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	2.23	RD23	Toyota 8",50mm BRNG (replaced by RD132)	30	All
	2.24	RD24	Nissan H233B,33 SPL	33	All
	2.25	RD25	Mitsubishi 9",RR,28 SPL (disc brake only)	28	All
	2.26	RD26	Land Rover HD,24 SPL (deleted from range)	24	3.54
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NOTE: Contact ARB directly for model numbers not listed here.



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	2.116	RD116	Dana 44,30 SPL,3.92 & UP	30	3.92 & UP
	2.117	RD117	Dana 44,30 SPL,3.73 & DN	30	3.73 & DN
	2.118	RD118	Suzuki Jimny,FR,22 SPL,10 bolt RG	22	All
	2.119	RD119	Ford 9",31 SPL	31	All
	2.121	RD121	Toyota 8" IFS,53mm BRNG	30	3.73 & DN
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NOTE: Contact ARB directly for model numbers not listed here.



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AIR OPERATED LOCKING DIFFERENTIALS

The Air Locker Service and Parts Manual is provided as a quick reference to ARB Air Locker and ARB Compressor replacement parts listings, accessories, exploded diagrams, installation and troubleshooting technical articles, and parts specifications.

Because new models are added to the Air Locker range on a regular basis, and design changes are implemented to make existing models suit a broader range of vehicles, the service technician and sales representative should be aware that some additions and changes may have occurred since the manufacture date of any existing Air Locker model. Note that the parts listing within the installation guide that is included with every Air Locker is a correct parts listing for that model at the time of manufacture. Therefore, the installation guide that was packaged with the Air Locker should always be retained by its owner.

Please note that parts listings in this manual are only a compiled list of replacement parts and do not necessarily constitute a complete list of every part contained within the kits. Also note that some parts listed may also be contained within a kit part number in the same listing.

Under the 'Specs' heading for each Air Locker model, ARB has endeavored to provide a general reference for backlash, ring gear bolt torque, and bearing cap torque, wherever this information was found to be publicly available as a 'rule of thumb'. However, this information can never be said to cover 100% of the application scope for any given differential model. Where possible, always refer to the manufacturer's service manual for the specific make and model of the vehicle for information such as torque and backlash setting, as ARB assumes no liability for damages resulting from the use of the information contained herein.

Dimensional information such as the inside and outside diameter (ID & OD) and the bolt pattern of the ring gear have been added where possible for identification purposes only and should never be employed as gauging or fabricating data.

This manual is not intended to be used as a complete application reference since ARB also publishes an Air Locker Application Chart, which is regularly maintained for completeness. Visit our web site or contact ARB directly if you require a current copy of this chart.



1.2

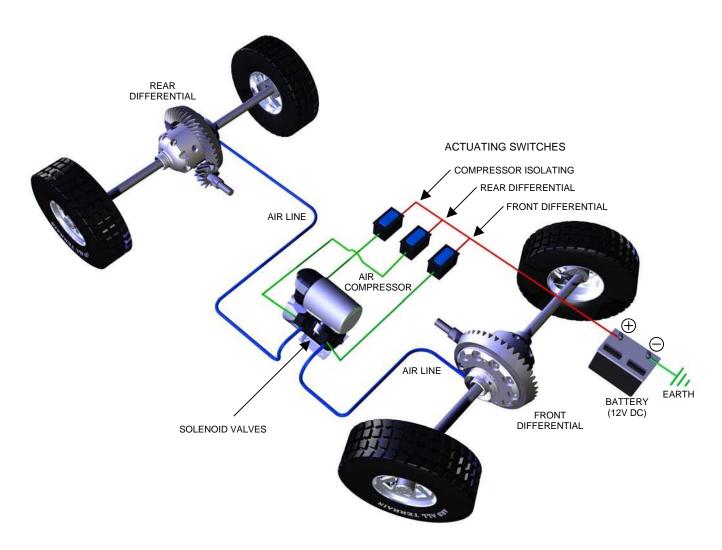
FUNCTIONAL DESCRIPTION

OVERVIEW

The ARB Air Locker is a replacement differential carrier that can either operate as a conventional differential, or lock both rear (or front) axle shafts together allowing maximum drive torque to be transmitted to both wheels. The locking function is controlled from the vehicle dashboard by the driver. Front axle Air Lockers can be locked when traversing slippery surfaces giving maximum traction, or unlocked on high traction surfaces to retain full control of the steering. As a safety feature, the front differential cannot be locked unless the rear differential has first been locked.

SYSTEM

Since the Air Locker is pneumatically actuated, an onboard compressor, or other air supply, is required. The schematic diagram below shows the component layout.



The air compressor is started with the air compressor switch, and a pressure switch maintains the air pressure in the reservoir between 585kPa [85psi] and 690kPa [100psi]. When the Air Locker switch is operated, the relevant pneumatic solenoid valve opens, allowing compressed air down the line to the differential.



1.2

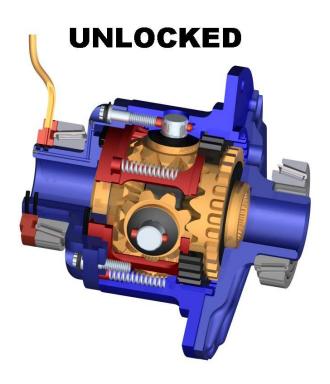
FUNCTIONAL DESCRIPTION

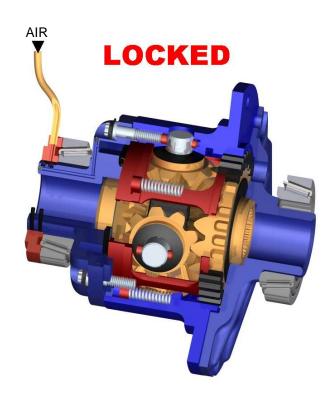
DIFFERENTIAL

Although the Air Locker is a replacement differential, the original equipment manufacturer's (OEM) ring gear can usually be installed with the original ring gear bolts. Generally, at least one original carrier bearing is also reused. The side gears inside the differential carrier are broached with the same splines as those on the original differential so that the original axle shafts can usually be used unmodified. The ring and pinion backlash and carrier bearing preload is set in the same manner as on the original differential, and the set-up of the ring and pinion gear set can be performed directly from the vehicle manufacturer's service manual by any experienced technician.

A bulkhead fitting is installed into a drilled and tapped port in the differential housing to take compressed air to the Air Locker. Air is forced into the differential through the seal housing which utilizes Viton rotary seals to transfer air pressure to the differential carrier even while it is rotating. Compressed air passes from the seal housing through a port in the Air Locker adjacent to the bearing journal, and into an annular groove containing a pneumatic seal. Air pressure behind this seal overcomes the force of the return springs which actuates the clutch gear. The clutch gear meshes between the splined side gear and the differential carrier, preventing the entire gear set from rotating. Since no differential action can take place, both drive axles are now mechanically 'locked' to the ring gear.

When the Air Locker switch is turned off, the solenoid valve closes the port from the compressor, and opens the exhaust port allowing the air in the differential to be exhausted. The return springs force the clutch gear back to its original position, disengaging the clutch gear from the splined side gear, freeing the internal gears so that they can once again provide the same normal differential action as the original open factory differential.







Toyota 8",45mm BRNG** Toyota 8",45mm BRNG**					_	
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02 1 CLUTCH GEAR 050102 03 1 DIFFERENTIAL CASE 010104 04 4 RETURN SPRING 150101 05 2 CROSS SHAFT RETAINING PIN 120102 * 2 CROSS SHAFT RETAINING PIN 120302 06 1 LONG CROSS SHAFT 060103 07 2 SHORT CROSS SHAFT 060303 08 1 PISTON 040103 09 1 BONDED SEAL 160701 10 1 CYLINDER CAP ASSEMBLY 030118 11 6 CYLINDER CAP RETAINING BOLT 200205 12 6 LOCKING TAB (8mm) 150401 13 1 TAPERED ROLLER BEARING NOT SUPPLIED 14 1 SEAL HOUSING RETAINING CLIP 150601 15 1 SPLINED SIDE GEAR 130301R 16 4 PINION THRUST WASHER 151101 17 4 PINION GEAR 140101R 18	_	ITEM#	QTY	DESCRIPTION	PART#	NOTES
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Specs:

Axle Spline 30 tooth, Ø33mm [1.31"]
Ratio Supported All
Ring Gear ID 126.0mm [4.96"]
Ring Gear OD 200mm [8"]
Ring Gear Bolts 10 bolts on Ø160mm [6.30"]
Ring Gear Torque 95Nm [70 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 95Nm [70 ft-lb]

Notes:

1 For replacement O-rings use only BS133 Viton 75

For 8" with 50mm carrier bearing ID refer to RD23 (Section 2.23).

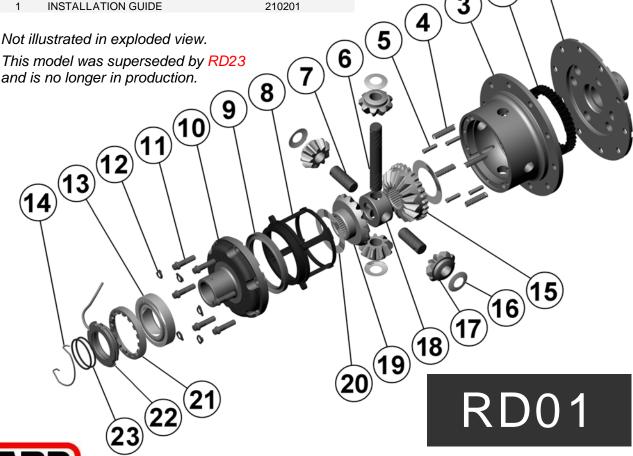
For 8" IFS refer to RD92 (Section 2.92).

For seal housing set-up refer to tech note (Section 5.1 & 5.2).

Refer to pinion gear modification tech note (Section 5.6).

Revision Date 10/10/06

For information on RD01 models with 4 cylinder cap bolts, contact ARB.



RD	002	Toyota 8.9",45mm BRN	G**		Specs:
ITEM #	QTY	DESCRIPTION	PART#	NOTES	
01	1	FLANGE CAP	021702	NOTES	Axle Spline 30 tooth, Ø33mm [1.31"]
02	1	CLUTCH GEAR	050202		Ratio Supported All
03	1		010204		• •
		DIFFERENTIAL CASE			Ring Gear ID 138.1mm [5.44"]
04	4	RETURN SPRING	150101		Ring Gear OD 225mm [8.9"]
05	3	CROSS SHAFT RETAINING PIN	120303		Ring Gear Bolts 12 bolts on Ø156mm [6.14"]
06	1	LONG CROSS SHAFT	060205		Ring Gear Torque 120Nm [89 ft-lb]
07	2	SHORT CROSS SHAFT	060402		Backlash 0.15-0.20mm [0.006-0.08"]
80	1	PISTON	040202		Bearing Cap Torque 110Nm [81 ft-lb]
09	1	BONDED SEAL	160705		
10	1	CYLINDER CAP ASSEMBLY	030208		
11	8	CYLINDER CAP RETAINING BOLT	200205		
12	8	LOCKING TAB (8mm)	150401		Notes:
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED		1101001
14	1	SEAL HOUSING RETAINING CLIP	150601		
15	1	SPLINED SIDE GEAR	130401		1 For replacement O-rings
16	4	PINION THRUST WASHER	151102		use only BS133 Viton 75.
17	4	PINION GEAR	140201		decemy before them to:
18	1	SPIDER BLOCK	070201		For 8.9" with 50mm carrier bearing ID
19	1	SIDE GEAR	130201		refer to RD33 (Section 2.33).
	2	SIDE GEAR THRUST WASHER			Telef to ND33 (Section 2.33).
20			151002		Fam 0.0% O allia assaulat materiala DD404
21	1	ADJUSTER NUT	100101		For 8.9" C-clip model refer to RD124
22	1	SEAL HOUSING ASSEMBLY	081902		(Section 2.124).
23	2	SEAL HOUSING O-RING	160235	1	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105		For seal housing set-up refer to tech note
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201		(Section 5.1 & 5.2).
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501		
*	1	AIR LINE (5mm DIA X 6m LONG)	170301		For information on RD02 models with 4
*	1	SOLENOID VALVE (12V)	180103		cylinder cap bolts, contact ARB.
*	1	SWITCH	180209		
*	1	SWITCH COVER (FRONT)	180210		
*	1	SWITCH COVER (REAR)	180211		
*	10	CABLE TIE	180301		
*	1	WARNING LABEL	210101		
*	1	BUMPER STICKER	210101		\sim (1)
*	1	OPERATING & SERVICE MANUAL	210200		\bigcirc (2) $\stackrel{\bullet}{\smile}$
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	1	INSTALLATION GUIDE	210202		(3)
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*	Not ill	lustrated in exploded view.			(5)
		•	•		
**		model was superseded by RD33	<u> </u>	√(6	
	and is	s no longer in production.	∼ (7	1	
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		(23)			
	AL	R			
					Revision Date 11/10/06

2.2 -

RD	03	Land Rover,10 SPL,Ban	jo	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	020404	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010404	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
08	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP ASSEMBLY	030120	
11	6	CYLINDER CAP RETAINING BOLT	200205	
12	6	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	SEAL HOUSING RETAINING CLIP	150602	
15	1	SPLINED SIDE GEAR	130302	
16	4	PINION THRUST WASHER	151101	
17	4	PINION GEAR	140101	
18	1	SPIDER BLOCK	070101	
19	1	SIDE GEAR	130102	
20	2	SIDE GEAR THRUST WASHER	151001	
21	1	ADJUSTER NUT (1.5mm thread pitch)	100201	2
*	1	ADJUSTER NUT (16 TPI Whitworth)	100301	2
22	1	SEAL HOUSING	082001	
23	2	SEAL HOUSING O-RING	160206	1
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210203	

Specs:

Axle Spline 10 tooth, Ø28.2mm [1.11"]
Ratio Supported 3.54:1
Ring Gear ID 125.4mm [4.94"]
Ring Gear Bolts 10 bolts on Ø142mm [5.59"]
Ring Gear Torque 58Nm [43 ft-lb]
Backlash 0.10-0.17mm [0.004-0.007"]
Bearing Cap Torque 90Nm [66 ft-lb]

Notes:

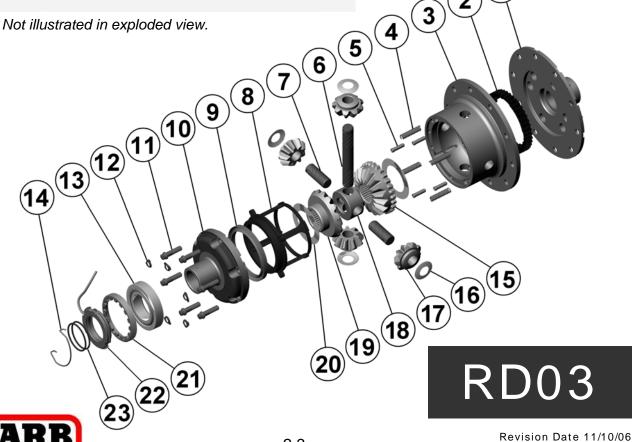
- 1 For replacement O-rings use only BS130 Viton 75.
- 2 Both types of Land Rover adjuster nut are supplied with this model. Early models using 100301 will require a special carrier bearing to suit the Air Locker. (Timken #11162 / 11300)

5mm [3/16"] ring gear spacer plate (ARB part# 'RD03A') is available for use with early Land Rover 4.70:1 ratio gears but longer bolts must be used. (Land Rover part# 576521)

Refer to seal housing set-up tech note (Section 5.2).

For information on RD03 models with 4 cylinder cap bolts, contact ARB.

Refer to Land Rover axle update tech note for 10 to 24 spline conversion information (Section 5.14).



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RD	04	Nissan H233,31 SPL				Specs:	
ITEM #	QTY	DESCRIPTION	PART#	NOTES			
01	1	FLANGE CAP	020301			Axle Spline	31 tooth, Ø32mm [1.26"]
02	1	CLUTCH GEAR	050202			Ratio Supported	All
03	1	DIFFERENTIAL CASE	010305			Ring Gear ID	146.0mm [5.75"]
04	4	RETURN SPRING	150101			Ring Gear Bolts	9 bolts on Ø180mm [7.09"]
05	3	CROSS SHAFT RETAINING PIN	120303		F	Ring Gear Bolt Size	10mm
06	1	LONG CROSS SHAFT	060205		•	Ring Gear Torque	86Nm [64 ft-lb]
07	2	SHORT CROSS SHAFT	060402			Backlash	0.15-0.20mm [0.006-0.008"]
08	1	PISTON	040202		В	earing Cap Torque	99Nm [73 ft-lb]
09	1	BONDED SEAL	160705				
10	1	CYLINDER CAP ASSEMBLY	030214				
11	8						
		CYLINDER CAP RETAINING BOLT	200205			NI=(
12	8	LOCKING TAB (8mm)	150401			Notes:	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED				
14	1	ADJUSTER NUT	100102				
15	1	SEAL HOUSING ASSEMBLY	081902		1	For replacement () rings
					'		
16	2	SEAL HOUSING O-RING	160235	1		use only BS133 V	iton 75
17	1	SEAL HOUSING RETAINING CLIP	150601				
18	1	SPLINED SIDE GEAR	130402			For information o	n RD04 models with metal
19	4	PINION THRUST WASHER	151102			pistons, contact A	
						pistoris, contact /	AILD.
20	4	PINION GEAR	140201				
21	1	SPIDER BLOCK	070201			For seal housing	set-up refer to tech notes
22	1	THRUST BLOCK	110101			(Section 5.1 & 5.2).
23	1	SIDE GEAR	130202			(**************************************	,.
24	2	SIDE GEAR THRUST WASHER	151002				
*	9	RING GEAR BOLT SPACER	4581061				
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105				
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201				
*							
	1	NIPPLE (1/8" to 1/8" BSPT)	170501				
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1	SWITCH COVER (REAR)	180211				
+							-(1)
	10	CABLE TIE	180301				
*	1	WARNING LABEL	210101				(2) · ·
*	1	BUMPER STICKER	210102			\bigcirc (3	
*	1	OPERATING & SERVICE MANUAL	210200)
*	1	INSTALLATION GUIDE	210204			\bigcirc (4) \bigcirc	
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RD	05	Mitsubishi 8",RR,28 SPL	_			Specs:	
ITEM#	QTY	DESCRIPTION	PART#	NOTES			
01	1	FLANGE CAP	020405			Axle Spline	28 tooth, Ø30.5mm [1.20"]
02	1	CLUTCH GEAR	050102			Ratio Supported	
03	1	DIFFERENTIAL CASE	010405				124.0mm [4.88"]
04	4	RETURN SPRING	150101				10 bolts on Ø150mm [5.91"]
05	2	CROSS SHAFT RETAINING PIN	120102			Ring Gear Torque	85Nm [63 ft-lb]
*	2	CROSS SHAFT RETAINING PIN	120302			Backlash	0.13-0.18mm [0.005-0.007"]
06	1	LONG CROSS SHAFT	060103		Р	Searing Cap Torque	60Nm [44 ft-lb]
07	2	SHORT CROSS SHAFT	060303		_	caring cap rorque	[לור דין ווויוטן
08	1	PISTON	040103				
09	1	BONDED SEAL	160701				
10	1	CYLINDER CAP ASSEMBLY	030121				
11	6	CYLINDER CAP RETAINING BOLT	200205			Notes:	
12	6	LOCKING TAB (8mm)	150401			140100.	
		` ,					
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED			_	
14	1	ADJUSTER NUT	100101		1	For replacement	
15	1	SEAL HOUSING ASSEMBLY	081902			use only BS133 \	/iton 75
16	2	SEAL HOUSING O-RING	160235	1		•	
17	1	SEAL HOUSING RETAINING CLIP	150601			For information of	on RD05 models with metal
18	1	SPLINED SIDE GEAR	130303				
						pistons, contact	AKD.
19	4	PINION THRUST WASHER	151101				
20	4	PINION GEAR	140101			For seal housing	set-up refer to tech notes
21	1	SPIDER BLOCK	070101			(Section 5.1 & 5.2	2).
22	1	THRUST BLOCK	110201			(,
23	1	SIDE GEAR	130103			For the 'large' Mit	tauhiahi 29 anling roor
							tsubishi 28 spline rear
24	2	SIDE GEAR THRUST WASHER	151001				12 ring gear bolts refer to
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105			RD46 (Section 2.4	46).
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201				
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501				
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*							
	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1	SWITCH COVER (REAR)	180211				
*	10	CABLE TIE	180301				\sim (1)
*	1	WARNING LABEL	210101				
*	1						\(2)\(\frac{1}{2}\)
		BUMPER STICKER	210102			<u> </u>	
*	1	OPERATING & SERVICE MANUAL	210200			\bigcirc (4) \bigcirc	/ \ \
*	1	INSTALLATION GUIDE	210205			(4) ~	\ \ \
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RD	06	Dana 44,30 SPL,3.92 & U	JP **			Specs:		
ITEM#	QTY	DESCRIPTION	PART#	NOTES		•		
01	1	FLANGE CAP	020502			Axle Spline	30 tooth, Ø33.3mm [1.31"]	
02	1	CLUTCH GEAR	050102			Ratio Supported		
03	1	DIFFERENTIAL CASE	010505			Ring Gear ID	141.3mm [5.56"]	
04	4	RETURN SPRING	150101			Ring Gear OD	216mm [8.5"]	
05	2	CROSS SHAFT RETAINING PIN	120102			Ring Gear Bolts	10 bolts on Ø168mm [6.61"]	
*	2	CROSS SHAFT RETAINING PIN	120302			Ring Gear Torque	75Nm [55 ft-lb]	
06	1	LONG CROSS SHAFT	060103			Backlash	0.15-0.25mm [0.006-0.010"]	
07	2	SHORT CROSS SHAFT	060303		-	Bearing Cap Torque	81Nm [60 ft-lb]	
08	1	PISTON	040103		_	bearing oap rorque	on the local radi	
09	1	BONDED SEAL	160701					
10	1	CYLINDER CAP	030410					
11	2	SEAL HOUSING O-RING	160205	1		Notes:		
12	6	CYLINDER CAP RETAINING BOLT	200205	'		110165.		
13	6	LOCKING TAB (8mm)	150401					
14	1	TAPERED ROLLER BEARING	160101	2	1	For replacement (Orings	
15	1	SEAL HOUSING	080301	2		use only BS132 V	=	
16	1					use only boloz v	11011 75	
17		SHIM KIT SPLINED SIDE GEAR	SHK004		2	Cor replacement l		
18	1	PINION THRUST WASHER	130304R		2	•		
			151101			rimken part # Livi	104949 / LM104912.	
19	4	PINION GEAR	140101R			Fan Fand IFC : a ata	allation refer to took wate	
20		SPIDER BLOCK	070101				allation refer to tech note	
21	1	SIDE GEAR	130104R			(Section 5.12) for	or alternative to C-clip use.	
22	2	SIDE GEAR THRUST WASHER	151003			Far notice of 0.70	d and dawn natauta DD447	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105				.73:1 and down refer to RD117	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201			(Section 2.117).		
*	1	AIR LINE (5mm DIA X 6m LONG)	170301			English and all and	- DD00 dala th. A d'a-dan	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501				n RD06 models with 4 cylinder	
	1	SOLENOID VALVE (12V)	180103			cap bolts, contact	TARB.	
_	1	SWITCH	180209			0 11 1	::L ABO : :	
*	1	SWITCH COVER (REAR)	180211			Suitable for use w	vith ABS tone ring.	
	1	SWITCH COVER (FRONT)	180210					
*	10	CABLE TIE	180301					
*	1	WARNING LABEL	210101				\sim (1)	
*	1	BUMPER STICKER	210102			_ (
*	1	OPERATING & SERVICE MANUAL	210200				2)	
*	1 Not ill	INSTALLATION GUIDE lustrated in exploded view.	210206		(•	4 (3)		
**		model was superseded by RD116 s no longer I production.	8 7 0	6				
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RD	07	Dana 44,30 SPL,3.73 &	DN **	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	020602	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010604	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
08	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP	030410	
11	2	SEAL HOUSING O-RING	160205	1
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160101	2
15	1	SEAL HOUSING	080301	
16	1	SHIM KIT	SHK004	
17	1	SPLINED SIDE GEAR	130304R	
18	4	PINION THRUST WASHER	151101	
19	4	PINION GEAR	140101R	
20	1	SPIDER BLOCK	070101	
21	1	SIDE GEAR	130104R	
22	2	SIDE GEAR THRUST WASHER	151003	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210207	
*	Not il	Unatrated in avaladed view		

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Specs:

Axle Spline 30 tooth, Ø33.3mm [1.31"] Ratio Supported 3.73:1 & down Ring Gear ID 141.3mm [5.56"] Ring Gear OD 216mm [8.5"] Ring Gear Bolts 10 bolts on Ø168mm [6.61"] Ring Gear Torque 75Nm [55 ft-lb] Backlash 0.15-0.25mm [0.006-0.010"] Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

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- For replacement O-rings use only BS132 Viton 75
- For replacement bearing use Timken part # LM104949 / LM104912.

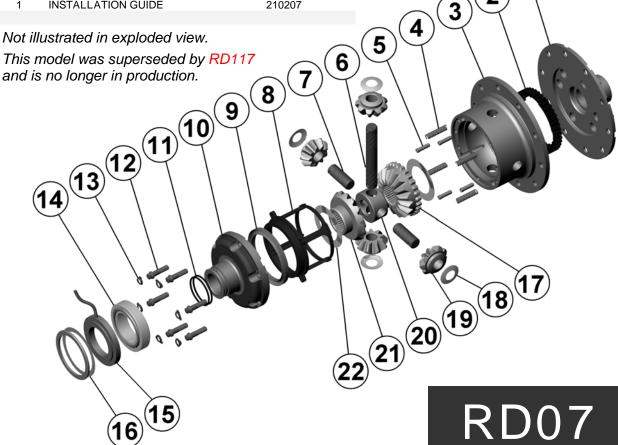
For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.

For ratios of 3.92:1 and up refer to RD116 (Section 2.116).

For information on RD07 models with 4 cylinder cap bolts, contact ARB.

Revision Date 11/10/06

Suitable for use with ABS tone ring.



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RD	80	Toyota 8.9", C-clip, 45mm	BRNG**		Specs:	
ITEM#	QTY	DESCRIPTION	PART#	NOTES		
01	1	FLANGE CAP	021702		Axle Spline	30 tooth, Ø33mm [1.31"]
02	1	CLUTCH GEAR	050202		Ratio Supported	All
03	1	DIFFERENTIAL CASE	011005		Ring Gear ID	138.1mm [5.44"]
04	8	RETURN SPRING	150101		Ring Gear OD	225mm [8.9"]
05	1	CROSS SHAFT RETAINING PIN	120303		Ring Gear Bolts	12 bolts on Ø156mm [6.14"]
06	1	LONG CROSS SHAFT	060205		Ring Gear Torque	120Nm [89 ft-lb]
07	1	SHORT CROSS SHAFT	060402		Backlash	0.15-0.20mm [0.006-0.08"]
08	2	SIDE GEAR THRUST WASHER	151002		Bearing Cap Torque	110Nm [81 ft-lb]
09	1	PISTON	040202		boaring oap rorque	. Totali [OT ICID]
10	1	BONDED SEAL	160705			
11	1	CYLINDER CAP	030212			
	6	CYLINDER CAP CYLINDER CAP RETAINING BOLT			Notos	
12 13	6	LOCKING TAB (8mm)	200205 150401		Notes:	
		` ,				
14	1	TAPERED ROLLER BEARING	NOT SUPPLIED		4	0 =:====
15	1	SPLINED SIDE GEAR	130401		1 For replacement	
16	1	SPIDER BLOCK	070201		use only BS133 V	iton 75.
17	3	PINION GEAR	140201			
18	3	PINION THRUST WASHER	151102			clip model (i.e., full floating)
19	1	THRUST BLOCK	110102		refer to RD33 (Se	ction 2.33).
20	1	SIDE GEAR	130201			
21	1	ADJUSTER NUT	100101		For seal housing	set-up refer to tech notes
22	1	SEAL HOUSING ASSEMBLY	081902		(Section 5.1 & 5.2	
23	2	SEAL HOUSING O-RING	160235	1	•	•
24	1	SEAL HOUSING RETAINING CLIP	150601		For information o	n RD08 models with less than
*	1	C-CLIP KIT	CCK004		8 cylinder cap bo	
*	1	SOCKET HEAD CAP SCREW (M8)	200504		J 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	, -
*	2	CYLINDER CAP RETAINING BOLT	200207		Thicker aftermark	cet ring gears may require
*	2	LOCKING TAB (6mm)	150402			emove the cross shaft.
*	1	LOCK WASHER	4581046		Refer to tech note	
*					iverer to recit ilote	5 (06 011011 5.0).
*	1	BULKHEAD FITTING KIT (0-RING TYPE)	170105			
*		PUSH-IN FITTING (5mm to 1/8" BSPP)	170201			
_	1	AIR LINE (5mm DIA X 6m LONG)	170301			
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501			
*	1	SOLENOID VALVE (12V)	180103			
*	1	SWITCH	180209			
*	1	SWITCH COVER (REAR)	180211			\sim (1)
*	10	CABLE TIE	180301		_	~(2) ···
*	1	WARNING LABEL	210101			3) 🛂 🗎
*	1	BUMPER STICKER	210102) -\ \
*	1	OPERATING & SERVICE MANUAL	210200		$\mathbf{A}(4)^{\mathbf{A}}$	~ \ \
*	1	INSTALLATION GUIDE	210208		\sim (5)	\ \
*	This n	ustrated in exploded view. model was superseded by RD12 no longer in production.	$\sim (9) \sim$	7	6	16 15
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RD	09	Nissan H233B,31 SPL**			Specs	s:	
ITEM#	QTY	DESCRIPTION	PART #	NOTES			
01	1	FLANGE CAP	020302		Ax	de Spline	31 tooth, Ø32mm [1.26"]
02	1	CLUTCH GEAR	050202			upported	All
03	1	DIFFERENTIAL CASE	010306		Rin	g Gear ID	146.0mm [5.75"]
04	4	RETURN SPRING	150101		Ring G	ear Bolts	9 bolts on Ø176mm [6.93"]
05	3	CROSS SHAFT RETAINING PIN	120303		Ring Gear	Bolt Size	12mm
06	1	LONG CROSS SHAFT	060205			ar Torque	142Nm [105 ft-lb]
07	2	SHORT CROSS SHAFT	060402			Backlash	0.15-0.20mm [0.006-0.008"]
08	1	PISTON	040202		Bearing Ca	p Torque	99Nm [73 ft-lb]
09	1	BONDED SEAL	160705				
10	1	CYLINDER CAP ASSEMBLY	030214				
11	8	CYLINDER CAP RETAINING BOLT	200205		Nistas	_	
12	8	LOCKING TAB (8mm)	150401		Notes	•	
13 14	1	TAPERED ROLLER BEARING	NOT SUPPLIED				
15	1	ADJUSTER NUT SEAL HOUSING ASSEMBLY	100102 081902		1 Forron	lacament	Oringo
16	2	SEAL HOUSING ASSEMBLY SEAL HOUSING O-RING	160235	1		lacement (ly BS133 V	
17	1	SEAL HOUSING O-RING SEAL HOUSING RETAINING CLIP	150601	'	useon	iy bo iss v	11011 75
18	1	SPLINED SIDE GEAR	130402		2 If ring o	noor holte	are 10mm then spacers
19	4	PINION THRUST WASHER	151102		0 (pplied with kit).
20	4	PINION GEAR	140201		must b	e useu (su	pplied with kit).
21	1	SPIDER BLOCK	070201		For info	ormation o	n RD09 models with metal
22	1	THRUST BLOCK	110101			s, contact /	
23	1	SIDE GEAR	130202		piotorio	, 001114017	W.B.
24	2	SIDE GEAR THRUST WASHER	151002		For sea	al housing	set-up refer to tech notes
*	9	RING GEAR BOLT SPACER	4581061	2		n <mark>5.1 & 5.2</mark>	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	_	(0000		<i>,</i> .
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201		For H2	33B 31 spli	ine differential with no thrust
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501				ough cross shaft refer
*	1	AIR LINE (5mm DIA X 6m LONG)	170301			8A (Section	
*	1	SOLENOID VALVE (12V)	180103			`	,
*	1	SWITCH	180209				
*	1	SWITCH COVER (REAR)	180211				
*	1	SWITCH COVER (FRONT)	180210				
*	10	CABLE TIE	180301				\sim (1)
*	1	WARNING LABEL	210101				\sim (2) \checkmark
*	1	BUMPER STICKER	210102			_ (3) 💆
*	1	OPERATING & SERVICE MANUAL	210200				3) \
*	1	INSTALLATION GUIDE	210209			(4)\	\neg
					\bigcirc (5)	$) \gamma$	
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**	This n	model was superseded by RD78	$BA \frown$	•		\ \	
	and is	no longer in production.	(8)	\		\ \	
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RD	10	GM 10 Bolt,8.5",28 SPL*	*	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	020902	
02	1	CLUTCH GEAR	050301	
03	1	DIFFERENTIAL CASE	010905	
04	4	RETURN SPRING	150101	
05	1	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060204	
07	1	PISTON	040301	
80	1	U-RING	160301	
09	1	CYLINDER CAP ASSEMBLY	030113	
10	2	SEAL HOUSING O-RING	160206	1
11	6	CYLINDER CAP RETAINING BOLT	200205	
12	6	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	160105	2
14	1	SEAL HOUSING	080601	
15	1	SHIM KIT	SHK003	
16	1	SPLINED SIDE GEAR	130602	
17	2	PINION GEAR	140302	
18	2	PINION THRUST WASHER	151103	
19	1	SIDE GEAR	130502	
20	2	SIDE GEAR THRUST WASHER	151003	
*	1	C-CLIP KIT	CCK003	
*	1	BULKHEAD FITTING KIT	170102	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210210	
*	Not il	llustrated in expladed view		

Specs:

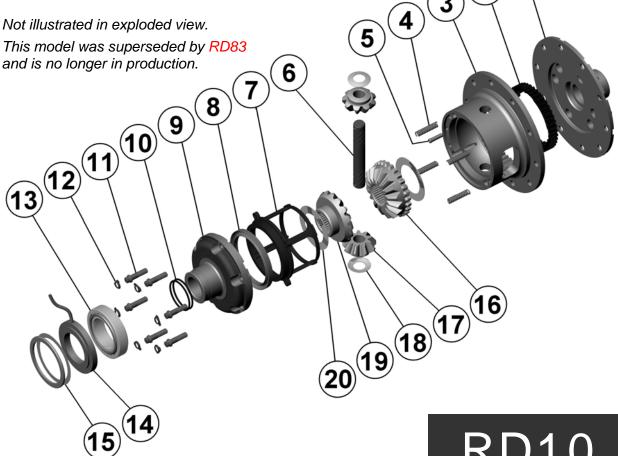
Axle Spline 28 tooth, Ø30.5mm [1.20"]
Ratio Supported 2.73:1 & up
Ring Gear ID 127.0mm [5.00"]
Ring Gear OD 216mm [8.5"]
Ring Gear Bolts 10 bolts on Ø156mm [6.14"]
Ring Gear Torque 88Nm [65 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

- 1 For replacement O-rings use only BS130 Viton 75.
- 2 For replacement bearing use Timken#LM501349 / LM501310.

For information on RD10 models with 4 cylinder cap bolts, contact ARB.

Ring gear bolts are 7/16" - 20 left-hand thread, and must be removed in a clockwise direction.





**

RD	12	GM 12 Bolt,8.9",30 SPL,	3.73 & U	P
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	020801	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	011007	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120303	
06	1	LONG CROSS SHAFT	060205	
07	1	SHORT CROSS SHAFT	060402	
08	1	PISTON	040202	
09	1	BONDED SEAL	160705	
10	1	CYLINDER CAP	030213	
11	2	SEAL HOUSING O-RING	160205	1
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160104	2
15	1	SHIM KIT	SHK002	
16	1	SEAL HOUSING ASSEMBLY	080501	
17	1	SPLINED SIDE GEAR	130401	
18	1	SPIDER BLOCK	070301	
19	3	PINION GEAR	140201	
20	3	PINION THRUST WASHER	151102	
21	1	SIDE GEAR	130201	
22	2	SIDE GEAR THRUST WASHER	151002	
*	1	'C' CLIP KIT	CCK004	
*	2	CYLINDER CAP RETAINING BOLT	200207	
*	2	LOCKING TAB (6mm)	150402	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210212	
_				

Specs:

Axle Spline 30 tooth, Ø33.3mm [1.31"] Ratio Supported 3.73:1 & up Ring Gear ID 138.1mm [5.44"] Ring Gear OD 225mm [8.9"] Ring Gear Bolts 12 bolts on Ø165mm [6.50"]
Ring Gear Torque 75Nm [55 ft-lb] Backlash 0.15-0.25mm [0.006-0.010"] Bearing Cap Torque 81Nm [60 ft-lb]

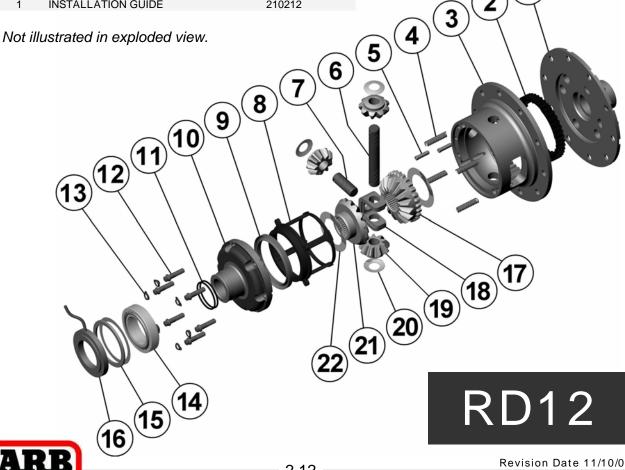
Notes:

- For replacement O-rings use only BS132 Viton 75
- For replacement bearing use Timken part #LM603049 / LM603011.

For information on RD12 models with metal pistons, contact ARB.

Ring gear bolts are 3/8" - 24 left-hand thread, and must be removed in a clockwise direction.

Revision Date 11/10/06



				//	
	RD	16	Ford 8.8",28 SPL**		
Ξ	ITEM#	QTY	DESCRIPTION	PART#	NOTES
	01	1	FLANGE CAP	020901	
	02	1	CLUTCH GEAR	050301	
	03	1	DIFFERENTIAL CASE	010903	
	04	4	RETURN SPRING	150101	
	05	1	CROSS SHAFT RETAINING PIN	120301	
	06	1	LONG CROSS SHAFT	060204	
	07	1	PISTON	040301	
	08	1	U-RING	160301	
	09	1	CYLINDER CAP ASSEMBLY	030402	
	10	2	SEAL HOUSING O-RING	160205	1
	11	6	CYLINDER CAP RETAINING BOLT	200205	
	12	6	LOCKING TAB (8mm)	150401	
	13	1	TAPERED ROLLER BEARING	160104	2
	14	1	SEAL HOUSING	080501	
	15	1	SHIM KIT	SHK002	
	16	1	SPLINED SIDE GEAR	130602	
	17	2	PINION GEAR	140302	
	18	2	PINION THRUST WASHER	151103	
	19	1	SIDE GEAR	130502	
	20	2	SIDE GEAR THRUST WASHER	151003	
	*	1	C-CLIP KIT	CCK003	
	*	1	BULKHEAD FITTING KIT	170102	
	*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
	*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
	*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
	*	1	SOLENOID VALVE (12V)	180103	
	*	1	SWITCH	180209	
	*	1	SWITCH COVER (REAR)	180211	
	*	10	CABLE TIE	180301	
	*	1	WARNING LABEL	210101	
	*	1	BUMPER STICKER	210102	
	*	1	OPERATING & SERVICE MANUAL	210200	
	*	1	INSTALLATION GUIDE	210216	

Specs:

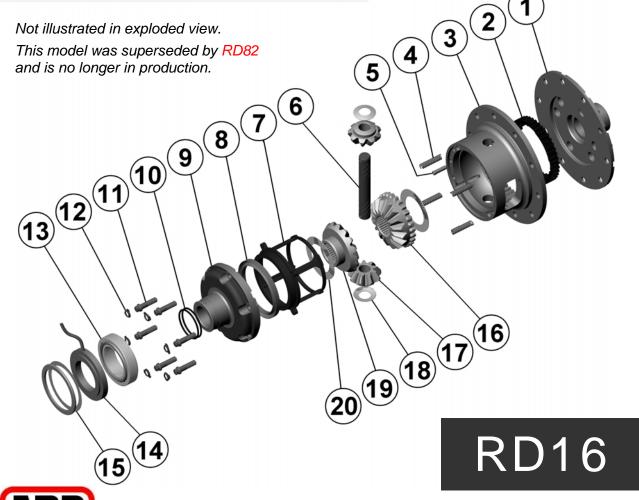
Axle Spline 28 tooth, Ø30.5mm [1.20"]
Ratio Supported All
Ring Gear ID 127.0mm [5.00"]
Ring Gear OD 224mm [8.8"]
Ring Gear Bolts 10 bolts on Ø152mm [6.00"]
Ring Gear Torque 81Nm [60 ft-lb]
Backlash 0.28-0.41mm [0.011-0.016"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

- For replacement O-rings use only BS132 Viton 75.
- 2 For replacement bearing use Timken part # LM603049 / LM603011.

For information on RD16 models with 4 cylinder cap bolts, contact ARB.

Revision Date 11/10/06



RD.	RD17 Nissan H233B,33 SPL,disc brake**			9	Specs:		
ITEM#	QTY	DESCRIPTION				оросо.	
01	1	FLANGE CAP	PART # 020302	NOTES		Axle Spline	22 to oth (822 2mm [1 21"]
							33 tooth, Ø33.3mm [1.31"]
02	1	CLUTCH GEAR	050202			Ratio Supported	All
03	1	DIFFERENTIAL CASE	010306			Ring Gear ID	146.0mm [5.75"]
04	4	RETURN SPRING	150101		_	Ring Gear Bolts	9 bolts on Ø176mm [6.93"]
05	3	CROSS SHAFT RETAINING PIN	120303		K	ling Gear Bolt Size	12mm
06	1	LONG CROSS SHAFT	060205			Ring Gear Torque	142Nm [105 ft-lb]
07	2	SHORT CROSS SHAFT	060402		_	Backlash	0.15-0.20mm [0.006-0.008"]
08	1	PISTON	040202		В	earing Cap Torque	99Nm [73 ft-lb]
09	1	BONDED SEAL	160705				
10	1	CYLINDER CAP ASSEMBLY	030214				
11	8	CYLINDER CAP RETAINING BOLT	200205			.	
12	8	LOCKING TAB (8mm)	150401			Notes:	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED				
14	1	SEAL HOUSING RETAINING CLIP	150601				
15	1	SPLINED SIDE GEAR	130405		1	For replacement (-
16	4	PINION THRUST WASHER	151102			use only BS133 V	iton 75.
17	4	PINION GEAR	140201				
18	1	SPIDER BLOCK	070201			For information o	n RD17 models with metal
19	1	SIDE GEAR	130205			pistons, contact A	ARB.
20	2	SIDE GEAR THRUST WASHER	151002				
21	1	ADJUSTER NUT	100102			For seal housing	set-up refer to tech notes
22	1	SEAL HOUSING ASSEMBLY	081902			(Section 5.1 & 5.2).
23	2	SEAL HOUSING O-RING	160235	1			
*	9	RING GEAR BOLT SPACER	4581061	2		For H233B 33 spli	ine differential with no
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105			through cross sha	aft (drum brake model)
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201			refer to RD24 (Sec	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501			`	,
*	1	AIR LINE (5mm DIA X 6m LONG)	170301		2	If ring gear bolts	are 10mm then spacers
*	1	SOLENOID VALVE (12V)	180103			must be used (su	
*	1	SWITCH	180209			(,
*	1	SWITCH COVER (REAR)	180211				
*	10	CABLE TIE	180301				
*	1	WARNING LABEL	210101				\frown (1)
*	1	BUMPER STICKER	210101			_ ((2)(1)
*	1	OPERATING & SERVICE MANUAL	210200				(2)
*	1	INSTALLATION GUIDE	210200			\sim (3)	\mathcal{A}
		INSTALLATION GOIDE	210217			(4)	\ \
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*	Not ill	ustrated in exploded view.			V	// \ \	0 0
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		model was superseded by RD24	(7)	\mathcal{A}		\ \ \	
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RD	18	Dana 44,19 SPL,3.92 &	UP**	
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020502	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010505	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
08	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP	030410	
11	2	SEAL HOUSING O-RING	160205	1
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160101	2
15	1	SEAL HOUSING	080301	
16	1	SHIM KIT	SHK004	
17	1	SPLINED SIDE GEAR	130305	
18	4	PINION THRUST WASHER	151101	
19	4	PINION GEAR	140101	
20	1	SPIDER BLOCK	070101	
21	1	THRUST BLOCK	110202	
22	1	SIDE GEAR	130105	
23	2	SIDE GEAR THRUST WASHER	151003	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210218	
*	Not ill	lustrated in exploded view.		
**	This I	model has been deleted from the	e range	_(6

Specs:

Axle Spline 19 tooth, Ø31.8mm [1.25"]
Ratio Supported 3.92:1 & up
Ring Gear ID 141.3mm [5.56"]
Ring Gear OD 216mm [8.5"]
Ring Gear Bolts 10 bolts on Ø168mm [6.61"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

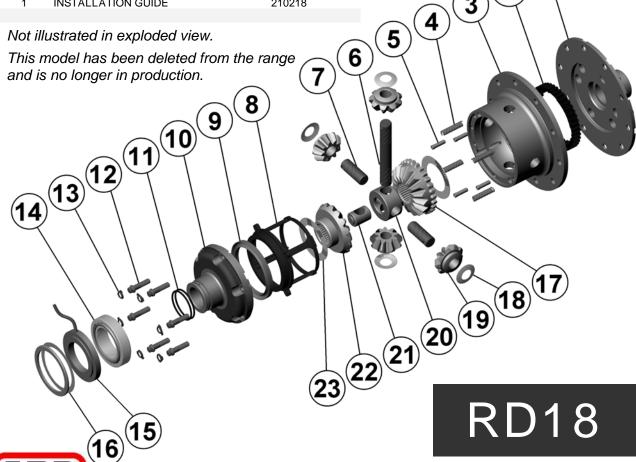
Notes:

- For replacement O-rings use only BS132 Viton 75.
- For replacement bearing use Timken part # LM104949 / LM104912.

For ratios of 3.73:1 and down refer to RD19 (Section 2.19).

For information on RD18 models with 4 cylinder cap bolts, contact ARB.

Revision Date 11/10/06



RD	19	Dana 44,19 SPL,3.73 &	DN**	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01 1 F		FLANGE CAP	020602	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010604	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
08	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP	030410	
11	2	SEAL HOUSING O-RING	160205	1
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160101	2
15	1	SEAL HOUSING	080301	
16	1	SHIM KIT	SHK004	
17	1	SPLINED SIDE GEAR	130305	
18	4	PINION THRUST WASHER	151101	
19	4	PINION GEAR	140101	
20	1	SPIDER BLOCK	070101	
21	1	THRUST BLOCK	110202	
22	1	SIDE GEAR	130105	
23	2	SIDE GEAR THRUST WASHER	151003	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210219	
4				

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Specs:

Axle Spline 19 tooth, Ø31.8mm [1.25"]
Ratio Supported 3.73:1 & down
Ring Gear ID 141.3mm [5.56"]
Ring Gear OD 216mm [8.5"]
Ring Gear Bolts 10 bolts on Ø168mm [6.61"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

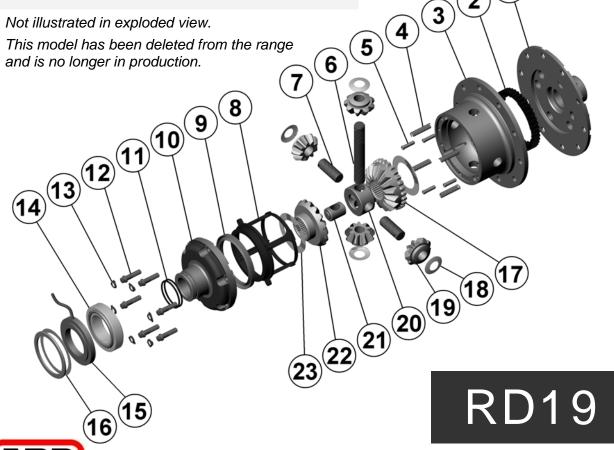
Notes:

- 1 For replacement O-rings use only BS132 Viton 75.
- For replacement bearing use Timken part # LM104949 / LM104912.

For ratios of 3.92:1 and up refer to RD18 (Section 2.18).

For information on RD19 models with 4 cylinder cap bolts, contact ARB.

Revision Date 11/10/06



RD20		Land Rover, Salisbury, 3.5	54:1	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	021101	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	011203	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120303	
06	1	LONG CROSS SHAFT	060205	
07	2	SHORT CROSS SHAFT	060402	
80	1	PISTON	040202	
09	1	BONDED SEAL	160705	
10	1	CYLINDER CAP	030503	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160107	2
15	1	SEAL HOUSING	080701	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130407	
18	4	PINION THRUST WASHER	151102	
19	4	PINION GEAR	140201	
20	1	SPIDER BLOCK	070201	
21	1	SIDE GEAR	130206	
22	2	SIDE GEAR THRUST WASHER	151006	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	ACTUATOR SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210220	
*	Not il	lustrated in avaladed view		

Specs:

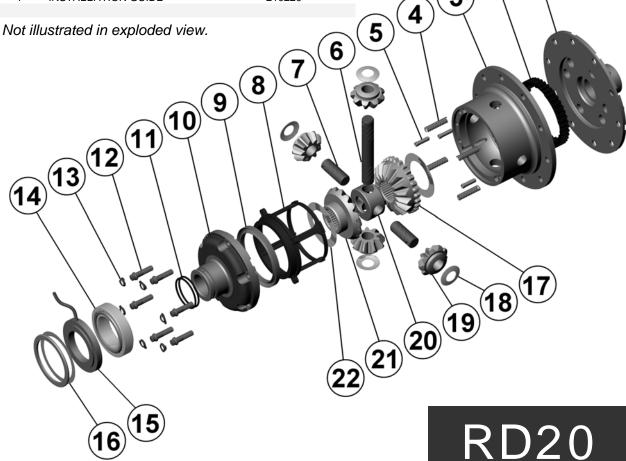
Axle Spline 24 tooth, Ø31.5mm [1.24"]
Ratio Supported 3.54:1
Ring Gear ID 162.0mm [6.38"]
Ring Gear Bolts 12 bolts on Ø191mm [7.50"]
Ring Gear Torque 136Nm [100 ft-lb]
Backlash 0.15-0.27mm [0.006-0.011"]
Bearing Cap Torque 134Nm [99 ft-lb]
Pre-load Amount 0.13mm [0.005"]

Notes:

- For replacement O-rings use only BS136 Viton 75.
- For replacement bearing use Timken part # 387A / 382A.

For use with a ring and pinion ratio of 4.70:1 refer to RD32 (Section 2.32).

For information on RD20 models with metal pistons, contact ARB.





RD21		21	Dana 60,30 SPL,4.56 &	UP	
	ITEM#	QTY	DESCRIPTION	PART#	NOTES
	01	1	FLANGE CAP	021102	
	02	1	CLUTCH GEAR	050202	
	03	1	DIFFERENTIAL CASE	011303	
	04	4	RETURN SPRING	150101	
	05	3	CROSS SHAFT RETAINING PIN	120303	
	06	1	LONG CROSS SHAFT	060205	
	07	2	SHORT CROSS SHAFT	060402	
	80	1	PISTON	040202	
	09	1	BONDED SEAL	160705	
	10	1	CYLINDER CAP	030503	
	11	2	SEAL HOUSING O-RING	160207	1
	12	8	CYLINDER CAP RETAINING BOLT	200205	
	13	8	LOCKING TAB (8mm)	150401	
	14	1	TAPERED ROLLER BEARING	160107	2
	15	1	SEAL HOUSING	080701	
	16	1	SHIM KIT	SHK001	
	17	1	SPLINED SIDE GEAR	130406	
	18	4	PINION THRUST WASHER	151102	
	19	4	PINION GEAR	140201	
	20	1	SPIDER BLOCK	070201	
	21	1	SIDE GEAR	130207	
	22	2	SIDE GEAR THRUST WASHER	151006	
	*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
	*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
	*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
	*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
	*	1	SOLENOID VALVE (12V)	180103	
	*	1	SWITCH	180209	
	*	1	SWITCH COVER (REAR)	180211	
	*	10	CABLE TIE	180301	
	*	1	WARNING LABEL	210101	
	*	1	BUMPER STICKER	210102	
	*	1	OPERATING & SERVICE MANUAL	210200	
	*	1	INSTALLATION GUIDE	210221	
	4	A I = 1 11	long that to all the control and and a standard		

Specs:

Axle Spline 30 tooth, Ø33.3mm [1.31"]
Ratio Supported 4.56:1 & up
Ring Gear ID 162.0mm [6.38"]
Ring Gear OD 248mm [9.75"]
Ring Gear Bolts 12 bolts on Ø191mm [7.50"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

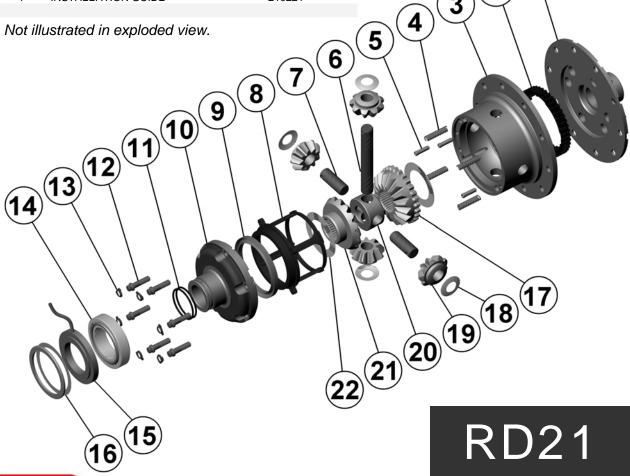
Notes:

- 1 For replacement O-ring use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A-382A

For ratios of 4.10:1 and down refer to RD22 (Section 2.22).

For information on RD21 models with metal pistons, contact ARB.

Revision Date 11/10/06



RD22		Dana 60,30 SPL,4.10 & I	DN	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	021101	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	011203	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120303	
06	1	LONG CROSS SHAFT	060205	
07	2	SHORT CROSS SHAFT	060402	
08	1	PISTON	040202	
09	1	BONDED SEAL	160705	
10	1	CYLINDER CAP	030503	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160107	2
15	1	SEAL HOUSING	080701	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130406	
18	4	PINION THRUST WASHER	151102	
19	4	PINION GEAR	140201	
20	1	SPIDER BLOCK	070201	
21	1	SIDE GEAR	130207	
22	2	SIDE GEAR THRUST WASHER	151006	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210222	

Specs:

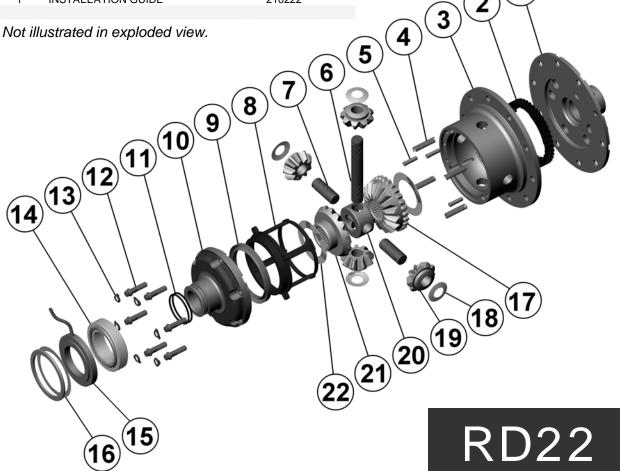
Axle Spline 30 tooth, Ø33.3mm [1.31"]
Ratio Supported 4.10:1 & down
Ring Gear ID 162.0mm [6.38"]
Ring Gear OD 248mm [9.75"]
Ring Gear Bolts 12 bolts on Ø191mm [7.50"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A-382A.

For ratios of 4.56:1 and up refer to RD21 (Section 2.21).

For information on RD22 models with metal pistons, contact ARB.



ARB

RD23		Toyota 8",50mm BRNG		
ITEM #	QTY	DESCRIPTION	PART#	NOTE
01	1	FLANGE CAP	020102	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010104	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
08	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP ASSEMBLY	030130	
11	6	CYLINDER CAP RETAINING BOLT	200205	
12	6	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	2
14	1	SEAL HOUSING RETAINING CLIP	150601	
15	1	SPLINED SIDE GEAR	130301R	
16	4	PINION THRUST WASHER	151101	
17	4	PINION GEAR	140101R	
18	1	SPIDER BLOCK	070101	
19	1	SIDE GEAR	130101R	
20	2	SIDE GEAR THRUST WASHER	151003	
21	1	ADJUSTER NUT	100101	
22	1	SEAL HOUSING ASSEMBLY	081901	
23	2	SEAL HOUSING O-RING	160207	1
*	1	ADJUSTER NUT	100103	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210223	
*	Not il	lustrated in exploded view.	,	

Specs:

Axle Spline 30 tooth, Ø33mm [1.31"]
Ratio Supported All
Ring Gear ID 126.0mm [4.96"]
Ring Gear OD 200mm [8"]
Ring Gear Bolts 10 bolts on Ø160mm [6.30"]
Ring Gear Torque 95Nm [70 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 95Nm [70 ft-lb]

Notes:

- 1 For replacement O-rings use only BS136 Viton 75.
- For 80mm bearing OD use Timken bearing #32010X (ARB# 160116).
- 2 For 83mm bearing OD use Koyo or SKF bearing #TR100802-1 & TR100802-2.

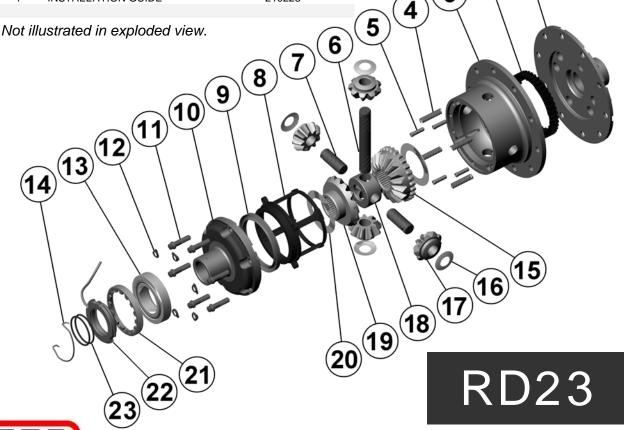
For 8" IFS refer to RD92 (Section 2.92).

Refer to seal housing set-up tech note (Sec. 5.2).

Refer to pinion modification tech note (Sec. 5.6).

For information on RD23 models with 4 cylinder cap bolts, contact ARB.

Older RD23 models with O-ring grooves in the cylinder cap use O-ring BS031 #160209.



2.23

RD	24	Nissan H233B,33 SPL				Specs:	
ITEM#	QTY	DESCRIPTION	PART#	NOTES		•	
01	1	FLANGE CAP	020302	140120		Axle Spline	33 tooth, Ø33.3mm [1.31"]
02		CLUTCH GEAR					•
	1		050202			Ratio Supported	AII
03	1	DIFFERENTIAL CASE	010307			Ring Gear ID	146.0mm [5.75"]
04	4	RETURN SPRING	150101			Ring Gear Bolts	9 bolts on Ø176mm [6.93"]
05	4	CROSS SHAFT RETAINING PIN	120303			Ring Gear Bolt Size	12mm
06	4	SHORT CROSS SHAFT	060402			Ring Gear Torque	142Nm [105 ft-lb]
07	1	PISTON	040202			Backlash	0.15-0.20mm [0.006-0.008"]
08	1	BONDED SEAL	160705			Bearing Cap Torque	99Nm [73 ft-lb]
09	1	CYLINDER CAP ASSEMBLY	030214			zeamig cap relique	
10	8	CYLINDER CAP RETAINING BOLT	200205				
11	8	LOCKING TAB (8mm)	150401			Nistas.	
12	1	TAPERED ROLLER BEARING	NOT SUPPLIED			Notes:	
13	1	ADJUSTER NUT	100102				
14	1	SEAL HOUSING ASSEMBLY	081902				
15	2	SEAL HOUSING O-RING	160235	1		1 For replacement 0	O-rings
16	1	SEAL HOUSING RETAINING CLIP	150601			use only BS133 V	iton 75.
17	1	SPLINED SIDE GEAR	130405			, , ,	
18	4	PINION THRUST WASHER	151102			For information o	n RD24 models with metal
19	4	PINION GEAR	140201				
						pistons, contact A	AND.
20	1	SPIDER BLOCK	070201				
21	1	SIDE GEAR	130205				set-up refer to tech notes
22	2	SIDE GEAR THRUST WASHER	151002			(Section 5.1 & 5.2	·).
*	9	RING GEAR BOLT SPACER	4581061	2			
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105			2 If ring gear bolts a	are 10mm then spacers
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201			must be used (su	·
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501			(,
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*							
	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1	SWITCH COVER (REAR)	180211				
*	10	CABLE TIE	180301				
*	1	WARNING LABEL	210101				
*	1	BUMPER STICKER	210102			\sim ((1)
*	1	OPERATING & SERVICE MANUAL	210200			\bigcirc (2)	⟨ • ∕
*	1	INSTALLATION GUIDE	210224			(2)(2)	7
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*	Not il	lustrated in exploded view.		(5))\	· \ \	
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RD25	Mitsubishi 9",RR,28 SPL,disc	brake		Specs:
ITEM# QTY	DESCRIPTION	PART#	NOTES	
01 1	FLANGE CAP	021202		Axle Spline 28 tooth, Ø30.5mm [1.20"]
02 1	CLUTCH GEAR	050202		Ratio Supported All
03 1				• •
	DIFFERENTIAL CASE	011403		Ring Gear ID 145.0mm [5.71"]
04 4	RETURN SPRING	150101		Ring Gear Bolts 12 bolts on Ø175mm [6.89"]
05 3	CROSS SHAFT RETAINING PIN	120303		Ring Gear Torque 85Nm [63 ft-lb]
06 1	LONG CROSS SHAFT	060205		Backlash 0.13-0.18mm [0.005-0.007"]
07 2	SHORT CROSS SHAFT	060402		Bearing Cap Torque 60Nm [44 ft-lb]
08 1	PISTON	040202		2 - 4 - 4 - 1
09 1	BONDED SEAL	160705		
10 1	CYLINDER CAP ASSEMBLY	030603		
11 8	CYLINDER CAP RETAINING BOLT	200205		NI-1
12 8	LOCKING TAB (8mm)	150401		Notes:
13 1	TAPERED ROLLER BEARING	NOT SUPPLIED		
14 1	SEAL HOUSING RETAINING CLIP	150601		
15 1	SPLINED SIDE GEAR	130408		1 For replacement O-rings
16 4	PINION THRUST WASHER	151102		use only BS133 Viton 75.
17 4	PINION GEAR	140201		doc only Bores viten re.
				For information on RD25 models with metal
18 1	SPIDER BLOCK	070201		
19 1	SIDE GEAR	130208		pistons, contact ARB.
20 2	SIDE GEAR THRUST WASHER	151002		
21 1	ADJUSTER NUT	100101		For seal housing set-up refer to tech notes
22 1	SEAL HOUSING ASSEMBLY	081902		(Section 5.1 & 5.2).
23 2	SEAL HOUSING O-RING	160235	1	,
* 1	BULKHEAD FITTING KIT (O-RING TYPE)	170105		For the large Mitsubishi 28 spline differential
* 1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201		with a thrust block between the axle shafts
	NIPPLE (1/8" to 1/8" BSPT)	170501		(available on drum brake equipped vehicles)
* 1	AIR LINE (5mm DIA X 6m LONG)	170301		refer to RD46 (Section 2.46).
* 1	SOLENOID VALVE (12V)	180103		
* 1	SWITCH	180209		For the 'small' Mitsubishi 28 spline rear
* 1	SWITCH COVER (REAR)	180211		differential with 10 ring gear bolts refer to
* 10	CABLE TIE	180301		RD05 (Section 2.5).
* 1	WARNING LABEL	210101		(1)
	BUMPER STICKER	210102		
* 1	OPERATING & SERVICE MANUAL	210200		(3) \(\)
* 1 * Not il	Justrated in exploded view.	8 7 8 7	<u>6</u>	5 4 10 18 17 16 15
	23 22 21			RD25



KL	26	Land Rover HD,24 SPL*	· ×
ITEM#	QTY	DESCRIPTION	PART # NOTES
01	1	FLANGE CAP	020404
02	1	CLUTCH GEAR	050102
03	1	DIFFERENTIAL CASE	010404
04	4	RETURN SPRING	150101
05	2	CROSS SHAFT RETAINING PIN	120102
*	2	CROSS SHAFT RETAINING PIN	120302
06	1	LONG CROSS SHAFT	060103
07	2	SHORT CROSS SHAFT	060303
80	1	PISTON	040103
09	1	BONDED SEAL	160701
10	1	CYLINDER CAP ASSEMBLY	030120
11	6	CYLINDER CAP RETAINING BOLT	200205
12	6	LOCKING TAB (8mm)	150401
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED
14	1	CLAMPING PLATE	090201
15	1	SPLINED SIDE GEAR	130306R
16	4	PINION THRUST WASHER	151101
17	4	PINION GEAR	140101R
18	1	SPIDER BLOCK	070101
19	1	SIDE GEAR	130106R
20	2	SIDE GEAR THRUST WASHER	151001
21	1	ADJUSTER NUT (1.5mm thread pitch)	100201
22	1	SEAL HOUSING	080201
23	2	SEAL HOUSING O-RING	160206 1
24	3	SEAL HOUSING SCREW	200501
*	1	BULKHEAD FITTING KIT	170102
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501
*	1	AIR LINE (5mm DIA X 6m LONG)	170301
*	1	SOLENOID VALVE (12V)	180103
*	1	SWITCH	180209
*	1	SWITCH COVER (FRONT)	180210
*	1	SWITCH COVER (REAR)	180211
*	10	CABLE TIE	180301
*	1	WARNING LABEL	210101
*	1	BUMPER STICKER	210101
*	1	OPERATING & SERVICE MANUAL	210200
*	1	INSTALLATION GUIDE	210226
		INSTALLATION GOIDE	210220
*	Not il	lustrated in exploded view.	
**	the ra	model has been deleted from ange and is no longer in action.	8 76

Specs:

Axle Spline 24 tooth, Ø31.5mm [1.24"]
Ratio Supported 3.54:1
Ring Gear ID 125.4mm [4.94"]
Ring Gear Bolts 10 bolts on Ø142mm [5.59"]
Ring Gear Torque 58Nm [43 ft-lb]

Backlash 0.10-0.17mm [0.004-0.007"]
Bearing Cap Torque 90Nm [66 ft-lb]

Notes:

For replacement O-rings use only BS130 Viton 75.

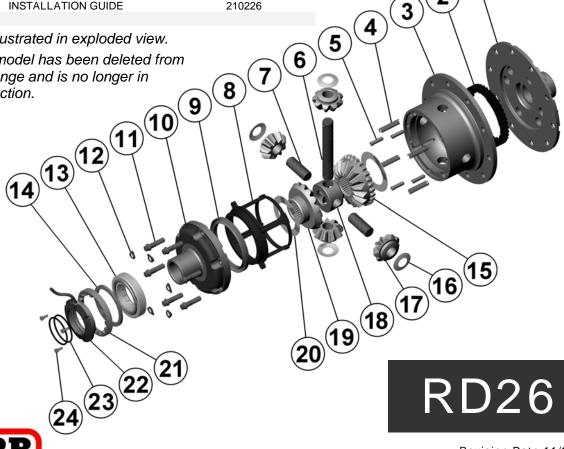
5mm [3/16"] ring gear spacer plate (ARB part# 'RD03A') is available for use with early Land Rover 4.70:1 ratio gears but longer bolts must be used. (Land Rover part# 576521.)

Refer to seal housing set-up tech note (Section 5.1).

Refer to Land Rover axle update tech note for 10 to 24 spline conversion information (Section 5.14).

For information on RD26 models with 4 cylinder cap bolts, contact ARB.

Revision Date 11/10/06



			-	
RD	27	Nissan C200,29 SPL**		
ITEM #	QTY	DESCRIPTION	PART#	NOTE
01	1	FLANGE CAP	020103	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010105	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
80	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP	030123	
11	2	SEAL HOUSING O-RING	160208	1
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	-	TAPERED ROLLER BEARING	NOT SUPPLIED	
15	1	SEAL HOUSING	080801	
16	1	SHIM KIT	SHK004	
17	1	SPLINED SIDE GEAR	130307	
18	4	PINION THRUST WASHER	151101	
19	4	PINION GEAR	140101	
20	1	SPIDER BLOCK	070101	
21	1	THRUST BLOCK	110203	
22	1	SIDE GEAR	130107	
23	2	SIDE GEAR THRUST WASHER	151003	
*	1	BULKHEAD FITTING KIT	170102	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	ACTUATOR SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210227	
*	Not il	lustrated in avaladed view		

Specs:

Axle Spline 29 tooth, Ø30.4mm [1.20"]

Ratio Supported All

Ring Gear ID 128.0mm [5.04"]

Ring Gear Bolts 10 bolts on Ø150mm [5.91"]

Ring Gear Bolt Size 12mm

Ring Gear Torque 120Nm [89 ft-lb]

Backlash 0.13-0.18mm [0.005-0.007"]

Bearing Cap Torque 93Nm [69 ft-lb]

Notes:

 For replacement O-rings use only BS030 Viton 75.

For information on RD27 models with metal pistons, contact ARB.

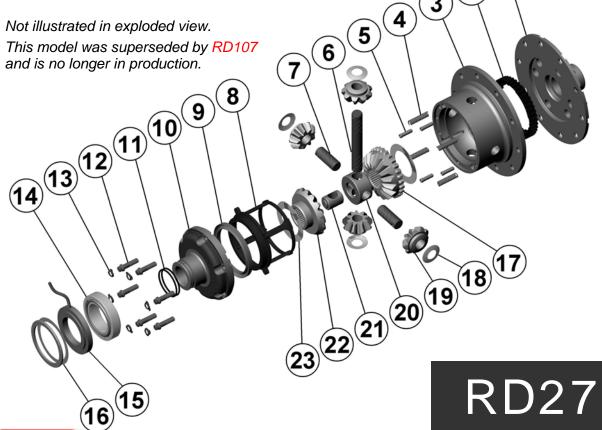
When used with 10mm ring gear bolts, adapter sleeves of the following size are required:

Outside: Ø12.25mm [0.482"] Inside: Ø10.45mm [0.411"] Length: 10mm [0.39"] Bolt Torque: 74Nm [55 ft-lb]

Some C200's did not have thrust blocks between the axles and therefore the Air Locker thrust block must be removed.

Revision Date 11/10/06

Refer to axle modification tech note (Section 5.4) if axle binds inside carrier.



ΛII	D A	IN LOCKEN AII C	perai	eu L
RD	28	GM 10 Bolt,8.5",30 SPL**	•	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	020903	
02	1	CLUTCH GEAR	050301	
03	1	DIFFERENTIAL CASE	010905	
04	4	RETURN SPRING	150101	
05	1	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060204	
07	1	PISTON	040301	
80	1	U-RING	160301	
09	1	CYLINDER CAP ASSEMBLY	030114	
10	2	SEAL HOUSING O-RING	160205	1
11	6	CYLINDER CAP RETAINING BOLT	200205	
12	6	LOCKING TAB (8mm)	150401	
13	2	TAPERED ROLLER BEARING	160109	2
14	1	SHIM KIT	SHK003	
15	1	SEAL HOUSING	080602	
16	1	SPLINED SIDE GEAR	130603	
17	2	PINION GEAR	140302	
18	2	PINION THRUST WASHER	151103	
19	1	SIDE GEAR	130503	
20	2	SIDE GEAR THRUST WASHER	151003	
*	1	C-CLIP KIT	CCK003	
*	1	BULKHEAD FITTING KIT	170102	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210228	
*	Not il	lustrated in exploded view.		
**		model was superseded by RD84 s no longer in production.		(

Specs:

Axle Spline 30 tooth, Ø33.3mm [1.31"]
Ratio Supported 2.73:1 & up
Ring Gear ID 127.0mm [5.00"]
Ring Gear OD 216mm [8.5"]
Ring Gear Bolts 10 bolts on Ø156mm [6.14"]
Ring Gear Torque 88Nm [65 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

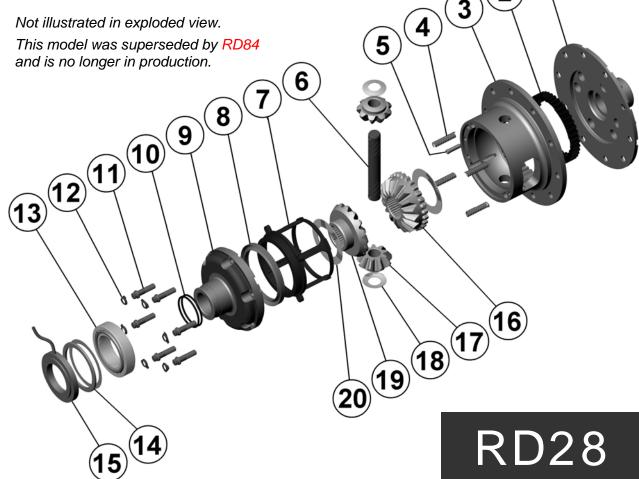
- 1 For replacement O-rings use only BS132 Viton 75.
- For replacement bearing use Timken part # LM102949 / LM102910.

For information on RD28 models with 4 cylinder cap bolts, contact ARB.

Ring gear bolts are 7/16" - 20 left-hand thread, and must be removed in a clockwise direction.

When installing into 1999 & newer vehicles, bearing # 160104, seal housing # 080501 & shim kit # SHK002 must be substituted for the listed items.

Revision Date 11/10/06



RD	30	Dana 30,27 SPL,3.73 &	UP**	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	021801	
02	1	CLUTCH GEAR	050501	
03	1	DIFFERENTIAL CASE	011901	
04	4	RETURN SPRING	150102	
05	4	CROSS SHAFT RETAINING PIN	120401	
06	1	LONG CROSS SHAFT	060104	
07	2	SHORT CROSS SHAFT	060306	
80	1	PISTON	040601	
09	1	U-RING	160303	
10	1	CYLINDER CAP	030901	
11	2	SEAL HOUSING O-RING	160210	1
12	6	CYLINDER CAP RETAINING BOLT	200207	
13	6	LOCKING TAB (6mm)	150402	
14	1	TAPERED ROLLER BEARING	160105	2
15	1	SEAL HOUSING	080603	
16	1	SHIM KIT	SHK003	
17	1	SPLINED SIDE GEAR	131004R	
18	4	PINION THRUST WASHER	151105	
19	4	PINION GEAR	140501R	
20	1	SPIDER BLOCK	070501	
21	1	SIDE GEAR	130901R	
22	2	SIDE GEAR THRUST WASHER	151005	
*	1	BULKHEAD FITTING KIT	170102	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210230	
*	Not il	llustrated in exploded view		

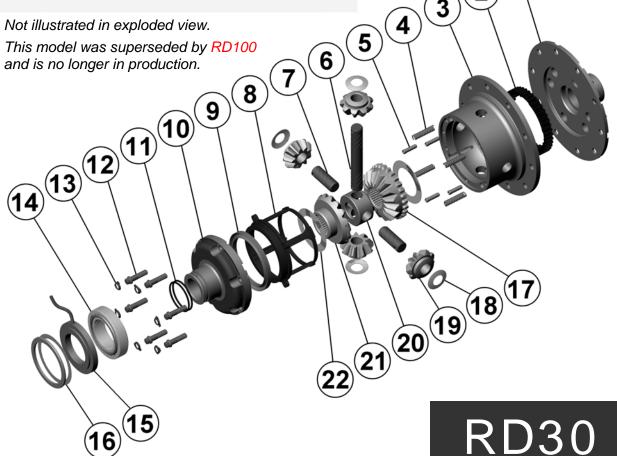
Specs:

Axle Spline 27 tooth, Ø29.5mm [1.16"]
Ratio Supported 3.73:1 & up
Ring Gear ID 114.3mm [4.50"]
Ring Gear OD 183mm [7.2"]
Ring Gear Bolts 10 bolts on Ø133mm [5.24"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

- For replacement O-rings use only BS028 Viton 75.
- For replacement bearing use Timken part # LM501349 / LM501310.

Not for use in IFS Dana 30 models.



ARB

**

RD	31	Dana 30,27 SPL,3.54 &	DN**	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	021802	
02	1	CLUTCH GEAR	050501	
03	1	DIFFERENTIAL CASE	011902	
04	4	RETURN SPRING	150102	
05	4	CROSS SHAFT RETAINING PIN	120401	
06	1	LONG CROSS SHAFT	060104	
07	2	SHORT CROSS SHAFT	060306	
80	1	PISTON	040601	
09	1	U-RING	160303	
10	1	CYLINDER CAP	030901	
11	2	SEAL HOUSING O-RING	160210	1
12	6	CYLINDER CAP RETAINING BOLT	200207	
13	6	LOCKING TAB (6mm)	150402	
14	1	TAPERED ROLLER BEARING	160105	2
15	1	SEAL HOUSING	080603	
16	1	SHIM KIT	SHK003	
17	1	SPLINED SIDE GEAR	131004R	
18	4	PINION THRUST WASHER	151105	
19	4	PINION GEAR	140501R	
20	1	SPIDER BLOCK	070501	
21	1	SIDE GEAR	130901R	
22	2	SIDE GEAR THRUST WASHER	151005	
*	1	BULKHEAD FITTING KIT	170102	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210231	
-1-				

**

Specs:

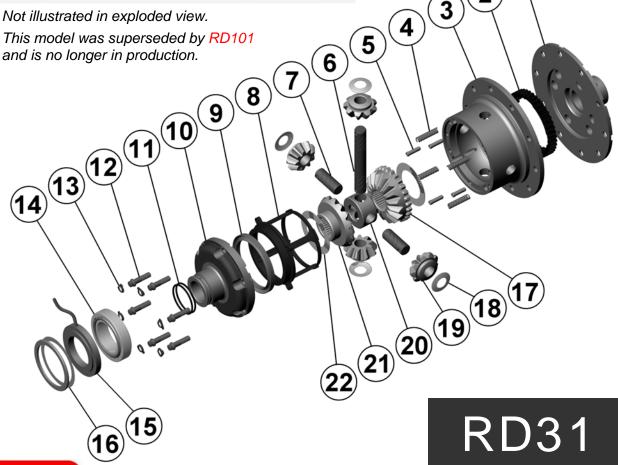
Axle Spline 27 tooth, Ø29.5mm [1.16"]
Ratio Supported 3.54:1 & down
Ring Gear ID 114.3mm [4.50"]
Ring Gear OD 183mm [7.2"]
Ring Gear Bolts 10 bolts on Ø133mm [5.24"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

- 1 For replacement O-rings use only BS028 Viton 75.
- 2 For replacement bearing use Timken part # LM501349 / LM501310.

Not for use in IFS Dana 30 models.

Revision Date 11/10/06



RD	32	Land Rover, Salisbury, 4.	70:1	
ITEM#	QTY	DESCRIPTION	PART#	NOT
01	1	FLANGE CAP	021102	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	011303	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120303	
06	1	LONG CROSS SHAFT	060205	
07	2	SHORT CROSS SHAFT	060402	
80	1	PISTON	040202	
09	1	BONDED SEAL	160705	
10	1	CYLINDER CAP	030503	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160107	2
15	1	SEAL HOUSING	080701	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130407	
18	4	PINION THRUST WASHER	151102	
19	4	PINION GEAR	140201	
20	1	SPIDER BLOCK	070201	
21	1	SIDE GEAR	130206	
22	2	SIDE GEAR THRUST WASHER	151006	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210232	
ماد	A 1			

Specs:

Axle Spline 24 tooth, Ø31.5mm [1.24"]
Ratio Supported 4.70:1
Ring Gear ID 162.0mm [6.38"]
Ring Gear Bolts 12 bolts on Ø191mm [7.50"]
Ring Gear Torque 136Nm [100 ft-lb]
Backlash 0.15-0.27mm [0.006-0.011"]
Bearing Cap Torque 134Nm [99 ft-lb]
Pre-load Amount 0.13mm [0.005"]

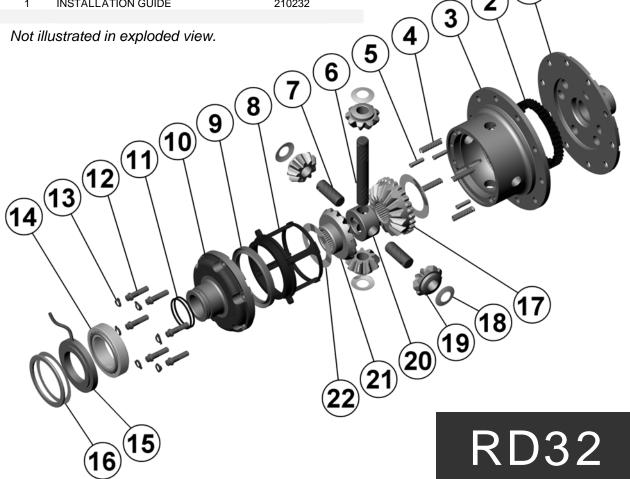
Notes:

- 1 For replacement O-rings use only BS136 Viton 75
- For replacement bearing use Timken part # 387A / 382A.

For ratios of 3.54:1 refer to RD20 (Section 2.20).

For information on RD32 models with metal pistons, contact ARB.

Revision Date 11/10/06



16 4 PINION THRUST WASHER 151102 17 4 PINION GEAR 140201 For 8.9" with 18 1 SPIDER BLOCK 070201 bearings mus 19 1 SIDE GEAR 130201 and Timken p 20 2 SIDE GEAR THRUST WASHER 151002 21 1 ADJUSTER NUT 100101 For 8.9" C-cli 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 Refer to seal	
01 1 FLANGE CAP 021703 Axle Spl 02 1 CLUTCH GEAR 050202 Ratio Suppor 03 1 DIFFERENTIAL CASE 010204 Ring Gear 04 4 RETURN SPRING 150101 Ring Gear 05 3 CROSS SHAFT RETAINING PIN 120303 Ring Gear Box 06 1 LONG CROSS SHAFT 060205 Ring Gear Toro 07 2 SHORT CROSS SHAFT 060402 Bearing Cap Toro 08 1 PISTON 040202 Bearing Cap Toro 09 1 BONDED SEAL 160705 10 1 CYLINDER CAP ASSEMBLY 030222 11 8 CYLINDER CAP RETAINING BOLT 200205 12 8 LOCKING TAB (8mm) 150401 Notes: 13 1 TAPERED ROLLER BEARING NOT SUPPLIED 14 1 SEAL HOUSING RETAINING CLIP 150601 15 1 SPLINED SIDE GEAR 130401 1	
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08 1 PISTON 040202 Bearing Cap Toro 09 1 BONDED SEAL 160705 10 1 CYLINDER CAP ASSEMBLY 030222 11 8 CYLINDER CAP RETAINING BOLT 200205 <	
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17 4 PINION GEAR 140201 For 8.9" with 18 1 SPIDER BLOCK 070201 bearings mus 19 1 SIDE GEAR 130201 and Timken p 20 2 SIDE GEAR THRUST WASHER 151002 21 1 ADJUSTER NUT 100101 For 8.9" C-cli 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 Refer to seal	ent O-rings use only BS136 Viton 75.
18 1 SPIDER BLOCK 070201 bearings mus 19 1 SIDE GEAR 130201 and Timken p 20 2 SIDE GEAR THRUST WASHER 151002 21 1 ADJUSTER NUT 100101 For 8.9" C-cli 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 Refer to seal	45mm carrier bearing ID 50mm
19 1 SIDE GEAR 130201 and Timken p 20 2 SIDE GEAR THRUST WASHER 151002 21 1 ADJUSTER NUT 100101 For 8.9" C-cli 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 Refer to seal	45mm carrier bearing ID, 50mm t be acquired. ARB part #160116
20 2 SIDE GEAR THRUST WASHER 151002 21 1 ADJUSTER NUT 100101 For 8.9" C-cli 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 Refer to seal	art #32010X-32010X.
21 1 ADJUSTER NUT 100101 For 8.9" C-cli 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 Refer to seal	are 11020101 020101.
22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 Refer to seal	o model refer to RD124 (Sec. 2.124).
23 2 SEAL HOUSING O-RING 160207 1 Refer to seal	
	housing set-up tech note (Sec. 5.2).
* 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105	
	on on RD33 models with 4
	oolts, contact ARB.
* 1 AIR LINE (5mm DIA X 6m LONG) 170301	
	odels with O-ring grooves in the
	use; cylinder cap #030209,
· · · · · · · · · · · · · · · · · · ·	#080102 and O-ring BS031 #160209.
* 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301	
* 1 WARNING LABEL 210101	
* 1 BUMPER STICKER 210102	\sim (1)
* 1 OPERATING & SERVICE MANUAL 210200	(2)
* 1 INSTALLATION GUIDE 210233	
* Not illustrated in exploded view. * Not illustrated in exploded view. 14 13 12 11 10 9 8 7 6 5 4 11 12 11 10 11 11 11 11 11 11	7 16 15
20 19 18	RD33

2.33

RD	35	Dana 60HD,35 SPL,4.56	& UP	
ITEM #	QTY	DESCRIPTION	PART#	NOTE
01	1	FLANGE CAP	021501	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	011701	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
80	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	030803	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160107	2
15	1	SEAL HOUSING	080701	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130801	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130701	
22	2	SIDE GEAR THRUST WASHER	151004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210235	
*	Not ill	lustrated in exploded view.		

Specs:

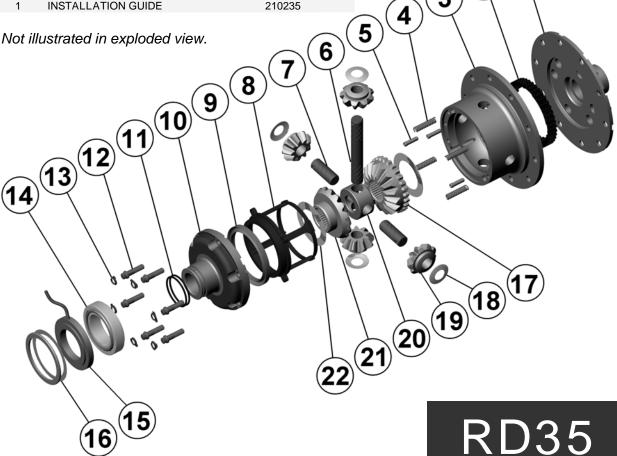
Axle Spline 35 tooth, Ø38.1mm [1.50"]
Ratio Supported 4.56:1 & up
Ring Gear ID 162.0mm [6.38"]
Ring Gear OD 248mm [9.75"]
Ring Gear Bolts 12 bolts on Ø191mm [7.50"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- 1 For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

For ratios of 4.10:1 and down refer to RD36 (Section 2.36).

For Dana 60HD C-clip model refer to RD42 (Section 2.42).





Dana 60HD,35 SPL,4.10 & DN RD36 Specs: NOTES 01 FLANGE CAP 021502 Axle Spline 35 tooth, Ø38.1mm [1.50"] 1 02 1 **CLUTCH GEAR** 050401 Ratio Supported 4.10:1 & down 03 **DIFFERENTIAL CASE** 011702 Ring Gear ID 162.0mm [6.38"] 248mm [9.75"] 04 RETURN SPRING 150101 Ring Gear OD 05 3 CROSS SHAFT RETAINING PIN 12 bolts on Ø191mm [7.50"] 120301 Ring Gear Bolts 06 LONG CROSS SHAFT 060703 Ring Gear Torque 149Nm [110 ft-lb] 0.15-0.25mm [0.006-0.010"] SHORT CROSS SHAFT 07 2 060802 Backlash 108Nm [80 ft-lb] 08 PISTON 040501 Bearing Cap Torque 09 **BONDED SEAL** 1 160703 10 CYLINDER CAP 030803 1 11 2 SEAL HOUSING O-RING 160207 Notes: 8 CYLINDER CAP RETAINING BOLT 12 200205 13 LOCKING TAB (8mm) 150401 14 TAPERED ROLLER BEARING 160107 2 SEAL HOUSING 15 For replacement O-rings 1 080701 16 SHIM KIT SHK001 use only BS136 Viton 75. SPLINED SIDE GEAR 17 130801 PINION THRUST WASHER For replacement bearing use 18 151104 19 PINION GEAR 140401 Timken part # 387A / 382A. 20 SPIDER BLOCK 070401 21 SIDE GEAR 130701 For ratios of 4.56:1 and up refer to RD35 1 SIDE GEAR THRUST WASHER 151004 (Section 2.35). **BULKHEAD FITTING KIT (O-RING TYPE)** 170105 PUSH-IN FITTING (5mm to 1/8" BSPP) For Dana 60HD C-clip model refer to RD43 170201 AIR LINE (5mm DIA X 6m LONG) 170301 (Section 2.43). NIPPLE (1/8" to 1/8" BSPT) 170501 1 SOLENOID VALVE (12V) 180103 SWITCH 180209 SWITCH COVER (REAR) 180211 1 SWITCH COVER (FRONT) 180210 10 **CABLE TIE** 180301 WARNING LABEL 1 210101 1 **BUMPER STICKER** 210102 OPERATING & SERVICE MANUAL 210200 **INSTALLATION GUIDE** 210236 Not illustrated in exploded view. 6 8 **11** 22 21 20 19

RD36

(ARB)

RD	37	Ford 10.25" & 10.5" (Sterling	corporate)	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	021103	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	011801	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
80	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	031002	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	NOT SUPPLIED	2
15	1	SEAL HOUSING	080702	
16	1	SHIM KIT	SHK006	
17	1	SPLINED SIDE GEAR	130803	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130703	
22	2	SIDE GEAR THRUST WASHER	151007	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210237	
*	Not ill	lustrated in exploded view.		1
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			\sim (5)\

Specs:

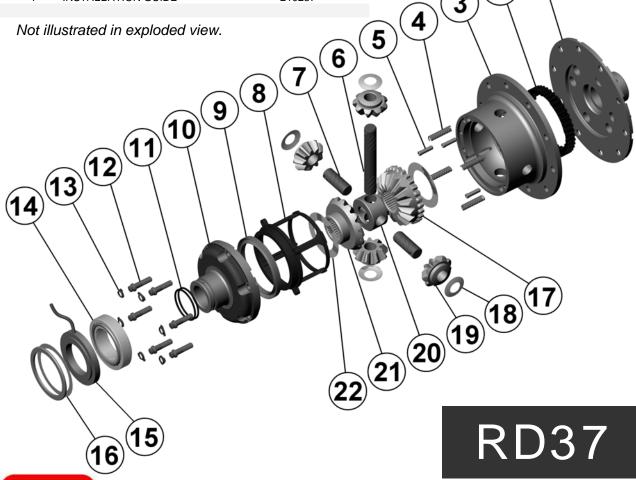
Axle Spline 35 tooth, Ø38.1mm [1.50"]
Ratio Supported All
Ring Gear ID 165.1mm [6.50"]
Ring Gear OD 260/268mm [10.25/10.50"]
Ring Gear Bolts 12 bolts on Ø192mm [7.56"]
Ring Gear Torque 129Nm [95 ft-lb]
Backlash 0.28-0.41mm [0.011-0.016"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- For replacement O-rings use only BS136 Viton 75.
- For replacement bearing use Timken part # 469 / 453X.

Suitable for use with ABS tone ring.

Revision Date 11/10/06



RD	38	Dana 35,non C-clip,27 SPL,3.	31 & DN**	
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021902	
02	1	CLUTCH GEAR	050501	
03	1	DIFFERENTIAL CASE	012002	
04	4	RETURN SPRING	150102	
05	4	CROSS SHAFT RETAINING PIN	120401	
06	1	LONG CROSS SHAFT	060104	
07	2	SHORT CROSS SHAFT	060306	
08	1	PISTON	040601	
09	1	U-RING	160303	
10	1	CYLINDER CAP	030902	
11	2	SEAL HOUSING O-RING	160210	1
12	6	CYLINDER CAP RETAINING BOLT	200207	
13	6	LOCKING TAB (6mm)	150402	
14	1	TAPERED ROLLER BEARING	160105	2
15	1	SEAL HOUSING	080603	
16	1	SHIM KIT	SHK003	
17	1	SPLINED SIDE GEAR	131004R	
18	4	PINION THRUST WASHER	151105	
19	4	PINION GEAR	140501R	
20	1	SPIDER BLOCK	070501	
21	1	SIDE GEAR	130901R	
22	2	SIDE GEAR THRUST WASHER	151005	
*	1	BULKHEAD FITTING KIT	170102	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210238	

Specs:

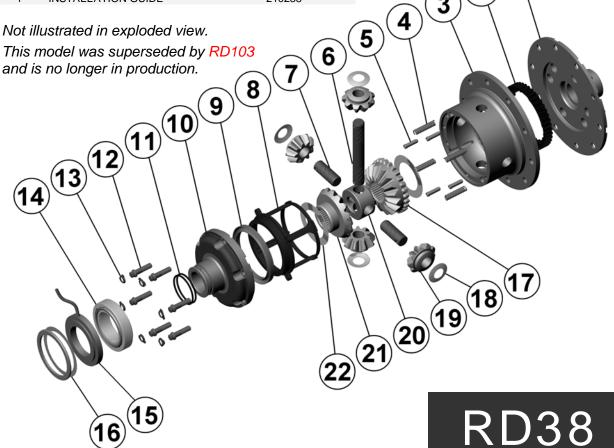
Axle Spline 27 tooth, Ø29.5mm [1.16"]
Ratio Supported 3.31:1 & down
Ring Gear ID 120.7mm [4.75"]
Ring Gear OD 193mm [7.6"]
Ring Gear Bolts 8 bolts on Ø146mm [5.75"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 75Nm [55 ft-lb]

Notes:

- For replacement O-rings Use only BS028 Viton 75.
- For replacement bearing use Timken part # LM501349 / LM501310.

Not for use with C-clip retained rear axle models unless a C-clip eliminator kit is used.

For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.





RD	39	Dana 35,non C-clip,27 SPL,3.	.54 & UP**	
ITEM#	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021901	
02	1	CLUTCH GEAR	050501	
03	1	DIFFERENTIAL CASE	012001	
04	4	RETURN SPRING	150102	
05	4	CROSS SHAFT RETAINING PIN	120401	
06	1	LONG CROSS SHAFT	060104	
07	2	SHORT CROSS SHAFT	060306	
80	1	PISTON	040601	
09	1	U-RING	160303	
10	1	CYLINDER CAP	030902	
11	2	SEAL HOUSING O-RING	160210	1
12	6	CYLINDER CAP RETAINING BOLT	200207	
13	6	LOCKING TAB (6mm)	150402	
14	1	TAPERED ROLLER BEARING	160105	2
15	1	SEAL HOUSING	080603	
16	1	SHIM KIT	SHK003	
17	1	SPLINED SIDE GEAR	131004R	
18	4	PINION THRUST WASHER	151105	
19	4	PINION GEAR	140501R	
20	1	SPIDER BLOCK	070501	
21	1	SIDE GEAR	130901R	
22	2	SIDE GEAR THRUST WASHER	151005	
*	1	BULKHEAD FITTING KIT	170102	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210239	
*	11: 4-11	lustrated in avaladed view		

Specs:

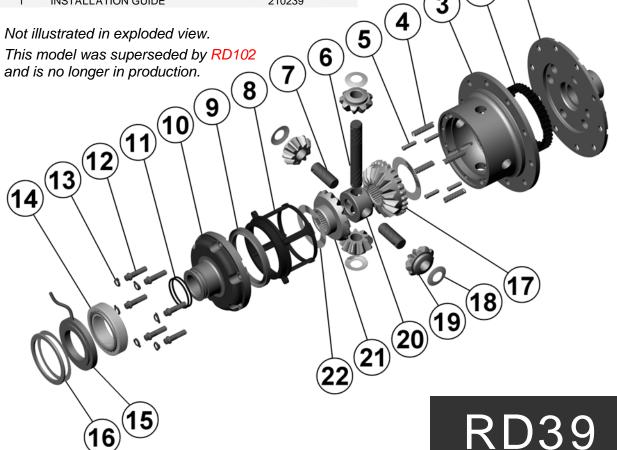
Axle Spline 27 tooth, Ø29.5mm [1.16"]
Ratio Supported 3.54:1 & up
Ring Gear ID 120.7mm [4.75"]
Ring Gear OD 193mm [7.6"]
Ring Gear Bolts 8 bolts on Ø146mm [5.75"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 75Nm [55 ft-lb]

Notes:

- For replacement O-rings Use only BS028 Viton 75.
- For replacement bearing use Timken part # LM501349 / LM501310.

Not for use with C-clip retained rear axle models unless a C-clip eliminator kit is used.

For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.





**

RE	D40	GM 14 Bolt,9.5",C-clip		
ITEM #	QTY	DESCRIPTION	PART #	NOT
01	1	FLANGE CAP	022001	
02	1	CLUTCH GEAR	050402	
03	1	DIFFERENTIAL CASE	012101	
04	4	RETURN SPRING	150101	
05	1	CROSS SHAFT RETAINING PIN	120401	
06	1	LONG CROSS SHAFT	060901	
07	1	PISTON	040501	
80	1	BONDED SEAL	160703	
09	1	CYLINDER CAP	031001	
10	2	SEAL HOUSING O-RING	160211	1
11	8	CYLINDER CAP RETAINING BOLT	200204	
12	1	TAPERED ROLLER BEARING	160110	2
13	1	SEAL HOUSING ASSEMBLY	080901	
14	1	SPLINED SIDE GEAR	130802	
15	2	PINION GEAR	140402	
16	2	PINION THRUST WASHER	151104	
17	1	SIDE GEAR	130702	
18	2	SIDE GEAR THRUST WASHER	151004	
*	1	'C' CLIP KIT	CCK002	
*	1	M6 RETAINING BOLT	200204	
*	1	LOCK WASHER	4581059	
*	1	PIN WITHDRAWAL TOOL	1201T	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210240	
4				

Specs:

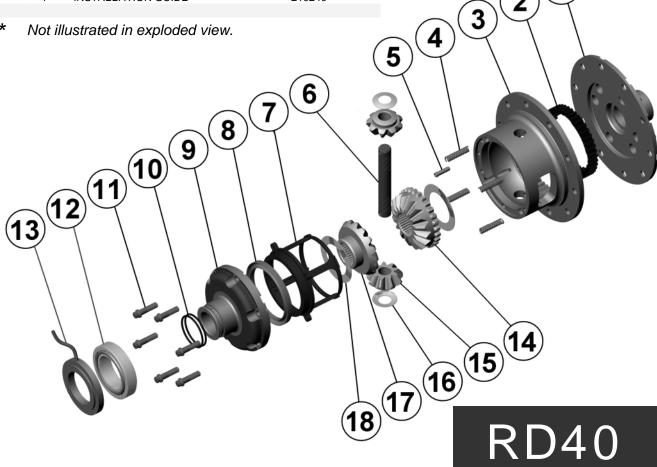
Axle Spline 33 tooth, Ø34.8mm [1.37"]
Ratio Supported All
Ring Gear ID 152.9mm [6.02"]
Ring Gear OD 241mm [9.50"]
Ring Gear Bolts 12 bolts on Ø181mm [7.13"]
Ring Gear Torque 102Nm [75 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- 1 For replacement O-rings use only BS135 Viton 75.
- 2 For replacement bearing use Timken part # JLM506849 / JLM506810.

Ring gear bolts are M12x1.5mm left-hand thread, and must be removed in a clockwise direction.

Variation in OE casting may require modification to the bearing cap to suit lock tab position.





ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	020503	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010505	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
08	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP	030410	
11	2	SEAL HOUSING O-RING	160205	1
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	0
14	1	TAPERED ROLLER BEARING	160101	2
15	1	SEAL HOUSING	080301	
16	1	SHIM KIT	SHK004	
17	1	SPLINED SIDE GEAR	130308	
18 19	4	PINION THRUST WASHER PINION GEAR	151101	
20	1	SPIDER BLOCK	140101 070101	
21	1	THRUST BLOCK	110202	
22	1	SIDE GEAR	130108	
23	2	SIDE GEAR THRUST WASHER	151003	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170103	
*	1	AIR LINE (5mm DIA X 6m LONG)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210241	
*	Not il	lustrated in exploded view.		

Specs:

Axle Spline 19 tooth, Ø31.5mm [1.24"]

Ratio Supported All

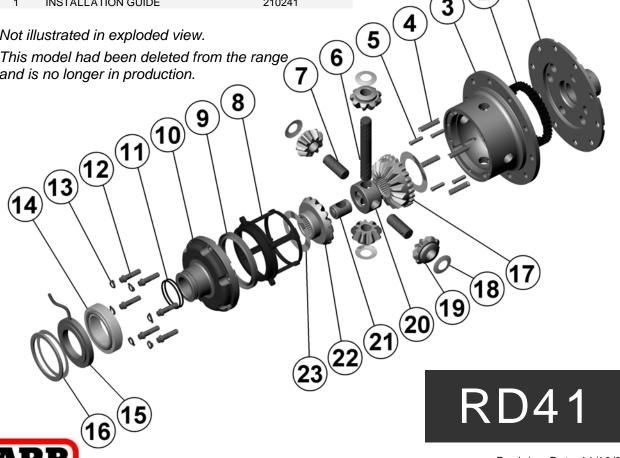
Ring Gear ID 141.3mm [5.56"]

Ring Gear Bolts 10 bolts on Ø168mm [6.63"]

Notes:

- For replacement O-rings use only BS132 Viton 75.
- For replacement bearing use Timken part # LM104949 / LM104912.

Revision Date 11/10/06



RD	42	Dana 60HD,C-clip,35 SP	L,4.56 & l	UP	Specs:
ITEM#	QTY	DESCRIPTION	PART#	NOTES	Species.
01	1	FLANGE CAP	021501	NOTES	Axle Spline 35 tooth, Ø38.1mm [1.50"]
02	1	CLUTCH GEAR	050401		Ratio Supported 4.56:1 & up
03	1	DIFFERENTIAL CASE	011703		Ring Gear ID 162.0mm [6.38"]
04	4	RETURN SPRING	150101		Ring Gear OD 248mm [9.75"]
05	1	CROSS SHAFT RETAINING PIN	120301		Ring Gear Bolts 12 bolts on Ø191mm [7.50"]
06	1	LONG CROSS SHAFT	060702		Ring Gear Torque 149Nm [110 ft-lb]
07	1	PISTON	040501		Backlash 0.15-0.25mm [0.006-0.010"]
80	1	BONDED SEAL	160703		Bearing Cap Torque 108Nm [80 ft-lb]
09	1	CYLINDER CAP	030803		
10	2	SEAL HOUSING O-RING	160207	1	
11	8	CYLINDER CAP RETAINING BOLT	200205		
12	8	LOCKING TAB (8mm)	150401		Notes:
13	1	TAPERED ROLLER BEARING	160107	2	NOIGS.
14	1	SEAL HOUSING ASSEMBLY	080701	_	
15	1				1 For replacement O rings
		SHIM KIT	SHK001		1 For replacement O-rings
16	1	SPLINED SIDE GEAR	130801		use only BS136 Viton 75.
17	2	PINION GEAR	140401		
18	2	PINION THRUST WASHER	151104		2 For replacement bearing use
19	1	SIDE GEAR	130701		Timken part # 387A / 382A.
20	2	SIDE GEAR THRUST WASHER	151004		
*	1	SOCKET HEAD SCREW	200506		For ratios of 4.10:1 and down refer to RD43
*	1	LOCK WASHER	4581046		(Section 2.43).
*	1	PIN WITHDRAWAL TOOL	1201T		
*	1	BULKHEAD FITTING KIT (O-RING TYPE)			For Dana 60HD non C-clip model refer to RD35
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201		(Section 2.35).
*	1	AIR LINE (5mm DIA X 6m LONG)	170301		(00011011 2.55).
*					
	1	NIPPLE (1/8" to 1/8" BSPT)	170501		
	1	SOLENOID VALVE (12V)	180103		
*	1	SWITCH	180209		
*	1	SWITCH COVER (REAR)	180211		
*	10	CABLE TIE	180301		
*	1	WARNING LABEL	210101		\sim (1)
*	1	BUMPER STICKER	210102		
*	1	OPERATING & SERVICE MANUAL	210200		(3)
,		dustrated in exploded view.	6	5	9 18 17 16
		15 14	•	- - - -	RD42

01 1 02 1	Dana 60HD,C-clip,35 S DESCRIPTION FLANGE CAP CLUTCH GEAR	PART # 021502	DN	Spec	s:	
01 1 02 1	FLANGE CAP		NOTES	•		
01 1 02 1	FLANGE CAP		NOTES			
02 1				Λ.		25 to ath (220 days 14 50")
					xle Spline	35 tooth, Ø38.1mm [1.50"]
		050401			Supported	4.10:1 & down
03 1	DIFFERENTIAL CASE	011704			ng Gear ID	162.0mm [6.38"]
04 4	RETURN SPRING	150101		Ring	g Gear OD	248mm [9.75"]
05 1	CROSS SHAFT RETAINING PIN	120301		Ring (Gear Bolts	12 bolts on Ø191mm [7.50"]
* 1	SOCKET HEAD SCREW	200506			ar Torque	149Nm [110 ft-lb]
* 1	LOCK WASHER	4581046		9	Backlash	0.15-0.25mm [0.006-0.010"]
* 1	PIN WITHDRAWAL TOOL	1201T		Bearing C		108Nm [80 ft-lb]
06 1	LONG CROSS SHAFT	060702		Dearing O	ap Torque	10014111 [00 11 15]
07 1	PISTON	040501				
08 1	BONDED SEAL	160703		Nistas		
09 1	CYLINDER CAP	030803		Notes	5.	
10 2	SEAL HOUSING O-RING	160207	1			
11 8	CYLINDER CAP RETAINING BOLT	200205				
12 8	LOCKING TAB (8mm)	150401		1 For re	placement (O-rings
13 1	TAPERED ROLLER BEARING	160107	2	use or	ly BS136 V	iton 75.
14 1	SEAL HOUSING ASSEMBLY	080701			-	
15 1	SHIM KIT	SHK001		2 For re	olacement l	pearing use
16 1	SPLINED SIDE GEAR	130801			n part # 387	<u> </u>
17 2	PINION GEAR	140401		TITIKO	11 Part # 307	A / 302A.
				F	:f 4 FC	4 and refer to DD40
-	PINION THRUST WASHER	151104				1 and up refer to RD42
19 1	SIDE GEAR	130701		(Section	on 2.42).	
20 2	SIDE GEAR THRUST WASHER	151004				
* 1	BULKHEAD FITTING KIT (O-RING TYPE	PE) 170105		For Da	ana 60HD no	on C-clip model refer to RD36
* 1	PUSH-IN FITTING (5mm to 1/8" BSP	P) 170201		(Section	on 2.36).	
* 1	AIR LINE (5mm DIA X 6m LONG)	170301				
* 1	NIPPLE (1/8" to 1/8" BSPT)	170501				
* 1	SOLENOID VALVE (12V)	180103				
* 1	SWITCH	180209				
	SWITCH COVER (REAR)	180211				
10	CABLE TIE	180301				
* 1	WARNING LABEL	210101				~ (1)
* 1	BUMPER STICKER	210102				5) (1)
* 1	OPERATING & SERVICE MANUAL	210200				
* 1	INSTALLATION GUIDE	210243			(3)	√ \
* Not illu	astrated in exploded view.	76		5 4 19 18	17	6
	15)14)		(20)		F	RD43

2.43

AK	BA	IR LOCKER Air	Operate	dL	.00
RD)44	Isuzu,RR,26 SPL			
ITEM #	QTY	DESCRIPTION	PART#	NOTES	
01	1	FLANGE CAP	022101		
02	1	CLUTCH GEAR	050102		
03	1	DIFFERENTIAL CASE	010506		
04	4	RETURN SPRING	150101		
05	2	CROSS SHAFT RETAINING PIN	120102		
*	2	CROSS SHAFT RETAINING PIN	120302		
06	4	SHORT CROSS SHAFT	060303		
07	2	SIDE GEAR THRUST WASHER	151003		
08	1	PISTON	040103		
09	1	BONDED SEAL	160701		
10	1	CYLINDER CAP	030411		
11	2	SEAL HOUSING O-RING	160205	1	
12	6	CYLINDER CAP RETAINING BOLT	200205		
13	6	LOCKING TAB (8mm)	150401		
14	1	TAPERED ROLLER BEARING	NOT SUPPLIED		1
15	1	SEAL HOUSING	081001		
16	1	SHIM KIT	SHK005		
17	1	SPLINED SIDE GEAR	130309		
18	4	PINION THRUST WASHER	151101		
19	4	PINION GEAR	140101		
20	1	SPIDER BLOCK	070101		
21	1	THRUST BLOCK	110507		
22	1	SIDE GEAR	130109		
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105		
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201		
*	1	AIR LINE (5mm DIA X 6m LONG)	170301		
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501		
*	1	SOLENOID VALVE (12V)	180103		
*	1	SWITCH COVER (REAR)	180209		
*	10	SWITCH COVER (REAR) CABLE TIE	180211 180301		
*	-	WARNING LABEL			
*	1	-	210101		
*	1	BUMPER STICKER	210102		
*	1	OPERATING & SERVICE MANUAL INSTALLATION GUIDE	210200 210244		
	·		210244		
*	Not ill	ustrated in exploded view.			
		98	7	6	5

Specs:

Axle Spline 26 tooth, Ø33.5mm [1.32"]

Ring Gear Bolts 12 bolts on Ø165mm [6.50"]

Ratio Supported All

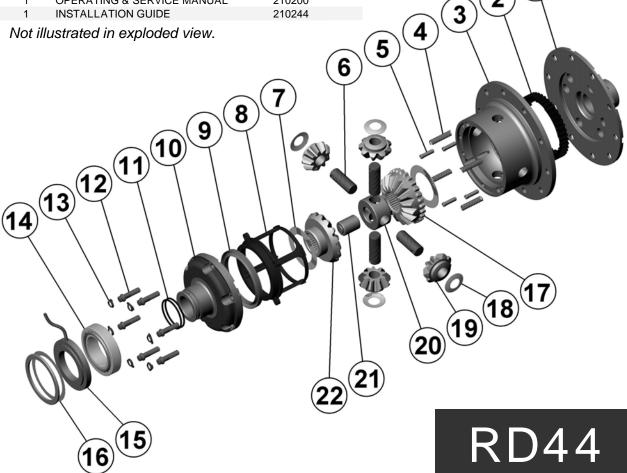
Ring Gear ID 138.0mm [5.43"]

Notes:

For replacement O-rings with cross section diameter of 2.62mm [0.103"] use only BS132 Viton 75 (ARB # 160205).
For replacement O-rings with cross section diameter of 1.78mm [0.070"] (older models)

For information on RD44 models with 4 cylinder cap bolts, contact ARB.

use only BS031 Viton 75 (ARB # 160209).



			-	
RD	45	Mahindra,19 SPL**		
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	020503	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010505	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
80	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP	030410	
11	2	SEAL HOUSING O-RING	160205	1
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160101	2
15	1	SEAL HOUSING	080301	
16	1	SHIM KIT	SHK004	
17	1	SPLINED SIDE GEAR	130305	
18	4	PINION THRUST WASHER	151101	
19	4	PINION GEAR	140101	
20	1	SPIDER BLOCK	070101	
21	1	THRUST BLOCK	110202	
22	1	SIDE GEAR	130105	
23	2	SIDE GEAR THRUST WASHER	151003	
*	1	BULKHEAD FITTING KIT	170102	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210245	
*	Not il	lustrated in exploded view.		

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Specs:

Axle Spline 19 tooth, Ø31.8mm [1.25"]

Ratio Supported All

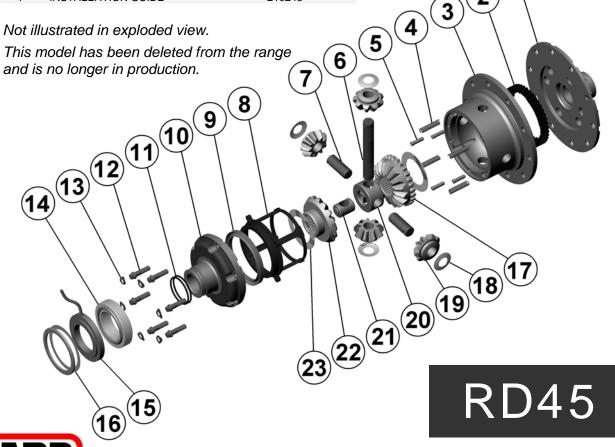
Ring Gear ID 141.3mm [5.56"]

Ring Gear Bolts 10 bolts on Ø168mm [6.61"]

Notes:

- 1 For replacement O-rings use only BS132 Viton 75.
- For replacement bearing use Timken part # LM104949 / LM104912.

Revision Date 11/10/06



			7			3 - 111	
RD	46	Mitsubishi 9",RR,28 SPL			S	pecs:	
ITEM #	QTY	DESCRIPTION	PART#	NOTES			
01	1	FLANGE CAP	021202			Axle Spline	28 tooth, Ø30.5mm [1.20"]
02	1	CLUTCH GEAR	050202			Ratio Supported	All
03	1	DIFFERENTIAL CASE	011403				145.0mm [5.71"]
04	4	RETURN SPRING	150101			Ring Gear Bolts	12 bolts on Ø175mm [6.89"]
05	4	CROSS SHAFT RETAINING PIN	120303		F	Ring Gear Torque	85Nm [63 ft-lb]
06	4	SHORT CROSS SHAFT	060402			Backlash	0.13-0.18mm [0.005-0.007"]
07	2	SIDE GEAR THRUST WASHER	151002		Por	aring Cap Torque	60Nm [44 ft-lb]
08			040202		Dec	aring Cap Torque	60NIII [44 II-ID]
	1	PISTON					
09	1	BONDED SEAL	160705				
10	1	CYLINDER CAP ASSEMBLY	030603				
11	8	CYLINDER CAP RETAINING BOLT	200205			1 . 4	
12	8	LOCKING TAB (8mm)	150401		I \	lotes:	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED				
14	1	ADJUSTER NUT	100101				
15	1	SEAL HOUSING ASSEMBLY	081902		1	For replacement	O-rings
16	2	SEAL HOUSING O-RING	160235	1		use only BS133 \	/iton 75.
17	1	SEAL HOUSING RETAINING CLIP	150601				
18	1	SPLINED SIDE GEAR	130408			For information of	n RD46 models with metal
19	4	PINION THRUST WASHER	151102			pistons, contact	ARB.
20	4	PINION GEAR	140201			p	
21	1	SPIDER BLOCK	070201			For seal housing	set-up refer to tech notes
22	1	THRUST BLOCK	110504			(Section 5.1 & 5.2	
	1					(Section 5.1 & 5.2	.).
23		SIDE GEAR	130208			Cantha (anall) Mi	taubiahi 00 anlina man
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105				tsubishi 28 spline rear
	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201				0 ring gear bolts refer to
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501			RD05 (Section 2.5	5).
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1	SWITCH COVER (REAR)	180211				
*	10	CABLE TIE	180301				\sim (1)
*	1	WARNING LABEL	210101			_	(2)
*	1	BUMPER STICKER	210102				(2)
*	1	OPERATING & SERVICE MANUAL	210200			\bigcirc (3)	
*	1	INSTALLATION GUIDE	210246			(4)	\ \
			210240			\(T / \	\ \
*	Not ill	ustrated in exploded view.			(5	\mathcal{I}	
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RD	47	AMC Model 20,2.73:1			Specs:
ITEM #	QTY	DESCRIPTION	PART #	NOTES	
01	1	FLANGE CAP	022201		Axle Spline 29 tooth, Ø31.8mm [1.25"]
02	1	CLUTCH GEAR	050102		Ratio Supported 2.73:1
03	1	DIFFERENTIAL CASE	011502		Ring Gear ID 136.6mm [5.38"]
03					
	4	RETURN SPRING	150101		Ring Gear OD 225.6mm [8.88"]
05	2	CROSS SHAFT RETAINING PIN	120102		Ring Gear Bolts 8 bolts on Ø165mm [6.50"]
*	2	CROSS SHAFT RETAINING PIN	120302		
06	4	SHORT CROSS SHAFT	060303		
07	2	SIDE GEAR THRUST WASHER	151003		
80	1	PISTON	040103		
09	1	BONDED SEAL	160701		
10	1	CYLINDER CAP	030115		
11	2	SEAL HOUSING O-RING	160208	1	Notes:
12	6	CYLINDER CAP RETAINING BOLT	200205		
13	6	LOCKING TAB (8mm)	150401		
14	1	TAPERED ROLLER BEARING	160104	2	1 For replacement O-rings
15	1	SEAL HOUSING	080503		use only BS030 Viton 75.
16	1	SHIM KIT	SHK007		accom, 20000 mem or
17	1	SPLINED SIDE GEAR	130310R		2 For replacement bearing use
18	4	PINION THRUST WASHER	151101		Timken part #LM603049 / LM603011.
19	4				Tillikeli part #Livido3049 / Livido3011.
		PINION GEAR	140101R		Farmetice of 0.00 4.0 cm materials DD00
20	1	SPIDER BLOCK	070101		For ratios of 3.08:1 & up refer to RD60
21	1	THRUST BLOCK	110506		(Section 2.60).
22	1	SIDE GEAR	130110R		
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105		
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201		
*	1	AIR LINE (5mm DIA X 6m LONG)	170301		
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501		
*	1	SOLENOID VALVE (12V)	180103		
*	1	SWITCH	180209		
*	1	SWITCH COVER (REAR)	180211		
*	1	SWITCH COVER (FRONT)	180210		
*	10	CABLE TIE	180301		
*	1	WARNING LABEL	210101		\sim (1)
*	1	BUMPER STICKER	210101		\bigcirc (2) $\stackrel{\bullet}{\smile}$
*	1	OPERATING & SERVICE MANUAL	210102		(2)(2)
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	1	INSTALLATION GUIDE	210247		(4) \ \
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RD	50	Dana 50,30 SPL		
ITEM #	QTY	DESCRIPTION	PART #	NOTE
01	1	FLANGE CAP	022701	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010603	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
80	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP	030410	
11	2	SEAL HOUSING O-RING	160205	1
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160112	2
15	1	SEAL HOUSING	080302	
16	1	SHIM KIT	SHK004	
17	1	SPLINED SIDE GEAR	130304R	
18	4	PINION THRUST WASHER	151101	
19	4	PINION GEAR	140101R	
20	1	SPIDER BLOCK	070101	
21	1	SIDE GEAR	130104R	
22	2	SIDE GEAR THRUST WASHER	151003	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210250	

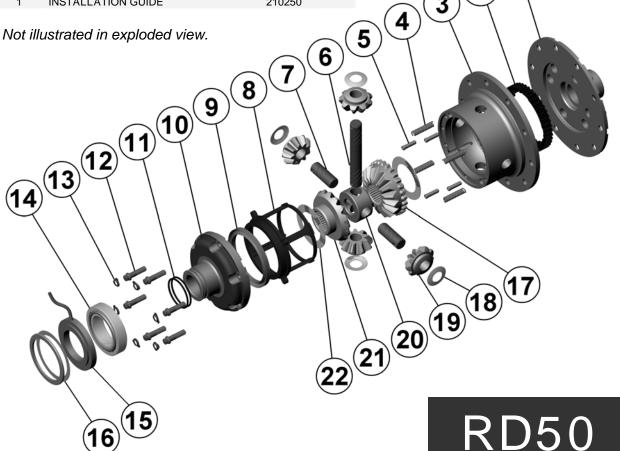
Specs:

Axle Spline 30 tooth, Ø33.3mm [1.31"]
Ratio Supported All
Ring Gear ID 141.3mm [5.56"]
Ring Gear OD 229mm [9.0"]
Ring Gear Bolts 10 bolts on Ø168mm [6.61"]
Ring Gear Torque 88Nm [65 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

- For replacement O-rings use only BS132 Viton 75.
- For replacement bearing use Timken part # LM104949 / LM104911.

For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.





			*			
	D51	GM / AAM 9.25",33 SPL			Specs:	
ITEM #		DESCRIPTION	PART#	NOTES		
01	1	FLANGE CAP	022401		Axle Spline	
02	1	CLUTCH GEAR	050202		Ratio Supported	All
03	1	DIFFERENTIAL CASE	012301		Ring Gear ID	152.9mm [6.02"]
04	4	RETURN SPRING	150101		Ring Gear OD	235mm [9.25"]
05	3	CROSS SHAFT RETAINING PIN	120303		Ring Gear Bolts	12 bolts on 181mm [7.13"]
06	1	LONG CROSS SHAFT	060205		Ring Gear Torque	88Nm [65 ft-lb]
07	2	SHORT CROSS SHAFT	060402		Backlash	0.15-0.25mm [0.006-0.010"]
08	1	PISTON	040202			
09	1	BONDED SEAL	160705			
10	1	CYLINDER CAP	031101			
11	8	CYLINDER CAP RETAINING BOLT	200205			
12	8	LOCKING TAB (8mm)	150401		Notes:	
13	2	SEAL HOUSING O-RING	160239	1		
14	1	SEAL HOUSING	080903			
15	1	TAPERED ROLLER BEARING	NOT SUPPLIED		1 For replacement	O-rings
16	1	SPLINED SIDE GEAR	130410		use only BS146	Viton 75.
17	4	PINION GEAR	140201			
18	4	PINION THRUST WASHER	151102		Ring gear bolts a	are M12x1.5mm left-hand
19	1	SPIDER BLOCK	070201		thread, and mus	t be removed in a clockwise
20	1	SIDE GEAR	130210		direction.	
21	2	SIDE GEAR THRUST WASHER	151006			
*	1	SEAL HOUSING BRACKET (LIVE AXLE)	220203		Use extreme care	e to protect the sealing
*	1	SEAL HOUSING BRACKET (IFS)	220204		faces of the flang	ge when separating the
*	2	WASHER	4581072			e clamshell housing.
*	1	SOCKET HD CAP SCREW (M6 X 16mm)	200208			-
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105			
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201			
*	1	AIR LINE (5mm DIA X 6m LONG)	170301			
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501			
*	1	SOLENOID VALVE (12V)	180103			
*	1	SWITCH	180209			
*	1	SWITCH COVER (FRONT)	180210			
*	10	CABLE TIE	180301			\sim (1)
*	1	WARNING LABEL	210101		_	(2)
*	1	BUMPER STICKER	210102			(2)
*	1	OPERATING & SERVICE MANUAL	210200		\sim (3)) ~ \
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RD53		53	Dana 70HD,35 SPL,4.56	& UP	
ľ	ITEM#	QTY	DESCRIPTION	PART#	NOTES
	01	1	FLANGE CAP	022501	
	02	1	CLUTCH GEAR	050401	
	03	1	DIFFERENTIAL CASE	012401	
	04	4	RETURN SPRING	150101	
	05	3	CROSS SHAFT RETAINING PIN	120301	
	06	1	LONG CROSS SHAFT	060703	
	07	2	SHORT CROSS SHAFT	060802	
	80	1	PISTON	040501	
	09	1	BONDED SEAL	160703	
	10	1	CYLINDER CAP	031203	
	11	2	SEAL HOUSING O-RING	160220	1
	12	8	CYLINDER CAP RETAINING BOLT	200205	
	13	8	LOCKING TAB (8mm)	150401	
	14	1	TAPERED ROLLER BEARING	160113	2
	15	1	SEAL HOUSING	080703	
	16	1	SHIM KIT	SHK006	
	17	1	SPLINED SIDE GEAR	130801	
	18	4	PINION THRUST WASHER	151104	
	19	4	PINION GEAR	140401	
	20	1	SPIDER BLOCK	070401	
	21	1	SIDE GEAR	130701	
	22	2	SIDE GEAR THRUST WASHER	151004	
	*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
	*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
	*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
	*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
	*	1	SOLENOID VALVE (12V)	180103	
	*	1	SWITCH	180209	
	*	1	SWITCH COVER (REAR)	180211	
	*	10	CABLE TIE	180301	
	*	1	WARNING LABEL	210101	
	*	1	BUMPER STICKER	210102	
	*	1	OPERATING & SERVICE MANUAL	210200	
	*	1	INSTALLATION GUIDE	210253	

Specs:

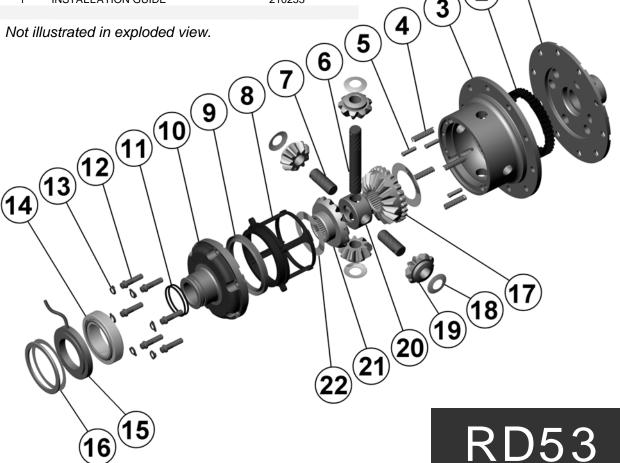
Axle Spline 35 tooth, Ø38.1mm [1.50"]
Ratio Supported 4.56:1 & up
Ring Gear ID 174.9mm [6.89"]
Ring Gear OD 267mm [10.5"]
Ring Gear Bolts 12 bolts on Ø203mm [8.00"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]
Carrier Bearing OD 104.78mm [4.125"]

Notes:

- For replacement O-rings use only BS141 Viton 75.
- 2 For replacement bearing use Timken part # 39250 / 39412.

For the 35 spline Dana 70U with a carrier bearing OD of 96.84mm [3.813"] refer to RD65 (Section 2.65).

For ratios of 4.10:1 and down refer to RD54 (Section 2.54).





RD54		Dana 70HD,35 SPL,4.10	& DN	
ITEM#	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	022601	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	012402	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
80	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	031203	
11	2	SEAL HOUSING O-RING	160220	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160113	2
15	1	SEAL HOUSING	080703	
16	1	SHIM KIT	SHK006	
17	1	SPLINED SIDE GEAR	130801	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130701	
22	2	SIDE GEAR THRUST WASHER	151004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210254	
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Specs:

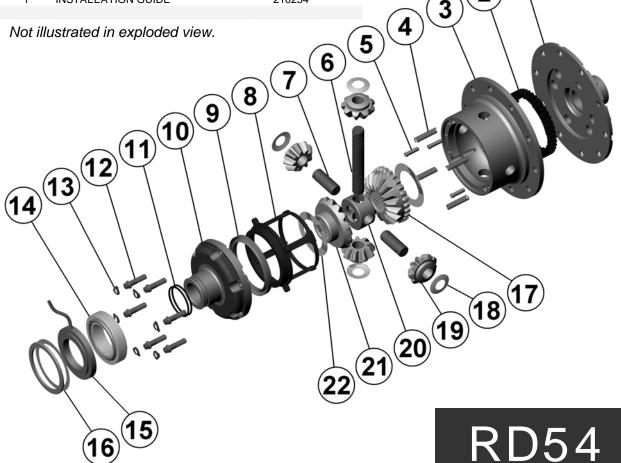
Axle Spline 35 tooth, Ø38.1mm [1.50"]
Ratio Supported 4.10:1 & down
Ring Gear ID 174.9mm [6.89"]
Ring Gear OD 267mm [10.5"]
Ring Gear Bolts 12 bolts on Ø203mm [8.00"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]
Carrier Bearing OD 104.78mm [4.125"]

Notes:

- 1 For replacement O-rings use only BS141 Viton 75.
- 2 For replacement bearing use Timken part # 39250 / 39412.

For the 35 spline Dana 70U with a carrier bearing OD of 96.84mm [3.813"] refer to RD66 (Section 2.66).

For ratios of 4.56:1 and up refer to RD53 (Section 2.53).



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RD5	5B	Ford 9",31 SPL**		
ITEM#	QTY	DESCRIPTION	PART #	NOTES
01	1	SEAL HOUSING WASHER	151204	
02	1	SEAL HOUSING	081301	
03	2	SEAL HOUSING O-RING	160220	1
04	2	SEAL HOUSING BRACKET	220102	
05	1	SWIVEL AIR FITTING (5mm)	170209	
06	1	SEAL HOUSING COLLAR	081302	
07	1	TRANSFER TUBE O-RING	160234	
80	3	GRUB SCREW (KNURL POINT, M6)	200305	
09	3	GRUB SCREW (DOG POINT, M6)	200306	
10	2	SHORT CROSS SHAFT	060307	
11	2	COUNTERSUNK SCREW (1/4" UNC)	200209	
12	1	DIFFERENTIAL CASE	012204	
13	1	LONG CROSS SHAFT	060107	
14	1	SIDE GEAR	130111R	
15	4	PINION GEAR	140102R	
16	1	SPIDER BLOCK	070501	
17	4	PINION THRUST WASHER	151106	
18	1	SPLINED SIDE GEAR	130311R	
19	2	SIDE GEAR THRUST WASHER	151003	
20	1	BONDED SEAL	160703	
21	1	CLUTCH GEAR	050603	
22	12	RETURN SPRING	150107	
23	1	FLANGE CAP	022302	
24	10	RING GEAR BOLT	200601	
25	1	INNER COMPRESSION NUT	170613	
*	1	BULKHEAD FITTING KIT (5 to 5mm)	170104	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	TUBE SUPPORT SPRING (internal)	170702	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING AND SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210255	

Specs:

Axle Spline 31 tooth, Ø33.5mm [1.32"]
Ratio Supported All
Ring Gear ID 127.0mm [5.00"]
Ring Gear OD 229mm [9.0"]
Ring Gear Bolts 10 bolts on Ø152mm [6.00"]
Ring Gear Torque 95Nm [70 ft-lb]
OEM Backlash 0.25-0.41mm [0.010-0.016"]
Non-OEM Backlash 0.18-0.25mm [0.007-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

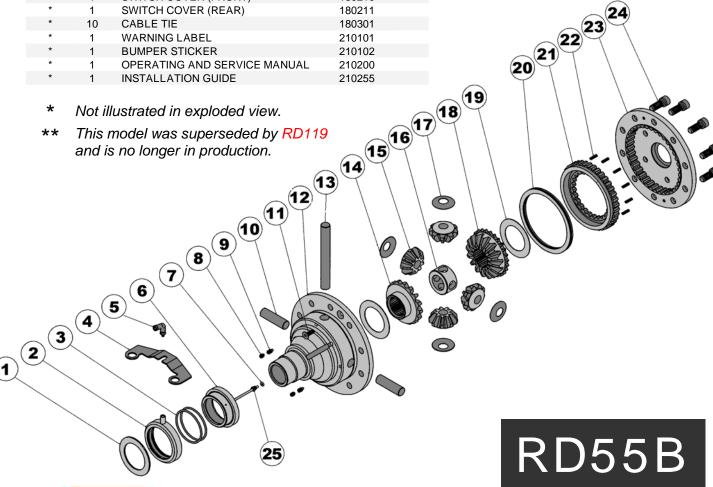
Notes:

 For replacement O-rings use only BS141 Viton 75.

Standard ring gear bolts must be replaced with with grade 12 cap screws (supplied).

Revision Date 11/10/06

For the 35 spline Ford 9" refer to RD99 (Section 2.99).



RD	56	Land Rover,24 SPL,Ban	jo	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	020406	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010404	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
08	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP ASSEMBLY	030131	
11	6	CYLINDER CAP RETAINING BOLT	200205	
12	6	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	SEAL HOUSING RETAINING CLIP	150602	
15	1	SPLINED SIDE GEAR	130306R	
16	4	PINION THRUST WASHER	151101	
17	4	PINION GEAR	140101R	
18	1	SPIDER BLOCK	070101	
19	1	SIDE GEAR	130106R	
20	2	SIDE GEAR THRUST WASHER	151001	
21	1	ADJUSTER NUT	100201	
22	1	SEAL HOUSING	082002	
23	2	SEAL HOUSING O-RING	160235	1
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210256	

Specs:

Axle Spline 24 tooth, Ø31.5mm [1.24"]
Ratio Supported 3.54:1
Ring Gear ID 125.4mm [4.94"]
Ring Gear Bolts 10 bolts on Ø142mm [5.59"]
Ring Gear Torque 58Nm [43 ft-lb]
Backlash 0.10-0.17mm [0.004-0.007"]
Bearing Cap Torque 90Nm [66 ft-lb]

Notes:

1 For replacement O-rings use only BS133 Viton 75.

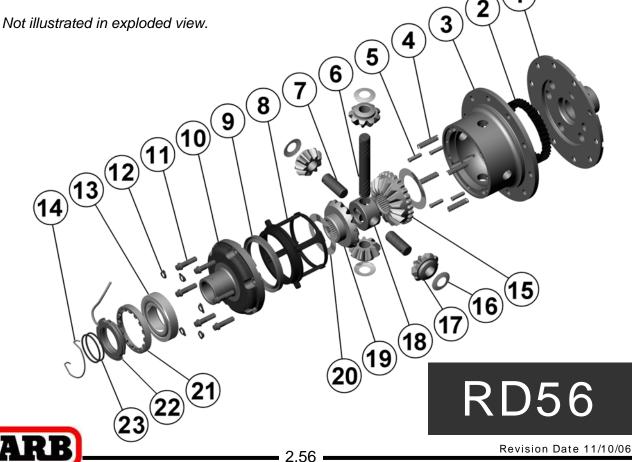
This model replaces the non-traction control differential carrier with a flange diameter of 174mm [6.85"]. For the traction control version with a flange diameter of 205mm [8.07"] refer to RD57 (Section 2.57).

5mm [3/16"] ring gear spacer plate (ARB part# 'RD03A') is available for use with early Land Rover 4.7:1 ratio gear but longer bolts must be used (Land Rover part# 576521).

Refer to seal housing set-up tech note (Sec. 5.2).

Refer to Land Rover axle update tech note for 10 to 24 spline conversion information (Sec. 5.14).

Older RD56 models with O-ring grooves in the cylinder cap use; cylinder cap #030124, seal housing #080202 and O-ring BS129 #160221.



RD57		Land Rover,24 SPL,Ban	jo,T/C	
ITEM #	QTY	DESCRIPTION	PART #	NOTE
01	1	FLANGE CAP	022801	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	012501	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
80	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP ASSEMBLY	030121	
11	6	CYLINDER CAP RETAINING BOLT	200205	
12	6	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	SEAL HOUSING RETAINING CLIP	150602	
15	1	SPLINED SIDE GEAR	130306R	
16	4	PINION THRUST WASHER	151101	
17	4	PINION GEAR	140101R	
18	1	SPIDER BLOCK	070101	
19	1	SIDE GEAR	130106R	
20	2	SIDE GEAR THRUST WASHER	151001	
21	1	ADJUSTER NUT	100201	
22	1	SEAL HOUSING	082002	
23	2	SEAL HOUSING O-RING	160235	1
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210257	

Specs:

Axle Spline 24 tooth, Ø31.5mm [1.24"]
Ratio Supported 3.54:1
Ring Gear ID 125.4mm [4.94"]
Ring Gear Bolts 10 bolts on Ø142mm [5.59"]
Ring Gear Torque 58Nm [43 ft-lb]
Backlash 0.10-0.17mm [0.004-0.007"]
Bearing Cap Torque 90Nm [66 ft-lb]

Notes:

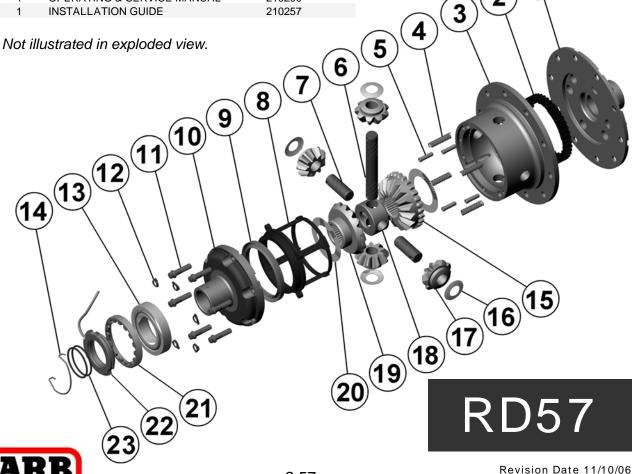
1 For replacement O-rings use only BS133 Viton 75.

This model replaces the traction control differential carrier with a flange diameter of 205mm [8.07"]. For the non-traction control version with flange diameter of 174mm [6.95"] refer to RD56 (Section 2.56).

5mm [3/16"] ring gear spacer plate (ARB part# 'RD03A') is available for use with early Land Rover 4.7:1 ratio gear but longer bolts must be used (Land Rover part# 576521).

Refer to seal housing set-up tech note (Sec. 5.2).

Older RD57 models with O-ring grooves in the cylinder cap use; cylinder cap #030126, seal housing #080202 and O-ring BS129 #160221.



RD	60	AMC Model 20,3.07 & UP			Ç	Specs:	
						P P000.	
ITEM#	QTY 1	DESCRIPTION	PART#	NOTES		Ayla Calina	20 to oth (824 0mm [4 25"]
01 02		FLANGE CAP	022203			Axle Spline	29 tooth, Ø31.8mm [1.25"] 3.07:1 & up
02	1	CLUTCH GEAR	050102			Ratio Supported	•
03	4	DIFFERENTIAL CASE RETURN SPRING	011505 150101			Ring Gear ID Ring Gear OD	136.6mm [5.38"] 225mm [8.9"]
05	4	CROSS SHAFT RETAINING PIN	120302			Ring Gear Bolts	8 bolts on Ø165mm [6.50"]
06	4	SHORT CROSS SHAFT	060303			Ring Gear Torque	88Nm [65 ft-lb]
07	2	SIDE GEAR THRUST WASHER	151003		1	Backlash	0.15-0.25mm [0.006-0.010"]
08	1	PISTON	040103		Ro	aring Cap Torque	88Nm [65 ft-lb]
09	1	BONDED SEAL	160701		De	ailing Cap Torque	0014111 [00-11-10]
10	1	CYLINDER CAP	030127				
11	2	SEAL HOUSING O-RING	160208	1			
12	8	CYLINDER CAP RETAINING BOLT	200205		N	Notes:	
13	8	LOCKING TAB (8mm)	150401			10100.	
14	1	TAPERED ROLLER BEARING	160104	2			
15	1	SEAL HOUSING	080504		1	For replacement (O-rings
16	1	SHIM KIT	SHK002			use only BS030 V	_
17	1	SPLINED SIDE GEAR	130310R			·	
18	4	PINION THRUST WASHER	151101		2	For replacement b	pearing use
19	4	PINION GEAR	140101R				603049 / LM603011.
20	1	SPIDER BLOCK	070101				
21	1	THRUST BLOCK	110506			For 2.73:1 ratio re	fer to RD47 (Section 2.47).
22	1	SIDE GEAR	130110R				
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105				
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201				
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501				
*	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1	SWITCH COVER (REAR)	180211				
*	1	SWITCH COVER (FRONT)	180210				
*	10	CABLE TIE	180301				
*	1	WARNING LABEL	210101				(1)
*	1	BUMPER STICKER	210102			\sim ($^{\circ}$	
*	1	OPERATING & SERVICE MANUAL INSTALLATION GUIDE	210200 210260			\sim (3)	
*		3 12 11 10 9 8	7	6	5	20 19	8 17
	9	16 15	(2	(2)		F	RD60

RD64				1		
01 1 FLANGE CAP 023001 Asia Spline 32 tooth, 324.8mm [1.37] 02 1 CLUTCH GEAR 050202 Ratio Supported All (CLUTCH GEAR 050202) 03 1 DIFFERENTIAL CASE 012701 Ring Gear ID 150.0mm [5.91] 04 RETURN SPRING PIN 150101 Ring Gear ID 150.0mm [5.91] 05 2 SHORT CROSS SHAFT 060402 Ring Gear ID 150.0mm [5.91] 06 1 LONG GROSS SHAFT 060402 Ring Gear ID 12 boils on 0714mm [6.85] 07 2 SHORT CROSS SHAFT 060402 Ring Gear ID 12 boils on 0714mm [6.85] 08 1 PINTON SEAL BLUCK 04020 Ring Gear Torque 980mm [70 ft-lb] 09 1 PINTON GEAR 0585MBLY 040203 Ring Gear Torque 980mm [70 ft-lb] 10 1 SEAL HOUSING RETAINING BOLT 1050401 Ring Gear Torque 980mm [70 ft-lb] 11 1 AFRERED ROLLER BEARING NOT SupPLED 14 1 SEAL HOUSING RETAINING CLIP 150601 Ring Gear Torque 980mm [70 ft-lb] 12 1 SUPLING BIS GEAR 1400201 Ring Gear Torque 980mm [70 ft-lb] 13 1 TAPERED ROLLER BEARING NOT SupPLED 14 1 SEAL HOUSING RETAINING CLIP 150601 Ring Gear Torque 980mm [70 ft-lb] 14 1 SEAL HOUSING RETAINING CLIP 150601 Ring Gear Torque 980mm [70 ft-lb] 15 SPILORE BIS GEAR 1400201 Ring Gear Torque 980mm [70 ft-lb] 16 1 PINNON THRUST WASHER 150001 Ring Gear Torque 980mm [70 ft-lb] 16 1 PINNON THRUST WASHER 150001 Ring Gear Torque 980mm [70 ft-lb] 16 1 PINNON GEAR 1 400201 Ring Gear Torque 980mm [70 ft-lb] 17 1 PINNON GEAR 1 400201 Ring Gear Torque 980mm [70 ft-lb] 18 1 SIDE GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 19 1 SIDE GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 SIDE GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON GEAR 1 100001 Ring Gear Torque 980mm [70 ft-lb] 10 1 PINNON						Specs:
02 1 CLUTCH GEAR 060202 03 1 DIFFERENTIAL CASE 012701 04 4 RETURN SPRING 150101 1500mm [5.31"] 05 3 CROSS SHAFT 060402 06 1 LONG CROSS SHAFT 060402 07 2 SHORT CROSS SHAFT 060402 08 1 BONDED SEAL (67075) 1 SEAL HOUSING RETAINING CLIP 150401 13 1 TAPERED ROLLER BEARING NOT SUPPLIED 150 SEAL HOUSING RETAINING CLIP 150401 15 1 SPILIED SIDE GEAR 130411 16 1 PINION THEIRUS WASHER 151102 17 4 PINION GEAR (47020) 18 1 SEAL HOUSING RETAINING CLIP 150601 19 1 SEAL HOUSING ASSEMBLY 081901 20 2 SIDE GEAR THRUST WASHER 151002 21 1 A DAULSTER NUT 100101 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING ASSEMBLY 081901 24 1 SEAL HOUSING ASSEMBLY 081901 25 1 PUSH-IN ETITING (6mm to 18° BSPF) 170201 26 1 RIGH SEAL HOUSING CHIRD 1770201 27 1 RIGH SEAL HOUSING CHIRD 1770201 28 1 SEAL HOUSING OF RING 1770201 29 1 SEAL HOUSING OF RING 1770201 20 1 RIGH SEAL HOUSING SEASEMBLY 081901 20 1 SEAL HOUSING DE RING 1770201 21 1 A DAULSTER NUT 081901 22 1 SEAL HOUSING OF RING 1770201 23 2 SEAL HOUSING OF RING 1770201 24 1 SEAL HOUSING OF RING 1770201 25 1 RIGH SEAL HOUSING SEASEMBLY 081901 26 1 SUNTCH COVER (EAR) 1802211 27 1 OCABLE TIE 180301 28 1 SUNTCH COVER (EAR) 1802211 28 1 DEPRINTED SEASEMED 1770201 29 1 DEPRINTED SEASEMED 1770201 20 1 DEPRINTED SEASEMED 1770201 20 1 DEPRINTED SEASEMED 1770201 21 1 MARNING LABEL 210101 22 1 DEPRINTED SEASEMED 1770201 23 1 SUNTCH COVER (EAR) 1802211 24 1 DEPRINTED SEASEMED 1770201 25 1 DEPRINTED SEASEMED 1770201 26 1 DEPRINTED SEASEMED 1770201 27 1 DEPRINTED SEASEMED 1770201 28 1 DEPRINTED SEASEMED 1770201 29 1 DEPRINTED SEASEMED 1770201 20 1 DEPRINTED SEASEMED 1770					NOTES	
03 1 DIFFERENTIAL CASE 012701 4 RETURN SPRINS N 150101 05 3 CROSS SHAFT RETAINING PIN 120303 06 1 LONG CROSS SHAFT 060205 07 2 SHORT CROSS SHAFT 060205 08 1 PISTON 040202 08 1 RONDED SEAL 160705 11 8 CVINDER CAP P ASSEMBLY 050205 11 8 CVINDER CAP PETAINING BOLT 150205 11 8 CVINDER CAP PETAINING BOLT 150205 11 8 CVINDER CAP PETAINING BOLT 150205 11 1 1 APPERED BOLDER BEARING NOT SUPPLED 150201 12 1 APPERED BOLDER BEARING NOT SUPPLED 150205 13 1 SPILLOE SIDE GEAR 130411 15 1 SPILLOE SIDE GEAR 130411 16 1 PINION THRUST WASHER 151102 17 4 PINION CHAR 140201 18 1 SPIDER BLOCK 070201 18 1 SPIDER BLOCK 070201 19 1 SIDE GEAR 130211 20 2 SIDE GEAR THRUST WASHER 151006 21 1 ADJUSTER MIN CASEMBLY 081907 22 1 SEAL HOUSING ASSEMBLY 081907 21 1 ADJUSTER MIN CASEMBLY 170105 22 1 SEAL HOUSING ASSEMBLY 170105 23 1 SELIK-HEAD FITTING KITH ORAND TYPE) 170201 24 1 SELIK-HEAD FITTING KITH ORAND TYPE) 170201 25 1 SELIK-HEAD FITTING KITH ORAND TYPE) 170201 26 1 SWITCH COVER (REAR) 180214 27 1 SOLENDID VALVE (12V) 180103 28 1 SWITCH OLVER (REAR) 180214 29 1 SOLENDID VALVE (12V) 180103 20 1 SWITCH OLVER (REAR) 180201 21 1 WARNING LABEL 210101 22 2 SIDE GEAR THRUST WASHER 160209. ** Not illustrated in exploded view.* **Not illustrated in exploded view.* **Not illustrated in exploded view.*	01	1				
04 4 RETURN SPRING 05 3 CROSS SHAFT RETAINING PIN 120303 10 1 LONG CROSS SHAFT 060402 10 1 PISTON 10 1 CYLINDER CAR ASSEMBLY 10 1 CYLINDER CAR ASSEMBLY 10 1 CYLINDER CAR ASSEMBLY 10 1 CYLINDER CAR RETAINING BOLT 10 1 CYLINDER CAR RETAINING BOLT 11 2 SCAL HOUSING RETAINING CLIP 15 1 SPRINED SIDE GEAR 16 1 PINION THEUST WASHER 16	02	1	CLUTCH GEAR	050202		Ratio Supported All
1	03	1	DIFFERENTIAL CASE	012701		Ring Gear ID 150.0mm [5.91"]
1	04	4	RETURN SPRING	150101		
06 1 LONG CROSS SHAFT 060402 07 2 SHORT CROSS SHAFT 060402 08 1 PISTON 040202 08 1 PISTON 040202 09 1 BONDED SEAL 160705 10 1 CYLINDER CAP ASSEMBLY 030223 11 8 CYLINDER CAP RETAINING BOLT 200205 12 8 LOCKING TAB (8mm) 150401 13 1 TAPERED ROLLER BEARING NOT SUPPLIED 15 SPILINED SIDE GEAR 130411 15 1 SPILINED SIDE GEAR 130411 16 1 PINION THRUST WASHER 151022 17 4 PINION GEAR 140201 18 1 SPIDER BLOCK 070201 18 1 SPIDER BLOCK 070201 18 1 SPIDER BLOCK 070201 19 1 SUB GEAR THRUST WASHER 151002 21 1 ADJUSTER MING SEMMEL 100101 22 1 SEAL HOUSING 981037 1 2 SEAL HOUSING 981037 1 1 SEAL HOUSING 981037 1 1 SULKHEAD TO 18° BSPT) 170501 1 1 AIR LINE (5mm DIA X 6m LONG) 170301 1 1 SWITCH 180209 1 1 SWITCH COVER (REAR) 1802211 1 1 WARNING LABEL 210101 1 NSTALLATION GUIDE 210264 * Not illustrated in exploded view.	05	3	CROSS SHAFT RETAINING PIN			
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11						
12 8 LOCKING TAB (8mm) 150401 13 1 TAPPERD FOULER BEARING NOT SUPPLIED 14 1 SEAL HOUSING RETAINING CLIP 150601 15 1 SPLINED SIDE GEAR 130411 16 1 PINON THRUST WASHER 151102 17 4 PINON GEAR 140201 18 1 SPLOER BLOCK 070201 18 1 SPLOER BLOCK 070201 19 1 SIDE GEAR 130211 20 2 SIDE GEAR 151006 21 1 ADJUSTER NUT 100101 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 17FE) 170105 1 1 BULKHEAD FITTING (5mm to 18° BSPP) 170201 1 1 MR PUBL (18° to 18° BSPT) 170201 1 1 SWITCH 100 VALVE (12V) 180103 1 1 SWITCH 100 VALVE (12V) 180103 1 1 SWITCH 100 CABLE TIE 180301 1 1 MARNING LABEL 210101 1 1 MARNING LABEL 210102 1 1 MSTALLATION GUIDE 1000000000000000000000000000000000000						
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13 1 TAPERED ROLLER BEARING 14 1 SPAL HOUSING RETAINING CLIP 15 1 SPLINED SIDE GEAR 15 1 SPLINED SIDE GEAR 16 1 PINION THRUST WASHER 15 102 1 SPIDER BLOCK 17 4 PINION GEAR 1 HOUSING SERMEN 18 1 SPIDER BLOCK 19 1 SIDE GEAR 1 130211 20 2 SIDE GEAR THRUST WASHER 15 1006 21 1 ADJUSTER NUT 22 1 SEAL HOUSING ASSEMBLY 23 2 SEAL HOUSING ASSEMBLY 23 2 SEAL HOUSING ASSEMBLY 24 1 BULKHEAD FITTING KIT (JOHING TYPE) 25 1 DEJUKHEAD FITTING KIT (JOHING TYPE) 26 1 PUSH-IN FITTING (Smm to 18° BSPP) 27 1 AIR LINE (5mm DIA X 5m LONG) 28 1 SWITCH 29 1 SWITCH 20 1 SWITCH 20 1 SWITCH 20 1 SWITCH 21 1 MARNING LABEL 21 101 CABLE TIE 21 10 CABLE TIE 21 10 CABLE TIE 21 10 LABRAGA & SERVICE MANUAL 21020 21 1 INSTALLATION GUIDE 21 1 INSTALLATION GUIDE 21 1 INSTALLATION GUIDE 21 1 INSTALLATION GUIDE 21 10 PUSH-IN FITTING (Sm ANUAL 210204 210 10 PUSH-IN FITTING (Sm ANUAL 210206 21 1 INSTALLATION GUIDE 21 1 MARNING LABEL 210101 21 1 INSTALLATION GUIDE 21 10 PUSH-IN EACH ANUAL 210206 21 1 INSTALLATION GUIDE 21 10 PUSH-IN EACH ANUAL 210206 21 1 INSTALLATION GUIDE 21 10 PUSH-IN EACH ANUAL 210206 21 1 INSTALLATION GUIDE 21 10 PUSH-IN EACH ANUAL 210206 21 1 INSTALLATION GUIDE 21 10 PUSH-IN EACH ANUAL 210206 21 1 INSTALLATION GUIDE 21 10 PUSH-IN EACH ANUAL 210206 21 1 INSTALLATION GUIDE 21 10 PUSH ANUAL 210206 21 1 INSTALLATION GUIDE 21 10 PUSH ANUAL 210206 21 1 INSTALLATION GUIDE 21 10 PUSH ANUAL	12	8	LOCKING TAB (8mm)	150401		Notes:
15 1 SPLINED SIDE GEAR 16 1 PINON THRUST WASHER 151102 17 4 PINON GEAR 1 H0201 18 1 SPIDE GEAR 1 SPLOCK 179 1 SIDE GEAR 1 130211 20 2 SIDE GEAR THRUST WASHER 151006 21 1 ADJUSTER NUT 22 1 SEAL HOUSING ASSEMBLY 23 2 SEAL HOUSING ASSEMBLY 24 1 BULKHELAD FITTING KIT (JORING TYPE) 25 1 BULKHELAD FITTING KIT (JORING TYPE) 26 1 PUSH-IN FITTING (Simm to 18/8* BSPP) 27 1 AIR LINE (6mm DIA X 5m LONG) 28 1 SWITCH 29 1 SWITCH 29 1 SWITCH 29 1 SWITCH COVER (REAR) 20 1 SWITCH 20 1 SWITCH 21 1 SWITCH COVER (REAR) 21 1 MSTALLATION GUIDE 21 1 OFFRATING S SERVICE MANUAL 21020 **Not illustrated in exploded view.** **Not illustrated in explosed in the folion of the folion	13	1	TAPERED ROLLER BEARING	NOT SUPPLIED		
16 1 PINION THRUST WASHER 151102 17 4 PINION GEAR 140201 18 1 SPIDER BLOCK 070201 19 1 SIDE GEAR 118UST WASHER 151006 20 2 SIDE GEAR THRUST WASHER 151006 21 1 ADJUSTER NUT 100101 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 24 1 BULKHEAD FITTING KIT (0-RING TYPE) 170105 25 1 PUSH-IN FITTING form to 1/8'BSPP) 170201 26 1 NIPPLE (18" to 1/8'BSPT) 170501 27 1 AIR LINE (6mm DIA X 6m LONG) 170301 28 1 SWITCH 180209 29 1 WARNING LABEL 210101 20 1 TWARNING LABEL 210101 21 1 WARNING LABEL 210102 21 1 INSTALLATION GUIDE 210264 * Not illustrated in exploded view.	14	1	SEAL HOUSING RETAINING CLIP	150601		
16 1 PINION THRUST WASHER 151102 17 4 PINION GEAR 140201 18 1 SPIDER BLOCK 070201 19 1 SIDE GEAR THRUST WASHER 151006 20 2 SIDE GEAR THRUST WASHER 151006 21 1 ADJUSTER NUT 100101 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING ORNING 160207 24 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 25 1 PUSH-IN FITTING KIT (O-RING TYPE) 170105 26 1 NIPPLE (18" to 18" BSPT) 170201 27 1 AIR LINE (6mm lot AX 6m LONG) 170301 28 1 SWITCH 180209 29 1 WARNING LABEL 210101 20 1 WARNING LABEL 210101 21 1 WARNING LABEL 210102 21 1 OPERATING & SERVICE MANUAL 210206 21 1 INSTALLATION GUIDE 210264 * Not illustrated in exploded view.	15	1	SPLINED SIDE GEAR	130411		1 For replacement O-rings
17 4 PINION GEAR 140201 18 1 SPIDER BLOCK 070201 19 1 SIDE GEAR THRUST WASHER 15006 20 1 ADJUSTER NUT 100101 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING ASSEMBLY 081901 24 1 BULKHEAD FITTING KIT (0-RING TYPE) 170105 25 1 PUSH-NI FITTING (6mm to 1/8*BSPP) 170201 26 1 NIPPLE (1/8* to 1/8* BSPT) 170201 27 1 NIPPLE (1/8* to 1/8* BSPT) 170301 28 1 SWITCH COVER (REAR) 180209 29 1 SWITCH COVER (REAR) 180209 20 1 SWITCH COVER (REAR) 180201 20 1 INSTALLATION GUIDE 210264 * Not illustrated in exploded view.		1				
18						doo only be roo viton to.
19 1 SIDE GEAR 20 2 SIDE GEAR THRUST WASHER 151006 21 1 ADJUSTER NUT 100101 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING ORING 1 PUSH-IN FITTING (Firm to 1/8" BSPP) 1 TO201 1 NIPPLE (1/8" to 1/8" BSPT) 1 TO201 1 1 AIR LINE (5mm to 1/8" BSPP) 1 TO201 1 1 NIPPLE (1/8" to 1/8" BSPT) 1 TO301 1 1 SWITCH 1 SWITCH 1 SWITCH COVER (REAR) 1 1 SWITCH 1 D CABLE TIE 1 B0301 1 1 WARNING LABEL 1 1 OPERATING & SERVICE MANUAL 2 10202 1 INSTALLATION GUIDE * Not illustrated in exploded view. (Section 5.2). Older RD64 models with O-ring grooves in the cylinder cap #030216, seal housing #080102 and O-ring BS031 #160209.						Refer to seal housing set-up tech note
20 2 SIDE GEAR THRUST WASHER 151006 21 1 ADJUSTER NUT 100101 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING ASSEMBLY 160207 1 25 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 26 1 PUSH-IN FITTING (Smm to 1/8° BSPP) 170201 27 1 NIPPLE (18° to 1/8° SEPT) 170501 28 1 AIR LINE (5mm DIA X 6m LONG) 170301 29 1 SWITCH 180209 20 1 SWITCH 180209 21 1 WARNING LABEL 210101 21 1 BUMPER STICKER 210102 21 1 OPERATING & SERVICE MANUAL 210200 21 INSTALLATION GUIDE 210264 * Not illustrated in exploded view.						
21 1 ADJUSTER NUT 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 1 100207 1 24 1 BULKHEAD FITTING KIT (O-RING TYPE) 25 1 PUSH-IN FITTING (SIM to 1/8" BSPF) 26 1 NIPPLE (1/8" to 1/8" BSPT) 27 1 AJR LINE (Sim DIA X 6m LONG) 28 1 SOLENOID VALVE (12V) 29 1 SWITCH 20 1 WARNING LABEL 210101 21 1 WARNING LABEL 210101 21 1 O CABLE TIE 2100102 210264 * Not illustrated in exploded view. Older RD84 models with O-ring grooves in the cylinder cap #3030216, seal housing #080102 and O-ring BS031 #160209.						(Section 5.2).
22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 1 NIPPLE (18" to 1/8" BSPT) 170301 1 1 NIPPLE (18" to 1/8" BSPT) 180103 1 1 SWITCH 180209 1 1 SWITCH 180209 1 1 WARNING LABEL 210101 1 1 WARNING LABEL 210101 2 1 OPERATING & SERVICE MANUAL 210200 1 1 INSTALLATION GUIDE 210264 * Not illustrated in exploded view.						
23 2 SEAL HOUSING O-RING 1 1 600207 1 seal housing #080102 and O-ring BS031 #160209. 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 1 INPPLE (1/8" to 1/8" BSPP) 170501 1 INIPPLE (1/8" to 1/8" to 1/						
1 BULKHEAD FITTING KIT (CAING TYPE) 170105 1 PUSH-IN FITTING (Simm to 1/8" BSPP) 170201 1 NIPPLE (1/8" to 1/8" BSPT) 170501 1 AIR LINE (Simm DIA X 6m LONG) 170901 1 SOLENDIO VALVE (12V) 180209 1 SWITCH COVER (REAR) 180201 1 OCABLE TIE 180301 1 WARNING LABEL 210101 1 BUMPER STICKER 210102 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 100264 * Not illustrated in exploded view.						
1 PUSH-IN FITTING (Smim to 1/8" BSPP) 170201		2		160207	1	seal housing #080102 and O-ring BS031 #160209.
1	*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105		
1 NIPPLE (1/8" to 1/8" BSPT) 170501 1 AIR LINE (5mm DIA X 6m LONG) 170301 1 SOLENOID VALVE (12V) 180103 1 SWITCH 180209 1 SWITCH 180209 1 SWITCH 180201 1 10 CABLE TIE 180301 1 1 WARNING LABEL 210101 1 1 BUMPER STICKER 210102 1 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 210264 * Not illustrated in exploded view. * Not illustrated in exploded view.	*	1	, , ,	170201		
* 1 AIR LINE (5mm DIA X 6m LONG) 170301 • 1 SUTCH (12V) 180103 • 1 SWITCH (12V) 180209 • 1 SWITCH COVER (REAR) 180211 • 10 CABLE TIE 180301 • 1 WARNING LABEL 210101 • 1 BUMPER STICKER 210102 • 1 OPERATING & SERVICE MANUAL 210200 • 1 INSTALLATION GUIDE 210264 * Not illustrated in exploded view. * Not illustrated in exploded view.	*					
* 1 SOLENOID VALVE (12V) 180103 1 SWITCH 180209 1 SWITCH COVER (REAR) 180211 1 10 CABLE TIE 180301 1 1 WARNING LABEL 210101 1 1 BUMPER STICKER 210102 1 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE * Not illustrated in exploded view. * Not illustrated in exploded view.	*					
* 1 SWITCH 180209 1 1 SWITCH COVER (REAR) 180201 1 10 CABLE TIE 180301 1 1 WARNING LABEL 210101 1 1 OPERATING & SERVICE MANUAL 210200 1 1 OPERATING & SERVICE MANUAL 210200 1 1 INSTALLATION GUIDE 210264 * Not illustrated in exploded view. * Not illustrated in exploded view.	*					
* 1 SWITCH COVER (REAR) 180211 • 10 CABLE TIE 180301 • 1 WARNING LABEL 210101 • 1 BUMPER STICKER 210102 • 1 OPERATING & SERVICE MANUAL 210200 • 1 INSTALLATION GUIDE 210264 * Not illustrated in exploded view. * Not illustrated in exploded view.						
* Not illustrated in exploded view.						
* Not illustrated in exploded view.						
* Not illustrated in exploded view.		10	CABLE TIE	180301		\sim (1)
* Not illustrated in exploded view. * Not illustrated in exploded view. * Not illustrated in exploded view. (a) (a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	*	1	WARNING LABEL	210101		$\sim (2) \setminus 1$
* Not illustrated in exploded view. * Not illustrated in exploded view. 14 13 12 11 10 9 8 7 6 5 4 1 1 1 10 9 8 7 6 1 1 1 10 9 8 1 7 6 1 1 1 10 9 8 1 7 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	*	1	BUMPER STICKER	210102		
* Not illustrated in exploded view. * Not illustrated in exploded view. 14 13 12 11 10 9 8 7 6 5 4 1 1 1 10 9 8 7 6 1 1 1 10 9 8 1 7 6 1 1 1 10 9 8 1 7 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	*	1	OPERATING & SERVICE MANUAL	210200		\bigcirc (3) \checkmark
* Not illustrated in exploded view. 14 13 12 11 10 9 8 7 6 5 1 1 1 10 9 8 17 16 15 15 15 15 15 15 15 15 15 15 15 15 15	*	1	INSTALLATION GUIDE	210264		$\sim (4) $
20 19 18 17 16	,		11 10 9	87	6	
			23 22 21		20	(17)(18)

ARB

RD65		Dana 70U,35 SPL,4.56 8	₹ UP	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	022502	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	012401	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
80	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	030803	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160107	2
15	1	SEAL HOUSING	080701	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130801	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130701	
22	2	SIDE GEAR THRUST WASHER	151004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210265	

Specs:

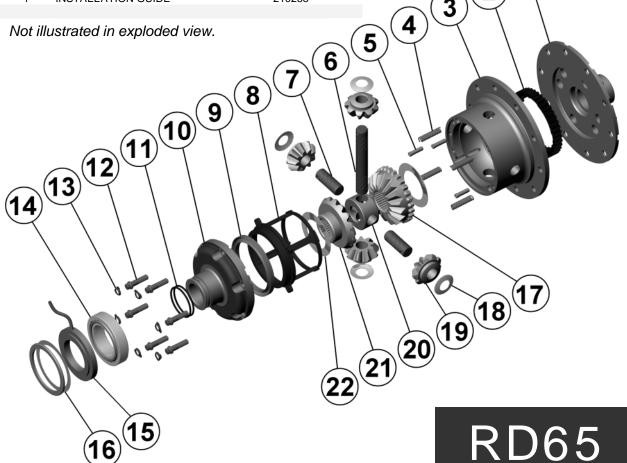
Axle Spline 35 tooth, Ø38.1mm [1.50"]
Ratio Supported 4.56:1 & up
Ring Gear ID 174.9mm [6.89"]
Ring Gear OD 267mm [10.5"]
Ring Gear Bolts 12 bolts on Ø203mm [8.00"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]
Carrier Bearing OD 96.84mm [3.813"]

Notes:

- 1 For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

For the 35 spline Dana 70H with a carrier bearing OD of 104.78mm [4.125"] refer to RD53 (Section 2.53).

For ratios of 4.10:1 and down refer to RD66 (Section 2.66).



ARB

	RD	66	Dana 70U,35 SPL,4.10 8	& DN	
-	ITEM#	QTY	DESCRIPTION	PART#	NOTE
	01	1	FLANGE CAP	022603	
	02	1	CLUTCH GEAR	050401	
	03	1	DIFFERENTIAL CASE	012402	
	04	4	RETURN SPRING	150101	
	05	3	CROSS SHAFT RETAINING PIN	120301	
	06	1	LONG CROSS SHAFT	060703	
	07	2	SHORT CROSS SHAFT	060802	
	80	1	PISTON	040501	
	09	1	BONDED SEAL	160703	
	10	1	CYLINDER CAP	030803	
	11	2	SEAL HOUSING O-RING	160207	1
	12	8	CYLINDER CAP RETAINING BOLT	200205	
	13	8	LOCKING TAB (8mm)	150401	
	14	1	TAPERED ROLLER BEARING	160107	2
	15	1	SEAL HOUSING	080701	
	16	1	SHIM KIT	SHK001	
	17	1	SPLINED SIDE GEAR	130801	
	18	4	PINION THRUST WASHER	151104	
	19	4	PINION GEAR	140401	
	20	1	SPIDER BLOCK	070401	
	21	1	SIDE GEAR	130701	
	22	2	SIDE GEAR THRUST WASHER	151004	
	*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
	*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
	*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
	*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
	*	1	SOLENOID VALVE (12V)	180103	
	*	1	SWITCH	180209	
	*	1	SWITCH COVER (REAR)	180211	
	*	10	CABLE TIE	180301	
	*	1	WARNING LABEL	210101	
	*	1	BUMPER STICKER	210102	
	*	1	OPERATING & SERVICE MANUAL	210200	
	*	1	INSTALLATION GUIDE	210266	
	4				

Specs:

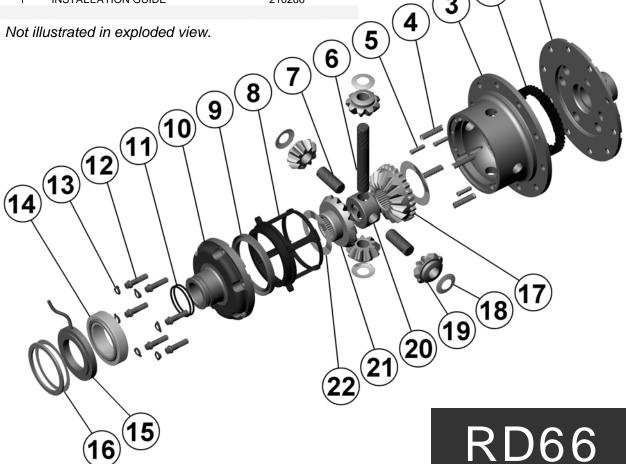
Axle Spline 35 tooth, Ø38.1mm [1.50"]
Ratio Supported 4.10:1 & down
Ring Gear ID 174.9mm [6.89"]
Ring Gear OD 267mm [10.5"]
Ring Gear Bolts 12 bolts on Ø203mm [8.00"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]
Carrier Bearing OD 96.84mm [3.813"]

Notes:

- For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

For the 35 spline Dana 70H with a carrier bearing OD of 104.78mm [4.125"] refer to RD54 (Section 2.54).

For ratios of 4.56:1 and up refer to RD65 (Section 2.65).





			operat		
RD		Dana 35,C-clip,27 SPL,3			
1TEM #	QTY 1	DESCRIPTION FLANGE CAP	PART #	NOTES	
		CLUTCH GEAR	021902		
02	1	DIFFERENTIAL CASE	050501		
03 04	1	CROSS SHAFT RETAINING PIN	012008 120401	3	
*	1	CROSS SHAFT RETAINING PIN	RPK001	3	
	1	LONG CROSS SHAFT	061101	3	
05 06	1	SHORT CROSS SHAFT	061201		
07	1	PISTON	040601		Ве
08	1	U-RING	160303		ь
09	1	CYLINDER CAP	030904		
10	2	SEAL HOUSING O-RING	160210	1	
11	8	CYLINDER CAP RETAINING BOLT	200207		1
12	8	LOCKING TAB (6mm)	150402		•
13	1	TAPERED ROLLER BEARING	160105	2	
14	1	SEAL HOUSING ASSEMBLY	080603		1
15	1	SHIM KIT	SHK003		
16	1	SPRING RETAINER RING	190101		
17	8	RETURN SPRING	150107		2
18	2	COUNTERSUNK SCREW	200213		_
19	1	SPLINED SIDE GEAR	131004R		
20	1	SPIDER BLOCK	070602		
21	3	PINION GEAR	140502R		
22	3	PINION THRUST WASHER	151107		
23	1	SIDE GEAR	130904R		
24	2	SIDE GEAR THRUST WASHER	151005		
*	1	BULKHEAD FITTING KIT	170102		
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201		
*	1	AIR LINE (5mm DIA X 6m LONG)	170301		
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501		
*	1	SOLENOID VALVE (12V)	180103		3
*	1	SWITCH	180209		
*	1	SWITCH COVER (REAR)	180211		
*	10	CABLE TIE	180301		
*	1	WARNING LABEL	210101		
*	1	BUMPER STICKER	210102		
*	1	OPERATING & SERVICE MANUAL	210200		
*	1	INSTALLATION GUIDE	210268		
*	Not il	lustrated in exploded view.		(5	76
**		model was superseded by RD103	3 (6)	/
		s no longer in production.	7		

Specs:

Axle Spline 27 tooth, Ø29.5mm [1.16"]
Ratio Supported 3.31:1 & down
Ring Gear ID 120.7mm [4.75"]
Ring Gear Bolts 8 bolts on Ø146mm [5.75"]
Ring Gear Torque Backlash 9.15-0.25mm [0.006-0.010"]
Ratio Supported 5.31:1 & down 120.7mm [4.75"]
8 bolts on Ø146mm [5.75"]
9.15-0.25mm [0.006-0.010"]
9.15-0.25mm [0.006-0.010"]

Notes:

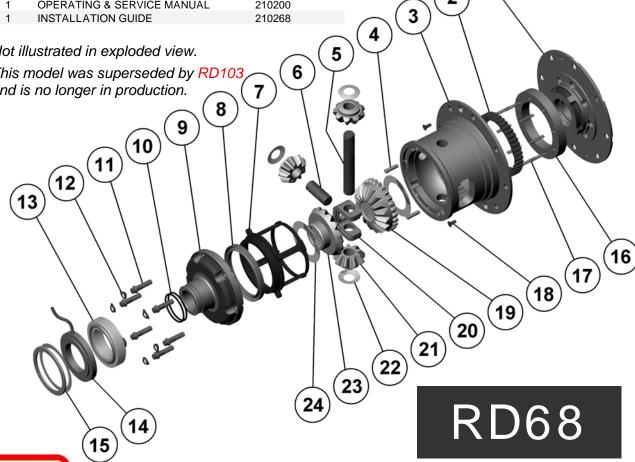
- 1 For replacement O-rings use only BS028 Viton 75.
- For replacement bearing use Timken part # LM501349 / LM501310.

Newer OEM Dana 35 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.

Some OEM Dana 35 drive pinion gears extend too far into the centre and converge with the differential carrier. Refer to ring and pinion modification note (Section 5.6) for correction.

Revision Date 12/10/06

3 Short retaining pin for C-clip removal (ARB # 120402) comes in kit # RPK001.



RD	69	Dana 35,C-clip,27 SPL,3	3.54 & UF) **
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021901	
02	1	CLUTCH GEAR	050501	
03	1	DIFFERENTIAL CASE	012007	
04	1	CROSS SHAFT RETAINING PIN	120401	3
*	1	CROSS SHAFT RETAINING PIN KIT	RPK001	3
05	1	LONG CROSS SHAFT	061101	
06	1	SHORT CROSS SHAFT	061201	
07	1	PISTON	040601	
80	1	U-RING	160303	
09	1	CYLINDER CAP	030904	
10	2	SEAL HOUSING O-RING	160210	1
11	8	CYLINDER CAP RETAINING BOLT	200207	
12	8	LOCKING TAB (6mm)	150402	
13	1	TAPERED ROLLER BEARING	160105	2
14	1	SEAL HOUSING ASSEMBLY	080603	
15	1	SHIM KIT	SHK003	
16	1	SPRING RETAINER RING	190101	
17	8	RETURN SPRING	150107	
18	2	COUNTERSUNK SCREW	200213	
19	1	SPLINED SIDE GEAR	131004R	
20	1	SPIDER BLOCK	070602	
21	3	PINION GEAR	140502R	
22	3	PINION THRUST WASHER	151107	
23	1	SIDE GEAR	130904R	
24	2	SIDE GEAR THRUST WASHER	151005	
*	1	BULKHEAD FITTING KIT	170102	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210269	

**

Specs:

Axle Spline 27 tooth, Ø29.5mm [1.16"]
Ratio Supported 3.54:1 & up
Ring Gear ID 120.7mm [4.75"]
Ring Gear OD 193mm [7.6"]
Ring Gear Bolts 8 bolts on Ø146mm [5.75"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 75Nm [55 ft-lb]

Notes:

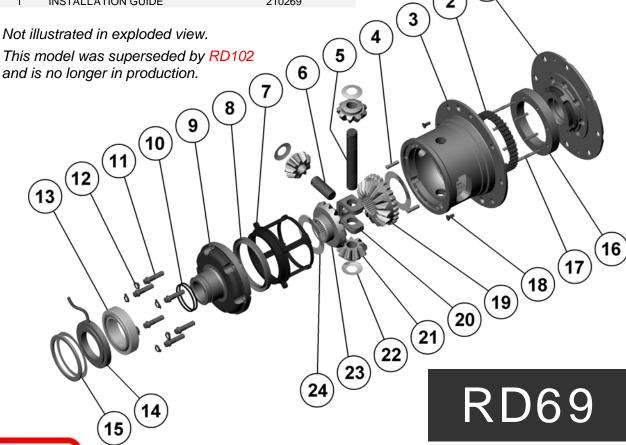
- 1 For replacement O-rings use only BS028 Viton 75.
- 2 For replacement bearing use Timken part # LM501349 / LM501310.

Newer OEM Dana 35 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.

Some OEM Dana 35 drive pinion gears extend too far into the centre and converge with the differential carrier. Refer to ring and pinion modification note (Section 5.6) for correction.

Revision Date 12/10/06

3 Short retaining pin for C-clip removal (ARB # 120402) comes in kit # RPK001.



Nissan H260,37 SPL								
1	RD'	70	Nissan H260,37 SPL			S	Specs:	
1	ITEM #	OTY	DESCRIPTION	PART#	NOTES		•	
02 1 CLUTCH GEAR 059401 Ratio Supported All Differentials CASE 012901 Ring Gear Differentials CASE 012901 Ring Gear Differentials CASE 012901 Ring Gear Bolts 10 bolts on 02200mm [7 of 1 piston 040501 Ring Gear Bolts 12 depth of 1 piston 040501 Ring Gear Bolts 212 Alm (150 ft-15) Ring Gear Bolts 212 Alm (150 ft-15) Ring Gear Torque 212Nm [156 ft-15] Ring Gear Differentials Ring Gear Ring Gear Torque 212Nm [156 ft-15] R					NOTES		Ayle Spline	37 tooth Ø38 4mm [1 51"]
03 1 DIFFERENTIAL CASE 04 4 RETURN SPRING 05 4 CROSS SHAFT RETAINING PIN 06 4 SHORT CROSS SHAFT 06 08 09002 07 1 PISTON 08 1 BONNED SEAL 09 1 CYLINDER CAP RESSEMBLY 031202 10 8 LOCKING TAB (8mm) 15 1 TAPPERE PROLLER BEARING 12 1 TAPPERE PROLLER BEARING 13 1 CLAMPING PLATE 13 1 CLAMPING PLATE 14 1 ADJUSTER NUT 15 1 SEAL HOUSING 15 2 SEAL HOUSING 081201 16 2 SEAL HOUSING 081201 17 4 SEAL HOUSING 081201 18 1 SPILNED SIDE GEAR 19 4 PINION THRUST WASHER 15 1 SPILNED SIDE GEAR 12 1 SPIDER BLOCK 19 4 PINION THRUST WASHER 15 1 SIDE GEAR 13 1 SIDE GEAR 13 1 SIDE GEAR 14 1 SIDE GEAR 15 10 SIDE GEAR 15 10 SIDE GEAR 16 1 SIDE GEAR 16 1 SIDE GEAR 17 1 SIDE GEAR 18 1 SIDE								
04 4 RETURN SPRING 150101 Control of the Cross SHAFT RETAINING PIN 120001 Control of the Cross SHAFT RETAINING PIN 120001 Control of the Cross SHAFT 060802 Control of the Cross SHAFT 160802 Control of the Cross								
OS 4 CROSS SHAFT RETAINING PIN 120301 Ring Gear Boll Size 14mm 120301 Ring Gear Torque 1212km 1166 ft-lb 100703 100 100703 10070								
06 4 SHORT CROSS SHAFT 060802 PISTON 040501 PISTON 040501 07 1 PISTON 040501 08 1 BONDED SEAL 160703 09 1 CYLINDER CAP ASSEMBLY 031202 10 8 CYLINDER CAP ASSEMBLY 031202 11 8 LOCKING TAB (8mm) 159401 12 1 TAPERED ROLLER BEARING NOT SUPPLIED 13 1 CLAMPINOP IATE 090301 14 1 ADJUSTER NUT 100501 15 1 SEAL HOUSING ORING 160227 1 1 SEAL HOUSING ORING 160227 1 1 For replacement O-rings use only B\$138 Viton 75. Refer to seal housing set-up tech note (Section 5.1). Notes: N						Ri		
07								
08 1 BONDED SEAL 160703								
1						Be		
10 8 CVLINDER CAP RETAINING BOLT 11 8 LOCKING TAB (8mm) 12 1 TAPERED ROLLER BEARING 13 1 CLAMPING PLATE 13 1 CLAMPING PLATE 14 1 ADJUSTER NUT 10501 15 1 SEAL HOUSING O-RING 16 2 SEAL HOUSING O-RING 16 2 SEAL HOUSING O-RING 17 4 SEAL HOUSING SCREW 200501 18 1 SPLINED SIDE GEAR 130804 19 4 PINION THRUST WASHER 151104 20 4 PINION GEAR 140401 21 1 SPIDER BLOCK 22 1 SIDE GEAR 23 2 SIDE GEAR 130704 23 2 SIDE GEAR 1130704 23 2 SIDE GEAR 1151007 1 BULKHEAD FITTING (SIMB TYPE) 1 1 PUSH-IN FITTING (SIMB TYPE) 1 1 NIPPLE (1/8" to 1/8" BSPT) 1 1 SWITCH 1 1 COZBLE TIE 1 1 WARNING LABEL 1 1 OPERATING & SERVICE MANUAL 2 1 1 SWITCH COVER (REAR) 1 1 OPERATING & SERVICE MANUAL 2 1 1 SWITCH GOVER (REAR) 1 1 OPERATING & SERVICE MANUAL 2 1 1 SWITCH GOVER (REAR) 2 1 1 INSTALLATION GUIDE * Not illustrated in exploded view. * Not illustrated in exploded view. * Not illustrated in exploded view.							ag cap .c.quc	00.111. [00.11.2]
11								
12								
13 1 CLAMPING PLATE 14 1 A DJUSTER NUT 15 1 SEAL HOUSING 081201 16 2 SEAL HOUSING 160227 1 17 4 SEAL HOUSING SCREW 200501 18 1 SPLINED SIDE GEAR 130804 19 4 PINION THRUST WASHER 151104 20 4 PINION GEAR 140401 21 1 SPIDER BLOCK 070401 22 1 SIDE GEAR 130704 23 2 SIDE GEAR THRUST WASHER 151007 1 BULKHEAD FITTING KIT (0-RING TYPE) 170201 1 NIPPLE (1/8" to 1/8" BSPT) 170501 1 NIPPLE (1/8" to 1/8" BSPT) 170501 1 SWITCH 180209 1 SWITCH 180209 1 SWITCH COVER (REAR) 180201 1 I SWITCH COVER (REAR) 190301 1 I SWITCH COVER (REAR) 210102 1 I NISTALLATION GUIDE 210270 * Not illustrated in exploded view.	12					N	Notes:	
15	13	1	CLAMPING PLATE	090301			.0.00.	
16 2 SEAL HOUSING SCREW 200501 17 4 SEAL HOUSING SCREW 200501 18 1 SPLINED SIDE GEAR 130804 19 4 PINION THRUST WASHER 151104 20 4 PINION GEAR 140401 21 1 SPIDER BLOCK 070401 22 1 SIDE GEAR 130704 23 2 SIDE GEAR THRUST WASHER 151007 2 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 2 1 PUSH-IN FITTING (Smm to 1/8" BSPP) 170201 2 1 SOLENOID VALVE (12") 180103 2 1 SWITCH COVER (REAR) 180201 2 1 WARNING LABEL 210101 2 1 WARNING LABEL 210101 3 1 OPERATING & SERVICE MANUAL 210200 3 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	14	1	ADJUSTER NUT	100501				
16 2 SEAL HOUSING SCREW 200501 17 4 SEAL HOUSING SCREW 200501 18 1 SPLINED SIDE GEAR 130804 19 4 PINION THRUST WASHER 151104 20 4 PINION GEAR 140401 21 1 SPIDER BLOCK 070401 22 1 SIDE GEAR 130704 23 2 SIDE GEAR THRUST WASHER 151007 1 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 1 1 NIPPLE (1/8" to 1/8" BSPT) 170201 1 1 SOLENOID VALVE (12V) 180103 1 SWITCH 180209 1 1 SWITCH COVER (REAR) 180201 1 1 UPARNING LABEL 210101 1 1 BUMPER STICKER 210102 1 1 OPERATING & SERVICE MANUAL 210200 1 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	15	1	SEAL HOUSING	081201		1	For replacement (O-rings
17 4 SEAL HOUSING SCREW 18 1 SPLINED SIDE GEAR 19 4 PINION THRUST WASHER 151104 20 4 PINION GEAR 140401 21 1 SPIDER BLOCK 070401 22 1 SIDE GEAR 130704 23 2 SIDE GEAR THRUST WASHER 151007 1 BULKHEAD FITTING KIT (CRING TYPE) 1 NIPPLE (1/8" to 1/8" BSPT) 1 AIR LINE (Smm DIA X 6m LONG) 1 SWITCH 1 SWITCH 180209 1 SWITCH 180209 1 SWITCH 180301 1 WARNING LABEL 210101 1 O CABLE TIE 180301 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view. Refer to seal housing set-up tech note (Section 5.1). Refer to seal housing set-up tech note (Section 5.1).	16	2	SEAL HOUSING O-RING	160227	1			=
19 4 PINION THRUST WASHER 151104 (Section 5.1). 20 4 PINION GEAR 140401 21 1 SPIDER BLOCK 070401 22 1 SIDE GEAR 130704 23 2 SIDE GEAR THRUST WASHER 151007 * 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 * 1 PUSH-IN FITTING (Sim to 1/8" BSPP) 170201 * 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (Smm DIA X 6m LONG) 170301 * 1 SWITCH COVER (REAR) 180209 * 1 SWITCH COVER (REAR) 180201 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATING & SERVICE MANUAL 210200 * 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	17	4	SEAL HOUSING SCREW	200501			·	
19 4 PINION THRUST WASHER 151104 (Section 5.1). 20 4 PINION GEAR 140401 21 1 SPIDER BLOCK 070401 22 1 SIDE GEAR 130704 23 2 SIDE GEAR THRUST WASHER 151007 1 BULKHEAD FITTING KIT (CRING TYPE) 170105 1 PUSH-IN FITTING (Sim to 1/8" BSPT) 170501 1 NIPPLE (1/8" to 1/8" BSPT) 170501 1 AIR LINE (Sim DIA X 6m LONG) 170301 1 SWITCH 180209 1 SWITCH 180209 1 SWITCH COVER (REAR) 180211 1 WARNING LABEL 210101 1 BUMPER STICKER 210102 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	18	1	SPLINED SIDE GEAR	130804			Refer to seal hous	sing set-up tech note
20 4 PINION GEAR 140401 21 1 SPIDER BLOCK 070401 22 1 SIDE GEAR 130704 23 2 SIDE GEAR THRUST WASHER 151007 1 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 1 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 1 1 NIPPLE (1/8" to 1/8" BSPT) 170501 1 1 AIR LINE (5mm DIA X 6m LONG) 170301 1 1 SOLENOID VALVE (12V) 180103 1 1 SWITCH 180209 1 1 SWITCH 180209 1 1 SWITCH 180209 1 1 WARNING LABEL 210101 1 1 WARNING LABEL 210101 1 1 BUMPER STICKER 210102 1 1 INSTALLATION GUIDE 210200 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	19	4	PINION THRUST WASHER	151104				
22 1 SIDE GEAR 130704 23 2 SIDE GEAR THUST WASHER 151007 * 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 * 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 * 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATING & SERVICE MANUAL 210200 * 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	20	4	PINION GEAR	140401			,	
23 2 SIDE GEAR THRUST WASHER 151007 1 BULKHEAD FITTING KIT (O-RING TYPE) 177015 1 PUSH-IN FITTING (Simm to 1/8" BSPP) 170201 1 NIPPLE (1/8" to 1/8" BSPT) 170501 1 AIR LINE (Simm DIA X 6m LONG) 170301 2 1 SOLENOID VALVE (12V) 180103 1 1 SWITCH 180209 1 1 SWITCH 180209 1 1 WARNING LABEL 210101 1 1 BUMPER STICKER 210102 1 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	21	1	SPIDER BLOCK	070401				
* 1 BULKHEAD FITTING KIT (0-RING TYPE) 170105 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 1 NIPPLE (1/8" to 1/8" BSPP) 170501 1 AIR LINE (5mm DIA X 6m LONG) 170301 1 SOLENOID VALVE (12V) 180103 1 SWITCH 180209 1 SWITCH 180209 1 SWITCH 180301 1 WARNING LABEL 210101 1 BUMPER STICKER 210102 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	22	1		130704				
* 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 • 1 PUSH-IN FITTING (Smm to 1/8" BSPP) 170201 • 1 NIPPLE (1/8" to 1/8" BSPT) 170501 • 1 AIR LINE (Smm DIJA X 6m LONG) 170301 • 1 SOLENOID VALVE (12V) 180103 • 1 SWITCH 180209 • 1 SWITCH 180209 • 1 SWITCH 20VER (REAR) 180211 • 10 CABLE TIE 180301 • 1 WARNING LABEL 210101 • 1 BUMPER STICKER 210102 • 1 OPERATING & SERVICE MANUAL 210200 • 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	23	2	SIDE GEAR THRUST WASHER	151007				
* NIPPLE (1/8" to 1/8" BSPT) 170501 1 AIR LINE (5mm DIA X 6m LONG) 170301 1 SOLENOID VALVE (12V) 180103 1 SWITCH 180209 1 SWITCH 180209 1 1 SWITCH 180211 1 0 CABLE TIE 180301 1 1 WARNING LABEL 210101 1 BUMPER STICKER 210102 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view. * Not illustrated in exploded view.	*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105				
* Not illustrated in exploded view. 1 Air Line (5mm Dia X 6m LONG) 170301 1 SOLENOID VALVE (12V) 180103 1 SWITCH 180209 1 SWITCH COVER (REAR) 180211 1 10 CABLE TIE 180301 1 WARNING LABEL 210101 1 BUMPER STICKER 210102 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view.	*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201				
* 1 SOLENOID VALVE (12V) 180103 - 1 SWITCH 180209 - 1 1 SWITCH 180209 - 1 1 SWITCH COVER (REAR) 180211 - 10 CABLE TIE 180301 - 1 WARNING LABEL 210101 - 1 BUMPER STICKER 210102 - 1 OPERATING & SERVICE MANUAL 210200 - 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view. * Not illustrated in exploded view.	*	1		170501				
* 1 SWITCH 180209 1 SWITCH COVER (REAR) 180211 1 10 CABLE TIE 180301 1 WARNING LABEL 210101 1 BUMPER STICKER 210102 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view. * Not illustrated in exploded view.	*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
* 1 SWITCH 180209 1 SWITCH COVER (REAR) 180211 1 10 CABLE TIE 180301 1 WARNING LABEL 210101 1 BUMPER STICKER 210102 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view. * Not illustrated in exploded view.	*	1	SOLENOID VALVE (12V)	180103				
* 10 CABLE TIE 180301 1 WARNING LABEL 210101 1 BUMPER STICKER 210102 1 OPERATING & SERVICE MANUAL 210200 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view. * Not illustrated in exploded view.	*	1		180209				
* 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATING & SERVICE MANUAL 210200 * 1 INSTALLATION GUIDE 210270 * Not illustrated in exploded view. * Not illustrated in 99876	*	1	SWITCH COVER (REAR)	180211				
* Not illustrated in exploded view. * Not illustrated in exploded view. * Not illustrated in exploded view.	*	10	CABLE TIE	180301				
* Not illustrated in exploded view. * Not illustrated in exploded view. 13 12 11 10 9 13 12 11 10 10 11 18	*	1	WARNING LABEL	210101				\sim (1)
* Not illustrated in exploded view. * Not illustrated in exploded view. 13 12 11 10 9 8 7 6	*	1	BUMPER STICKER	210102			_ (2)(1)
* Not illustrated in exploded view. * Not illustrated in exploded view. 5 4 13 12 11 10 9 8 7 6	*	1	OPERATING & SERVICE MANUAL	210200				2) ~
* Not illustrated in exploded view. Solve of the state o	*	1	INSTALLATION GUIDE	210270			(3)	\prec
	*		11 10 9 8	7	22	5	20	19 18
23 ED70			15 14	(23)				RD70_

RD	71	Nissan H260,37 SPL,dis	sc brake	
ITEM#		DESCRIPTION	PART#	NOTES
01	QTY 1	FLANGE CAP	023201	NOTES
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	012901	
03	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060703	
08	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP ASSEMBLY	031202	
11	8	CYLINDER CAP RETAINING BOLT	200205	
12	8	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	CLAMPING PLATE	090301	
15	1	SPLINED SIDE GEAR	130804	
16	4	PINION THRUST WASHER	151104	
17	4	PINION GEAR	140401	
18	1	SPIDER BLOCK	070401	
19	1	SIDE GEAR	130704	
20	2	SIDE GEAR THRUST WASHER	151007	
21	1	ADJUSTER NUT	100501	
22	1	SEAL HOUSING	081201	
23	2	SEAL HOUSING O-RING	160227	1
24	4	SEAL HOUSING SCREW	200501	'
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210271	
*	Not ill	lustrated in exploded view.		
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Specs:

Axle Spline 37 tooth, Ø38.4mm [1.51"]
Ratio Supported All
Ring Gear ID 165.1mm [6.50"]
Ring Gear Bolts 10 bolts on Ø200mm [7.87"]
Ring Gear Bolt Size 14mm
Ring Gear Torque 212Nm [156 ft-lb]
Backlash 0.15-0.20mm [0.006-0.008"]
Bearing Cap Torque 88Nm [65 ft-lb]

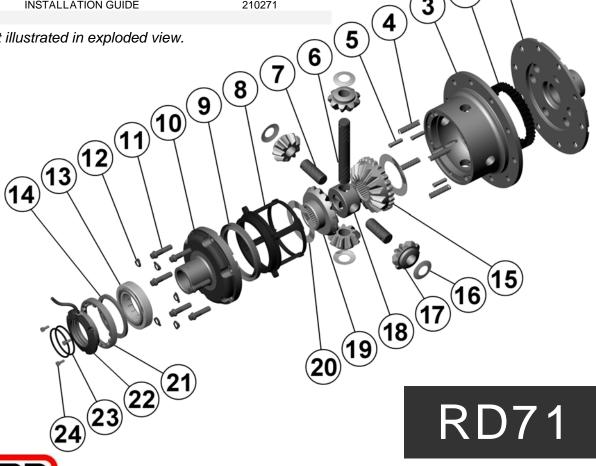
Notes:

For replacement O-rings use only BS138 Viton 75.

Refer to seal housing set-up tech note (Section 5.1).

For H260 37 spline differential with no through cross shaft refer to RD70 (Section 2.70).

Revision Date 12/10/06



			7			3 - 111	
RD [°]	72	Suzuki Sierra,RR,26 SP	L**		S	Specs:	
ITEM #	QTY	DESCRIPTION	PART#	NOTES			
01	1	FLANGE CAP	023101			Axle Spline	26 tooth, Ø27.4mm [1.08"]
02	1	CLUTCH GEAR	050701			Ratio Supported	All
03	1	DIFFERENTIAL CASE	012801				108.0mm [4.25"]
						Ring Gear ID	
04	4	RETURN SPRING	150107			Ring Gear Bolts	10 bolts on Ø130mm [5.12"]
05	3	CROSS SHAFT RETAINING PIN	120403		ı	Ring Gear Torque	85Nm [63 ft-lb]
06	1	LONG CROSS SHAFT	060106			Backlash	0.10-0.15mm [0.004-0.006"]
07	2	SHORT CROSS SHAFT	060306		Ве	aring Cap Torque	85Nm [63 ft-lb]
08	1	PISTON	040801			0 1 1	
09	1	U-RING	160306				
10	1	CYLINDER CAP ASSEMBLY	031301				
11	8	CYLINDER CAP RETAINING BOLT	200211			1.4	
12	8	LOCKING TAB (6mm)	150402		l)	Notes:	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED				
14	1	SEAL HOUSING RETAINING CLIP	150601				
15	1	SPLINED SIDE GEAR	131201		1	For replacement	O-rings
16	4	PINION THRUST WASHER	151108			use only BS133 V	=
17	4	PINION GEAR	140601			400 0my 20 100 1	11011 7 0.
			070701			For and bousing	ant up refer to took notes
18	1	SPIDER BLOCK					set-up refer to tech notes
19	1	SIDE GEAR	131101			(Section 5.1 & 5.2).
20	2	SIDE GEAR THRUST WASHER	151008				
21	1	ADJUSTER NUT	100101				
22	1	SEAL HOUSING ASSEMBLY	081902				
23	2	SEAL HOUSING O-RING	160235	1			
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105				
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201				
*							
	1	NIPPLE (1/8" to 1/8" BSPT)	170501				
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1	SWITCH COVER (REAR)	180211				
*	10	CABLE TIE	180301				
*	1	WARNING LABEL	210101				
*	1	BUMPER STICKER	210101			/	\bigcirc (1)
*						\sim (2)
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•	1	INSTALLATION GUIDE	210272			(4)(3)\	
*		ustrated in exploded view.			5	$) \downarrow $	
**		model was superseded by RD88		6)`	\prec	\ \	
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RD	73	Suzuki Sierra,FR,22 SPI	L**		Spe	cs:	
ITEM #	QTY	DESCRIPTION	PART #	NOTES			
01	1	FLANGE CAP	023101			Axle Spline	22 tooth, Ø23.9mm [0.94"]
02	1	CLUTCH GEAR	050701		Rati	o Supported	AII
03	1	DIFFERENTIAL CASE	012801			Ring Gear ID	108.0mm [4.25"]
04	4	RETURN SPRING	150107			g Gear Bolts	10 bolts on Ø130mm [5.12"]
05	3	CROSS SHAFT RETAINING PIN	120403		Ring	Gear Torque	85Nm [63 ft-lb]
06	1	LONG CROSS SHAFT	060106			Backlash	0.10-0.15mm [0.004-0.006"]
07	2	SHORT CROSS SHAFT	060306		Bearing	Cap Torque	85Nm [63 ft-lb]
08	1	PISTON	040801				
09	1	U-RING	160306				
10	1	CYLINDER CAP ASSEMBLY	031301				
11	8	CYLINDER CAP RETAINING BOLT	200211				
12	8		150402		Note	00:	
		LOCKING TAB (6mm)			NOU	5 5.	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED				
14	1	SEAL HOUSING RETAINING CLIP	150601		_		
15	1	SPLINED SIDE GEAR	131202			replacement	=
16	4	PINION THRUST WASHER	151108		use	only BS133 V	iton 75.
17	4	PINION GEAR	140601				
18	1	SPIDER BLOCK	070701		For	seal housing	set-up refer to tech notes
19	1	SIDE GEAR	131102			ction 5.1 & 5.2	
20	2	SIDE GEAR THRUST WASHER	151008		(00)	011011 0.1 Q 0.2	.).
21	1	ADJUSTER NUT	100101				
22	1	SEAL HOUSING ASSEMBLY	081902				
23	2	SEAL HOUSING O-RING	160235	1			
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105				
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201				
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501				
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*	1	SOLENOID VALVE (12V)	180103				
*	1	· , ,					
		SWITCH	180209				
_	1	SWITCH COVER (FRONT)	180210				
*	10	CABLE TIE	180301				
*	1	WARNING LABEL	210101				\frown (1)
*	1	BUMPER STICKER	210102			_ (2)(')
*	1	OPERATING & SERVICE MANUAL	210200				2)
*	1	INSTALLATION GUIDE	210273			<u> </u>	\checkmark \
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Suzuki Vitara, RR, 26 SPL, 10 bolt RG Specs: 01 FLANGE CAP 021803 Axle Spline 26 tooth, Ø27.4mm [1.08"] 02 1 **CLUTCH GEAR** 050501 Ratio Supported 03 **DIFFERENTIAL CASE** 011903 Ring Gear ID 118.0mm [4.65"] 10 bolts on Ø140mm [5.51"] 04 RETURN SPRING 150102 Ring Gear Bolts 05 3 95Nm [70 ft-lb] CROSS SHAFT RETAINING PIN 120401 Ring Gear Torque 0.13-0.18mm [0.005-0.007"] 06 LONG CROSS SHAFT 061101 Backlash SHORT CROSS SHAFT 07 2 061201 Bearing Cap Torque 85Nm [63 ft-lb] **PISTON** 08 040601 09 1 **U-RING** 160303 10 CYLINDER CAP ASSEMBLY 030905 11 8 CYLINDER CAP RETAINING BOLT 200207 LOCKING TAB (6mm) Notes: 12 8 150402 13 TAPERED ROLLER BEARING NOT SUPPLIED 14 SEAL HOUSING RETAINING CLIP 150601 15 SPLINED SIDE GEAR For replacement O-rings 1 131005 16 PINION THRUST WASHER 151107 use only BS133 Viton 75. 17 4 PINION GEAR 140502 SPIDER BLOCK 070502 For seal housing set-up refer to tech note 18 19 SIDE GEAR 130905 (Section 5.1 / 5.2). 20 2 SIDE GEAR THRUST WASHER 151005 21 ADJUSTER NUT 100101 1 22 SEAL HOUSING ASSEMBLY 081902 **SEAL HOUSING O-RING** 160235 23 **BULKHEAD FITTING KIT (O-RING TYPE)** 170105 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 NIPPLE (1/8" to 1/8" BSPT) 170501 1 AIR LINE (5mm DIA X 6m LONG) 170301 SOLENOID VALVE 180103 SWITCH 180209 1 SWITCH COVER (REAR) 180211 10 **CABLE TIE** 180301 WARNING LABEL 210101 1 **BUMPER STICKER** 210102 OPERATING & SERVICE MANUAL 210200 **INSTALLATION GUIDE** 210274 Not illustrated in exploded view. 6 19 18 23 22 RD74

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ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	023701	
02	1	CLUTCH GEAR	050701	
03	1	DIFFERENTIAL CASE	012802	
04	4	RETURN SPRING	150107	
05	3	CROSS SHAFT RETAINING PIN	120403	
06	1	LONG CROSS SHAFT	060106	
07	2	SHORT CROSS SHAFT	060306	
80	1	PISTON	040801	
09	1	U-RING	160306	
10	1	CYLINDER CAP ASSEMBLY	031301	
11	8	CYLINDER CAP RETAINING BOLT	200211	
12	8	LOCKING TAB (6mm)	150402	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	SEAL HOUSING RETAINING CLIP	150601	
15	1	SPLINED SIDE GEAR	131202	
16	4	PINION THRUST WASHER	151108	
17	4	PINION GEAR	140601	
18	1	SPIDER BLOCK	070701	
19	1	SIDE GEAR	131102	
20	2	SIDE GEAR THRUST WASHER	151008	
21	1	ADJUSTER NUT	100101	
22	1	SEAL HOUSING ASSEMBLY	081902	
23	2	SEAL HOUSING O-RING	160235	1
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210101	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210200	
*	Not il	lustrated in exploded view.	へ(7)〜	3)(

Specs:

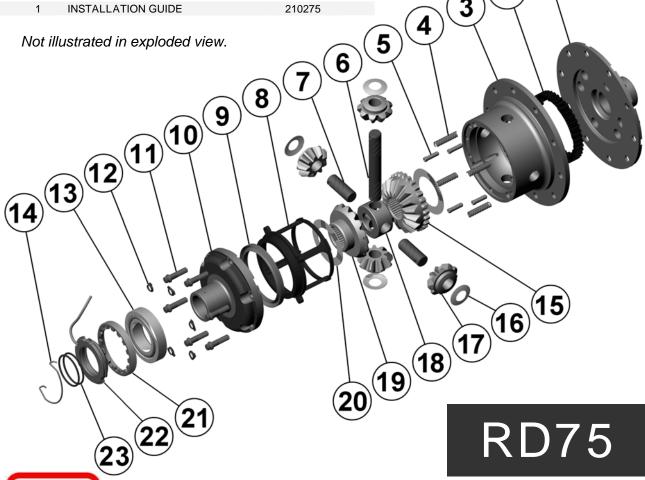
Axle Spline 22 tooth, Ø23.9mm [0.94"]
Ratio Supported All
Ring Gear ID 108.0mm [4.25"]
Ring Gear Bolts 10 bolts on Ø130mm [5.12"]
Ring Gear Torque 95Nm [70 ft-lb]
Backlash 0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque 60Nm [44 ft-lb]

Notes:

 For replacement O-rings use only BS133 Viton 75.

For seal housing set-up refer to tech note (Section 5.2).

Revision Date 12/10/06



DB		Considirent (IA) ED C	O ODI **			
RD		Suzuki Jimny (JA),FR,2	2 SPL ^{**}		Specs:	
ITEM #	QTY	DESCRIPTION	PART#	NOTES		
01	1	FLANGE CAP	023103		Axle Spline 22 tooth, Ø23.9mm [0.94"]	
02	1	CLUTCH GEAR	050701		Ratio Supported All	
03	1	DIFFERENTIAL CASE	012803		Ring Gear ID 108.0mm [4.25"]	
04	4	RETURN SPRING	150109		Ring Gear Bolts 8 bolts on Ø130mm [5.12"]
05	3	CROSS SHAFT RETAINING PIN	120403		Ring Gear Torque 85Nm [63 ft-lb]	
06	1	LONG CROSS SHAFT	060106		Backlash 0.10-0.20mm [0.004-0.008"]
07	2	SHORT CROSS SHAFT	060306		Bearing Cap Torque 50Nm [37 ft-lb]	
80	1	PISTON	040801			
09	1	U-RING	160306			
10	1	CYLINDER CAP ASSEMBLY	031303			
11	8	CYLINDER CAP RETAINING BOLT	200211			
12	8	LOCKING TAB (6mm)	150402		Notes:	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED			
14	1	CLAMPING PLATE	090401			
15	1	SPLINED SIDE GEAR	131202		1 For replacement O-rings	
16	4	PINION THRUST WASHER	151108		use only BS030 Viton 75.	
17	4	PINION GEAR	140601			
18	1	SPIDER BLOCK	070701		Refer to seal housing set-up tech note	
19	1	SIDE GEAR	131102		(Section 5.1).	
20	2	SIDE GEAR THRUST WASHER	151008			
21	1	ADJUSTER NUT	100601			
22	1	SEAL HOUSING	081401			
23	2	SEAL HOUSING O-RING	160208	1		
24	3	SEAL HOUSING SCREW	200502			
	1	BULKHEAD FITTING KIT (O-RING TYPE)				
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)				
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501			
•	1	AIR LINE (5mm DIA X 6m LONG)	170301			
	1	SOLENOID VALVE (12V)	180103			
*	1	SWITCH	180209			
*	1 10	SWITCH COVER (FRONT)	180210			
*	10	CABLE TIE	180301			
*		WARNING LABEL	210101		\sim (1)	
*	1	BUMPER STICKER OPERATING & SERVICE MANUAL	210102 210200		(2)	
*	1	INSTALLATION GUIDE	210200		(2)(2)	
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Revision Date 12/10/06

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RD78	Nissan H233	3B,31 SPL			S	pecs:	
ITEM# Q	Y DESCRI	PTION	PART#	NOTES			
01	FLANGE CAP		020302			Axle Spline	31 tooth, Ø32.0mm [1.26"]
02	CLUTCH GEAR		050202			Ratio Supported	All
03		SF	010307			Ring Gear ID	146.0mm [5.75"]
	RETURN SPRING	02	150101			Ring Gear Bolts	9 bolts on Ø176mm [6.93"]
05		TAINING DIN	120303		Din	g Gear Bolt Size	12mm
	SHORT CROSS SH		060402		K	ing Gear Torque	142Nm [105 ft-lb]
07		ST WASHER	151002		_	Backlash	0.15-0.20mm [0.006-0.008"]
	PISTON		040202		Bea	ring Cap Torque	99Nm [73 ft-lb]
09			160705				
10			030214				
	CYLINDER CAP RE		200205				
12 8	,	•	150401		Ν	otes:	
	TAPERED ROLLER	BEARING	NOT SUPPLIED				
	ADJUSTER NUT		100102				
15	SEAL HOUSING AS	SSEMBLY	081902	1		For replacement	
16 2	SEAL HOUSING O-	RING	160235			use only BS133 \	/iton 75.
17	SEAL HOUSING RE	TAINING CLIP	150601				
18	SPLINED SIDE GEA	٩R	130402			For seal housing	set-up refer to tech note
19	PINION THRUST W	ASHER	151102			(Section 5.1 / 5.2)	
	PINION GEAR		140201			(
21			070201				
22			110502				
23			130202				
		CDACED					
•			4581061				
	BULKHEAD FITTIN		170105				
	PUSH-IN FITTING (· · · · · · · · · · · · · · · · · · ·	170201				
*	== (170501				
*	,		170301				
*	SOLENOID VALVE	(12V)	180103				
*	SWITCH		180209				
*	SWITCH COVER (F	RONT)	180210				
*	SWITCH COVER (R	EAR)	180211				
* 1	0 CABLE TIE	,	180301				- (1)
*			210101				
	BUMPER STICKER		210102				(2)
*			210200			\bigcirc (3)	
*			210278A			$\langle (4) \rangle \langle$	' \ \
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RD [°]	79	Suzuki Vitara,RR,26 SF	L,12 bolt	RG		Specs:	
ITEM #	QTY	DESCRIPTION	PART#	NOTES			
01	1	FLANGE CAP	023301			Axle Spline	26 tooth, Ø27.4mm [1.08"]
02	1	CLUTCH GEAR	050501			Ratio Supported	All
		DIFFERENTIAL CASE				Ring Gear ID	118.0mm [4.65"]
03	1		011904				
04	4	RETURN SPRING	150102			Ring Gear Bolts	12 bolts on Ø140mm [5.51"]
05	3	CROSS SHAFT RETAINING PIN	120401			Ring Gear Torque	95Nm [70 ft-lb]
06	1	LONG CROSS SHAFT	061101			Backlash	0.13-0.18mm [0.005-0.007"]
07	2	SHORT CROSS SHAFT	061201		В	earing Cap Torque	85Nm [63 ft-lb]
80	1	PISTON	040601				
09	1	U-RING	160303				
10	1	CYLINDER CAP ASSEMBLY	030905				
11	8	CYLINDER CAP RETAINING BOLT	200207				
12	8	LOCKING TAB (6mm)	150402			Notes:	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED)		101001	
14	1	SEAL HOUSING RETAINING CLIP	150601				
15	1	SPLINED SIDE GEAR	131005		1	For replacement	O-rings
16	4	PINION THRUST WASHER	151107		•	use only BS133 \	
17	4	PINION GEAR	140502			dac only boros (11011 73.
18	1	SPIDER BLOCK	070502			For goal bouging	act up refer to took note
19							set-up refer to tech note
	1	SIDE GEAR	130905			(Section 5.1 / 5.2)	
20	2	SIDE GEAR THRUST WASHER	151005				
21	1	ADJUSTER NUT	100101				
22	1	SEAL HOUSING ASSEMBLY	081902				
23	2	SEAL HOUSING O-RING	160235	1			
*	1	BULKHEAD FITTING KIT (O-RING TYPE)					
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201				
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501				
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1	SWITCH COVER (REAR)	180211				
*	10	CABLE TIE	180301				
*							
			210101				(🛕 \
*	1	WARNING LABEL	210101				$\mathbf{T}(1)$
*	1	BUMPER STICKER	210102				2 (1)
*	1 1	BUMPER STICKER OPERATING & SERVICE MANUAL	210102 210200			- (3)(2 (1)
* *	1	BUMPER STICKER	210102			3 (3)(2 (1)
*	1 1 1	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE	210102 210200		E	3 (4) 3 (5)(3)(5)(3)(5)(3)(5	2 (1)
*	1 1 1	BUMPER STICKER OPERATING & SERVICE MANUAL	210102 210200		5)	43	2 (1)
*	1 1 1	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE	210102 210200	<u>a</u> (5)	43	2 (1)
*	1 1 1	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE	210102 210200	6)(5	43	2 (1)
*	1 1 1	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE lustrated in exploded view.	210102 210200 210279	6	5	43	2 (1)
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*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6	5	4 3	2 1
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*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6	5	4 3	2 1
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*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6	5	4 3	2 1
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6	5	4 3	
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6	5	4	
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6	5	4	
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6	5	4	
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6		17)	
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6		17)	
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6		17)	
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*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	20		18 17	16
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6		18 17	16
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6		18 17	16
*	1 1 1 Not ill	BUMPER STICKER OPERATING & SERVICE MANUAL INSTALLATION GUIDE Justrated in exploded view.	210102 210200 210279	6		18 17	

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RD	80	Dana 80,35 SPL		
ITEM#	QTY	DESCRIPTION	PART#	NOTE
01	1	FLANGE CAP	022602	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	012403	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
80	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	031203	
11	2	SEAL HOUSING O-RING	160220	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (6mm)	150401	
14	1	TAPERED ROLLER BEARING	160113	2
15	1	SEAL HOUSING	080704	
16	1	SHIM KIT	SHK006	
17	1	SPLINED SIDE GEAR	130801	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130701	
22	2	SIDE GEAR THRUST WASHER	151004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210280	

Specs:

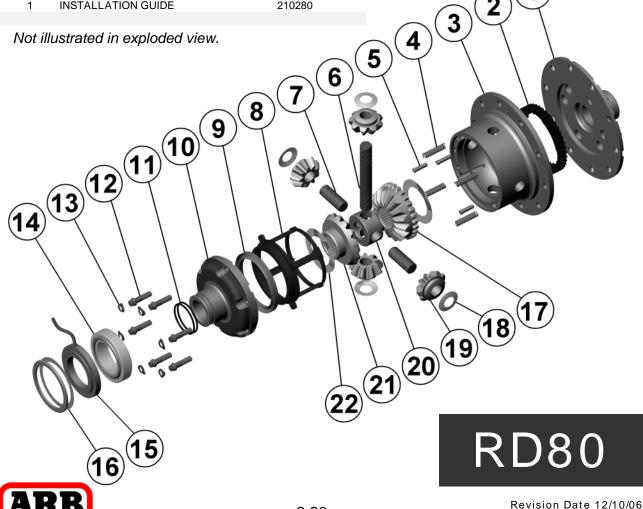
Axle Spline 35 tooth, Ø38.1mm [1.50"]
Ratio Supported Varies by mfg. (see note)
Ring Gear ID 174.9mm [6.89"]
Ring Gear OD 292mm [11.5"]
Ring Gear Bolts 12 bolts on Ø203mm [8.00"]
Ring Gear Torque 237Nm [175 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- 1 For replacement O-rings use only BS141 Viton 75.
- 2 For replacement bearing use Timken part # 39250 / 39412.

The ratio split for the carrier break varies by application. RD80 suits the numerically higher range (i.e., ???:1 & up) for each application.

For the 37 spline Dana 80 refer to RD91 (Section 2.91).



RD	81	Ford 8.8",31 SPL		
ITEM #	QTY	DESCRIPTION	PART#	NOTES
1	1	SEAL HOUSING ASSEMBLY	081501	
2	1	CLUTCH GEAR	050801	
3	3	PINION THRUST WASHER	151110	
4	3	PINION GEAR	140701R	
5	1	LONG CROSS SHAFT	060204	
6	1	SHORT CROSS SHAFT	060403	
7	1	DIFFERENTIAL CASE	013001	
8	2	COUNTERSUNK SCREW	200213	
9	2	CROSS SHAFT RETAINING PIN	120601	
10	1	TAPERED ROLLER BEARING	160109	2
11	2	SEAL HOUSING O-RING	160227	1
12	1	FLANGE CAP ASSEMBLY	028401	
13	1	BONDED SEAL	160702	
14	8	RETURN SPRING	150107	
15	1	SPLINED SIDE GEAR	131401R	
16	1	SPIDER BLOCK	070902	
17	1	SIDE GEAR	131301R	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
*	1	C-CLIP KIT	CCK005	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	SOLENOID VALVE (12V)	180103	
*	10	CABLE TIE	180301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	BUMPER STICKER	210102	
*	1	WARNING STICKER	210101	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210281	

Specs:

Axle Spline	31 tooth, Ø33.5mm [1.32"]
Ratio Supported	AII
Ring Gear ID	127.0mm [5.00"]
Ring Gear OD	224mm [8.8"]
Ring Gear Bolts	10 bolts on Ø152mm [6.00"]
Ring Gear Torque	81Nm [60 ft-lb]
Backlash	0.28-0.41mm [0.011-0.016"]
Bearing Cap Torque	81Nm [60 ft-lb]

Notes:

- For replacement O-rings use only BS138 Viton 75.
- For replacement bearing use Timken part # LM102949 / LM102910.

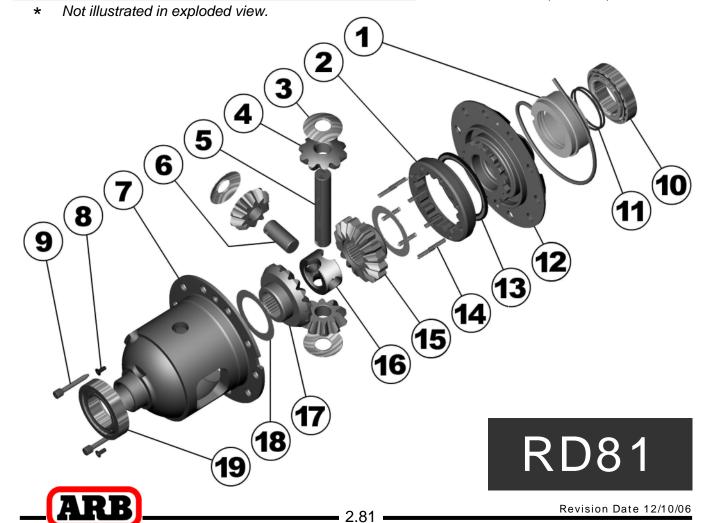
RD81 suits C-clip & non C-clip applications.

For the 28 spline model see RD82 (Section 2.82).

Suitable for use with ABS tone ring.

Seal housing comes pre-installed. To service O-rings or bearing remove the seal housing assembly with a bearing puller.

Thicker aftermarket ring gears may require modification to remove the cross shaft. Refer to tech note (Section 5.6).



RD	82	Ford 8.8",28 SPL		
ITEM #	QTY	DESCRIPTION	PART #	NOTES
1	1	SEAL HOUSING ASSEMBLY	081501	
2	1	CLUTCH GEAR	050801	
3	3	PINION THRUST WASHER	151110	
4	3	PINION GEAR	140701R	
5	1	LONG CROSS SHAFT	060204	
6	1	SHORT CROSS SHAFT	060403	
7	1	DIFFERENTIAL CASE	013001	
8	2	COUNTERSUNK SCREW	200213	
9	2	CROSS SHAFT RETAINING PIN	120601	
10	1	TAPERED ROLLER BEARING	160109	2
11	2	SEAL HOUSING O-RING	160227	1
12	1	FLANGE CAP ASSEMBLY	028401	
13	1	BONDED SEAL	160702	
14	8	RETURN SPRING	150107	
15	1	SPLINED SIDE GEAR	131404H	
16	1	SPIDER BLOCK	070902	
17	1	SIDE GEAR	131304H	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	TAPERED ROLLER BEARING	NOT SUPPLIED	2
*	1	C-CLIP KIT	CCK005	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	SOLENOID VALVE (12V)	180103	
*	10	CABLE TIE	180301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	BUMPER STICKER	210102	
*	1	WARNING STICKER	210101	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210282	

Specs:

Axle Spline 28 tooth, Ø30.5mm [1.20"]
Ratio Supported All
Ring Gear ID 127.0mm [5.00"]
Ring Gear OD 224mm [8.8"]
Ring Gear Bolts 10 bolts on Ø152mm [6.00"]
Ring Gear Torque 81Nm [60 ft-lb]
Backlash 0.28-0.41mm [0.011-0.016"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

- For replacement O-rings use only BS138 Viton 75.
- For replacement bearing use Timken part # LM102949 / LM102910.

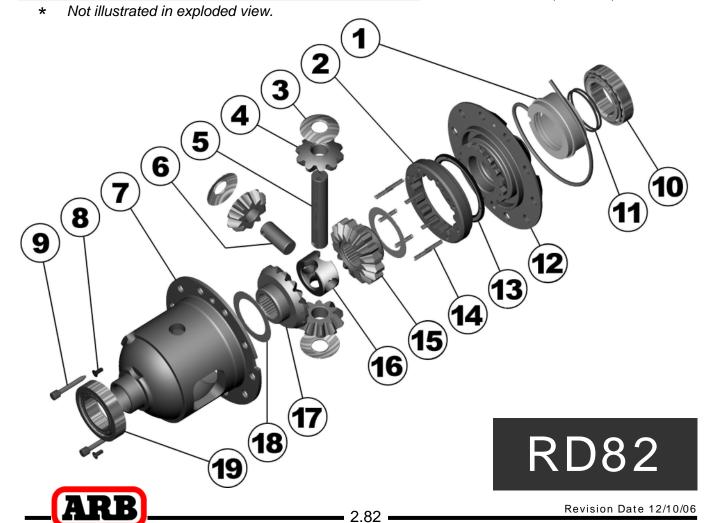
RD82 suits C-clip & non C-clip applications.

For the 31 spline model see RD81 (Section 2.81).

Suitable for use with ABS tone ring.

Seal housing comes pre-installed. To service O-rings or bearing remove the seal housing assembly with a bearing puller.

Thicker aftermarket ring gears may require modification to remove the cross shaft. Refer to tech note (Section 5.6).



RD	83	GM 10 Bolt,8.5",28 SPL		
ITEM #	QTY	DESCRIPTION	PART#	NOTES
1	1	SPLINED SIDE GEAR	131404H	
2	1	SPIDER BLOCK	070902	
3	1	LONG CROSS SHAFT	060204	
4	1	SIDE GEAR	131304H	
5	2	SIDE GEAR THRUST WASHER	151010	
6	2	COUNTERSUNK SCREW	200213	
7	2	CROSS SHAFT RETAINING PIN	120601	
8	2	SEAL HOUSING O-RING	160235	1
9	1	SEAL HOUSING ASSEMBLY	081801	
10	1	SHIM KIT	SHK003	
11	2	TAPERED ROLLER BEARING	160114	2
12	1	FLANGE CAP ASSEMBLY	028403	
13	1	BONDED SEAL	160702	
14	1	CLUTCH GEAR	050801	
15	8	RETURN SPRING	150107	
16	1	SHORT CROSS SHAFT	060403	
17	3	PINION GEAR	140701R	
18	3	PINION THRUST WASHER	151110	
19	1	DIFFERENTIAL CASE	013003	
*	1	C-CLIP KIT	CCK005	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	SOLENOID VALVE (12V)	180103	
*	10	CABLE TIE	180301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	BUMPER STICKER	210102	
*	1	WARNING STICKER	210101	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210283	

Specs:

Axle Spline	28 tooth, Ø30.5mm [1.20"]
Ratio Supported	2.73:1 & up
Ring Gear ID	127.0mm [5.00"]
Ring Gear OD	216mm [8.5"] & 219mm [8.63"]
Ring Gear Bolts	10 bolts on Ø156mm [6.14"]
Ring Gear Torque	88Nm [65 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb]

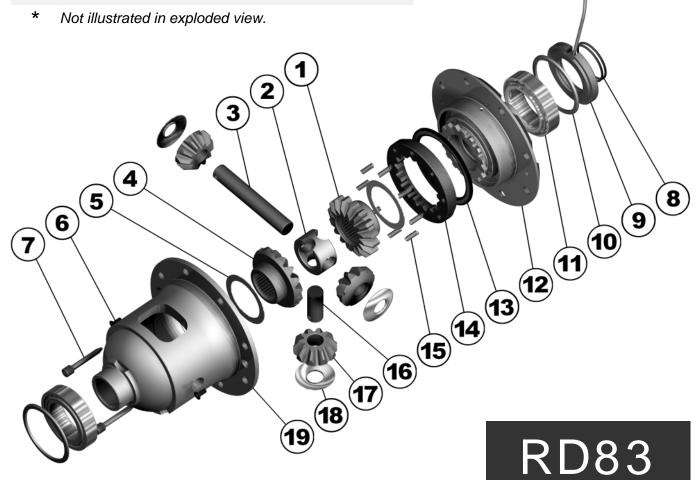
Notes:

- 1 For replacement O-rings use only BS133 Viton 75.
- 2 For replacement bearing use Timken part # LM102949 / LM102911.

Ring gear bolts are 7/16" - 20 left-hand thread, and must be removed in a clockwise direction.

Thicker aftermarket ring gears may require modification to remove the cross shaft. Refer to tech note (Section 5.6).

For the 30 spline model see RD84 (Section 2.84).





RD	84	GM 10 Bolt,8.5",30 SPL		
ITEM #	QTY	DESCRIPTION	PART#	NOTES
1	1	SPLINED SIDE GEAR	131405R	
2	1	SPIDER BLOCK	070902	
3	1	LONG CROSS SHAFT	060204	
4	1	SIDE GEAR	131305R	
5	2	SIDE GEAR THRUST WASHER	151010	
6	2	COUNTERSUNK SCREW	200213	
7	2	CROSS SHAFT RETAINING PIN	120601	
8	2	SEAL HOUSING O-RING	160235	1
9	1	SEAL HOUSING ASSY (Ø73.4 [2.9"])	081801	
*	1	SEAL HOUSING ASSY (Ø77.8 [3.1"])	081802	
10	1	SHIM KIT (Ø73.2 [2.9"])	SHK003	
*	1	SHIM KIT (Ø77.7 [3.1"])	SHK002	
11	2	TAPERED ROLLER BEARING (SMALL)	160114	2
12	1	FLANGE CAP ASSEMBLY	028403	
13	1	BONDED SEAL	160702	
14	1	CLUTCH GEAR	050801	
15	8	RETURN SPRING	150107	
16	1	SHORT CROSS SHAFT	060403	
17	3	PINION GEAR	140701R	
18	3	PINION THRUST WASHER	151110	
19	1	DIFFERENTIAL CASE	013003	
*	1	C-CLIP KIT	CCK005	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	SOLENOID VALVE (12V)	180103	
*	10	CABLE TIE	180301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	BUMPER STICKER	210102	
*	1	WARNING STICKER	210101	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210283	

Specs:

Axle Spline	30 tooth, Ø33.3mm [1.31"]
Ratio Supported	2.73:1 & up
Ring Gear ID	127.0mm [5.00"]
Ring Gear OD	216mm [8.5"] & 219mm [8.63"]
Ring Gear Bolts	10 bolts on Ø156mm [6.14"]
Ring Gear Torque	88Nm [65 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb]

Notes:

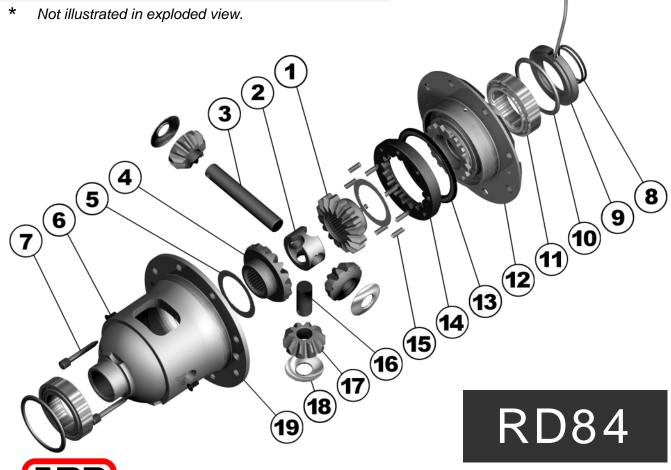
- 1 For replacement O-rings use only BS133 Viton 75.
- For replacement bearing on early model 'small bearing' (Ø73.43mm [2.891"]) axle use Timken part # LM102949 / LM102911.

For replacement bearing on late model 'large bearing' (Ø77.79mm [3.063"]) axle use Timken part # LM603049 / LM603012.

Ring gear bolts are 7/16" - 20 left-hand thread, and must be removed in a clockwise direction.

Thicker aftermarket ring gears may require modification to remove the cross shaft. Refer to tech note (Section 5.6).

For the 28 spline model see RD83 (Section 2.83).



Isuzu RR,23 SPL,non-LSD NOTES 01 FLANGE CAP 021503 02 **CLUTCH GEAR** 050202 03 **DIFFERENTIAL CASE** 012702 04 **RETURN SPRING** 150101 05 3 CROSS SHAFT RETAINING PIN 120303 06 LONG CROSS SHAFT 060205 SHORT CROSS SHAFT 07 2 060402 08 PISTON 040202 09 **BONDED SEAL** 1 160702 10 CYLINDER CAP 030805 11 2 SEAL HOUSING O-RING 160227 8 CYLINDER CAP RETAINING BOLT 12 200205 13 LOCKING TAB (8mm) 150401 14 TAPERED ROLLER BEARING 160115 2 15 SEAL HOUSING 1 080705 16 SHIM KIT SHK001 17 SPLINED SIDE GEAR 130412 PINION THRUST WASHER 18 151102 19 PINION GEAR 140201 20 SPIDER BLOCK 070201 21 SIDE GEAR 130212 1 SIDE GEAR THRUST WASHER 151006 **BULKHEAD FITTING KIT (O-RING TYPE)** 170105 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 AIR LINE (5mm DIA X 6m LONG) 170301 NIPPLE (1/8" to 1/8" BSPT) 170501 1 SOLENOID VALVE (12V) 180103 SWITCH 180209 SWITCH COVER (REAR) 180211 1 CABLE TIE 10 180301 1 WARNING LABEL 210101 **BUMPER STICKER** 210102 1 **OPERATING & SERVICE MANUAL** 1 210200 **INSTALLATION GUIDE** 210285 *

Specs:

Axle Spline 23 tooth, Ø38.1mm [1.50"]

Ratio Supported All

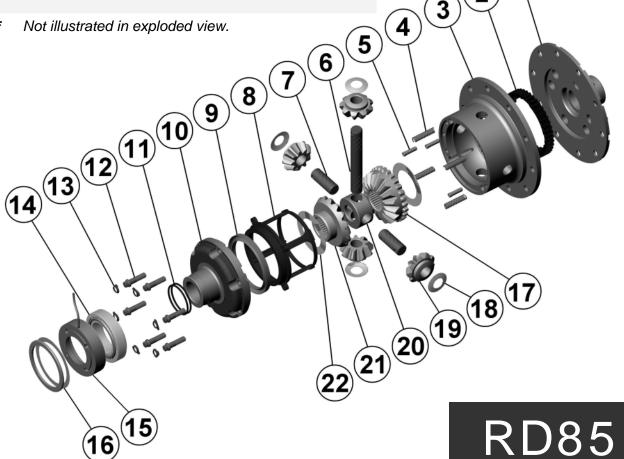
Ring Gear ID 154.0mm [6.06"]

Ring Gear Bolts 12 bolts on Ø180mm [7.09"]

Notes:

- For replacement O-rings use only BS138 Viton 75.
- For replacement bearing use Timken part # LM806649 / LM806610.

Only suits non-LSD models with small carrier bearing - OD 96.84mm [3.813"].



ARB

			/				
RD	87	Suzuki Jimny,FR,22 SPL	_,8 bolt F	RG	Specs	:	
ITEM #	QTY	DESCRIPTION	PART #	NOTES			
01	1	FLANGE CAP	023702		Ax	le Spline	22 tooth, Ø23.9mm [0.94"]
02	1	CLUTCH GEAR	050701		Ratio Su	upported	All
03	1	DIFFERENTIAL CASE	012804		Rino	Gear ID	108.0mm [4.25"]
04	4	RETURN SPRING	150107		Ring Gear Bolts 8 bolts on Ø130mm [5		
05	3	CROSS SHAFT RETAINING PIN	120403		Ring Gear Torque 85Nm [63 ft-lb]		
06	1	LONG CROSS SHAFT	060106		_	Backlash	0.10-0.20mm [0.004-0.008"]
07	2	SHORT CROSS SHAFT	060306		Bearing Car		50Nm [37 ft-lb]
08	1	PISTON	040801		Bearing Out	o rorque	COMM [OF IT ID]
09	1	U-RING	160306				
10	1	CYLINDER CAP ASSEMBLY	031303				
11	8	CYLINDER CAP RETAINING BOLT	200211				
12	8	LOCKING TAB (6mm)	150402		Notes:		
13	1	TAPERED ROLLER BEARING	NOT SUPPLIE	D	110163.	•	
14	1	CLAMPING PLATE	090401	D			
15	1	SPLINED SIDE GEAR	131202		1 For root	acomont (O ringo
						acement (
16	4	PINION THRUST WASHER	151108		use only	y BS030 V	iton 75.
17	4	PINION GEAR	140601		5 ()		
18	1	SPIDER BLOCK	070701				sing set-up tech note
19	1	SIDE GEAR	131102		(Section	1 5.1).	
20	2	SIDE GEAR THRUST WASHER	151008				
21	1	ADJUSTER NUT	100601				ear model refer to RD118
22	1	SEAL HOUSING	081401		(Section	า 2.118).	
23	2	SEAL HOUSING O-RING	160208	1			
24	3	SEAL HOUSING SCREW	200502				
*	1	RING GEAR SPACER	190103				
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105				
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201				
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501				
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1	SWITCH COVER (FRONT)	180210				
*	10	CABLE TIE	180301				
*	1	WARNING LABEL	210101				\bigcirc (1)
*	1	BUMPER STICKER	210102			\sim (2)
*	1	OPERATING & SERVICE MANUAL	210200			(3)	- / \
*	1	INSTALLATION GUIDE	210287		(A)		_/ /
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RD	88	Suzuki,26 SPL,10 bolt R	:G		S	specs:			
ITEM #	QTY	DESCRIPTION	PART#	NOTES					
01	1	FLANGE CAP	023701			Axle Spline	26 tooth, Ø27.4mm [1.08"]		
02	1	CLUTCH GEAR	050701			Ratio Supported	All		
03	1	DIFFERENTIAL CASE	012802			Ring Gear ID	108.0mm [4.25"]		
04	4	RETURN SPRING	150107			Ring Gear Bolts	10 bolts on Ø130mm [5.12"]		
05	3	CROSS SHAFT RETAINING PIN	120403		F	Ring Gear Torque	95Nm [70 ft-lb]		
06	1	LONG CROSS SHAFT 060106			•	Backlash	0.13-0.18mm [0.005-0.007"]		
07	2	SHORT CROSS SHAFT	060306		Bea	aring Cap Torque	60Nm [44 ft-lb]		
08	1	PISTON 040801							
09	1	U-RING	160306						
10	1	CYLINDER CAP ASSEMBLY	031301						
11	8	CYLINDER CAP RETAINING BOLT	200211						
12	8	LOCKING TAB (6mm)	150402		N	lotes:			
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED)					
14	1	SEAL HOUSING RETAINING CLIP	150601						
15	1	SPLINED SIDE GEAR	131201		1	For replacement			
16	4	PINION THRUST WASHER	151108			use only BS133 V	/iton 75.		
17	4	PINION GEAR	140601						
18	1	SPIDER BLOCK	070701				set-up refer to tech note		
19	1	SIDE GEAR	131101			(Section 5.2).			
20	2	SIDE GEAR THRUST WASHER	151008						
21	1	ADJUSTER NUT	100101						
22	1	SEAL HOUSING ASSEMBLY	081902						
23	2	SEAL HOUSING O-RING	160235	1					
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105						
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201						
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501						
*	1	AIR LINE (5mm DIA X 6m LONG)	170301						
*	1	SOLENOID VALVE (12V)	180103						
*	1	SWITCH	180209						
*	1	SWITCH COVER (FRONT)	180210						
*	1	SWITCH COVER (REAR)	180211						
*	10	CABLE TIE	180301				_ (4)		
*	1	WARNING LABEL	210101				\bigcirc (1)		
*	1	BUMPER STICKER	210102				$(2) \smile$		
*	1	OPERATING & SERVICE MANUAL	210200			\sim (3)	\bigcirc		
	1	INSTALLATION GUIDE	210288			(4)	\ \		
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RD	89	Toyota Tacoma,RR**		
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	021705	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010408	
04	4	RETURN SPRING	150112	
05	4	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	061301	
07	2	SHORT CROSS SHAFT	061401	
80	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP ASSEMBLY	030129	
11	8	CYLINDER CAP RETAINING BOLT	200205	
12	8	LOCKING TAB (8mm)	150401	
13	2	SEAL HOUSING O-RING	160232	1
14	1	SEAL HOUSING ASSEMBLY	080303	3
15	1	TAPERED ROLLER BEARING	160116	2
16	1	SPLINED SIDE GEAR	130301R	
17	4	PINION GEAR	140103R	
18	4	PINION THRUST WASHER	151111	
19	1	SPIDER BLOCK	070102	
20	1	SIDE GEAR	130101R	
21	2	SIDE GEAR THRUST WASHER	151003	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210289	

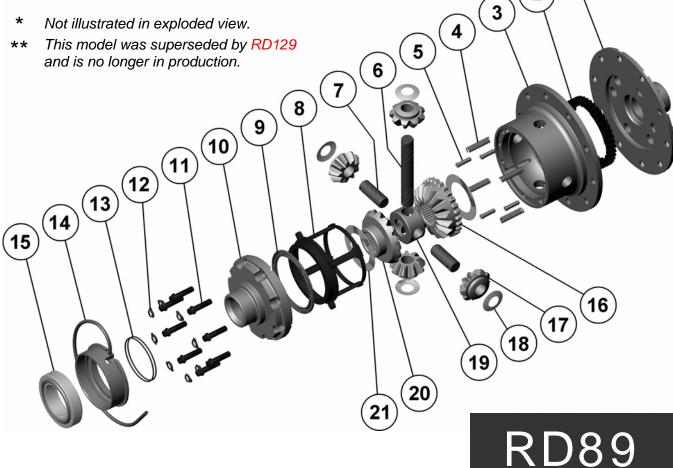
Specs:

Axle Spline 30 tooth, Ø33.0mm [1.30"]
Ratio Supported All
Ring Gear ID 127.5mm [5.02"]
Ring Gear OD 213mm [8.4"]
Ring Gear Bolts 12 bolts on Ø152mm [5.98"]
Ring Gear Torque 96Nm [71 ft-lb]
Backlash 0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque 85Nm [63 ft-lb]

Notes:

- 1 For replacement O-rings use only BS037 Viton 75.
- For replacement bearing use Timken part # X32010X / Y32010X.
- 3 Seal housing comes pre-installed. To service O-rings or bearing remove the seal housing assembly with a bearing puller.

86mm bearing OD.





Revision Date 9/02/07

			,	
RD	90	TOYOTA 7.5" IFS		
ITEM#	QTY	DESCRIPTION	PART#	NOTES
1	1	BONDED SEAL	160701	
2	1	CLUTCH GEAR	050802	
3	8	RETURN SPRING	150113	
4	1	LONG CROSS SHAFT	061302	
5	1	SPIDER BLOCK	070503	
6	1	DIFFERENTIAL CASE	013101	
7	3	CROSS SHAFT RETAINING PIN	120601	
8	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
9	1	SHIM KIT	SHK008	
10	1	TAPERED ROLLER BEARING	160117	2
11	1	SEAL HOUSING ASSEMBLY	081701	
12	2	SEAL HOUSING O-RING	160233	1
13	1	FLANGE CAP ASSEMBLY	028501	
14	1	SPLINED SIDE GEAR	131602H	
15	4	PINION THRUST WASHER	151112	
16	4	PINION GEAR	140801H	
17	2	SHORT CROSS SHAFT	061402	
18	1	SIDE GEAR	131502H	
19	2	SIDE GEAR THRUST WASHER	151011	
20	2	COUNTERSUNK SCREW	200213	
21	2	ANTI-FRICTION BUSHING (PTFE)	160801	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	SOLENOID VALVE (12V)	180103	
*	10	CABLE TIE	180301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	BUMPER STICKER	210102	
*	1	WARNING STICKER	210101	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210290	

Specs:

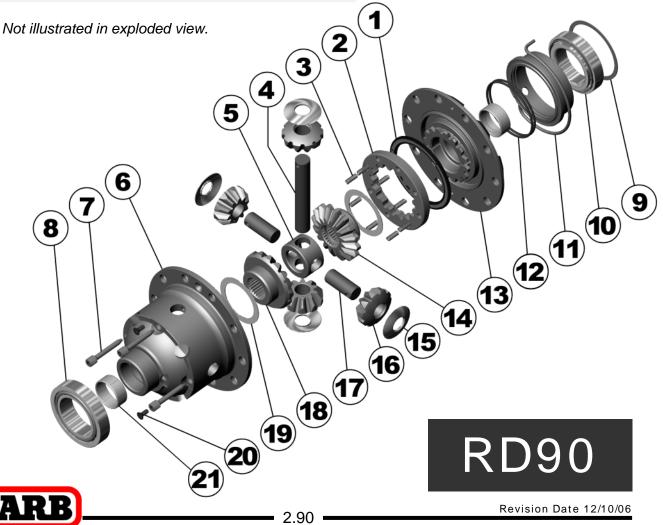
Axle Spline 27 tooth, Ø28.0mm [1.10"]
Ratio Supported All
Ring Gear ID 118.0mm [4.65"]
Ring Gear OD 191mm [7.5"]
Ring Gear Bolts 10 bolts on Ø140mm [5.51"]
Ring Gear Torque 96Nm [71 ft-lb]
Backlash 0.13-0.18mm [0.005-0.007"]

Bearing Cap Torque 85Nm [63 ft-lb]

Notes:

- For replacement O-rings use only BS148 Viton 75.
- 2 For replacement bearing use Timken part # LM503349 / LM503310.

Spare axle retaining clips may be required (not supplied) to refit CV shafts.



RD	91	Dana 80,37 SPL		
ITEM#	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	022602	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	012403	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
08	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	031203	
11	2	SEAL HOUSING O-RING	160220	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160113	2
15	1	SEAL HOUSING	080704	
16	1	SHIM KIT	SHK006	
17	1	SPLINED SIDE GEAR	130805	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130705	
22	2	SIDE GEAR THRUST WASHER	151004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210291	

Specs:

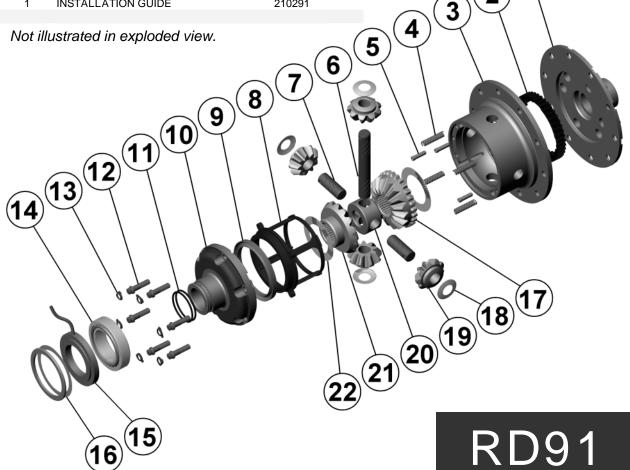
Axle Spline 37 tooth, Ø40.6mm [1.60"]
Ratio Supported Varies by mfg. (see note)
Ring Gear ID 174.9mm [6.89"]
Ring Gear OD 292mm [11.5"]
Ring Gear Bolts 12 bolts on Ø203mm [8.00"]
Ring Gear Torque 237Nm [175 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- 1 For replacement O-rings use only BS141 Viton 75.
- 2 For replacement bearing use Timken part # 39250 / 39412.

The ratio split for the carrier break varies by application. RD91 suits the numerically higher range (i.e., ???:1 & up) for each application.

For the 35 spline Dana 80 refer to RD80 (Section 2.80).



ARB

RD	92	Toyota 8" IFS,50mm BRI	٧G	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	020104	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010407	
04	4	RETURN SPRING	150112	
05	4	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	061301	
07	2	SHORT CROSS SHAFT	061401	
08	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP ASSEMBLY	030129	
11	8	CYLINDER CAP RETAINING BOLT	200205	
12	8	LOCKING TAB (8mm)	150401	
13	2	SEAL HOUSING O-RING	160232	1
14	1	SEAL HOUSING ASSEMBLY	080304	
15	1	TAPERED ROLLER BEARING	160116	2
16	1	SPLINED SIDE GEAR	130301R	
17	4	PINION GEAR	140103R	
18	4	PINION THRUST WASHER	151111	
19	1	SPIDER BLOCK	070102	
20	1	SIDE GEAR	130101R	
21	2	SIDE GEAR THRUST WASHER	151003	
*	1	SHIM KIT	SHK004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210292	

Specs:

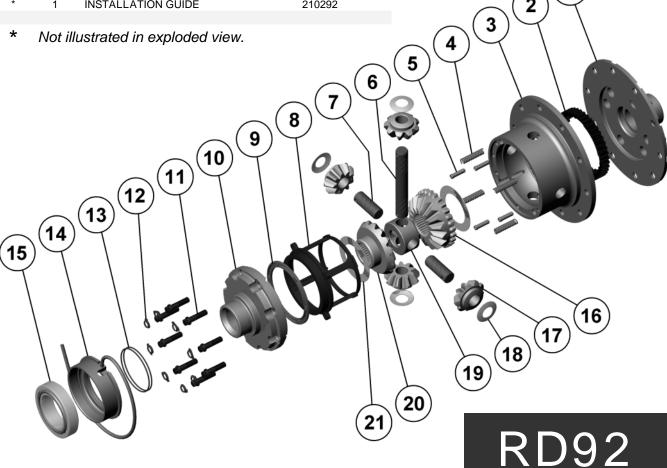
Axle Spline 30 tooth, Ø33.0mm [1.30']
Ratio Supported All
Ring Gear ID 126.0mm [4.96"]
Ring Gear OD 203mm [8.0"]
Ring Gear Bolts 10 bolts on Ø160mm [6.30"]
Ring Gear Torque 96Nm [71 ft-lb]
Backlash 0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque 85Nm [63 ft-lb]

Notes:

- 1 For replacement O-rings use only BS037 Viton 75.
- For replacement bearing use Timken part # X32010X / Y32010X.

Spare axle retaining clips may be required (not supplied) to refit CV shafts.

Seal housing comes pre-installed. To service O-rings or bearing remove the seal housing assembly with a bearing puller.





	RD	93	Chrysler 8.25",29 SPL		
•	ITEM#	QTY	DESCRIPTION	PART#	NOTES
	1	1	SEAL HOUSING ASSEMBLY	081501	
	2	1	CLUTCH GEAR	050801	
	3	3	PINION THRUST WASHER	151110	
	4	3	PINION GEAR	140701R	
	5	1	LONG CROSS SHAFT	060204	
	6	1	SHORT CROSS SHAFT	060403	
	7	1	DIFFERENTIAL CASE	013002	
	8	2	COUNTERSUNK SCREW	200213	
	9	2	CROSS SHAFT RETAINING PIN	120601	
	10	1	TAPERED ROLLER BEARING	160109	2
	11	2	SEAL HOUSING O-RING	160227	1
	12	1	FLANGE CAP ASSEMBLY	028402	
	13	1	BONDED SEAL	160702	
	14	8	RETURN SPRING	150107	
	15	1	SPLINED SIDE GEAR	131402R	
	16	1	SPIDER BLOCK	070301	
	17	1	SIDE GEAR	131302R	
	18	2	SIDE GEAR THRUST WASHER	151010	
	19	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
	*	1	C-CLIP KIT	CCK005	
	*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
	*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
	*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
	*	1	SOLENOID VALVE (12V)	180103	
	*	10	CABLE TIE	180301	
	*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
	*	1	SWITCH	180209	
	*	1	SWITCH COVER (REAR)	180211	
	*	1	BUMPER STICKER	210102	
	*	1	WARNING STICKER	210101	
	*	1	OPERATING & SERVICE MANUAL	210200	
	*	1	INSTALLATION GUIDE	210293	

Specs:

Axle Spline	29 tooth, Ø30.7mm [1.21"]
Ratio Supported	All
Ring Gear ID	130.5mm [5.14"]
Ring Gear OD	210mm [8.25"]
Ring Gear Bolts	10 bolts on Ø153 mm [6.00"]
Ring Gear Torque	76Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb]

Notes:

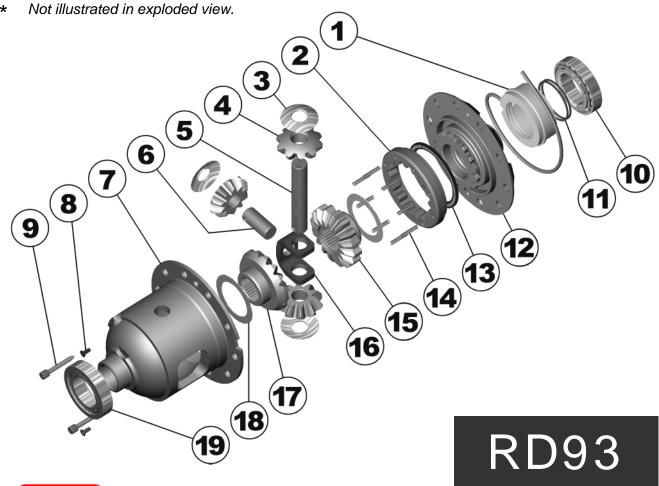
- For replacement O-rings use only BS138 Viton 75.
- 2 For replacement bearing use Timken part # LM102949 / LM102910.

RD93 suits C-clip & non C-clip applications.

Suitable for use with ABS tone ring.

Ring gear bolts are 3/8" - 20 left-hand thread, and must be removed in a clockwise direction.

Seal housing comes pre-installed. To service O-rings or bearing remove the seal housing assembly with a bearing puller.





RD	94	Isuzu IFS,17 SPL				Specs:	
ITEM #	QTY	DESCRIPTION	PART #	NOTES			
01	1	FLANGE CAP	021804			Axle Spline	17 tooth, Ø28.4mm [1.12"]
02	1	CLUTCH GEAR	050501			Ratio Supported	All
03	1	DIFFERENTIAL CASE	011905			Ring Gear ID	114.3mm [4.50"]
						•	
04	4	RETURN SPRING	150102			Ring Gear Bolts	10 bolts on Ø144mm [5.67"]
05	3	CROSS SHAFT RETAINING PIN	120401				
06	1	LONG CROSS SHAFT	061101				
07	2	SHORT CROSS SHAFT	061201				
08	1	PISTON	040601				
09	1	U-RING	160303				
10							
	1	CYLINDER CAP	030901				
11	2	SEAL HOUSING O-RING	160210	1		N	
12	6	CYLINDER CAP RETAINING BOLT	200207			Notes:	
13	6	LOCKING TAB (6mm)	150402				
14	-	TAPERED ROLLER BEARING	NOT SUPPLIED				
15	1	SEAL HOUSING	081605		1	For replacement	O-rings
16	1	SHIM KIT	SHK003		•	use only BS028 \	
						use only booze v	71011 73.
17	1	SPLINED SIDE GEAR	131007R				
18	4	PINION THRUST WASHER	151107				asting may require modification
19	4	PINION GEAR	140502R			to the bearing ca	p to clear the cylinder cap.
20	1	SPIDER BLOCK	070502				
21	1	SIDE GEAR	130907R				
22	2	SIDE GEAR THRUST WASHER	151005				
*	1		170105				
*		BULKHEAD FITTING KIT (O-RING TYPE)					
	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201				
*	1	AIR LINE (5mm DIA X 6m LONG)	170301				
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501				
*	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1		180210				
*		SWITCH COVER (FRONT)					
	10	CABLE TIE	180301				_
*	1	WARNING LABEL	210101				
*	1	BUMPER STICKER	210102				\sim (1)
*	1	OPERATING & SERVICE MANUAL	210200				
*	1	INSTALLATION GUIDE	210294			(2)\4	4) ¬
*	Not ill	lustrated in exploded view.			5)	4 (3)	
(14	13 12 11 10 9	<u> </u>	6			
		15		22	21	20(19)	8 17
		16					RD94

2.94 ______ Revision Date 12/10/06

RD	95	Dana 60,32 SPL,4.56 &	UP	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	021501	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	011701	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
80	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	030803	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160107	2
15	1	SEAL HOUSING	080701	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130806	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130706	
22	2	SIDE GEAR THRUST WASHER	151004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210295	
				/
*	11:4:11	lustrated in avaladed view		- /

Specs:

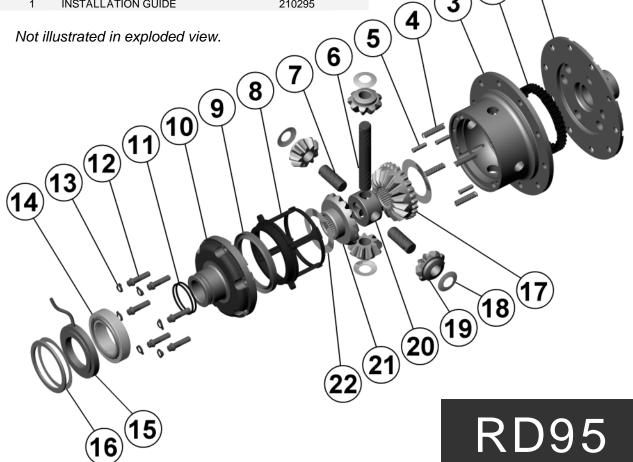
Axle Spline 32 tooth, Ø35.8mm [1.41"]
Ratio Supported 4.56:1 & up
Ring Gear ID 162.0mm [6.38"]
Ring Gear OD 248mm [9.75"]
Ring Gear Bolts 12 bolts on Ø191mm [7.50"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

For ratio of 4.10:1 and down refer to RD96 (Section 2.96).

Revision Date 12/10/06



2.95

RD	96	Dana 60,32 SPL,4.10 &	DN	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	021502	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	011702	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
08	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	030803	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160107	2
15	1	SEAL HOUSING	080701	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130806	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130706	
22	2	SIDE GEAR THRUST WASHER	151004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210296	

Specs:

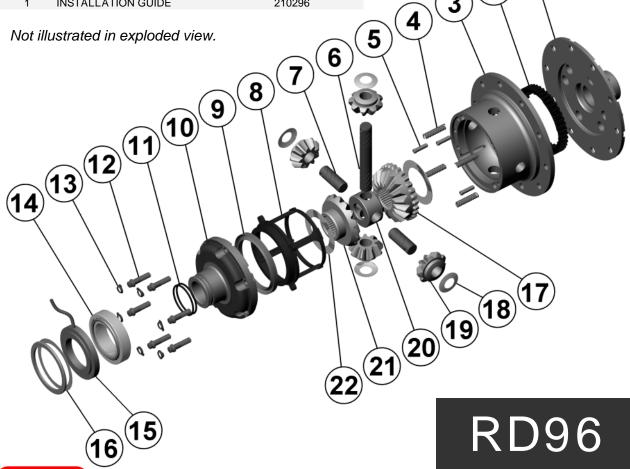
Axle Spline 32 tooth, Ø35.8mm [1.41"]
Ratio Supported 4.10:1 & down
Ring Gear ID 162.0mm [6.38"]
Ring Gear OD 248mm [9.75"]
Ring Gear Bolts 12 bolts on Ø191mm [7.50"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

For ratio of 4.56:1 and up refer to RD95 (Section 2.95).

Revision Date 12/10/06



2.96

RD	97	Dana 70,32 SPL,4.56 &	UP	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	022502	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	012401	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
80	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	030803	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160107	2
15	1	SEAL HOUSING	080701	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130806	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130706	
22	2	SIDE GEAR THRUST WASHER	151004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210297	
*	Not il	Justrated in evaloded view		

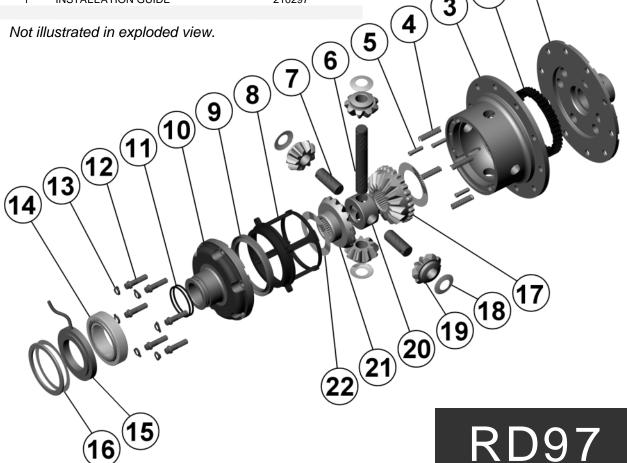
Specs:

Axle Spline 32 tooth, Ø35.8mm [1.41"]
Ratio Supported 4.56:1 & up
Ring Gear ID 174.9mm [6.89"]
Ring Gear OD 267mm [10.5"]
Ring Gear Bolts 12 bolts on Ø203mm [8.00"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

For ratio of 4.10:1 and down refer to RD98 (Section 2.98).



ARB

RD	98	Dana 70,32 SPL,4.10 &	DN	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	FLANGE CAP	022603	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	012402	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
08	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER CAP	030803	
11	2	SEAL HOUSING O-RING	160207	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160107	2
15	1	SEAL HOUSING	080701	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130806	
18	4	PINION THRUST WASHER	151104	
19	4	PINION GEAR	140401	
20	1	SPIDER BLOCK	070401	
21	1	SIDE GEAR	130706	
22	2	SIDE GEAR THRUST WASHER	151004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210298	
*	Not il	lustrated in exploded view		

Specs:

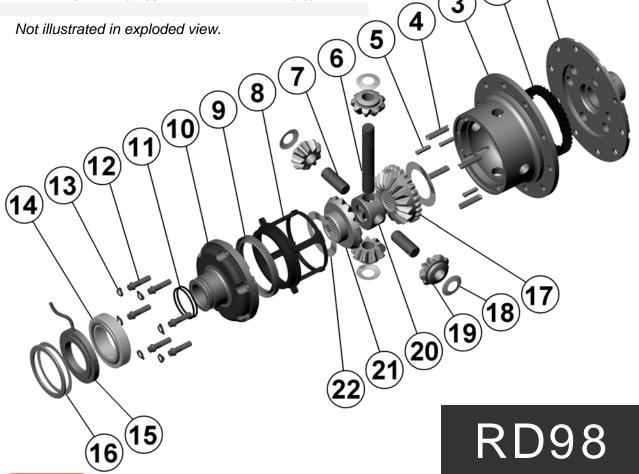
Axle Spline 32 tooth, Ø35.8mm [1.41"]
Ratio Supported 4.10:1 & down
Ring Gear ID 174.9mm [6.89"]
Ring Gear OD 267mm [10.5"]
Ring Gear Bolts 12 bolts on Ø203mm [8.00"]
Ring Gear Torque 149Nm [110 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 108Nm [80 ft-lb]

Notes:

- For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

For ratio of 4.56:1 and up refer to RD97 (Section 2.97).

Revision Date 12/10/06



2.98

RD	99	Ford 9",35 SPL,2" BRN0	3	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
02	1	FLANGE CAP ASSEMBLY	027303	
03	1	SPLINED SIDE GEAR	131403H	
04	1	SPIDER BLOCK	070201	
05	1	LONG CROSS SHAFT	060204	
06	1	SIDE GEAR	131303H	
07	2	COUNTERSUNK SCREW	200213	
08	3	CROSS SHAFT RETAINING PIN	120701	
09	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
10	1	SEAL HOUSING RETAINING CLIP	150601	
11	1	SEAL HOUSING	081901	
12	2	SEAL HOUSING O-RING	160207	1
13	1	ADJUSTER NUT	100105	
14	1	BONDED SEAL	160703	
15	1	CLUTCH GEAR	050804	
16	12	RETURN SPRING	150113	
17	2	SIDE GEAR THRUST WASHER	151010	
18	2	SHORT CROSS SHAFT	060403	
19	4	PINION GEAR	140701R	
20	4	PINION THRUST WASHER	151110	
21	1	DIFFERENTIAL CASE	012205	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210299	

Specs:

Axle Spline	35 tooth, Ø38.1mm [1.50"]
Ratio Supported	AII
Ring Gear ID	127.0mm [5.00"]
Ring Gear OD	229mm [9"]
Ring Gear Bolts	10 bolts on Ø152mm [6.00"]
Ring Gear Torque	95Nm [70 ft-lb]
OEM Backlash	0.25-0.41mm [0.010-0.016"]
Non-OEM Backlash	0.18-0.25mm [0.007-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb]

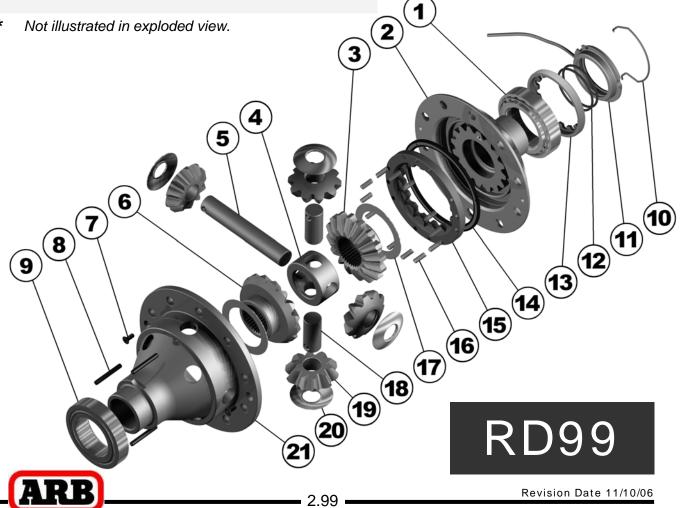
Notes:

1 For replacement O-rings use only BS136 Viton 75.

For the 31 spline Ford 9" refer to RD119 (Section 2.119).

Refer to seal housing set-up tech note (Section 5.2).

RD99 does not suit the OEM third member. Aftermarket third member with carrier bearing ID of 50.80mm [2.000"] and a bearing thickness of 21.59mm [0.850"] must be used.



RD1	100	Dana 30,27 SPL,3.73 &	UP	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
1	2	SEAL HOUSING O-RING	160235	1
2	1	SEAL HOUSING ASSEMBLY	081801	
3	2	SHIM KIT	SHK003	
4	1	BONDED SEAL	160701	
5	1	CLUTCH GEAR	050803	
6	1	SPIDER BLOCK	070503	
7	1	LONG CROSS SHAFT	061302	
8	1	SIDE GEAR	131501H	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	160109	2
12	1	FLANGE CAP ASSEMBLY	028502	
13	8	RETURN SPRING	150107	
14	1	SPLINED SIDE GEAR	131601H	
15	2	SHORT CROSS SHAFT	061402	
16	4	PINION GEAR	140801H	
17	4	PINION THRUST WASHER	151112	
18	2	SIDE GEAR THRUST WASHER	151011	
19	1	DIFFERENTIAL CASE	013102	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102100	

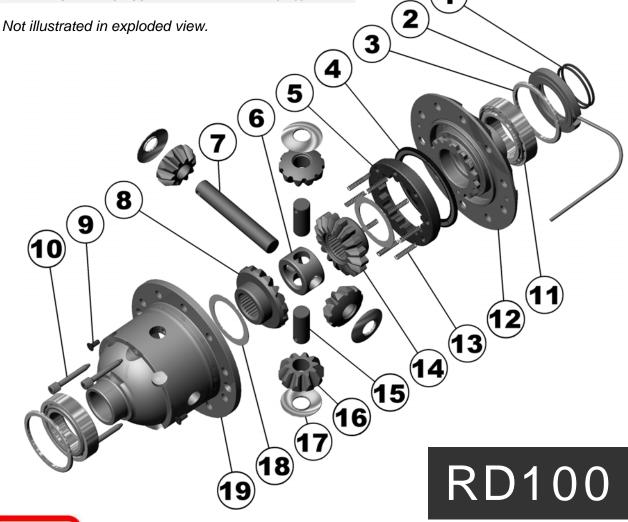
Specs:

Axle Spline 27 tooth, Ø29.5mm [1.16"]
Ratio Supported 3.73:1 & up
Ring Gear ID 114.3mm [4.50"]
Ring Gear OD 183mm [7.2"]
Ring Gear Bolts 10 bolts on Ø133mm [5.25"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb] (see note 3)

Notes:

- For replacement O-rings use only BS133 Viton 75.
- For replacement bearing use Timken part # LM102949 / LM102910.
- 3 Bearing cap torque does not apply to aluminum housings. Refer to vehicle's service manual for correct torque value.

For ratios of 3.54:1 and down refer to RD101 (Section 2.101).





RD1	101	Dana 30,27 SPL,3.54 &	DN	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
1	2	SEAL HOUSING O-RING	160235	1
2	1	SEAL HOUSING ASSEMBLY	081801	
3	2	SHIM KIT	SHK003	
4	1	BONDED SEAL	160701	
5	1	CLUTCH GEAR	050803	
6	1	SPIDER BLOCK	070503	
7	1	LONG CROSS SHAFT	061302	
8	1	SIDE GEAR	131501H	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	160109	2
12	1	FLANGE CAP ASSEMBLY	028502	
13	8	RETURN SPRING	150107	
14	1	SPLINED SIDE GEAR	131601H	
15	2	SHORT CROSS SHAFT	061402	
16	4	PINION GEAR	140801H	
17	4	PINION THRUST WASHER	151112	
18	2	SIDE GEAR THRUST WASHER	151011	
19	1	DIFFERENTIAL CASE	013103	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102101	

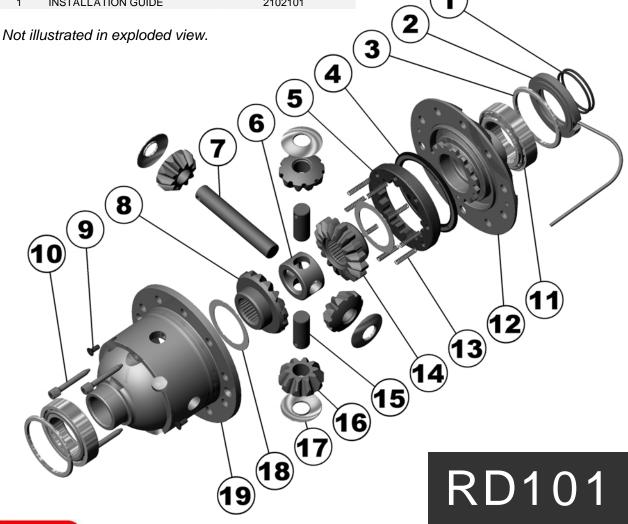
Specs:

Axle Spline 27 tooth, Ø29.5mm [1.16"]
Ratio Supported 3.54:1 & down
Ring Gear ID 114.3mm [4.50"]
Ring Gear OD 183mm [7.2"]
Ring Gear Bolts 10 bolts on Ø133mm [5.25"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb] (see note 3)

Notes:

- 1 For replacement O-rings use only BS133 Viton 75.
- For replacement bearing use Timken part # LM102949 / LM102910.
- 3 Bearing cap torque does not apply to aluminum housings. Refer to vehicle's service manual for correct torque value.

For ratios of 3.73:1 and up refer to RD100 (Section 2.100).



ARB

RD1	02	Dana 35,27 SPL,3.54 &	JP	
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	SPLINED SIDE GEAR	131601H	
02	1	SPIDER BLOCK	070801	
03	1	LONG CROSS SHAFT	061302	
04	1	SIDE GEAR	131501H	
05	2	SIDE GEAR THRUST WASHER	151011	
06	2	COUNTERSUNK SCREW	200213	
07	2	CROSS SHAFT RETAINING PIN	120601	
08	2	SEAL HOUSING O-RING	160235	1
09	1	SEAL HOUSING ASSEMBLY	081801	
10	2	SHIM KIT	SHK003	
11	2	TAPERED ROLLER BEARING	160109	2
12	1	FLANGE CAP ASSEMBLY	028504	
13	1	BONDED SEAL	160701	
14	1	CLUTCH GEAR	050803	
15	8	RETURN SPRING	150107	
16	1	SHORT CROSS SHAFT	061402	
17	3	PINION GEAR	140801H	
18	3	PINION THRUST WASHER	151112	
19	1	DIFFERENTIAL CASE	013104	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102102	

Specs:

Axle Spline 27 tooth, Ø29.5mm [1.16"]
Ratio Supported 3.54:1 & up
Ring Gear ID 120.7mm [4.75"]
Ring Gear OD 193mm [7.6"]
Ring Gear Bolts 8 bolts on Ø146mm [5.75"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 75Nm [55 ft-lb]

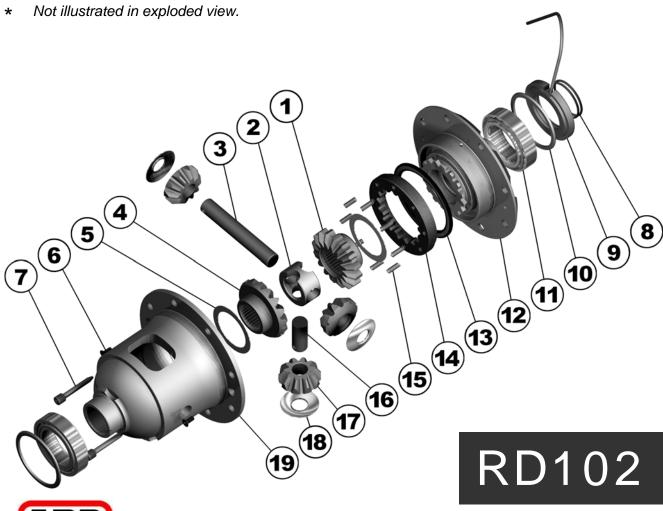
Notes:

- 1 For replacement O-rings use only BS133 Viton 75.
- 2 For replacement bearing use Timken part # LM102949 / LM102910.

For ratios of 3.31:1 and down refer to RD103 (Section 2.103).

Newer OEM Dana 35 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.

Some OEM Dana 35 drive pinion gears extend too far into the centre and converge with the differential carrier. Refer to ring and pinion modification note (Section 5.6) for correction.



ARB

RD1	03	Dana 35,27 SPL,3.31 &	DN	
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	SPLINED SIDE GEAR	131601H	
02	1	SPIDER BLOCK	070801	
03	1	LONG CROSS SHAFT	061302	
04	1	SIDE GEAR	131501H	
05	2	SIDE GEAR THRUST WASHER	151011	
06	2	COUNTERSUNK SCREW	200213	
07	2	CROSS SHAFT RETAINING PIN	120601	
08	2	SEAL HOUSING O-RING	160235	1
09	1	SEAL HOUSING ASSEMBLY	081801	
10	2	SHIM KIT	SHK003	
11	2	TAPERED ROLLER BEARING	160109	
12	1	FLANGE CAP ASSEMBLY	028505	
13	1	BONDED SEAL	160701	
14	1	CLUTCH GEAR	050803	
15	8	RETURN SPRING	150107	
16	1	SHORT CROSS SHAFT	061402	
17	3	PINION GEAR	140801H	
18	3	PINION THRUST WASHER	151112	
19	1	DIFFERENTIAL CASE	013105	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102103	

Specs:

Axle Spline	27 tooth, Ø29.5mm [1.16"]
Ratio Supported	3.31:1 & down
Ring Gear ID	120.7mm [4.75"]
Ring Gear OD	193mm [7.6"]
Ring Gear Bolts	8 bolts on Ø146mm [5.75"]
Ring Gear Torque	75Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	75Nm [55 ft-lb]

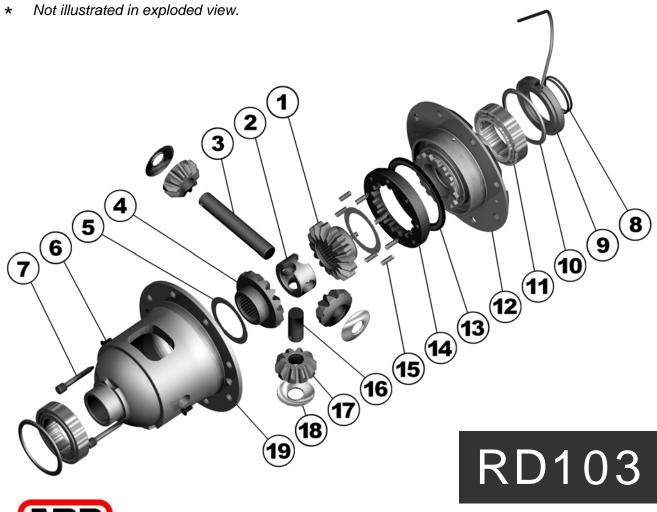
Notes:

- 1 For replacement O-rings use only BS133 Viton 75.
- 2 For replacement bearing use Timken part # LM102949 / LM102910.

For ratios of 3.54:1 and up refer to RD102 (Section 2.102).

Newer OEM Dana 35 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from $\emptyset 3/8$ " to $\emptyset 7/16$ " to suit.

Some OEM Dana 35 drive pinion gears extend too far into the centre and converge with the differential carrier. Refer to ring and pinion modification note (Section 5.6) for correction.





RD1	104	Dana 30,30 SPL,3.73 &	UP	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
1	2	SEAL HOUSING O-RING	160235	1
2	1	SEAL HOUSING ASSEMBLY	081801	
3	2	SHIM KIT	SHK003	
4	1	BONDED SEAL	160701	
5	1	CLUTCH GEAR	050803	
6	1	SPIDER BLOCK	070503	
7	1	LONG CROSS SHAFT	061302	
8	1	SIDE GEAR	131503H	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	160109	2
12	1	FLANGE CAP ASSEMBLY	028502	
13	8	RETURN SPRING	150107	
14	1	SPLINED SIDE GEAR	131603H	
15	2	SHORT CROSS SHAFT	061402	
16	4	PINION GEAR	140801H	
17	4	PINION THRUST WASHER	151112	
18	2	SIDE GEAR THRUST WASHER	151011	
19	1	DIFFERENTIAL CASE	013102	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102104	

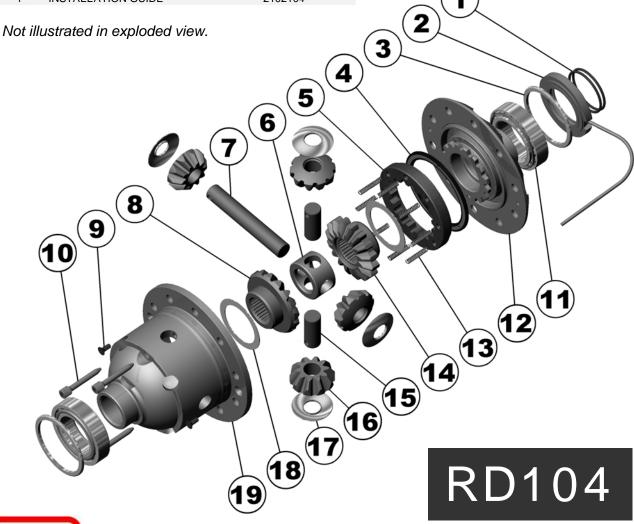
Specs:

Axle Spline 30 tooth, Ø33.3mm [1.31"]
Ratio Supported 3.73:1 & up
Ring Gear ID 114.3mm [4.50"]
Ring Gear OD 183mm [7.2"]
Ring Gear Bolts 10 bolts on Ø133mm [5.25"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb] (see note 3)

Notes:

- 1 For replacement O-rings use only BS133 Viton 75.
- 2 For replacement bearing use Timken part # LM102949 / LM102910.
- 3 Bearing cap torque does not apply to aluminum housings. Refer to vehicle's service manual for correct torque value.

30 spline Dana 30 is a performance upgrade requiring aftermarket axle shafts.





RD1	05	Dana 35,30 SPL,3.54 &	UP	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	SPLINED SIDE GEAR	131603H	
02	1	SPIDER BLOCK	070801	
03	1	LONG CROSS SHAFT	061302	
04	1	SIDE GEAR	131503H	
05	2	SIDE GEAR THRUST WASHER	151011	
06	2	COUNTERSUNK SCREW	200213	
07	2	CROSS SHAFT RETAINING PIN	120601	
08	2	SEAL HOUSING O-RING	160235	1
09	1	SEAL HOUSING ASSEMBLY	081801	
10	2	SHIM KIT	SHK003	
11	2	TAPERED ROLLER BEARING	160109	
12	1	FLANGE CAP ASSEMBLY	028504	
13	1	BONDED SEAL	160701	
14	1	CLUTCH GEAR	050803	
15	8	RETURN SPRING	150107	
16	1	SHORT CROSS SHAFT	061402	
17	3	PINION GEAR	140801H	
18	3	PINION THRUST WASHER	151112	
19	1	DIFFERENTIAL CASE	013104	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102105	

Specs:

Axle Spline	30 tooth, Ø33.3mm [1.31"]
Ratio Supported	3.54:1 & up
Ring Gear ID	120.7mm [4.75"]
Ring Gear OD	193mm [7.6"]
Ring Gear Bolts	8 bolts on Ø146mm [5.75"]
Ring Gear Torque	75Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	75Nm [55 ft-lb]

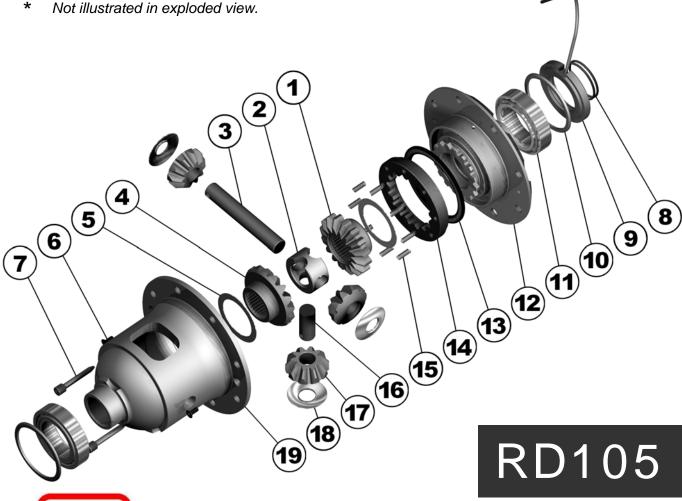
Notes:

- 1 For replacement O-rings use only BS133 Viton 75.
- 2 For replacement bearing use Timken part # LM102949 / LM102910.

Newer OEM Dana 35 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.

Some OEM Dana 35 drive pinion gears extend too far into the centre and converge with the differential carrier. Refer to ring and pinion modification note (Section 5.6) for correction.

30 spline Dana 35 is a performance upgrade requiring aftermarket axle shafts.





RD1	06	Nissan C200,31 SPL				Specs:	
						-	
ITEM #	QTY	DESCRIPTION	PART#	NOTES			
01	1	FLANGE CAP	020103			Axle Spline	31 tooth, Ø32.0mm [1.26"]
02	1	CLUTCH GEAR	050102			Ratio Supported	All
03	1	DIFFERENTIAL CASE	010105			Ring Gear ID	128.0mm [5.04"]
04	4	RETURN SPRING	150101			Ring Gear Bolts	10 bolts on Ø150mm [5.91"]
05	2	CROSS SHAFT RETAINING PIN	120102			Ring Gear Bolt Size	• •
*					Г		12mm
	2	CROSS SHAFT RETAINING PIN	120302			Ring Gear Torque	120Nm [89 ft-lb]
06	4	SHORT CROSS SHAFT	060308			Backlash	0.13-0.18mm [0.005-0.007"]
07	2	SIDE GEAR THRUST WASHER	151003		В	Bearing Cap Torque	93Nm [69 ft-lb]
08	1	PISTON	040103				
09	1	BONDED SEAL	160701				
10	1	CYLINDER CAP	030133				
11	2			4		Motoc	
		SEAL HOUSING O-RING	160208	1		Notes:	
12	6	CYLINDER CAP RETAINING BOLT	200205				
13	6	LOCKING TAB (8mm)	150401				
14	-	TAPERED ROLLER BEARING	NOT SUPPLIED		1	For replacement	O-rings
15	1	SEAL HOUSING	080802			use only BS030 V	/iton 75.
16	1	SHIM KIT	SHK004			,	
17	1	SPLINED SIDE GEAR	130313H			When used with	10mm ring gear bolts, adapter
18	4	PINION THRUST WASHER	151101				lowing size are required:
19	4	PINION GEAR	140101			Outside: Ø12.25n	nm [0.482"]
20	1	SPIDER BLOCK	070101			Inside: Ø10.45mn	n [0.411"]
21	1	THRUST BLOCK	110501			Length: 10mm [0.	.39"1
22	1	SIDE GEAR	130113H			Bolt Torque: 74N	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105			Boil Torquo. 7 III	[66 1. 16]
*						D - (()	PC C tbt-
	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201				dification tech note
*	1	AIR LINE (5mm DIA X 6m LONG)	170301			(Section 5.4) if ax	le binds inside carrier.
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501				
*	1	SOLENOID VALVE (12V)	180103				
*	1	SWITCH	180209				
*	1	SWITCH COVER (REAR)	180211				
*	1		180210				
*		SWITCH COVER (FRONT)					_
	10	CABLE TIE	180301				
*	1	WARNING LABEL	210101				\bigcirc (1)
*	1	BUMPER STICKER	210102				(2) •
*	1	OPERATING & SERVICE MANUAL	210200			(2)	
*	1	INSTALLATION GUIDE	2102106			(3	
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- 2.106 **-**

AILD	AIII LOO		operate	G L	OUNT	ng Dinc	Cittais
RD10	Nissan C20	00/R200A,29	SPL		Sp	ecs:	
ITEM#	TY DES	CRIPTION	PART#	NOTES			
01	1 FLANGE CAP		020103			Axle Spline	29 tooth, Ø30.4mm [1.20"]
	1 CLUTCH GEAR		050102		D	atio Supported	All
		24.05			IX.		
	1 DIFFERENTIAL (010105			Ring Gear ID	128.0mm [5.04"]
04	4 RETURN SPRINC	3	150101		R	ing Gear Bolts	10 bolts on Ø150mm [5.91"]
05	2 CROSS SHAFT F	RETAINING PIN	120102		Rina	Gear Bolt Size	12mm
	2 CROSS SHAFT F		120302		_		120Nm [89 ft-lb]
					KIII	g Gear Torque	
06	4 SHORT CROSS S	SHAFT	060308			Backlash	0.13-0.18mm [0.005-0.007"]
07	2 SIDE GEAR THR	UST WASHER	151003		Bearir	ng Cap Torque	93Nm [69 ft-lb]
08	1 PISTON		040103				• •
	1 BONDED SEAL		160701				
10	1 CYLINDER CAP		030123				
11	2 SEAL HOUSING	O-RING	160208	1	No	tes:	
12	6 CYLINDER CAP	RETAINING BOLT	200205				
	6 LOCKING TAB (8	,	150401		_		
14	 TAPERED ROLL 	ER BEARING	NOT SUPPLIED		1 Fo	or replacement (O-rings
15	1 SEAL HOUSING		080802		us	se only BS030 V	iton 75.
	1 SHIM KIT		SHK004			,	
		EAD			10.0	9	0 h H
	1 SPLINED SIDE G		130307				0mm ring gear bolts, adapter
18	4 PINION THRUST	WASHER	151101		sl	eeves of the foll	owing size are required:
19	4 PINION GEAR		140101		O	utside: Ø12.25m	nm [0.482"]
	1 SPIDER BLOCK		070101			side: Ø10.45mm	
		(=::==:==:					
	1 THRUST BLOCK	(THREADED)	110401			ength: 10mm [0.	
21	1 THRUST BLOCK		110501		В	olt Torque: 74Nr	m [55 ft-lb]
22	1 SIDE GEAR		130107			·	-
		ING KIT (O-RING TYPE)	170105		D	ofor to ovla mad	lification tech note
	1 PUSH-IN FITTING	G (5mm to 1/8" BSPP)	170201		(S	Section 5.4) if ax	le binds inside carrier.
*	1 AIR LINE (5mm D	DIA X 6m LONG)	170301				
*	1 NIPPLE (1/8" to 1	1/8" RSPT)	170501				
			180103				
		/E (12V)					
*	1 SWITCH		180209				
*	1 SWITCH COVER	(REAR)	180211				
*	1 SWITCH COVER		180210				
		()					
	0 CABLE TIE		180301				\bigcirc (1)
*	1 WARNING LABE	L	210101			~ 1	(2)
*	1 BUMPER STICKE	≣R	210102			(2)	L
*		ERVICE MANUAL	210200			\bigcirc (3)	\mathcal{A}
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- 2.107 **-**

RD1	09	Dana 44,35 SPL,3.92 &	UP	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
1	2	SEAL HOUSING O-RING	160207	1
2	1	SEAL HOUSING ASSEMBLY	081803	
3	2	SHIM KIT	SHK009	
4	1	BONDED SEAL	160703	
5	1	CLUTCH GEAR	050804	
6	1	SPIDER BLOCK	070201	
7	1	LONG CROSS SHAFT	060204	
8	1	SIDE GEAR	131303H	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	160101	2
12	1	FLANGE CAP ASSEMBLY	027304	
13	12	RETURN SPRING	150113	
14	1	SPLINED SIDE GEAR	131403H	
15	2	SHORT CROSS SHAFT	060403	
16	4	PINION GEAR	140701R	
17	4	PINION THRUST WASHER	151110	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	DIFFERENTIAL CASE	013004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102109	

Specs:

Axle Spline	35 tooth, Ø38.1mm [1.50"]
Ratio Supported	3.92:1 & up
Ring Gear ID	141.3mm [5.56"]
Ring Gear OD	216mm [8.5"]
Ring Gear Bolts	10 bolts on Ø168mm [6.61"]
Ring Gear Torque	75Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb] (see note 3)

Notes:

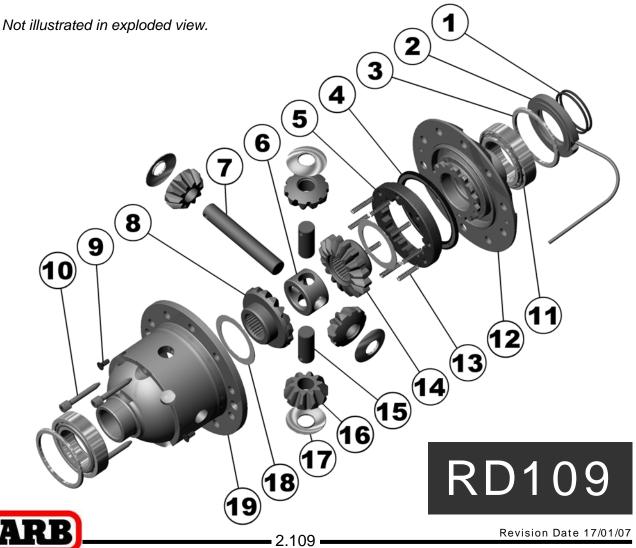
- For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # LM104949 / LM104912.

For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.

35 spline Dana 44 is a performance upgrade requiring aftermarket axle shafts.

Suitable for use with ABS tone ring.

Newer OEM Dana 44 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.



RD1	10	MITSUBISHI IFS,28 SPI	_	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
1	1	BONDED SEAL	160701	
2	1	CLUTCH GEAR	050802	
3	8	RETURN SPRING	150113	
4	1	LONG CROSS SHAFT	061302	
5	1	SPIDER BLOCK	070503	
6	1	DIFFERENTIAL CASE	013107	
7	3	CROSS SHAFT RETAINING PIN	120601	
8	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
9	1	SHIM KIT	SHK002	
10	1	TAPERED ROLLER BEARING	160117	2
11	1	SEAL HOUSING ASSEMBLY	081701	
12	2	SEAL HOUSING O-RING	160233	1
13	1	FLANGE CAP ASSEMBLY	028507	
14	1	SPLINED SIDE GEAR	131605H	
15	4	PINION THRUST WASHER	151112	
16	4	PINION GEAR	140801H	
17	2	SHORT CROSS SHAFT	061402	
18	1	SIDE GEAR	131505H	
19	2	SIDE GEAR THRUST WASHER	151011	
20	2	COUNTERSUNK SCREW	200213	
21	1	ANTI-FRICTION BUSHING (PTFE)	160803	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	SOLENOID VALVE (12V)	180103	
*	10	CABLE TIE	180301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	BUMPER STICKER	210102	
*	1	WARNING STICKER	210101	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102110	

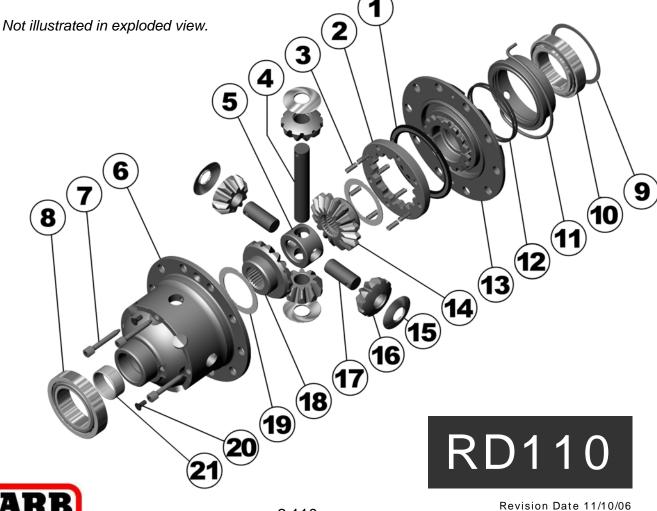
Specs:

Axle Spline 28 tooth, Ø28.8mm [1.13"]
Ratio Supported All
Ring Gear ID 124.0mm [4.88"]
Ring Gear Bolts 10 bolts on Ø150mm [5.91"]
Ring Gear Torque 85Nm [63 ft-lb]
Backlash 0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque 60Nm [44 ft-lb]

Notes:

- For replacement O-rings use only BS148 Viton 75.
- 2 For replacement bearing use Timken part # LM503349 / LM503310.

Spare axle retaining clips may be required (not supplied) to refit CV shafts.



2.110

			,	
RD1	11	Toyota 8" IFS,53mm BF	RNG	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	BONDED SEAL	160702	
02	1	CLUTCH GEAR	050806	
03	8	RETURN SPRING	150113	
04	1	LONG CROSS SHAFT	060204	
05	1	SPIDER BLOCK	070201	
06	1	DIFFERENTIAL CASE	013007	
07	3	CROSS SHAFT RETAINING PIN	120601	
80		TAPERED ROLLER BEARING	NOT SUPPLIED	
09	1	SHIM KIT	SHK009	
10	1	SEAL HOUSING ASSEMBLY	081805	
11	2	SEAL HOUSING O-RING	160207	1
12		TAPERED ROLLER BEARING	NOT SUPPLIED	
13	1	FLANGE CAP ASSEMBLY	027307	
14	1	LOCKING SIDE GEAR	131411R	
15	4	PINION THRUST WASHER	151110	
16	4	PINION GEAR	140701R	
17	2	SHORT CROSS SHAFT	060403	
18	1	SIDE GEAR	131311R	
19	2	SIDE GEAR THRUST WASHER	151010	
20	2	CSK SCREW	200213	
21	2	ANTI-FRICTION BUSHING (PTFE)	160804	
*	1	BULKHEAD KIT	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	NYLON AIR LINE (5mm DIA X 6m	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102111	

Specs:

Axle Spline 30 tooth, Ø33mm [1.31"]
Ratio Supported 3.91:1 & up
Ring Gear ID 126.0mm [4.96"]
Ring Gear OD 200mm [8"]
Ring Gear Bolts 10 bolts on Ø160mm [6.30"]
Ring Gear Torque 95Nm [70 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]

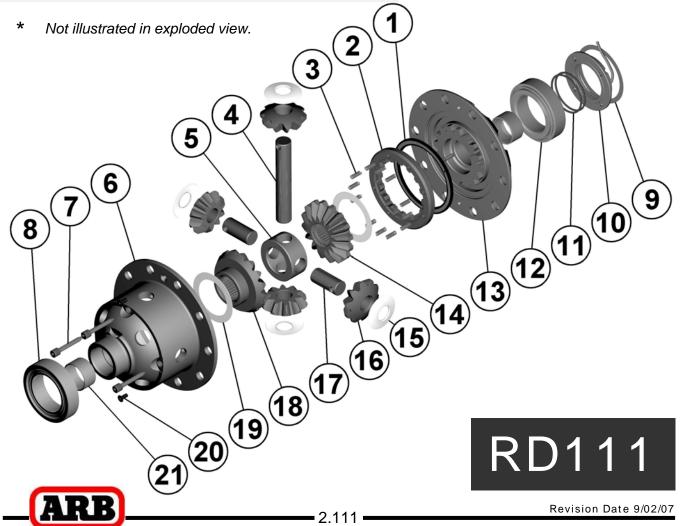
Notes:

1 For replacement O-rings use only BS136 Viton 75.

Spare axle retaining clips may be required (not supplied) to refit CV shafts.

For 8" IFS with 50mm carrier bearings refer to RD131 (Section 2.131).

For 8" IFS with 53mm carrier bearings for the numerically lower ring and pinion ratios (i.e., 3.73 & DN) refer to RD121 (Section 2.121).



RD1	12	Chrysler 8.25",27 SPL		
ITEM#	QTY	DESCRIPTION	PART#	NOTES
1	1	SEAL HOUSING ASSEMBLY	081501	
2	1	CLUTCH GEAR	050801	
3	3	PINION THRUST WASHER	151110	
4	3	PINION GEAR	140701R	
5	1	LONG CROSS SHAFT	060204	
6	1	SHORT CROSS SHAFT	060403	
7	1	DIFFERENTIAL CASE	013002	
8	2	COUNTERSUNK SCREW	200213	
9	2	CROSS SHAFT RETAINING PIN	120601	
10	1	TAPERED ROLLER BEARING	160109	2
11	2	SEAL HOUSING O-RING	160227	1
12	1	FLANGE CAP ASSEMBLY	028402	
13	1	BONDED SEAL	160702	
14	8	RETURN SPRING	150107	
15	1	SPLINED SIDE GEAR	131406H	
16	1	SPIDER BLOCK	070301	
17	1	SIDE GEAR	131306H	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
*	1	C-CLIP KIT	CCK005	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	SOLENOID VALVE (12V)	180103	
*	10	CABLE TIE	180301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	BUMPER STICKER	210102	
*	1	WARNING STICKER	210101	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102112	

Specs:

Axle Spline	27 tooth, Ø29.5mm [1.16"]
Ratio Supported	All
Ring Gear ID	130.5mm [5.14"]
Ring Gear OD	210mm [8.25"]
Ring Gear Bolts	10 bolts on Ø153 mm [6.00"]
Ring Gear Torque	76Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb]

Notes:

- 1 For replacement O-rings use only BS138 Viton 75.
- 2 For replacement bearing use Timken part # LM102949 / LM102910.

RD112 suits C-clip & non C-clip applications.

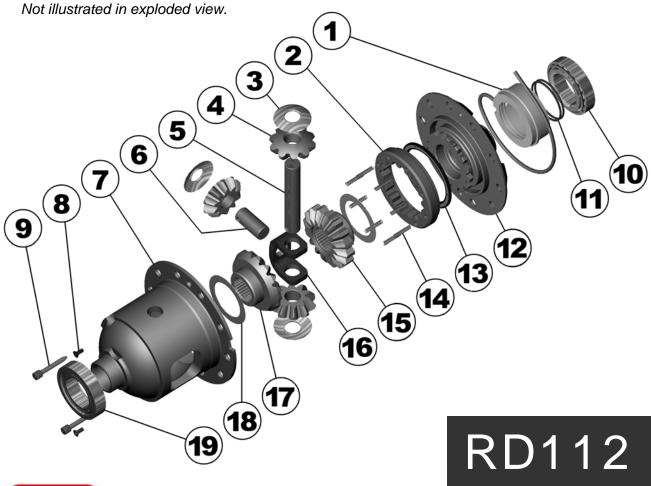
Suitable for use with ABS tone ring.

Ring gear bolts are 3/8" - 20 left-hand thread, and must be removed in a clockwise direction.

Seal housing comes pre-installed.

To service O-rings or bearing remove the seal housing assembly with a bearing puller.

May not suit some axle splines with 45°PA.





RD′	113	Dana 44,33 SPL,3.92 &	UP	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
1	2	SEAL HOUSING O-RING	160207	1
2	1	SEAL HOUSING ASSEMBLY	081803	
3	2	SHIM KIT	SHK009	
4	1	BONDED SEAL	160703	
5	1	CLUTCH GEAR	050804	
6	1	SPIDER BLOCK	070201	
7	1	LONG CROSS SHAFT	060204	
8	1	SIDE GEAR	131307H	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	160101	2
12	1	FLANGE CAP ASSEMBLY	027304	
13	12	RETURN SPRING	150113	
14	1	SPLINED SIDE GEAR	131407H	
15	2	SHORT CROSS SHAFT	060403	
16	4	PINION GEAR	140701R	
17	4	PINION THRUST WASHER	151110	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	DIFFERENTIAL CASE	013004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102109	

Specs:

Axle Spline	33 tooth, Ø34.8.1mm [1.37"]
Ratio Supported	3.92:1 & up
Ring Gear ID	141.3mm [5.56"]
Ring Gear OD	216mm [8.5"]
Ring Gear Bolts	10 bolts on Ø168mm [6.61"]
Ring Gear Torque	75Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb] (see note 3)

Notes:

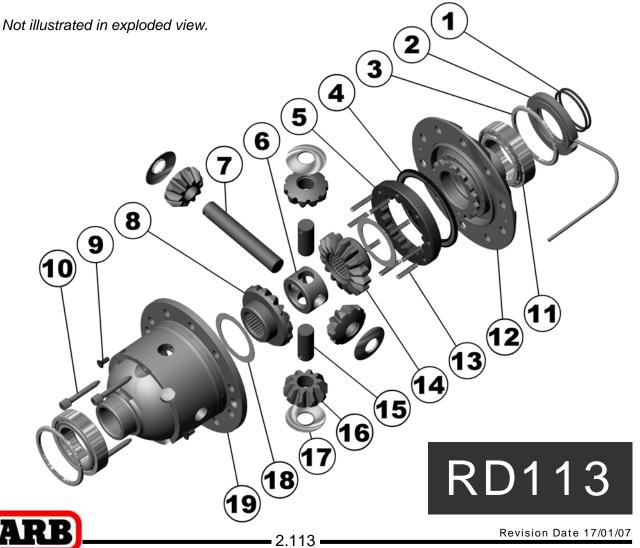
- 1 For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # LM104949 / LM104912.

For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.

33 spline Dana 44 is a performance upgrade requiring aftermarket axle shafts.

Suitable for use with ABS tone ring.

Newer OEM Dana 44 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.



			7		9 - 111	
RD′	114	GM 14 Bolt,10.5",FF			Specs:	
ITEM #	QTY	DESCRIPTION	PART #	NOTES		
1	1	TAPERED ROLLER BEARING	NOT SUPPLIED		Axle Spline	30 tooth, Ø39.2mm [1.54"]
					•	
2	1	SEAL HOUSING BRACKET	220202		Ratio Supported	4.10:1 & down
3	1	BONDED SEAL	160706		Ring Gear ID	163.513mm [6.4375"]
4	1	CLUTCH GEAR	050805		Ring Gear OD	267mm [10.5"]
5	8	RETURN SPRING	150113		Ring Gear Bolts	12 bolts on Ø197.6mm [7.78"]
6	1	LONG CROSS SHAFT	061501		Ring Gear Torque	163Nm [120 ft-lb]
7	1	SPIDER BLOCK	070402		Backlash	0.13-0.20mm [0.005-0.008"]
8	4	PINION THRUST WASHER	151113		Bearing Cap Torque	183Nm [135 ft-lb]
9	4	PINION GEAR	140901R			
10	1	SIDE GEAR	131701R			
11	3	CROSS SHAFT RETAINING PIN	120601			
	-				Motoci	
12	1	TAPERED ROLLER BEARING	NOT SUPPLIED		Notes:	
13	2	WASHER	151205			
14	1	SEAL HOUSING ASSEMBLY	082101			
15	2	SEAL HOUSING O-RING	160233	1	1 For replacement	O-rings
16	1	FLANGE CAP ASSEMBLY	028601		use only BS148 V	iton 75.
17	2	SIDE GEAR THRUST WASHER	151007			
18	1	SPLINED SIDE GEAR	131801R		Does not support	OE ring & pinion ratios of
19	2	SHORT CROSS SHAFT	061601			ever, most known aftermarket
20	1	DIFFERENTIAL CASE	013201			s of the 4.56:1 & up range are
21	2	COUNTERSUNK SCREW	200214		made 'thick' to su	iit the 4.10:1 & down carrier.
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105			
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201			
*						
*	1	AIR LINE (5mm DIA X 6m LONG)	170301			
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501			
*	1	SOLENOID VALVE (12V)	180103			
*	1	SWITCH	180209			
*						
	1	SWITCH COVER (FRONT)	180210			
*	1	SWITCH COVER (REAR)	180211			
*	10	CABLE TIE	180301			
*	1	WARNING LABEL	210101			
*					(1)	
	1	BUMPER STICKER	210102		$\bigcirc \setminus \blacksquare /$	
*	1	OPERATION & SERVICE MANUAL	210200			_
*	1	INSTALLATION GUIDE	2102114		$\mathbf{a} (2)$	
12	11	9 8 7 6	5	4	17)	13
	AR	21 21	20 19		18	D114 Revision Date 11/10/06
		<u> </u>	2.114			MEVISION Date 11/10/00

Dana 70HD,37 SPL,4.56 & UP Specs: 01 FLANGE CAP 022501 Axle Spline 37 tooth, Ø40.6mm [1.60"] 02 **CLUTCH GEAR** 050401 Ratio Supported 4.56:1 & up 03 **DIFFERENTIAL CASE** 012401 Ring Gear ID 174.9mm [6.89"] 267mm [10.5"] 04 **RETURN SPRING** 150101 Ring Gear OD 05 3 CROSS SHAFT RETAINING PIN 12 bolts on Ø203mm [8.00"] 120301 Ring Gear Bolts 06 LONG CROSS SHAFT 060703 Ring Gear Torque 149Nm [110 ft-lb] SHORT CROSS SHAFT 0.15-0.25mm [0.006-0.010"] 07 2 060802 Backlash **PISTON** Bearing Cap Torque 108Nm [80 ft-lb] 08 040501 09 **BONDED SEAL** Carrier Bearing OD 104.78mm [4.125"] 1 160703 10 CYLINDER CAP 031203 1 11 2 **SEAL HOUSING O-RING** 160220 Notes: 8 CYLINDER CAP RETAINING BOLT 12 200205 13 LOCKING TAB (8mm) 150401 14 TAPERED ROLLER BEARING 160113 2 SEAL HOUSING 15 For replacement O-rings 1 080703 16 SHIM KIT **SHK006** use only BS141 Viton 75. SPLINED SIDE GEAR 17 130805 PINION THRUST WASHER For replacement bearing use 18 151104 19 PINION GEAR 140401 Timken part # 39250 / 39412. 20 SPIDER BLOCK 070401 21 SIDE GEAR 130705 1 SIDE GEAR THRUST WASHER 151004 **BULKHEAD FITTING KIT (O-RING TYPE)** 170105 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 AIR LINE (5mm DIA X 6m LONG) 170301 NIPPLE (1/8" to 1/8" BSPT) 170501 SOLENOID VALVE (12V) 180103 SWITCH 180209 SWITCH COVER (FRONT) 180210 1 SWITCH COVER (REAR) 180211 10 **CABLE TIE** 180301 WARNING LABEL 210101 1 **BUMPER STICKER** 210102 OPERATING & SERVICE MANUAL 210200 **INSTALLATION GUIDE** 2102115 Not illustrated in exploded view. 6 8 11 **21 20**

ARB

RD115

RD1		Dana 44,30 SPL,3.92 &		
ITEM #	QTY	DESCRIPTION	PART#	NOTES
1	2	SEAL HOUSING O-RING	160207	1
2	1	SEAL HOUSING ASSEMBLY	081803	
3	2	SHIM KIT	SHK009	
4	1	BONDED SEAL	160703	
5	1	CLUTCH GEAR	050804	
6	1	SPIDER BLOCK	070201	
7	1	LONG CROSS SHAFT	060204	
8	1	SIDE GEAR	131308R	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	160101	2
12	1	FLANGE CAP ASSEMBLY	027304	
13	12	RETURN SPRING	150113	
14	1	SPLINED SIDE GEAR	131408R	
15	2	SHORT CROSS SHAFT	060403	
16	4	PINION GEAR	140701R	
17	4	PINION THRUST WASHER	151110	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	DIFFERENTIAL CASE	013004	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102116	

Specs:

Axle Spline 30 tooth, Ø33.3mm [1.31"]
Ratio Supported 3.92:1 & up
Ring Gear ID 141.3mm [5.56"]
Ring Gear OD 216mm [8.5"]
Ring Gear Bolts 10 bolts on Ø168mm [6.61"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb] (see note 3)

Notes:

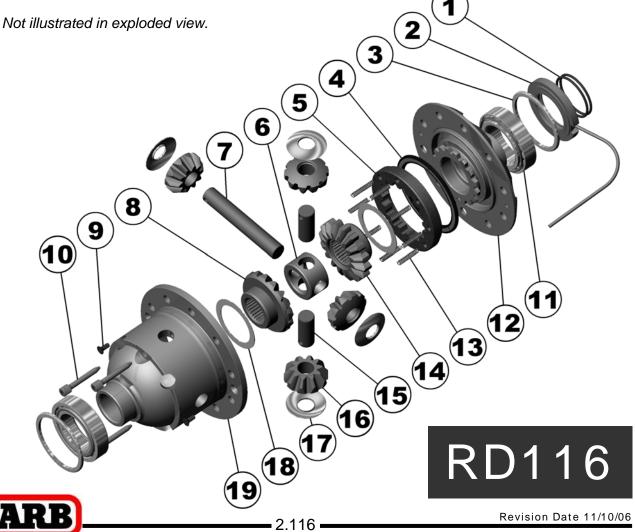
- 1 For replacement O-rings use only BS136 Viton 75.
- For replacement bearing use Timken part # LM104949 / LM104912.

For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.

For ratios of 3.73:1 and down refer to RD117 (Section 2.117)

Suitable for use with ABS tone ring.

Newer OEM Dana 44 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.



RD1	17	Dana 44,30 SPL,3.73 &	DN	
ITEM #	QTY	DESCRIPTION	PART #	NOTES
1	2	SEAL HOUSING O-RING	160207	1
2	1	SEAL HOUSING ASSEMBLY	081803	
3	2	SHIM KIT	SHK009	
4	1	BONDED SEAL	160703	
5	1	CLUTCH GEAR	050804	
6	1	SPIDER BLOCK	070201	
7	1	LONG CROSS SHAFT	060204	
8	1	SIDE GEAR	131308R	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	160101	2
12	1	FLANGE CAP ASSEMBLY	027305	
13	12	RETURN SPRING	150113	
14	1	SPLINED SIDE GEAR	131408R	
15	2	SHORT CROSS SHAFT	060403	
16	4	PINION GEAR	140701R	
17	4	PINION THRUST WASHER	151110	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	DIFFERENTIAL CASE	013005	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102116	

Specs:

Axle Spline 30 tooth, Ø33.3mm [1.31"]
Ratio Supported 3.73:1 & down
Ring Gear ID 141.3mm [5.56"]
Ring Gear OD 216mm [8.5"]
Ring Gear Bolts 10 bolts on Ø168mm [6.61"]
Ring Gear Torque 75Nm [55 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb] (see note 3)

Notes:

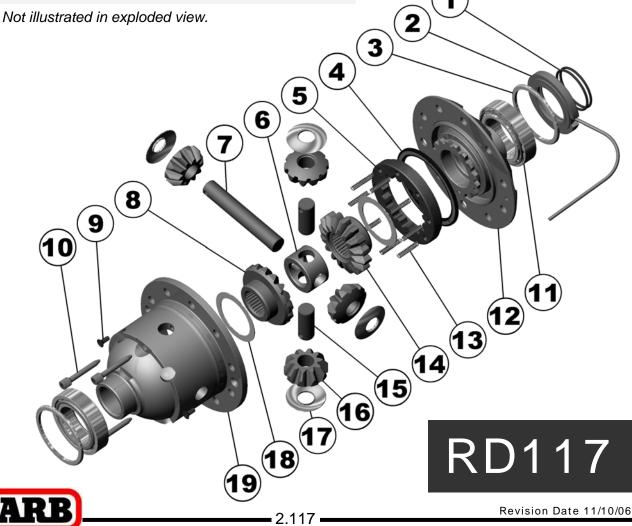
- 1 For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # LM104949 / LM104912.

For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.

For ratios of 3.92:1 and up refer to RD116 (Section 2.116)

Suitable for use with ABS tone ring.

Newer OEM Dana 44 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.



Suzuki Jimny,FR,22 SPL,10 Bolt RG Specs: 01 FLANGE CAP 023703 Axle Spline 22 tooth, Ø23.9mm [0.94"] 02 **CLUTCH GEAR** 050701 Ratio Supported 03 **DIFFERENTIAL CASE** 012805 Ring Gear ID 108.0mm [4.25"] 10 bolts on Ø130mm [5.12"] 04 RETURN SPRING 150107 Ring Gear Bolts 05 3 Ring Gear Torque 85Nm [63 ft-lb] CROSS SHAFT RETAINING PIN 120403 0.10-0.20mm [0.004-0.008"] 06 LONG CROSS SHAFT 060106 Backlash 50Nm [37 ft-lb] SHORT CROSS SHAFT 07 2 060306 Bearing Cap Torque **PISTON** 08 040801 09 1 **U-RING** 160306 10 CYLINDER CAP ASSEMBLY 031303 1 11 8 CYLINDER CAP RETAINING BOLT 200211 LOCKING TAB (6mm) 150402 Notes: 12 8 13 TAPERED ROLLER BEARING NOT SUPPLIED 14 **CLAMPING PLATE** 090401 15 SPLINED SIDE GEAR For replacement O-rings 1 131202 16 PINION THRUST WASHER 151108 use only BS030 Viton 75. 17 4 PINION GEAR 140601 SPIDER BLOCK 070701 Refer to seal housing set-up tech note 18 19 SIDE GEAR 131102 (Section 5.1). 20 2 SIDE GEAR THRUST WASHER 151008 21 ADJUSTER NUT 100601 1 22 SEAL HOUSING 081401 **SEAL HOUSING O-RING** 23 160208 24 SEAL HOUSING SCREW 200502 **BULKHEAD FITTING KIT (O-RING TYPE)** 170105 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 1 NIPPLE (1/8" to 1/8" BSPT) 170501 AIR LINE (5mm DIA X 6m LONG) 170301 SOLENOID VALVE (12V) 180103 **SWITCH** 180209 1 SWITCH COVER (FRONT) 180210 10 **CABLE TIE** 180301 WARNING LABEL 1 210101 **BUMPER STICKER** 210102 **OPERATING & SERVICE MANUAL** 210200 **INSTALLATION GUIDE** 2102118 Not illustrated in exploded view. 6 8 10 **11** 19 18 24 23 22

RD1	19	Ford 9",31 SPL		
ITEM#	QTY	DESCRIPTION	PART#	NOTES
01	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
02	1	FLANGE CAP ASSEMBLY	027306	
03	1	SPLINED SIDE GEAR	131409R	
04	1	SPIDER BLOCK	070201	
05	1	LONG CROSS SHAFT	060204	
06	1	SIDE GEAR	131301R	
07	2	COUNTERSUNK SCREW	200213	
80	3	CROSS SHAFT RETAINING PIN	120701	
09	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
10	1	SEAL HOUSING RETAINING CLIP	150602	
11	1	SEAL HOUSING	082002	
12	2	SEAL HOUSING O-RING	160235	1
13	1	ADJUSTER NUT (75.3mm [2.95"])	100703	
*	1	ADJUSTER NUT (80mm [3.15"])	100704	
14	1	BONDED SEAL	160703	
15	1	CLUTCH GEAR	050804	
16	12	RETURN SPRING	150113	
17	2	SIDE GEAR THRUST WASHER	151010	
18	2	SHORT CROSS SHAFT	060403	
19	4	PINION GEAR	140701R	
20	4	PINION THRUST WASHER	151110	
21	1	DIFFERENTIAL CASE	012206	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102119	

Specs:

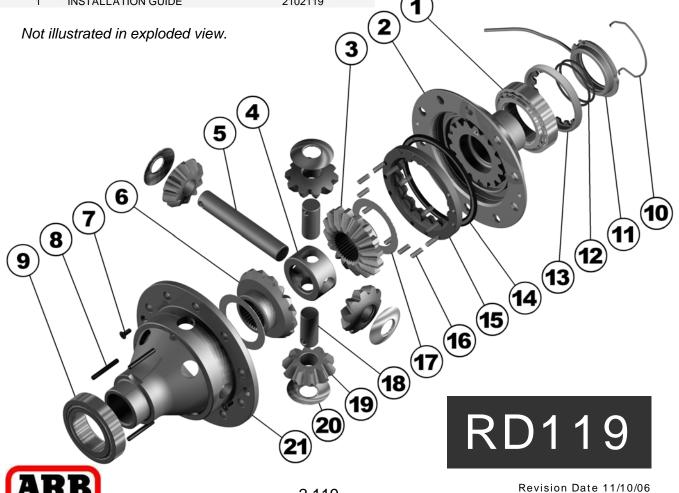
Axle Spline 31 tooth, Ø33.5mm [1.32"]
Ratio Supported All
Ring Gear ID 127.0mm [5.00"]
Ring Gear OD 229mm [9"]
Ring Gear Bolts 10 bolts on Ø152mm [6.00"]
Ring Gear Torque 95Nm [70 ft-lb]
OEM Backlash 0.25-0.41mm [0.010-0.016"]
Non-OEM Backlash 0.18-0.25mm [0.007-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

1 For replacement O-rings use only BS132 Viton 75.

For the 35 spline Ford 9" refer to RD99 (Section 2.99).

Refer to seal housing set-up tech note (Section 5.2).



2.119

			,	
RD1	21	Toyota 8" IFS,53mm BF	RNG	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	BONDED SEAL	160702	
02	1	CLUTCH GEAR	050806	
03	8	RETURN SPRING	150113	
04	1	LONG CROSS SHAFT	060204	
05	1	SPIDER BLOCK	070201	
06	1	DIFFERENTIAL CASE	013008	
07	3	CROSS SHAFT RETAINING PIN	120601	
80		TAPERED ROLLER BEARING	NOT SUPPLIED	
09	1	SHIM KIT	SHK009	
10	1	SEAL HOUSING ASSEMBLY	081805	
11	2	SEAL HOUSING O-RING	160207	1
12		TAPERED ROLLER BEARING	NOT SUPPLIED	
13	1	FLANGE CAP ASSEMBLY	027308	
14	1	LOCKING SIDE GEAR	131411R	
15	4	PINION THRUST WASHER	151110	
16	4	PINION GEAR	140701R	
17	2	SHORT CROSS SHAFT	060403	
18	1	SIDE GEAR	131311R	
19	2	SIDE GEAR THRUST WASHER	151010	
20	2	CSK SCREW	200213	
21	2	ANTI-FRICTION BUSHING (PTFE)	160804	
*	1	BULKHEAD KIT	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	NYLON AIR LINE (5mm DIA X 6m	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102111	

Specs:

Axle Spline 30 tooth, Ø33mm [1.31"]
Ratio Supported 3.73:1 & down
Ring Gear ID 126.0mm [4.96"]
Ring Gear OD 200mm [8"]
Ring Gear Bolts 10 bolts on Ø160mm [6.30"]
Ring Gear Torque 95Nm [70 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]

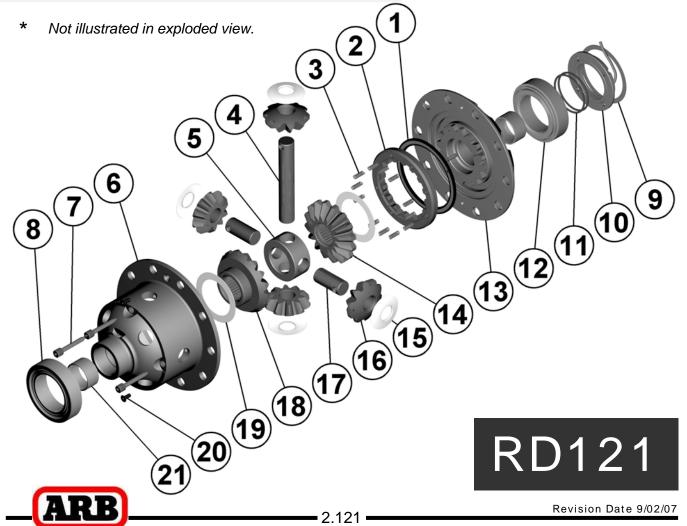
Notes:

1 For replacement O-rings use only BS136 Viton 75.

Spare axle retaining clips may be required (not supplied) to refit CV shafts.

For 8" IFS with 50mm carrier bearings refer to RD131 (Section 2.131).

For 8" IFS with 53mm carrier bearings for the numerically higher ring and pinion ratios (i.e., 3.91 & UP) refer to RD111 (Section 2.111).



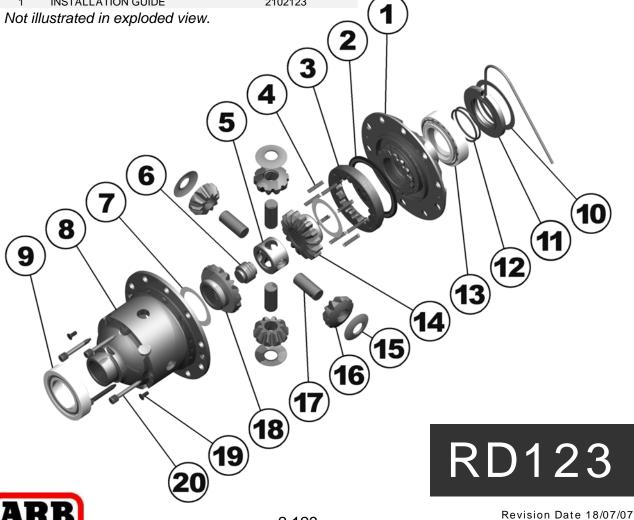
RD'	123	Mazda 8",RR,shim adjus	sted	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
1	1	FLANGE CAP ASSEMBLY	028508	
2	1	BONDED SEAL	160701	
3	1	CLUTCH GEAR	050803	
4	8	RETURN SPRING	150107	
5	1	SPIDER BLOCK	070503	
6	1	THRUST BLOCK	110505	
*	1	THRUST BLOCK	110508	
7	2	SIDE GEAR THRUST WASHER	151011	
8	1	DIFFERENTIAL CASE	013108	
9	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
10	1	SHIM KIT	SHK010	
11	1	SEAL HOUSING ASSEMBLY	081804	
12	2	SEAL HOUSING O-RING	160235	1
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	SPLINED SIDE GEAR	131606H	
15	4	PINION THRUST WASHER	151112	
16	4	PINION GEAR	140801H	
17	4	SHORT CROSS SHAFT	061402	
18	1	SIDE GEAR	131506H	
19	2	COUNTERSUNK SCREW	200213	
20	4	CROSS SHAFT RETAINING PIN	120601	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102123	
*	Not il	lustrated in exploded view.		

Specs:

Axle Spline 30 tooth
Ratio Supported All
Ring Gear ID 121.3mm [4.77"]
Ring Gear OD 205.5mm [8.09"]
Ring Gear Bolts 10 bolts on Ø146.25 [5.75"]
Ring Gear Torque 95Nm [70 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

 For replacement O-rings use only BS133 Viton 75.



2.123

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RD1	24	Toyota 8.9", C-clip, 50mm	BRNG		Specs:	
ITEM#	QTY	DESCRIPTION	PART #	NOTES		
01	1	FLANGE CAP	021703		Axle Spline	30 tooth, Ø33mm [1.31"]
02	1	CLUTCH GEAR	050202		Ratio Supported	All
03	1	DIFFERENTIAL CASE	011005		Ring Gear ID	138.1mm [5.44"]
04	8	RETURN SPRING	150101		Ring Gear OD	225mm [8.9"]
05	1	CROSS SHAFT RETAINING PIN	120303		Ring Gear Bolts	12 bolts on Ø156mm [6.14"]
06	1	LONG CROSS SHAFT	060205		Ring Gear Torque	120Nm [89 ft-lb]
07	1	SHORT CROSS SHAFT	060402		Backlash	0.15-0.20mm [0.006-0.08"]
80	2	SIDE GEAR THRUST WASHER	151002		Bearing Cap Torque	110Nm [81 ft-lb]
09	1	PISTON	040202			
10	1	BONDED SEAL	160705			
11	1	CYLINDER CAP	030224			
12	6	CYLINDER CAP RETAINING BOLT	200205		Notes:	
13	6	LOCKING TAB (8mm)	150401		. 101001	
14	1	TAPERED ROLLER BEARING	NOT SUPPLIED			
15	1	SPLINED SIDE GEAR	130401		1 For replacement	O-rings
16	1	SPIDER BLOCK	070201			_
					use only BS136 \	/IIOII 75.
17	3	PINION GEAR	140201			
18	3	PINION THRUST WASHER	151102			nm carrier bearing ID, 50mm
19	1	THRUST BLOCK	110102		_	e acquired. ARB part #160116
20	1	SIDE GEAR	130201		and Timken part	#32010X-32010X.
21	1	ADJUSTER NUT	100101			
22	1	SEAL HOUSING ASSEMBLY	081901		For 8.9" non C-cl	ip model (i.e., full floating)
23	2	SEAL HOUSING O-RING	160207	1	refer to RD33 (Se	
24	1	SEAL HOUSING RETAINING CLIP	150601			,
*	1	C-CLIP KIT	CCK004		For seal housing	set-up refer to tech notes
*	1	SOCKET HEAD CAP SCREW (M8)	200504		(Section 5.1 & 5.2	
*	2	CYLINDER CAP RETAINING BOLT	200207		(Section 5.1 & 5.2	-)-
*					Thicker oftermort	cat ring good may require
	2	LOCKING TAB (6mm)	150402			ket ring gears may require
	1	LOCK WASHER	4581046			emove the cross shaft.
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105		Refer to tech not	e (Section 5.6).
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201			
*	1	AIR LINE (5mm DIA X 6m LONG)	170301			
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501			
*	1	SOLENOID VALVE (12V)	180103			_
*	1	SWITCH	180209			
*	1	SWITCH COVER (REAR)	180211			\bigcirc (1)
*	10	CABLE TIE	180301			\sim (2) \sim
*	1	WARNING LABEL	210101		\sim (3	
*	1	BUMPER STICKER	210102			
*	1	OPERATING & SERVICE MANUAL	210200		5 (4)	\ \ _
*	1	INSTALLATION GUIDE	2102124	,		
	•	INOTALEATION COIDE	2102124		(6) \	
				(7)		
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Revision Date 11/10/06

RD′	125	Dana 35,non C-clip,30 SP	L,3.54 &	UP
ITEM #	QTY	DESCRIPTION	PART #	NOTES
1	2	SEAL HOUSING O-RING	160235	1
2	1	SEAL HOUSING ASSEMBLY	081801	
3	2	SHIM KIT	SHK003	
4	1	BONDED SEAL	160701	
5	1	CLUTCH GEAR	050803	
6	1	SPIDER BLOCK	070503	
7	1	LONG CROSS SHAFT	061302	
8	1	SIDE GEAR	131503H	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	160109	2
12	1	FLANGE CAP ASSEMBLY	028504	
13	8	RETURN SPRING	150107	
14	1	SPLINED SIDE GEAR	131603H	
15	2	SHORT CROSS SHAFT	061402	
16	4	PINION GEAR	140801H	
17	4	PINION THRUST WASHER	151112	
18	2	SIDE GEAR THRUST WASHER	151011	
19	1	DIFFERENTIAL CASE	013106	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102125	
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Specs:

Axle Spline	30 tooth, Ø33.3mm [1.31"]
Ratio Supported	3.54:1 & up
Ring Gear ID	120.7mm [4.75"]
Ring Gear OD	193mm [7.6"]
Ring Gear Bolts	8 bolts on Ø146mm [5.75"]
Ring Gear Torque	75Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	75Nm [55 ft-lb]

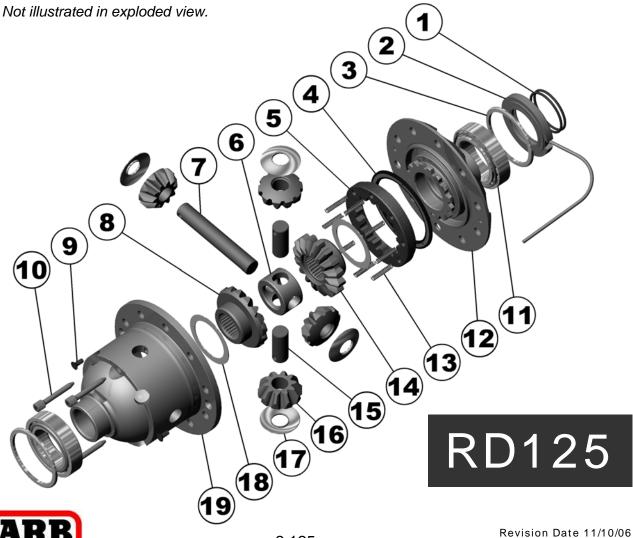
Notes:

- For replacement O-rings use only BS133 Viton 75.
- 2 For replacement bearing use Timken part # LM501349 / LM501310.

Newer OEM Dana 35 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.

Some OEM Dana 35 drive pinion gears extend too far into the centre and converge with the differential carrier. Refer to ring and pinion modification note (Section 5.6) for correction.

30 spline Dana 35 is a performance upgrade requiring aftermarket axle shafts.



2.125

RD126					
01 1 FLANGE CAP 022604 02 1 CLUTCH GEAR 050202 03 1 DIFFERENTIAL CASE 011304 04 4 RETURN SPRING 150101 05 3 CROSS SHAFT 060205 06 1 LONG CROSS SHAFT 060402 08 1 PISTON 040202 09 1 BONDED SEAL 160705 10 1 CYLINDER CAP ASSEMBLY 030504 11 8 CYLINDER CAP RETAINING BOLT 200205 12 8 LOCKING TAB (8mm) 150401 13 1 TAPERED ROLLER BEARING NOT SUPPLIED 14 1 SEAL HOUSING RETAINING CLIP 150601 15 1 SPLINED SIDE GEAR 130407 16 4 PINION THRUST WASHER 151102 17 4 PINION GEAR 140201 18 1 SPIDE GEAR 130206 20 2 SIDE GEAR T	RD1	26	Santana PS-10,RR		
02 1 CLUTCH GEAR 050202 03 1 DIFFERENTIAL CASE 011304 04 4 RETURN SPRING 150101 05 3 CROSS SHAFT 060205 06 1 LONG CROSS SHAFT 060402 08 1 PISTON 040202 09 1 BONDED SEAL 160705 10 1 CYLINDER CAP ASSEMBLY 030504 11 8 CYLINDER CAP RETAINING BOLT 200205 12 8 LOCKING TAB (8mm) 150401 13 1 TAPERED ROLLER BEARING NOT SUPPLIED 14 1 SEAL HOUSING RETAINING CLIP 150601 15 1 SPLINED SIDE GEAR 130407 16 4 PINION THRUST WASHER 151102 17 4 PINION GEAR 140201 18 1 SPIDE GEAR 130206 20 2 SIDE GEAR THRUST WASHER 151006 21 1 <t< th=""><th></th><th></th><th></th><th>PART#</th><th>NOTES</th></t<>				PART#	NOTES
03 1 DIFFERENTIAL CASE 011304 04 4 RETURN SPRING 150101 05 3 CROSS SHAFT RETAINING PIN 120303 06 1 LONG CROSS SHAFT 060205 07 2 SHORT CROSS SHAFT 060402 08 1 PISTON 040202 09 1 BONDED SEAL 160705 10 1 CYLINDER CAP ASSEMBLY 030504 11 8 CYLINDER CAP RETAINING BOLT 200205 12 8 LOCKING TAB (8mm) 150401 13 1 TAPERED ROLER BEARING NOT SUPPLIED 14 1 SEAL HOUSING RETAINING CLIP 150601 15 1 SPLINED SIDE GEAR 130407 16 4 PINION THRUST WASHER 151102 17 4 PINION GEAR 140201 18 1 SPIDE GEAR 130206 20 2 SIDE GEAR THRUST WASHER 151006 21 <t< th=""><th>01</th><th>1</th><th></th><th>022604</th><th></th></t<>	01	1		022604	
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19 1 SIDE GEAR 130206 20 2 SIDE GEAR THRUST WASHER 151006 21 1 ADJUSTER NUT 100801 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 * 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 * 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 * 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	17	4	PINION GEAR	140201	
20 2 SIDE GEAR THRUST WASHER 151006 21 1 ADJUSTER NUT 100801 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 * 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 * 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 * 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	18	1	SPIDER BLOCK	070201	
21 1 ADJUSTER NUT 100801 22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 * 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 * 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 * 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	19	1	SIDE GEAR	130206	
22 1 SEAL HOUSING ASSEMBLY 081901 23 2 SEAL HOUSING O-RING 160207 1 * 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 * 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 * 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	20	2	SIDE GEAR THRUST WASHER	151006	
23 2 SEAL HOUSING O-RING 160207 1 * 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 * 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 * 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	21	1	ADJUSTER NUT	100801	
* 1 BULKHEAD FITTING KIT (O-RING TYPE) 170105 * 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 * 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	22	1	SEAL HOUSING ASSEMBLY	081901	
* 1 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 * 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	23	2	SEAL HOUSING O-RING	160207	1
* 1 NIPPLE (1/8" to 1/8" BSPT) 170501 * 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
* 1 AIR LINE (5mm DIA X 6m LONG) 170301 * 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
* 1 SOLENOID VALVE (12V) 180103 * 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
* 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
* 1 SWITCH 180209 * 1 SWITCH COVER (REAR) 180211 * 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	*	1	SOLENOID VALVE (12V)	180103	
* 10 CABLE TIE 180301 * 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	*	1	SWITCH	180209	
* 1 WARNING LABEL 210101 * 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	*	1	SWITCH COVER (REAR)	180211	
* 1 BUMPER STICKER 210102 * 1 OPERATION & SERVICE MANUAL 210200	*	10	CABLE TIE	180301	
* 1 OPERATION & SERVICE MANUAL 210200	*	1	WARNING LABEL	210101	
* 1 OPERATION & SERVICE MANUAL 210200	*	1	BUMPER STICKER	210102	
* 1 INSTALLATION GUIDE 2102126	*	1	OPERATION & SERVICE MANUAL	210200	
	*	1	INSTALLATION GUIDE	2102126	

Specs:

Axle Spline 34 tooth, Ø31.5mm [1.24"]

Ratio Supported All

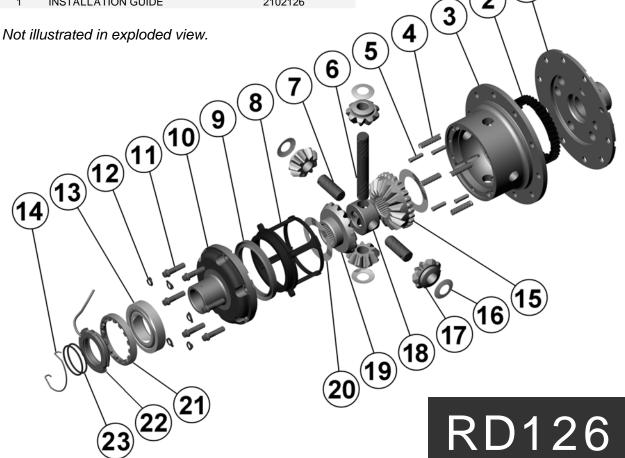
Ring Gear ID 160.0mm [6.30"] Ring Gear OD 251mm [9.9"]

Ring Gear Bolts 12 bolts on Ø190.6mm [7.50"]

Notes:

1 For replacement O-rings use only BS136 Viton 75.

Refer to seal housing set-up tech note (Sec. 5.2).



ARB

Revision Date 11/10/06

RD1	29	Toyota Tacoma,RR		
ITEM #	QTY	DESCRIPTION	PART#	NOTI
01	2	SEAL HOUSING O-RING	160207	1
02	1	SEAL HOUSING ASSEMBLY	081807	
03	1	SHIM KIT	SHK004	
04	1	BONDED SEAL	160702	
05	1	CLUTCH GEAR	050806	
06	1	SPIDER BLOCK	070201	
07	1	LONG CROSS SHAFT	060204	
80	1	SIDE GEAR	131311R	
09	2	COUNTERSUNK SCREWS	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	NOT SUPPLIED	
12	1	FLANGE CAP ASSEMBLY	027313	
13	8	RETURN SPRING	150113	
14	1	SPLINED SIDE GEAR	131411R	
15	2	SHORT CROSS SHAFT	060403	
16	4	PINION GEAR	140701R	
17	4	PINION THRUST WASHER	151110	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	DIFFERENTIAL CASE	013013	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	2	CABLE TIE (4.8 x 200mm)	180302	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102129	

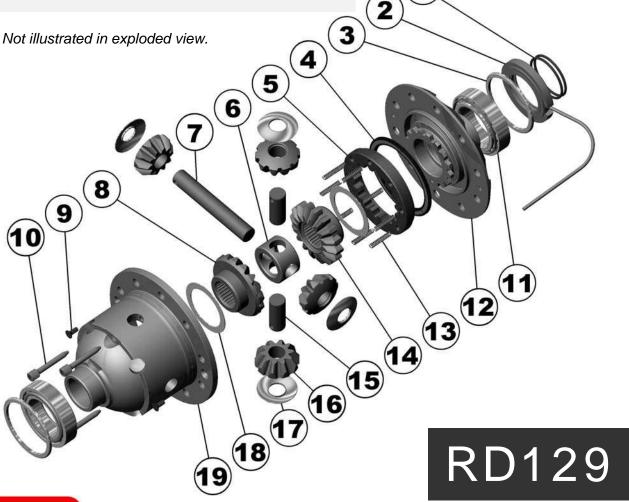
Specs:

Axle Spline 30 tooth, Ø33.0mm [1.30"]
Ratio Supported All
Ring Gear ID 127.5mm [5.02"]
Ring Gear OD 213mm [8.4"]
Ring Gear Bolts 12 bolts on Ø152mm [5.98"]
Ring Gear Torque 96Nm [71 ft-lb]
Backlash 0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque 85Nm [63 ft-lb]

Revision Date 9/02/07

Notes:

 For replacement O-rings use only BS136 Viton 75.



2.129

RD1	32	Toyota 8",50mm BRNG		
ITEM#	QTY	DESCRIPTION	PART#	NOT
01	1	FLANGE CAP ASSEMBLY	027309	
02	1	BONDED SEAL	160702	
03	1	CLUTCH GEAR	050806	
04	2	SHORT CROSS SHAFT	060403	
05	1	LONG CROSS SHAFT	060204	
06	1	SIDE GEAR	131311R	
07	2	SIDE GEAR THRUST WASHER	151010	
80	2	COUNTERSUNK SCREW	200213	
09	3	RETAINING PIN	120601	
10	-	TAPERED ROLLER BEARING	NOT SUPPLIED	2
11	1	SEAL HOUSING RETAINING CLIP	150601	
12	1	SEAL HOUSING ASSEMBLY	081901	
13	2	SEAL HOUSING O-RINGS	160207	1
14	1	ADJUSTER NUT	100101	
15	8	RETURN SPRINGS	150113	
16	1	SPLINED SIDE GEAR	131411R	
17	4	PINION GEAR	140701R	
18	4	PINION THRUST WASHER	151110	
19	1	SPIDER BLOCK	070201	
20	1	DIFFERENTIAL CASE	013009	
*	1	ADJUSTER NUT	100103	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102132	

Specs:

Axle Spline 30 tooth, Ø33mm [1.31"]
Ratio Supported All
Ring Gear ID 126.0mm [4.96"]
Ring Gear OD 200mm [8"]
Ring Gear Bolts 10 bolts on Ø160mm [6.30"]
Ring Gear Torque 95Nm [70 ft-lb]
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 95Nm [70 ft-lb]

Notes:

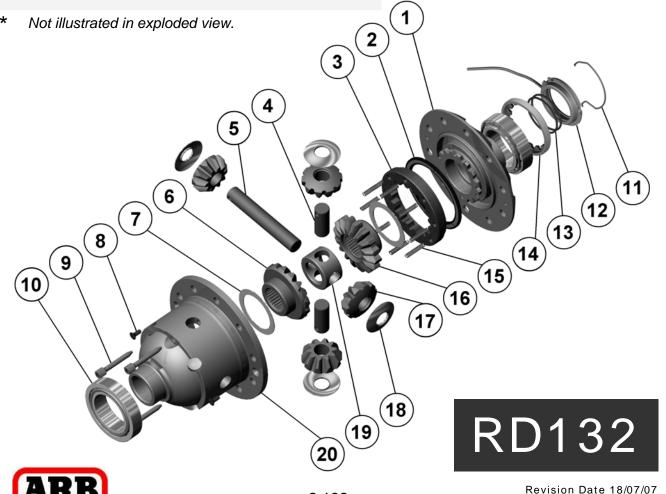
- 1 For replacement O-rings use only BS136 Viton 75.
- 2 For 80mm Bearing OD use Timken Bearing #32010X (ARB# 160116).
- For 83mm Bearing OD use Koyo or SKF bearing #TR100802-1 & TR100802-2.

For 8" Toyota IFS refer to RD131 (Section 2.131).

For 8" Toyota <u>shim pre-loaded</u> rear refer to RD133 (Section 2.133).

Refer to seal housing set-up tech note (Sec. 5.2).

Refer to pinion modification tech note (Sec. 5.6).



2.132

RD'	133	Toyota 8" RR,shim adjus	sted	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	2	SEAL HOUSING O-RING	160235	1
02	1	SEAL HOUSING ASSEMBLY	081804	
03	1	SHIM KIT	SHK010	
04	1	BONDED SEAL	160702	
05	1	CLUTCH GEAR	050806	
06	1	SPIDER BLOCK	070201	
07	1	LONG CROSS SHAFT	060204	
08	1	SIDE GEAR	131311R	
09	2	COUNTERSUNK SCREWS	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
12	1	FLANGE CAP ASSEMBLY	027319	
13	8	RETURN SPRING	150113	
14	1	SPLINED SIDE GEAR	131411R	
15	2	SHORT CROSS SHAFT	060403	
16	4	PINION GEAR	140701R	
17	4	PINION THRUST WASHER	151110	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	DIFFERENTIAL CASE	013019	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102133	
*	Not il	lustrated in exploded view.		

Specs:

Axle Spline 30 tooth, Ø33mm [1.31"]

Ratio Supported All

Ring Gear ID 126.4mm [4.96"]

Ring Gear OD 200mm [8"]

Ring Gear Bolts 10 bolts on Ø148.5mm [5.84"]

Ring Gear Torque 95Nm [70 ft-lb]

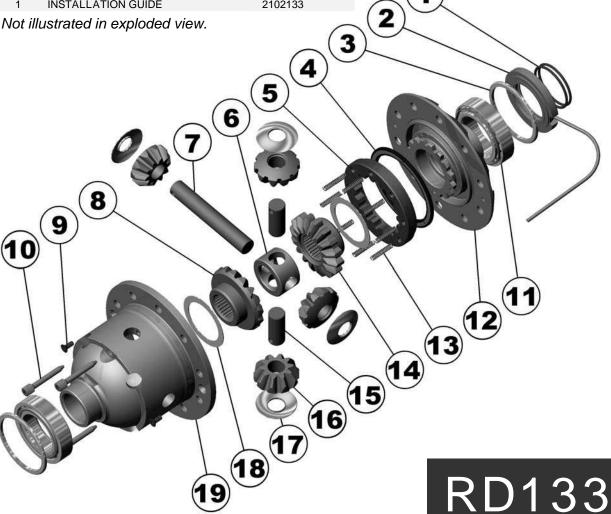
Backlash 0.15-0.25mm [0.006-0.010"]

Bearing Cap Torque 95Nm [70 ft-lb]

Notes:

1 For replacement O-rings use only BS133 Viton 75.

For 8" Toyota adjuster nut pre-loaded rear refer to RD132 (Section 2.132).



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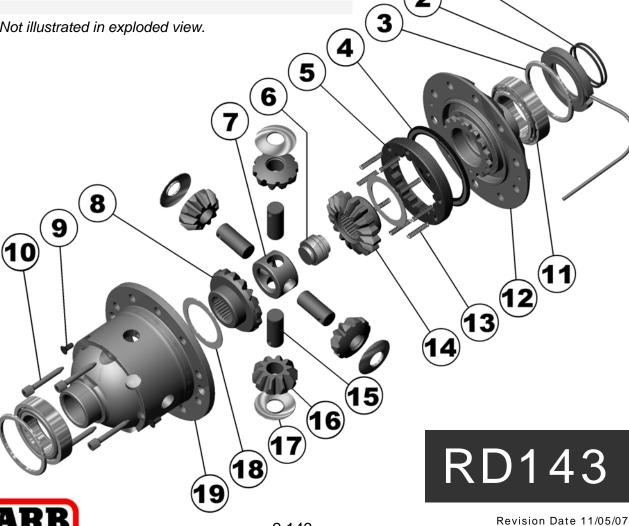
Revision Date 9/02/07

PART # 160207 081803 SHK009 160703 050804 110509 070201 131317H 200213 120601 160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201 170301 170501		Axle Spline Ratio Supported Ring Gear ID Ring Gear OD Ring Gear Bolts Ring Gear Torque (see note 3) Backlash Bearing Cap Torque Notes: 1 For replacement use only BS136	3 1 1 7 9 0 8
081803 SHK009 160703 050804 110509 070201 131317H 200213 120601 160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201	2	Ratio Supported Ring Gear ID Ring Gear OD Ring Gear Bolts Ring Gear Torque (see note 3) Backlash Bearing Cap Torque Notes: 1 For replacement use only BS136 2 For replacement Timken part # LM	3 1 1 7 9 0 8
SHK009 160703 050804 110509 070201 131317H 200213 120601 160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201		Ring Gear ID Ring Gear OD Ring Gear Bolts Ring Gear Torque (see note 3) Backlash Bearing Cap Torque Notes: 1 For replacement use only BS136	2 7 9 0 8
160703 050804 110509 070201 131317H 200213 120601 160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201 170301		Ring Gear OD Ring Gear Bolts Ring Gear Torque (see note 3) Backlash Bearing Cap Torque Notes: 1 For replacement use only BS136	? ? () 8
050804 110509 070201 131317H 200213 120601 160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201		Ring Gear Bolts Ring Gear Torque (see note 3) Backlash Bearing Cap Torque Notes: 1 For replacement use only BS136	O-Vite
110509 070201 131317H 200213 120601 160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201		Ring Gear Torque (see note 3) Backlash Bearing Cap Torque Notes: 1 For replacement use only BS136	O-Vito
131317H 200213 120601 160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201 170301		(see note 3) Backlash Bearing Cap Torque Notes: 1 For replacement use only BS136 2 For replacement Timken part # LM	O-Vito
200213 120601 160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201		Notes: For replacement use only BS136 For replacement Timken part # LM	O-Vito
120601 160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201 170301		Notes: 1 For replacement use only BS136 2 For replacement Timken part # LN	O-Vito
160101 027305 150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201 170301		Notes: 1 For replacement use only BS136 2 For replacement Timken part # LN	O-Vito
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150113 131417H 060403 140701R 151110 151010 013005 YPE) 170105 PP) 170201 170301		 For replacement use only BS136 For replacement Timken part # LN 	Vito be
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151010 013005 YPE) 170105 PP) 170201 170301		Timken part # LN	
013005 YPE) 170105 PP) 170201 170301		Timken part # LN	
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170301		3 Newer OFM Dan	
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180103			
180209		Suitable for use	wit
180210			
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	180210 180211 180301 210101 210102 210200	180210 180211 180301 210101 210102 210200 2102147	180210 180211 180301 210101 210102 210200 2102147

32 tooth, Ø35.8mm [1.41"] 3.73:1 & down 141.3mm [5.56"] 216mm [8.5"] 10 bolts on Ø168mm [6.61"] 75Nm [55 ft-lb] (3/8" bolts) 95Nm [70 ft-lb] (7/16" bolts) 0.15-0.25mm [0.006-0.010"] 81Nm [60 ft-lb]

- D-rings iton 75.
- earing use 104949 / LM104912.
- 44 ring and pinion sets use lange holes of the Air Locker rom Ø3/8" to Ø7/16" to suit.

ith ABS tone ring.



2.143

RD1	47	Dana 44,35 SPL,3.73 &	DN	
ITEM#	QTY	DESCRIPTION	PART#	NOTES
1	2	SEAL HOUSING O-RING	160207	1
2	1	SEAL HOUSING ASSEMBLY	081803	
3	2	SHIM KIT	SHK009	
4	1	BONDED SEAL	160703	
5	1	CLUTCH GEAR	050804	
6	1	SPIDER BLOCK	070201	
7	1	LONG CROSS SHAFT	060204	
8	1	SIDE GEAR	131303H	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING PIN	120601	
11	2	TAPERED ROLLER BEARING	160101	2
12	1	FLANGE CAP ASSEMBLY	027305	
13	12	RETURN SPRING	150113	
14	1	SPLINED SIDE GEAR	131403H	
15	2	SHORT CROSS SHAFT	060403	
16	4	PINION GEAR	140701R	
17	4	PINION THRUST WASHER	151110	
18	2	SIDE GEAR THRUST WASHER	151010	
19	1	DIFFERENTIAL CASE	013005	
*	1	BULKHEAD FITTING KIT (O-RING TYPE)	170105	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	AIR LINE (5mm DIA X 6m LONG)	170301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SOLENOID VALVE (12V)	180103	
*	1	SWITCH	180209	
*	1	SWITCH COVER (FRONT)	180210	
*	1	SWITCH COVER (REAR)	180211	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102147	

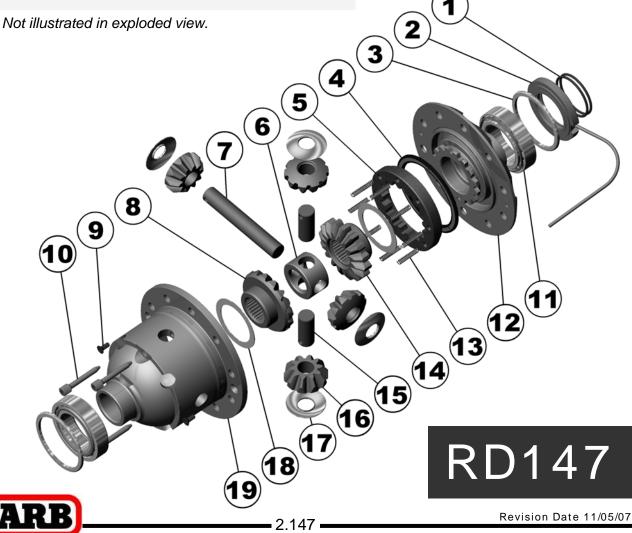
Specs:

Axle Spline 35 tooth, Ø38.1mm [1.50"]
Ratio Supported 3.73:1 & down
Ring Gear ID 141.3mm [5.56"]
Ring Gear OD 216mm [8.5"]
Ring Gear Bolts 10 bolts on Ø168mm [6.61"]
Ring Gear Torque 75Nm [55 ft-lb] (3/8" bolts)
(see note 3) 95Nm [70 ft-lb] (7/16" bolts)
Backlash 0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque 81Nm [60 ft-lb]

Notes:

- For replacement O-rings use only BS136 Viton 75.
- For replacement bearing use Timken part # LM104949 / LM104912.
- Newer OEM Dana 44 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.

Suitable for use with ABS tone ring.



RD	CKA	& RDCKA24 Air Comp	ressor	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	AIR FILTER COVER	290502	
02	1	AIR FILTER ELEMENT	290503	3
03	7	HEX FLANGE SCREW	200404	
04	1	AIR FILTER BASE	290501	
05	4	HEAD FIXING BOLT	290214	
06	1	INTAKE VALVE RETAINER	290203	
07	1	INTAKE VALVE SPRING	150104	
08	1	INTAKE VALVE INSERT	290215	
09	1	HEAD	290201	
10	1	INTAKE VALVE PLUNGER	290202	
11	1	HEAD O-RING	160214	5
12	1	BARREL	290309	
*	-	BARREL SHIM (0.2mm)	150501	7
*	-	BARREL SHIM (0.4mm)	150502	7
13	2	PISTON RING	290302	
14	1	BACKING O-RING	160213	
15	1	MANIFOLD RETAINING BOLT (M8 x 105mm)	6151174	
16	1	MANIFOLD RETAINING BOLT SEAL	160601	
17	1	MANIFOLD (RDCKA)	290207	
18	1	EXHAUST O-RING	160216	6
19	1	EXHAUST VALVE SPRING	150103	
20	1	EXHAUST VALVE PLUNGER	290205	
21	1	MANIFOLD O-RING	160212	4
22	2	PLUG (1/8" BSPT)	170802	
23	1	PRESSURE SWITCH	CO35	
24	4	HEX BOLT (M6 x 16mm)	6151017	
25	1	COVER PLATE	290404	
26	1	SOCKET HEAD CAP SCREW (M6 x 16mm)	200208	
27	1	PISTON/CONNECTING ROD ASSEMBLY	290310	
28	1	COUNTERWEIGHT	290402	
29	1	MOTOR ASSEMBLY (12V)	290412	1
29	-	MOTOR ASSEMBLY (24V)	290424	2
30	1	MOUNTING BRACKET ASSEMBLY	290604	
31	1	CUP HEAD BOLT (M6 x 25mm)	6151082	
32	1	FLANGE NUT (M6)	6151173	
33	1	COMPRESSOR BACKING PLATE	290603	
34	4	FLAT WASHER (6mm)	6151046	
35	4	SPRING WASHER (6mm)	6151042	
36	4	HEX NUT (M6)	6151031	
*	1	WIRING LOOM (RDCKA)	180405	1
*	1	WIRING LOOM (RDCKA24)	180407	2
*	1	RELAY (12V, 40A)	CO42	
*	1	SWITCH	180209	
*	1	SWITCH COVER (COMPRESSOR)	180212	
*	1	SCOTCH LOCK ELEC. CONNECTOR	CO45	
*	1	TERMINAL (10mm EYE)	CO44	
*	1	BRACKET SCREW (12mm X 18G PST)	6151176	

* Not illustrated in exploded view.

Specs:

Voltage	12 Volts (RDCKA), 24 Volts (RDCKA24)
Current Draw	No-Load 12A (RDCKA), 7A (RDCKA24)
	Load 18A (RDCKA), 12A (RDCKA24)
Air Flow	33.0L/min @ 0kPa [1.17CFM @ 0psi]
	26.4L/min @ 200kPa [0.93CFM @ 29psi]
Total Weight	4.3kg [9.5lbs]
Size	176mm x 170mm x 170mm
	[6.9" x 6.7" x 6.7"]
Manifold Port	¹ / ₄ " npt [Pressure Switch]
	¹ / ₈ " bspt [Solenoid nipple]
Pressure Switch	Open 690kPa [100psi]
	Closed 490kPa [70psi]

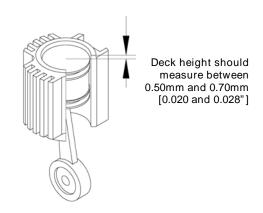
Notes:

- 1 Used on RDCKA only.
- 2 Used on RDCKA24 only.
- The air filter should be cleaned regularly. To do this, unclip the black cover (01) and remove the element (02). Wash in hot, soapy water, rinse and let dry completely. Reinsert the element into the base (SMOOTH SIDE DOWN), wipe out the cover, and clip back into place.

The compressor manifold must be periodically removed to clean out any condensation, etc. To do this bleed off any residual pressure that may be in the manifold; undo the hexagonal headed bolt at the end of the manifold. Remove the manifold and wipe out any moisture. If there is excessive moisture in the manifold then it should be cleaned out more regularly.

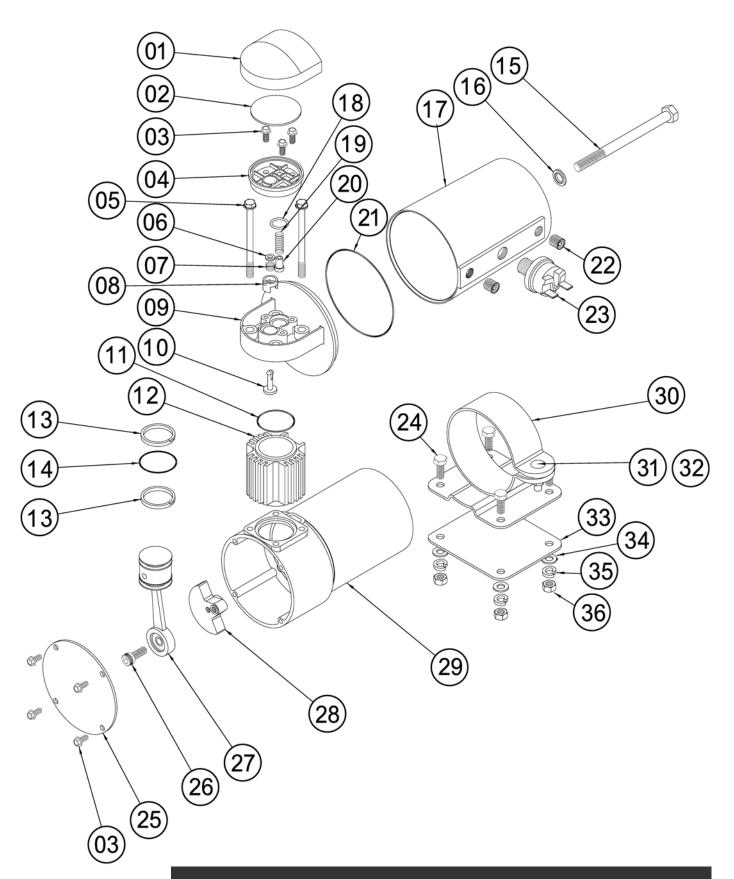
Refit manifold making sure that the O-ring is in its correct position; insert the bolt with the seal under the head. Torque the bolt up to 9.5Nm. <u>Do not over tighten.</u> Run the compressor and check for any air leaks.

- 4 For replacement O-ring use BS041 Viton 75.
- For replacement O-ring use BS025 Viton 75.
- 6 For replacement O-ring use BS014 Viton 75.
- 7 Barrel shims are used to set the deck height of the piston. With the piston at top dead centre (TDC), the deck height is the distance of the piston crown to the top of the barrel (see diagram below). Deck height specification is 0.50mm +0.2/-0.0 [0.020" +0.008/-0.000].





RDCKA & RDCKA24 Air Compressor – Diagram



RDCKA & RDCKA24



RDCP & RDCPA Portable Air Compressor ITEM# QTY DESCRIPTION PART # NOTES 01 1 AIR FILTER COVER 290502

			•	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	AIR FILTER COVER	290502	
02	1	AIR FILTER ELEMENT	290503	3
03	7	HEX FLANGE SCREW	200404	
04	1	AIR FILTER BASE	290501	
05	4	HEAD FIXING BOLT	290214	
06	1	INTAKE VALVE RETAINER	290203	
07	1	INTAKE VALVE SPRING	150104	
08	1	INTAKE VALVE INSERT	290215	
09	1	HEAD	290201	
10	1	INTAKE VALVE PLUNGER	290202	
11	1	HEAD O-RING	160214	
12	1	BARREL	290309	
*	-	BARREL SHIM (0.2mm)	150501	5
*	-	BARREL SHIM (0.4mm)	150502	5
13	2	PISTON RING	290302	
14	1	BACKING O-RING	160213	
15	1	MANIFOLD RETAINING BOLT (M8 X 105mm)	6151174	
16	1	MANIFOLD RETAINING BOLT SEAL	160601	
17	1	MANIFOLD - RDCP	290208	1
17A	1	MANIFOLD - RDCPA	290209	2
18	1	EXHAUST O-RING	160216	
19	1	EXHAUST VALVE SPRING	150103	
20	1	EXHAUST VALVE PLUNGER	290205	
21	1	MANIFOLD O-RING	160212	4
22	1	PRESSURE SWITCH	CO35	1
23	2	ELBOW (1/4" MALE/FEMALE)	170207	1
24	1	PUMP-UP KIT (RDCP)	PUK	1
24A	1	PUMP-UP KIT (RDCPA)	PUK2	2
25	1	COVER PLATE	290404	
26	1	SOCKET HEAD CAP SCREW (M6 X 16mm)	200208	
27	1	PISTON/CONNECTING ROD ASSEMBLY	290310	
28	1	COUNTERWEIGHT	290402	
29	1	MOTOR ASSEMBLY (12V)	290412	
30	1	MOUNTING BRACKET ASSEMBLY	290604	
31	1	CUP HEAD BOLT (M6 X 25mm)	6151082	
32	6	FLANGE NUT M6	6151173	
33	1	MOUNTING PLATE	290607	
34	5	COUNTERSUNK SCREW (M6 X 12mm)	6151171	
*	1	WIRING LOOM (RDCP)	180402	1
*	1	WIRING LOOM (RDCPA)	180406	2
*	1	RELAY (12V, 40A)	CO42	1
*	1	CARRY CASE	270102	
*	1	TYRE PRESSURE GAUGE	171101	1
*	1	INFLATION ACCESSORY KIT	171102	1

* Not illustrated in exploded view.

Specs:

Voltage	12 Volts
Current Draw	12A (No-Load), 18A (Load)
Air Flow	33.0L/min @ 0kPa [1.17CFM @ 0psi]
	26.4L/min @ 200kPa [0.93CFM @ 29psi]
Total Weight	6.4kg [14.1lbs] (RDCP)
	6.1kg [13.4lbs] (RDCPA)
Size	208mm x 440mm x 238mm
	[8.19" x 17.32" x 9.37"]
Manifold Port	¹ / ₄ " npt [RDCP]
	¹ / ₈ " bspt [RDCPA]
Pressure Switch	Open 690kPa [100psi]
	Closed 490kPa [70psi]
Hose Length	6m [20ft]

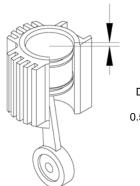
Notes:

- 1 Used on RDCP only.
- 2 Used on RDCPA only.
- The air filter should be cleaned regularly. To do this, unclip the black cover (01) and remove the element (02). Wash in hot, soapy water, rinse and let dry completely. Reinsert the element into the base (SMOOTH SIDE DOWN), wipe out the cover, and clip back into place.

The compressor manifold must be periodically removed to clean out any condensation, etc. To do this bleed off any residual pressure that may be in the manifold; undo the hexagonal headed bolt at the end of the manifold. Remove the manifold and wipe out any moisture. If there is excessive moisture in the manifold then it should be cleaned out more regularly.

Refit manifold making sure that the O-ring is in its correct position; insert the bolt with the seal under the head. Torque the bolt up to 9.5Nm. <u>Do not over tighten.</u> Run the compressor and check for any air leaks.

- 4 For replacement O-ring use BS041 Viton 75.
- 5 Barrel shims are used to set the deck height of the piston. With the piston at top dead centre (TDC), the deck height is the distance of the piston crown to the top of the barrel (see diagram below). Deck height specification is 0.50mm +0.2/-0.0 [0.020" +0.008/-0.000].



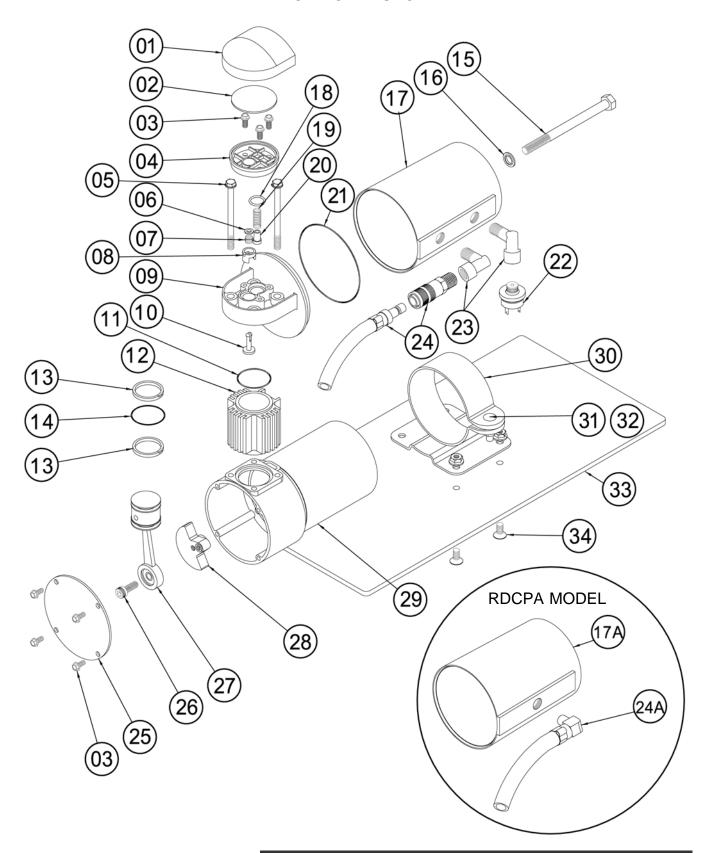
Deck height should measure between 0.50mm and 0.70mm [0.020 and 0.028"]



RDCP & RDCPA

Portable Air Compressor - Diagram

RDCP MODEL SHOWN



RDCP & RDCPA



CK	SA	On-Board Air Compr	essor Kit	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	3	HEAD BOLT	310202	
02	1	HEAD ASSEMBLY	310102	
03	1	BARREL O-RING		1
04	1	BARREL	310201	
05	1	BARREL GASKET		1
06	1	PISTON/COUNTERWEIGHT ASSEMBLY	310103	
07	1	CRANKCASE COVER GASKET		1
80	1	CRANKCASE COVER		2
09 & 16	1	COVER BOLTS (M4 HEX FLANGE)	310203	
10	1	AIR FILTER ASSEMBLY	300501	7
11	1	AIR FILTER ELEMENT	300502	5
12	2	SOLENOID ASSEMBLY	NOT SUPPLIED	
13	1	PRESSURE SWITCH	CO35	
14	2	PLUG (1/8" BSPT)	170802	4
15	1	MANIFOLD O-RING		1
17	1	MOTOR/CRANKCASE ASSEMBLY		2
18	2	MOTOR BOLT O-RING		1
19	1	MANIFOLD COVER		2
20	2	MOTOR BOLT		2
21	1	MOTOR MOUNT ASSEMBLY	310101	
22	4	MOUNTING BOLT	200405	
23	2	MOTOR MOUNT CLAMPING NUT		3
24	1	COMPRESSOR BACKING PLATE	290603	
25	4	MOUNTING NUT	6151223	
26	2	MOTOR MOUNT CLAMPING BOLT		3
*	1	SWITCH COVER (COMPRESSOR)	180212	
*	1	SWITCH	180209	
*	1	WIRING LOOM,CKSA12	180408	6
*	1	INSTALLATION GUIDE	2102SA12	
*	1	SCOTCH LOCK ELEC. CONNECTOR	CO45	

Specs:

Voltage	12 Volts
Current Draw	No-Load 5A
	Load 6.5A
Air Flow	25.0L/min @ 0kPa [0.88CFM @ 0psi]
	13.4L/min @ 200kPa [0.47CFM @
Total Weight	2.1kg [4.6lbs]
Size	122mm x 162mm x 188mm
	[4.8" x 6.4" x 3.5"]
Manifold Port	¹ / ₄ " npt [Pressure Switch]
	¹ / ₈ " bspt [Solenoid nipple]
Pressure Switch	Open 690kPa [100psi]
	Closed 490kPa [70psi]

Notes:

- Available only in CKS SEAL KIT #310104.
- 2 Not available separately.
- 3 Available only as included with MOTOR MOUNT ASSEMBLY #310101.
- 4 Included x2 in HEAD ASSEMBLY #310102.
- 5 Available only in packs of 3.
- 6 For wiring diagram refer to Section 5.8.
- 7 AIR FILTER ASSEMBLY comes complete with one AIR FILTER ELEMENT (Item #11)

* Not illustrated in exploded view.

NOTE: The air filter should be cleaned regularly. To do this, unclip the filter cover (10) and remove the element (11). Wash in hot, soapy water, rinse and let dry completely. Reinsert the element into the base. Wipe out the cover and clip firmly back into place.

All screws in this unit have been thread locked using a special high heat compound. Dis-assembly of this unit should only be attempted using a heat gun or micro torch to pre-heat each thread prior to loosening it.

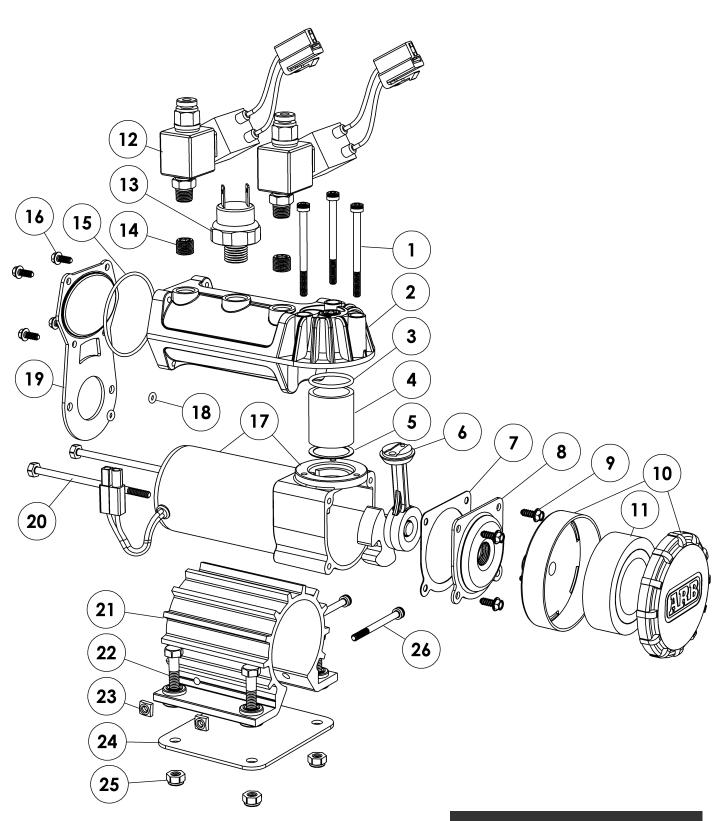
The compressor manifold must be periodically removed to clean out any condensation, etc. To do this, bleed off any residual pressure that may be in the manifold. Remove the 4 cover bolts at the end of the manifold and the 3 head bolts (01). Remove the manifold and wipe out any moisture. If there is excessive moisture in the manifold then it should be cleaned out more regularly. Refit the manifold making sure that the O-rings are in their correct position. Torque the bolts up to 1.28Nm [0.94ft-lb]. Do not over tighten. Run the compressor and check for any air leaks.



ARB

Revision Date 11/10/06

CKSA12 On-Board Air Compressor Kit



CKSA12



CKMA12 & CKMA24 Air Compressor NOTES 01 O-RING (BS010V75) 160242 5 1 02 1 MANIFOLD CAP (1/4" NPT) 320214 03 PRESSURE SWITCH (1/4" NPT) CO35 O-RING (BS031N70) 5 04 2 160241 05 1 MANIFOLD TUBE 320215 06 2 HEX BOLT (M6 x 60mm) 200703 07 COMPRESSOR HEAD ASSEMBLY 320102 1 08 SAFETY VALVE POPPET 320205 SAFETY VALVE SPRING 09 150115 10 SAFETY VALVE FITTING 320204 1 11 HEX BOLT (M6 x 125mm) 200704 200702 4 HEX BOLT (M6 x 12mm) 12 MANIFOLD SUPPORT BRACKET 13 1 320207 14 AIR LOCKER CONTROL SOLENOID (12V) 180103 # 15 NIPPLE (1/8" to 1/8" BSPT) 170501 16 PUSH-IN FITTING (5mm to 1/8" BSPP) 170201 17 3 O-RING (BS032S70) 160247 5 VALVE PLATE ASSEMBLY 320105 18 BARREL 19 320201 20 PISTON ASSEMBLY (SERVICE KIT) 320302 6 21 STICKER, CKM COMPRESSOR 210122 22 MOUNT ASSEMBLY 320101 2 MOTOR ASSEMBLY (12V) 320104 23(a) 23(b) MOTOR ASSEMBLY (24V) 320106 24 HEX BOLT (M6 x 25mm) 200405 4 CARRIAGE BOLT (M6 x 25mm) 6151082 25 4 FLAT WASHER (M6) 200709 26 **BACKING PLATE** 290603 27 4 NYLON LOCK-NUT (M6) 6151223 28 320203 CAP SCREW (M4 x 20mm) 29 1 200708 30 AIR FILTER FLANGE (1/4" NPT) 320212 1 31 AIR FILTER BASE 320501B 3 32 AIR FILTER ELEMENT (DISK TYPE) 290503 3 33 AIR FILTER COVER 320501A 3 34 O-RING (BS028N70) 160243 5 WIRING LOOM (CKMA12 & CKMA24) 180409 4 1 * RELAY (12V,40A) CO42 * 1 SWITCH (12V) 180209 SWITCH COVER (COMPRESSOR) 180212 1 SCOTCH LOCK ELEC. CONNECTOR (564) CO45 2 PLUG (1/8" BSPT) 170802 2 EYE TERMINAL, 10MM (YELLOW) 180702 EYE TERMINAL, 10MM (BLUE) CO44 INSTALLATION GUIDE, CKMA 2102MA12 FUSE,40A,MAXI TYPE 180703

Available separately or included with Air Locker kits.

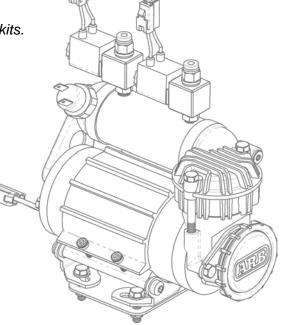
* Not illustrated in exploded view.

Specs:

Voltage	12 Volts (CKMA12), 24 Volts (CKMA24)
Current Draw	No-Load 13A (CKMA12 only)
	Load 23A (CKMA12 only)
Air Flow	75.1L/min @ 0kPa [2.65CFM @ 0psi]
	61.6L/min @ 200kPa [2.18CFM @ 29psi]
Total Weight	4.5kg [9.9lbs]
Size	145mm x 190mm x 98mm (H,L,W)
	[5.7" x 7.5" x 3.9"]
Manifold Port	¹ / ₄ " NPT [Pressure Switch] x 1
	¹ / ₈ " BSPT [Solenoid nipple] x 2
Pressure Switch	Open 690kPa [100psi]
	Closed 490kPa [70psi]
Safety Valve	OPEN @ > ~1250Kpa [180 PSI]

Notes:

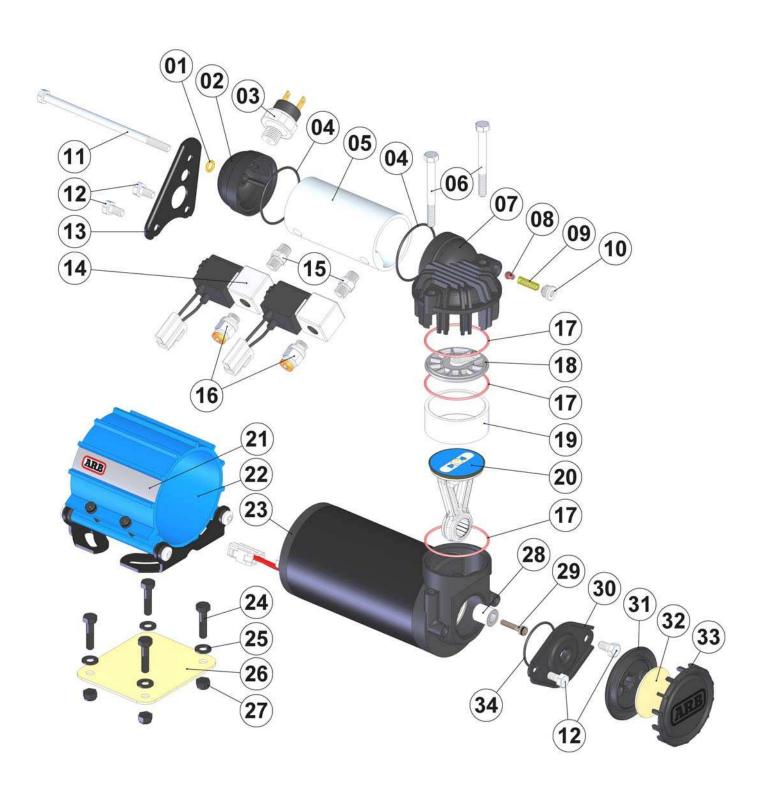
- 1 Comes pre-assembled with HEAD ASSY (07).
- 2 Motor voltage is the only difference between the CKMA12 and the CKMA24 compressors. CKM motors are serviceable. Contact ARB.
- 3 AIR FILTER BASE (31) & COVER (33) available only in AIR FILTER ASSY #320501 which also includes the element.
- 4 Wiring loom #180409 suits 12 & 24 volt systems. See full wiring diagram attached.
- 5 Complete set of O-ring seals is also available as O-ring Service Kit #320301.
- 6 PISTON ASSEMBLY (20) comes only as a service kit also containing the BARREL (19), AXLE (28), and CAP SCREW (29).
- 7 Thread lock must be applied to threads of CAP SCREW (29) and then torqued to 6 Nm [4.4 ft-lb]. CAP SCREW (29) should never be re-used once it has been fully torqued once.





Revision Date 31/07/07

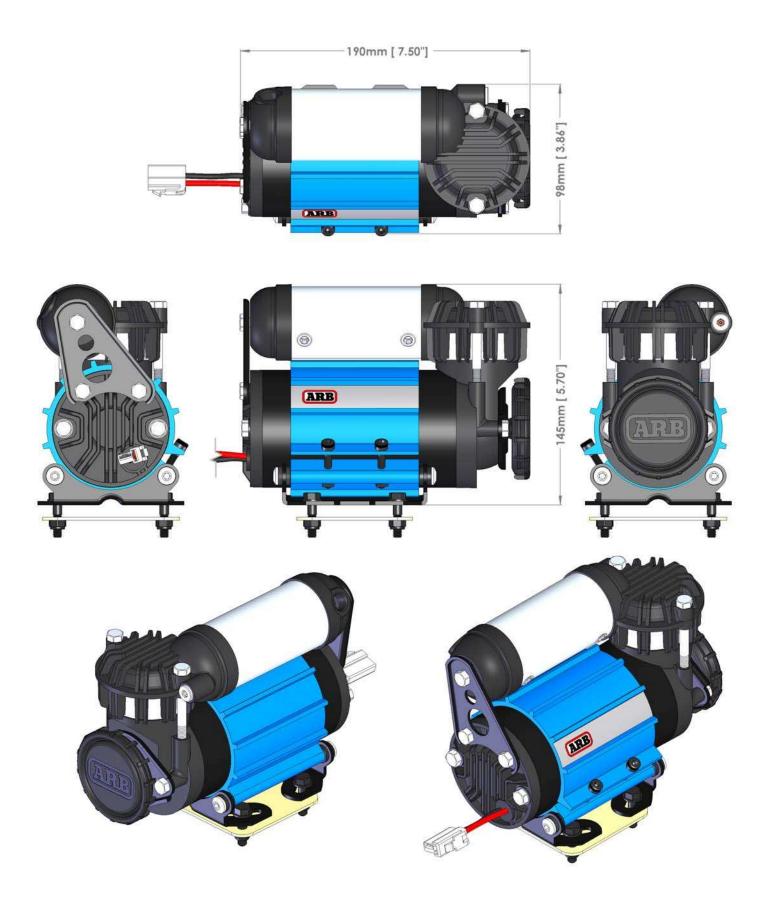
CKMA12 & CKMA24 Air Compressor – Exploded Parts Diagram



CKMA12 & CKMA24



CKMA12 & CKMA24 Air Compressor – Overall Sizes





CKMA12 & CKMA24 Air Compressor – Overview of Design Features

Description:

The ARB CKMA12 and CKMA24 compressor kits were designed specifically as a versatile, quick installing, compact yet high-flow air source to suit the ARB Air Locker, which also suits the harsh and demanding environment of the ARB Air Locker user.

Features:

- Available in 12V (CKMA12) or 24V (CKMA24) models.
- Ultra compact design makes it the highest flowing compressor in its class (voltage vs. size), and able to fit into tight areas where other high flowing compressors will not.
- Fully sealed components for moisture and dust resistance.
- Pressure switch controlled air manifold system specially designed to suit all ARB Air Locker equipped vehicles.
- Hard-anodized cylinder bore and PTFE (Teflon) impregnated carbon fibre piston seal for reduced friction and maximum trouble free life.
- New anodized mounting bracket dissipates motor heat and allows compressor to be repositioned 180°.
- Anti-vibration / sound deadening is integrated into the mount.
- Relocatable splash resistant air filter assembly for cleaner, cooler air supply and versatile waterproof air intake positioning.
- High density and high flow washable sintered bronze air filter element.
- Full wiring loom included for simplified installation and easy plug-in connectivity to Air Locker control solenoids.
- Heavy duty Maxi-Fuse equipped for professional in-line circuit protection.
- Motor is 100% ball bearing equipped, and features a unique linear brush pre-load system for extra long life, low heat and quiet operation throughout the life of the unit.
- Compressor piston is equipped with a German made high shock rated cylindrical roller bearing.
- Constructed entirely of light weight, high strength engineering grade materials, including military and aerospace standard components.
- Over-pressure safety valve equipped.
- Motor has internal thermal protection against extreme temperature damage.

Kit Includes:

- Fully assembled and tested air compressor (12 or 24V).
- Complete wiring loom w/ Air Locker solenoid plug-in contacts.
- OEM quality compressor isolating switch.
- Air Locker supply rated pressure switch.
- Relocatable splash resistant air filter with washable high-flow sintered bronze filter cartridge.
- Mounting hardware with reinforcing backing plate.
- Comprehensive photo illustrated installation guide.

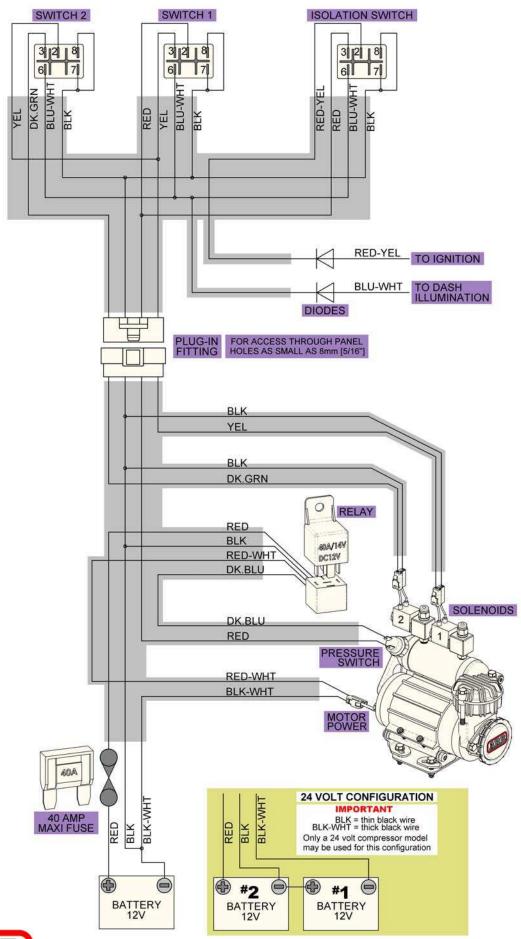
Optional Accessories:

Pump-up kit for hard mounted tyre inflation including hose, tyre filler chuck, T-piece, and recreational inflation accessories.



ARB Part # 180409

Air Compressor Loom - Wiring Diagram





170102 Bulkhead Fitting Kit, 5mm to 3/16" 01 AIR LINE (5mm NYLON) 170301 1 OUTER COMPRESSION NUT (5mm) 170602 02 03 FERRULE (5mm) 170603 3 AIRLINE SUPPORT TUBE (5mm) 170601 04 05 CENTRAL COMPRESSION NUT (5mm to 3/16") 170604 1 06 **BULKHEAD BODY** 170605 3 07 **FERRULE (3/16")** 170606 1 INNER COMPRESSION NUT (3/16") 170607 80 09 AIR LINE (3/16" STEEL) N/A 2 1 **BULKHEAD JUNCTION SUPPORT SPRING** 170701

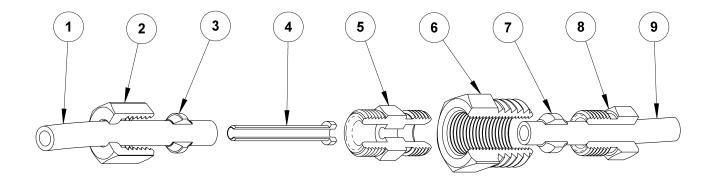
* Not illustrated in exploded view.

Specs:

External Tube Size 5mm Internal Tube Size 3/16" Bulkhead Thread 1/4" NPT

Notes:

- 1 Air line is not included with the bulkhead kit.
- 2 Air line is from seal housing.
- 3 Ferrules can be distinguished by the ID and thickness of the outer band (refer to diagram).



170	103	Bulkhead Fitting Kit, 5mm to	1/8"	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	-	AIR LINE (5mm NYLON)	170301	1
02	1	OUTER COMPRESSION NUT (5mm)	170602	
03	1	FERRULE (5mm)	170603	3
04	1	AIRLINE SUPPORT TUBE (5mm)	170601	
05	1	CENTRAL COMPRESSION NUT (5mm to 1/8")	170608	
06	1	BULKHEAD BODY	170605	
07	1	FERRULE (1/8")	170609	3
08	1	INNER COMPRESSION NUT (1/8")	170610	
09	-	AIR LINE (1/8" STEEL)	N/A	2
*	1	BULKHEAD JUNCTION SUPPORT SPRING	170701	

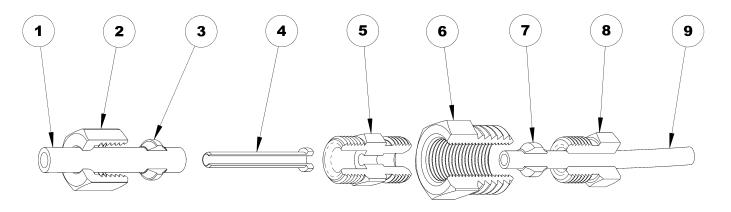
* Not illustrated in exploded view.

Specs:

External Tube Size 5mm Internal Tube Size 1/8" Bulkhead Thread 1/4" NPT

Notes:

- 1 Air line is not included with the bulkhead kit.
- 2 Air line is from seal housing.
- 3 Ferrules can be distinguished by the ID and thickness of the outer band (refer to diagram).





170105		105	Bulkhead Fitting Kit, 3.5mm O-ring	g type	
	ITEM #	QTY	DESCRIPTION	PART#	NOTES
	01	-	AIR LINE (5mm NYLON)	170301	1
	02	1	OUTER COMPRESSION NUT (5mm)	170602	
	03	1	FERRULE (5mm)	170603	
	04	1	AIRLINE SUPPORT TUBE (5mm)	170601	
	05	1	CENTRAL COMPRESSION NUT (5 to 3.5mm)	170615	
	06	1	O-RING (BS104N70)	160234	2
	07	1	BULKHEAD BODY (3.5mm O-RING TYPE)	170611	
	08	-	AIR LINE (3.5mm COPPER)	N/A	3
	*	1	BULKHEAD JUNCTION SUPPORT SPRING	170701	

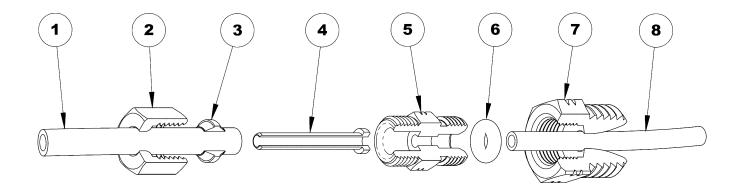
* Not illustrated in exploded view.

Specs:

External Tube Size 5mm Internal Tube Size 3.5mm Bulkhead Thread 1/4" NPT

Notes:

- 1 Air line is not included with the bulkhead kit.
- 2 For replacement O-ring use BS104 Nitrile 70.
- Air line is from seal housing.



1701	801	Bulkhead Fitting Kit, 5 to 3.5	5mm	
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	-	AIR LINE (5mm NYLON)	170301	1
02	1	OUTER COMPRESSION NUT (5mm)	170602	
03	1	FERRULE (5mm)	170603	3
04	1	AIRLINE SUPPORT TUBE (5mm)	170601	
05	1	CENTRAL COMPRESSION NUT (5 to 3.5mm)	170615	
06	1	BULKHEAD BODY	170605	
07	1	FERRULE (3.5mm)	170614	3
80	1	INNER COMPRESSION NUT (3.5mm)	170613	
09	-	AIR LINE (3.5mm COPPER)	N/A	2
*	1	BULKHEAD JUNCTION SUPPORT SPRING	170701	

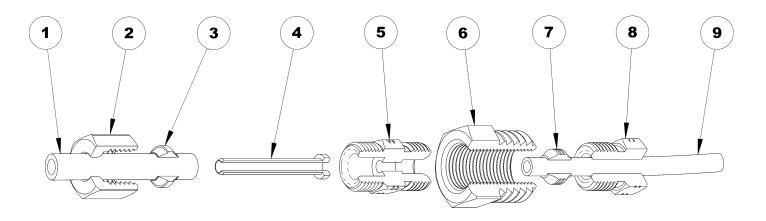
* Not illustrated in exploded view.

Specs:

External Tube Size 5mm
Internal Tube Size 3.5mm
Bulkhead Thread 1/4" NPT

Notes:

- 1 Air line is not included with the bulkhead kit.
- 2 Air line is from seal housing.
- 3 Ferrules can be distinguished by the ID and markings on the outer band (refer to diagram).





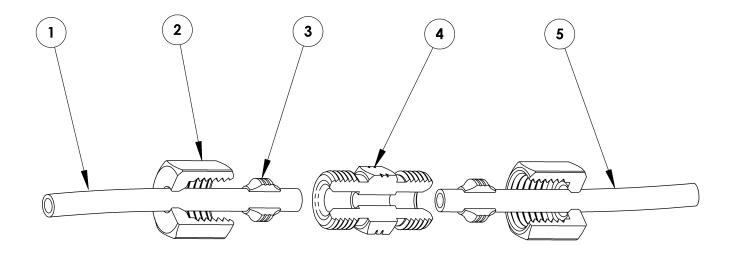
170′	Air Junction Kit, 3.5mm to 3			
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	AIR LINE (3.5mm COPPER, 250mm LONG)	170406	
02	2	OUTER COMPRESSION NUT (3.5mm)	170612	
03	2	FERRULE (3.5mm)	170614	
04	1	CENTRAL COMPRESSION NUT (3.5 to 3.5mm)	170616	
05	-	EXISTING AIR LINE (3.5mm COPPER)	N/A	1

Specs:

Tube Size 3.5mm

Notes:

1 Only one 250mm length of air line is supplied.



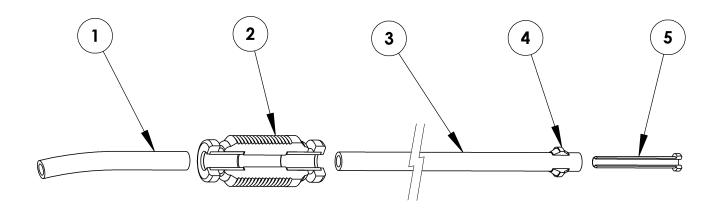
ASK001 Air Line Service Kit, 5mm PART# EXISTING AIR LINE (5mm NYLON) 01 N/A 1 02 CONNECTOR (5mm) 170206 03 AIR LINE (5mm DIA X 2m LONG) 170302 04 FERRULE (5mm) 170603 AIR LINE SUPPORT TUBE (5mm) 170601

Specs:

Tube Size 5mm

Notes:

Only one 2 meter length of air line is supplied.





HD	٩L	Heavy Duty Air Line Kit		
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	ADAPTOR, 3/8-24UNF TO JIC-4	170627	1
02	1	AIR LINE, REINFORCED JIC-4,1.2M	170304	
03	1	BRACKET,AIR LINE RETAINING	220103	
04	1	ADAPTOR,1/8NPP TO JIC-4	170628	
05	1	CLIP, AIR LINE RETAINING, P3052	150403	
06	1	AIR FITTING,STRAIGHT,R1 5 1/8"	170201	
07	2	SCREW,BUT HEAD TEK,20mm X 8G	6151143	

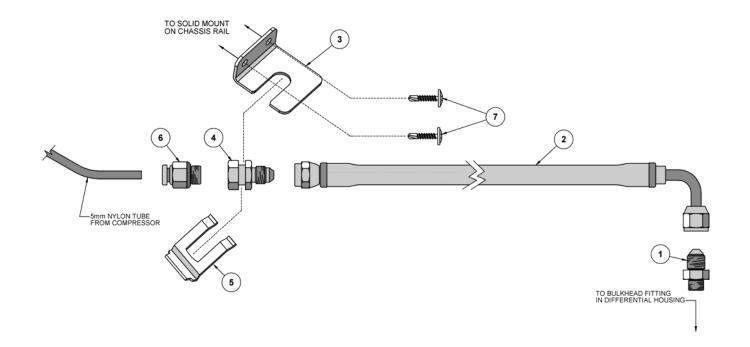
Specs:	
Push-in Size Bulkhead Thread Hose Length	••••
Notes:	

1 This adaptor is made from durable stainless steel to withstand the high tension rating of the reinforced hose.

Where a vehicle is used in extreme conditions, including snow drifts, heavy scrub, fallen trees, etc, and there is concern about the blue nylon air line being damaged, then ARB can offer a heavy duty reinforced air line to use in the exposed area between the chassis of the vehicle and the axle assembly.

NOTE:

When installing a heavy duty air line kit, make sure there is sufficient slack in the installed hose to allow for full droop of the axle.







290311 **RD Compressor Piston Service Kit** DESCRIPTION 80 **BARREL** 290309 PISTON/CONROD ASSEMBLY 290310 SHIM 0.2mm [0.008"] 150501 1 SHIM 0.4mm [0.016"] 150502 **HEAD O-RING** 160214 07 **PISTON RING** 290302 **BACKING O-RING** 160213 **INSTALLATION GUIDE** 210508

* Not illustrated in exploded view.

Specs:

Suits RDCKA, RDCKA24, RDCP, RDCPA

Notes:

3

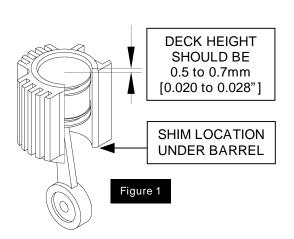
1 Shims required only for deck height adjustment.

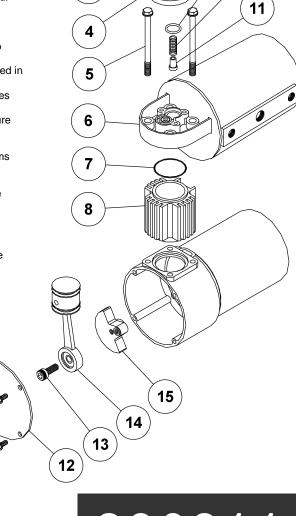
9

10

INSTALLATION:

- Remove compressor air filter cover (01), air filter (02) and hex head screws (03).
- 2. Remove the air filter base (04) and pay particular attention to the exhaust valve assembly (09-11), as these components are now loose. If this assembly falls out, refer to diagram opposite for reinstallation.
- 3. Remove cylinder head bolts (05) and carefully remove cylinder head (06) and the head O-ring (07). Discard the old O-ring.
- 4. Remove crankcase cover plate (12) and the cap screw (13) securing the piston and conrod assembly (14) to counterweight (15). Check between the piston/conrod assembly and the counterweight for a washer. If this washer is present, it <u>must</u> also be used in the rebuild.
- 5. Remove the barrel (08), piston and conrod as an assembly and discard.
- Clean the cap screw (13) threads and apply Loctite 272 as per tube instructions.
- Fit new piston/conrod assembly (with washer between conrod and counterweight if applicable – see step 4) to counterweight with the cap screw and using a torque wrench, tighten to 11Nm [8 ft-lb].
- 8. Carefully fit barrel over piston ensuring the piston rings are not damaged in the process.
- 9. With barrel fully seated on crankcase, rotate motor through 360 degrees (one full turn) and bring the piston to top dead centre (TDC).
- Measure the deck height (see Fig. 1) with a depth micrometer, to ensure the distance of the piston crown to the top of the barrel is within specification. Deck height 0.5mm +0.2/-0.0 [0.020" +0.008/-0.000].
- 11. If deck height is not within specification, insert one of the supplied shims below the barrel to adjust.
- 12. Recheck deck height.
- Clean the cylinder head bolt threads and apply Loctite 272 as per tube instructions.
- 14. Fit new O-ring with the cylinder head and secure the bolts, torqued to 9Nm [7 ft-lb] in a 1,3,4,2 sequence (diagonal pattern).
- Refit crankcase cover plate and air filter base ensuring exhaust valve assembly is installed complete and correct. Refit air filter (smooth side down) and air filter cover.
- 16. Test run compressor and check for correct operation.





290311

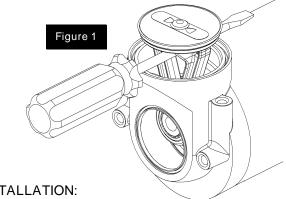


320302 CKM Compressor Piston Service Kit ITEM # QTY DESCRIPTION PART # NOTES 08 1 BARREL 320201 09 1 PISTON ASSEMBLY 320103 10 1 AXLE 320203 11 1 CAP SCREW (M4 X 20mm) 200708 * 1 INSTALLATION GUIDE 210511

* Not illustrated in exploded view.

PISTON REMOVAL:

- Unscrew the air filter assembly. Remove air filter flange bolts (13), air filter flange (12) and O-ring (14).
- Remove head bolts (01) and head assembly (02). On CKMA models the bolts securing the manifold support bracket will also need to be removed.
- Remove the BARREL (08). Place a screwdriver under the head of the
 piston as shown in Fig.1. This will stop the piston from moving through a full
 stroke.
- Unscrew the CAP SCREW (11) in an anti-clockwise direction and extract it along with the AXLE (10).
- Lift the PISTON ASSEMBLY (09) from the compressor motor.
- 6. Discard the PISTON ASSEMBLY, BARREL, AXLE and CAP SCREW.

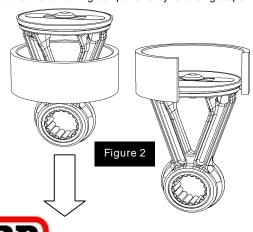


PISTON INSTALLATION:

- Ensure the pocket that the AXLE sits in is clean and free from damage.
- 8. With the new PISTON ASSEMBLY (09) and BARREL (08) assembled together, put them in place on the compressor motor.

NOTE: Be careful not to damage to the piston seal. The seal forms a cup shape and must be assembled into the barrel in the correct direction. Place the bearing end of the piston into the barrel first then pull the piston into the barrel as shown in Fig. 2.

- 9. Align the piston bearing then insert the AXLE (10) through the bearing so that it seats firmly into the pocket in the motor.
- Apply high strength thread lock (ie. Loctite 272) to the CAP SCREW (11).
 Insert the screw through the AXLE (10) into the motor and tighten by hand.
- 11. Using a torque wrench tighten the CAP SCREW (11) to 6.0Nm (4.4 ft-lb). Use the same technique with the screwdriver as in step 3 to prevent the piston from moving through a full stroke.
- 12. Re-assemble the remaining components by reversing steps 1 and 2.

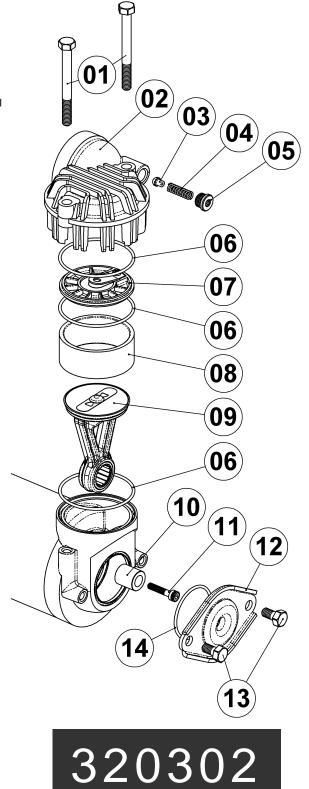


Specs:

Suits CKMA12, CKMA24, CKMP12

Notes:

O-ring seals are available as O-ring Seal Kit #320301.



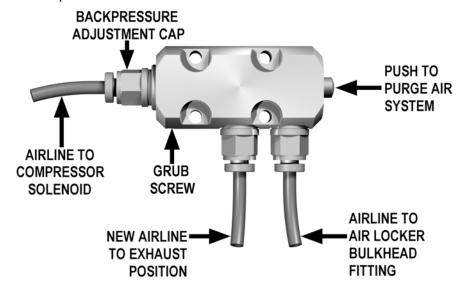
Revision Date 3/08/07

170′	110	Purge Valve Kit		
ITEM #	QTY	DESCRIPTION	PART#	NOTES
	1	PURGE VALVE ASSEMBLY	170110	
	4	SCREW, BUT HEAD TEK, 32mm X 8G	6151319	
	2	CABLE TIE	180302	
	1	AIR LINE (5mm DIA X 1m LONG)	170303	
		· ·		

Specs:

Body Dimensions 63mm x 32mm x 21mm Backpressure Reg 3-4psi [20-27kPa]

The Air Locker Purge Valve is designed for use with Air Locker differentials to purge impurities such as moisture, dust and oil from the airline that can impair the performance of the Air Locker. Pressing the purge button blows any contaminants out the exhaust port of the valve, maintaining low moisture levels in the air system and eliminating the possibility of passing contaminants back and forth through the solenoid. The Purge Valve also incorporates a backpressure regulator that has been factory set to 3-4psi [20-27kPa] preventing oil misting problems associated with poor axle ventilation.



INSTALLATION:

The Purge Valve should be located along the existing airline as close to the differential as practical, in a position were it can be firmly secured to a part of the vehicles sprung mass like body or chassis rail (NOT THE AXLE ASSEMBLY OR SUSPENSION). The kit contains self-drilling and taping screws and cable ties either of which can be used to secure the Purge Valve to the car. Use the screws when possible to firmly secure the Purge Valve to the body or chassis.

NOTE: the four holes in the Purge Valve provided for the screws must not be drilled out to take larger screws, this could cause permanent internal damage to the valve.

When the location for the Purge Valve has been decided, cut the existing airline at a point which will allow it to be plugged into the Purge Valve as shown above. The extra airline supplied in the kit is to be plugged into the exhaust port (the remaining fitting) and fed somewhere out of the way like into a chassis rail. The exhaust airline must not be connected directly to the axle breather port as this will pressurize the axle and counteract the affect of the breather.

BACKPRESSURE ADJUSTMENT:

NOTE: ARB does not recommend that the backpressure be altered.

The backpressure regulator is adjustable but has been factory set to between 3 and 4psi [20-27kPa]. To adjust the backpressure firstly make sure the Air Locker system is switched off and disengaged. The airlines can remain plugged in. The adjustment is made via the cap (see above), which is locked in place with a grub screw. With the grub screw loosened the backpressure is increased by screwing the cap in, and reduced by screwing the cap out. Make sure to tighten the grub screw after adjustment.

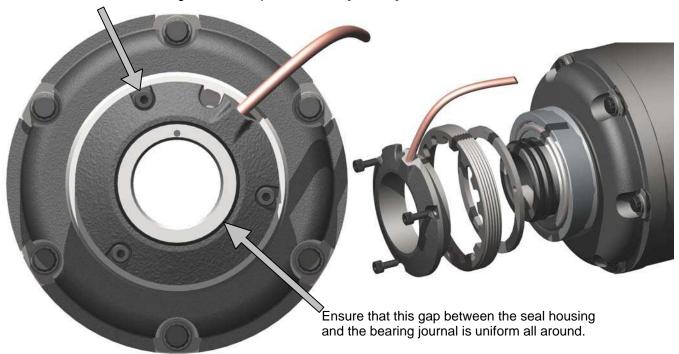


5.1 SCREW SECURED SEAL HOUSING SET-UP

On Air Locker models in which the carrier bearings are pre-loaded with adjuster nuts, two types of seal housing may be fitted. The first type, the screw secured type, must be adjusted for concentricity and is discussed below. The second type is secured by a spring clip and doesn't require adjustment (refer to section 5.2).

When installing the screw secured type extra care must be taken to ensure that the seal housing is concentric with the Air Locker bearing journal. Failure to observe this can cause an oil pumping effect due to the eccentric offset, and, in extreme cases, if metal to metal contact does occur the resultant damage and wear can cause air leaks.

Once seal housing has been centralized, apply thread locking compound to screw threads, and tighten to a torque of 4.75Nm [3.5 ft-lb].



The following installation procedure is recommended to ensure that the seal housing is concentric to the bearing journal and that the seals are airtight:

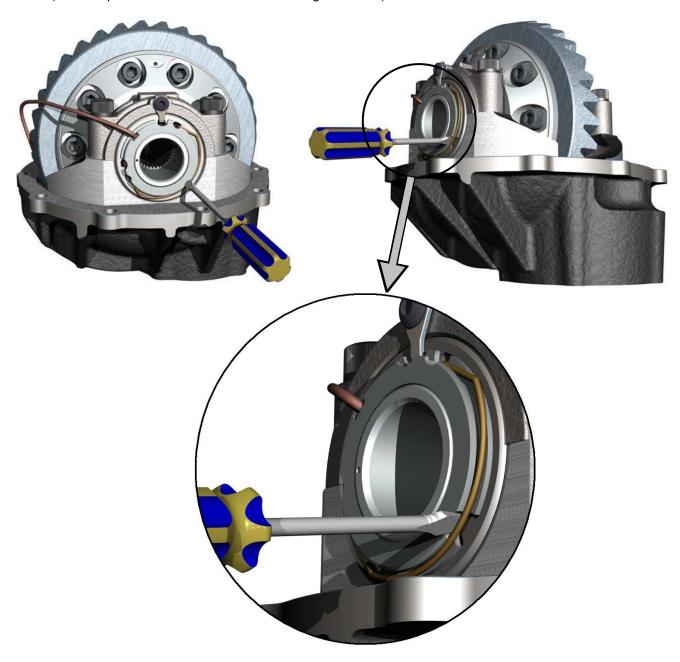
- 1. Clean the sealing surfaces of the seal housing and bearing journal with a penetrating oil (e.g. WD40) and ensure that these surfaces and the airways are clean and free of contaminants (e.g. dirt, water, metal filings etc.).
- 2. Inspect the O-rings for damage or contamination due to dirt.
- 3. Generously lubricate the sealing surfaces and O-rings with oil (differential oil is preferred).
- 4. Insert the O-rings into the grooves of the seal housing or bearing journal making sure that they are not twisted.
- 5. Gently push the seal housing onto the Air Locker with a twisting motion. This will seat the O-rings without twisting them or causing damage.
- 6. Apply 620kPa [90 psi] shop air to the end of the seal housing tube, and rotate the Air Locker a few turns to seat the O-rings.
- 7. Bend the tubing into position, and install the bulkhead fitting (refer to the Air Locker Installation Guide).
- 8. Rotate the seal housing until the cutout lines up with the closest adjuster nut slot to the locking tab position at the center of the bearing cap, and then assemble the locking tab.
- 9. With the shop air still applied, insert the seal housing screws and lightly finger tighten them.
- 10. Using a feeler gauge in the gap between the bearing journal and seal housing, check for an even gap all the way around. Be careful not to damage the O-ring with the feeler gauge. If the gap is uneven with the air applied there may be too much tension on the seal housing tube. Bend the tube to closer fit the seal housing position.
- 11. With the shop air still applied to the bulkhead fitting, rotate the drive pinion at an even speed and slowly tighten the seal housing screws to a torque of 4.75Nm [3.5 ft-lb].
- 12. As the pinion is still being rotated, check once again with the feeler gauge that the seal housing is concentric.



5.2 SPRING CLIP SECURED SEAL HOUSING SET-UP

Spring clip retained seal housings do not require any installation adjustments to achieve a concentric set-up. The following procedure is recommended for installing spring clip secured seal housings:

- 1. Clean the sealing surfaces of the seal housing and bearing journal with a penetrating oil (eg. WD40) and ensure that these surfaces and the airways are clean and free of contaminants (e.g. dirt, water, metal filings etc.).
- 2. Inspect the O-rings for damage or contamination due to dirt.
- 3. Generously lubricate the sealing surfaces and O-rings with oil (differential oil is preferred).
- 4. Insert the O-rings into the grooves of the seal housing making sure they are not twisted.
- 5. Gently push the seal housing onto the Air Locker with a twisting motion. This will seat the O-rings without twisting them or causing damage.
- 6. Rotate the seal housing until one of its two large cutouts line up with the adjuster nut slot that is closest to the locking tab position at the center of the bearing cap.
- 7. Assemble the locking tab.
- 8. Install the spring clip by first hooking both ends of the clip into the small aligned cutouts of the seal housing and the adjuster nut, and then snapping the clip into the groove of the seal housing using a screwdriver. (The completed installation is shown in the figure below.)





5.2 SPRING CLIP SECURED SEAL HOUSING SET-UP

- 9. Check that the seal housing is now secured from rotating and that it is sitting flat against the adjuster nut.
- 10. Check that the toe of the adjuster nut locking tab is not in contact with the seal housing as this would prevent the seal housing from floating correctly. Bend the toe of the tab upward with a screwdriver if necessary.
- 11. Bend the seal housing tube into a hook shape before trimming and connecting it to the bulkhead fitting.

 This will ensure that the seal housing tube is not under any tension so that the seal housing can still float.
- 12. Check that the seal housing tube is not in contact with any part except the seal housing and the bulkhead fitting (e.g., the bearing cap). Some clearance should exist between the tube and all other parts (especially moving parts) to prevent the possibility of contact from vibration or shock.

NOTE:

To check if the seal housing is floating correctly; rotate the drive pinion flange back and forth while watching the seal housing. The seal housing should rotate very slightly back and forth against the adjuster nut face but it should always stay perfectly flat against the flat face of the adjuster nut. If the seal housing appears to pull away from the adjuster nut each time you reverse the direction of the drive pinion then there are outside forces pulling/pushing against the seal housing which could result in an oil pumping tendency created by non concentric pressure on the O-rings. Check the locking tab is not in contact with the seal housing and the seal housing tube is not pulling on the seal housing.

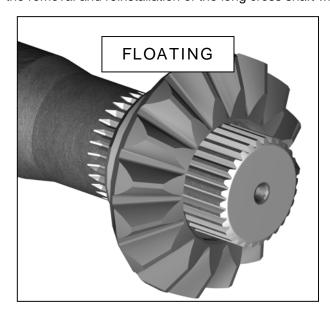


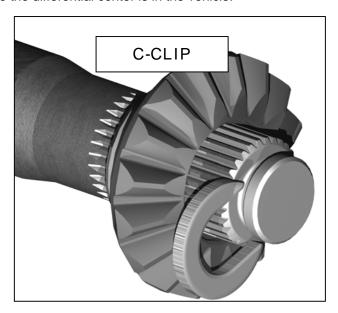
5.2

AXLE IDENTIFICATION

FLOATING vs. C-CLIP RETAINED AXLES

Floating axles are connected to the differential centre only by the sliding fit of the spline, whereas C-clip retained axles are completely retained to the vehicle by small 'C' shaped clips which assemble into a small groove on the inboard ends of the axle shafts on the inside of the differential. Air Locker differentials which support the use of C-clips incorporate a C-clip access window in the side of the differential case. These models will usually require the removal and reinstallation of the long cross shaft while the differential center is in the vehicle.





SEMI FLOATING vs. FULLY FLOATING AXLES

The difference between fully-floating (FF) and semi-floating (SF) rear axle shafts can usually be identified by the configuration of the hub in the centre of the wheels (refer to the diagram below). Fully floating axle shafts are independent of the wheel, and usually bolt onto a protruding part of the hub assembly. For this reason, fully-floating axle shafts can usually be completely removed from the vehicle without removing the wheel or disassembling the hub. In the case of semi-floating axle shafts, the wheel or rim usually bolts directly to a flat flanged section on the end of the axle shaft. Semi-floating axle shafts used in conjunction with drum brakes usually employ a thrust block inside the differential center to enable an end-float condition to be set-up at the hub end where the shafts are supported by the wheel bearing(s).





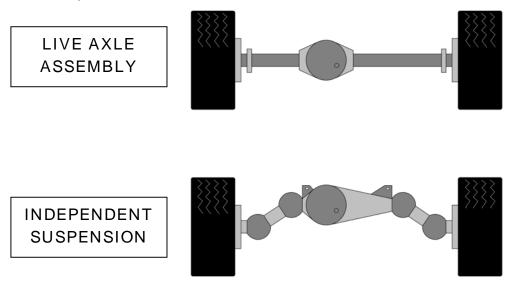


AXLE IDENTIFICATION

LIVE AXLE ASSEMBLIES vs. INDEPENDENT SUSPENSION (IFS & IRS)

Live axle assemblies are the most common axle in four wheel drive vehicles where the wheels, the axle shafts, and the differential centre all travel as a part of one straight rigid unit. In the case of a live axle, when one wheel is articulated upwards, the differential and the opposite wheel are forced to angle upwards with it.

Independent suspensions are those where the differential is hard mounted to the chassis of the vehicle and the wheels are only connected to the differential by independently articulating CV shafts or half shafts. In independent suspensions the upward movement of one wheel has no effect on the opposite wheel except by means of an anti-sway bar.

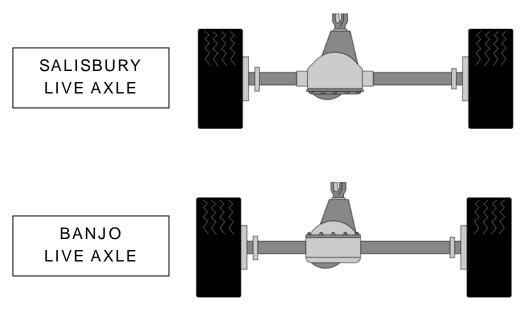


SALISBURY LIVE AXLES vs. BANJO LIVE AXLES

Most live axle assemblies can be classified as either Salisbury or Banjo style.

Also known as a Carrier Tube axle, the Salisbury live axle assembly consists of a cast centre section into which the axle tubes are permanently attached by welding or press fit. The differential centre is removed/installed into the assembly through a cover plate on the side of the axle assembly opposite to the drive pinion flange.

The Banjo style live axle, also known as the Hotchkiss, the Drop Out, or the Third Member style axle assembly, consists of a removable cast centre section most commonly referred to as the third member, and a sheet metal housing incorporating the axle tubes. The third member is attached to the housing by a circular bolted flange. In the case of Banjo style axles, the third member must be completely removed from the vehicle and supported on a workbench before the differential centre can be removed from or installed into the third member.





AXLE MODIFICATION

ECCENTRIC AXLE PROFILE

Some axle shafts may have been manufactured with too high a degree of eccentricity to maintain clearance inside the bearing journal of the Air Locker. If this is the case then the shaft or shafts should be modified in a lathe to relieve any of the axle shaft that comes in contact. Always make sure that the relief cut ends with at least a 2.5mm [0.10"] radius to retain full strength in the axle shaft.



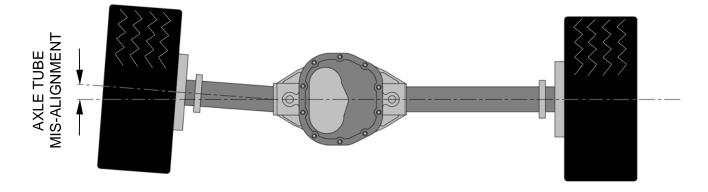


5.5 INSPECTION FOR BENT AXLES

Collision damage or heavy off-rod use of your vehicle in the past may have resulted in some degree of bending in the axle tubes. The figure below, although exaggerated, shows the misalignment of the axle tubes. ARB strongly recommends that you have your axle assembly inspected for concentricity and straightness before installing your Air Locker as any misalignment may result in excessive wear and/or failure of your differential and axle shafts.

Some specific symptoms of bent axle tubes include:

- The cross shaft broken adjacent to the front edge of the pinion.
- Excessive wear on the side gear seats.
- Excessive wear on the axle splines.





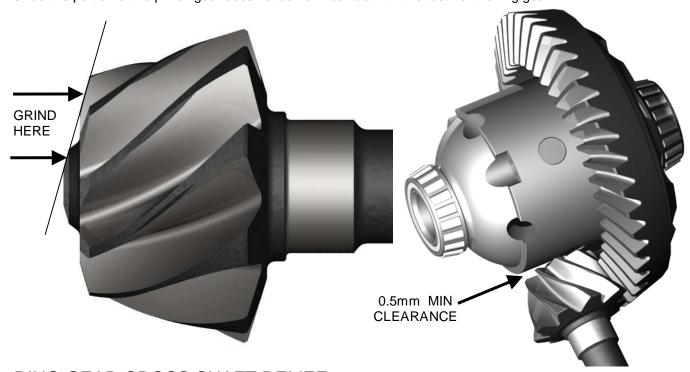
5.6 RING & PINION GEAR MODIFICATIONS

PINION FACE CLEARANCE

Some aftermarket pinion gears (and occasionally some factory pinion gears) extend so far towards the differential centre that they make contact with the body of the Air Locker. If this is the case then the end of the pinion gear will have to be carefully ground or machined away until at least 0.5mm [0.020"] of clearance exists.

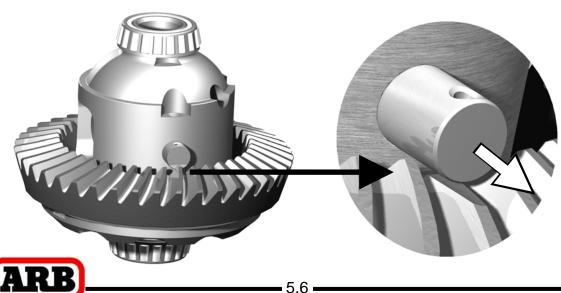
NOTE: If less than 0.5mm [0.020"] of clearance exists between the pinion gear and the Air Locker then contact could still be made when the assembly flexes under high torque.

Before making any modifications to the overall length of the pinion gear you should first record the pinion depth (usually marked on the end of the pinion) and then add the amount removed to this depth and mark it on the pinion as the new pinion depth. Never attempt to modify the Air Locker to create clearance as this would weaken the Air Locker. Removing material from the very end of the pinion gear will not harm the ring and pinion set since this portion of the pinion gear does not come in contact with the teeth of the ring gear.



RING GEAR CROSS SHAFT RELIEF

In the case of C-clip differentials, the long cross shaft of the Air Locker must be removed to install the C-clips which retain the axles. Using aftermarket ring & pinion sets that are numerically higher than the original ratio (e.g., changing from 3.56:1 to 4.88:1) can sometimes mean that one of the ring gear teeth will block the path of the cross shaft. NEVER MODIFY THE CROSS SHAFT TO CORRECT THIS PROBLEM. Simply grind a small relief into the ring gear tooth directly across from the cross shaft hole as shown below. A small relief of this type will not affect the strength of the ring gear.



SOLENOID VALVE

180103		Solenoid Valve (12V)		
ITEM #	QTY	DESCRIPTION	PART#	NOTES
01	1	DUST FILTER		
02	1	TOP NUT	540238	
03	1	O-RING		
04	1	COIL		1
05	1	VALVE STEM		
06	1	O-RING		
07	1	PLUNGER		
08	1	NIPPLE (1/8" to 1/8" BSPT)	170501	2
09	1	VALVE BODY		
10	1	PUSH-IN FITTING (5mm to 1/8" BSPP)	170201	2

Specs:

Pressure 0-10 Bar (145psi) Voltage 12V/5W

Notes:

- Do not apply power to the solenoid with the coil removed as this could cause permanent damage to the coil.
- 2 Not supplied with 180103 Solenoid Valve (12V)

One of the features of this solenoid is that is can be easily serviced. The procedure for dismantling the solenoid valve is as follows:

- 1. Unscrew and remove the Dust Filter (01), Top Nut (02), O-Ring (03) and Coil (04).
- 2. Unscrew the Valve Stem (05) from the Valve Body (09).
- 3. Remove the Plunger (07) from the Valve Stem.
- 4. The valve can now be cleaned and serviced, making sure the bottom of the plunger and its seat in the body are in good condition.

180103

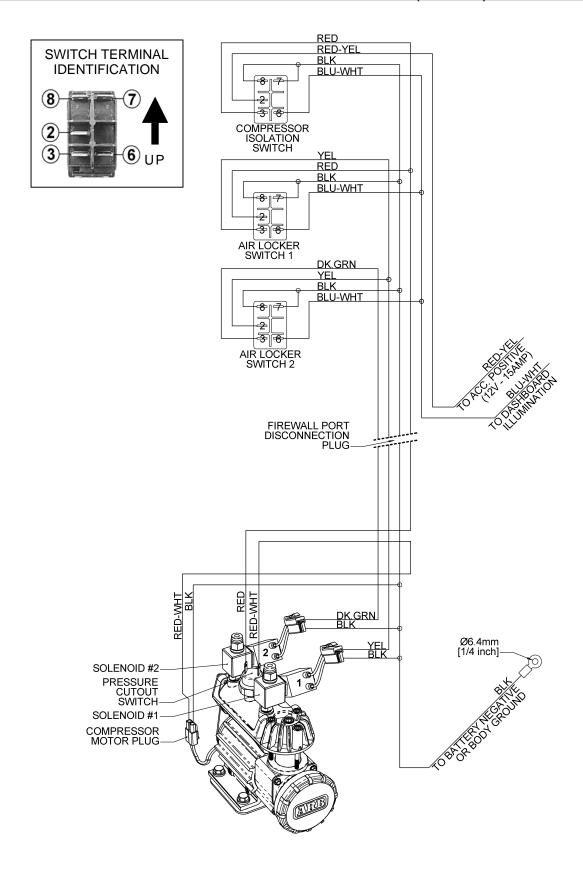
5.8 COMPRESSOR WIRING DIAGRAMS

RDCKA 12V VEHICLE LOOM RDCKA24 24V VEHICLE LOOM SWITCH 2 SWITCH 1 ISOLATION SWITCH SWITCH 2 SWITCH 1 ISOLATION SWITCH 3 2 8 3 | 2 | 8 3/12/1/8 3||2| | 8| 3|||2|| || 8|| 3||2| | 8| **a** 7 Î7 **a** 7 [a][7 6 6 BLU-WHT RED-YEL BLU-WHT BLU-WHT DK.GRN RED-YEI BLU-WHT BLK BLK RED BLK RED RED DK.GRN BLK BLK RED BLK BLK BLK BLK BK 띪 녣 Á Á 茰 RED-YEL RED-YEL _TO IGNITION TO IGNITION TO DASH ILLUMINATION **BLU-WHT BLU-WHT** TO DASH ILLUMINATION DIODES PLUG-IN FITTING PLUG-IN FITTING RED RED BLK BLK PLUG-IN RELAY PLUG-IN 12V RELAY DK.BLU DK.BLU **RED-WHT** RED-WHT 30 AMP FUSE 30 AMP FUSE DK.BLU DK.BLU RED RED PRESSURE LIMIT SWITCH PRESSURE LJMIT SWITCH RED-WHT PLUG-IN FITTING PLUG-IN FITTING COMPRESSOR MOTOR COMPRESSOR MOTOR BLK-WHT SOLENOID 1 SOLENOID 1 **BLK** BLK YEL YEL PLUG-IN FITTING PLUG-IN FITTING SOLENOID 2 SOLENOID 2 BLK BLK DK.GRN PLUG-IN FITTING DK.GRN PLUG-IN FITTING RED BLK RED BATTERY 1 (1) BATTERY 12V BATTERY 2 12V



5.8 COMPRESSOR WIRING DIAGRAMS

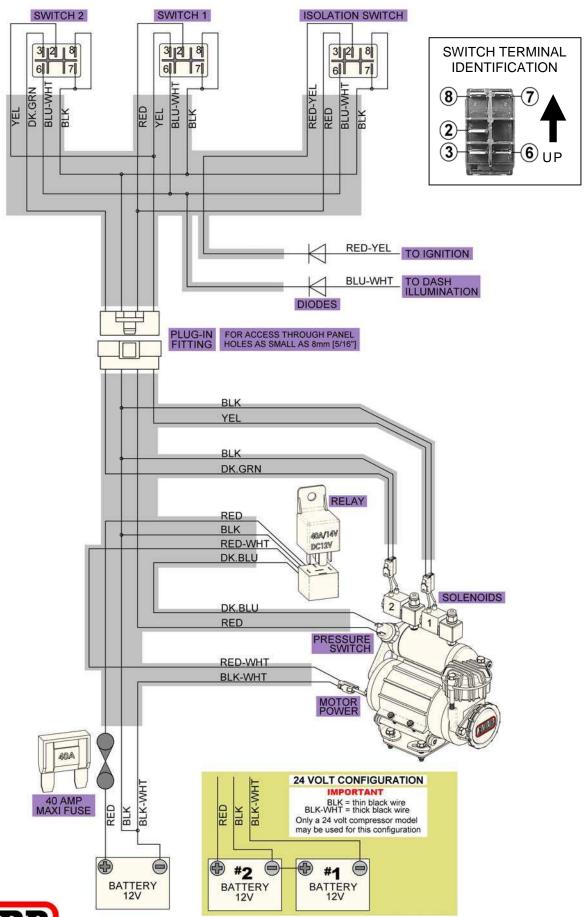
CKSA12 12V-15A VEHICLE LOOM (180408)





5.8 COMPRESSOR WIRING DIAGRAMS

CKMA SERIES 12V / 24V-40A VEHICLE LOOM (180409)



ARB

5.9 RDCKA FAULT DIAGNOSIS PROCEDURE

The following describes an effective procedure for tracing an electrical fault in an RDCKA air compressor which has been wired using a genuine ARB wiring loom - ARB#180405.

For a full wiring loom diagram refer to Air Locker Service & Parts Manual - Section 5.8 All steps must be performed in the order listed here for an accurate assessment.

NOTE:

Before attempting to troubleshoot a malfunctioning compressor, always make sure that the compressor manifold has been de-pressurized, all connections have been made according to the wiring diagram, the vehicle's ignition is in the accessory power position, and that the isolating switch has been turned 'ON'.

NOTE:

The 'battery voltage' referred to below should be approximately 12V in the case of the RDCKA and 24V in the case of the RDCKA24.

STEP

1

Using a multimeter, check the voltage at the battery terminals to make sure the battery is working and is fully charged.

Did each battery measure at least 11.5 volts?

- YES Proceed to STEP 2.
- NO Insufficient battery voltage. Recharge or replace the battery.
- Disconnect the compressor motor from the wiring loom at the connector plug. Run a wire directly from the negative terminal of the first or only battery to the BLACK wire of the compressor motor. Momentarily connect a wire from the positive terminal of the second or only battery to the RED wire of the compressor motor.

Did the compressor activate when the wires were connected?

- YES Remove the extra wires and reconnect the compressor motor plug. Proceed to STEP 3.
 - NO Internal compressor problem. Contact ARB for assistance.
- Remove the fuse from the fuse socket in the compressor wiring loom. Using a multimeter, check the continuity (resistance) across the 2 contacts of the fuse.

 Did the resistance measure less than 1 Ohm?
- YES Proceed to STEP 4.
- NO Blown fuse. Replace with a new 30A fuse of same type.
- Using a multimeter, check for battery voltage at both of the contacts in the fuse socket. Was battery voltage detected at one of the two contacts?
- YES Reconnect the fuse into the socket. Proceed to STEP 5.
- NO Wiring fault between the positive battery terminal and the fuse socket. Check the wire connection at the battery terminal and/or replace the wiring and/or fuse socket.
- Using a multimeter, check for battery voltage at the SOLID RED wire at the relay block (i.e., the wire leading directly from the fuse).

Was battery voltage detected?

- YES Proceed to STEP 6.
 - NO Wiring fault between the fuse and the relay. Replace wiring and/or fuse socket.
- Using a multimeter, check for battery voltage at the RED/YELLOW wire connected to terminal #2 of the compressor isolating switch.

(i.e., the wire leading from the vehicle's accessory power.)

Was battery voltage detected?

- YES Proceed to STEP 7.
- NO Wire has not been connected correctly or accessory power has not been turned on. Attach RED/YELLOW wire to live accessory power.



5.9 RDCKA FAULT DIAGNOSIS PROCEDURE

STEP

Using a multimeter, check for approximately 12V at the SOLID RED wire connected to terminal #3 of the compressor isolating switch. (while still connected)

Was approximately 12V detected?

- YES Proceed to STEP 8.
 - NO Switch fault or switch not turned 'ON'. Replace switch or toggle switch to 'ON' position.
- Using a multimeter, check for approximately 12V at the SOLID RED wire connected to the pressure switch attached to the compressor tank.

Was approximately 12V detected?

- YES Proceed to STEP 9.
 - NO Wiring fault between the isolating switch and the pressure switch. Replace wiring.
- Using a multimeter, check for approximately 12V at the DARK BLUE wire connected to the pressure switch attached to the compressor tank. (while still connected)

Was approximately 12V detected?

- YES Proceed to STEP 10.
 - NO Pressure switch fault or tank not de-pressurized. Replace pressure switch or drain tank.
- Using a multimeter, check for approximately 12V at the DARK BLUE wire at the relay block. (i.e., the wire leading directly from the pressure switch)

Was approximately 12V detected?

- YES Proceed to STEP 11.
- NO Wiring fault between pressure switch and relay block. Replace wiring.
- Disconnect the relay from the relay block. Using a multimeter, check the continuity between the SOLID BLACK wire at the relay block and the negative terminal of second or only battery.

 Did the resistance measure less than 1 Ohm?
 - YES Reconnect the relay to the relay block. Proceed to STEP 12.
 - NO Wiring fault in the ground wire between the battery and the relay block. Replace wiring.
- Using a multimeter, pierce the RED/WHITE wire connected to the relay block and check for battery voltage while the relay is still connected.

Was battery voltage detected?

- YES Proceed to STEP 13.
- NO Relay fault. Replace with a new 40A relay of the same type.
- Disconnect the compressor motor from the wiring loom at the connector plug. Using a multimeter, check for battery voltage at the RED/WHITE wire on the loom side of the plug.

Was battery voltage detected?

- YES Proceed to STEP 14.
- NO Wiring fault between the relay and the compressor motor connector. Replace wiring.
- Using a multimeter, check the continuity (resistance) between the SOLID BLACK wire on the loom side of the plug (not on the compressor side) and the negative terminal of the first or only battery.

 Did the resistance measure less than 1 Ohm?
 - YES Intermittent fault or internal compressor problem. Contact ARB.
 - NO Wiring fault in the ground wire between the battery and the compressor motor. Replace wiring.



■ 5.9

5.9 CKMA12 & CKMA24 FAULT DIAGNOSIS PROCEDURE

The following describes an effective procedure for tracing an electrical fault in a CKMA12 or CKMA24 compressor which has been wired using a genuine ARB wiring loom - ARB#180409 For a full wiring loom diagram refer to Air Locker Service & Parts Manual - Section 5.8 All steps must be performed in the order listed here for an accurate assessment.

NOTE:

Before attempting to troubleshoot a malfunctioning compressor, always make sure that the compressor manifold has been de-pressurized, all connections have been made according to the wiring diagram, the vehicle's ignition is in the ACC power position, and that the ISOLATING SWITCH has been turned 'ON'.

NOTE:

The 'MOTOR VOLTAGE' referred to below should be approximately 12V in the case of the CKMA12 and 24V in the case of the CKMA24. Otherwise '12V' refers to approximately 12V regardless of compressor model as the 24V compressor runs on a 12V control circuit.

NOTE:

Battery number references (e.g., [#1]) are for 24V system wiring purposes.

STEP

1

Using a multimeter, check the voltage at the battery terminals to make sure the battery is working and is fully charged. Check each individual 12V battery in a 24V system.

Did each battery measure at least 11.5 volts?

YES Proceed to STEP 2.

NO Insufficient battery voltage. Recharge or replace the battery.

Disconnect the compressor motor from the wiring loom at the connector plug. Run a new wire directly from the negative (-) terminal of the battery [#1] to the BLK-WHT wire of the compressor motor. Momentarily connect a wire from the positive terminal of the battery [#2] to the RED wire of the compressor motor.

Did the compressor activate when the wires were connected?

YES Remove the extra wires and reconnect the compressor motor plug. Proceed to STEP 3.

NO Internal compressor motor problem. Contact ARB for assistance.

the continuity (resistance) across the 2 contacts of the fuse.

Did the resistance measure less than 1 Ohm?

YES Proceed to STEP 4.

NO Blown fuse. Replace with a new 40A maxi fuse of same type. Insert new fuse with caution in case a wiring short was responsible for the fuse blowing.

4

Using a multimeter, check for MOTOR VOLTAGE between a chassis ground and each of the two contacts in the fuse socket.

Remove the fuse from the fuse socket in the compressor wiring loom. Using a multimeter, check

Was MOTOR VOLTAGE detected at one of the two contacts?

YES Reconnect the fuse into the socket. Proceed to STEP 5.

NO Wiring fault between the positive (+) battery terminal and the fuse socket. Check the wire connection at the battery terminal and/or replace the wiring and/or fuse socket.



5.9 CKMA12 & CKMA24 FAULT DIAGNOSIS PROCEDURE

STEP

5

Using a multimeter, check for MOTOR VOLTAGE between a chassis ground and the RED wire at the relay block (i.e., the wire leading directly from the fuse).

Was MOTOR VOLTAGE detected?

- YES Proceed to STEP 6.
 - NO Wiring fault between the fuse and the relay. Replace wiring and/or fuse socket.
- Using a multimeter, check for approximately 12V between the negative (-) terminal of the battery [#2] and the RED-YEL wire connected to terminal #2 of the compressor isolating switch. (i.e., the wire leading from the vehicle's ACC power.)

Was 12V detected?

- YES Proceed to STEP 7.
 - NO Wire has not been connected correctly or accessory power has not been turned on. Attach RED-YEL wire to live ACC power.
- Using a multimeter, check for approximately 12V between the negative (-) terminal of the battery [#2] and the RED wire connected to terminal #3 of the compressor isolating switch. Test while spade terminals are still connected.

Was approximately 12V detected?

- YES Proceed to STEP 8.
 - NO Switch fault or switch not turned 'ON'. Replace switch or toggle switch to 'ON' position.
- Using a multimeter, check for approximately 12V between the negative (-) terminal of the battery [#2] and the RED wire connected to the pressure switch attached to the compressor tank.

Was approximately 12V detected?

- YES Proceed to STEP 9.
- NO Wiring fault between the isolating switch and the pressure switch. Replace wiring.
- Using a multimeter, check for approximately 12V between the negative (-) terminal of the battery [#2] and the DK-BLU wire connected to the pressure switch attached to the compressor tank. Test while spade terminals are still connected.

Was approximately 12V detected?

- YES Proceed to STEP 10.
 - NO Pressure switch fault or tank not de-pressurized. Replace pressure switch or drain tank.
- Using a multimeter, check for approximately 12V between the negative (-) terminal of the battery [#2] and the DK-BLU wire at the relay block. (i.e., the wire leading directly from the pressure switch)

Was approximately 12V detected?

- YES Proceed to STEP 11.
 - NO Wiring fault between pressure switch and relay block. Replace wiring.
- Disconnect the relay from the relay block. Using a multimeter, check the continuity between the BLK wire at the relay block and the negative (-) terminal of the battery [#2].

Did the resistance measure less than 1 Ohm?

- YES Reconnect the relay to the relay block. Proceed to STEP 12.
 - NO Wiring fault in the ground wire between the battery and the relay block. Replace wiring.



- 5.9

CKMA12 & CKMA24 FAULT DIAGNOSIS PROCEDURE 5.9

STEP

Using a multimeter, check for MOTOR VOLTAGE between the negative (-) terminal of the battery [#1] and the RED-WHT wire connected to the relay block and while the relay is still connected. Pierce the RED-WHT wire with the multimeter probe to make connection if necessary.

Was MOTOR VOLTAGE detected?

- YES Proceed to STEP 13.
 - NO Relay fault. Replace with a new 12V - 40A relay of the same type.
- Disconnect the compressor motor from the wiring loom at the connector plug. Using a multimeter, check for MOTOR VOLTAGE between the negative (-) terminal of the battery [#1] and the RED-WHT wire on the loom side of the plug.

Was MOTOR VOLTAGE detected?

- Proceed to STEP 14. YES
- Wiring fault between the relay and the compressor motor connector. Replace wiring. NO
- Using a multimeter, check the continuity (resistance) between the BLK-WHT wire on the loom side of the plug (not on the compressor side) and the negative (-) terminal of the battery [#1]. Did the resistance measure less than 1 Ohm?
 - Intermittent wiring fault or internal compressor problem. Contact ARB. YES
 - Wiring fault in the ground wire between the battery [#1] and the compressor motor. Replace NO wiring.



5.10 SERIAL NUMBER INTERPRETATION

The build date of an ARB Air Locker can be ascertained from the serial number, as follows:

Serial Number: 05080476

- The first two numbers refer to the year of manufacture (i.e. 2005).
- The second two numbers refer to the month of manufacture (i.e. August).
- The last four numbers are a sequential series starting at 0001 in each month.

Thus, the example above was the four hundred and seventy sixth Air Locker manufactured in the month of August, 2005.

It is important to provide the serial number along with the part number when ordering spare parts or making warranty claims.

The model number of unpackaged/unidentified Air Lockers can be cross referenced by contacting ARB.

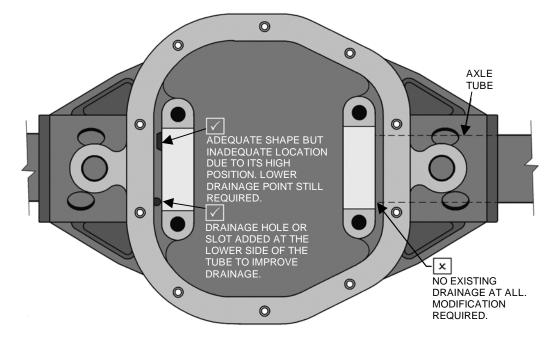


5.11 INSURING ADEQUATE OIL DRAINAGE

Some Dana 30, Dana 35, Dana 44 and Ford 8.8 axles were manufactured with poor oil drainage between the axle tubes and the differential housing. This can often result in one of the axle tubes filling up with differential oil while running. In most cases this will result in a blocked air vent which will cause the differential housing to pressurize and expel oil from the axle seals at the wheels or force oil into the *Air Locker* air lines, eventually expelling oil at the solenoid valve. This is a design flaw that was corrected by most automakers in the later releases of their axle assemblies.

Inspect the differential housing for the presence of adequate drainage in both axle tubes. If no adequate drainage points are present in the differential housing then it is critical that you modify the housing to include them (refer to the figure below).

Note that before any modifications it is important to cover the differential housing cavity and the axle tube openings with a rag to protect them from metal filings. Afterwards, remove any sharp edges and thoroughly clean the housing.



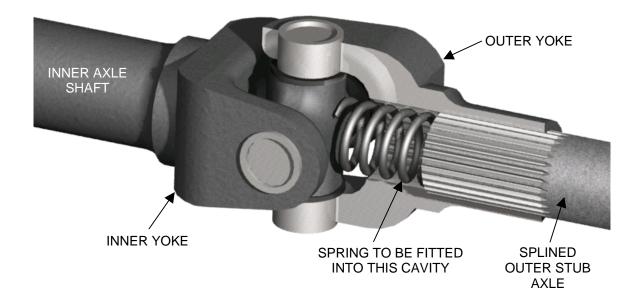


5.12 INSTALLATION IN FORD FRONT DIFFERENTIALS

The Dana 35, 44 and 50 differential carriers in the front of Ford IFS vehicles manufactured since 1980 utilise a C-clip to retain one front axle. When an ARB Air Locker is to be installed, this C-clip cannot be re-used. Therefore, a spring is to be fitted at the outer end of the axle to prevent the axle floating out of the splines in the differential. A suitable spring would be a car valve spring or one of similar strength. The spring must be put inside the outer yoke so that it presses against the inner end of the stub axle, in essence, spring loading the slip spline as shown below.

NOTE:

When assembled, ensure that the spring maintains sufficient pressure on the axle to hold it firmly against the cross shaft of the differential while the truck is sitting on level ground.



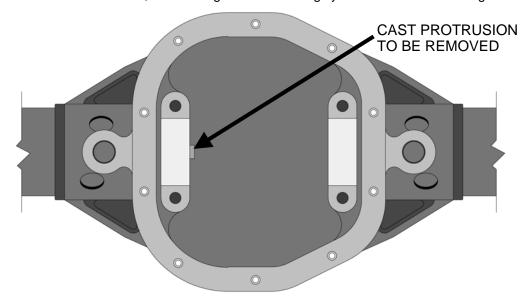


5.13 LAND ROVER SALISBURY HOUSING MODIFICATION

A small modification to the differential housing of a Land Rover Salisbury (e.g., 1983 to 2002 Defender 110) is required when installing a model RD20 Air Locker into the rear.

There is a small protrusion adjacent to the carrier bearing seat which must be removed as it could make contact with the differential during operation. The diagram below shows the location of the protrusion that is to be removed.

When this modification is being done, care must be taken not to damage the bearing seat, and the pinion must be protected from debris. In addition, the housing must be thoroughly cleaned before installing the Air Locker.





5.14

LAND ROVER AXLE UPDATE

Pre-1993 Land Rover factory 10 spline differentials are prone to two weaknesses that have been addressed by Land Rover in the release of their later model differentials.

The first is that of the 10 spline axle shafts of the pre-1993 models which are far more prone to breakage due to torque wind-up than the 25% larger 24 spline axle shafts of the post-1993 (and some pre-1993 V8 Defenders) differentials.

The second is a design flaw inherent in the sizing of the bearing journal. Failure has been observed at the bearing journal seat in all versions of the early differential centre, whether it be the factory original or a high performance aftermarket replacement. Land Rover addressed this issue in its post-1993 differential by increasing the inside diameter of the carrier bearing, therefore thickening the cross section of the bearing journal at the failure point by a huge 50%.

NOTE:

These breakages generally only occur in significantly modified vehicles (i.e., larger tires and/or greater horsepower).

Those customers wishing to upgrade to 24 spline axle shafts to avoid both of these failure modes have two options.

The first option is to upgrade to an Air Locker 24 spline Rover Differential (RD56). Post-1993 Land Rover 24 spline axle shafts and tapered roller carrier bearings (Timken #LM102949 / LM102910) will need to be sourced.

The second option is to convert their existing 10 spline Air Locker (RD03) to a 24 spline model (RD56) using the set of components in the table below. Post-1993 Land Rover 24 spline axle shafts or suitable aftermarket axle shafts will need to be sourced.

NOTE:

Pre-1980 10 spline Rover differentials using 16 TPI Whitworth adjuster nuts may NOT be substituted with, or converted to, an RD56 because of the outside diameter of their carrier bearings (76.20mm dia).

NOTE:

It is not possible to convert early-production RD03's with a four bolt cylinder cap.

QTY	DESCRIPTION	PART#	NOTES
1	FLANGE CAP	020406	
1	CYLINDER CAP ASSEMBLY	030131	
1	SIDE GEAR	130106R	
1	SPLINED SIDE GEAR	130306R	
4	PINION GEAR	140101R	1
6	CYLINDER CAP RETAINING BOLT	200205	2
6	LOCKING TAB (8mm)	150401	2
2	TAPERED ROLLER BEARING	160109	3
2	SIDE GEAR THRUST WASHER	151001	4
4	PINION THRUST WASHER	151101	4
1	SEAL HOUSING	082002	
2	SEAL HOUSING O-RING	160235	5
1	SEAL HOUSING RETAINING CLIP	150602	

Notes:

- Pinions must be replaced for this modification.
- 2 Bolts and locking tabs must never be re-used.
- 3 Timken #LM102949 / LM102910.
- 4 Replace the thrust washers if worn.
- 5 Use only BS133 Viton 75.



6.1

SERVICE GUIDE

RECOMMENDED LUBRICANTS' SPECIFICATIONS

Type of Use	Recommended Lubricant					
Normal/Typical Use: highway and light to medium off road use between –12 and +100°C [10 to 212°F]	Shell Mobil					
Heavy Off Road Use: high horsepower/high torque use between –9 and + 100°C [16 to 212°F]	Shell Mobil	Spirax HD 85W-140 Mobilube GX140				
High Temperature/Desert Use: mainly off road use between -30 and +100°C [-22 to 212°F]	Shell Mobil					
Low Temperature/Winter Use: mainly off road use between –48 and +100°C [-54 to 212°F]	Shell Mobil	•				
To find other lubricants that are equivalent to the examples above, p	lease con	tact your authorised ARB Air Locker				

To find other lubricants that are equivalent to the examples above, please contact your authorised ARB Air Locke distributor.

RECOMMENDED REGULAR SERVICE SCHEDULE

Frequency of Service	Description of Service Check or Operation							
After the first 2,500km (1,500 miles) of use, and after each subsequent 50,000km (31,000 miles) of off road use or 75,000km (46,000miles) of highway use.	Change differential oil. Clean or replace axle breather. NOTE: Always fill until almost level with filler plughole, manually rotate differential several times, then fill again until level with filler plughole. (See Recommended Lubricants Specifications.) If the axle installation angle has been modified (i.e. the vehicle has been raised) or is used for lengthy steep incline climbs, a standpipe may be needed to modify the filler level of the housing.							
After every 12,000km (7,460 miles).	Check differential oil level and inspect for leaks.							
After each use in water and/or mud.	Change differential oil to maintain viscosity and to flush out any trapped water, mud, or other foreign particles. Clean or replace breather.							
After each use in dense bush and /or protruding rocks.	Inspect all section of exposed airline for abrasion or cuts.							
After each heavy use (i.e., competition use).	Change differential oil to maintain viscosity and to flush out any foreign particles.							
Every 6 months (maximum).	Operate the Air Locker to ensure it is in good working condition. Check air system for deposits of moisture condensation or oil. Flush clean with compressed air if necessary. Clean or replace axle breather.							
NOTE: In addition to the service schedule above, always adhere to all service guidelines set forth in your vehicle manufacturer's service manual.								



6.2		SHIM KI	T SPECIFICATION	ONS	
SHK001					
PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA
150326	2	SHIM	0.76mm [0.030"]	96.5mm [3.80"]	76.1 [3.00"]
150327	2	SHIM	0.25mm [0.010"]	96.5mm [3.80"]	76.1 [3.00"]
150328	2	SHIM	0.13mm [0.005"]	96.5mm [3.80"]	76.1 [3.00"]
150329	2	SHIM	0.08mm [0.003"]	96.5mm [3.80"]	76.1 [3.00"]
150330	1	MASTER SHIM	2.5mm [0.10"]	96.6mm [3.80"]	76.2 [3.00"]
SHK002					
PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA
150316	2	SHIM	0.76mm [0.030"]	77.8 [3.06"]	68.2 [2.69"]
150317	2	SHIM	0.25mm [0.010"]	77.8 [3.06"]	68.2 [2.69"]
150318	2	SHIM	0.13mm [0.005"]	77.8 [3.06"]	68.2 [2.69"]
150310	2	SHIM	0.08mm [0.003"]	77.8 [3.06"]	68.2 [2.69"]
150319	1	MASTER SHIM	2.5mm [0.10"]	77.7 [3.06"]	68.3 [2.69"]
130320	'	WASTER SHIW	2.5///// [0.10]	77.7 [3.00]	00.5 [2.09]
SHK003					
PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA
150321	2	SHIM	0.76mm [0.030"]	73.0 [2.87"]	63.1 [2.48"]
150322	2	SHIM	0.25mm [0.010"]	73.0 [2.87"]	63.1 [2.48"]
150323	2	SHIM	0.13mm [0.005"]	73.0 [2.87"]	63.1 [2.48"]
150324	2	SHIM	0.08mm [0.003"]	73.0 [2.87"]	63.1 [2.48"]
150325	1	MASTER SHIM	2.5mm [0.10"]	73.2 [2.88"]	63.1 [2.48"]
SHK004					
PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA
150301	2	SHIM	0.76mm [0.030"]	82.7 [3.26"]	68.3 [2.69"]
150302	2	SHIM	0.25mm [0.010"]	82.7 [3.26"]	68.3 [2.69"]
150303	2	SHIM	0.13mm [0.005"]	82.7 [3.26"]	68.3 [2.69"]
150304	2	SHIM	0.08mm [0.003"]	82.7 [3.26"]	68.3 [2.69"]
150305	1	MASTER SHIM	2.5mm [0.10"]	82.9 [3.26"]	68.3 [2.69"]
CHICODE					
SHK005 PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA
150337	2	SHIM SHIM	0.76mm [0.030"] 0.25mm [0.010"]	89.7 [3.53"]	74.2 [2.92"]
150338	2	SHIM		89.7 [3.53"]	74.2 [2.92"]
150339	2	SHIM	0.13mm [0.005"]	89.7 [3.53"]	74.2 [2.92"]
150340	2	_	0.08mm [0.003"]	89.7 [3.53"]	74.2 [2.92"]
150341	1	MASTER SHIM	1.0mm [0.04"]	89.8 [3.54"]	74.3 [2.93"]
SHK006					
PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA
150332	1	SHIM	0.76mm [0.030"]	104.4 [4.11"]	76.1 [3.00"]
150333	1	SHIM	0.25mm [0.010"]	104.4 [4.11"]	76.1 [3.00"]
150334	1	SHIM	0.13mm [0.005"]	104.4 [4.11"]	76.1 [3.00"]
150335	1	SHIM	0.08mm [0.003"]	104.4 [4.11"]	76.1 [3.00"]
150336	1	MASTER SHIM	2.5mm [0.10"]	104.5 [4.11"]	76.2 [3.00"]



6.2	2 SHIM KIT SPECIFICATIONS											
SHK007												
PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA							
150343	2	SHIM	0.76mm [0.030"]	77.5 [3.05"]	63.1 [2.48"]							
150344	2	SHIM	0.25mm [0.010"]	77.5 [3.05"]	63.1 [2.48"]							
150345	2	SHIM	0.13mm [0.005"]	77.5 [3.05"]	63.1 [2.48"]							
150346	2	SHIM	0.08mm [0.003"]	77.5 [3.05"]	63.1 [2.48"]							
150342	1	MASTER SHIM	1.5mm [0.06"]	77.7 [3.06"]	63.2 [2.49"]							
SHK008												
PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA							
150315	2	SHIM	1.60mm [0.063"]	77.8 [3.06"]	68.2 [2.69"]							
150316	2	SHIM	0.76mm [0.030"]	77.8 [3.06"]	68.2 [2.69"]							
150317	2	SHIM	0.25mm [0.010"]	77.8 [3.06"]	68.2 [2.69"]							
150318	2	SHIM	0.13mm [0.005"]	77.8 [3.06"]	68.2 [2.69"]							
150319	2	SHIM	0.08mm [0.003"]	77.8 [3.06"]	68.2 [2.69"]							
150320	1	MASTER SHIM	2.5mm [0.10"]	77.7 [3.06"]	68.3 [2.69"]							
SHK009												
PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA							
150348	2	SHIM	0.76mm [0.030"]	82.5 [3.25"]	70.0 [2.76"]							
150349	2	SHIM	0.25mm [0.010"]	82.5 [3.25"]	70.0 [2.76"]							
150350	2	SHIM	0.13mm [0.005"]	82.5 [3.25"]	70.0 [2.76"]							
150351	2	SHIM	0.08mm [0.003"]	82.5 [3.25"]	70.0 [2.76"]							
150352	1	MASTER SHIM	4.5mm [0.06"]	82.5 [3.25"]	70.0 [2.76"]							
SHK010												
PART#	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA							
150343	2	SHIM	0.76mm [0.030"]	77.5 [3.05"]	63.1 [2.48"]							
150344	2	SHIM	0.25mm [0.010"]	77.5 [3.05"]	63.1 [2.48"]							
150345	2	SHIM	0.13mm [0.005"]	77.5 [3.05"]	63.1 [2.48"]							
150346	2	SHIM	0.08mm [0.003"]	77.5 [3.05"]	63.1 [2.48"]							



ADJUSTER NUT SPECIFICATIONS 6.3 NOTE: This table is for identification purposes only and should not be used for manufacturing data. DESCRIPTION PART# THREAD SIZE (major Ø) THREAD PITCH 100101 ADJUSTER NUT, ANK001, ANK004 81.8mm 1.5mm ADJUSTER NUT, ANK002 100102 82mm 2.0mm 100103 ADJUSTER NUT, ANK004 1.5mm 85mm ADJUSTER NUT, ANKO06 100104 3.35" 16TPI ADJUSTER NUT, ANK009 16 TPI 100105 3 5/16" 100201 ADJUSTER NUT, ANK003, ANK005 1.5mm (ISO) 75mm ADJUSTER NUT, ANK003 3 1/16" 16TPI (Whitworth) 100301 ADJUSTER NUT, ANK007 100501 102mm 2mm ADJUSTER NUT, ANKO08 100601 69.6mm 2mm 100703 ADJUSTER NUT, ANK010 2.950" 16TPI 100704 ADJUSTER NUT, ANK010 3.150" 16TPI



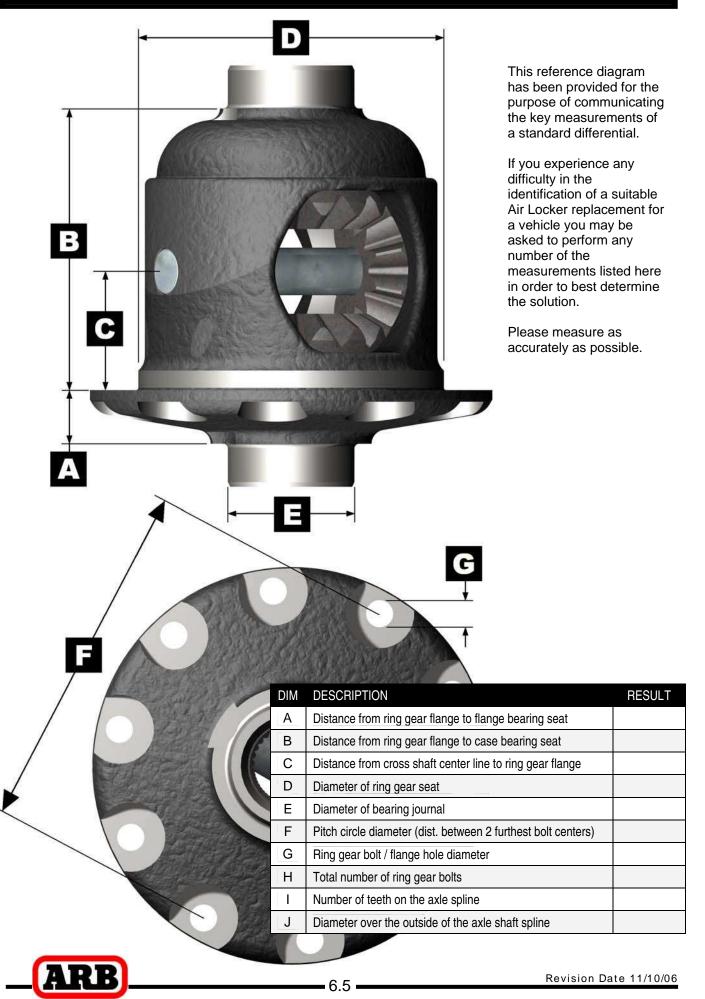
6.4 DIFFERENTIAL RATIO CALCULATOR

					NU	MBE	R OF	TEE	ETH (ON P	IOINI	N GE	AR			
		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	21	2.625	2.333	2.100	1.909	1.750	1.615	1.500	1.400	1.313	1.235	1.167	1.105	1.050	1.000	0.955
	22	2.750	2.444	2.200	2.000	1.833	1.692	1.571	1.467	1.375	1.294	1.222	1.158	1.100	1.048	1.000
	23	2.875	2.556	2.300	2.091	1.917	1.769	1.643	1.533	1.438	1.353	1.278	1.211	1.150	1.095	1.045
	24	3.000	2.667	2.400	2.182	2.000	1.846	1.714	1.600	1.500	1.412	1.333	1.263	1.200	1.143	1.091
	25	3.125	2.778	2.500	2.273	2.083	1.923	1.786	1.667	1.563	1.471	1.389	1.316	1.250	1.190	1.136
	26	3.250	2.889	2.600	2.364	2.167	2.000	1.857	1.733	1.625	1.529	1.444	1.368	1.300	1.238	1.182
	27	3.375	3.000	2.700	2.455	2.250	2.077	1.929	1.800	1.688	1.588	1.500	1.421	1.350	1.286	1.227
	28	3.500	3.111	2.800	2.545	2.333	2.154	2.000	1.867	1.750	1.647	1.556	1.474	1.400	1.333	1.273
	29	3.625	3.222	2.900	2.636	2.417	2.231	2.071	1.933	1.813	1.706	1.611	1.526	1.450	1.381	1.318
	30	3.750	3.333	3.000	2.727	2.500	2.308	2.143	2.000	1.875	1.765	1.667	1.579	1.500	1.429	1.364
	31	3.875	3.444	3.100	2.818	2.583	2.385	2.214	2.067	1.938	1.824	1.722	1.632	1.550	1.476	1.409
\propto	32	4.000	3.556	3.200	2.909	2.667	2.462	2.286	2.133	2.000	1.882	1.778	1.684	1.600	1.524	1.455
⋖	33	4.125	3.667	3.300	3.000	2.750	2.538	2.357	2.200	2.063	1.941	1.833	1.737	1.650	1.571	1.500
GE	34	4.250	3.778	3.400	3.091	2.833	2.615	2.429	2.267	2.125	2.000	1.889	1.789	1.700	1.619	1.545
9	35	4.375	3.889	3.500	3.182	2.917	2.692	2.500	2.333	2.188	2.059	1.944	1.842	1.750	1.667	1.591
Ž	36	4.500	4.000	3.600	3.273	3.000	2.769	2.571	2.400	2.250	2.118	2.000	1.895	1.800	1.714	1.636
$\overline{\mathbf{x}}$	37	4.625	4.111	3.700	3.364	3.083	2.846	2.643	2.467	2.313	2.176	2.056	1.947	1.850	1.762	1.682
O	38	4.750	4.222	3.800	3.455	3.167	2.923	2.714	2.533	2.375	2.235	2.111	2.000	1.900	1.810	1.727
	39	4.875	4.333	3.900	3.545	3.250	3.000	2.786	2.600	2.438	2.294	2.167	2.053	1.950	1.857	1.773
王	40	5.000	4.444	4.000	3.636	3.333	3.077	2.857	2.667	2.500	2.353	2.222	2.105	2.000	1.905	1.818
Щ	41	5.125	4.556	4.100	3.727	3.417	3.154	2.929	2.733	2.563	2.412	2.278	2.158	2.050	1.952	1.864
世	42	5.250	4.667	4.200	3.818	3.500	3.231	3.000	2.800	2.625	2.471	2.333	2.211	2.100	2.000	1.909
iL.	43	5.375	4.778	4.300	3.909	3.583	3.308	3.071	2.867	2.688	2.529	2.389	2.263	2.150	2.048	1.955
0	44	5.500	4.889	4.400	4.000	3.667	3.385	3.143	2.933	2.750	2.588	2.444	2.316	2.200	2.095	2.000
2	45	5.625	5.000	4.500	4.091	3.750	3.462	3.214	3.000	2.813	2.647	2.500	2.368	2.250	2.143	2.045
BE	46	5.750	5.111	4.600	4.182	3.833	3.538	3.286	3.067	2.875	2.706	2.556	2.421	2.300	2.190	2.091
NUMB	47	5.875	5.222	4.700	4.273	3.917	3.615	3.357	3.133	2.938	2.765	2.611	2.474	2.350	2.238	2.136
\supseteq	48	6.000	5.333	4.800	4.364	4.000	3.692	3.429	3.200	3.000	2.824	2.667	2.526	2.400	2.286	2.182
_	49	6.125	5.444	4.900	4.455	4.083	3.769	3.500	3.267	3.063	2.882	2.722	2.579	2.450	2.333	2.227
	50	6.250	5.556	5.000	4.545	4.167	3.846	3.571	3.333	3.125	2.941	2.778	2.632	2.500	2.381	2.273
	51	6.375	5.667	5.100	4.636	4.250	3.923	3.643	3.400	3.188	3.000	2.833	2.684	2.550	2.429	2.318
	52	6.500	5.778	5.200	4.727	4.333	4.000	3.714	3.467	3.250	3.059	2.889	2.737	2.600	2.476	2.364
	53	6.625	5.889	5.300	4.818	4.417	4.077	3.786	3.533	3.313	3.118	2.944	2.789	2.650	2.524	2.409
	54	6.750	6.000	5.400	4.909	4.500	4.154	3.857	3.600	3.375	3.176	3.000	2.842	2.700	2.571	2.455
	55	6.875	6.111	5.500	5.000	4.583	4.231	3.929	3.667	3.438	3.235	3.056	2.895	2.750	2.619	2.500
	56	7.000	6.222	5.600	5.091	4.667	4.308	4.000	3.733	3.500	3.294	3.111	2.947	2.800	2.667	2.545
	57	7.125	6.333	5.700	5.182	4.750	4.385	4.071	3.800	3.563	3.353	3.167	3.000	2.850	2.714	2.591
	58	7.250	6.444	5.800	5.273	4.833	4.462	4.143	3.867	3.625	3.412	3.222	3.053	2.900	2.762	2.636
	59	7.375	6.556	5.900	5.364	4.917	4.538	4.214	3.933	3.688	3.471	3.278	3.105	2.950	2.810	2.682
	60	7.500	6.667	6.000	5.455	5.000	4.615	4.286	4.000	3.750	3.529	3.333	3.158	3.000	2.857	2.727

Use the chart above to determine your differential ratio by counting the number of teeth on both your pinion and your ring gear. The ratio is found at the intersection of the column containing the number of teeth on your pinion gear with the row containing the number of teeth on your ring gear.



6.5 DIFFERENTIAL MEASUREMENT REFERENCE



			7			3 - 111 - 111		
6.6	PA	CKAGING	WEIGH	TS /	AND	DIMENSIONS		
Part No.	kg	[lbs]	Part No.	kg	[lbs]	Part No.	kg	[lbs]
RD03	10.0	[22]	RD56	10.0	[22]	RD97	21.0	[46]
RD04	14.0	[31]	RD57	10.0	[22]	RD98	21.0	[46]
RD05	10.0	[22]	RD60	11.5	[25]	RD99	12.8	[28]
RD09	13.5	[30]	RD64	13.5	[28]	RD100	8.7	[19]
RD12	13.0	[29]	RD65	21.0	[46]	RD101	8.7	[19]
RD17	13.5	[30]	RD66	21.0	[46]	RD102	10.2	[22]
RD20	18.5	[41]	RD70	19.0	[42]	RD103	10.2	[22]
RD21	17.0	[37]	RD74	8.1	[18]	RD104	8.7	[19]
RD22	18.5	[41]	RD75	6.0	[13]	RD105	10.2	[22]
RD23	10.0	[22]	RD78A	13.5	[30]	RD106	11.5	[25]
RD24	13.4	[30]	RD79	8.1	[18]	RD107	11.5	[25]
RD25	13.0	[29]	RD80	21.0	[46]	RD109	12.1	[27]
RD32	18.5	[41]	RD81	11.3	[25]	RD110	8.7	[19]
RD33	13.0	[29]	RD82	11.3	[25]	RD111	13.0	[29]
RD35	19.5	[43]	RD83	11.3	[25]	RD112	11.3	[25]
RD36	19.5	[43]	RD84	11.3	[25]	RD113	12.1	[27]
RD37	18.0	[40]	RD85	13.2	[29]	RD114	21.0	[46]
RD40	16.5	[36]	RD87	6.0	[13]	RD115	21.0	[46]
RD42	18.0	[40]	RD88	6.0	[13]	RD116	13.0	[29]
RD43	18.0	[40]	RD89	11.0	[24]	RD117	13.0	[29]
RD44	13.0	[29]	RD90	8.7	[19]	RD118	6.0	[13]
RD46	13.0	[29]	RD91	21.0	[46]	RD119	12.8	[28]
RD47	11.5	[25]	RD92	11.0	[24]	RD121	13.0	[29]
RD50	11.5	[25]	RD93	11.3	[25]	RD123	9.1	[20]
RD51	13.0	[29]	RD94	8.0	[18]	RD124	12.7	[28]
RD53	21.0	[46]	RD95	19.5	[43]	RD125	10.4	[23]
RD54	21.0	[46]	RD96	19.5	[43]			

All ARB Air Locker cartons measure 265mm x 265mm x 275mm [10.4" x 10.4" x 10.8"]

Part No.	kg [lbs]	Carton Size L x W x H mm [in]
RDCKA	4.2 [9.3]	215 x 130 x 230 [8.5 x 5.1 x 9.1]
RDCKA24	4.2 [9.3]	215 x 130 x 230 [8.5 x 5.1 x 9.1]
RDCP	6.4 [14.1]	450 x 245 x 215 [17.7 x 9.7 x 8.5]
RDCPA	6.1 [13.4]	450 x 245 x 215 [17.7 x 9.7 x 8.5]
CKSA12	2.4 [5.3]	215 x 160 x 145 [8.5 x 6.3 x 5.7]





TECHNICAL SPE

ARB AIR COMPRESSOR RANGE		Y VOLTAGE	DRAW		WEIGHT % included % included		'CLE % @ 22°C / off time)	SIZE mm [-when positione in the mountin -portable compr shown as carry					
MODEL NUMBER	DESCRIPTION	SUPPLY	CURRE	@ 0KPa	@ 0PSI	CURRENT	@ 200KPa		Kgs	Lbs	DUTY CY (on time	HEIGHT	LENG
CKSA12	COMPACT ON-BOARD		5A	25.0L/m	0.88CFM	6.5A	13.4L/m	0.47CFM	2.4	5.3	35% 21/39	122mm [4.8"]	162m [6.4'
CKMA12	HIGH VOL ON-BOARD	12	13A	75.1L/m	2.65CFM	22.9A	61.6L/m	2.18CFM	4.5	9.9	50% 30/30	142mm [5.6"]	190m [7.5'
CKMA24	HIGH VOL ON-BOARD	24							4.5	9.9	50% 30/30	142mm [5.6"]	190m [7.5'
CKMP12	HIGH VOL PORTABLE	12	13A	75.1L/m	2.65CFM	22.9A	61.6L/m	2.18CFM	6.6	14.5	50% 30/30	208mm [8.19"]	440m [17.32
RDCKA	STD ON-BOARD	12	13A	36.0L/m	1.27CFM	18A	28.0L/m	1.00CFM	4.3	9.5	25% 15/45	176mm [6.9"]	170m [6.7'
RDCKA24	STD ON-BOARD	24	7A			12A			4.3	9.5	25% 15/45	176mm [6.9"]	170m
RDCPA	STD PORTABLE	12	13A	36.0L/m	1.27CFM	18A	28.0L/m	1.00CFM	6.1	13.4	25% 15/45	208mm [8.19"]	440m [17.32
RDCP	DELUXE PORTABLE	12	13A	36.0L/m	1.27CFM	18A	28.0L/m	1.00CFM	6.4	14.1	25% 15/45	208mm [8.19"]	440m [17.32

-All ARB Air Compressors are individually leak tested, pressure tested, current draw tested and flow tested under load at the factory before page -ARB Air Compressor pressure switches are specially designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure range of an ARB Air Locker air operated locking designed to suit the working pressure rang

