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2.2	RD02	Toyota 8.9",45mm BRNG (replaced by RD33)	30	All
2.3	RD03	Land Rover,10 SPL,Banjo	10	3.54
2.4	RD04	Nissan H233,31 SPL	31	All
2.5	RD05	Mitsubishi 8",RR,28 SPL	28	All
2.6	RD06	Dana 44,30 SPL,3.92 & UP	30	3.92 & UP
2.7	RD07	Dana 44,30 SPL,3.73 & DN	30	3.73 & DN
2.8	RD08	Toyota 8.9",C-clip,45mm BRNG (replaced by RD124)	30	All
2.9	RD09	Nissan H233B,31 SPL (thrust block only - replaced by RD78A)	31	All
2.10	RD10	GM 10 Bolt,8.5",28 SPL (replaced by RD83)	28	2.73 & UP
2.12	RD12	GM 12 Bolt,8.9",30 SPL,3.73 & UP	30	3.73 & UP
2.16	RD16	Ford 8.8",28 SPL (replaced by RD82)	28	All
2.17	RD17	Nissan H233B,33 SPL (disc brake only – replaced by RD24)	33	All
2.18	RD18	Dana 44,19 SPL,3.92 & UP (deleted from range)	19	3.92 & UP
2.19	RD19	Dana 44,19 SPL,3.73 & DN (deleted from range)	19	3.73 & DN
2.20	RD20	Land Rover,Salisbury,3.54:1	24	3.54
2.21	RD21	Dana 60,30 SPL,4.56 & UP	30	4.56 & UP
2.22	RD22	Dana 60,30 SPL,4.10 & DN	30	4.10 & DN
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
2.27	RD27	Nissan C200,29 SPL (replaced by RD107)	29	All
2.28	RD28	GM 10 Bolt,8.5",30 SPL (replaced by RD84)	30	2.73 & UP
2.30	RD30	Dana 30,27 SPL,3.73 & UP (replaced by RD100)	27	3.73 & UP
2.31	RD31	Dana 30,27 SPL,3.54 & DN (replaced by RD101)	27	3.54 & DN
2.32	RD32	Land Rover,Salisbury,4.70:1	24	4.7
2.33	RD33	Toyota 8.9",50mm BRNG	30	All
2.35	RD35	Dana 60HD,35 SPL,4.56 & UP	35	4.56 & UP
2.36	RD36	Dana 60HD,35 SPL,4.10 & DN	35	4.10 & DN
2.37	RD37	Ford 10.25" & 10.5" (Sterling / corporate)	35	All
2.38	RD38	Dana 35,non C-clip,27 SPL,3.31 & DN (replaced by RD103)	27	3.31 & DN
2.39	RD39	Dana 35,non C-clip,27 SPL,3.54 & UP (replaced by RD102)	27	3.54 & UP
2.40	RD40	GM 14 Bolt,9.5",C-clip	33	All
2.41	RD41	Mitsubishi Jeep,RR (deleted from range)	19	All
2.42	RD42	Dana 60HD,C-clip,35 SPL,4.56 & UP	35	4.56 & UP
2.43	RD43	Dana 60HD,C-clip,35 SPL,4.10 & DN	35	4.10 & DN
2.44	RD44	Isuzu,RR,26 SPL	26	All
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2.46	RD46	Mitsubishi 9",RR,28 SPL	28	All
2.47	RD47	AMC Model 20,2.73:1	29	2.73
2.50	RD50	Dana 50,30 SPL	30	All
2.51	RD51	GM / AAM 9.25",33 SPL	33	All
2.53	RD53	Dana 70HD,35 SPL,4.56 & UP	35	4.56 & UP
2.54	RD54	Dana 70HD,35 SPL,4.10 & DN	35	4.10 & DN
2.55	RD55B	Ford 9",31 SPL (replaced by RD119)	31	All
2.56	RD56	Land Rover,24 SPL,Banjo	24	All
2.57	RD57	Land Rover,24 SPL,Banjo,T/C	24	All
2.60	RD60	AMC Model 20,3.08 & UP	29	3.08 & UP
2.64	RD64	Toyota 9.5",32 SPL	32	All
2.65	RD65	Dana 70U,35 SPL,4.56 & UP	35	4.56 & UP
2.66	RD66	Dana 70U,35 SPL,4.10 & DN	35	4.10 & DN

NOTE: Contact ARB directly for model numbers not listed here.



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2.69	RD69	Dana 35,C-clip,27 SPL,3.54 & UP (replaced by RD102)	27	3.54 & UP
2.70	RD70	Nissan H260,37 SPL	37	All
2.71	RD71	Nissan H260,37 SPL (disc brake only)	37	All
2.72	RD72	Suzuki Sierra,RR,26 SPL (replaced by RD88)	26	All
2.73	RD73	Suzuki Sierra,FR,22 SPL (replaced by RD75)	22	All
2.74	RD74	Suzuki Vitara,RR,26 SPL,10 bolt RG	26	All
2.75	RD75	Suzuki,FR,22 SPL,10 bolt RG	22	All
2.77	RD77	Suzuki Jimny (JA),FR,22 SPL (replaced by RD87)	22	All
2.78	RD78A	Nissan H233B,31 SPL	31	All
2.79	RD79	Suzuki Vitara,RR,26 SPL,12 bolt RG	26	All
2.80	RD80	Dana 80,35 SPL	35	Varies by Mfg.
2.81	RD81	Ford 8.8",31 SPL	31	All
2.82	RD82	Ford 8.8",28 SPL	28	All
2.83	RD83	GM 10 Bolt,8.5",28 SPL	28	2.73 & UP
2.84	RD84	GM 10 Bolt,8.5",30 SPL	30	2.73 & UP
2.85	RD85	Isuzu RR,23 SPL,non-LSD	23	All
2.87	RD87	Suzuki Jimny,FR,22 SPL,8 bolt RG	22	All
2.88	RD88	Suzuki,26 SPL,10 bolt RG	26	All
2.89	RD89	Toyota Tacoma,RR (replaced by RD129)	30	All
2.90	RD90	Toyota 7.5" IFS	27	All
2.91	RD91	Dana 80,37 SPL	37	Varies by Mfg.
2.92	RD92	Toyota 8" IFS,50mm BRNG	30	All
2.93	RD93	Chrysler 8.25",29 SPL	29	All
2.94	RD94	Isuzu IFS,17 SPL	17	All
2.95	RD95	Dana 60,32 SPL,4.56 & UP	32	4.56 & UP
2.96	RD96	Dana 60,32 SPL,4.10 & DN	32	4.10 & DN
2.97	RD97	Dana 70,32 SPL,4.56 & UP	32	4.56 & UP
2.98	RD98	Dana 70,32 SPL,4.10 & DN	32	4.10 & DN
2.99	RD99	Ford 9",35 SPL,2" BRNG	35	All
2.100	RD100	Dana 30,27 SPL,3.73 & UP	27	3.73 & UP
2.101	RD101	Dana 30,27 SPL,3.54 & DN	27	3.54 & DN
2.102	RD102	Dana 35,27 SPL,3.54 & UP	27	3.54 & UP
2.103	RD103	Dana 35,27 SPL,3.31 & DN	27	3.31 & DN
2.104	RD104	Dana 30,30 SPL,3.73 & UP	30	3.73 & UP
2.105	RD105	Dana 35,30 SPL,3.54 & UP	30	3.54 & UP
2.106	RD106	Nissan C200,31 SPL	31	All
2.107	RD107	Nissan C200/R200A,29 SPL	29	All
2.109	RD109	Dana 44,35 SPL,3.92 & UP	35	3.92 & UP
2.110	RD110	Mitsubishi IFS,28 SPL	28	All
2.111	RD111	Toyota 8" IFS,53mm BRNG	30	3.91 & UP
2.112	RD112	Chrysler 8.25",27 SPL	27	All
2.113	RD113	Dana 44,33 SPL,3.92 & UP	33	3.92 & UP
2.114	RD114	GM 14 Bolt,10.5",FF	30	4.10 & DN
2.115	RD115	Dana 70HD,37 SPL,4.56 & UP	37	4.56 & UP
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
2.123	RD123	Mazda 8",RR,shim adjusted	30	All
2.124	RD124	Toyota 8.9",C-clip,50mm BRNG	30	All
2.125	RD125	Dana 35,non C-clip,30 SPL,3.54 & UP	30	3.54 & UP
2.126	RD126	Santana PS-10,RR	34	All
2.129	RD129	Toyota Tacoma,RR	30	All

NOTE: Contact ARB directly for model numbers not listed here.



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2.133	RD133	Toyota 8" RR,shim adjusted	30	All
2.143	RD143	Dana 44,32 SPL,3.73 & DN	32	3.73 & DN
2.147	RD147	Dana 44,35 SPL,3.73 & DN	35	3.73 & DN

NOTE: Contact ARB directly for model numbers not listed here.

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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.

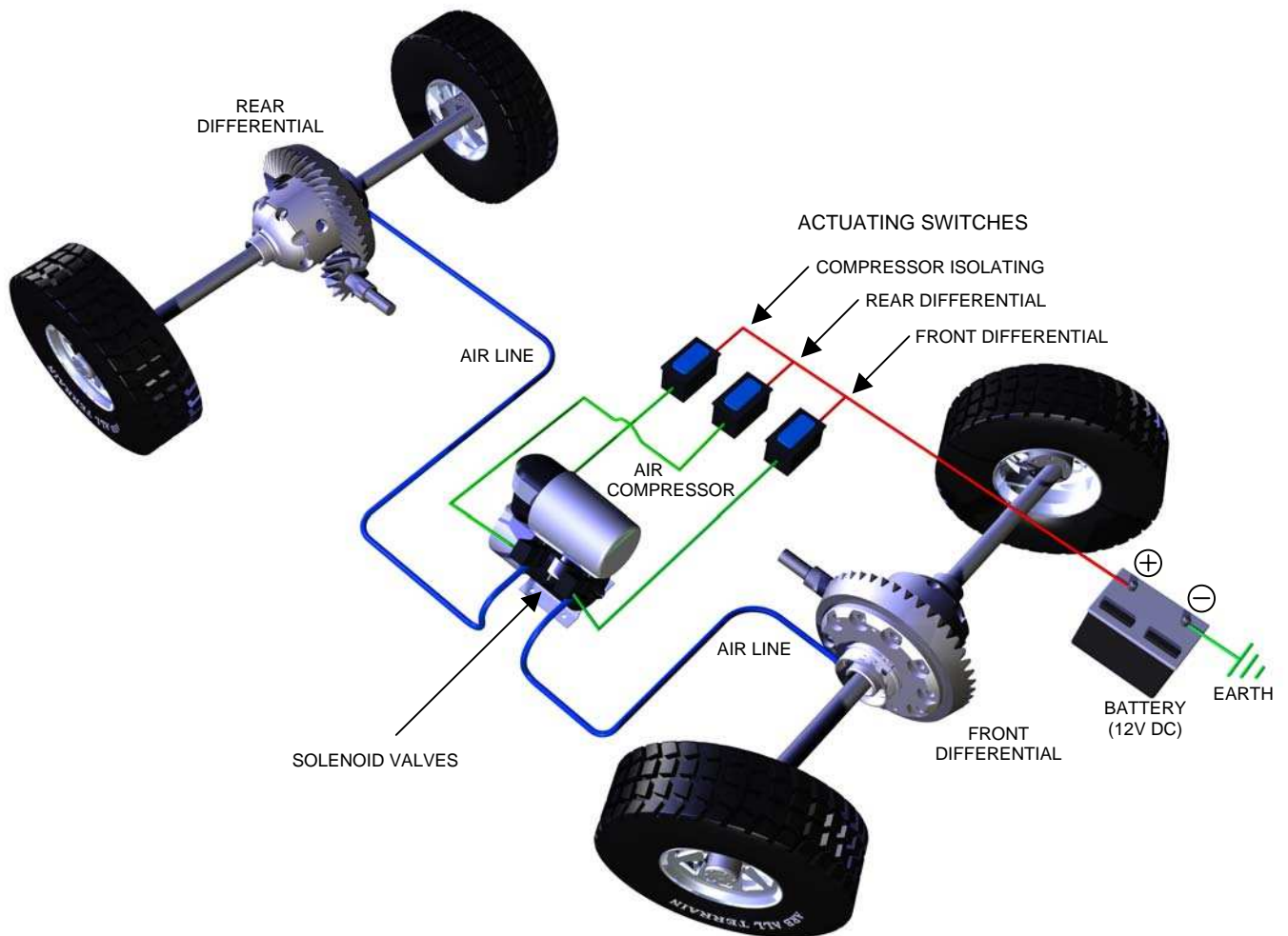
1.2 FUNCTIONAL DESCRIPTION

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.

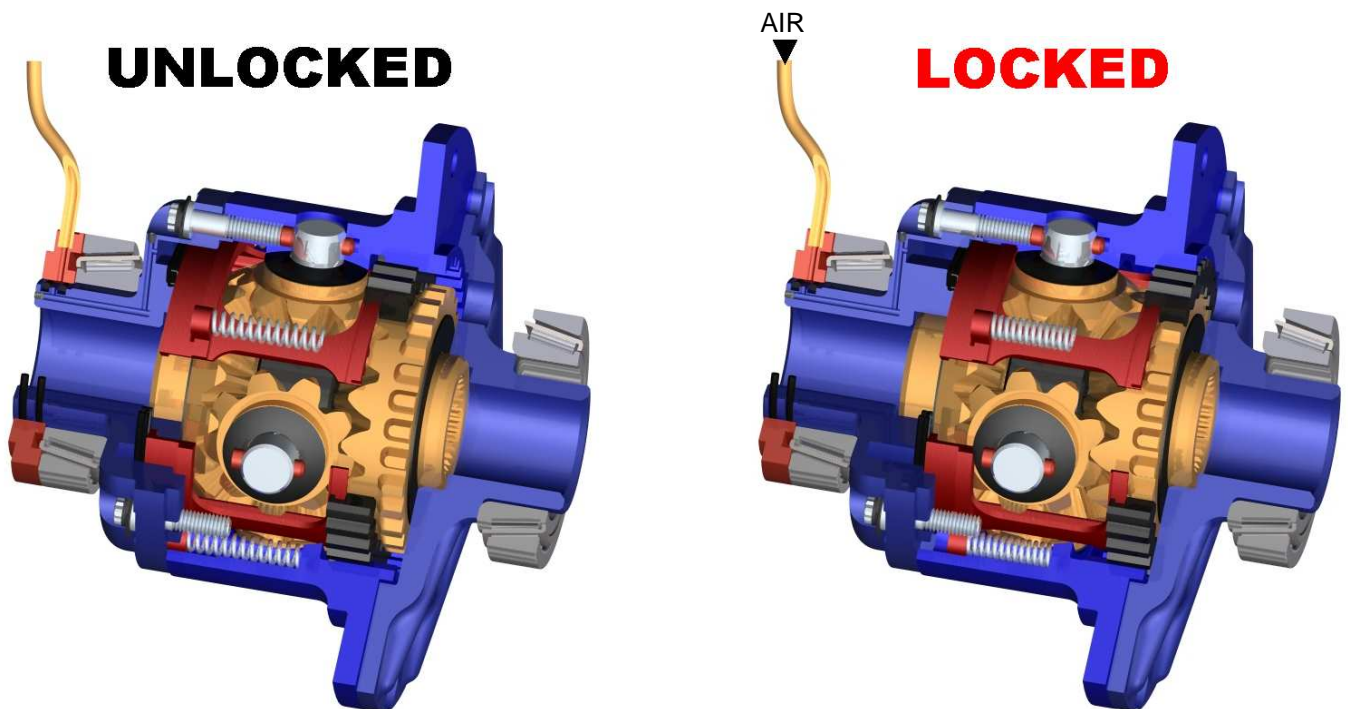
1.2 FUNCTIONAL DESCRIPTION

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.



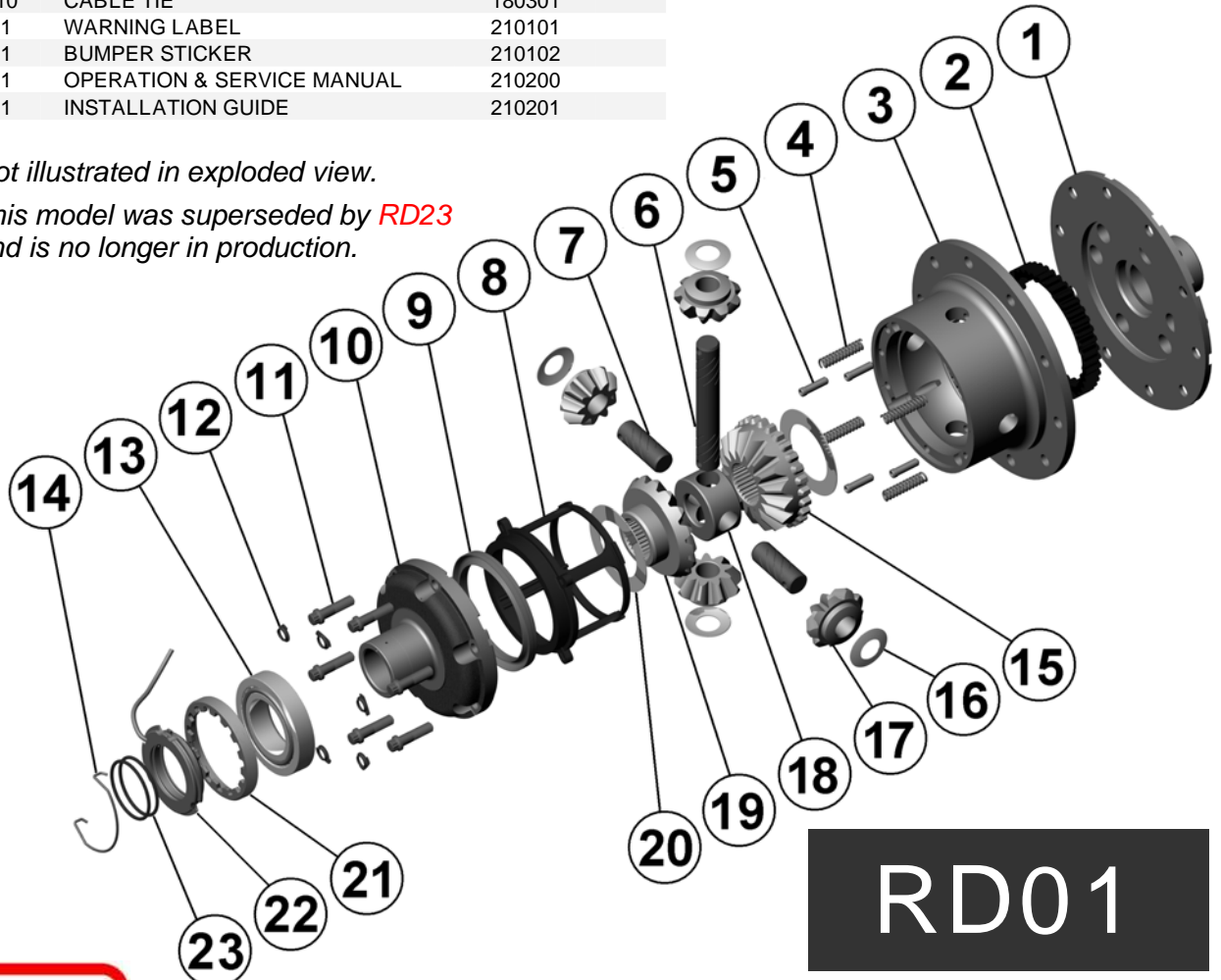
ARB AIR LOCKER *Air Operated Locking Differentials*

RD01 Toyota 8", 45mm BRNG**

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020101	
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	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	081902	2
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	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210201	

* Not illustrated in exploded view.

** This model was superseded by **RD23** and is no longer in production.



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](#)).
- For information on RD01 models with 4 cylinder cap bolts, contact ARB.

RD01



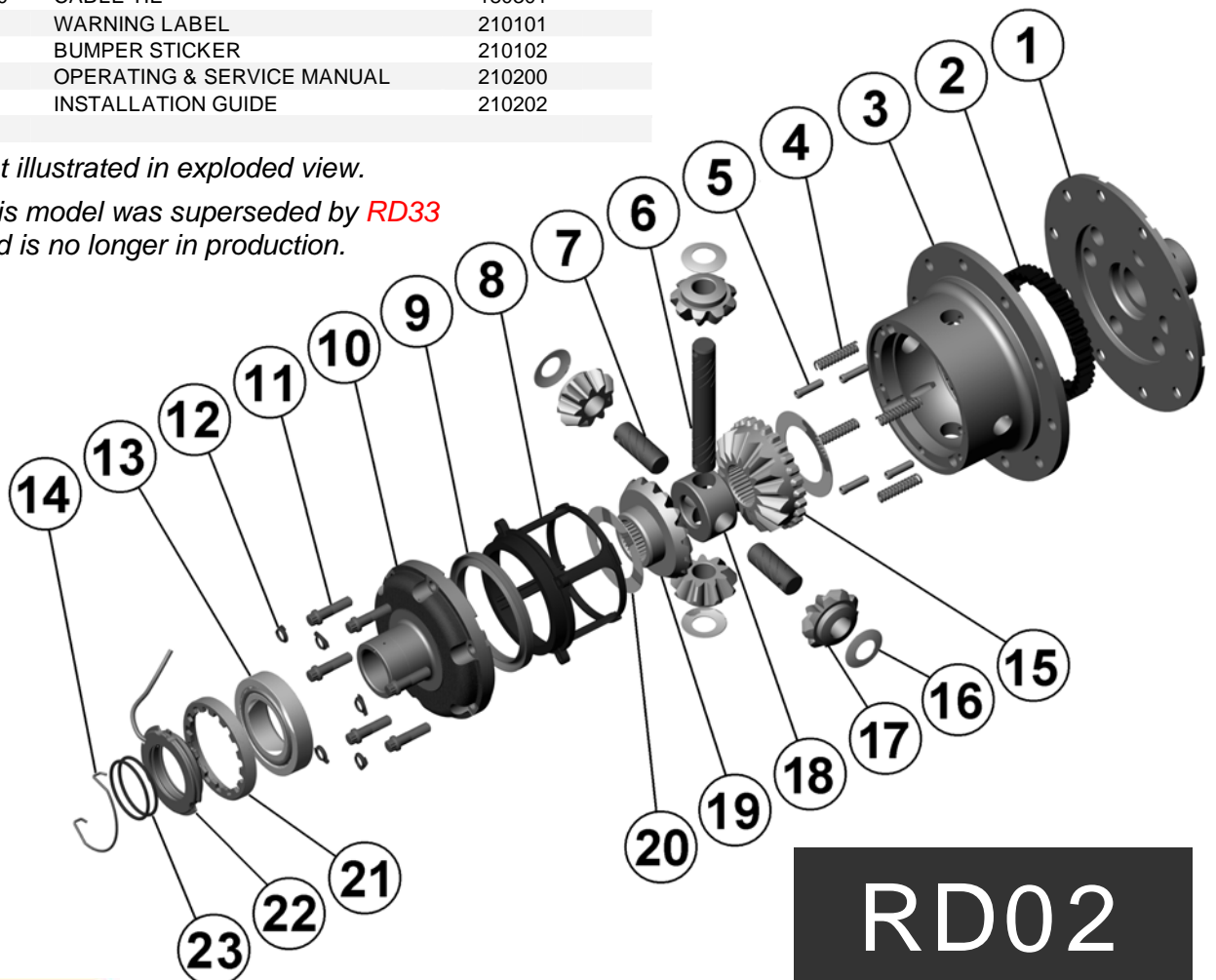
ARB AIR LOCKER *Air Operated Locking Differentials*

RD02 Toyota 8.9", 45mm BRNG**

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021702	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	010204	
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	030208	
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	130401	
16	4	PINION THRUST WASHER	151102	
17	4	PINION GEAR	140201	
18	1	SPIDER BLOCK	070201	
19	1	SIDE GEAR	130201	
20	2	SIDE GEAR THRUST WASHER	151002	
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	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210202	

* Not illustrated in exploded view.

** This model was superseded by **RD33** and is no longer in production.



Specs:

Axle Spline	30 tooth, Ø33mm [1.31"]
Ratio Supported	All
Ring Gear ID	138.1mm [5.44"]
Ring Gear OD	225mm [8.9"]
Ring Gear Bolts	12 bolts on Ø156mm [6.14"]
Ring Gear Torque	120Nm [89 ft-lb]
Backlash	0.15-0.20mm [0.006-0.08"]
Bearing Cap Torque	110Nm [81 ft-lb]

Notes:

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

For 8.9" with 50mm carrier bearing ID refer to RD33 (Section 2.33).

For 8.9" C-clip model refer to RD124 (Section 2.124).

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

For information on RD02 models with 4 cylinder cap bolts, contact ARB.

RD02

ARB AIR LOCKER *Air Operated Locking Differentials*

RD03 Land Rover, 10 SPL, Banjo

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]

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	

Notes:

- For replacement O-rings use only BS130 Viton 75.
- 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)

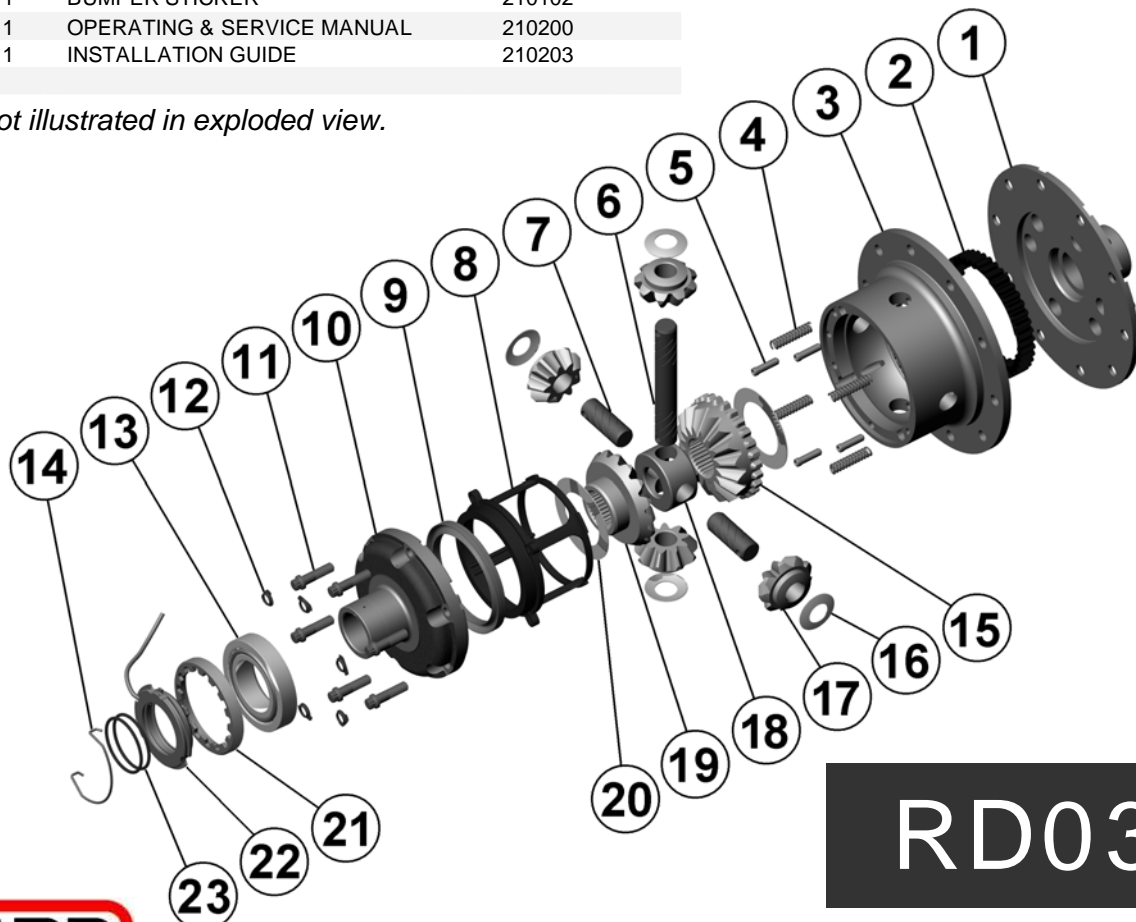
5mm [3/16"] ring gear spacer plate (ARB part# 'RD03A') is available for use with early Land Rover 4.70:1 ratio gears but longer bolts must be used. (Land Rover part# 576521)

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](#)).

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD04 Nissan H233,31 SPL

Specs:

Axle Spline	31 tooth, Ø32mm [1.26"]
Ratio Supported	All
Ring Gear ID	146.0mm [5.75"]
Ring Gear Bolts	9 bolts on Ø180mm [7.09"]
Ring Gear Bolt Size	10mm
Ring Gear Torque	86Nm [64 ft-lb]
Backlash	0.15-0.20mm [0.006-0.008"]
Bearing Cap Torque	99Nm [73 ft-lb]

Notes:

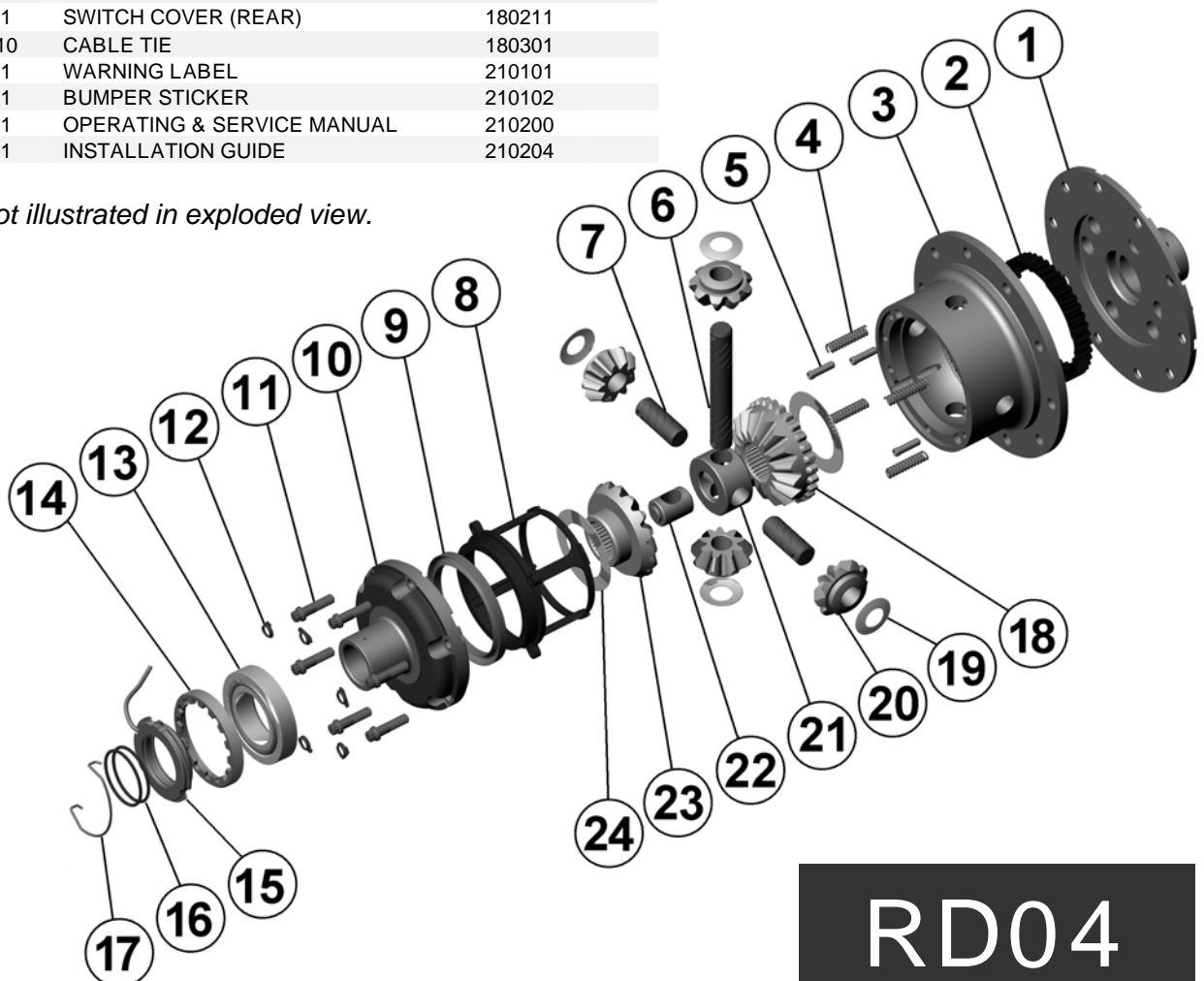
- 1 For replacement O-rings use only BS133 Viton 75

For information on RD04 models with metal pistons, contact ARB.

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

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020301	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	010305	
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	030214	
11	8	CYLINDER CAP RETAINING BOLT	200205	
12	8	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	ADJUSTER NUT	100102	
15	1	SEAL HOUSING ASSEMBLY	081902	
16	2	SEAL HOUSING O-RING	160235	1
17	1	SEAL HOUSING RETAINING CLIP	150601	
18	1	SPLINED SIDE GEAR	130402	
19	4	PINION THRUST WASHER	151102	
20	4	PINION GEAR	140201	
21	1	SPIDER BLOCK	070201	
22	1	THRUST BLOCK	110101	
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	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210204	

* Not illustrated in exploded view.



RD04



ARB AIR LOCKER *Air Operated Locking Differentials*

RD05 Mitsubishi 8",RR,28 SPL

Specs:

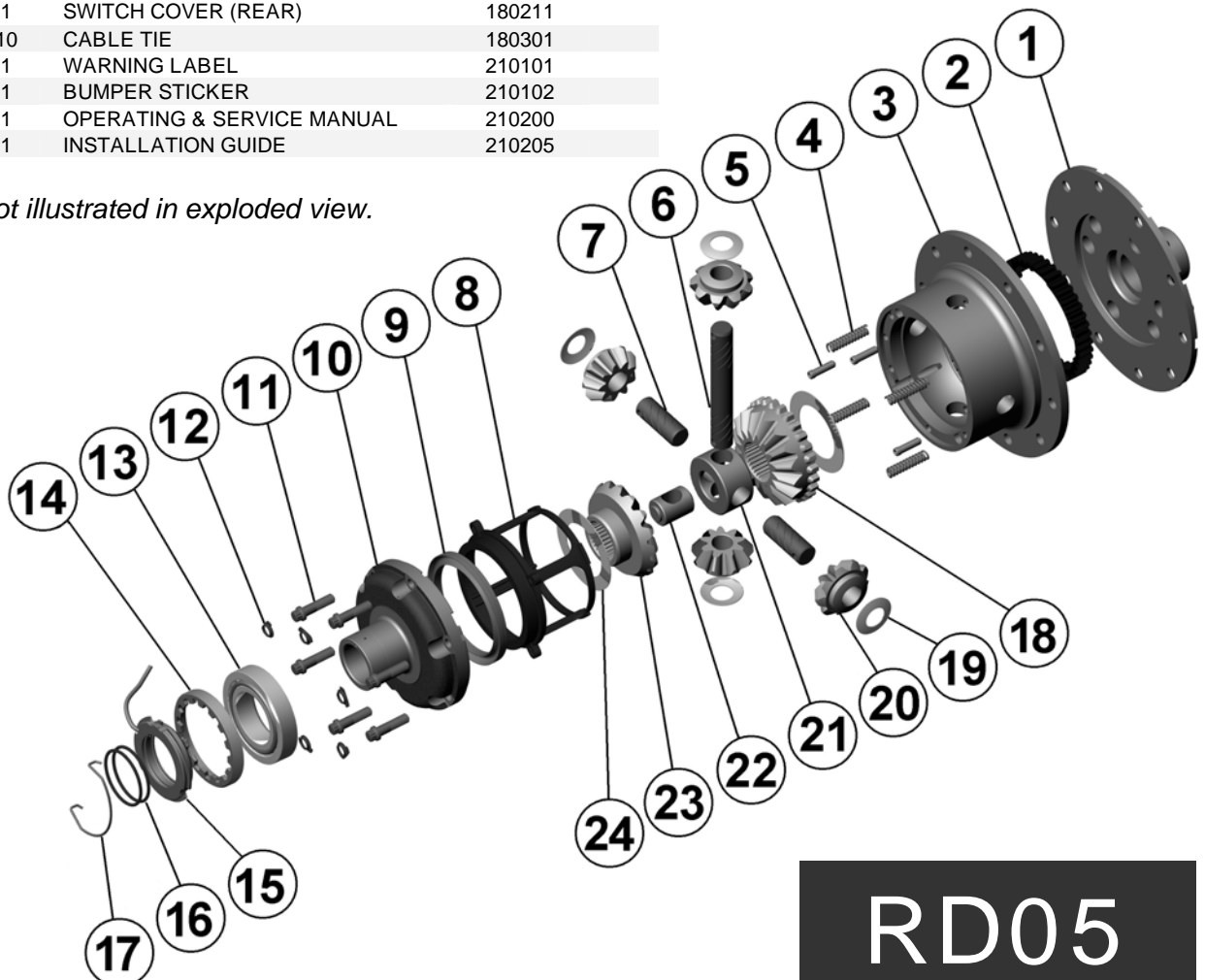
Axle Spline	28 tooth, Ø30.5mm [1.20"]
Ratio Supported	All
Ring Gear ID	124.0mm [4.88"]
Ring Gear Bolts	10 bolts on Ø150mm [5.91"]
Ring Gear Torque	85Nm [63 ft-lb]
Backlash	0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque	60Nm [44 ft-lb]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020405	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010405	
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	030121	
11	6	CYLINDER CAP RETAINING BOLT	200205	
12	6	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	ADJUSTER NUT	100101	
15	1	SEAL HOUSING ASSEMBLY	081902	
16	2	SEAL HOUSING O-RING	160235	1
17	1	SEAL HOUSING RETAINING CLIP	150601	
18	1	SPLINED SIDE GEAR	130303	
19	4	PINION THRUST WASHER	151101	
20	4	PINION GEAR	140101	
21	1	SPIDER BLOCK	070101	
22	1	THRUST BLOCK	110201	
23	1	SIDE GEAR	130103	
24	2	SIDE GEAR THRUST WASHER	151001	
*	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	210205	

Notes:

- 1 For replacement O-rings use only BS133 Viton 75
- For information on RD05 models with metal pistons, contact ARB.
- For seal housing set-up refer to tech notes (Section 5.1 & 5.2).
- For the 'large' Mitsubishi 28 spline rear differentials with 12 ring gear bolts refer to RD46 (Section 2.46).

* Not illustrated in exploded view.



RD05



ARB AIR LOCKER *Air Operated Locking Differentials*

RD06 Dana 44,30 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	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	210206	

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]

Notes:

- 1 For replacement O-rings use only BS132 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.

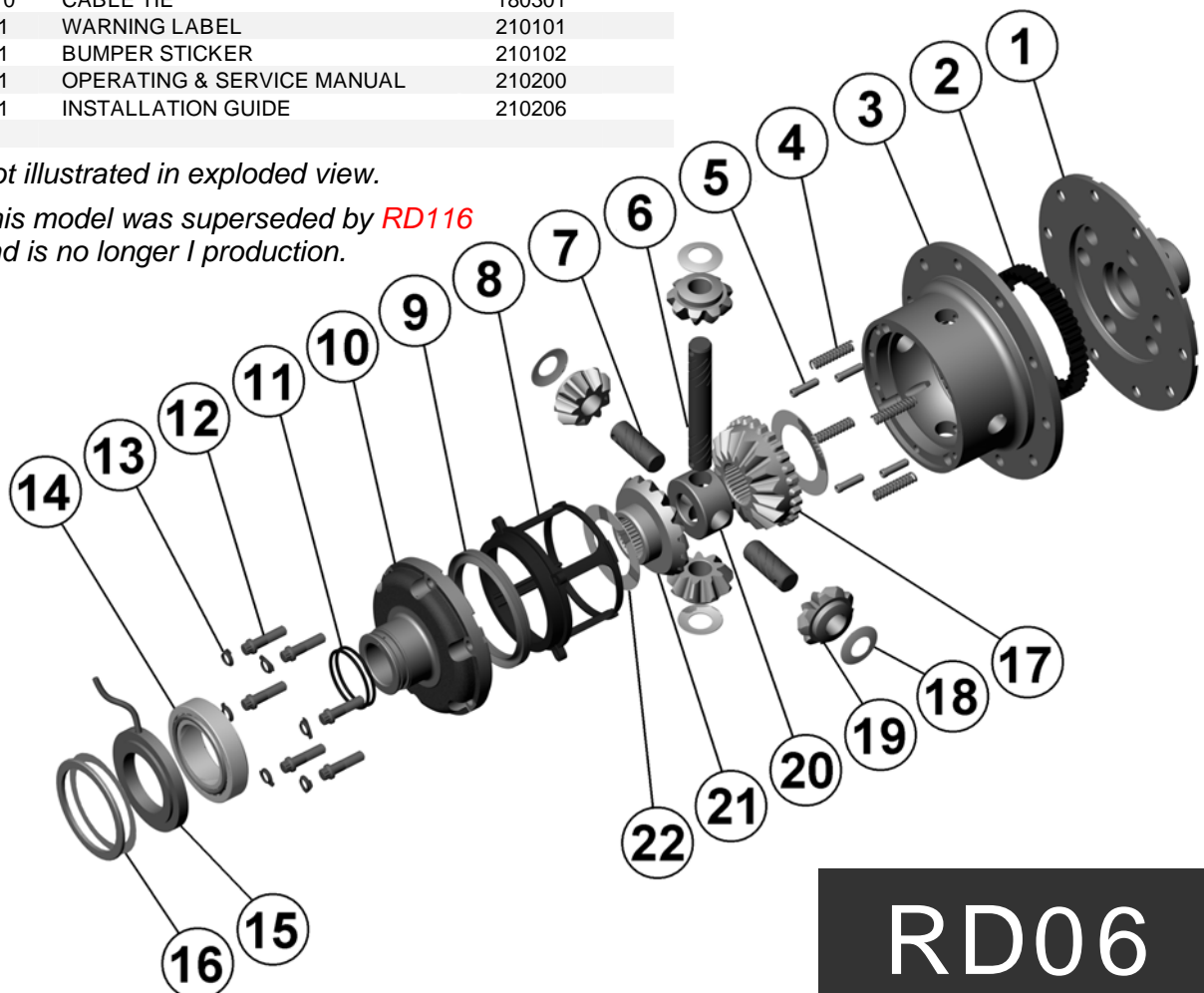
For ratios of 3.73:1 and down refer to RD117 (Section 2.117).

For information on RD06 models with 4 cylinder cap bolts, contact ARB.

Suitable for use with ABS tone ring.

* Not illustrated in exploded view.

** This model was superseded by **RD116** and is no longer in production.



RD06



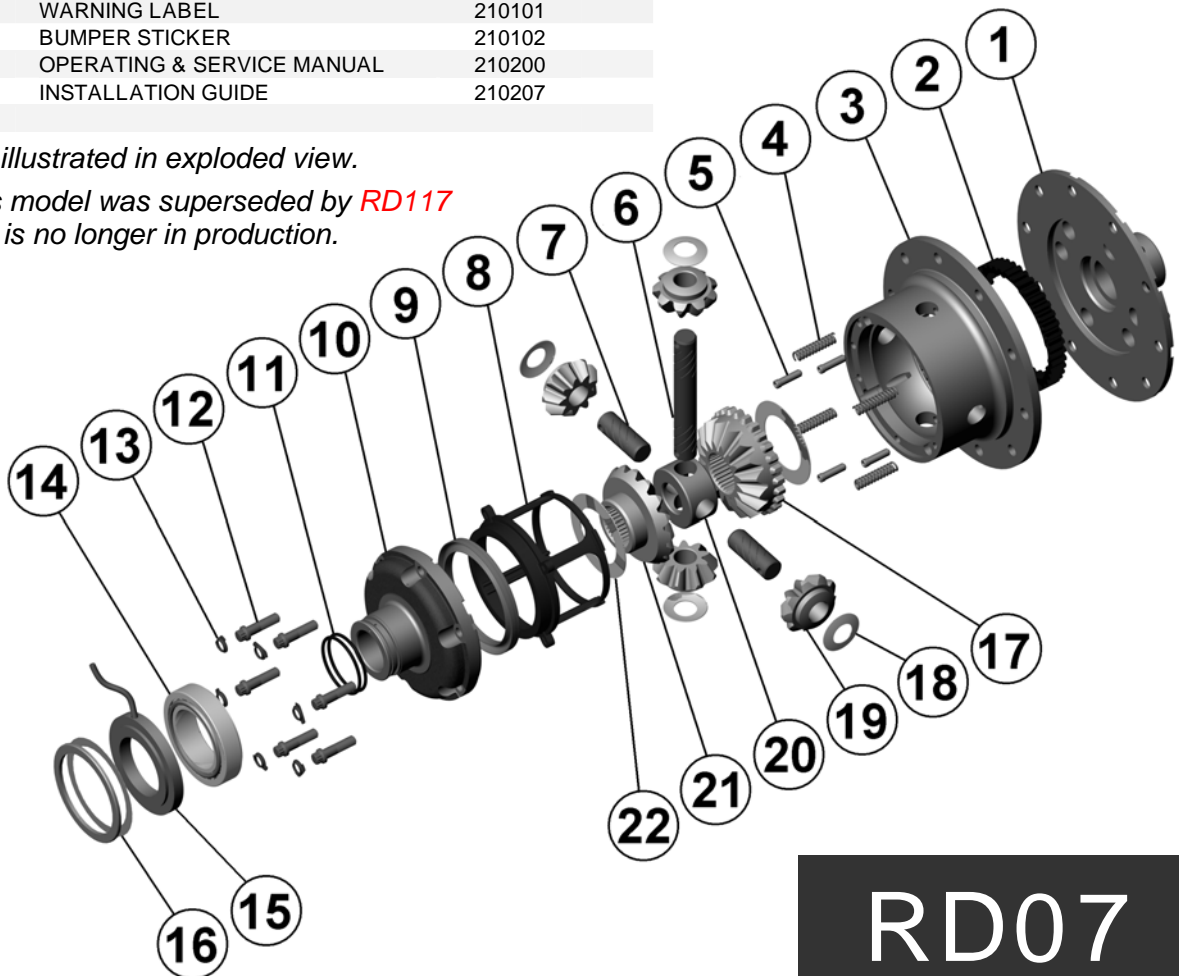
ARB AIR LOCKER *Air Operated Locking Differentials*

RD07 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 illustrated in exploded view.

** This model was superseded by **RD117** and is no longer in production.



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:

- 1 For replacement O-rings use only BS132 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).

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

Suitable for use with ABS tone ring.

RD07



ARB AIR LOCKER *Air Operated Locking Differentials*

RD08 Toyota 8.9", C-clip, 45mm BRNG**

Specs:

Axle Spline	30 tooth, Ø33mm [1.31"]
Ratio Supported	All
Ring Gear ID	138.1mm [5.44"]
Ring Gear OD	225mm [8.9"]
Ring Gear Bolts	12 bolts on Ø156mm [6.14"]
Ring Gear Torque	120Nm [89 ft-lb]
Backlash	0.15-0.20mm [0.006-0.008"]
Bearing Cap Torque	110Nm [81 ft-lb]

Notes:

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

For 8 7/8" non C-clip model (i.e., full floating) refer to RD33 ([Section 2.33](#)).

For seal housing set-up refer to tech notes ([Section 5.1](#) & [5.2](#)).

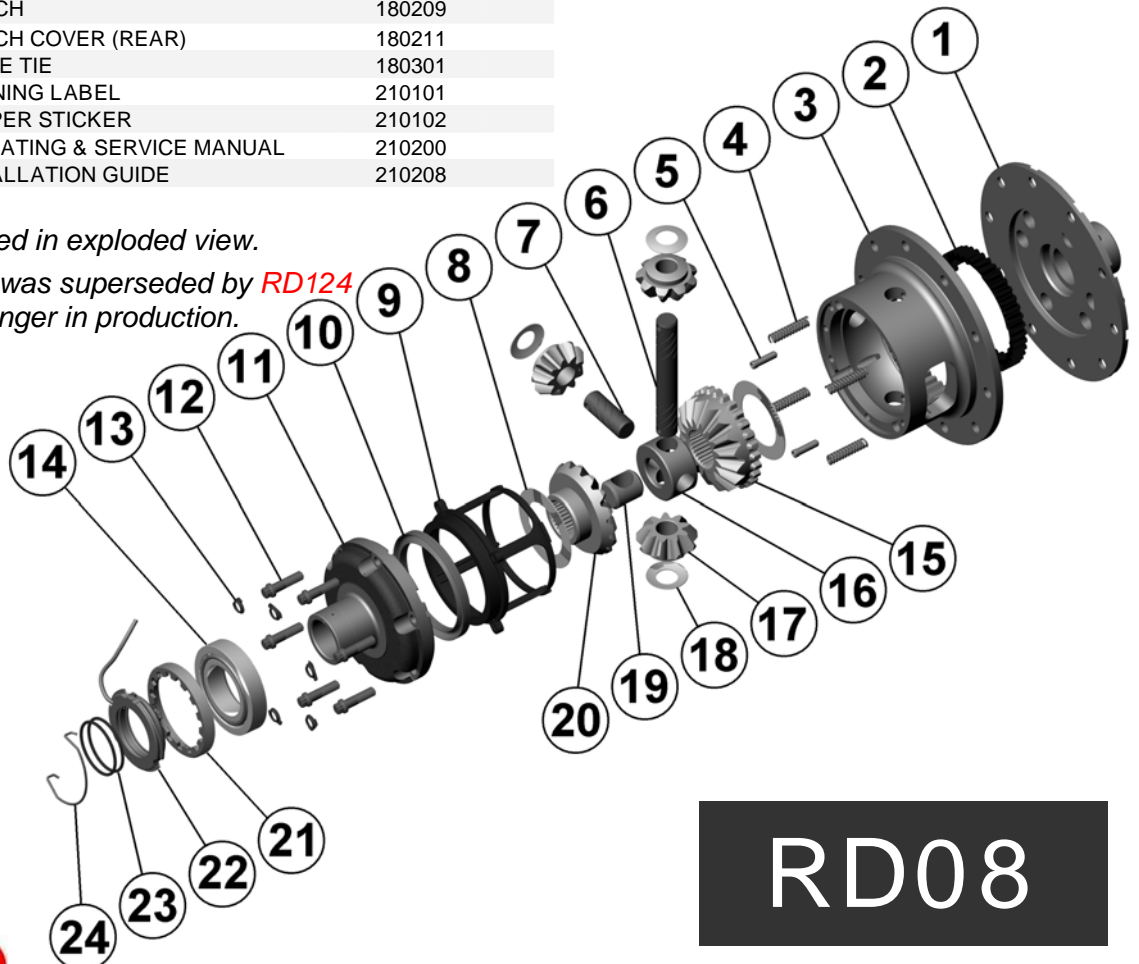
For information on RD08 models with less than 8 cylinder cap bolts, contact ARB.

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

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021702	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	011005	
04	8	RETURN SPRING	150101	
05	1	CROSS SHAFT RETAINING PIN	120303	
06	1	LONG CROSS SHAFT	060205	
07	1	SHORT CROSS SHAFT	060402	
08	2	SIDE GEAR THRUST WASHER	151002	
09	1	PISTON	040202	
10	1	BONDED SEAL	160705	
11	1	CYLINDER CAP	030212	
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
15	1	SPLINED SIDE GEAR	130401	
16	1	SPIDER BLOCK	070201	
17	3	PINION GEAR	140201	
18	3	PINION THRUST WASHER	151102	
19	1	THRUST BLOCK	110102	
20	1	SIDE GEAR	130201	
21	1	ADJUSTER NUT	100101	
22	1	SEAL HOUSING ASSEMBLY	081902	
23	2	SEAL HOUSING O-RING	160235	1
24	1	SEAL HOUSING RETAINING CLIP	150601	
*	1	C-CLIP KIT	CCK004	
*	1	SOCKET HEAD CAP SCREW (M8)	200504	
*	2	CYLINDER CAP RETAINING BOLT	200207	
*	2	LOCKING TAB (6mm)	150402	
*	1	LOCK WASHER	4581046	
*	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	210208	

* Not illustrated in exploded view.

** This model was superseded by **RD124** and is no longer in production.



RD08



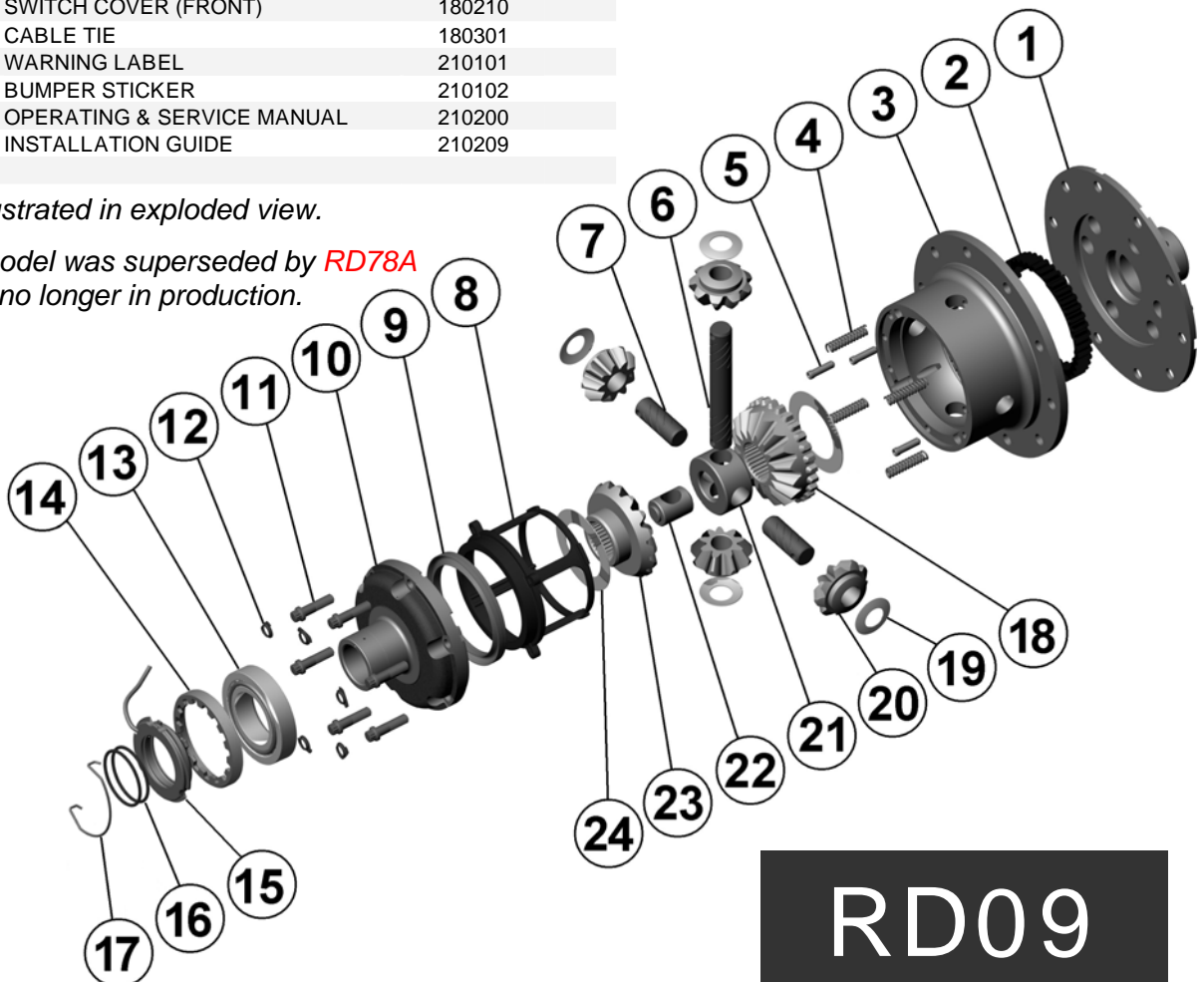
ARB AIR LOCKER *Air Operated Locking Differentials*

RD09 Nissan H233B,31 SPL**

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020302	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	010306	
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	030214	
11	8	CYLINDER CAP RETAINING BOLT	200205	
12	8	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	ADJUSTER NUT	100102	
15	1	SEAL HOUSING ASSEMBLY	081902	
16	2	SEAL HOUSING O-RING	160235	1
17	1	SEAL HOUSING RETAINING CLIP	150601	
18	1	SPLINED SIDE GEAR	130402	
19	4	PINION THRUST WASHER	151102	
20	4	PINION GEAR	140201	
21	1	SPIDER BLOCK	070201	
22	1	THRUST BLOCK	110101	
23	1	SIDE GEAR	130202	
24	2	SIDE GEAR THRUST WASHER	151002	
*	9	RING GEAR BOLT SPACER	4581061	2
*	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	SWITCH COVER (FRONT)	180210	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210209	

* Not illustrated in exploded view.

** This model was superseded by **RD78A** and is no longer in production.



Specs:

Axle Spline	31 tooth, Ø32mm [1.26"]
Ratio Supported	All
Ring Gear ID	146.0mm [5.75"]
Ring Gear Bolts	9 bolts on Ø176mm [6.93"]
Ring Gear Bolt Size	12mm
Ring Gear Torque	142Nm [105 ft-lb]
Backlash	0.15-0.20mm [0.006-0.008"]
Bearing Cap Torque	99Nm [73 ft-lb]

Notes:

- 1 For replacement O-rings use only BS133 Viton 75
- 2 If ring gear bolts are 10mm then spacers must be used (supplied with kit).

For information on RD09 models with metal pistons, contact ARB.

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

For H233B 31 spline differential with no thrust block and no through cross shaft refer to RD78A (Section 2.78).

RD09



ARB AIR LOCKER *Air Operated Locking Differentials*

RD10 GM 10 Bolt, 8.5", 28 SPL **

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.

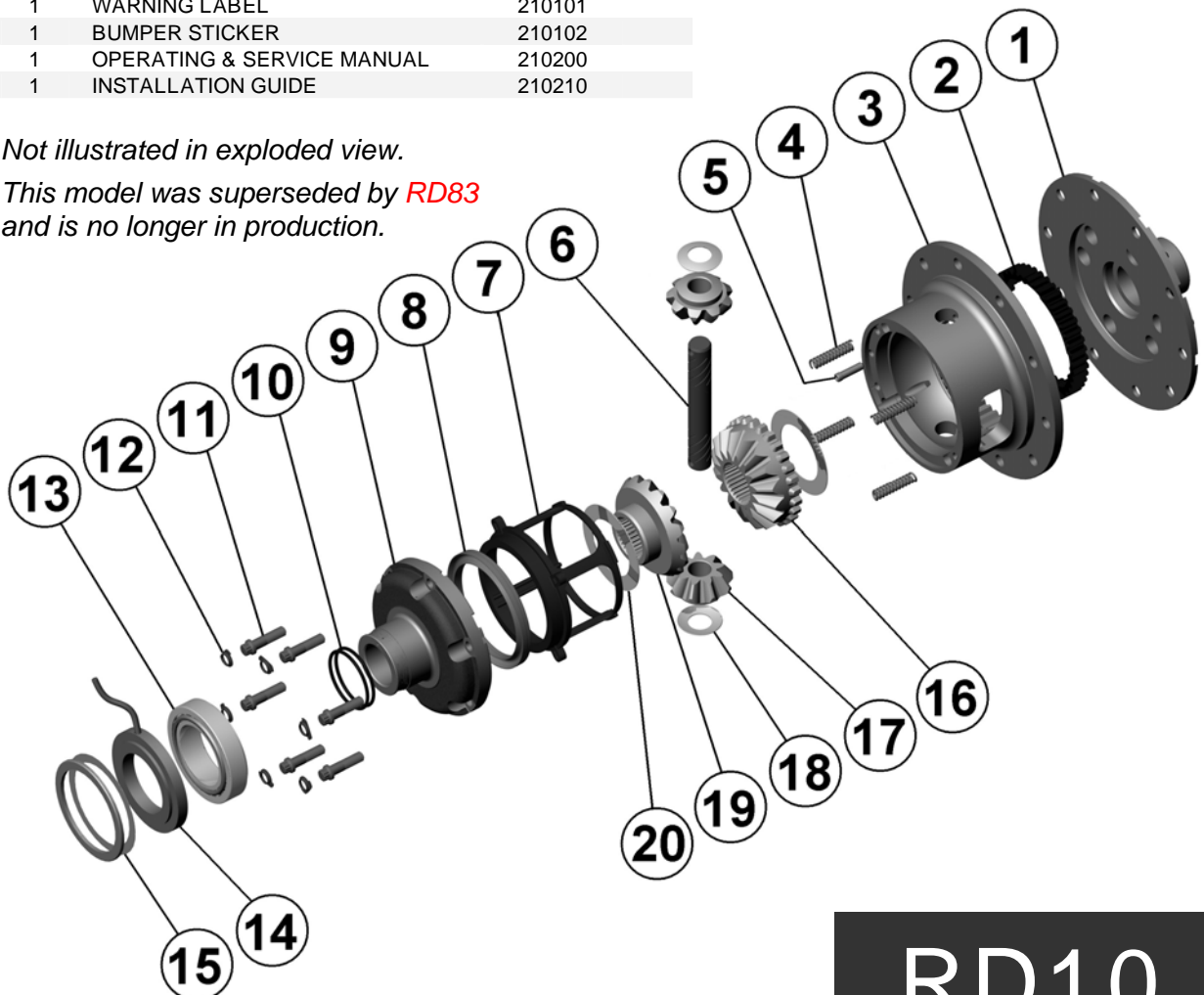
For information on RD10 models with 4 cylinder cap bolts, contact ARB.

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

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	
08	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 illustrated in exploded view.

** This model was superseded by **RD83** and is no longer in production.



RD10



ARB AIR LOCKER *Air Operated Locking Differentials*

RD12 GM 12 Bolt, 8.9", 30 SPL, 3.73 & UP

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]

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	

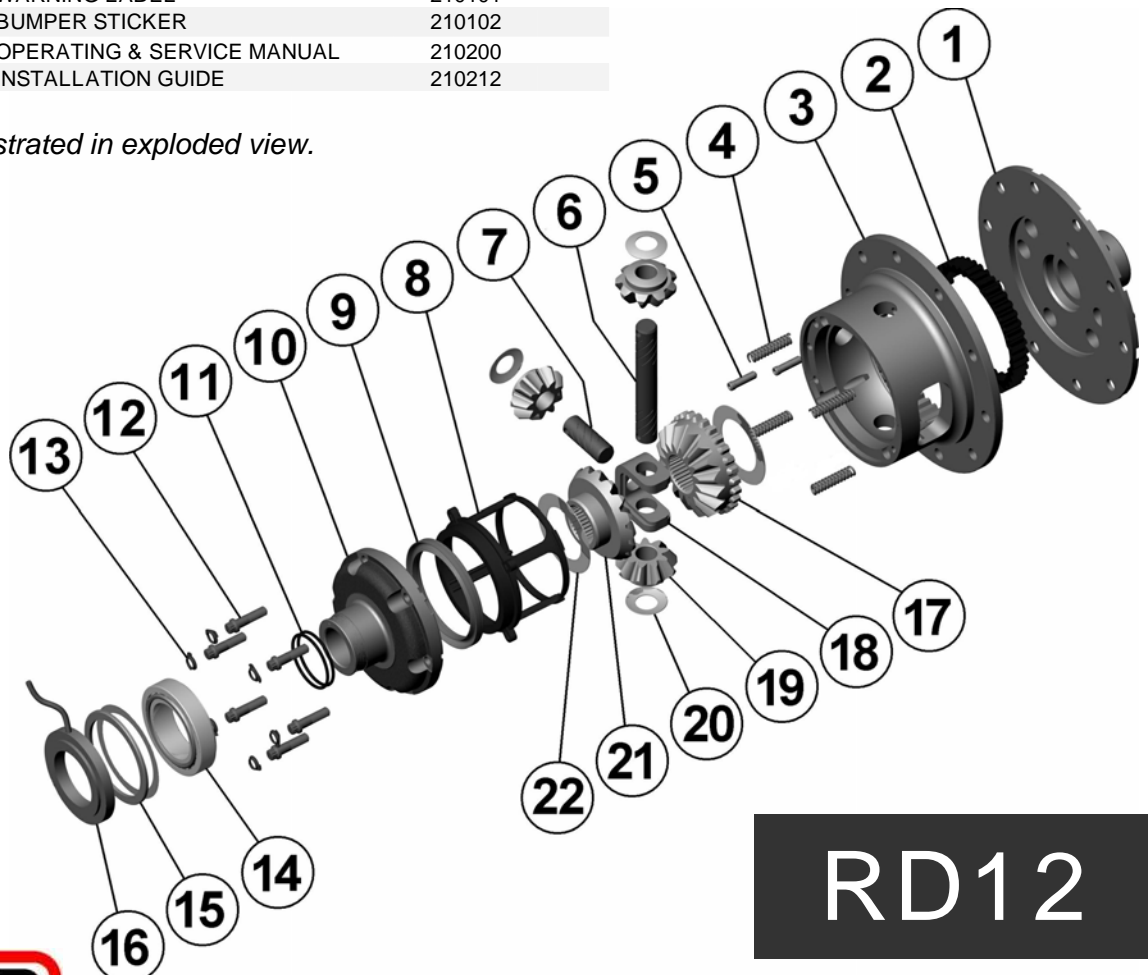
Notes:

- 1 For replacement O-rings use only BS132 Viton 75
- 2 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.

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD16 Ford 8.8",28 SPL **

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:

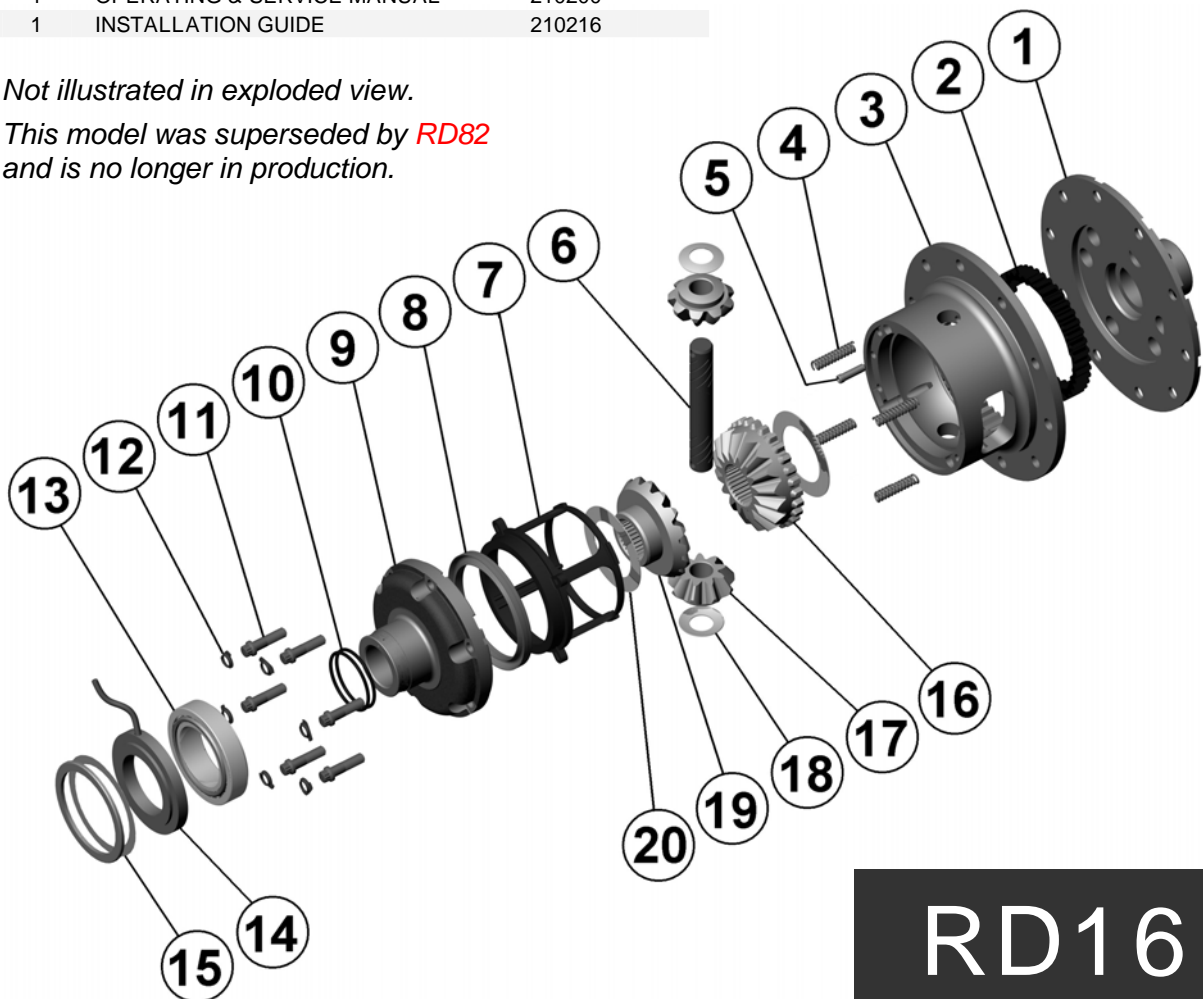
Axle Spline	28 tooth, Ø30.5mm [1.20"]
Ratio Supported	All
Ring Gear ID	127.0mm [5.00"]
Ring Gear OD	224mm [8.8"]
Ring Gear Bolts	10 bolts on Ø152mm [6.00"]
Ring Gear Torque	81Nm [60 ft-lb]
Backlash	0.28-0.41mm [0.011-0.016"]
Bearing Cap Torque	81Nm [60 ft-lb]

Notes:

- For replacement O-rings use only BS132 Viton 75.
 - For replacement bearing use Timken part # LM603049 / LM603011.
- For information on RD16 models with 4 cylinder cap bolts, contact ARB.

* Not illustrated in exploded view.

** This model was superseded by **RD82** and is no longer in production.



RD16



ARB AIR LOCKER *Air Operated Locking Differentials*

RD17 Nissan H233B,33 SPL,disc brake**

Specs:

Axle Spline	33 tooth, Ø33.3mm [1.31"]
Ratio Supported	All
Ring Gear ID	146.0mm [5.75"]
Ring Gear Bolts	9 bolts on Ø176mm [6.93"]
Ring Gear Bolt Size	12mm
Ring Gear Torque	142Nm [105 ft-lb]
Backlash	0.15-0.20mm [0.006-0.008"]
Bearing Cap Torque	99Nm [73 ft-lb]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020302	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	010306	
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	030214	
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	130405	
16	4	PINION THRUST WASHER	151102	
17	4	PINION GEAR	140201	
18	1	SPIDER BLOCK	070201	
19	1	SIDE GEAR	130205	
20	2	SIDE GEAR THRUST WASHER	151002	
21	1	ADJUSTER NUT	100102	
22	1	SEAL HOUSING ASSEMBLY	081902	
23	2	SEAL HOUSING O-RING	160235	1
*	9	RING GEAR BOLT SPACER	4581061	2
*	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	210217	

Notes:

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

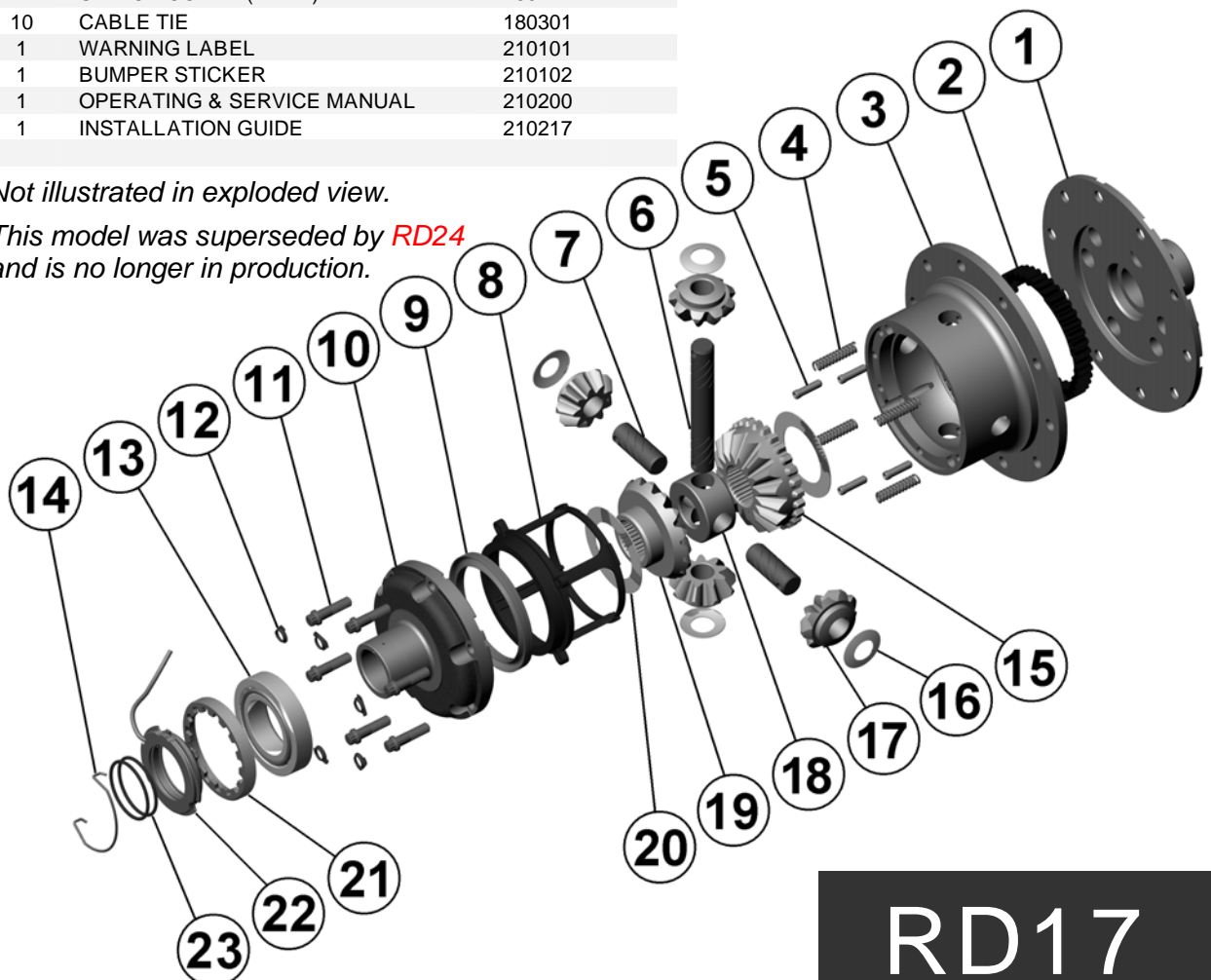
For information on RD17 models with metal pistons, contact ARB.

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

For H233B 33 spline differential with no through cross shaft (drum brake model) refer to RD24 (Section 2.24).
- If ring gear bolts are 10mm then spacers must be used (supplied with kit).

* Not illustrated in exploded view.

** This model was superseded by **RD24** and is no longer in production.



RD17



ARB AIR LOCKER *Air Operated Locking Differentials*

RD18 Dana 44,19 SPL,3.92 & UP**

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:

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

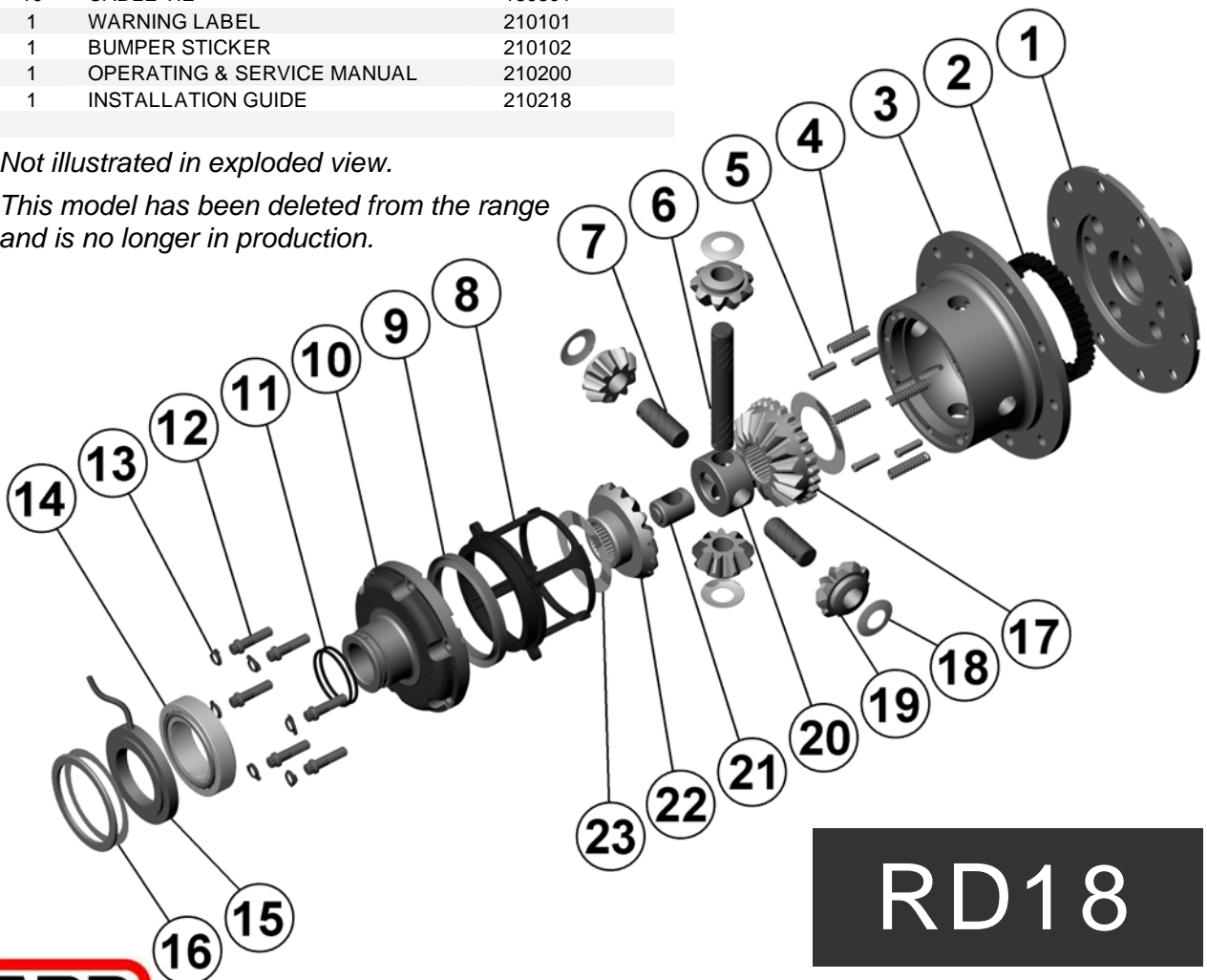
For ratios of 3.73:1 and down refer to RD19 ([Section 2.19](#)).

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

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 illustrated in exploded view.

** This model has been deleted from the range and is no longer in production.



RD18



ARB AIR LOCKER *Air Operated Locking Differentials*

RD19 Dana 44,19 SPL,3.73 & DN**

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]

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	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	

Notes:

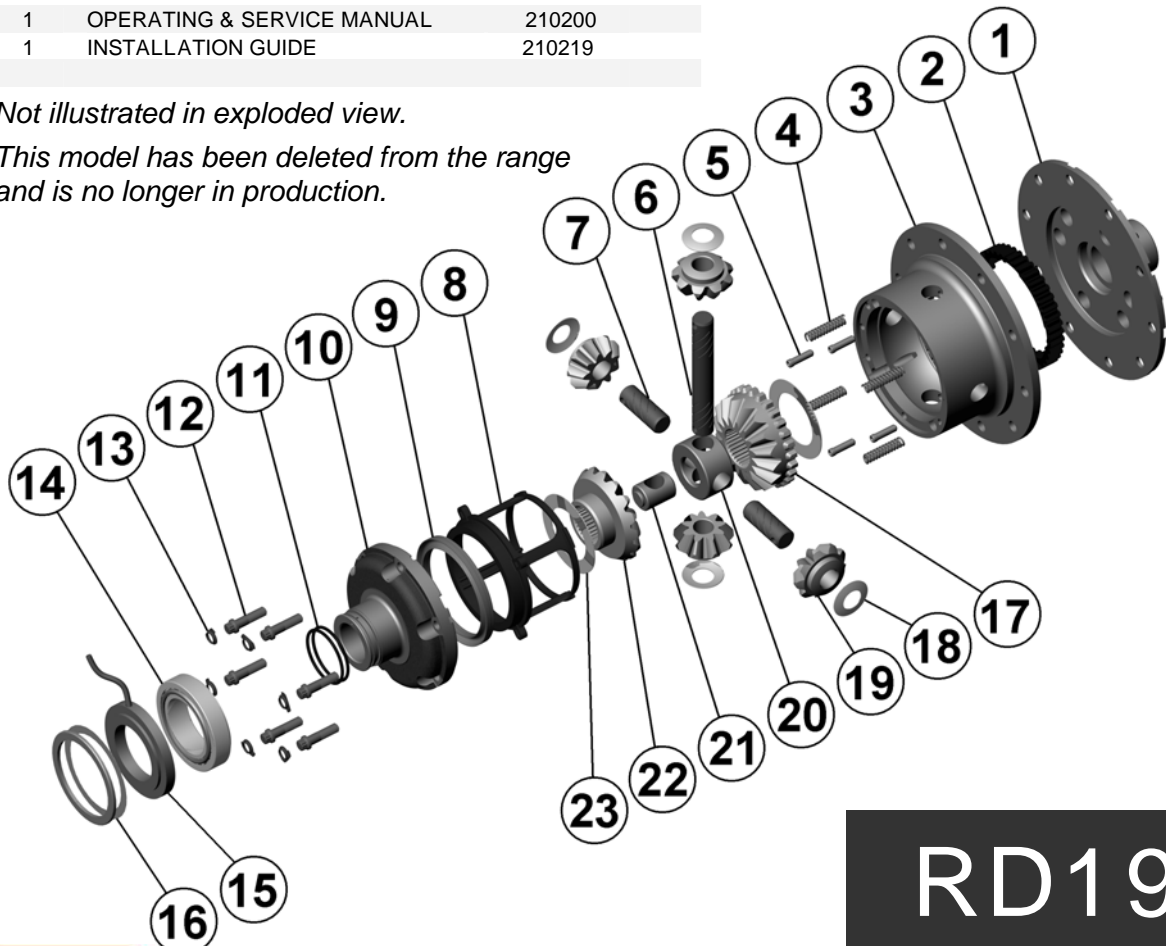
- For replacement O-rings use only BS132 Viton 75.
- For replacement bearing use Timken part # LM104949 / LM104912.

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.

* Not illustrated in exploded view.

** This model has been deleted from the range and is no longer in production.



RD19



ARB AIR LOCKER *Air Operated Locking Differentials*

RD20 Land Rover, Salisbury, 3.54:1

Specs:

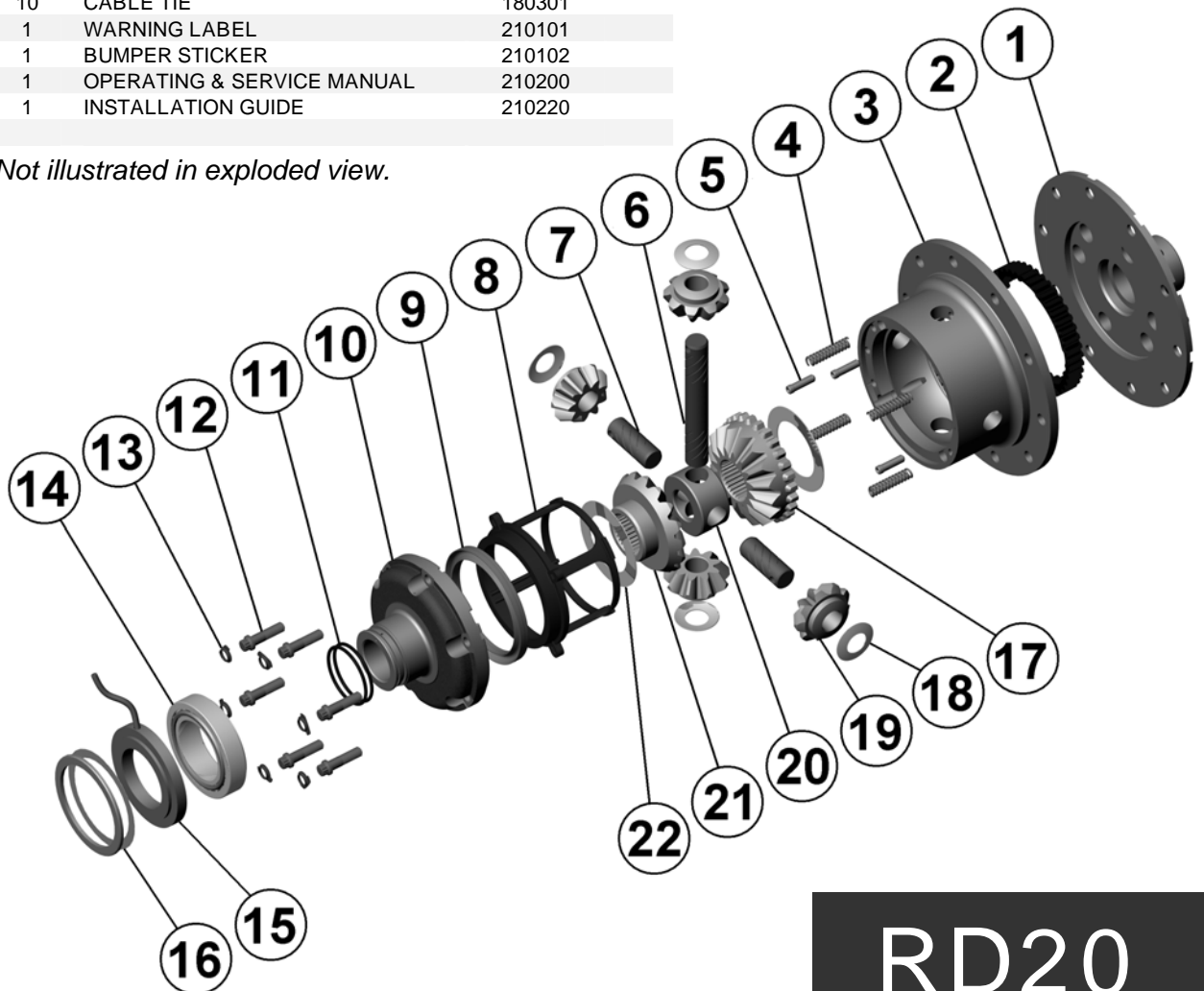
Axle Spline	24 tooth, Ø31.5mm [1.24"]
Ratio Supported	3.54:1
Ring Gear ID	162.0mm [6.38"]
Ring Gear Bolts	12 bolts on Ø191mm [7.50"]
Ring Gear Torque	136Nm [100 ft-lb]
Backlash	0.15-0.27mm [0.006-0.011"]
Bearing Cap Torque	134Nm [99 ft-lb]
Pre-load Amount	0.13mm [0.005"]

Notes:

- 1 For replacement O-rings use only BS136 Viton 75.
 - 2 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.

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	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 illustrated in exploded view.



RD20



ARB AIR LOCKER *Air Operated Locking Differentials*

RD21 Dana 60,30 SPL,4.56 & UP

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]

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	
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	210221	

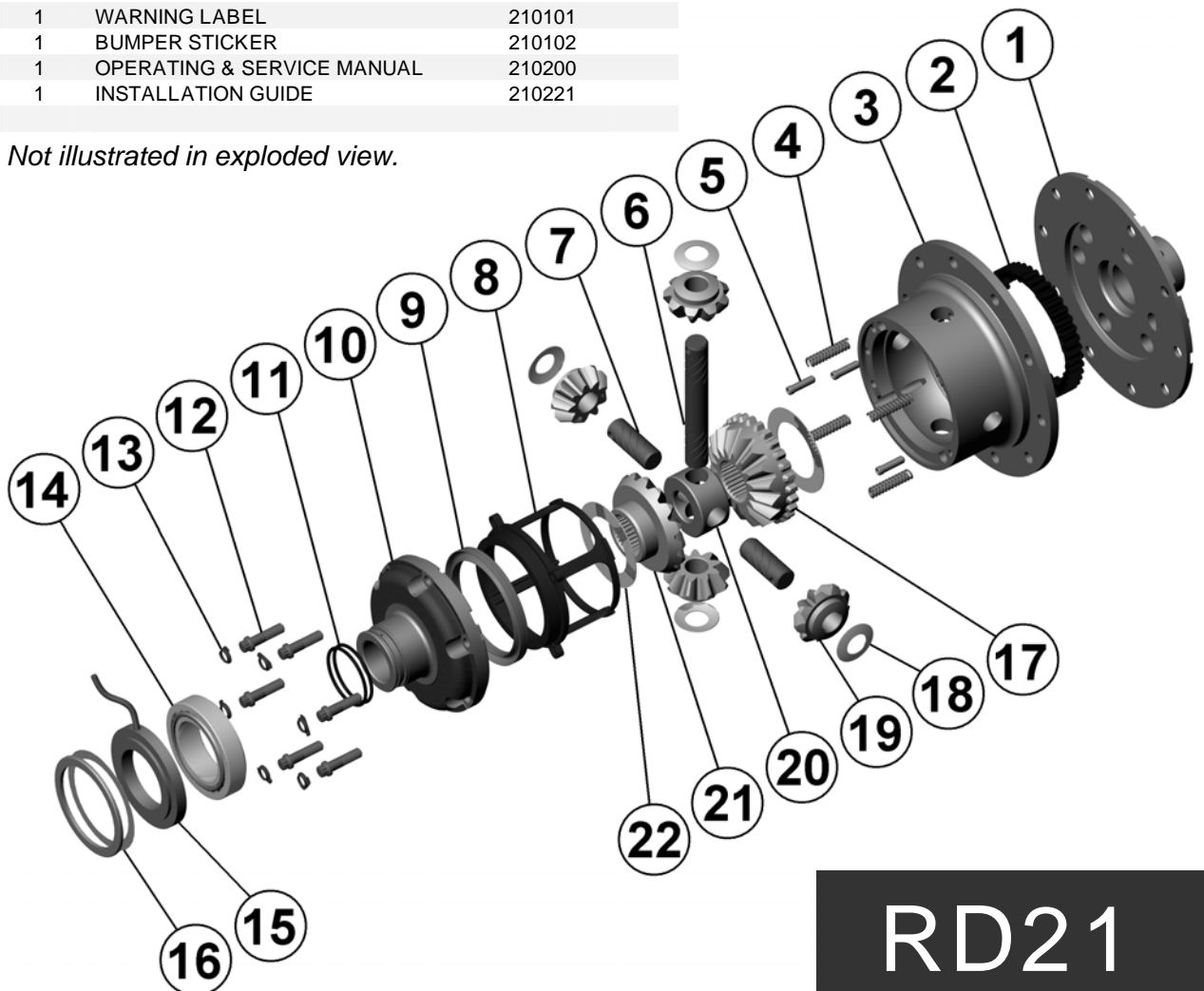
Notes:

- For replacement O-ring use only BS136 Viton 75.
- 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.

* *Not illustrated in exploded view.*



RD21



ARB AIR LOCKER *Air Operated Locking Differentials*

RD22 Dana 60,30 SPL,4.10 & DN

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]

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	

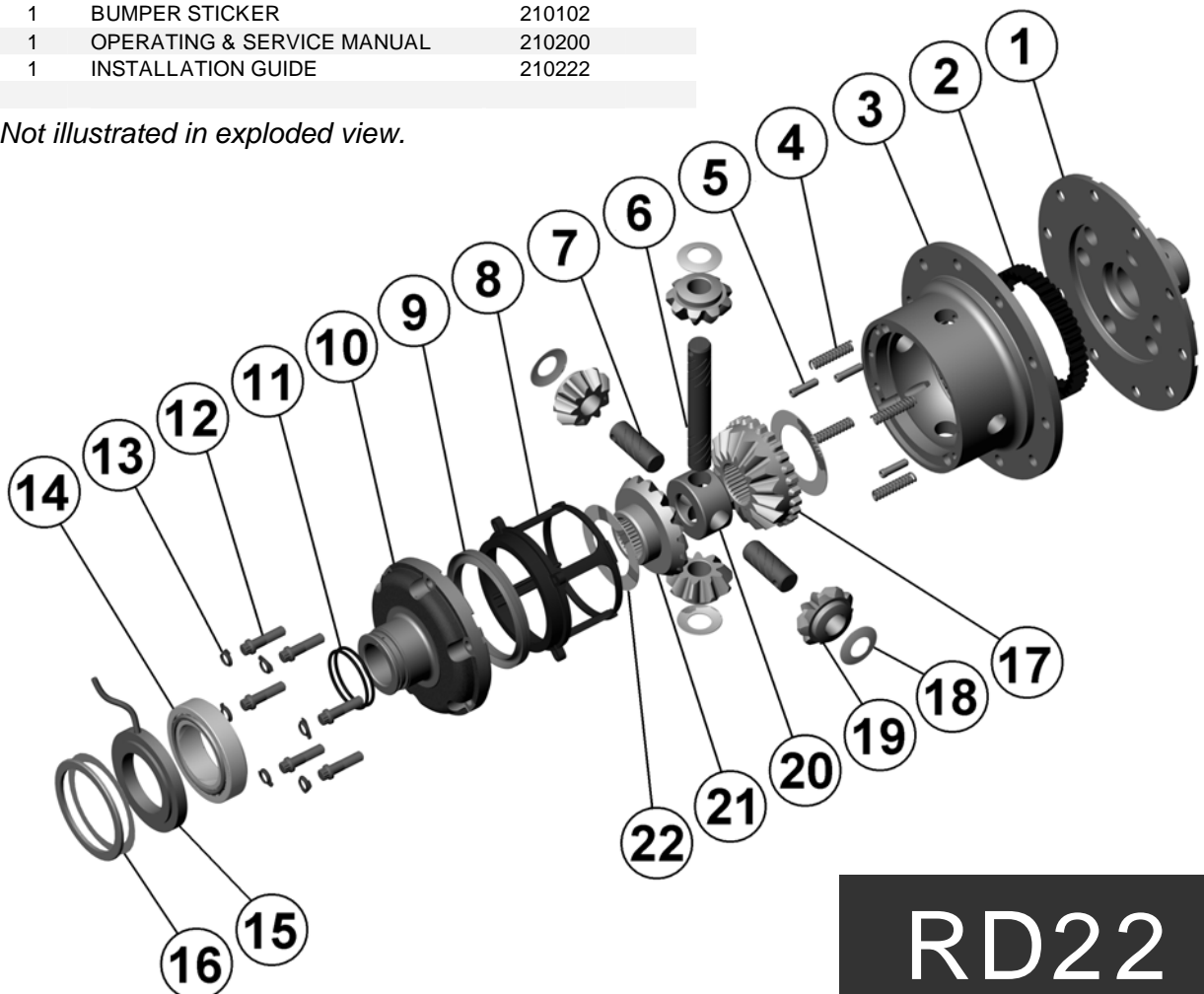
Notes:

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

* Not illustrated in exploded view.



RD22



ARB AIR LOCKER *Air Operated Locking Differentials*

RD23 Toyota 8",50mm BRNG

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).

- 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).

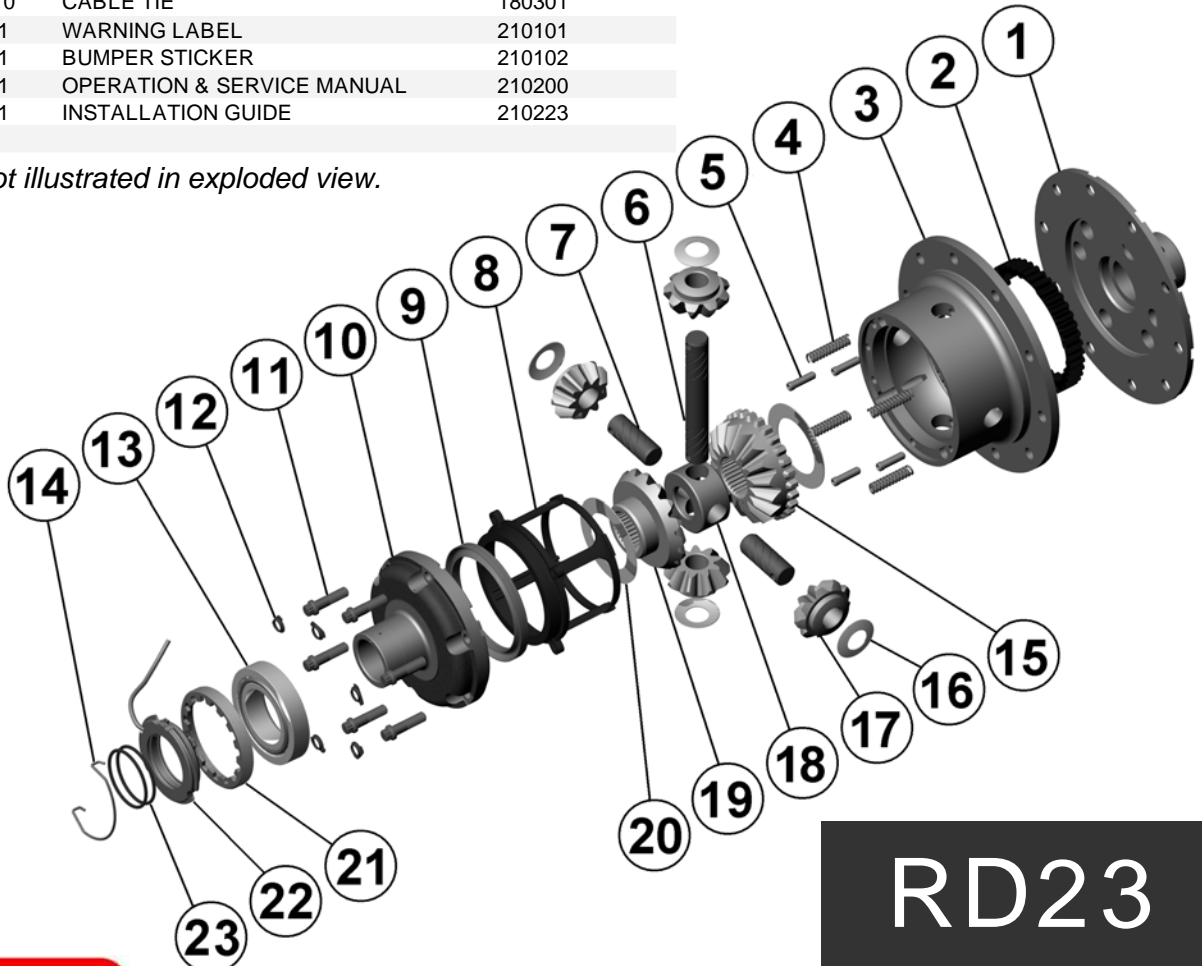
Refer to pinion modification tech note (Sec. 5.6).

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.

ITEM #	QTY	DESCRIPTION	PART #	NOTES
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 illustrated in exploded view.



RD23



ARB AIR LOCKER *Air Operated Locking Differentials*

RD24 Nissan H233B,33 SPL

Specs:

Axle Spline	33 tooth, Ø33.3mm [1.31"]
Ratio Supported	All
Ring Gear ID	146.0mm [5.75"]
Ring Gear Bolts	9 bolts on Ø176mm [6.93"]
Ring Gear Bolt Size	12mm
Ring Gear Torque	142Nm [105 ft-lb]
Backlash	0.15-0.20mm [0.006-0.008"]
Bearing Cap Torque	99Nm [73 ft-lb]

Notes:

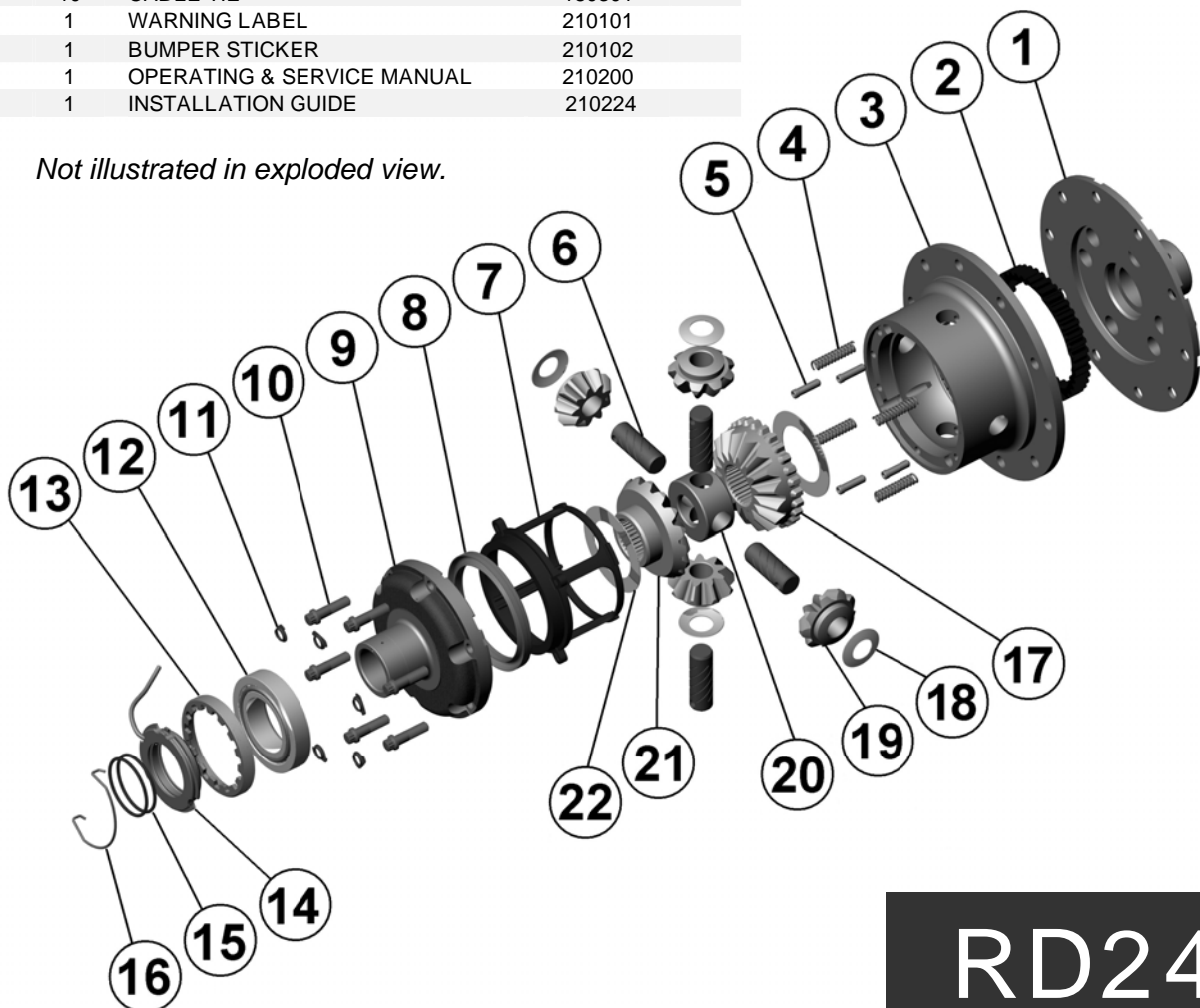
- 1 For replacement O-rings use only BS133 Viton 75.

For information on RD24 models with metal pistons, contact ARB.

For seal housing set-up refer to tech notes (Section 5.1 & 5.2).
- 2 If ring gear bolts are 10mm then spacers must be used (supplied with kit).

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020302	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	010307	
04	4	RETURN SPRING	150101	
05	4	CROSS SHAFT RETAINING PIN	120303	
06	4	SHORT CROSS SHAFT	060402	
07	1	PISTON	040202	
08	1	BONDED SEAL	160705	
09	1	CYLINDER CAP ASSEMBLY	030214	
10	8	CYLINDER CAP RETAINING BOLT	200205	
11	8	LOCKING TAB (8mm)	150401	
12	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
13	1	ADJUSTER NUT	100102	
14	1	SEAL HOUSING ASSEMBLY	081902	
15	2	SEAL HOUSING O-RING	160235	1
16	1	SEAL HOUSING RETAINING CLIP	150601	
17	1	SPLINED SIDE GEAR	130405	
18	4	PINION THRUST WASHER	151102	
19	4	PINION GEAR	140201	
20	1	SPIDER BLOCK	070201	
21	1	SIDE GEAR	130205	
22	2	SIDE GEAR THRUST WASHER	151002	
*	9	RING GEAR BOLT SPACER	4581061	2
*	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	210224	

* Not illustrated in exploded view.



RD24



ARB AIR LOCKER *Air Operated Locking Differentials*

RD25 Mitsubishi 9",RR,28 SPL,disc brake

Specs:

Axle Spline	28 tooth, Ø30.5mm [1.20"]
Ratio Supported	All
Ring Gear ID	145.0mm [5.71"]
Ring Gear Bolts	12 bolts on Ø175mm [6.89"]
Ring Gear Torque	85Nm [63 ft-lb]
Backlash	0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque	60Nm [44 ft-lb]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021202	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	011403	
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	030603	
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	130408	
16	4	PINION THRUST WASHER	151102	
17	4	PINION GEAR	140201	
18	1	SPIDER BLOCK	070201	
19	1	SIDE GEAR	130208	
20	2	SIDE GEAR THRUST WASHER	151002	
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	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210225	

Notes:

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

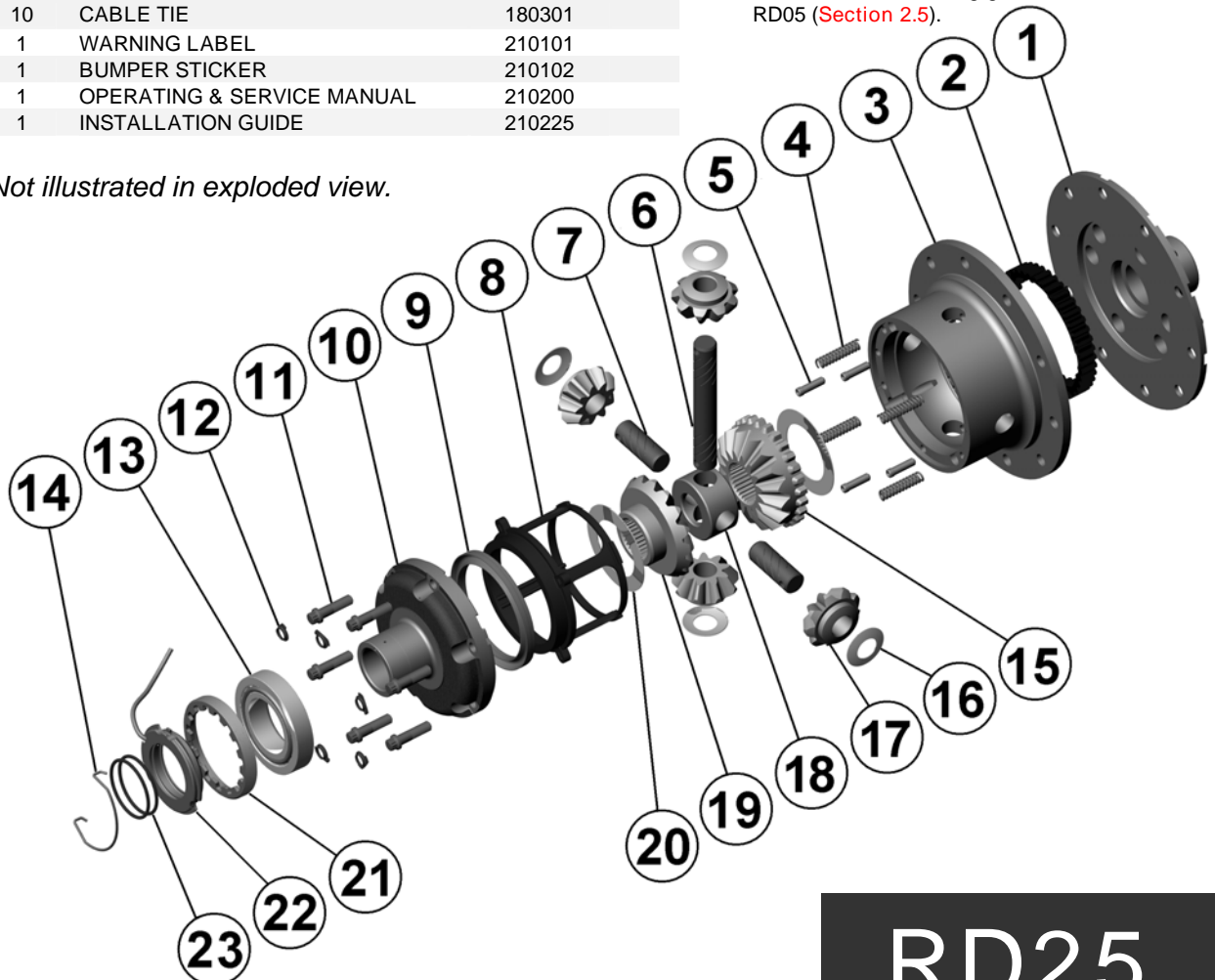
For information on RD25 models with metal pistons, contact ARB.

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

For the large Mitsubishi 28 spline differential with a thrust block between the axle shafts (available on drum brake equipped vehicles) refer to RD46 (Section 2.46).

For the 'small' Mitsubishi 28 spline rear differential with 10 ring gear bolts refer to RD05 (Section 2.5).

* Not illustrated in exploded view.



RD25



ARB AIR LOCKER *Air Operated Locking Differentials*

RD26 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	
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	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	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210226	

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 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.)

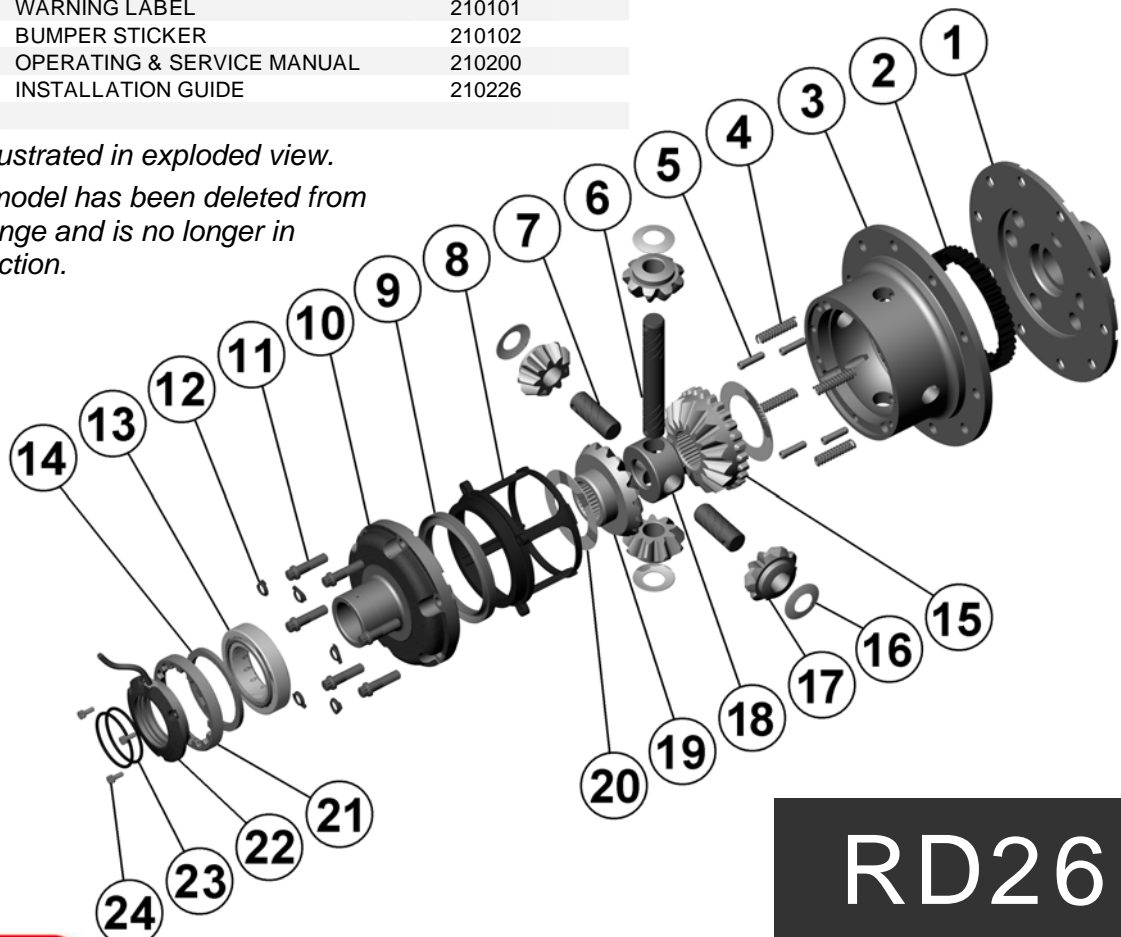
Refer to seal housing set-up tech note ([Section 5.1](#)).

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.

* Not illustrated in exploded view.

** This model has been deleted from the range and is no longer in production.



RD26



ARB AIR LOCKER *Air Operated Locking Differentials*

RD27 Nissan C200,29 SPL**

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:

- 1 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]

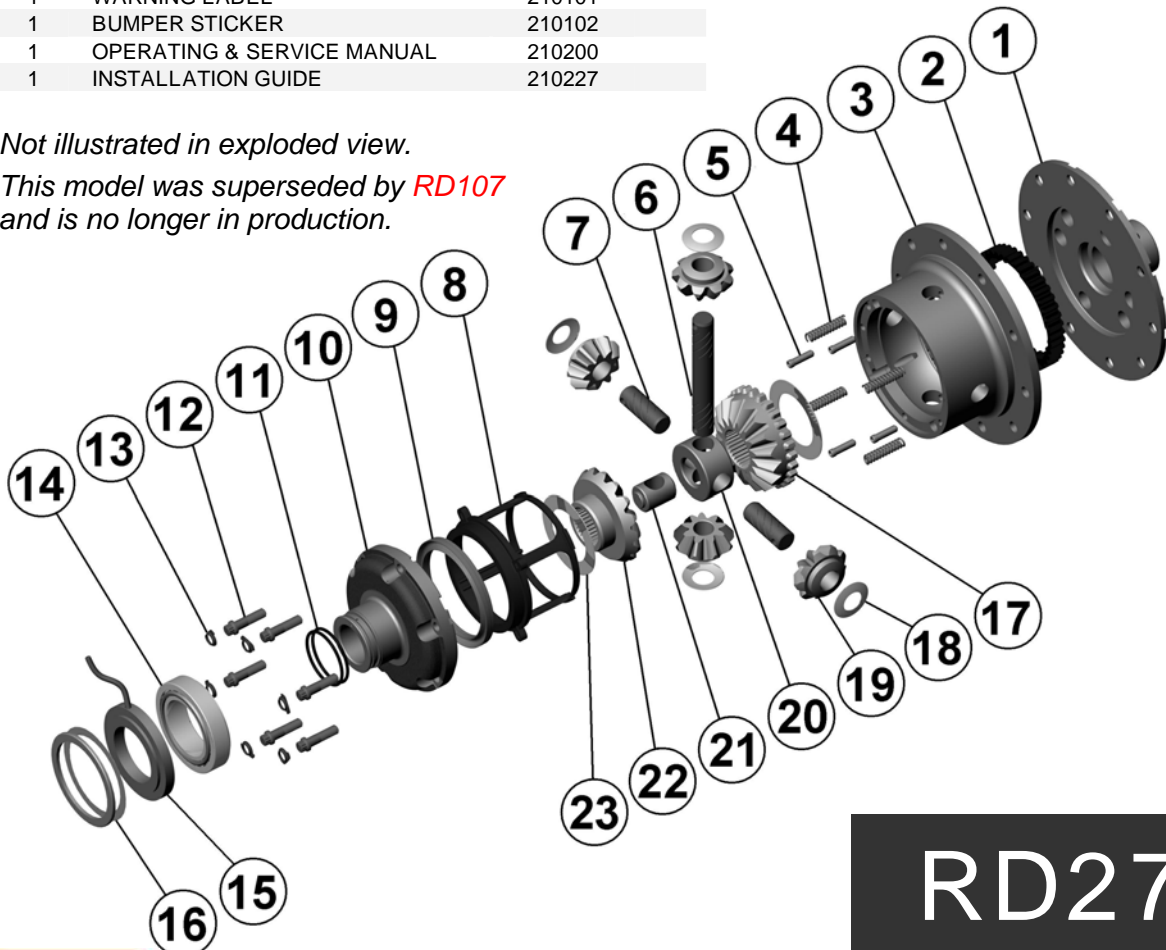
Some C200's did not have thrust blocks between the axles and therefore the Air Locker thrust block must be removed.

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

ITEM #	QTY	DESCRIPTION	PART #	NOTES
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	
08	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 illustrated in exploded view.

** This model was superseded by **RD107** and is no longer in production.



RD27



ARB AIR LOCKER *Air Operated Locking Differentials*

RD28 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	
08	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	

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.
- 2 For replacement bearing use Timken part # LM102949 / LM102910.

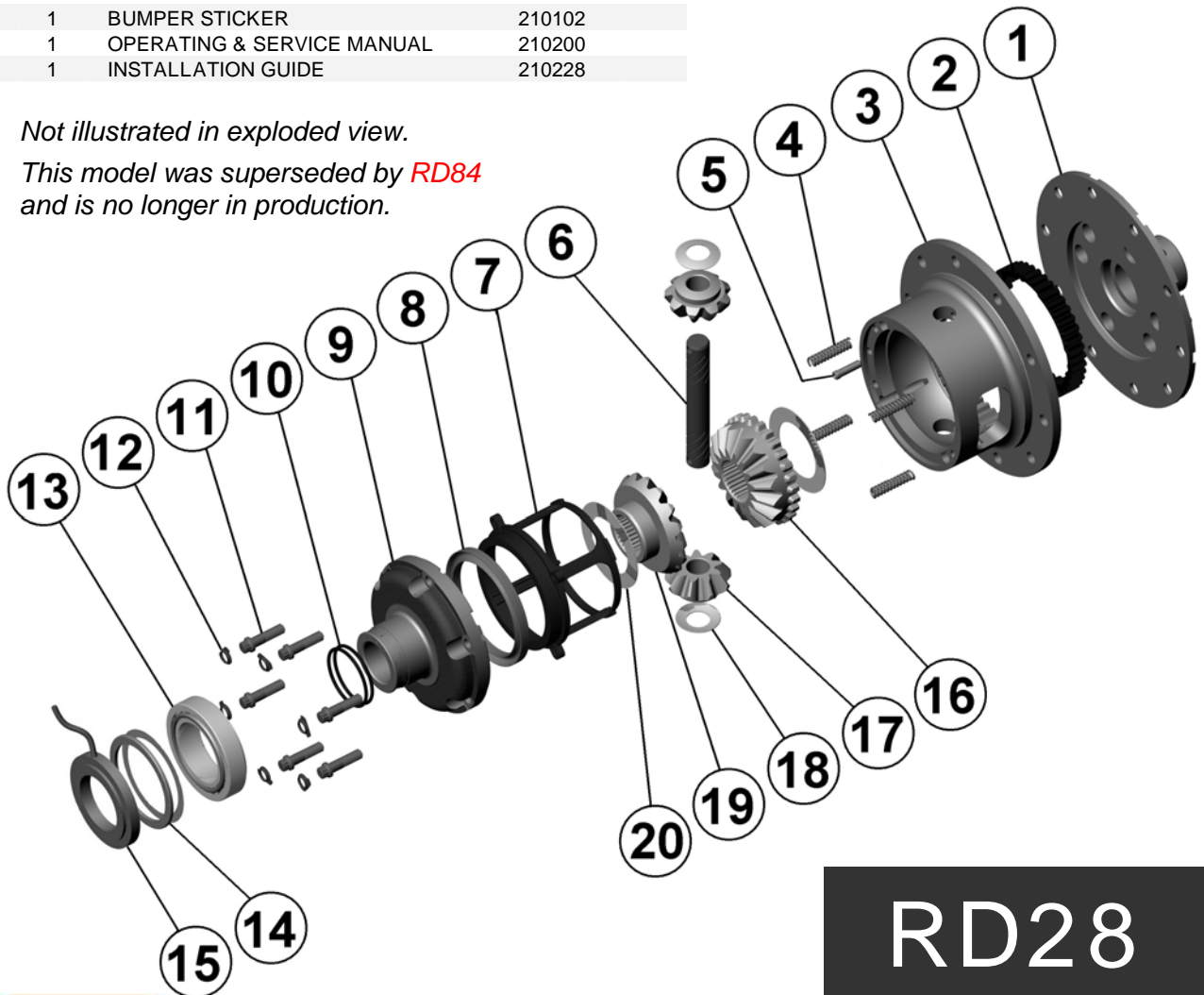
For information on RD28 models with 4 cylinder cap bolts, contact ARB.

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.

* Not illustrated in exploded view.

** This model was superseded by **RD84** and is no longer in production.



RD28



ARB AIR LOCKER *Air Operated Locking Differentials*

RD30 Dana 30,27 SPL,3.73 & UP**

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]

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	
08	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	

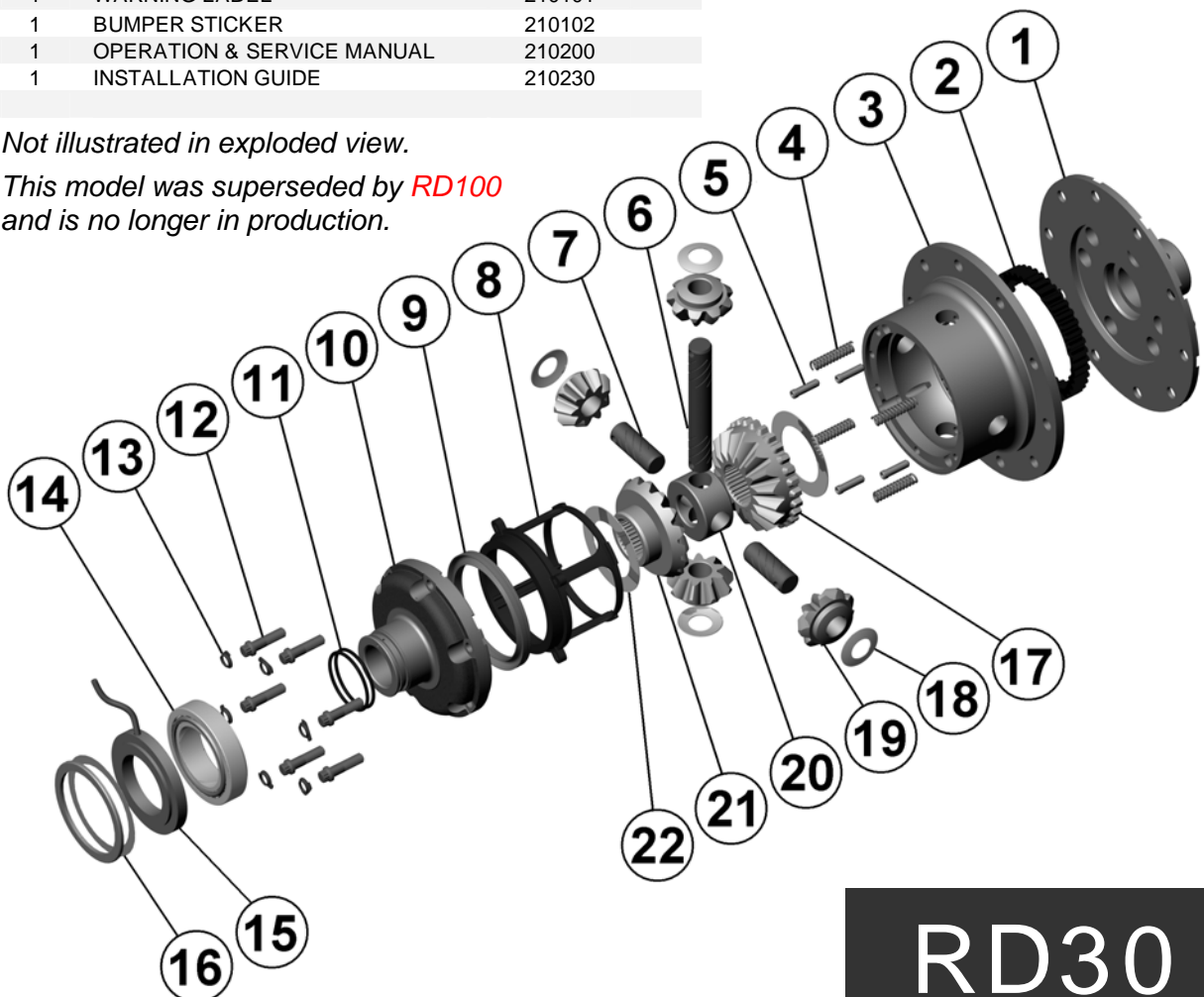
Notes:

- 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.

* Not illustrated in exploded view.

** This model was superseded by **RD100** and is no longer in production.



RD30



ARB AIR LOCKER *Air Operated Locking Differentials*

RD31 Dana 30,27 SPL,3.54 & DN**

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:

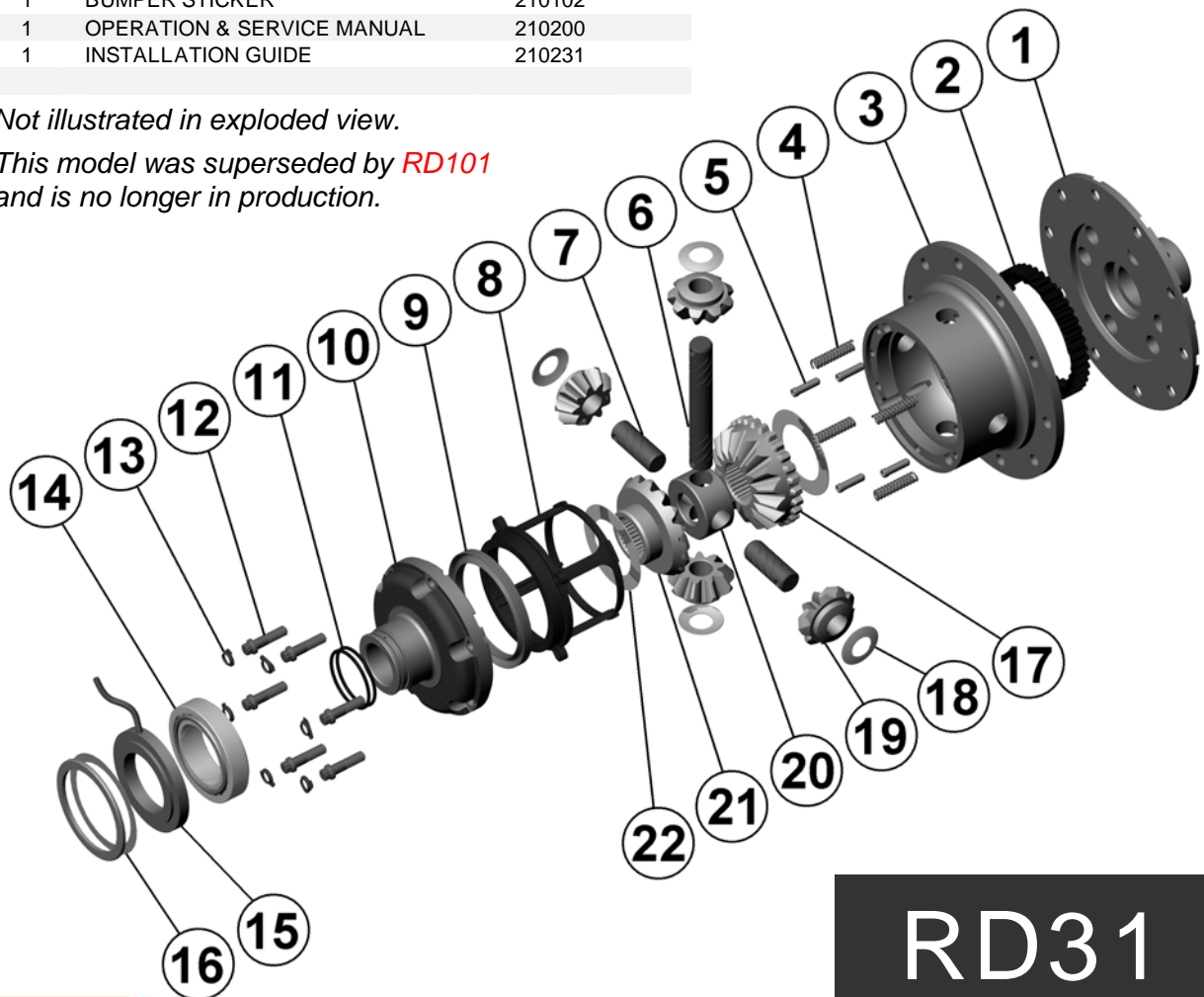
- 1 For replacement O-rings use only BS028 Viton 75.
- 2 For replacement bearing use Timken part # LM501349 / LM501310.

Not for use in IFS Dana 30 models.

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	
08	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	

* Not illustrated in exploded view.

** This model was superseded by **RD101** and is no longer in production.



RD31



ARB AIR LOCKER *Air Operated Locking Differentials*

RD32

Land Rover, Salisbury, 4.70:1

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"]

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	
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	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	

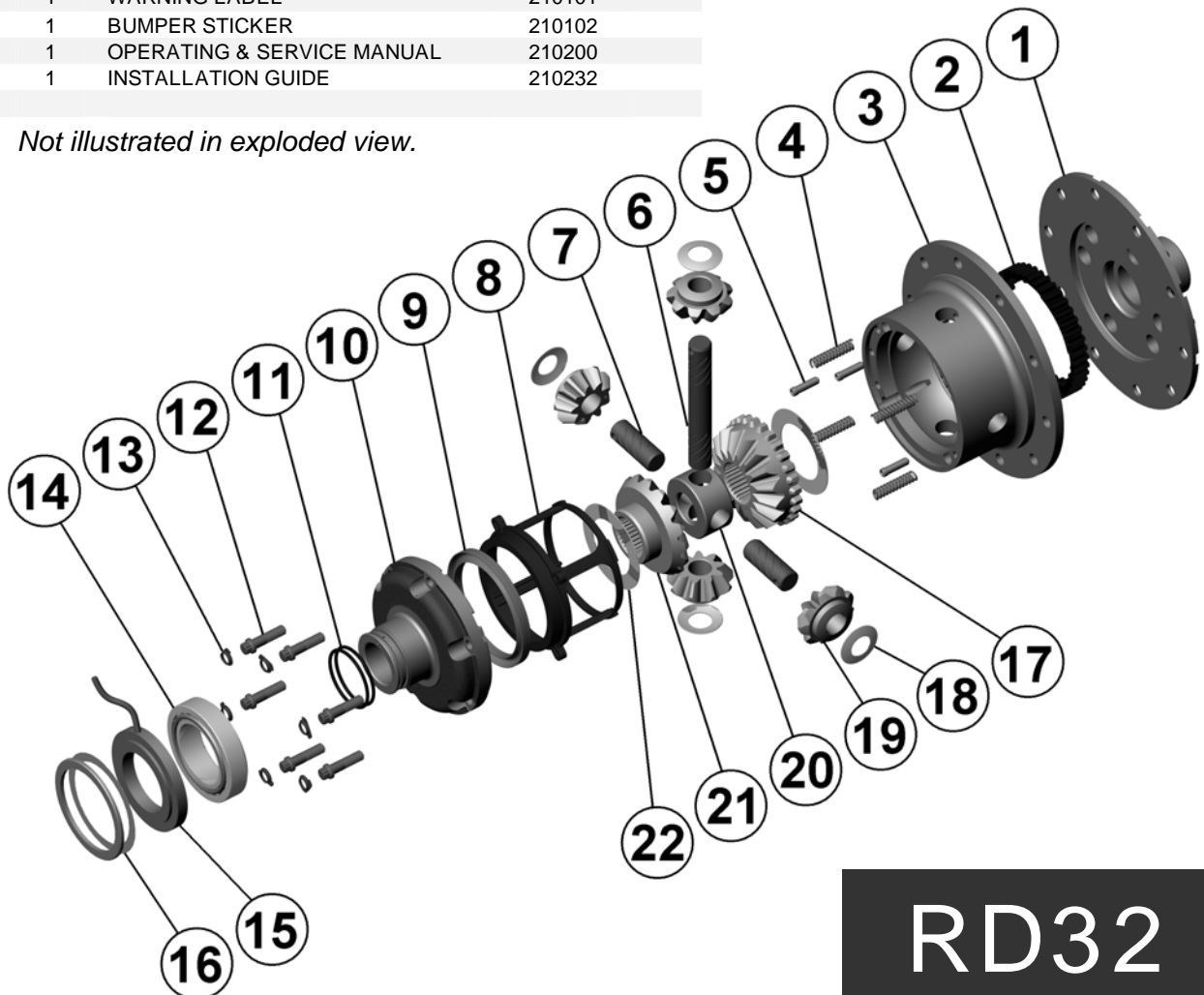
Notes:

- 1 For replacement O-rings use only BS136 Viton 75
- 2 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.

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD33 Toyota 8.9", 50mm BRNG

Specs:

Axle Spline	30 tooth, Ø33mm [1.31"]
Ratio Supported	All
Ring Gear ID	138.1mm [5.44"]
Ring Gear OD	225mm [8.9"]
Ring Gear Bolts	12 bolts on Ø156mm [6.14"]
Ring Gear Torque	120Nm [89 ft-lb]
Backlash	0.15-0.20mm [0.006-0.008"]
Bearing Cap Torque	110Nm [81 ft-lb]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021703	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	010204	
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	030222	
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	130401	
16	4	PINION THRUST WASHER	151102	
17	4	PINION GEAR	140201	
18	1	SPIDER BLOCK	070201	
19	1	SIDE GEAR	130201	
20	2	SIDE GEAR THRUST WASHER	151002	
21	1	ADJUSTER NUT	100101	
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 (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	210233	

Notes:

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

For 8.9" with 45mm carrier bearing ID, 50mm bearings must be acquired. ARB part #160116 and Timken part #32010X-32010X.

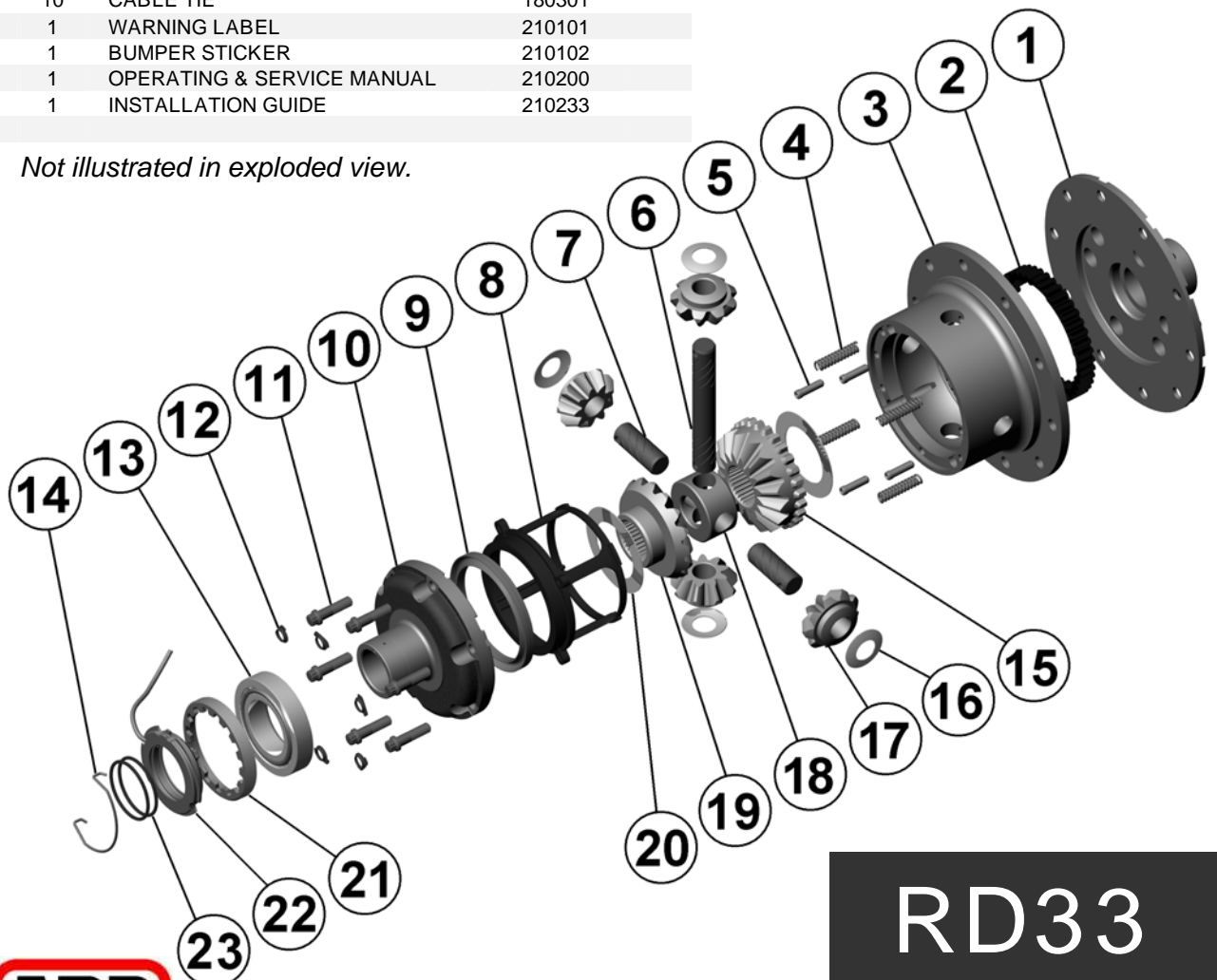
For 8.9" C-clip model refer to RD124 (Sec. 2.124).

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

For information on RD33 models with 4 cylinder cap bolts, contact ARB.

Older RD33 models with O-ring grooves in the cylinder cap use; cylinder cap #030209, seal housing #080102 and O-ring BS031 #160209.

* Not illustrated in exploded view.



RD33



ARB AIR LOCKER *Air Operated Locking Differentials*

RD35 Dana 60HD,35 SPL,4.56 & UP

Specs:

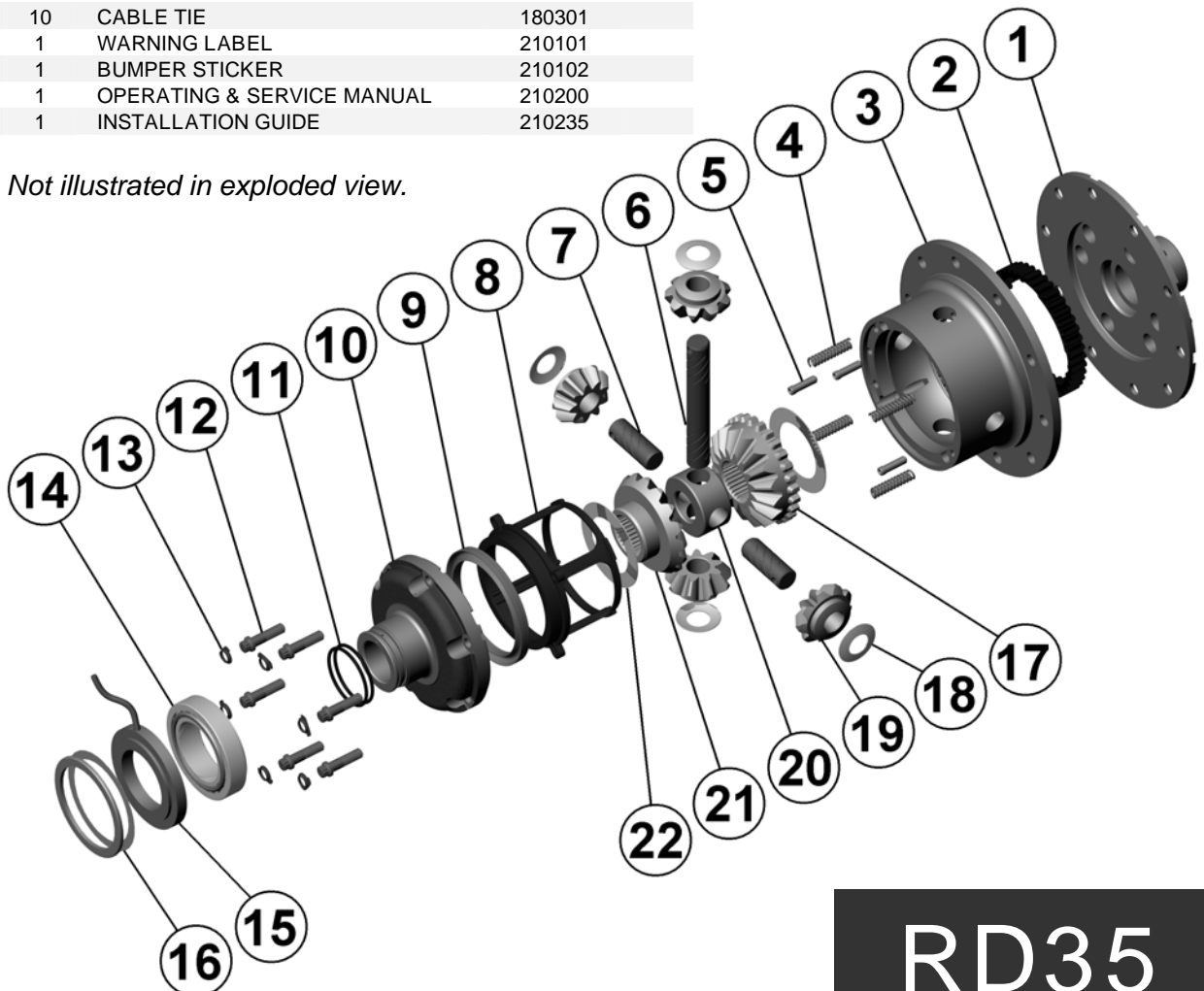
Axle Spline	35 tooth, Ø38.1mm [1.50"]
Ratio Supported	4.56:1 & up
Ring Gear ID	162.0mm [6.38"]
Ring Gear OD	248mm [9.75"]
Ring Gear Bolts	12 bolts on Ø191mm [7.50"]
Ring Gear Torque	149Nm [110 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	108Nm [80 ft-lb]

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](#)).

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	
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	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 illustrated in exploded view.



RD35



ARB AIR LOCKER *Air Operated Locking Differentials*

RD36 Dana 60HD,35 SPL,4.10 & DN

Specs:

Axle Spline	35 tooth, Ø38.1mm [1.50"]
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]

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	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	210236	

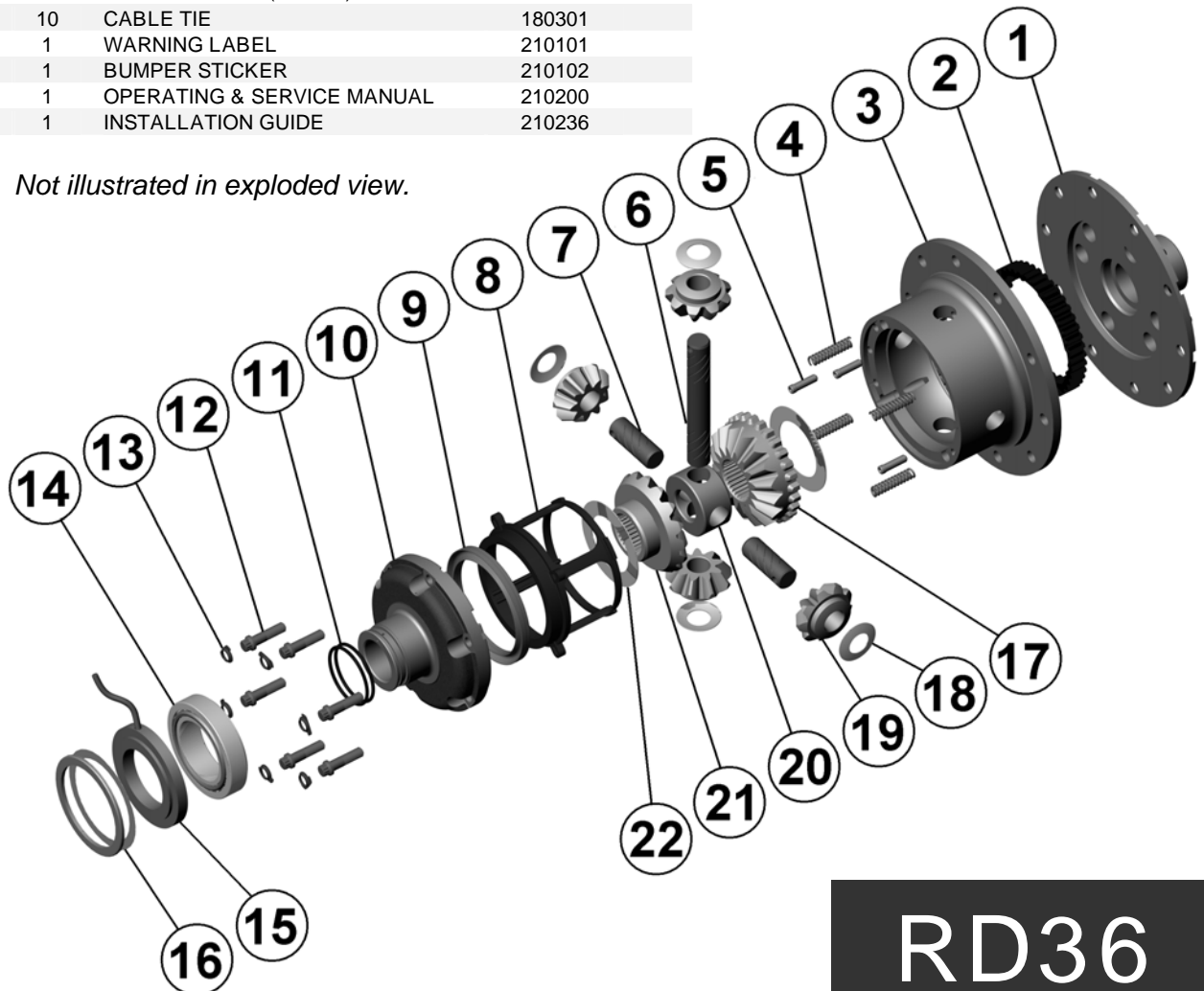
Notes:

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

For ratios of 4.56:1 and up refer to RD35 ([Section 2.35](#)).

For Dana 60HD C-clip model refer to RD43 ([Section 2.43](#)).

* *Not illustrated in exploded view.*



RD36



ARB AIR LOCKER *Air Operated Locking Differentials*

RD37 Ford 10.25" & 10.5" (Sterling / corporate)

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]

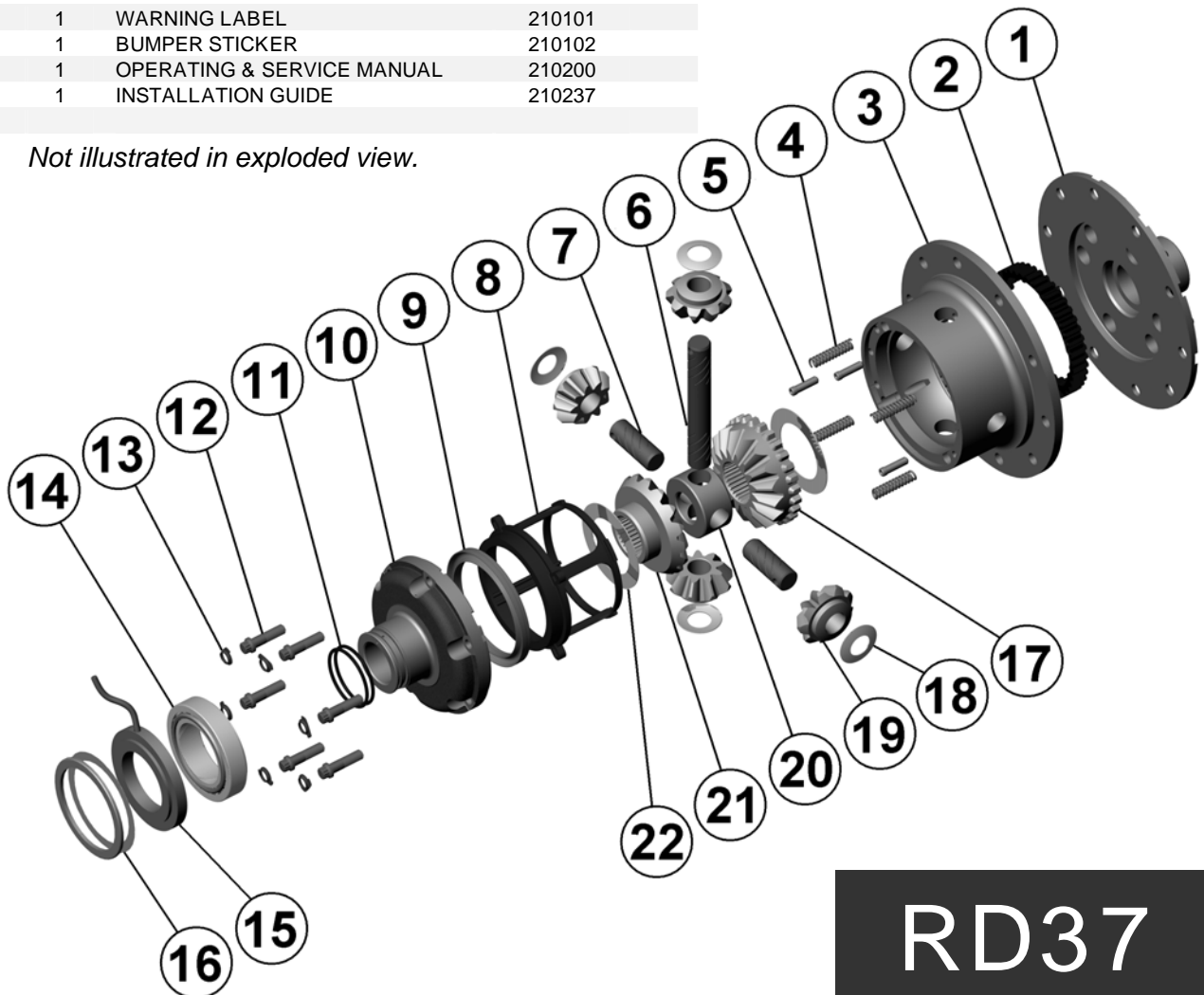
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021103	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	011801	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060703	
07	2	SHORT CROSS SHAFT	060802	
08	1	PISTON	040501	
09	1	BONDED SEAL	160703	
10	1	CYLINDER 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	

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.

* *Not illustrated in exploded view.*



RD37



ARB AIR LOCKER *Air Operated Locking Differentials*

RD38 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:

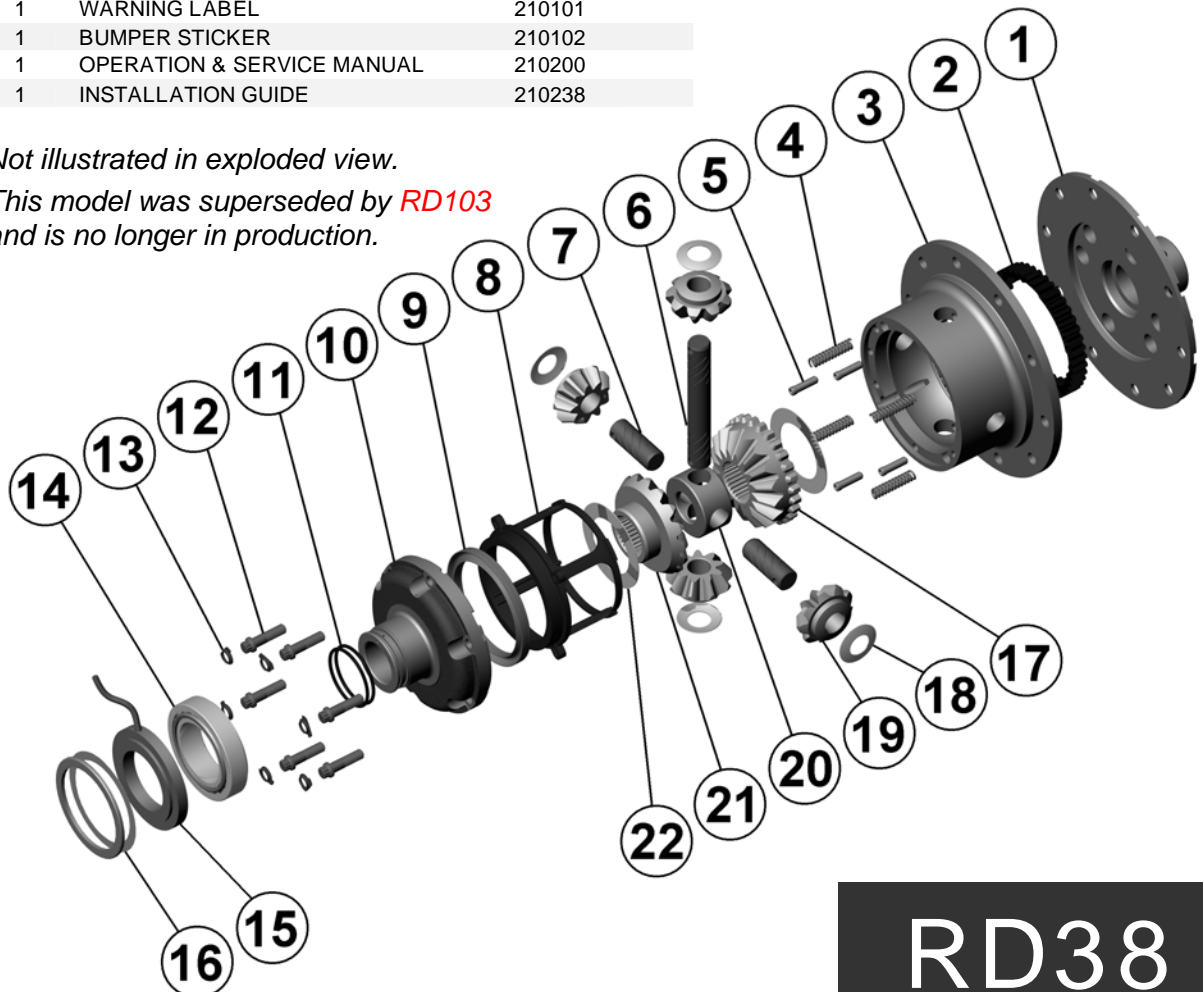
- For replacement O-rings
Use only BS028 Viton 75.
- For replacement bearing use
Timken part # LM501349 / LM501310.

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.

* Not illustrated in exploded view.

** This model was superseded by **RD103** and is no longer in production.



RD38



ARB AIR LOCKER *Air Operated Locking Differentials*

RD39 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	
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	210239	

Specs:

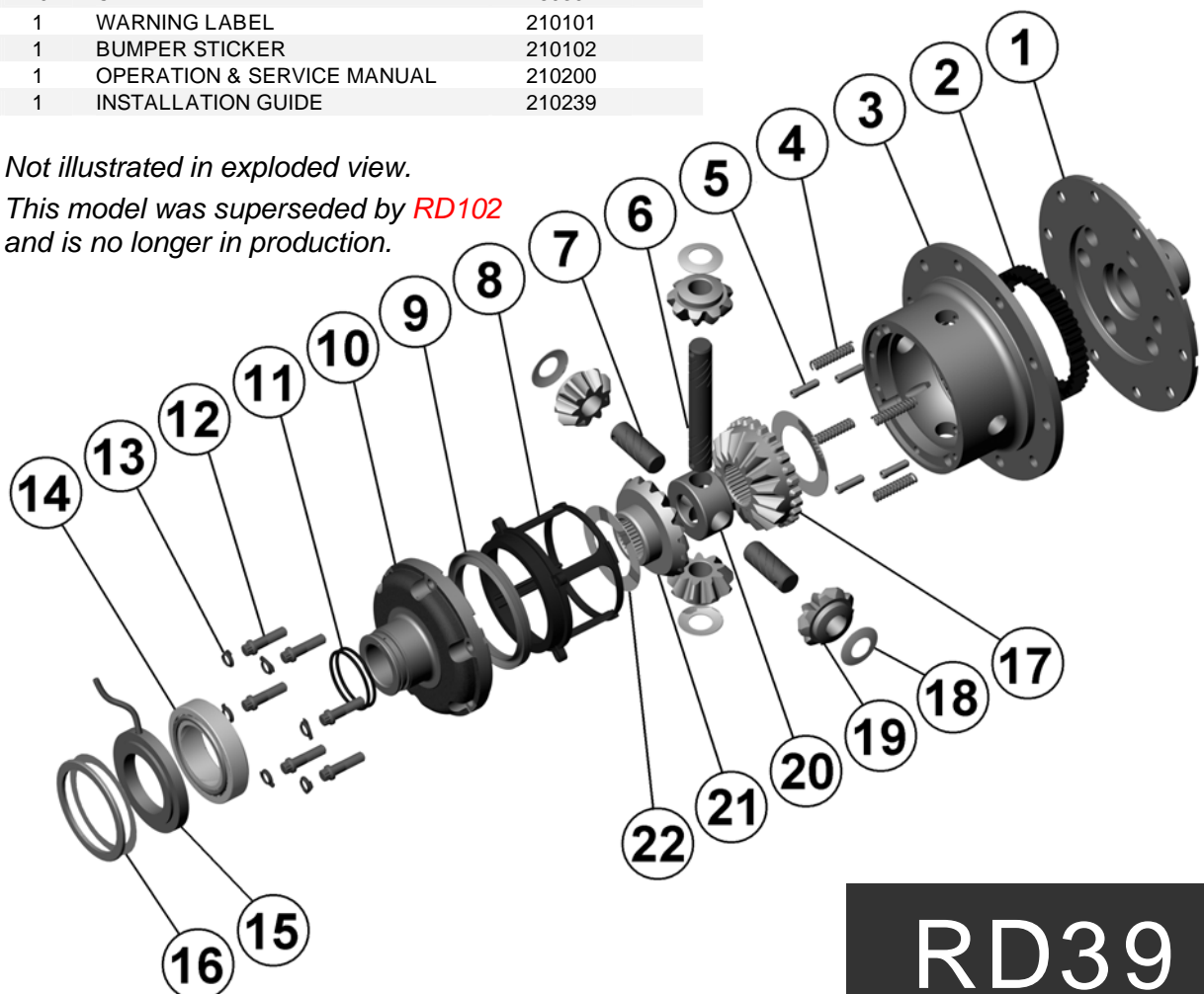
Axle Spline	27 tooth, Ø29.5mm [1.16"]
Ratio Supported	3.54:1 & up
Ring Gear ID	120.7mm [4.75"]
Ring Gear OD	193mm [7.6"]
Ring Gear Bolts	8 bolts on Ø146mm [5.75"]
Ring Gear Torque	75Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	75Nm [55 ft-lb]

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.



* Not illustrated in exploded view.

** This model was superseded by **RD102** and is no longer in production.

RD39



ARB AIR LOCKER *Air Operated Locking Differentials*

RD40 GM 14 Bolt, 9.5", C-clip

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:

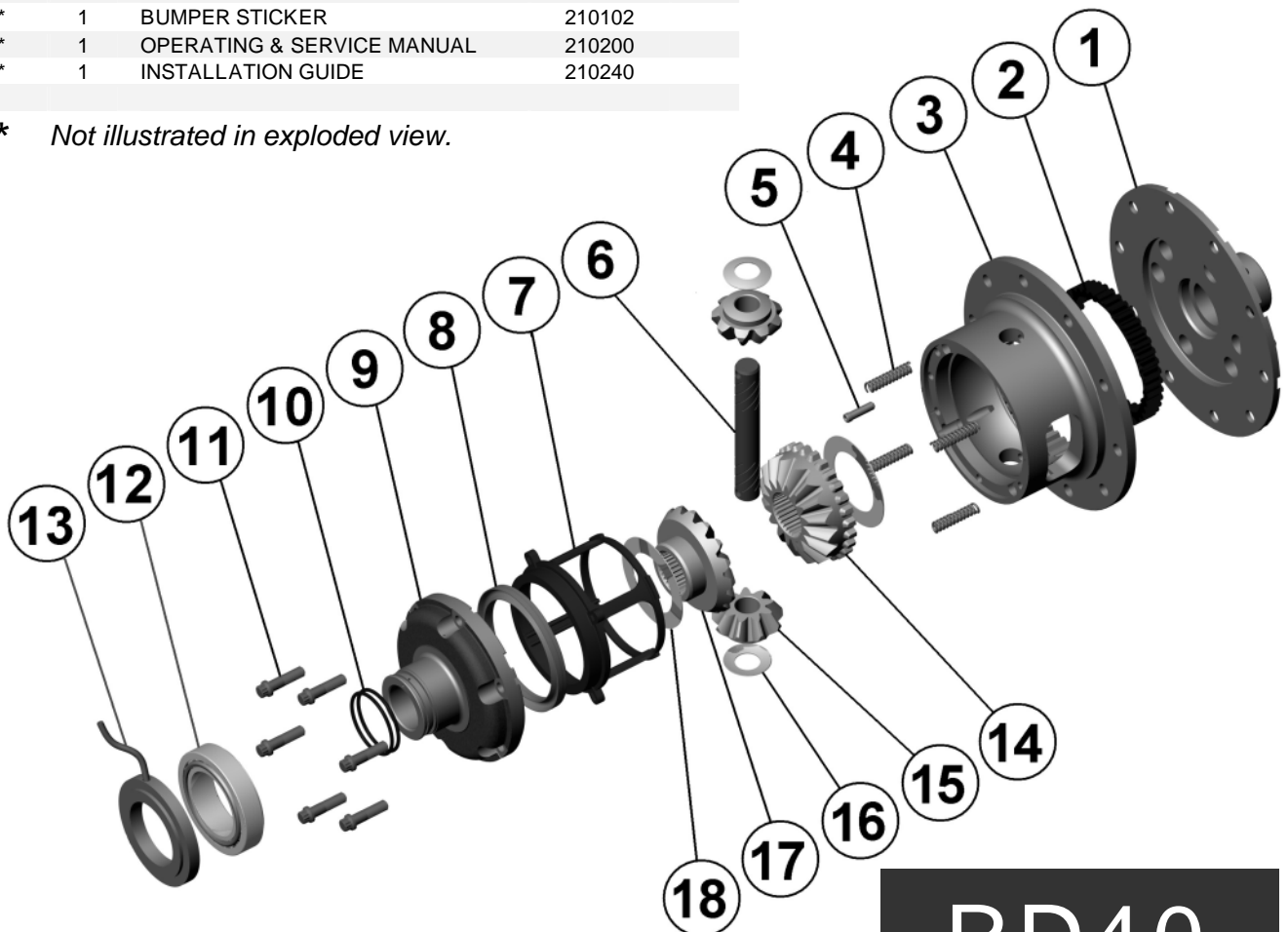
- 1 For replacement O-rings use only BS135 Viton 75.
- 2 For replacement bearing use Timken part # JLM506849 / JLM506810.

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	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	
08	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	

* Not illustrated in exploded view.



RD40



ARB AIR LOCKER *Air Operated Locking Differentials*

RD41 Mitsubishi Jeep,RR**

Specs:

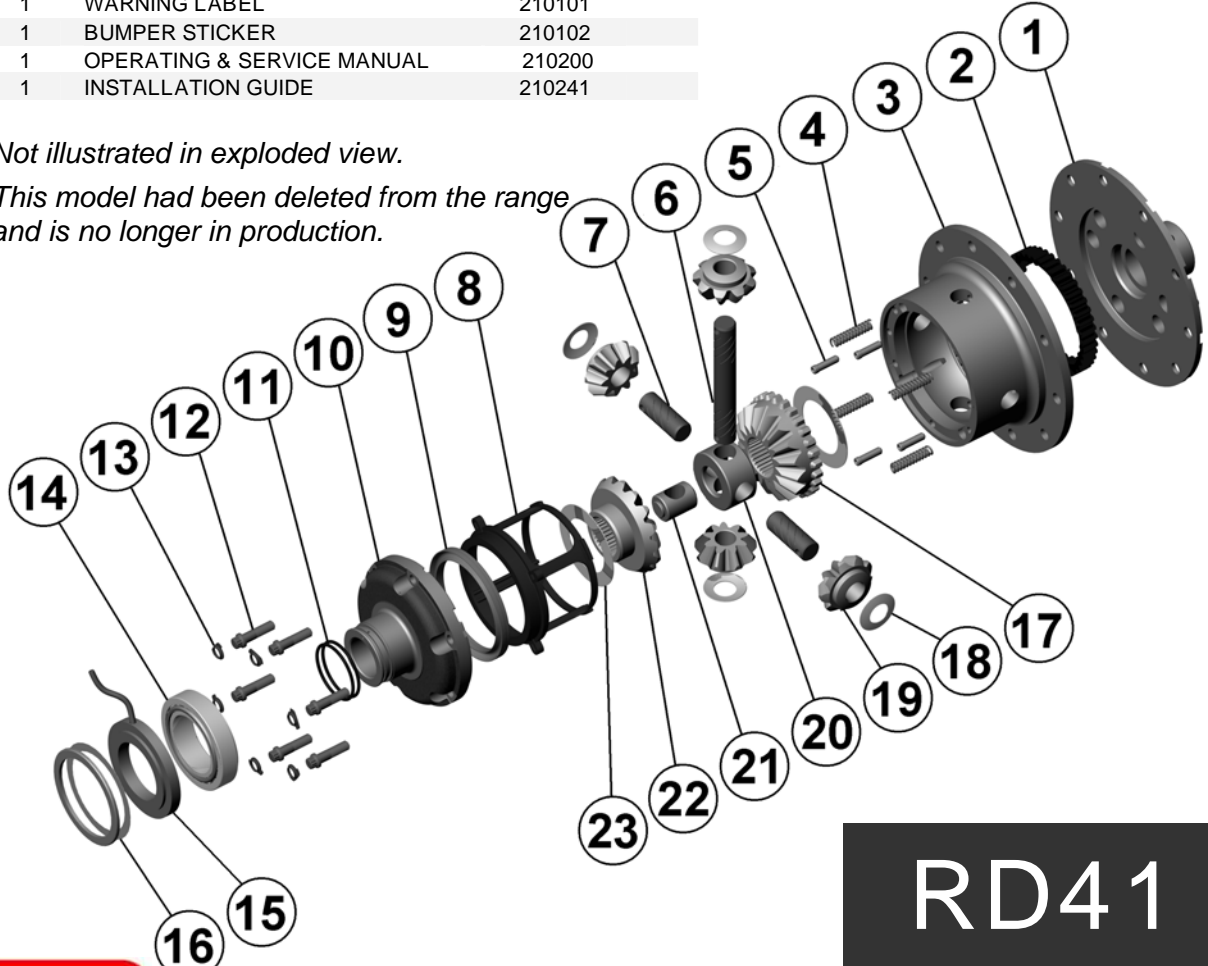
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020503	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010505	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
08	1	PISTON	040103	
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	
14	1	TAPERED ROLLER BEARING	160101	2
15	1	SEAL HOUSING	080301	
16	1	SHIM KIT	SHK004	
17	1	SPLINED SIDE GEAR	130308	
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	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)	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	210241	

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:

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

* Not illustrated in exploded view.
 ** This model had been deleted from the range and is no longer in production.



RD41



ARB AIR LOCKER *Air Operated Locking Differentials*

RD42 Dana 60HD, C-clip, 35 SPL, 4.56 & UP

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]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021501	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	011703	
04	4	RETURN SPRING	150101	
05	1	CROSS SHAFT RETAINING PIN	120301	
06	1	LONG CROSS SHAFT	060702	
07	1	PISTON	040501	
08	1	BONDED SEAL	160703	
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	
13	1	TAPERED ROLLER BEARING	160107	2
14	1	SEAL HOUSING ASSEMBLY	080701	
15	1	SHIM KIT	SHK001	
16	1	SPLINED SIDE GEAR	130801	
17	2	PINION GEAR	140401	
18	2	PINION THRUST WASHER	151104	
19	1	SIDE GEAR	130701	
20	2	SIDE GEAR THRUST WASHER	151004	
*	1	SOCKET HEAD SCREW	200506	
*	1	LOCK WASHER	4581046	
*	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	210242	

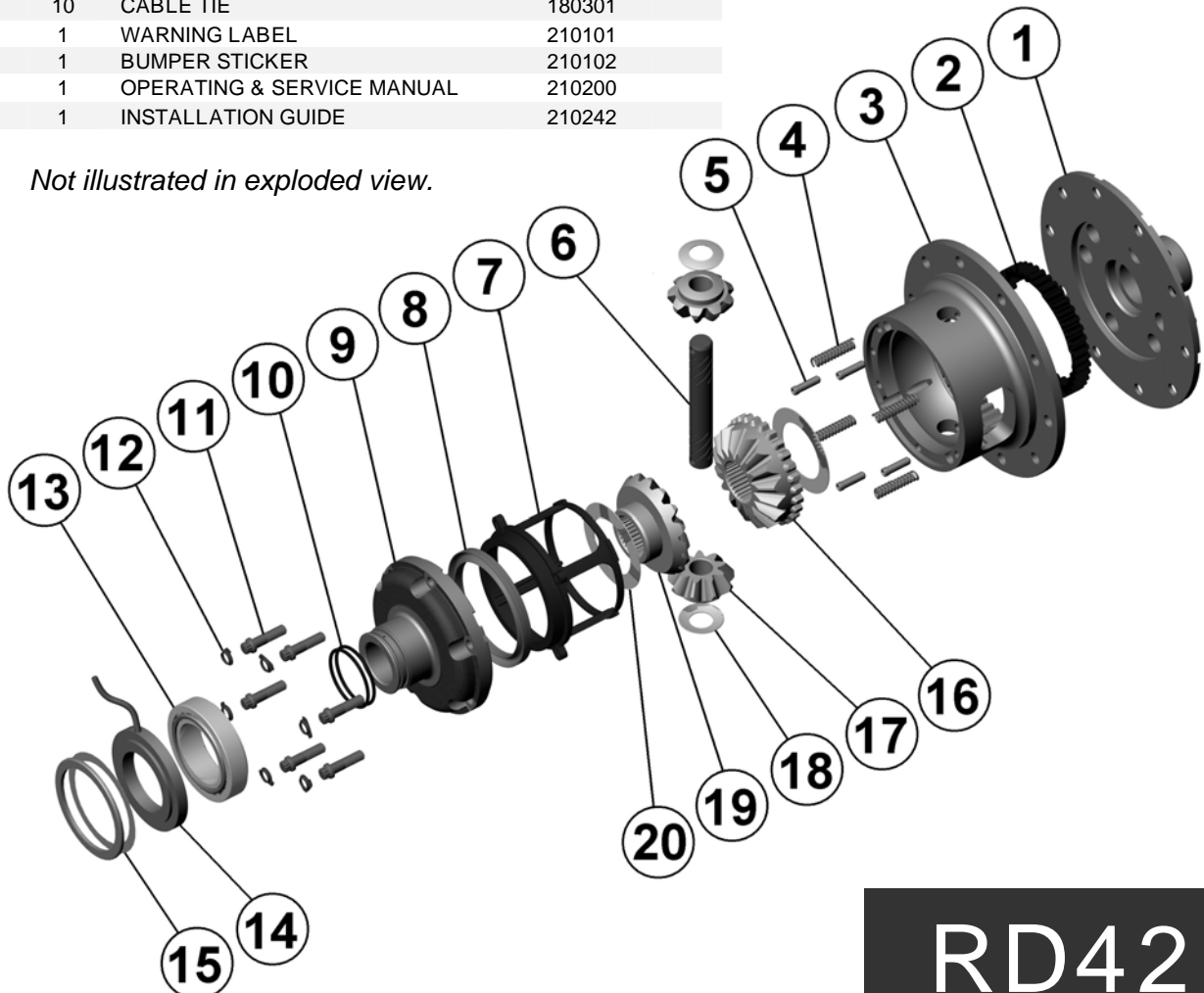
Notes:

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

For ratios of 4.10:1 and down refer to RD43 ([Section 2.43](#)).

For Dana 60HD non C-clip model refer to RD35 ([Section 2.35](#)).

* Not illustrated in exploded view.



RD42



ARB AIR LOCKER *Air Operated Locking Differentials*

RD43 Dana 60HD,C-clip,35 SPL,4.10 & DN

Specs:

Axle Spline	35 tooth, Ø38.1mm [1.50"]
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:

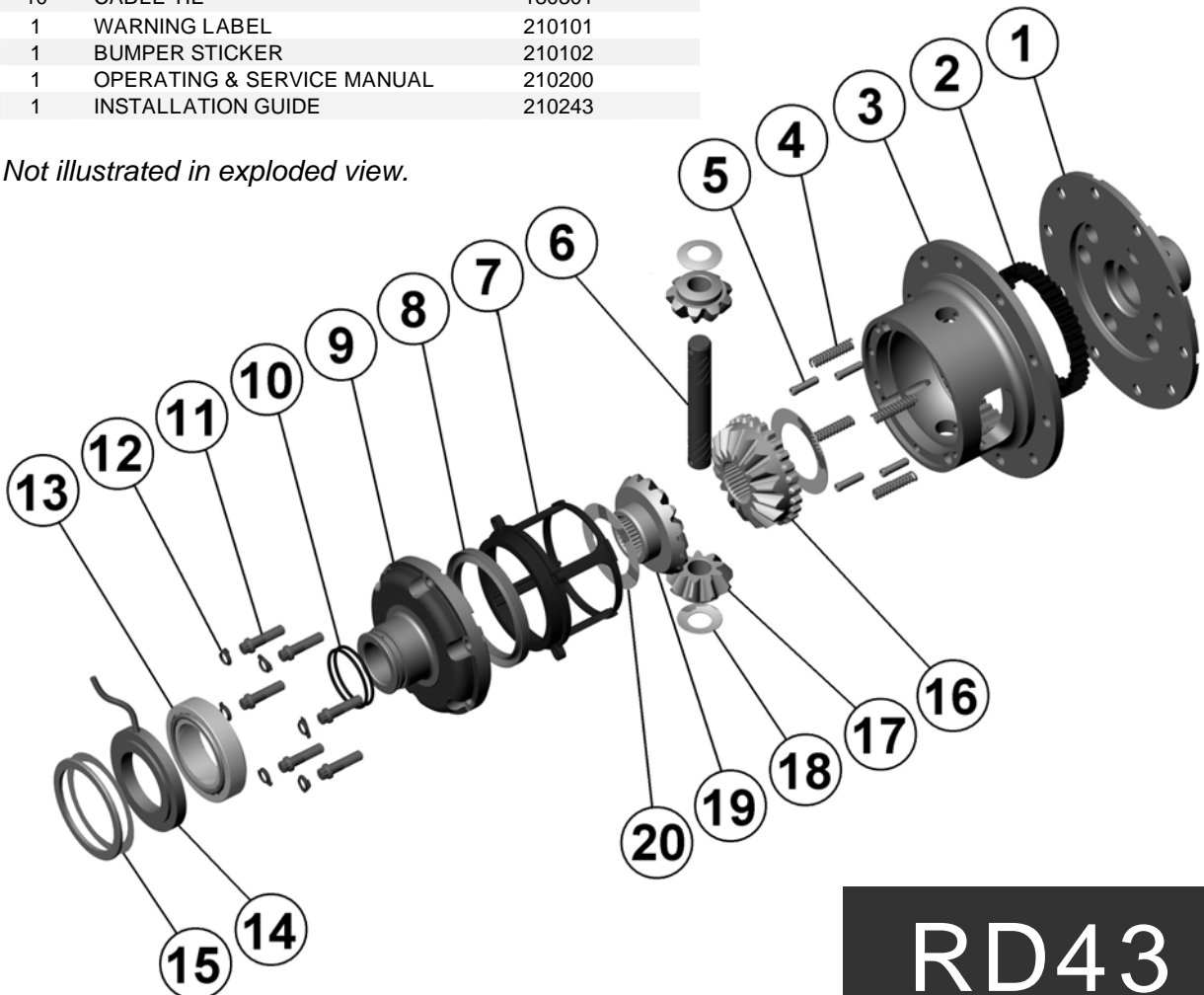
- 1 For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

For ratios of 4.56:1 and up refer to RD42 (Section 2.42).

For Dana 60HD non C-clip model refer to RD36 (Section 2.36).

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021502	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	011704	
04	4	RETURN SPRING	150101	
05	1	CROSS SHAFT RETAINING PIN	120301	
*	1	SOCKET HEAD SCREW	200506	
*	1	LOCK WASHER	4581046	
*	1	PIN WITHDRAWAL TOOL	1201T	
06	1	LONG CROSS SHAFT	060702	
07	1	PISTON	040501	
08	1	BONDED SEAL	160703	
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	
13	1	TAPERED ROLLER BEARING	160107	2
14	1	SEAL HOUSING ASSEMBLY	080701	
15	1	SHIM KIT	SHK001	
16	1	SPLINED SIDE GEAR	130801	
17	2	PINION GEAR	140401	
18	2	PINION THRUST WASHER	151104	
19	1	SIDE GEAR	130701	
20	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	210243	

* Not illustrated in exploded view.



RD43



ARB AIR LOCKER *Air Operated Locking Differentials*

RD44 Isuzu,RR,26 SPL

Specs:

Axle Spline	26 tooth, Ø33.5mm [1.32"]
Ratio Supported	All
Ring Gear ID	138.0mm [5.43"]
Ring Gear Bolts	12 bolts on Ø165mm [6.50"]

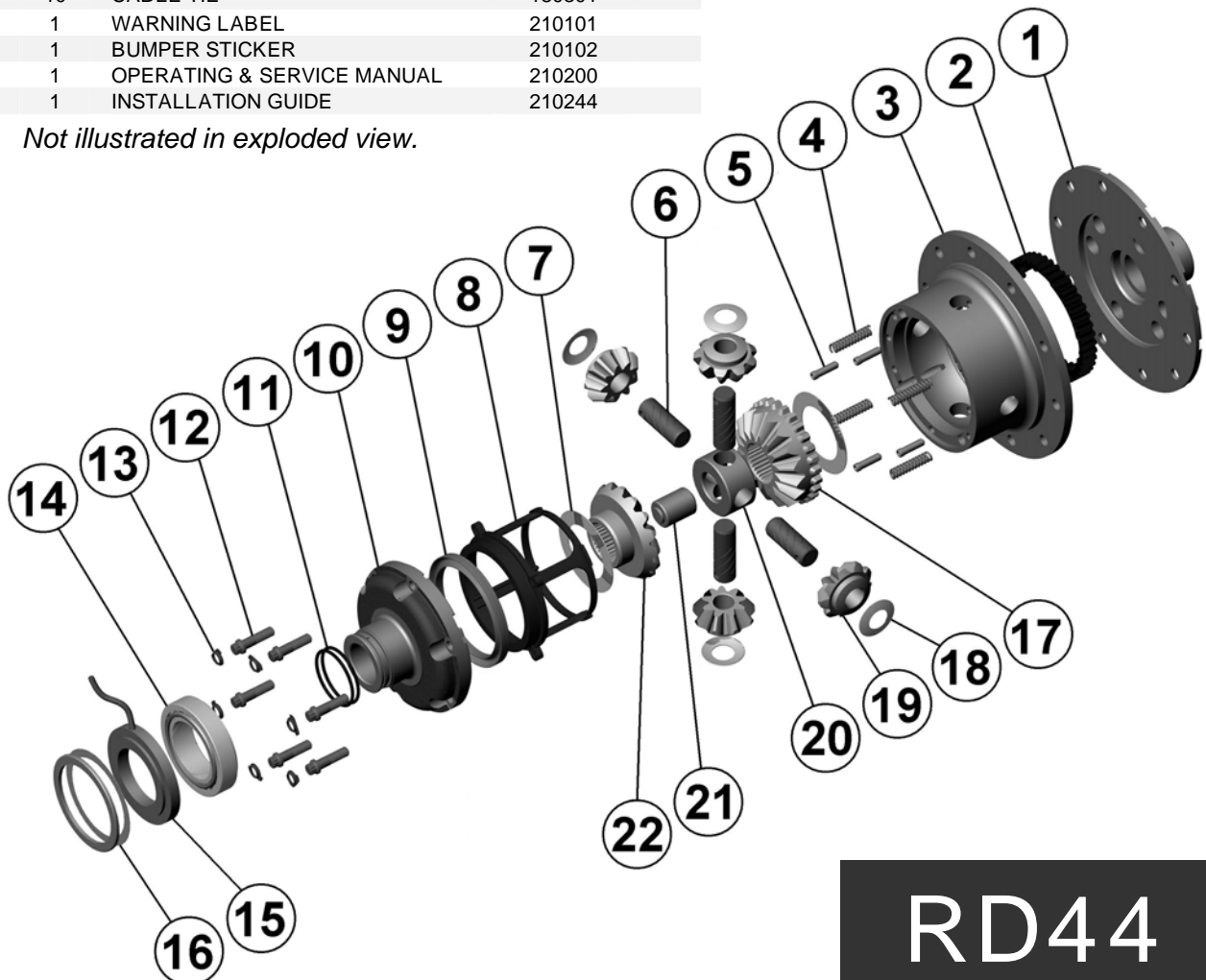
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	022101	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010506	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	4	SHORT CROSS SHAFT	060303	
07	2	SIDE GEAR THRUST WASHER	151003	
08	1	PISTON	040103	
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	
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	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	210244	

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) use only BS031 Viton 75 (ARB # 160209).

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

* Not illustrated in exploded view.



RD44



ARB AIR LOCKER *Air Operated Locking Differentials*

RD45 Mahindra,19 SPL**

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"]

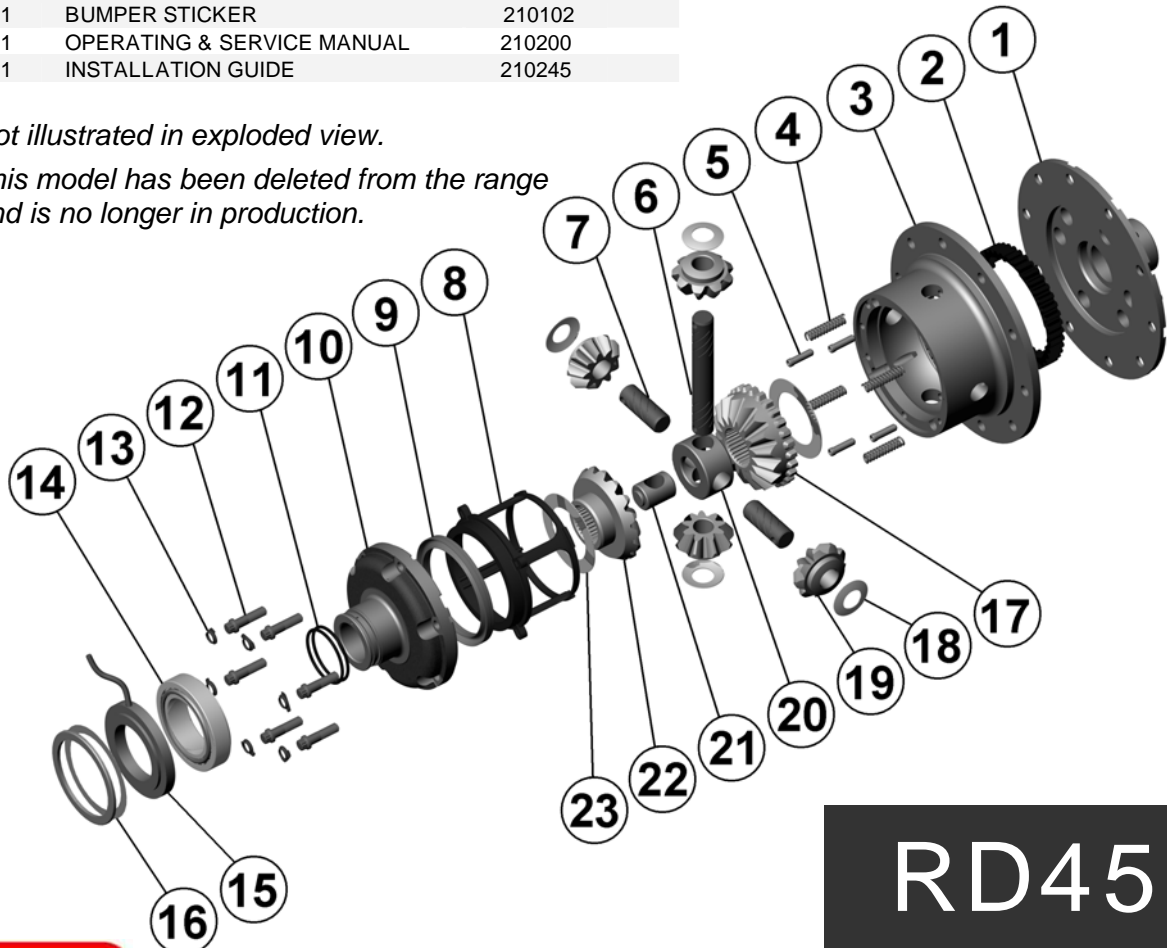
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020503	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	010505	
04	4	RETURN SPRING	150101	
05	2	CROSS SHAFT RETAINING PIN	120102	
*	2	CROSS SHAFT RETAINING PIN	120302	
06	1	LONG CROSS SHAFT	060103	
07	2	SHORT CROSS SHAFT	060303	
08	1	PISTON	040103	
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	
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	

Notes:

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

* Not illustrated in exploded view.

** This model has been deleted from the range and is no longer in production.



RD45



ARB AIR LOCKER *Air Operated Locking Differentials*

RD46 Mitsubishi 9",RR,28 SPL

Specs:

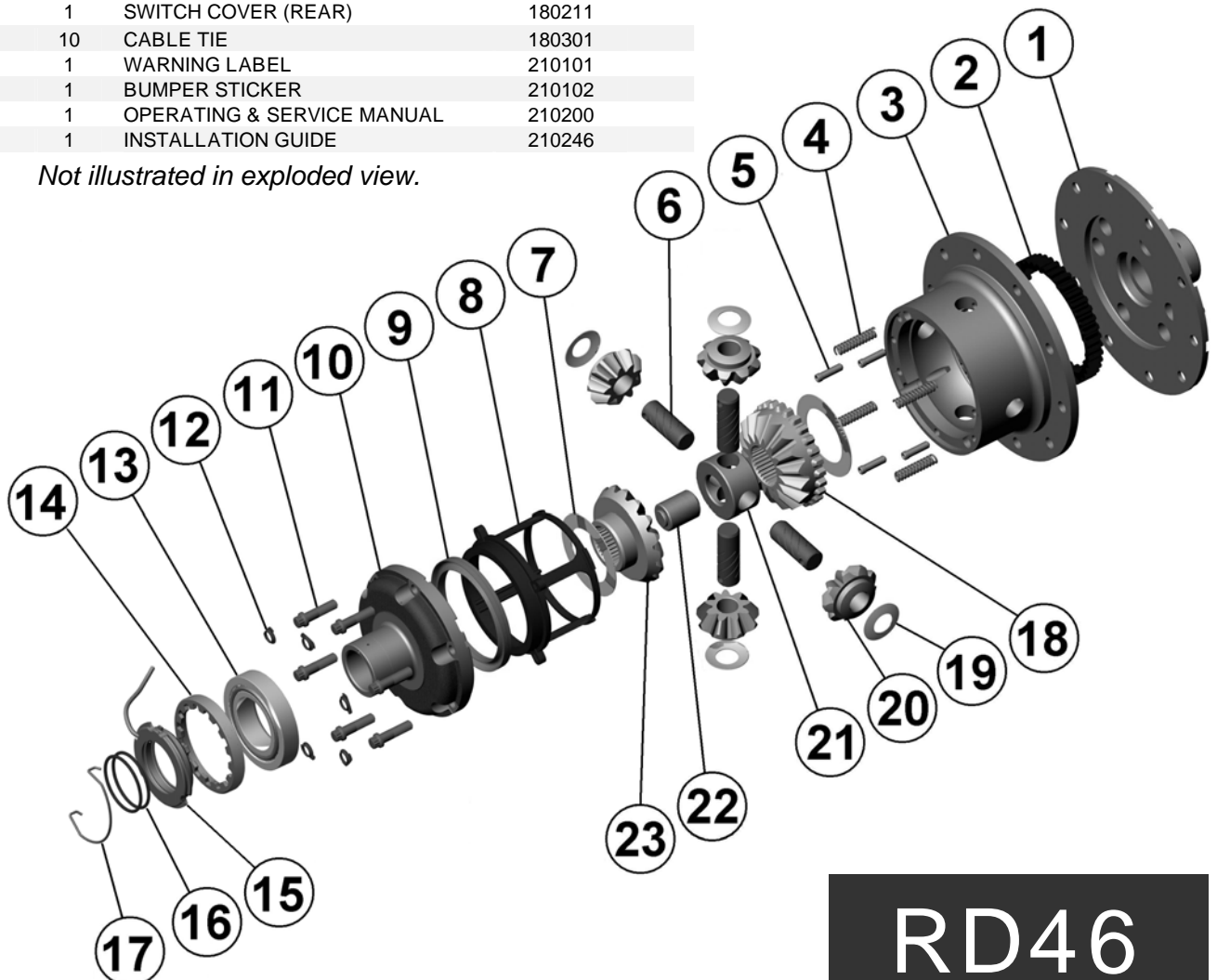
Axle Spline	28 tooth, Ø30.5mm [1.20"]
Ratio Supported	All
Ring Gear ID	145.0mm [5.71"]
Ring Gear Bolts	12 bolts on Ø175mm [6.89"]
Ring Gear Torque	85Nm [63 ft-lb]
Backlash	0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque	60Nm [44 ft-lb]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021202	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	011403	
04	4	RETURN SPRING	150101	
05	4	CROSS SHAFT RETAINING PIN	120303	
06	4	SHORT CROSS SHAFT	060402	
07	2	SIDE GEAR THRUST WASHER	151002	
08	1	PISTON	040202	
09	1	BONDED SEAL	160705	
10	1	CYLINDER CAP ASSEMBLY	030603	
11	8	CYLINDER CAP RETAINING BOLT	200205	
12	8	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	ADJUSTER NUT	100101	
15	1	SEAL HOUSING ASSEMBLY	081902	
16	2	SEAL HOUSING O-RING	160235	1
17	1	SEAL HOUSING RETAINING CLIP	150601	
18	1	SPLINED SIDE GEAR	130408	
19	4	PINION THRUST WASHER	151102	
20	4	PINION GEAR	140201	
21	1	SPIDER BLOCK	070201	
22	1	THRUST BLOCK	110504	
23	1	SIDE GEAR	130208	
*	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	210246	

Notes:

- 1 For replacement O-rings use only BS133 Viton 75.
- For information on RD46 models with metal pistons, contact ARB.
- For seal housing set-up refer to tech notes (Section 5.1 & 5.2).
- For the 'small' Mitsubishi 28 spline rear differential with 10 ring gear bolts refer to RD05 (Section 2.5).

* Not illustrated in exploded view.



RD46



ARB AIR LOCKER *Air Operated Locking Differentials*

RD47 AMC Model 20,2.73:1

Specs:

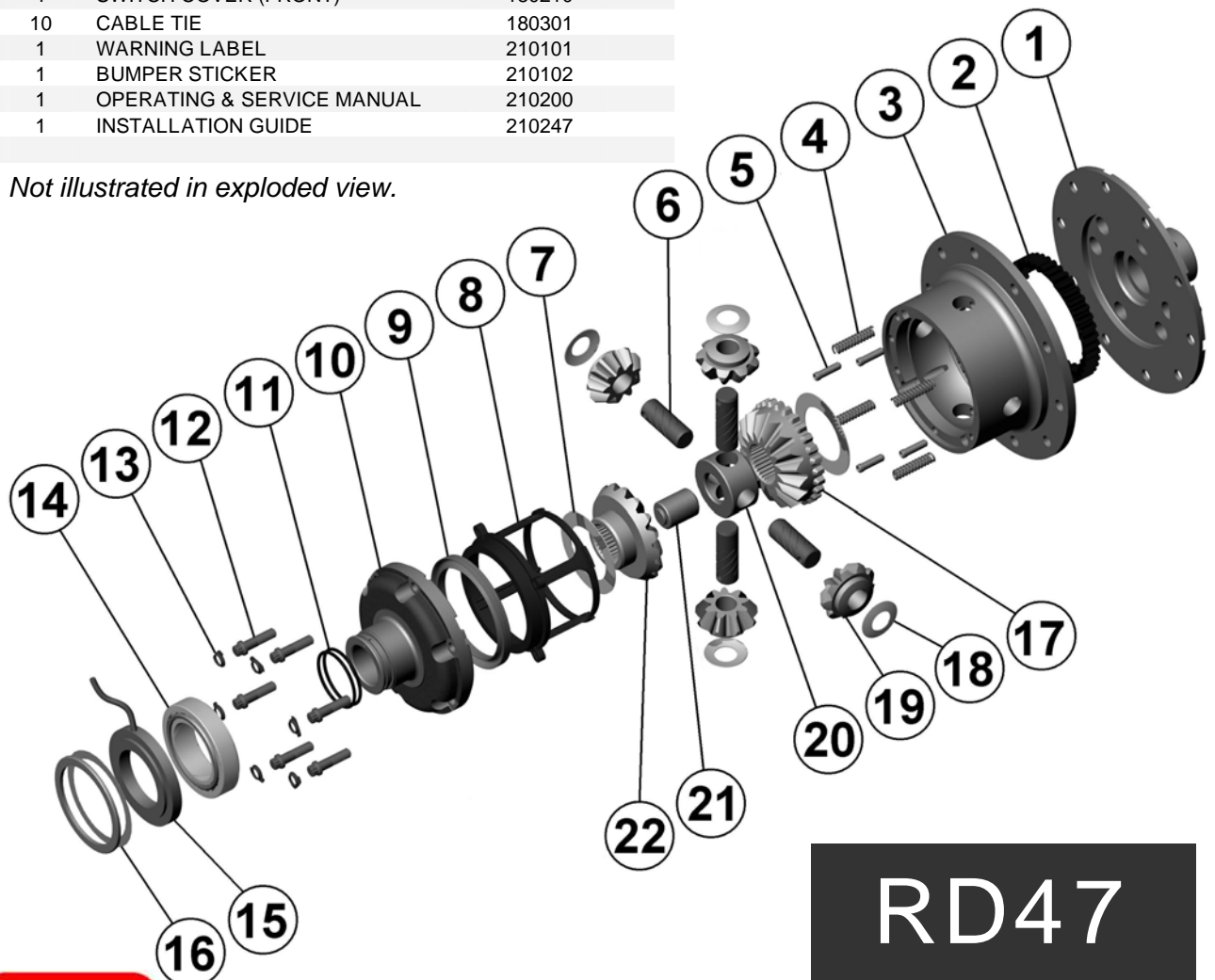
Axle Spline	29 tooth, Ø31.8mm [1.25"]
Ratio Supported	2.73:1
Ring Gear ID	136.6mm [5.38"]
Ring Gear OD	225.6mm [8.88"]
Ring Gear Bolts	8 bolts on Ø165mm [6.50"]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	022201	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	011502	
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	030115	
11	2	SEAL HOUSING O-RING	160208	1
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160104	2
15	1	SEAL HOUSING	080503	
16	1	SHIM KIT	SHK007	
17	1	SPLINED SIDE GEAR	130310R	
18	4	PINION THRUST WASHER	151101	
19	4	PINION GEAR	140101R	
20	1	SPIDER BLOCK	070101	
21	1	THRUST BLOCK	110506	
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	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210247	

Notes:

- For replacement O-rings use only BS030 Viton 75.
 - For replacement bearing use Timken part #LM603049 / LM603011.
- For ratios of 3.08:1 & up refer to RD60 ([Section 2.60](#)).

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD50 Dana 50,30 SPL

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]

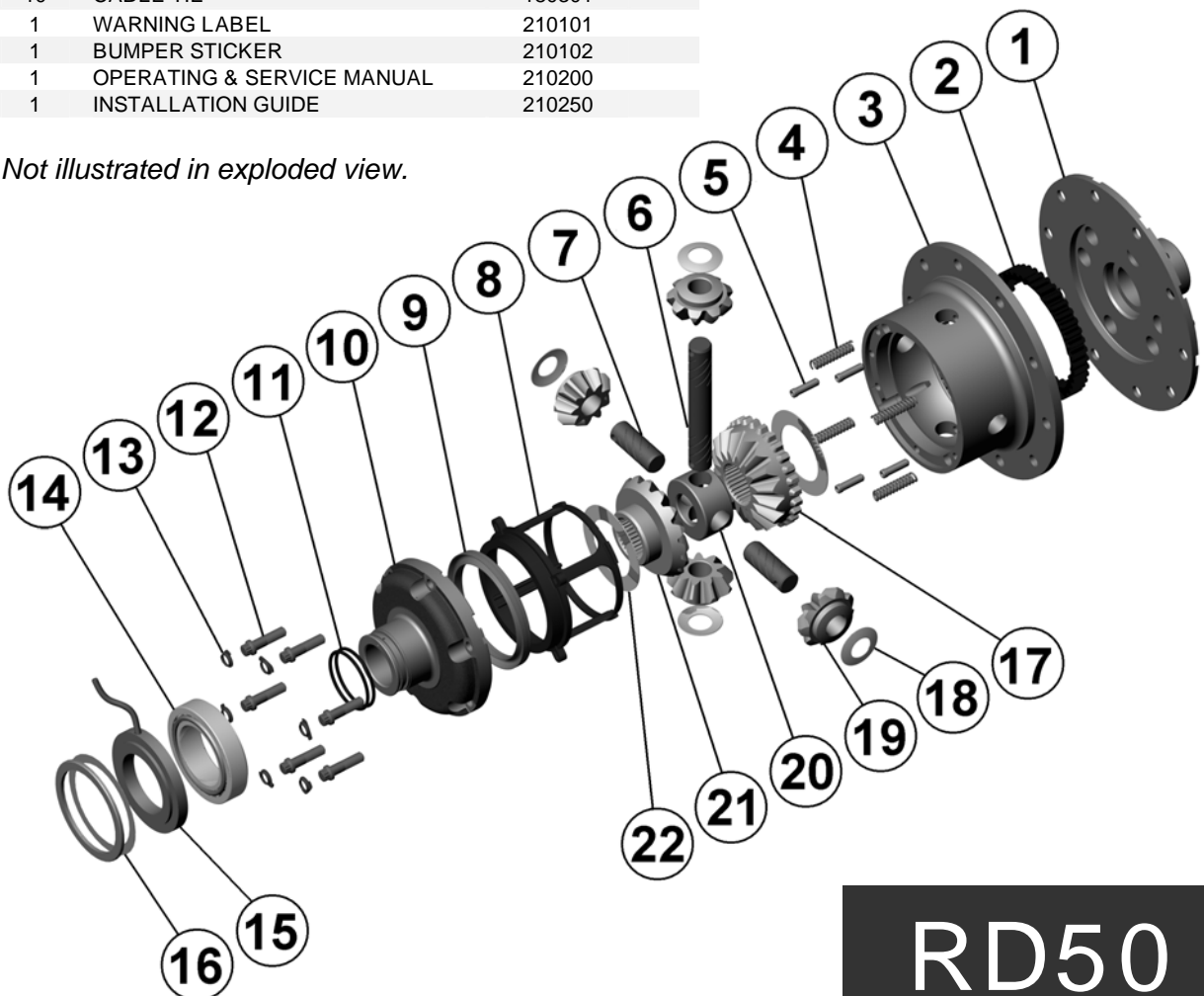
Notes:

- 1 For replacement O-rings use only BS132 Viton 75.
- 2 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.

ITEM #	QTY	DESCRIPTION	PART #	NOTES
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	
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	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	

* Not illustrated in exploded view.



RD50



ARB AIR LOCKER *Air Operated Locking Differentials*

RD51 GM / AAM 9.25",33 SPL

Specs:

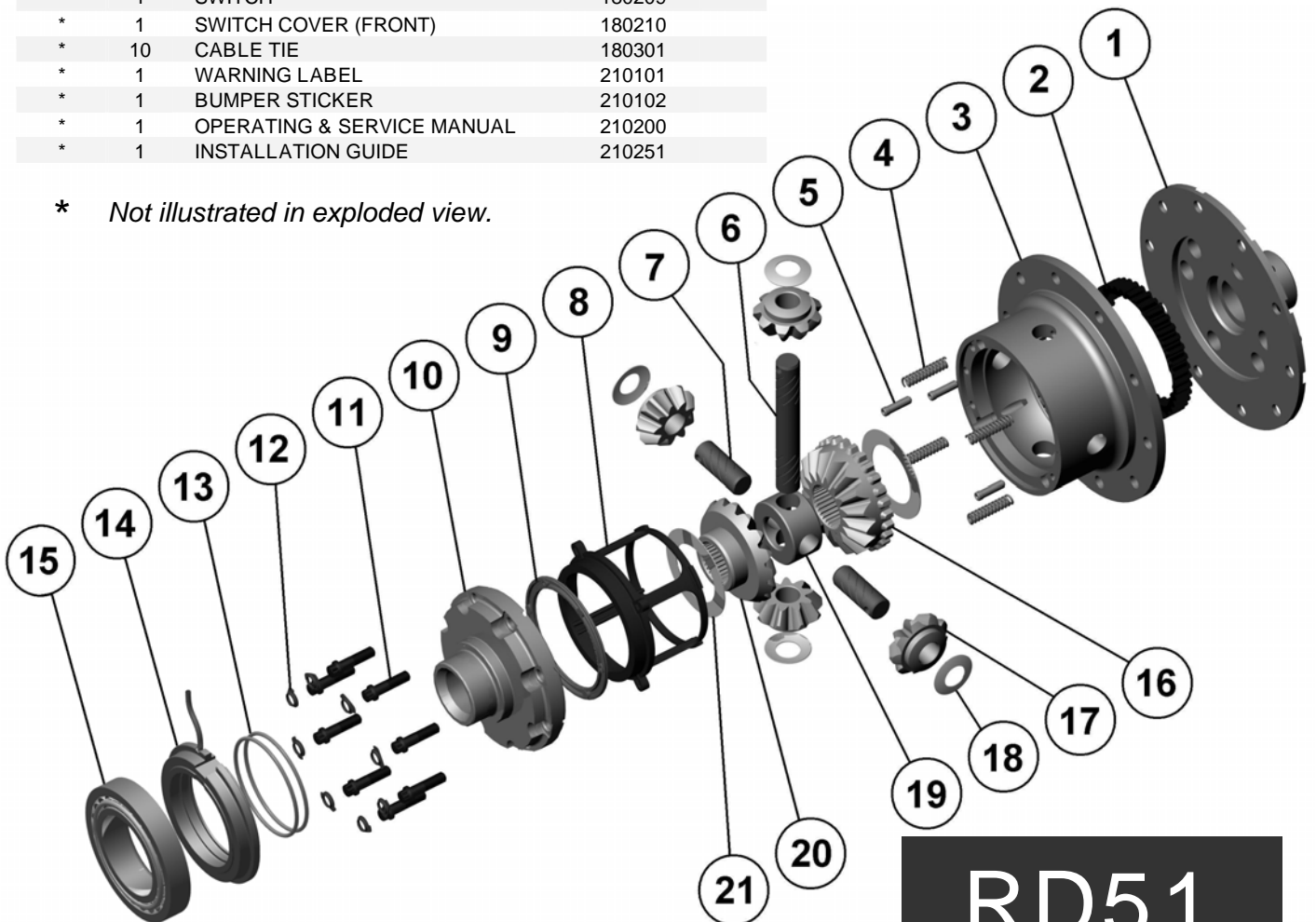
Axle Spline	33 tooth, Ø34.8mm [1.37"]
Ratio Supported	All
Ring Gear ID	152.9mm [6.02"]
Ring Gear OD	235mm [9.25"]
Ring Gear Bolts	12 bolts on 181mm [7.13"]
Ring Gear Torque	88Nm [65 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	022401	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	012301	
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	031101	
11	8	CYLINDER CAP RETAINING BOLT	200205	
12	8	LOCKING TAB (8mm)	150401	
13	2	SEAL HOUSING O-RING	160239	1
14	1	SEAL HOUSING	080903	
15	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
16	1	SPLINED SIDE GEAR	130410	
17	4	PINION GEAR	140201	
18	4	PINION THRUST WASHER	151102	
19	1	SPIDER BLOCK	070201	
20	1	SIDE GEAR	130210	
21	2	SIDE GEAR THRUST WASHER	151006	
*	1	SEAL HOUSING BRACKET (LIVE AXLE)	220203	
*	1	SEAL HOUSING BRACKET (IFS)	220204	
*	2	WASHER	4581072	
*	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	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210251	

Notes:

- For replacement O-rings use only BS146 Viton 75.
- Ring gear bolts are M12x1.5mm left-hand thread, and must be removed in a clockwise direction.
- Use extreme care to protect the sealing faces of the flange when separating the two halves of the clamshell housing.

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD53 Dana 70HD,35 SPL,4.56 & UP

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:

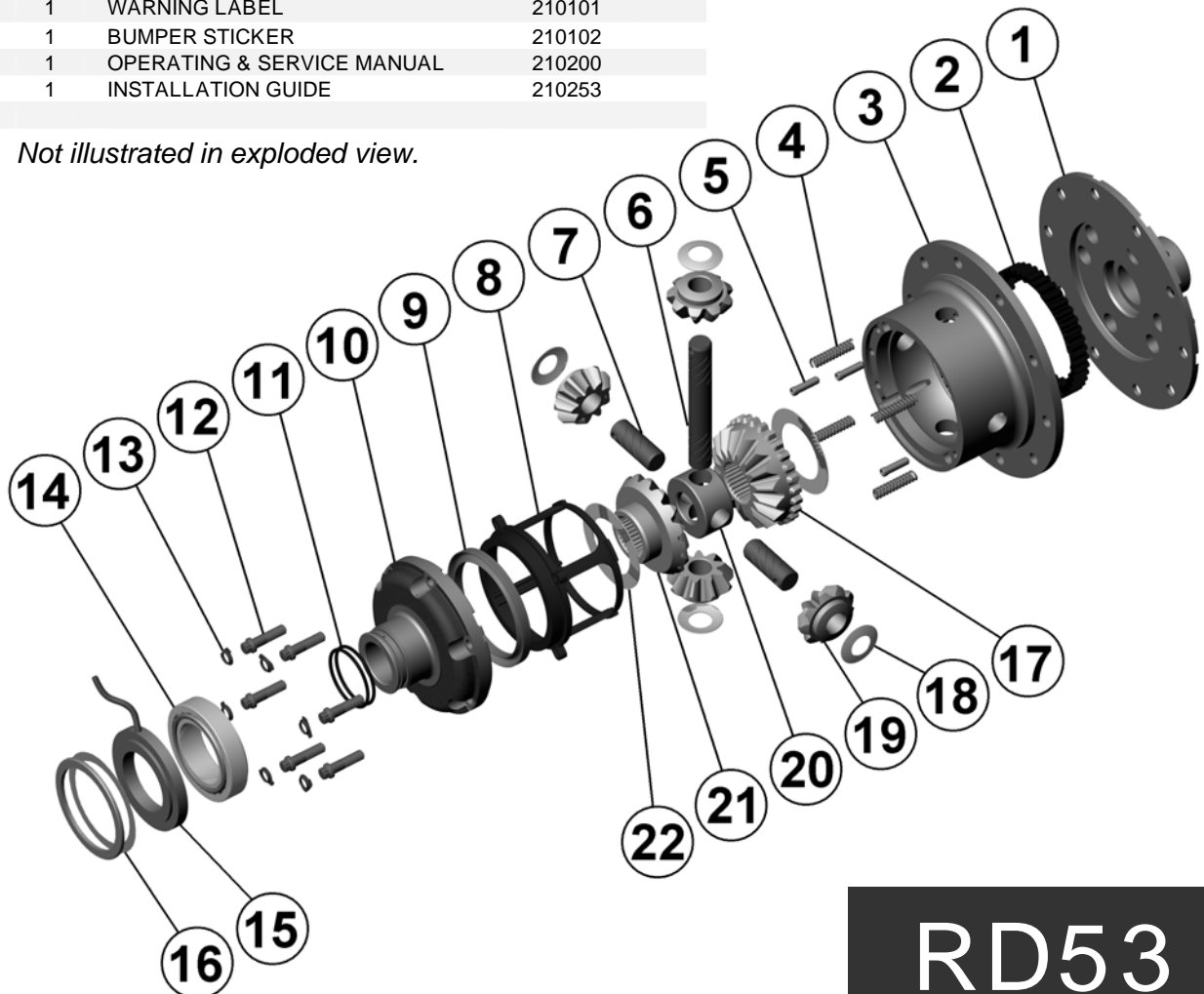
- 1 For replacement O-rings use only BS141 Viton 75.
- 2 For replacement bearing use Timken part # 39250 / 39412.

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

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

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	
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	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	

* Not illustrated in exploded view.



RD53



ARB AIR LOCKER *Air Operated Locking Differentials*

RD54 Dana 70HD,35 SPL,4.10 & DN

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:

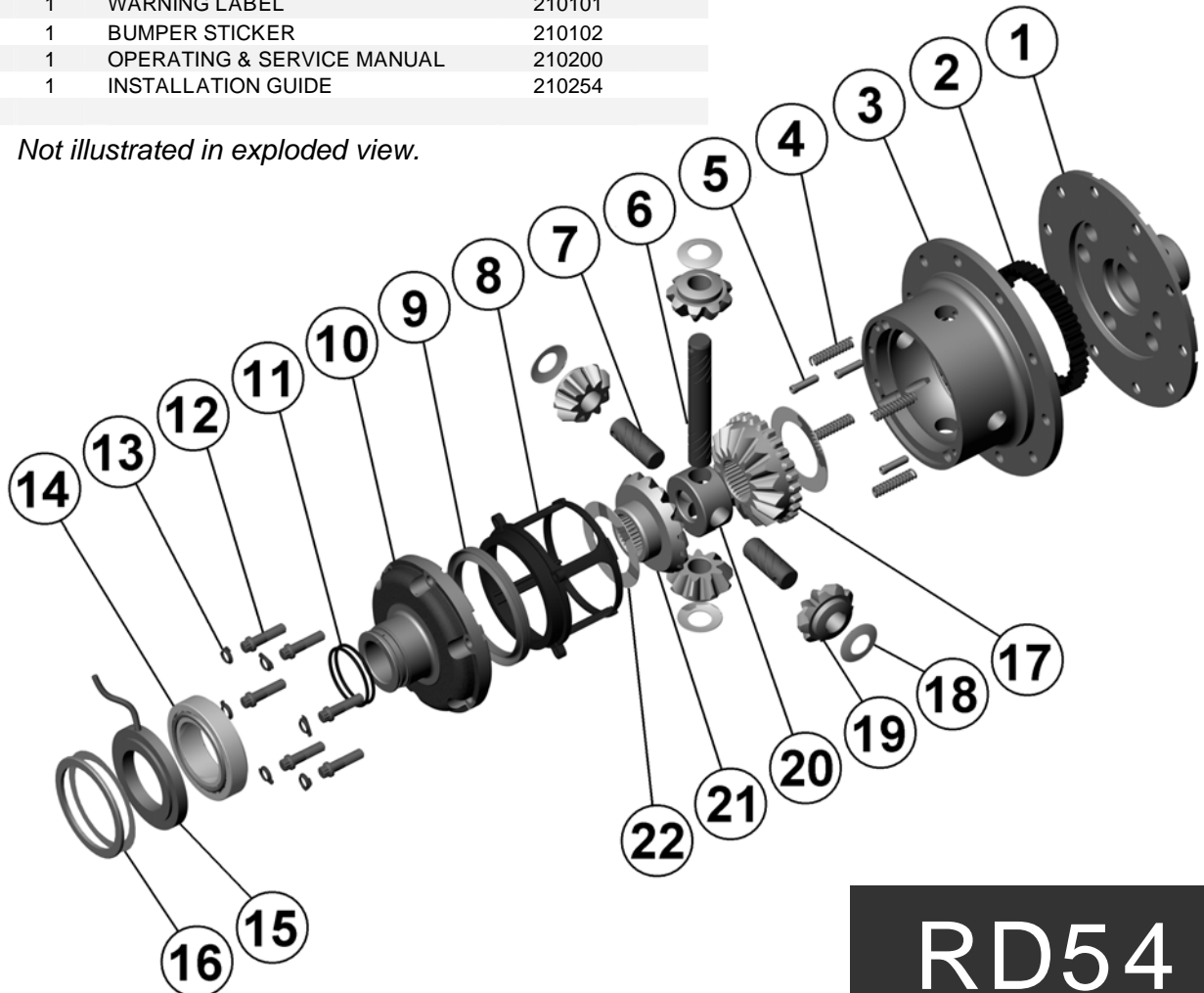
- 1 For replacement O-rings use only BS141 Viton 75.
- 2 For replacement bearing use Timken part # 39250 / 39412.

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).

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	
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	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	

* Not illustrated in exploded view.



RD54



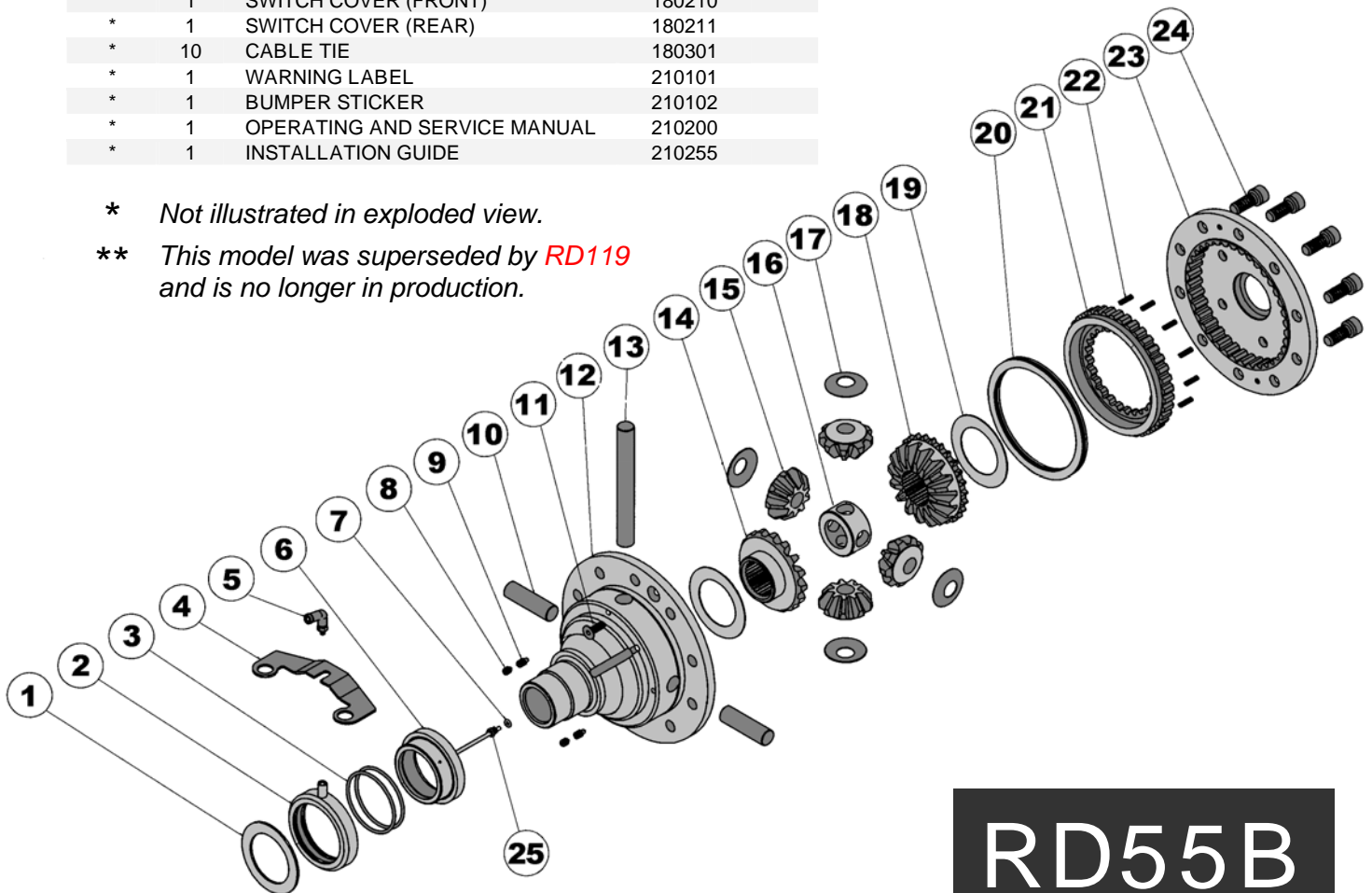
ARB AIR LOCKER *Air Operated Locking Differentials*

RD55B 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	
08	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	

* Not illustrated in exploded view.

** This model was superseded by **RD119** and is no longer in production.



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:

- 1 For replacement O-rings use only BS141 Viton 75.

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

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

RD55B



ARB AIR LOCKER *Air Operated Locking Differentials*

RD56 Land Rover, 24 SPL, Banjo

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).

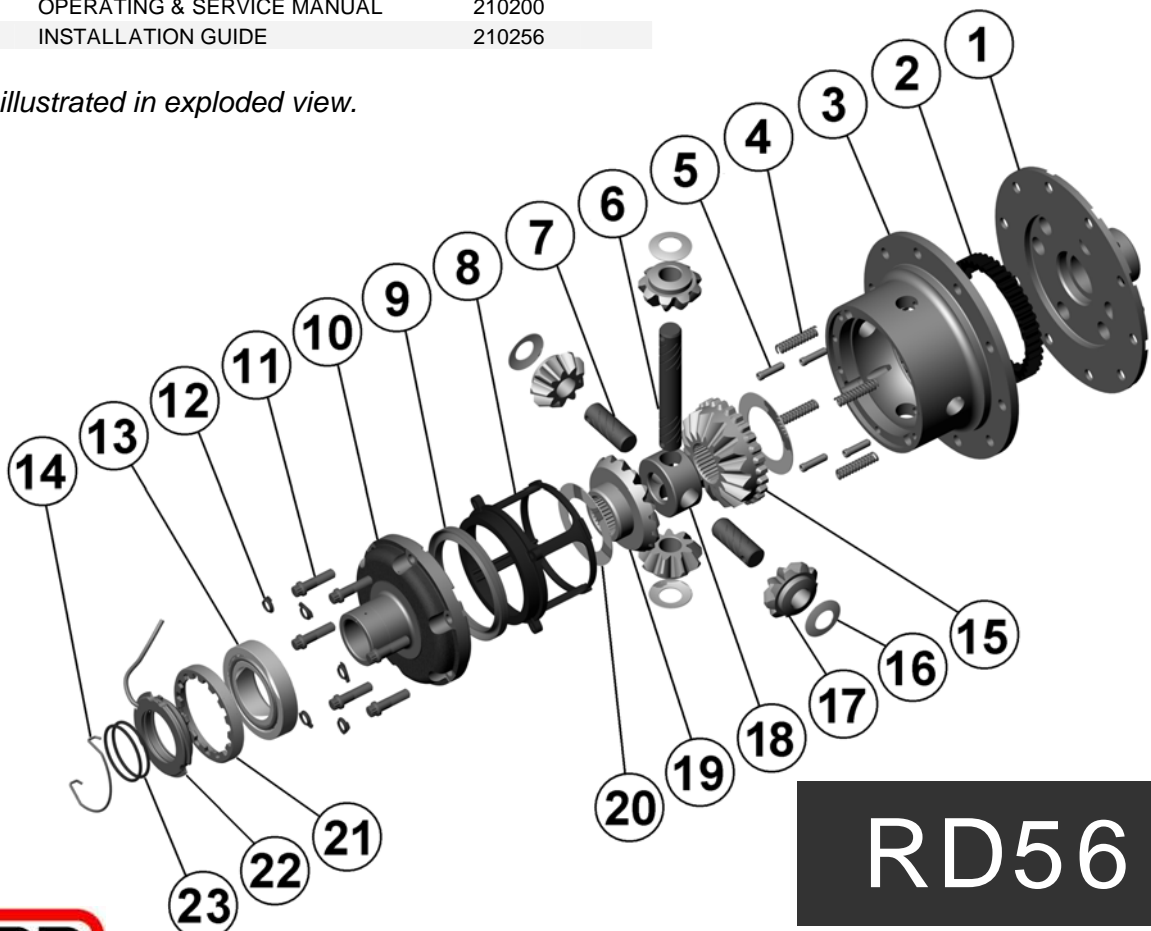
Refer to seal housing set-up tech note ([Sec. 5.2](#)).

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.

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	

* Not illustrated in exploded view.



RD56



ARB AIR LOCKER *Air Operated Locking Differentials*

RD57 Land Rover, 24 SPL, Banjo, T/C

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](#)).

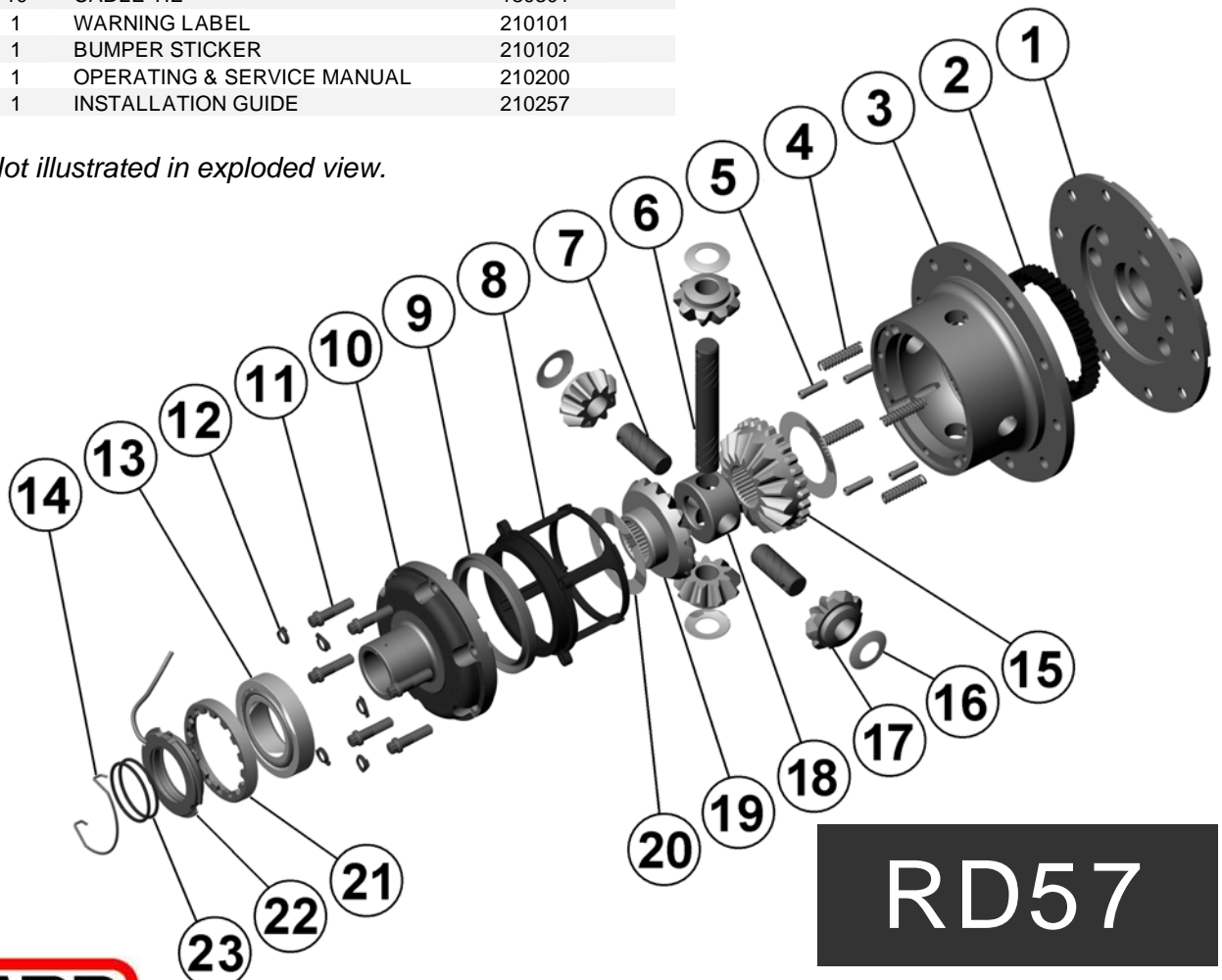
5mm [3/16"] ring gear spacer plate (ARB part# 'RD03A') is available for use with early Land Rover 4.7:1 ratio gear but longer bolts must be used (Land Rover part# 576521).

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.

ITEM #	QTY	DESCRIPTION	PART #	NOTES
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	
08	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	

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD60 AMC Model 20,3.07 & UP

Specs:

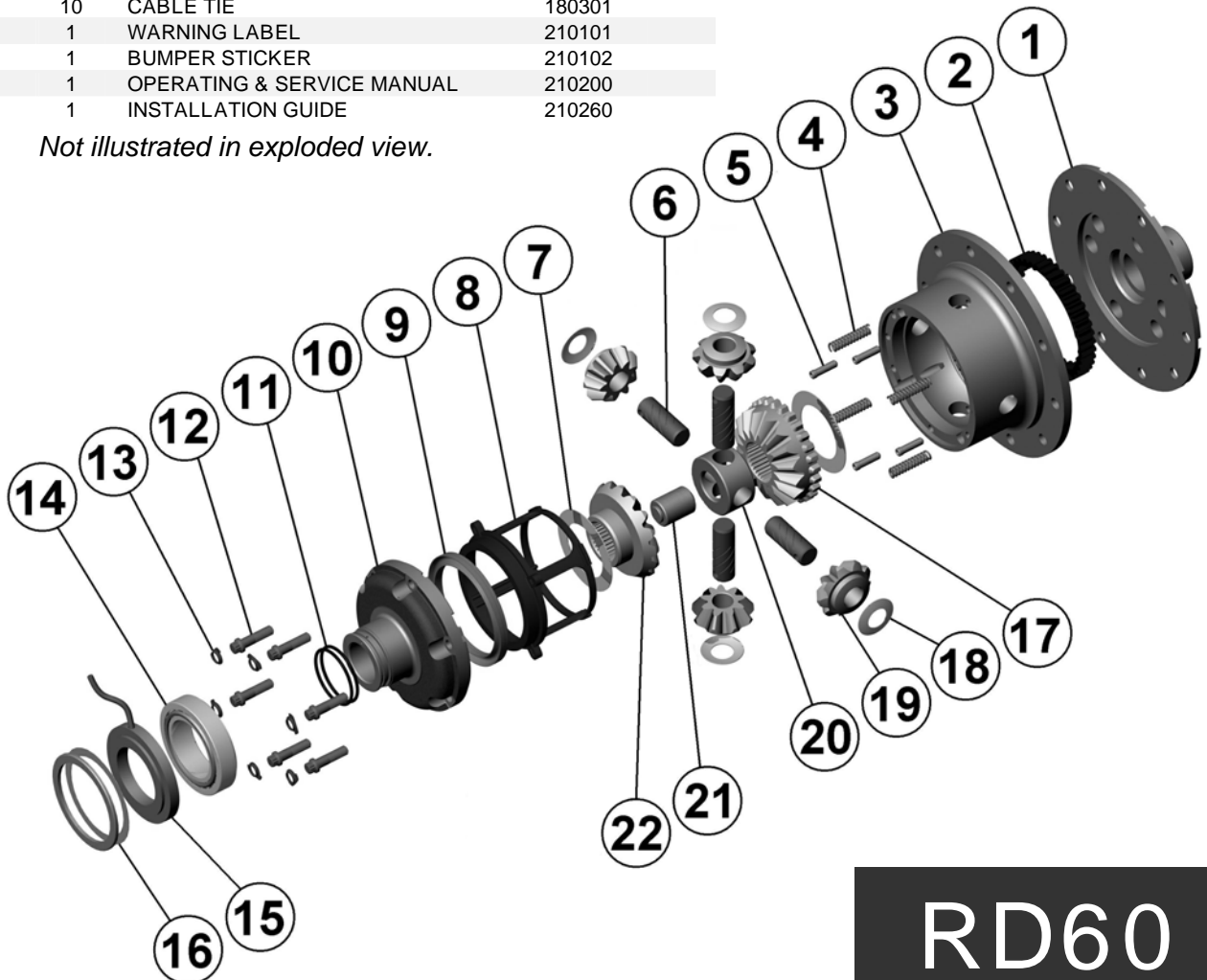
Axle Spline	29 tooth, Ø31.8mm [1.25"]
Ratio Supported	3.07:1 & up
Ring Gear ID	136.6mm [5.38"]
Ring Gear OD	225mm [8.9"]
Ring Gear Bolts	8 bolts on Ø165mm [6.50"]
Ring Gear Torque	88Nm [65 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	88Nm [65 ft-lb]

Notes:

- 1 For replacement O-rings use only BS030 Viton 75.
 - 2 For replacement bearing use Timken part # LM603049 / LM603011.
- For 2.73:1 ratio refer to RD47 ([Section 2.47](#)).

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	022203	
02	1	CLUTCH GEAR	050102	
03	1	DIFFERENTIAL CASE	011505	
04	4	RETURN SPRING	150101	
05	4	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	030127	
11	2	SEAL HOUSING O-RING	160208	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160104	2
15	1	SEAL HOUSING	080504	
16	1	SHIM KIT	SHK002	
17	1	SPLINED SIDE GEAR	130310R	
18	4	PINION THRUST WASHER	151101	
19	4	PINION GEAR	140101R	
20	1	SPIDER BLOCK	070101	
21	1	THRUST BLOCK	110506	
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	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210260	

* Not illustrated in exploded view.



RD60



ARB AIR LOCKER *Air Operated Locking Differentials*

RD64 Toyota 9.5",32 SPL

Specs:

Axle Spline	32 tooth, Ø34.8mm [1.37"]
Ratio Supported	All
Ring Gear ID	150.0mm [5.91"]
Ring Gear OD	241mm [9.5"]
Ring Gear Bolts	12 bolts on Ø174mm [6.85"]
Ring Gear Torque	95Nm [70 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	95Nm [70 ft-lb]

Notes:

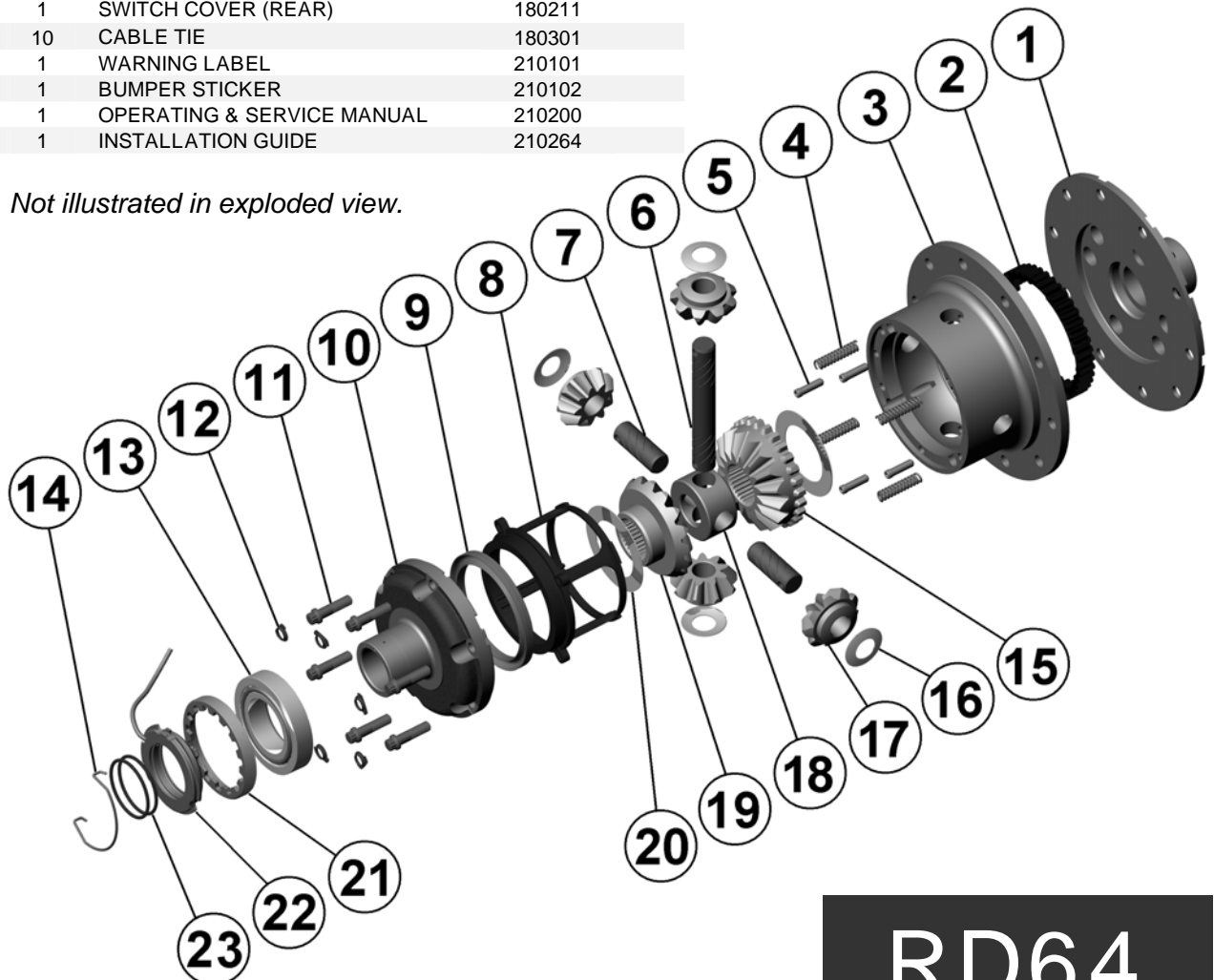
- 1 For replacement O-rings use only BS136 Viton 75.

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

Older RD64 models with O-ring grooves in the cylinder cap use; cylinder cap #030216, seal housing #080102 and O-ring BS031 #160209.

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023001	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	012701	
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	030223	
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	130411	
16	1	PINION THRUST WASHER	151102	
17	4	PINION GEAR	140201	
18	1	SPIDER BLOCK	070201	
19	1	SIDE GEAR	130211	
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
*	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	210264	

* Not illustrated in exploded view.



RD64



ARB AIR LOCKER *Air Operated Locking Differentials*

RD65 Dana 70U,35 SPL,4.56 & UP

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:

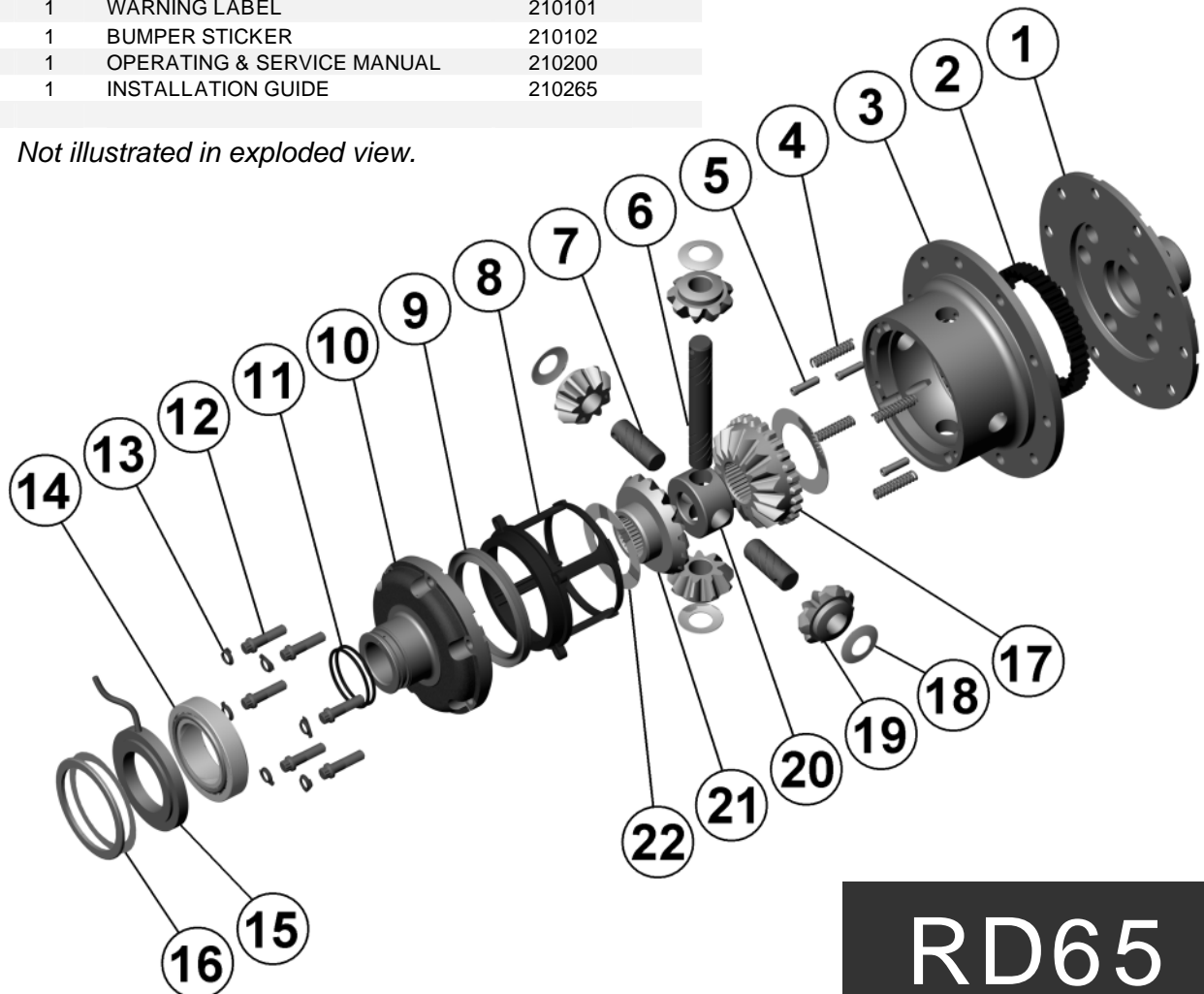
- 1 For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

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).

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	
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	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	

* Not illustrated in exploded view.



RD65



ARB AIR LOCKER *Air Operated Locking Differentials*

RD66 Dana 70U,35 SPL,4.10 & DN

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:

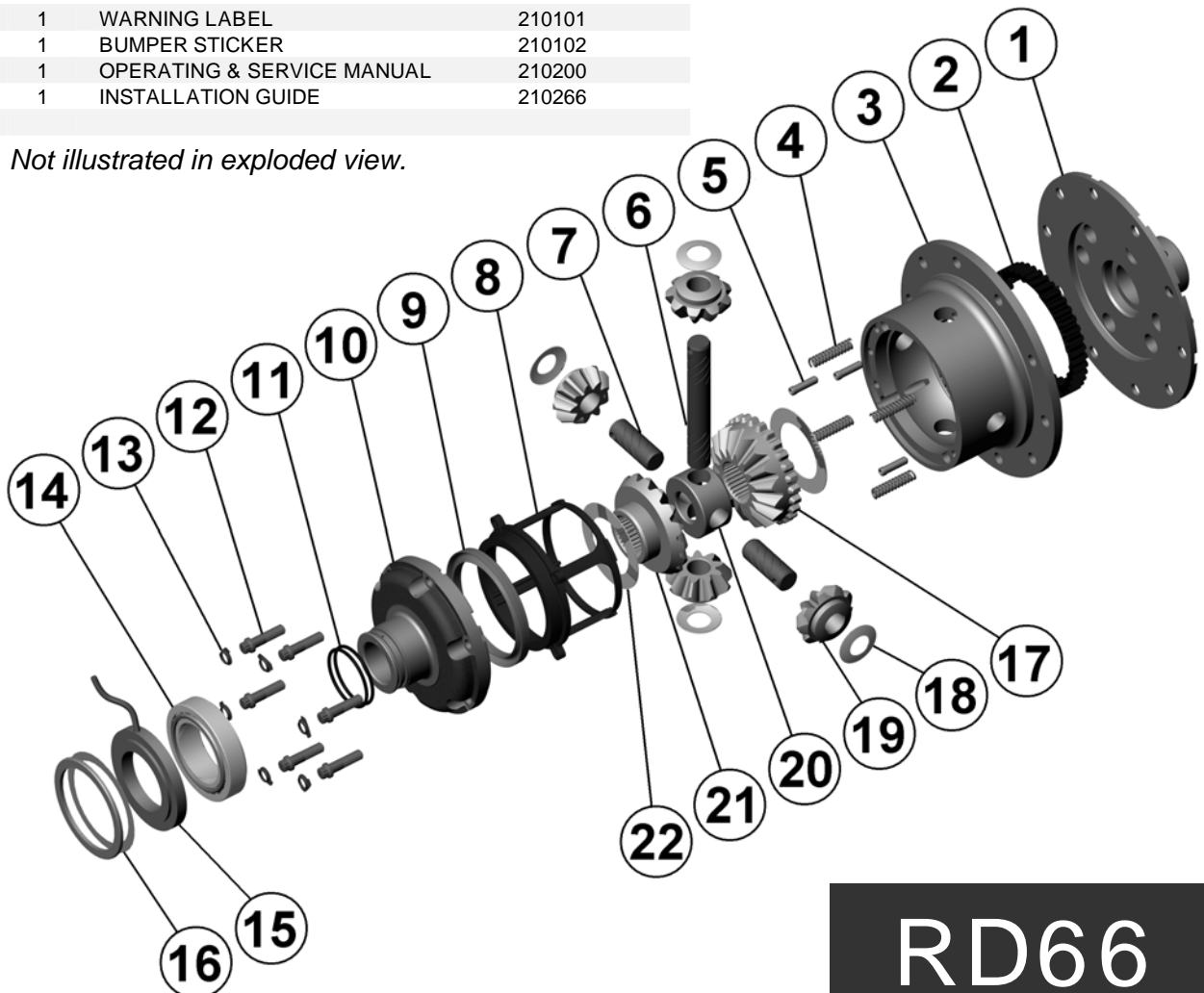
- 1 For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # 387A / 382A.

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

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

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	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	

* Not illustrated in exploded view.



RD66



ARB AIR LOCKER *Air Operated Locking Differentials*

RD68

Dana 35,C-clip,27 SPL,3.31 & DN**

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 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.

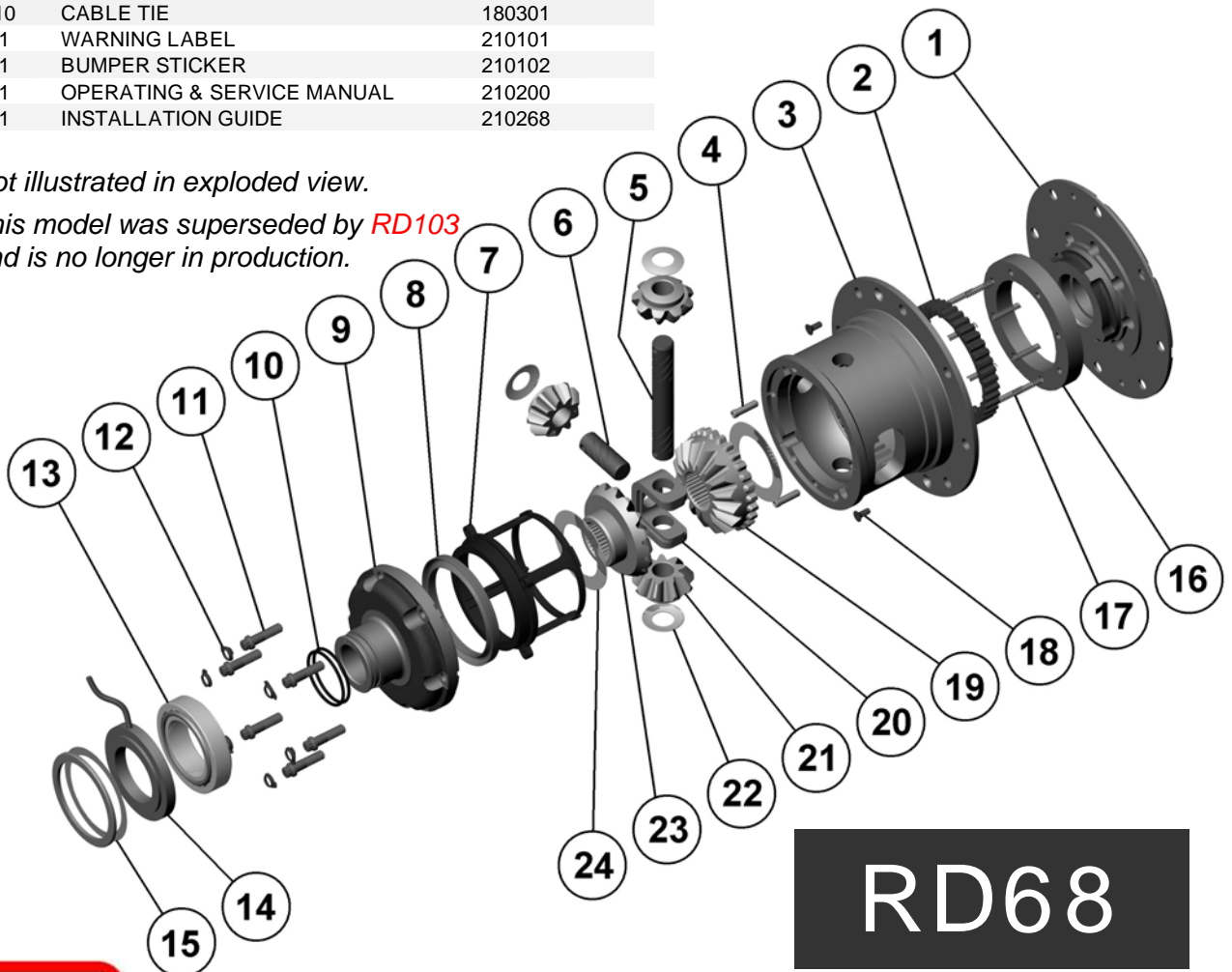
Some OEM Dana 35 drive pinion gears extend too far into the centre and converge with the differential carrier. Refer to ring and pinion modification note ([Section 5.6](#)) for correction.

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

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021902	
02	1	CLUTCH GEAR	050501	
03	1	DIFFERENTIAL CASE	012008	
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	
08	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	210268	

* Not illustrated in exploded view.

** This model was superseded by **RD103** and is no longer in production.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD69 Dana 35,C-clip,27 SPL,3.54 & UP**

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.

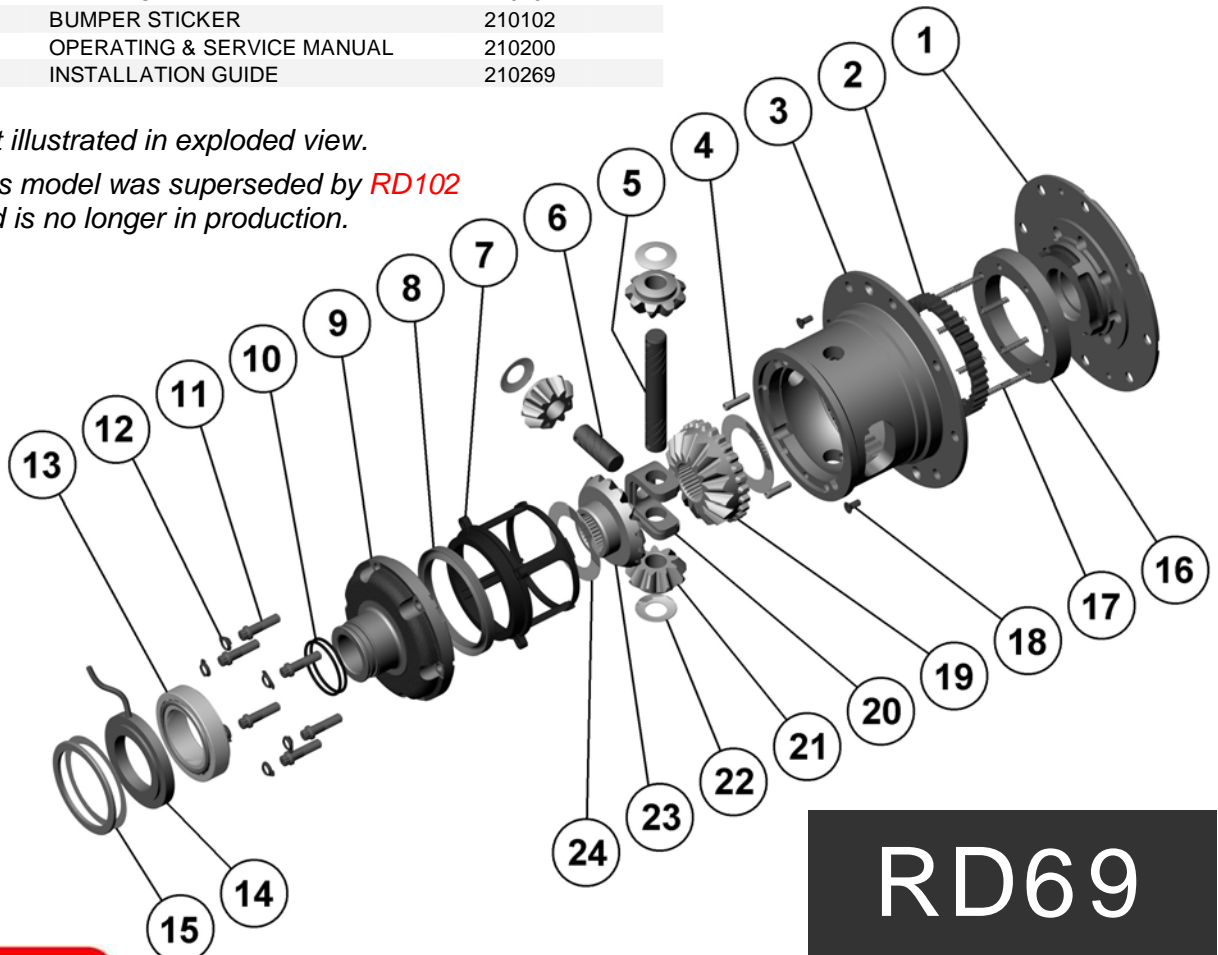
Some OEM Dana 35 drive pinion gears extend too far into the centre and converge with the differential carrier. Refer to ring and pinion modification note (Section 5.6) for correction.

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

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	
08	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	

* Not illustrated in exploded view.

** This model was superseded by **RD102** and is no longer in production.



RD69



ARB AIR LOCKER *Air Operated Locking Differentials*

RD70 Nissan H260,37 SPL

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]

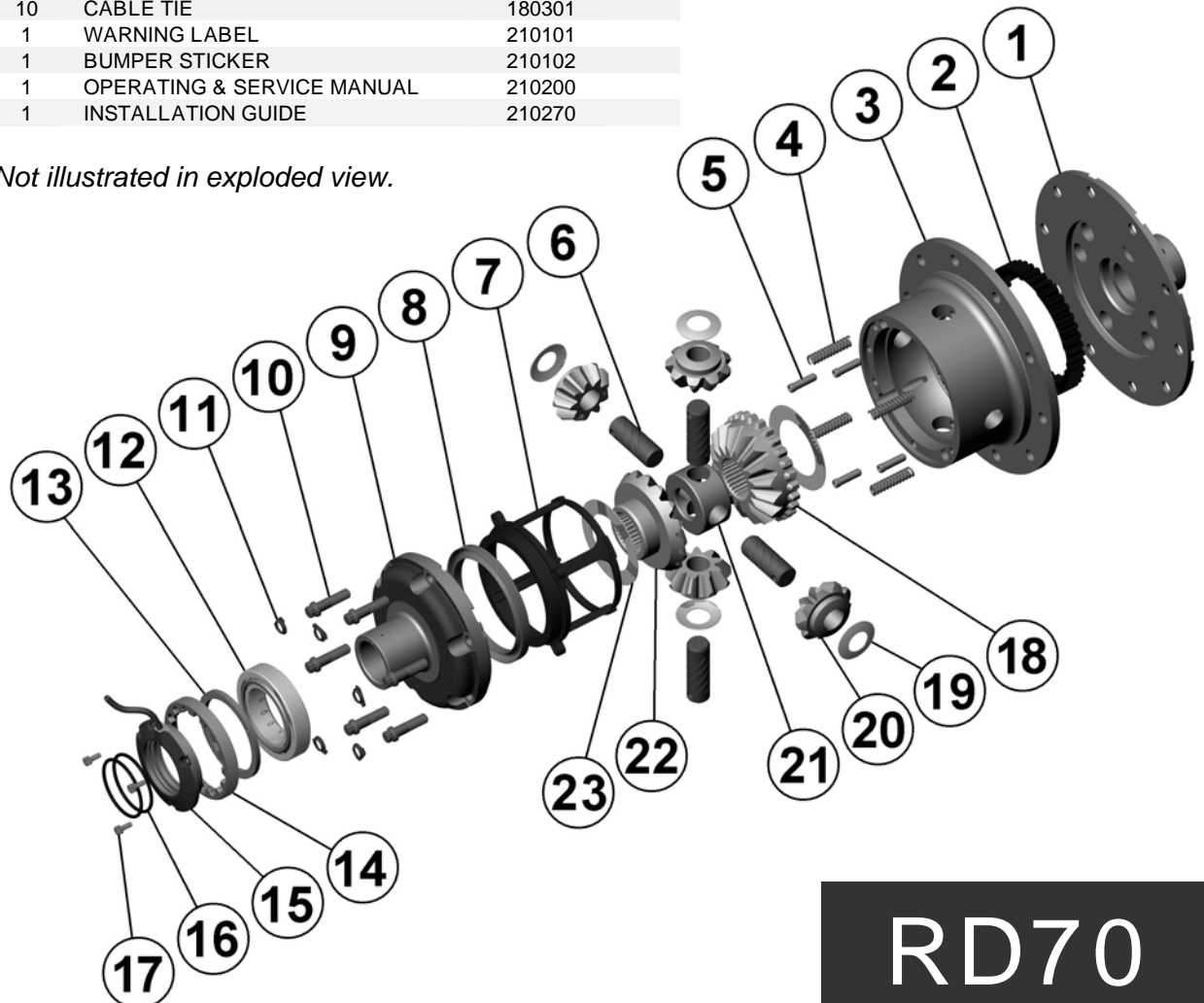
Notes:

- 1 For replacement O-rings use only BS138 Viton 75.

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

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023201	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	012901	
04	4	RETURN SPRING	150101	
05	4	CROSS SHAFT RETAINING PIN	120301	
06	4	SHORT CROSS SHAFT	060802	
07	1	PISTON	040501	
08	1	BONDED SEAL	160703	
09	1	CYLINDER CAP ASSEMBLY	031202	
10	8	CYLINDER CAP RETAINING BOLT	200205	
11	8	LOCKING TAB (8mm)	150401	
12	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
13	1	CLAMPING PLATE	090301	
14	1	ADJUSTER NUT	100501	
15	1	SEAL HOUSING	081201	
16	2	SEAL HOUSING O-RING	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 (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	210270	

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD71 Nissan H260,37 SPL,disc brake

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:

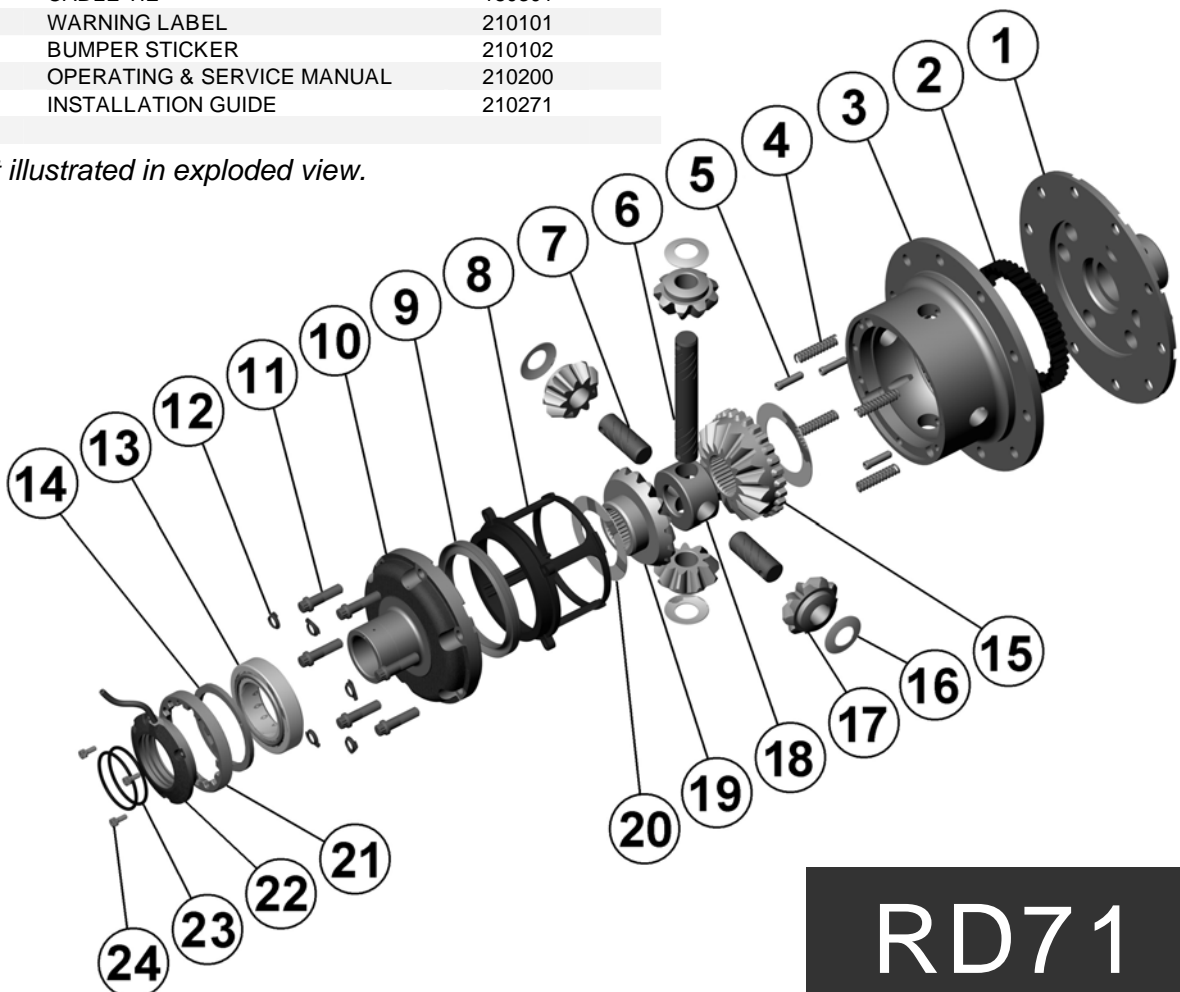
- 1 For replacement O-rings use only BS138 Viton 75.

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](#)).

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023201	
02	1	CLUTCH GEAR	050401	
03	1	DIFFERENTIAL CASE	012901	
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 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 illustrated in exploded view.



RD71



ARB AIR LOCKER *Air Operated Locking Differentials*

RD72 Suzuki Sierra,RR,26 SPL**

Specs:

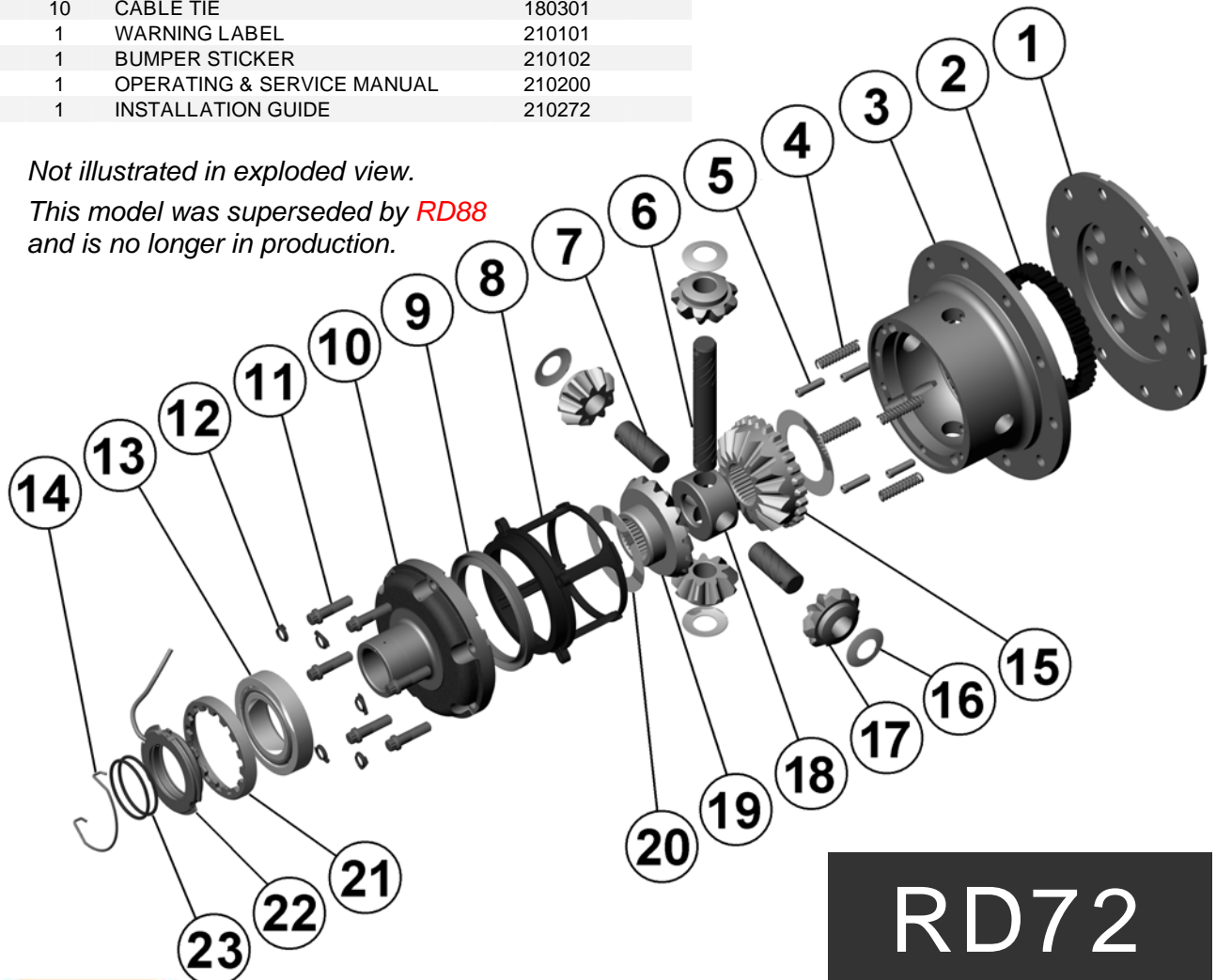
Axle Spline	26 tooth, Ø27.4mm [1.08"]
Ratio Supported	All
Ring Gear ID	108.0mm [4.25"]
Ring Gear Bolts	10 bolts on Ø130mm [5.12"]
Ring Gear Torque	85Nm [63 ft-lb]
Backlash	0.10-0.15mm [0.004-0.006"]
Bearing Cap Torque	85Nm [63 ft-lb]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023101	
02	1	CLUTCH GEAR	050701	
03	1	DIFFERENTIAL CASE	012801	
04	4	RETURN SPRING	150107	
05	3	CROSS SHAFT RETAINING PIN	120403	
06	1	LONG CROSS SHAFT	060106	
07	2	SHORT CROSS SHAFT	060306	
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	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	SEAL HOUSING RETAINING CLIP	150601	
15	1	SPLINED SIDE GEAR	131201	
16	4	PINION THRUST WASHER	151108	
17	4	PINION GEAR	140601	
18	1	SPIDER BLOCK	070701	
19	1	SIDE GEAR	131101	
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	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210272	

Notes:

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

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



* Not illustrated in exploded view.

** This model was superseded by RD88 and is no longer in production.

RD72



ARB AIR LOCKER *Air Operated Locking Differentials*

RD73 Suzuki Sierra,FR,22 SPL**

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	85Nm [63 ft-lb]
Backlash	0.10-0.15mm [0.004-0.006"]
Bearing Cap Torque	85Nm [63 ft-lb]

Notes:

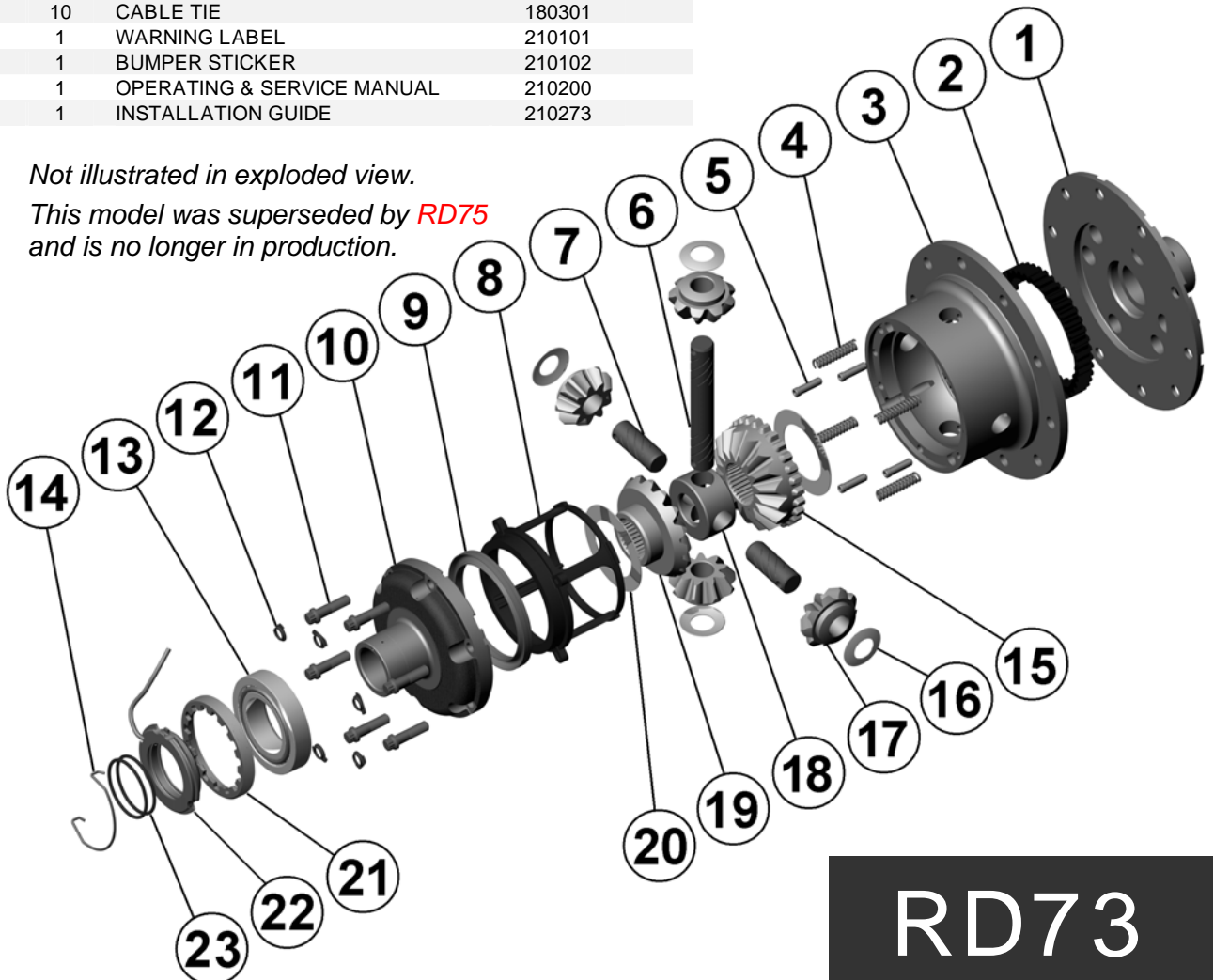
- 1 For replacement O-rings use only BS133 Viton 75.

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

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023101	
02	1	CLUTCH GEAR	050701	
03	1	DIFFERENTIAL CASE	012801	
04	4	RETURN SPRING	150107	
05	3	CROSS SHAFT RETAINING PIN	120403	
06	1	LONG CROSS SHAFT	060106	
07	2	SHORT CROSS SHAFT	060306	
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	
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	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210273	

* Not illustrated in exploded view.

** This model was superseded by RD75 and is no longer in production.



RD73



ARB AIR LOCKER *Air Operated Locking Differentials*

RD74 Suzuki Vitara,RR,26 SPL,10 bolt RG

Specs:

Axle Spline	26 tooth, Ø27.4mm [1.08"]
Ratio Supported	All
Ring Gear ID	118.0mm [4.65"]
Ring Gear Bolts	10 bolts on Ø140mm [5.51"]
Ring Gear Torque	95Nm [70 ft-lb]
Backlash	0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque	85Nm [63 ft-lb]

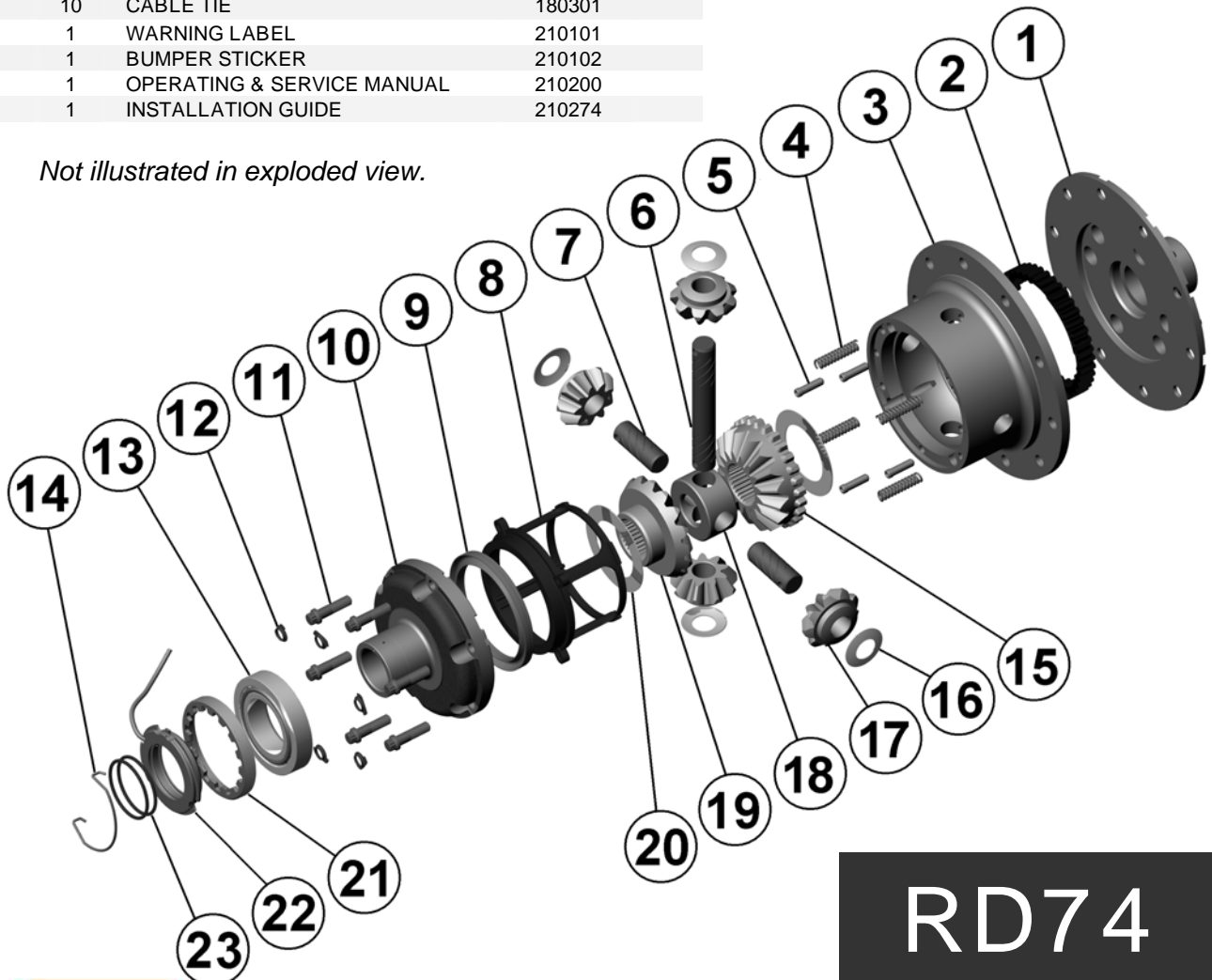
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021803	
02	1	CLUTCH GEAR	050501	
03	1	DIFFERENTIAL CASE	011903	
04	4	RETURN SPRING	150102	
05	3	CROSS SHAFT RETAINING PIN	120401	
06	1	LONG CROSS SHAFT	061101	
07	2	SHORT CROSS SHAFT	061201	
08	1	PISTON	040601	
09	1	U-RING	160303	
10	1	CYLINDER CAP ASSEMBLY	030905	
11	8	CYLINDER CAP RETAINING BOLT	200207	
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	131005	
16	4	PINION THRUST WASHER	151107	
17	4	PINION GEAR	140502	
18	1	SPIDER BLOCK	070502	
19	1	SIDE GEAR	130905	
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)	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	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	210274	

Notes:

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

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

* Not illustrated in exploded view.



RD74



ARB AIR LOCKER *Air Operated Locking Differentials*

RD75 Suzuki,FR,22 SPL,10 bolt RG

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]

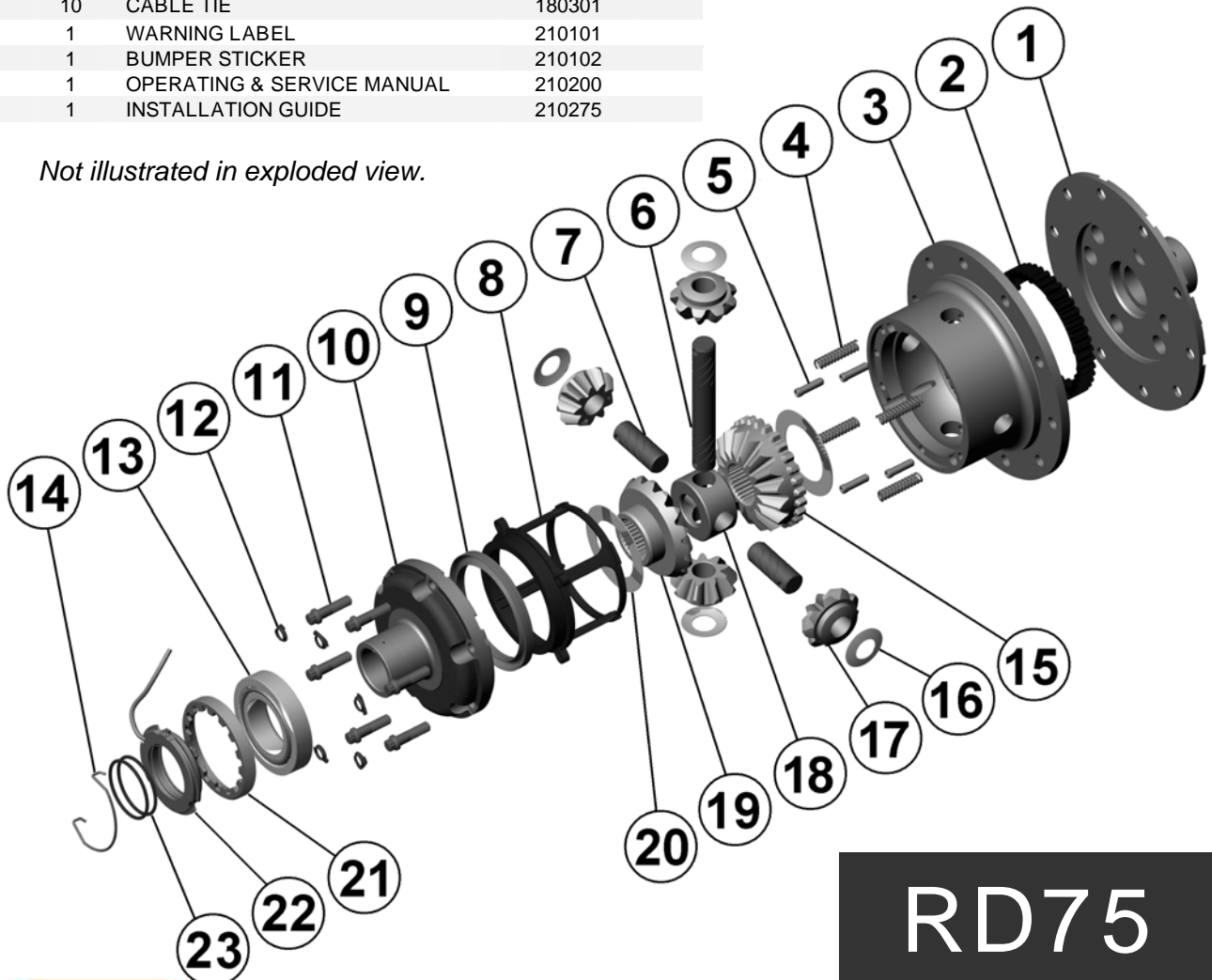
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023701	
02	1	CLUTCH GEAR	050701	
03	1	DIFFERENTIAL CASE	012802	
04	4	RETURN SPRING	150107	
05	3	CROSS SHAFT RETAINING PIN	120403	
06	1	LONG CROSS SHAFT	060106	
07	2	SHORT CROSS SHAFT	060306	
08	1	PISTON	040801	
09	1	U-RING	160306	
10	1	CYLINDER CAP ASSEMBLY	031301	
11	8	CYLINDER CAP RETAINING BOLT	200211	
12	8	LOCKING TAB (6mm)	150402	
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	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210275	

Notes:

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

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

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD77 Suzuki Jimny (JA),FR,22 SPL **

Specs:

Axle Spline	22 tooth, Ø23.9mm [0.94"]
Ratio Supported	All
Ring Gear ID	108.0mm [4.25"]
Ring Gear Bolts	8 bolts on Ø130mm [5.12"]
Ring Gear Torque	85Nm [63 ft-lb]
Backlash	0.10-0.20mm [0.004-0.008"]
Bearing Cap Torque	50Nm [37 ft-lb]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023103	
02	1	CLUTCH GEAR	050701	
03	1	DIFFERENTIAL CASE	012803	
04	4	RETURN SPRING	150109	
05	3	CROSS SHAFT RETAINING PIN	120403	
06	1	LONG CROSS SHAFT	060106	
07	2	SHORT CROSS SHAFT	060306	
08	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	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	CLAMPING PLATE	090401	
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	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)	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	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210277	

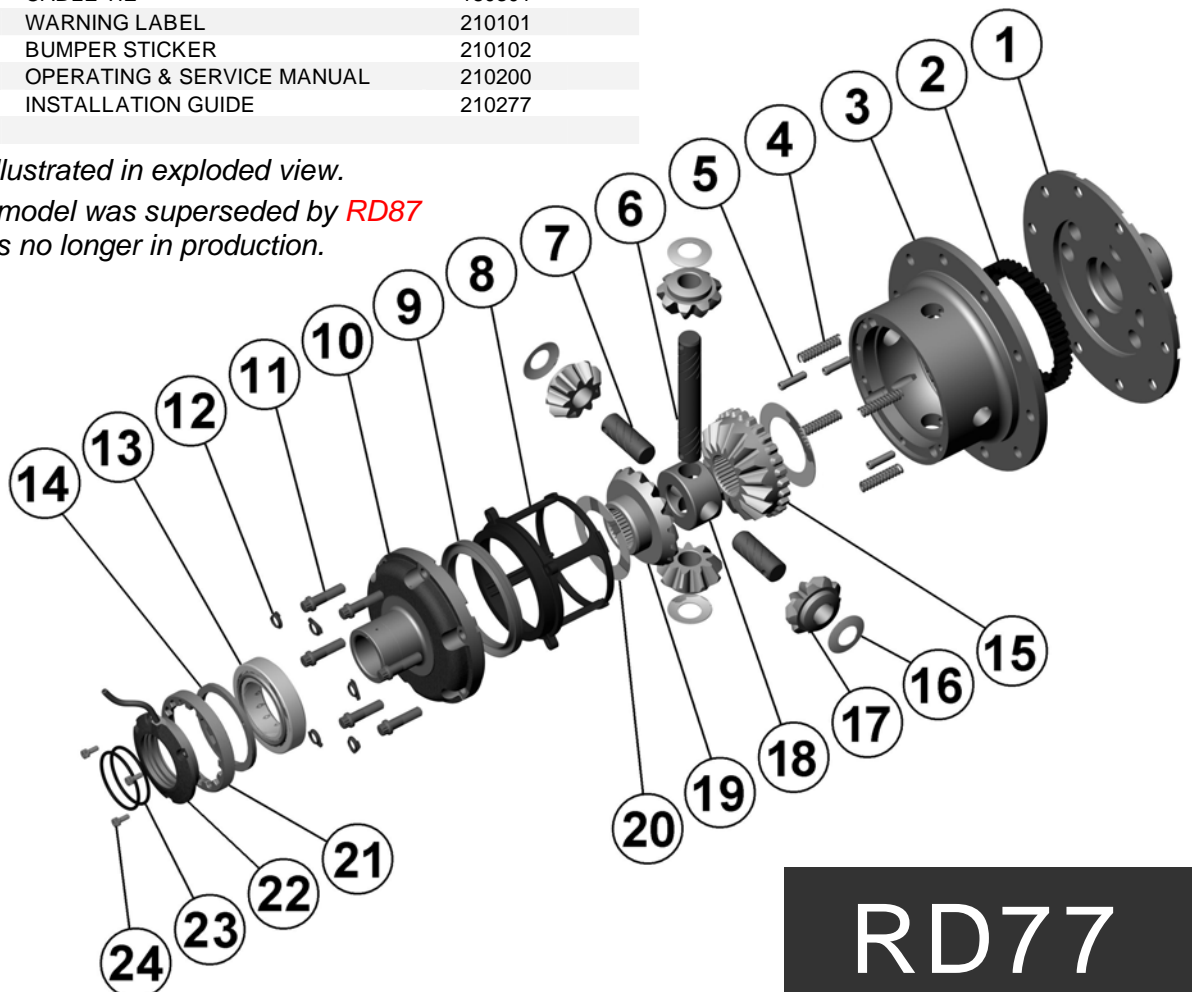
Notes:

- 1 For replacement O-rings use only BS030 Viton 75.

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

* Not illustrated in exploded view.

** This model was superseded by **RD87** and is no longer in production.



RD77



ARB AIR LOCKER *Air Operated Locking Differentials*

RD78A Nissan H233B,31 SPL

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	020302	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	010307	
04	4	RETURN SPRING	150101	
05	4	CROSS SHAFT RETAINING PIN	120303	
06	4	SHORT CROSS SHAFT	060402	
07	2	SIDE GEAR THRUST WASHER	151002	
08	1	PISTON	040202	
09	1	BONDED SEAL	160705	
10	1	CYLINDER CAP ASSEMBLY	030214	
11	8	CYLINDER CAP RETAINING BOLT	200205	
12	8	LOCKING TAB (8mm)	150401	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	ADJUSTER NUT	100102	
15	1	SEAL HOUSING ASSEMBLY	081902	1
16	2	SEAL HOUSING O-RING	160235	
17	1	SEAL HOUSING RETAINING CLIP	150601	
18	1	SPLINED SIDE GEAR	130402	
19	4	PINION THRUST WASHER	151102	
20	4	PINION GEAR	140201	
21	1	SPIDER BLOCK	070201	
22	1	THRUST BLOCK	110502	
23	1	SIDE GEAR	130202	
*	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 (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	210278A	

* Not illustrated in exploded view.

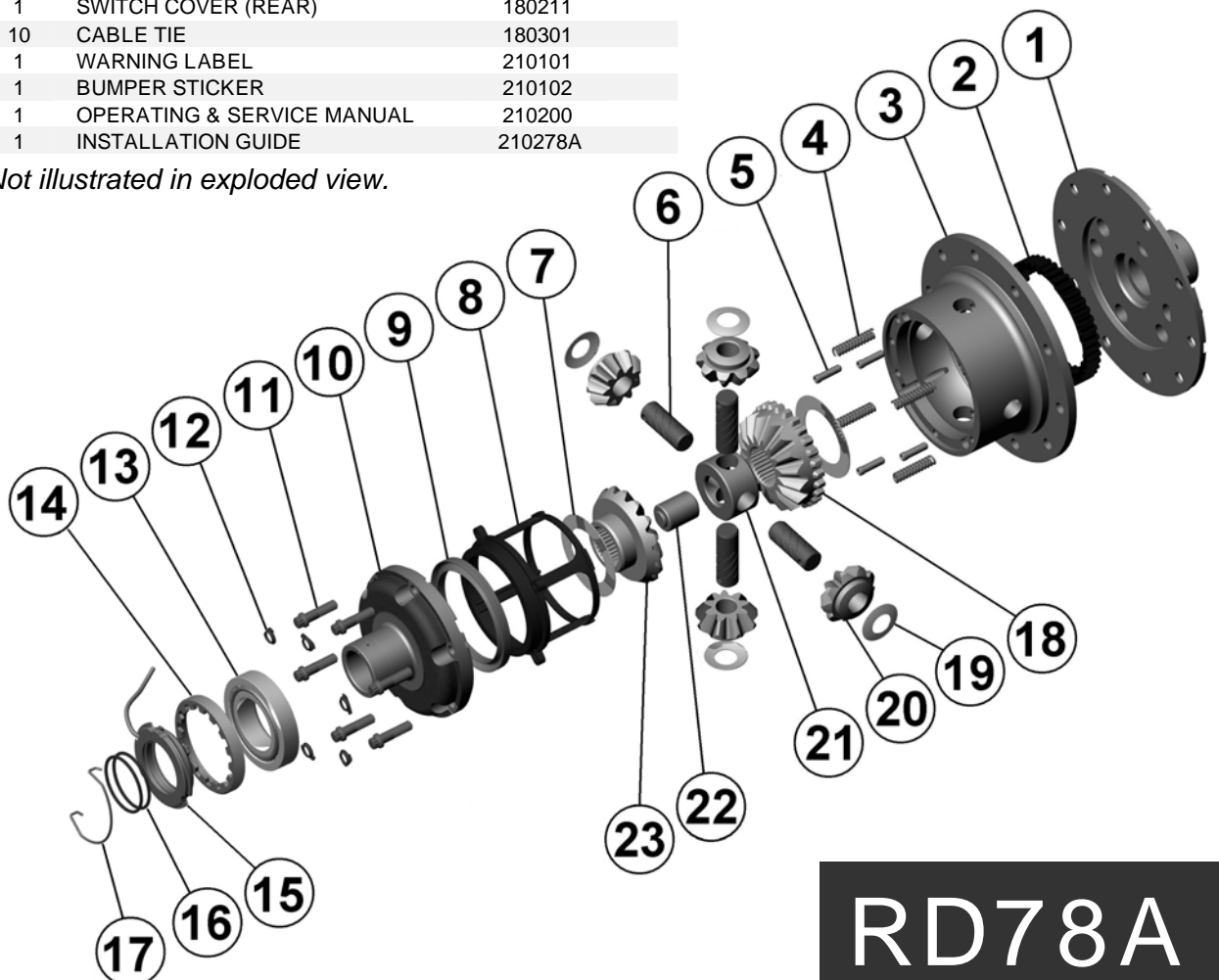
Specs:

Axle Spline	31 tooth, Ø32.0mm [1.26"]
Ratio Supported	All
Ring Gear ID	146.0mm [5.75"]
Ring Gear Bolts	9 bolts on Ø176mm [6.93"]
Ring Gear Bolt Size	12mm
Ring Gear Torque	142Nm [105 ft-lb]
Backlash	0.15-0.20mm [0.006-0.008"]
Bearing Cap Torque	99Nm [73 ft-lb]

Notes:

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

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



RD78A



ARB AIR LOCKER *Air Operated Locking Differentials*

RD79 Suzuki Vitara,RR,26 SPL,12 bolt RG

Specs:

Axle Spline	26 tooth, Ø27.4mm [1.08"]
Ratio Supported	All
Ring Gear ID	118.0mm [4.65"]
Ring Gear Bolts	12 bolts on Ø140mm [5.51"]
Ring Gear Torque	95Nm [70 ft-lb]
Backlash	0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque	85Nm [63 ft-lb]

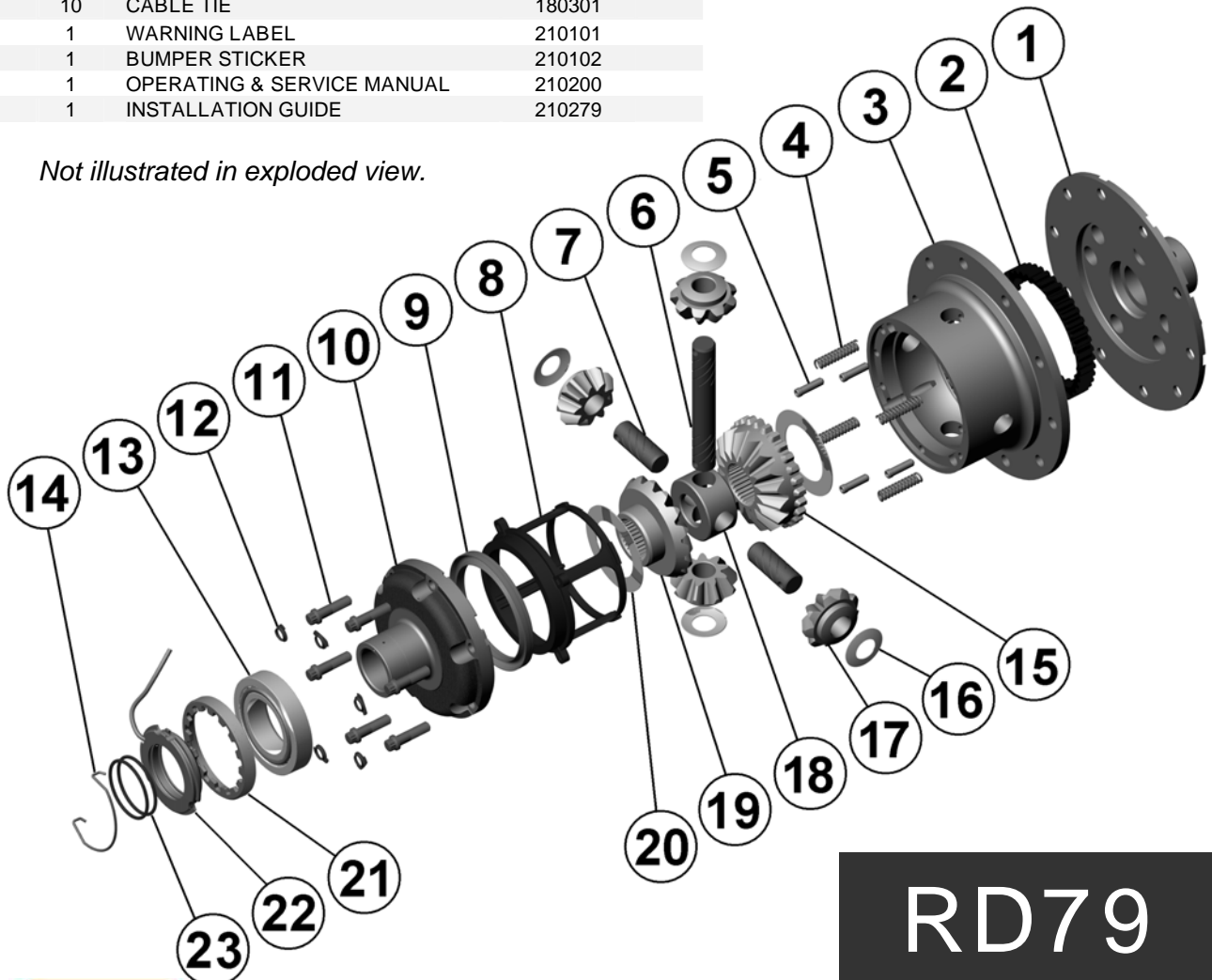
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023301	
02	1	CLUTCH GEAR	050501	
03	1	DIFFERENTIAL CASE	011904	
04	4	RETURN SPRING	150102	
05	3	CROSS SHAFT RETAINING PIN	120401	
06	1	LONG CROSS SHAFT	061101	
07	2	SHORT CROSS SHAFT	061201	
08	1	PISTON	040601	
09	1	U-RING	160303	
10	1	CYLINDER CAP ASSEMBLY	030905	
11	8	CYLINDER CAP RETAINING BOLT	200207	
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	131005	
16	4	PINION THRUST WASHER	151107	
17	4	PINION GEAR	140502	
18	1	SPIDER BLOCK	070502	
19	1	SIDE GEAR	130905	
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)	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	210279	

Notes:

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

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

* Not illustrated in exploded view.



RD79



ARB AIR LOCKER *Air Operated Locking Differentials*

RD80 Dana 80,35 SPL

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]

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 (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	

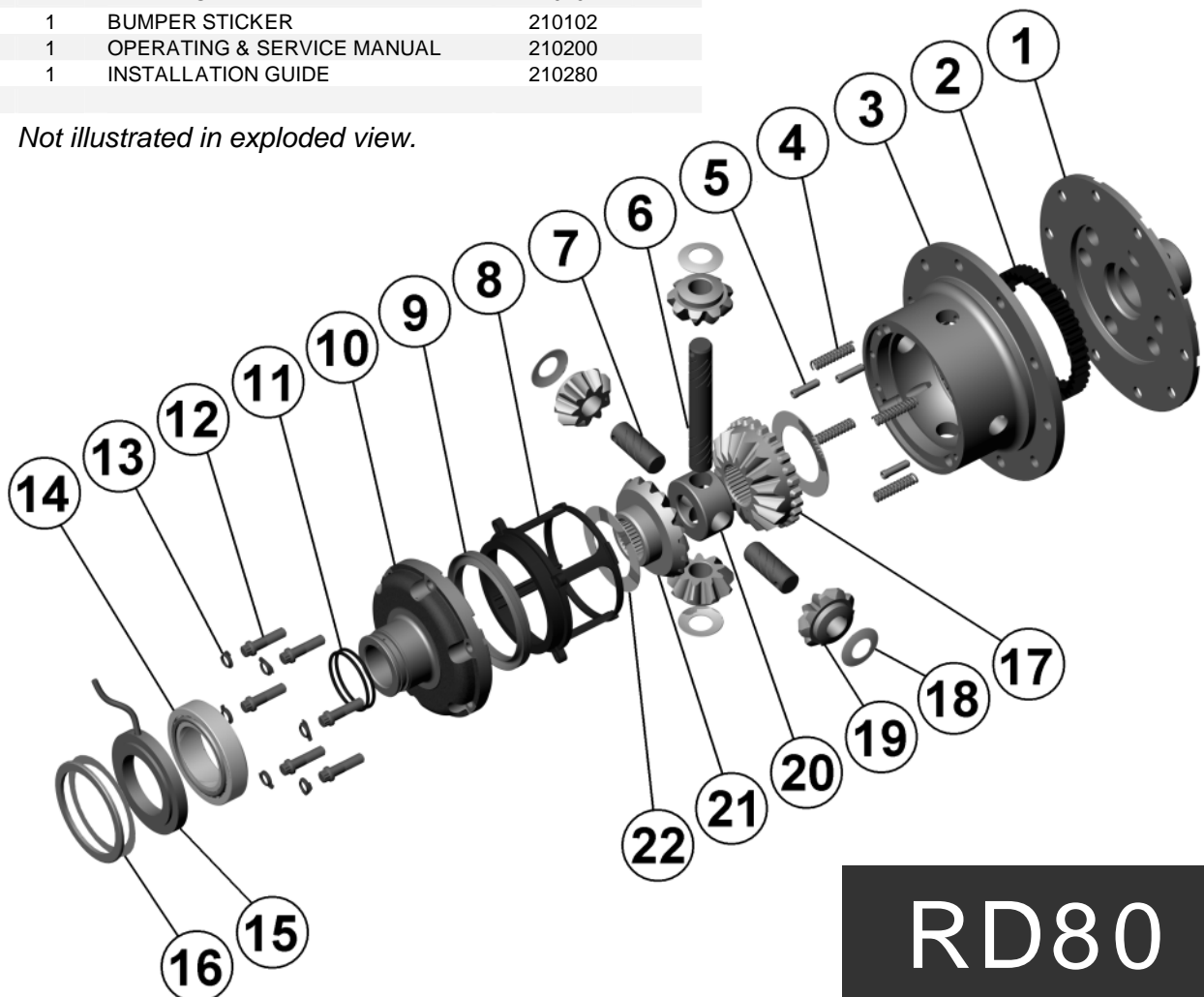
Notes:

- For replacement O-rings use only BS141 Viton 75.
- 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](#)).

* Not illustrated in exploded view.



RD80



ARB AIR LOCKER *Air Operated Locking Differentials*

RD81 Ford 8.8",31 SPL

Specs:

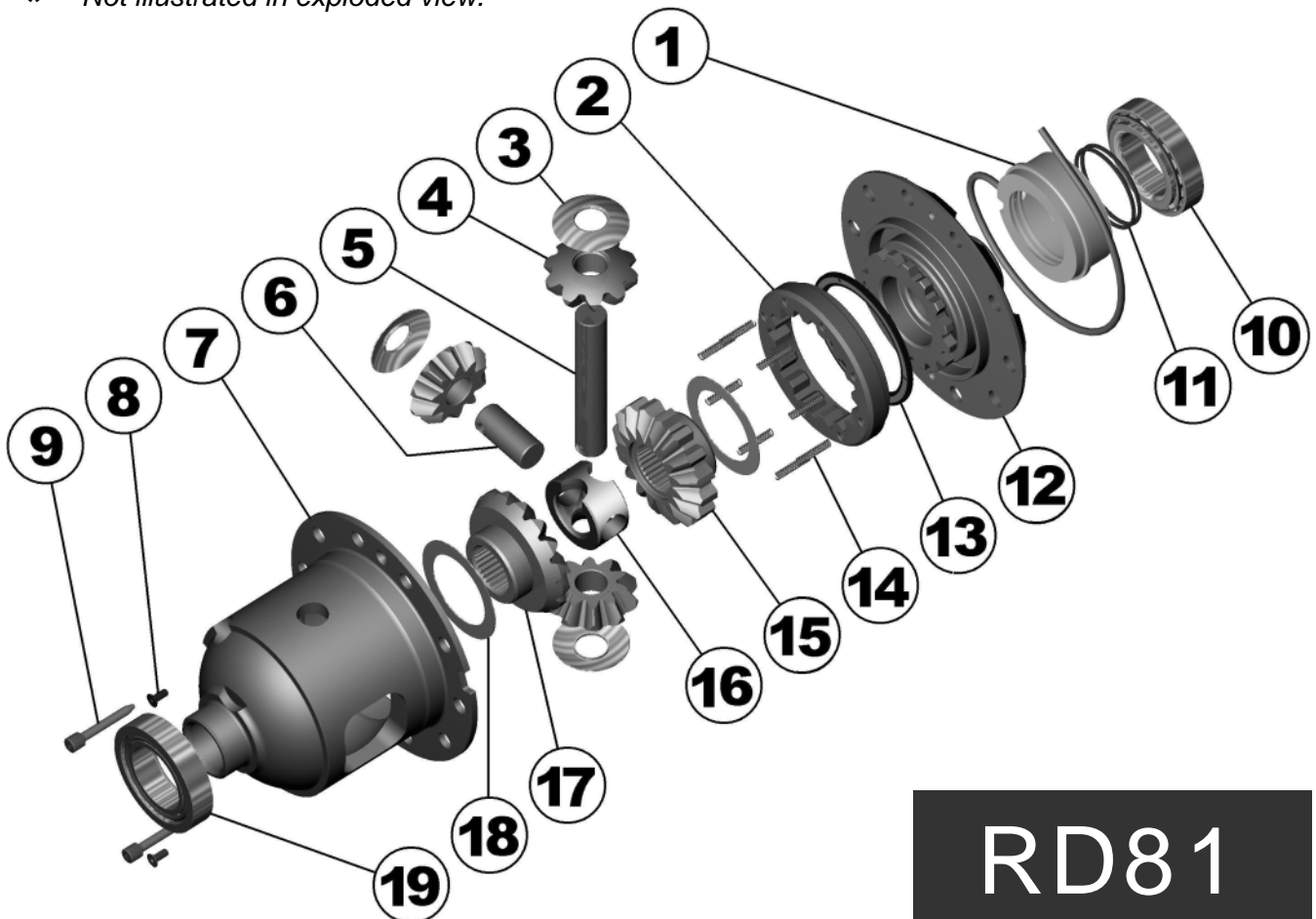
Axle Spline	31 tooth, Ø33.5mm [1.32"]
Ratio Supported	All
Ring Gear ID	127.0mm [5.00"]
Ring Gear OD	224mm [8.8"]
Ring Gear Bolts	10 bolts on Ø152mm [6.00"]
Ring Gear Torque	81Nm [60 ft-lb]
Backlash	0.28-0.41mm [0.011-0.016"]
Bearing Cap Torque	81Nm [60 ft-lb]

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	

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](#)).

* Not illustrated in exploded view.



RD81



ARB AIR LOCKER *Air Operated Locking Differentials*

RD82 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	

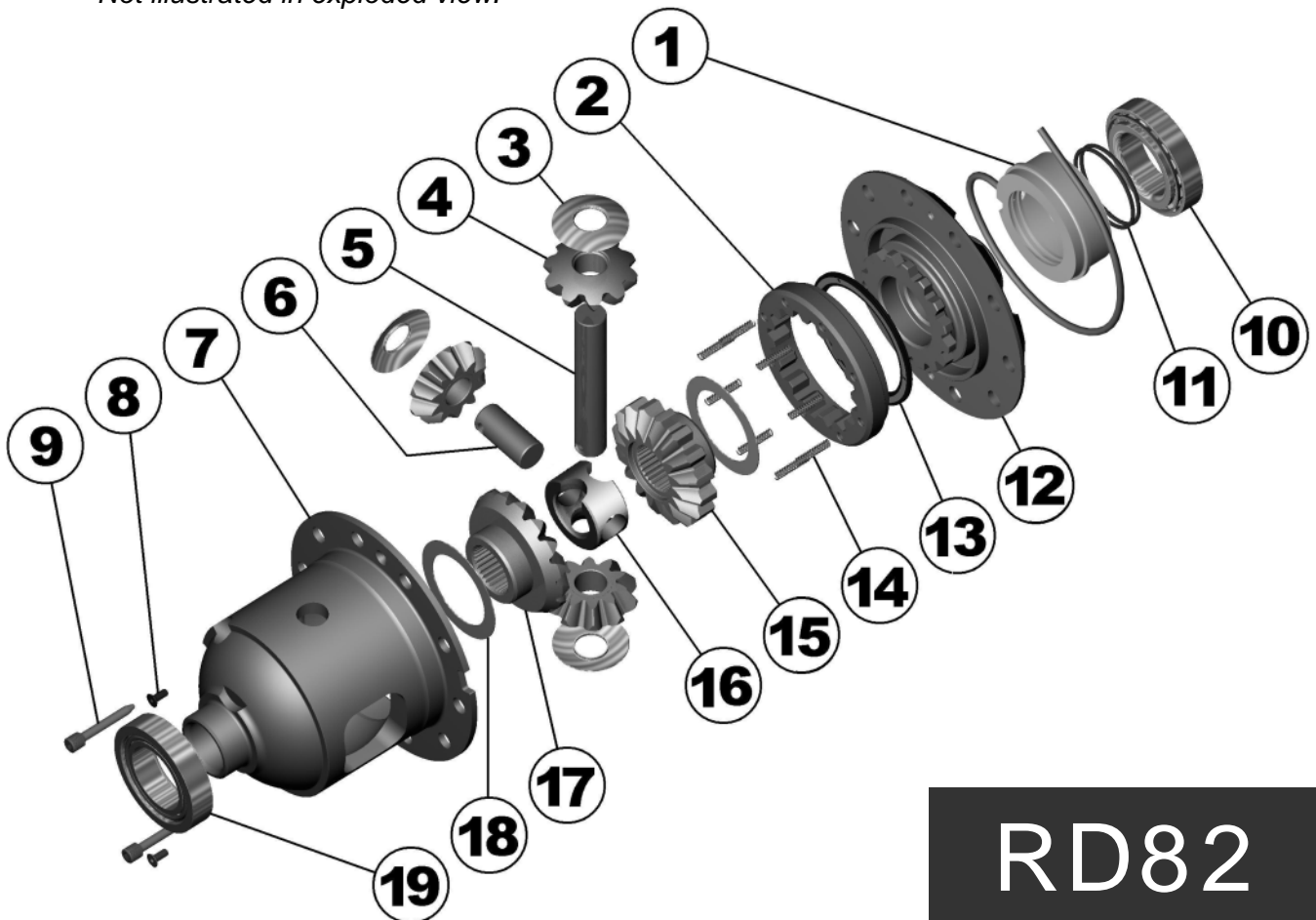
* Not illustrated in exploded view.

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](#)).



RD82



ARB AIR LOCKER *Air Operated Locking Differentials*

RD83 GM 10 Bolt, 8.5", 28 SPL

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.

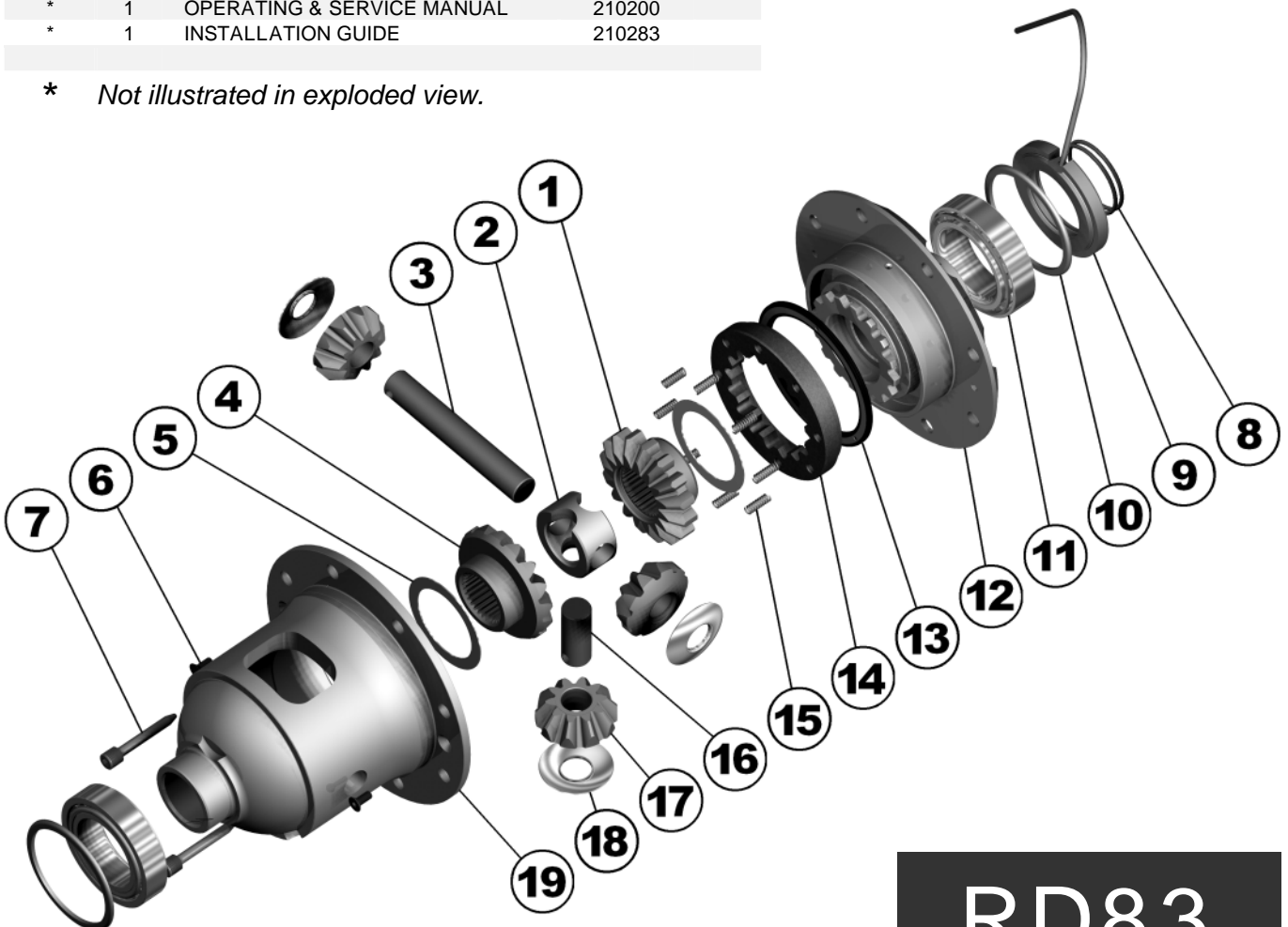
Ring gear bolts are 7/16" - 20 left-hand thread, and must be removed in a clockwise direction.

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](#)).

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	

* Not illustrated in exploded view.



RD83



ARB AIR LOCKER *Air Operated Locking Differentials*

RD84 GM 10 Bolt, 8.5", 30 SPL

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.
- 2 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.

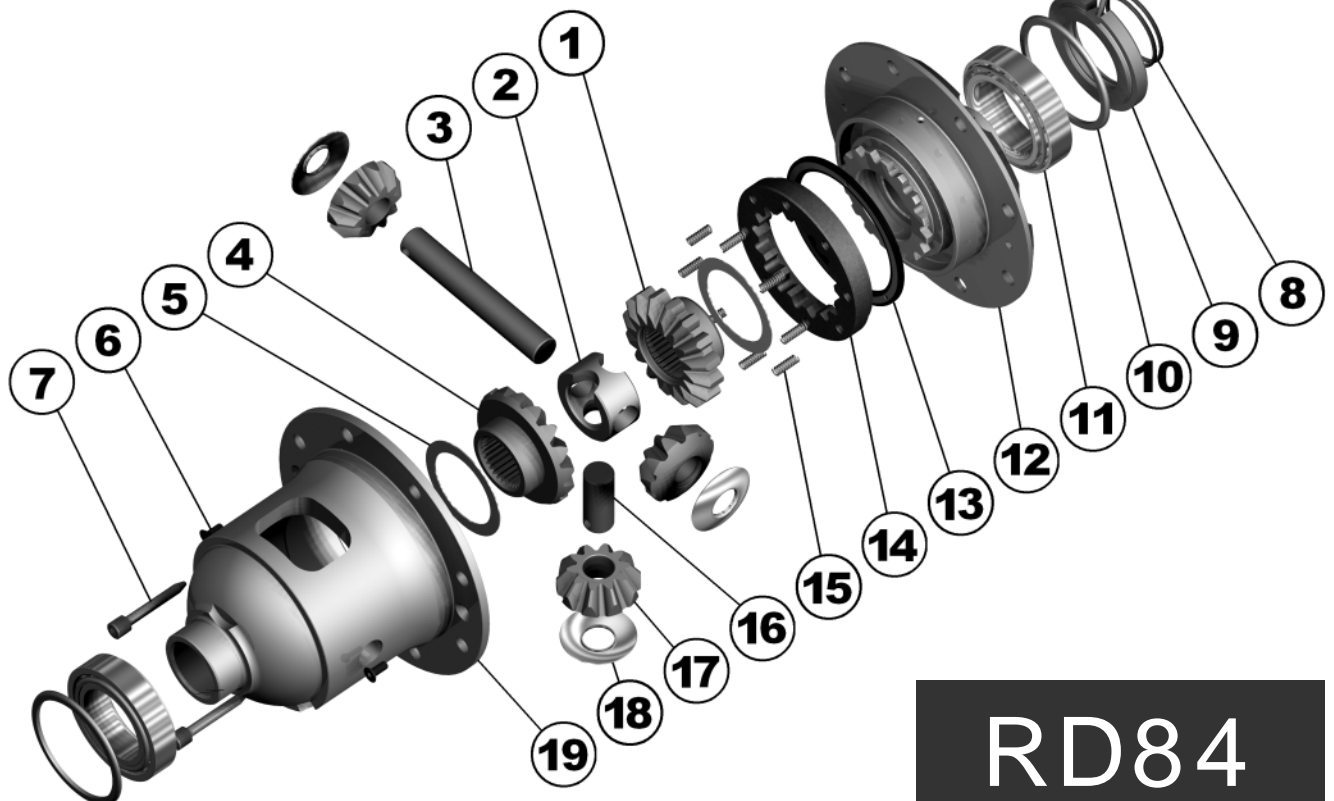
Ring gear bolts are 7/16" - 20 left-hand thread, and must be removed in a clockwise direction.

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](#)).

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	

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD85 Isuzu RR,23 SPL,non-LSD

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"]

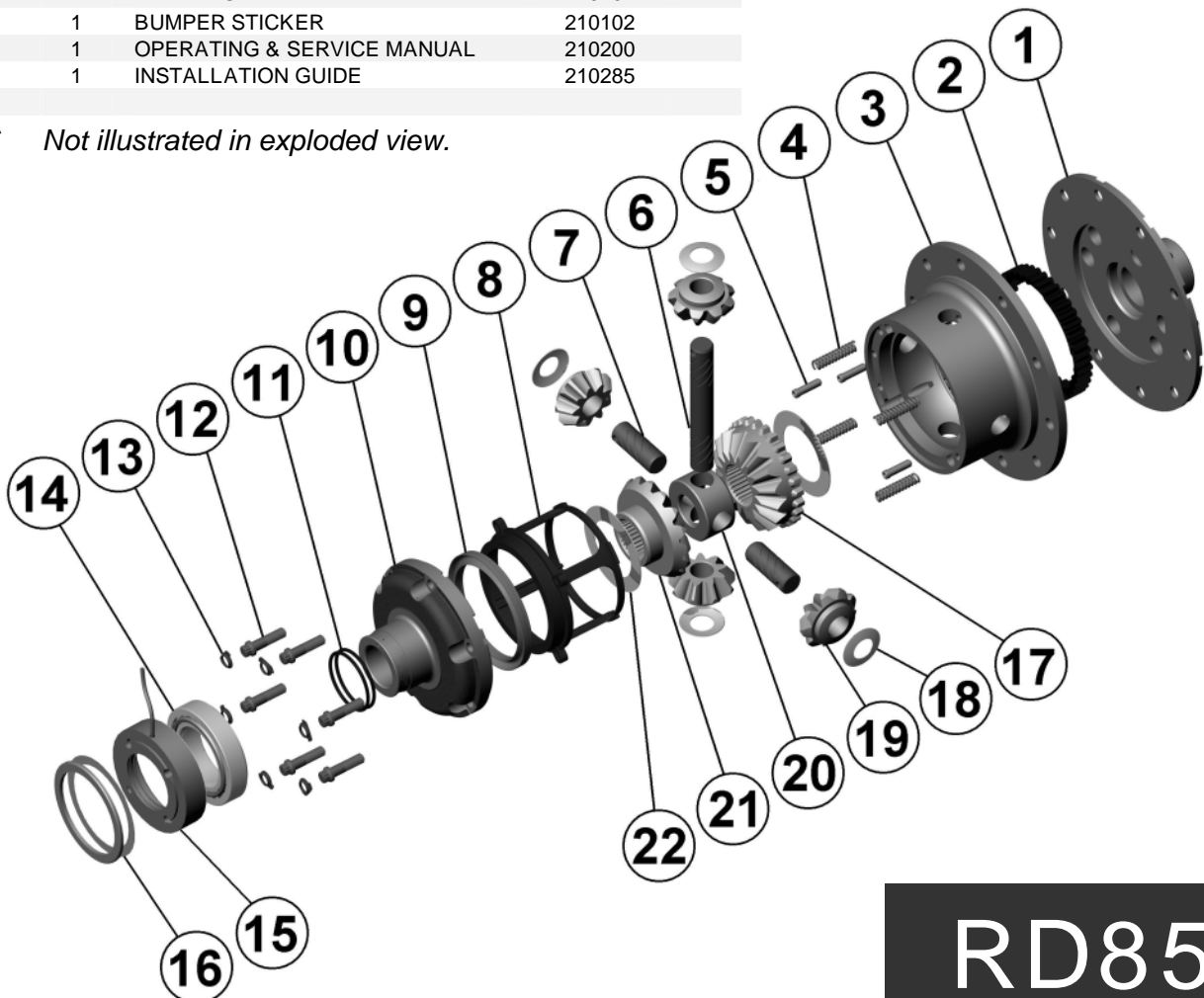
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021503	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	012702	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120303	
06	1	LONG CROSS SHAFT	060205	
07	2	SHORT CROSS SHAFT	060402	
08	1	PISTON	040202	
09	1	BONDED SEAL	160702	
10	1	CYLINDER CAP	030805	
11	2	SEAL HOUSING O-RING	160227	1
12	8	CYLINDER CAP RETAINING BOLT	200205	
13	8	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	160115	2
15	1	SEAL HOUSING	080705	
16	1	SHIM KIT	SHK001	
17	1	SPLINED SIDE GEAR	130412	
18	4	PINION THRUST WASHER	151102	
19	4	PINION GEAR	140201	
20	1	SPIDER BLOCK	070201	
21	1	SIDE GEAR	130212	
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	210285	

Notes:

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

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

* *Not illustrated in exploded view.*



RD85



ARB AIR LOCKER *Air Operated Locking Differentials*

RD87 Suzuki Jimny,FR,22 SPL,8 bolt RG

Specs:

Axle Spline	22 tooth, Ø23.9mm [0.94"]
Ratio Supported	All
Ring Gear ID	108.0mm [4.25"]
Ring Gear Bolts	8 bolts on Ø130mm [5.12"]
Ring Gear Torque	85Nm [63 ft-lb]
Backlash	0.10-0.20mm [0.004-0.008"]
Bearing Cap Torque	50Nm [37 ft-lb]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023702	
02	1	CLUTCH GEAR	050701	
03	1	DIFFERENTIAL CASE	012804	
04	4	RETURN SPRING	150107	
05	3	CROSS SHAFT RETAINING PIN	120403	
06	1	LONG CROSS SHAFT	060106	
07	2	SHORT CROSS SHAFT	060306	
08	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	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	CLAMPING PLATE	090401	
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	100601	
22	1	SEAL HOUSING	081401	
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	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210287	

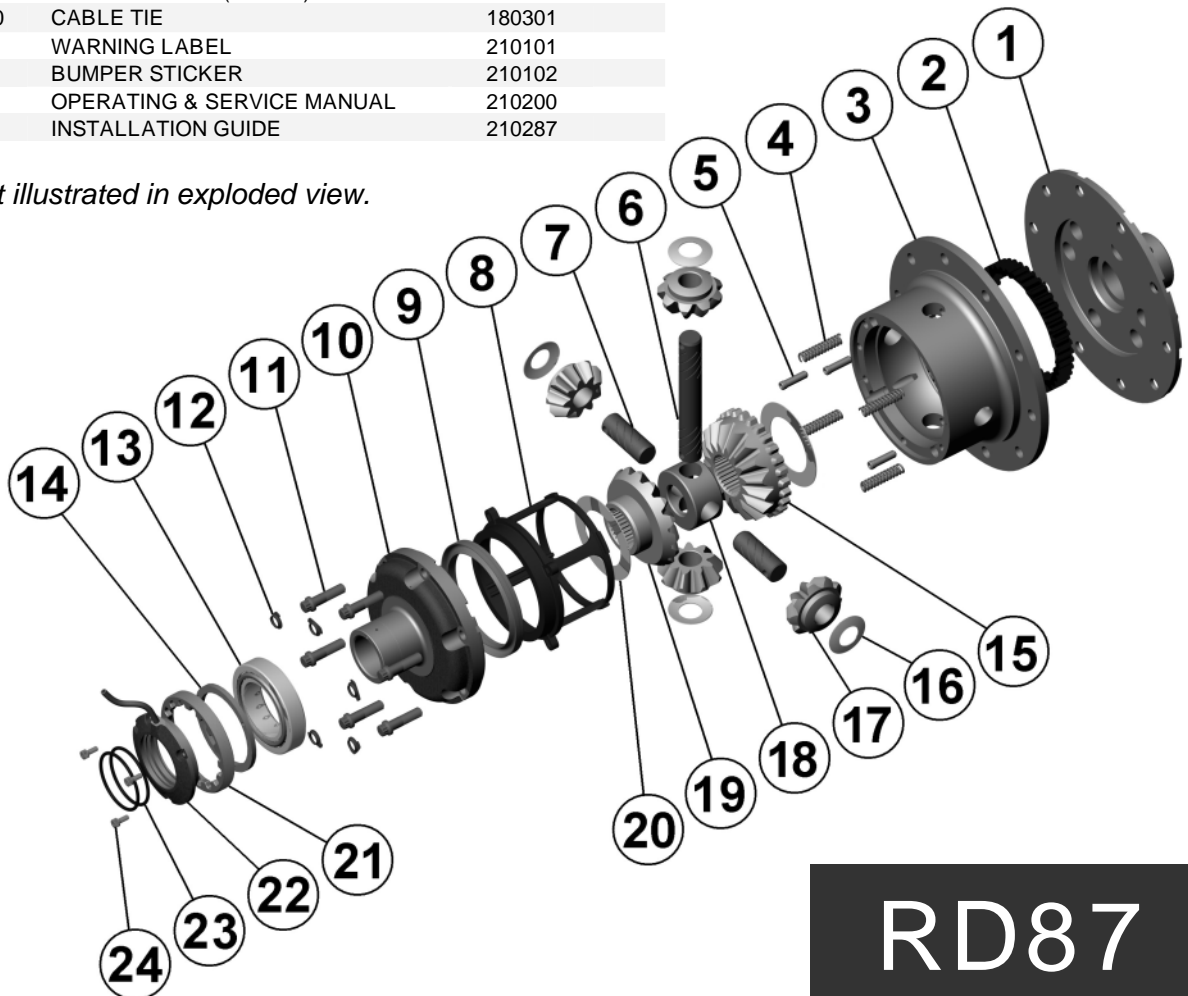
Notes:

- 1 For replacement O-rings use only BS030 Viton 75.

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

For 10 bolt ring gear model refer to RD118 ([Section 2.118](#)).

* Not illustrated in exploded view.



RD87



ARB AIR LOCKER *Air Operated Locking Differentials*

RD88 Suzuki,26 SPL,10 bolt RG

Specs:

Axle Spline	26 tooth, Ø27.4mm [1.08"]
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]

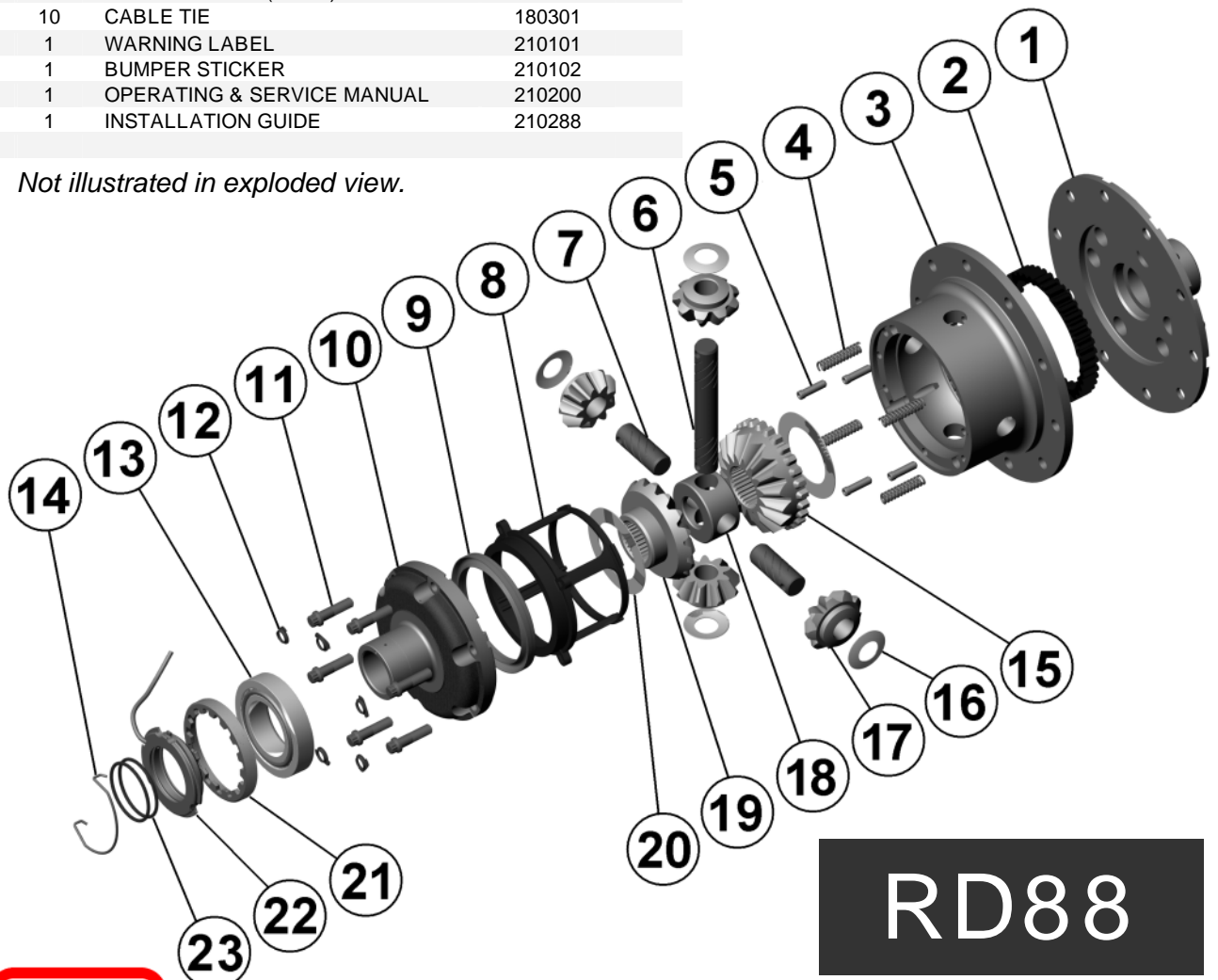
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023701	
02	1	CLUTCH GEAR	050701	
03	1	DIFFERENTIAL CASE	012802	
04	4	RETURN SPRING	150107	
05	3	CROSS SHAFT RETAINING PIN	120403	
06	1	LONG CROSS SHAFT	060106	
07	2	SHORT CROSS SHAFT	060306	
08	1	PISTON	040801	
09	1	U-RING	160306	
10	1	CYLINDER CAP ASSEMBLY	031301	
11	8	CYLINDER CAP RETAINING BOLT	200211	
12	8	LOCKING TAB (6mm)	150402	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	SEAL HOUSING RETAINING CLIP	150601	
15	1	SPLINED SIDE GEAR	131201	
16	4	PINION THRUST WASHER	151108	
17	4	PINION GEAR	140601	
18	1	SPIDER BLOCK	070701	
19	1	SIDE GEAR	131101	
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	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210288	

Notes:

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

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

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD89 Toyota Tacoma,RR**

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:

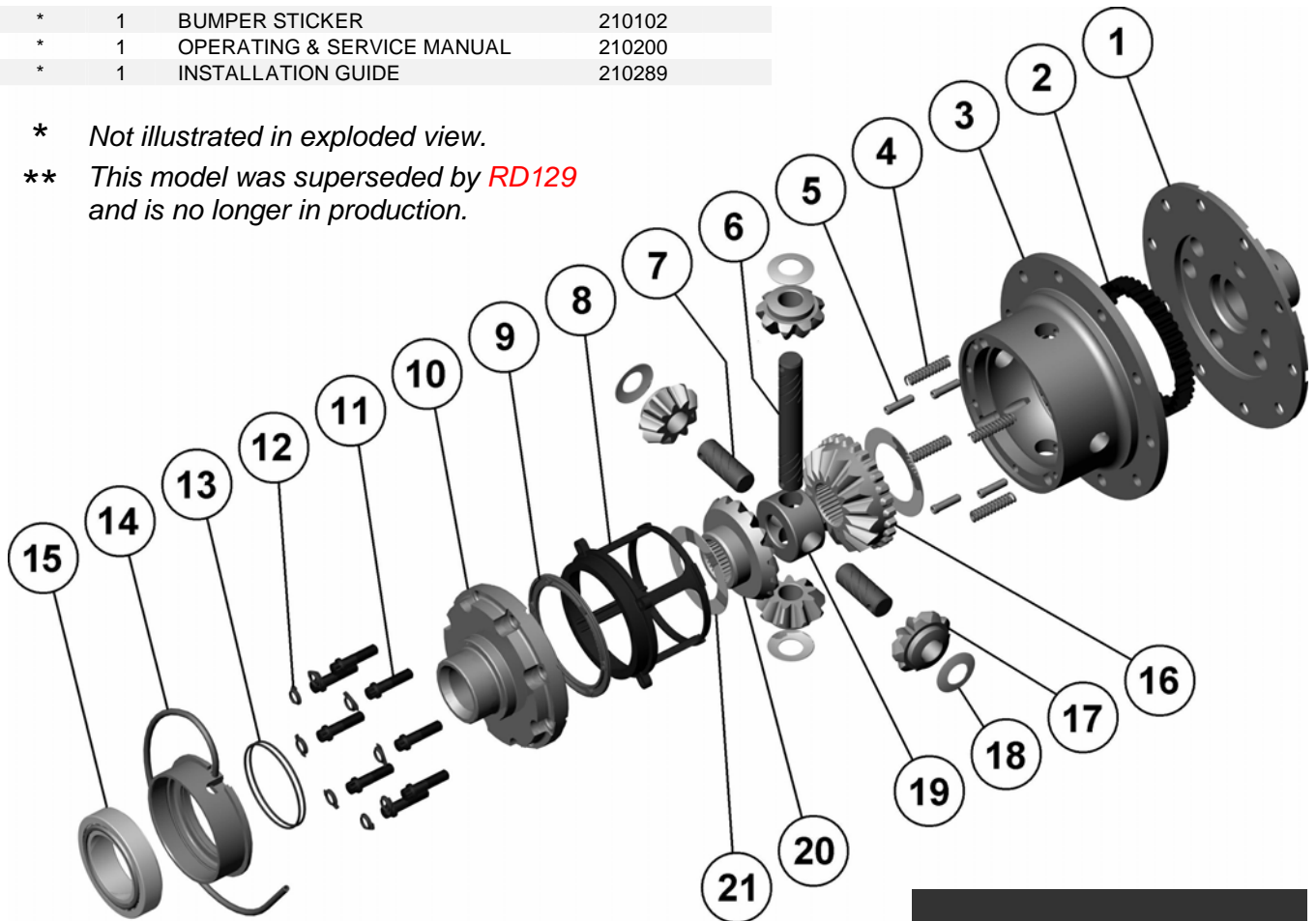
- 1 For replacement O-rings use only BS037 Viton 75.
- 2 For replacement bearing use Timken part # X32010X / Y32010X.
- 3 Seal housing comes pre-installed. To service O-rings or bearing remove the seal housing assembly with a bearing puller.

86mm bearing OD.

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	
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	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	

* Not illustrated in exploded view.

** This model was superseded by **RD129** and is no longer in production.



RD89



ARB AIR LOCKER *Air Operated Locking Differentials*

RD90 TOYOTA 7.5" IFS

Specs:

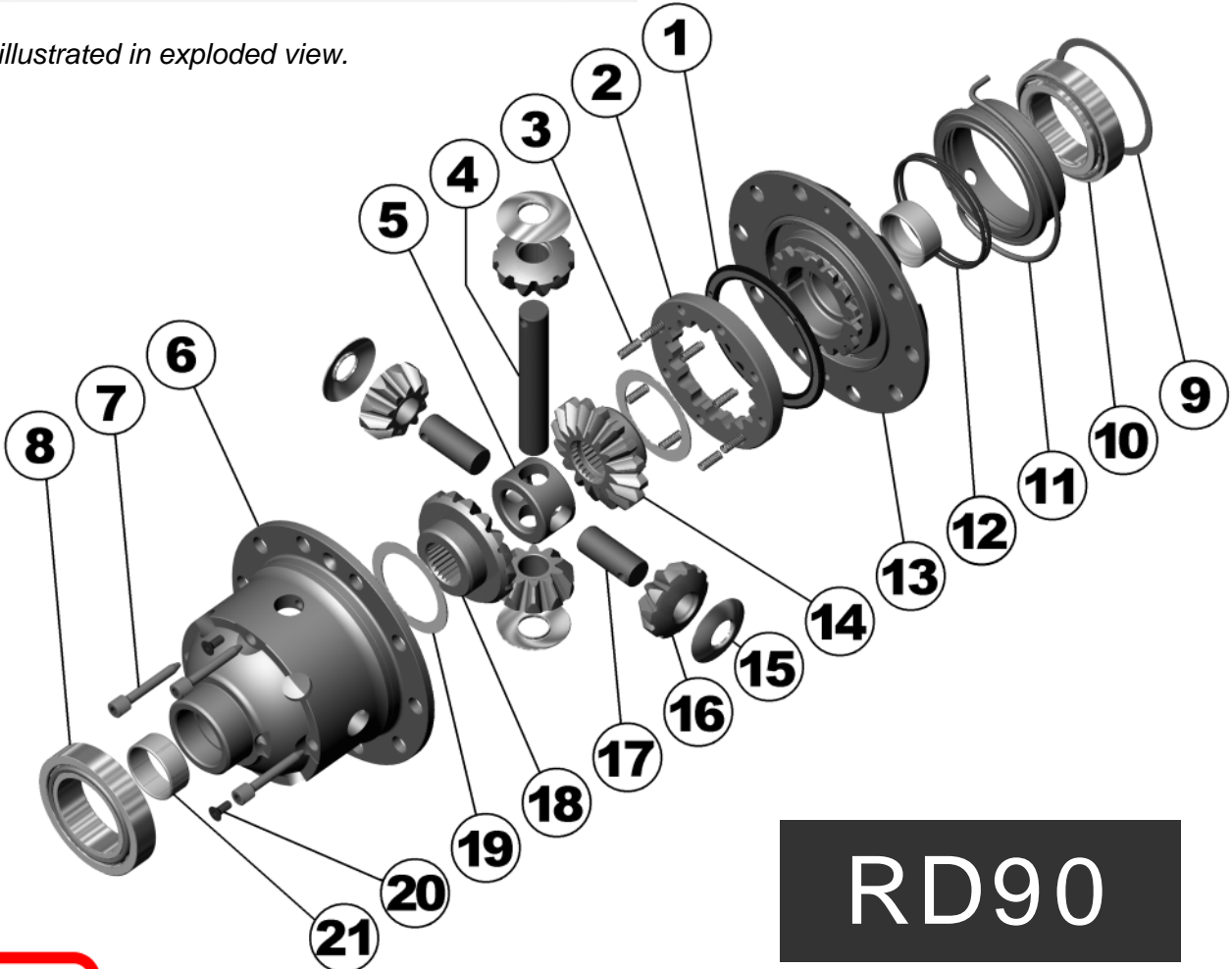
ITEM #	QTY	DESCRIPTION	PART #	NOTES
1	1	BONDED SEAL	160701	
2	1	CLUTCH GEAR	050802	
3	8	RETURN SPRING	150113	
4	1	LONG CROSS SHAFT	061302	
5	1	SPIDER BLOCK	070503	
6	1	DIFFERENTIAL CASE	013101	
7	3	CROSS SHAFT RETAINING PIN	120601	
8	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
9	1	SHIM KIT	SHK008	
10	1	TAPERED 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	

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:

- 1 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.

* Not illustrated in exploded view.



RD90



ARB AIR LOCKER *Air Operated Locking Differentials*

RD91 Dana 80,37 SPL

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]

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	

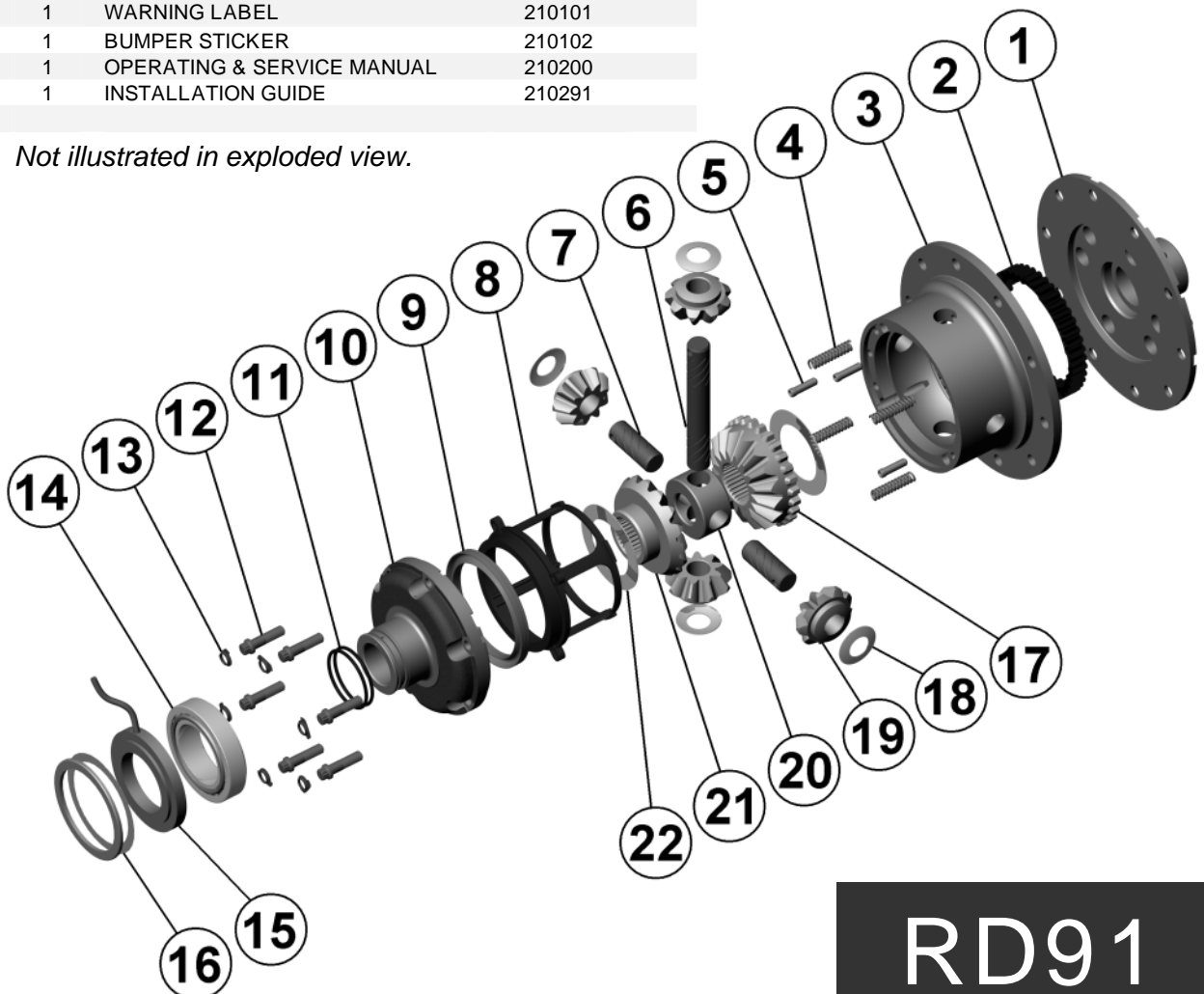
Notes:

- For replacement O-rings use only BS141 Viton 75.
- 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](#)).

* Not illustrated in exploded view.



RD91



ARB AIR LOCKER *Air Operated Locking Differentials*

RD92 Toyota 8" IFS, 50mm BRNG

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]

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	

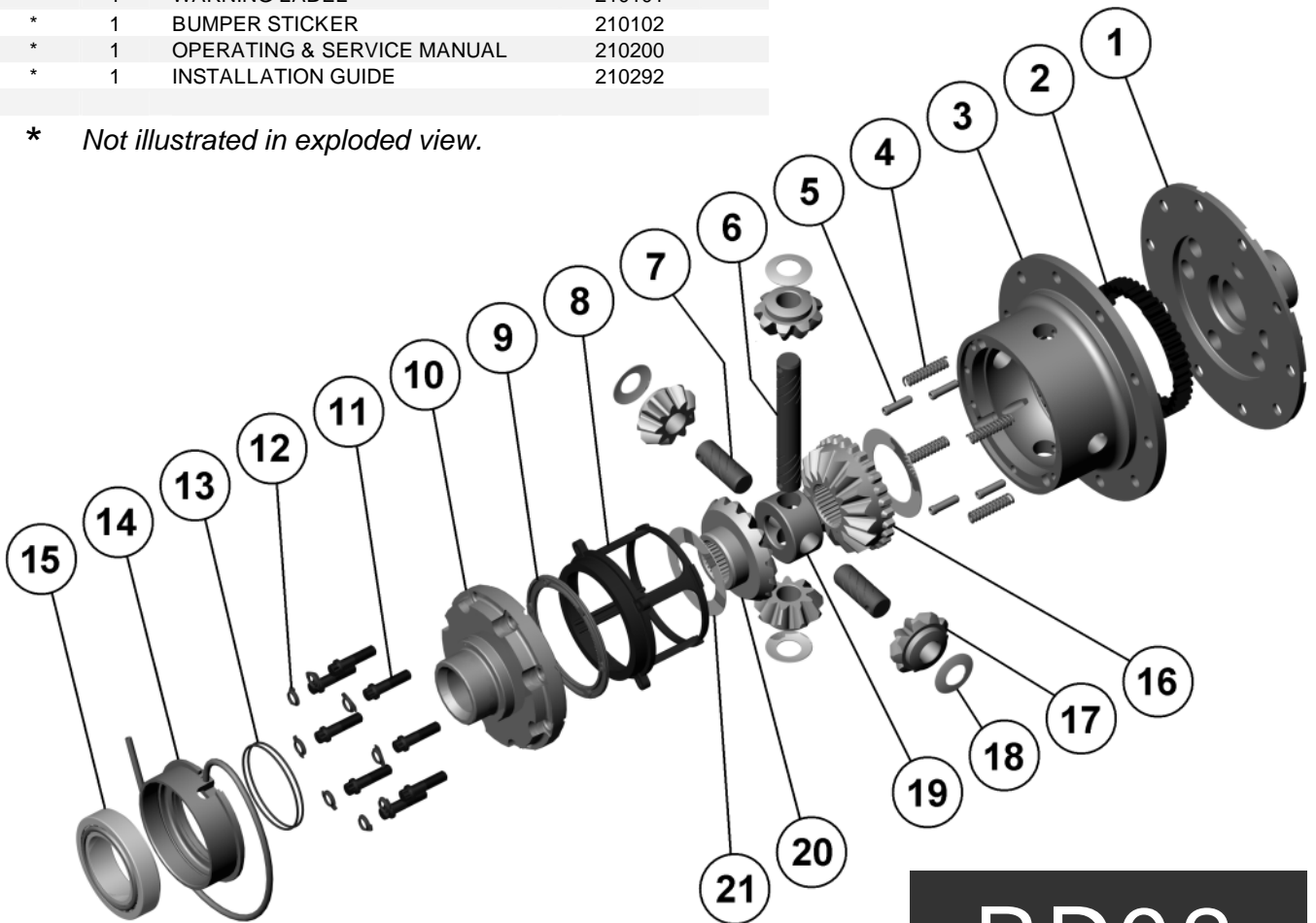
Notes:

- 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.

* Not illustrated in exploded view.



RD92



ARB AIR LOCKER *Air Operated Locking Differentials*

RD93 Chrysler 8.25",29 SPL

Specs:

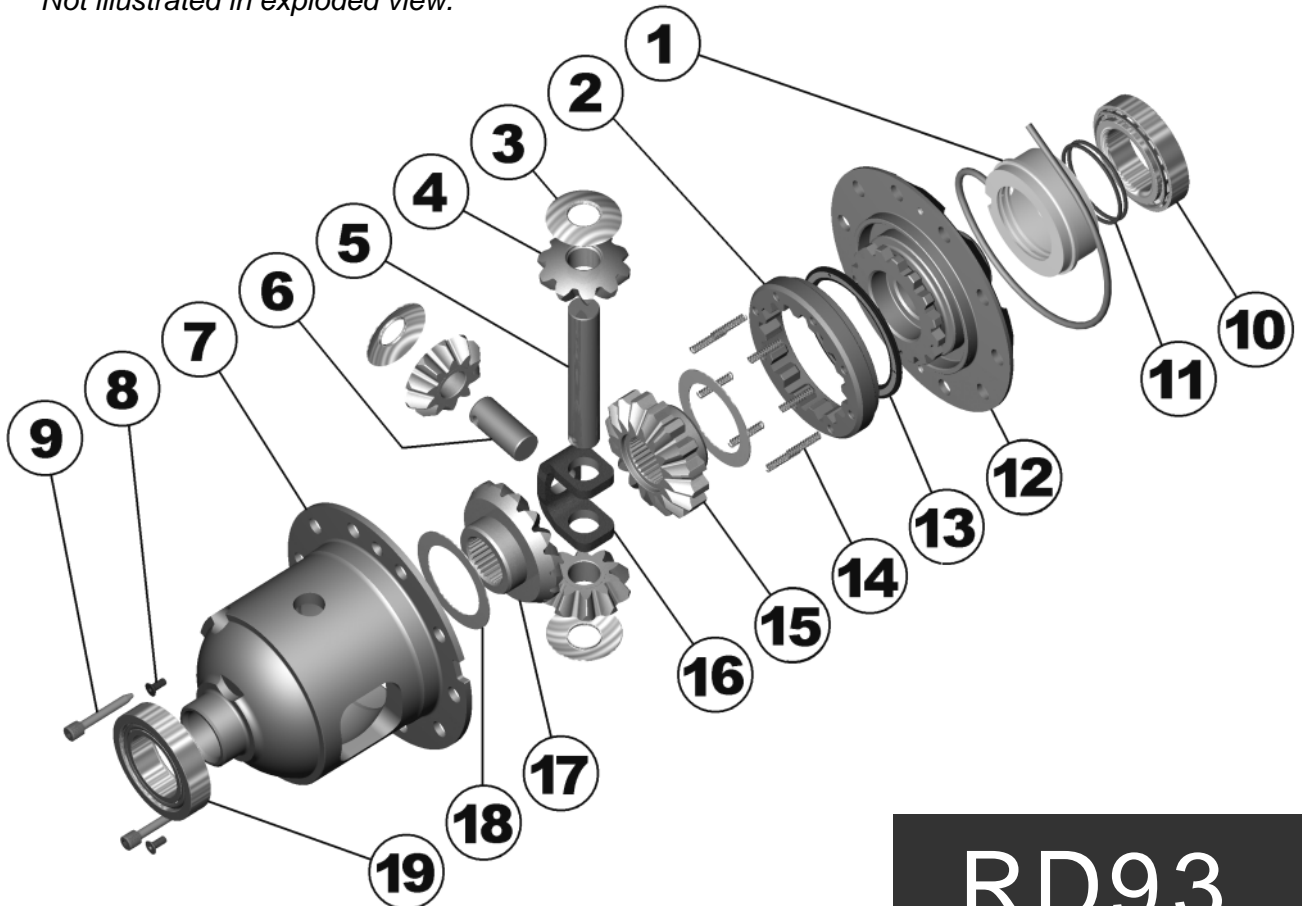
Axle Spline	29 tooth, Ø30.7mm [1.21"]
Ratio Supported	All
Ring Gear ID	130.5mm [5.14"]
Ring Gear OD	210mm [8.25"]
Ring Gear Bolts	10 bolts on Ø153 mm [6.00"]
Ring Gear Torque	76Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb]

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	

Notes:

- For replacement O-rings use only BS138 Viton 75.
 - 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.

* Not illustrated in exploded view.



RD93



ARB AIR LOCKER *Air Operated Locking Differentials*

RD94 Isuzu IFS, 17 SPL

Specs:

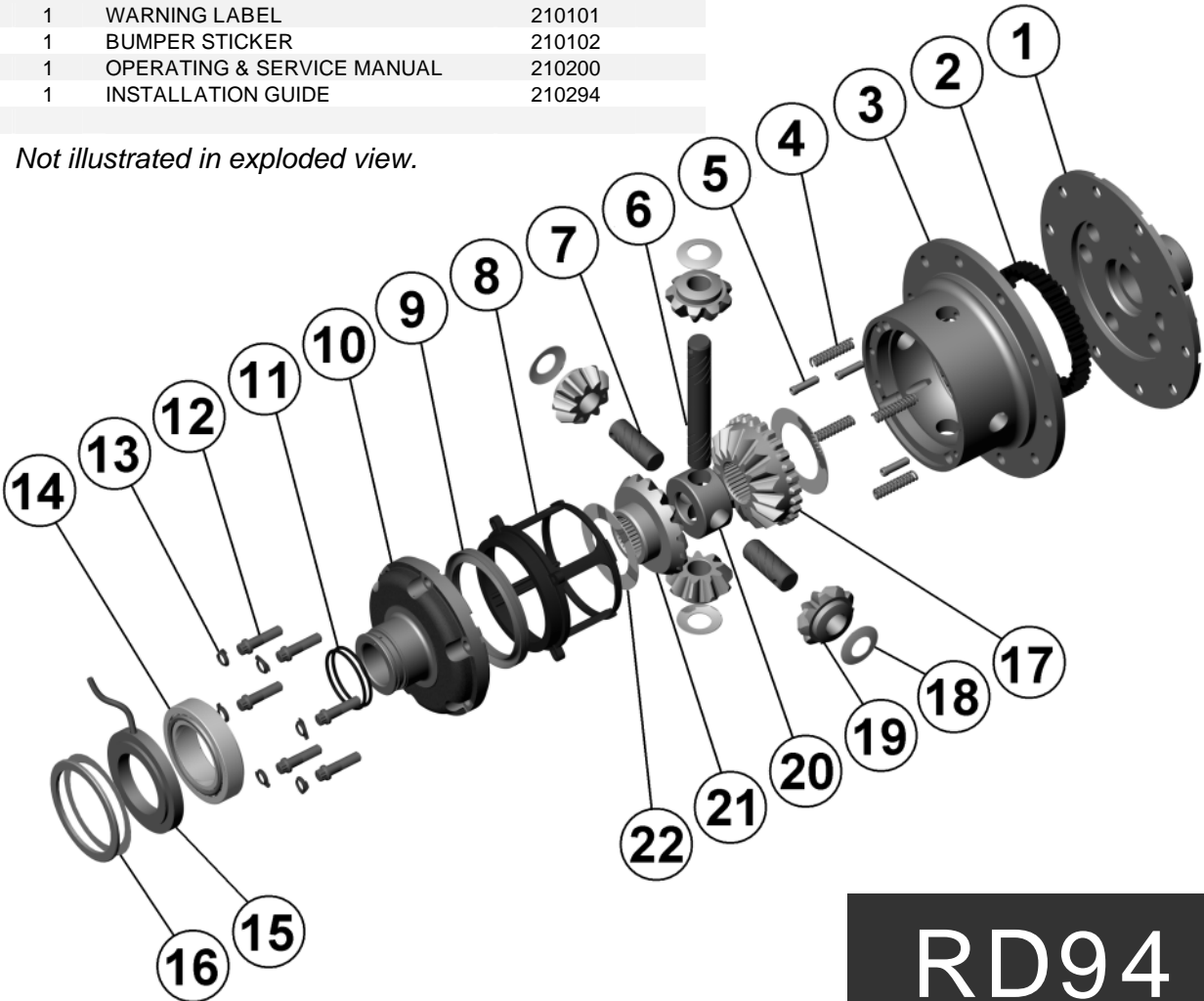
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021804	
02	1	CLUTCH GEAR	050501	
03	1	DIFFERENTIAL CASE	011905	
04	4	RETURN SPRING	150102	
05	3	CROSS SHAFT RETAINING PIN	120401	
06	1	LONG CROSS SHAFT	061101	
07	2	SHORT CROSS SHAFT	061201	
08	1	PISTON	040601	
09	1	U-RING	160303	
10	1	CYLINDER CAP	030901	
11	2	SEAL HOUSING O-RING	160210	1
12	6	CYLINDER CAP RETAINING BOLT	200207	
13	6	LOCKING TAB (6mm)	150402	
14	-	TAPERED ROLLER BEARING	NOT SUPPLIED	
15	1	SEAL HOUSING	081605	
16	1	SHIM KIT	SHK003	
17	1	SPLINED SIDE GEAR	131007R	
18	4	PINION THRUST WASHER	151107	
19	4	PINION GEAR	140502R	
20	1	SPIDER BLOCK	070502	
21	1	SIDE GEAR	130907R	
22	2	SIDE GEAR THRUST WASHER	151005	
*	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	210294	

Axle Spline 17 tooth, Ø28.4mm [1.12"]
 Ratio Supported All
 Ring Gear ID 114.3mm [4.50"]
 Ring Gear Bolts 10 bolts on Ø144mm [5.67"]

Notes:

- 1 For replacement O-rings use only BS028 Viton 75.
- Variation in OE casting may require modification to the bearing cap to clear the cylinder cap.

* Not illustrated in exploded view.



RD94



ARB AIR LOCKER *Air Operated Locking Differentials*

RD95 Dana 60,32 SPL,4.56 & UP

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]

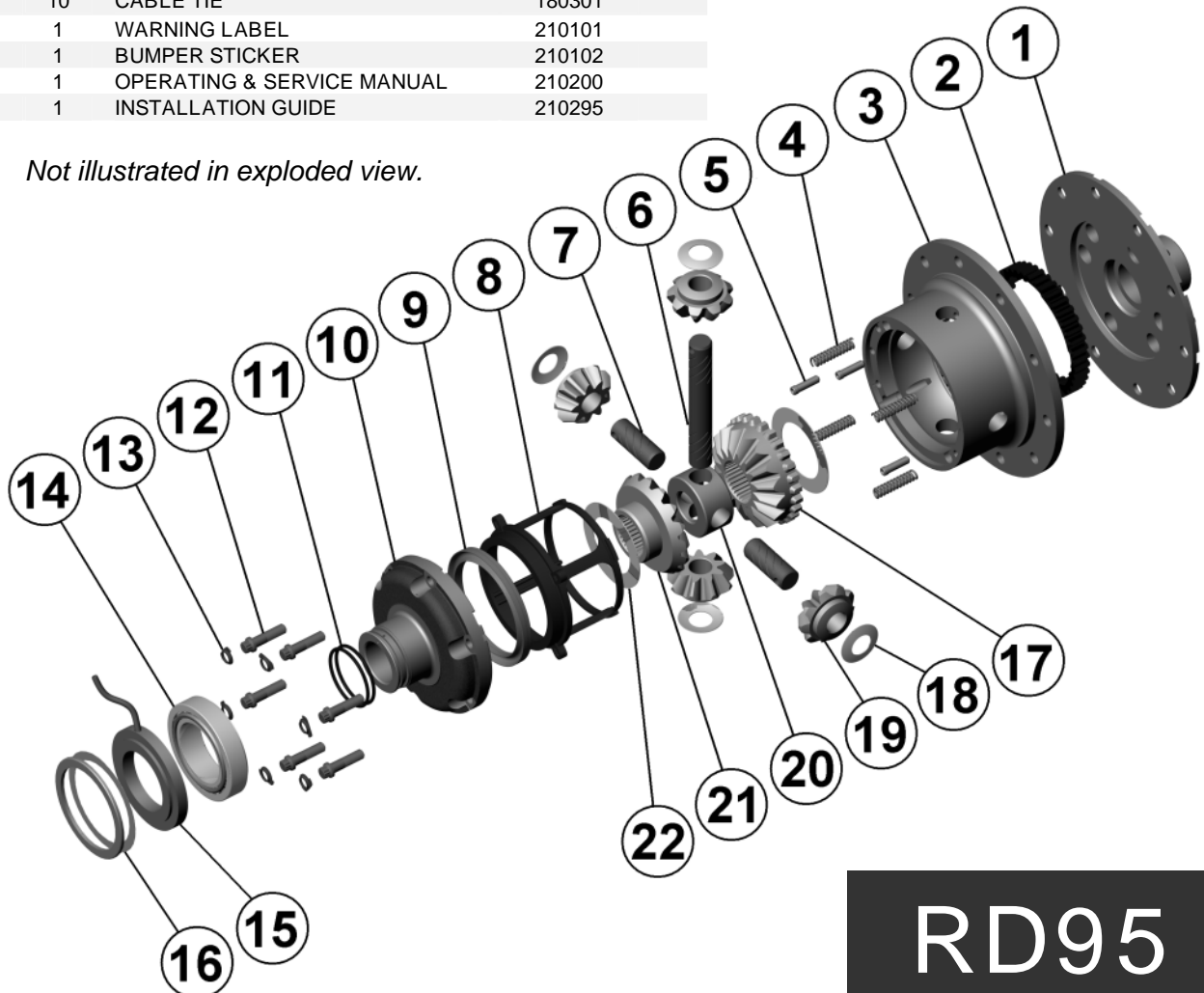
Notes:

- 1 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](#)).

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	
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	210295	

* Not illustrated in exploded view.



RD95



ARB AIR LOCKER *Air Operated Locking Differentials*

RD96 Dana 60,32 SPL,4.10 & DN

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]

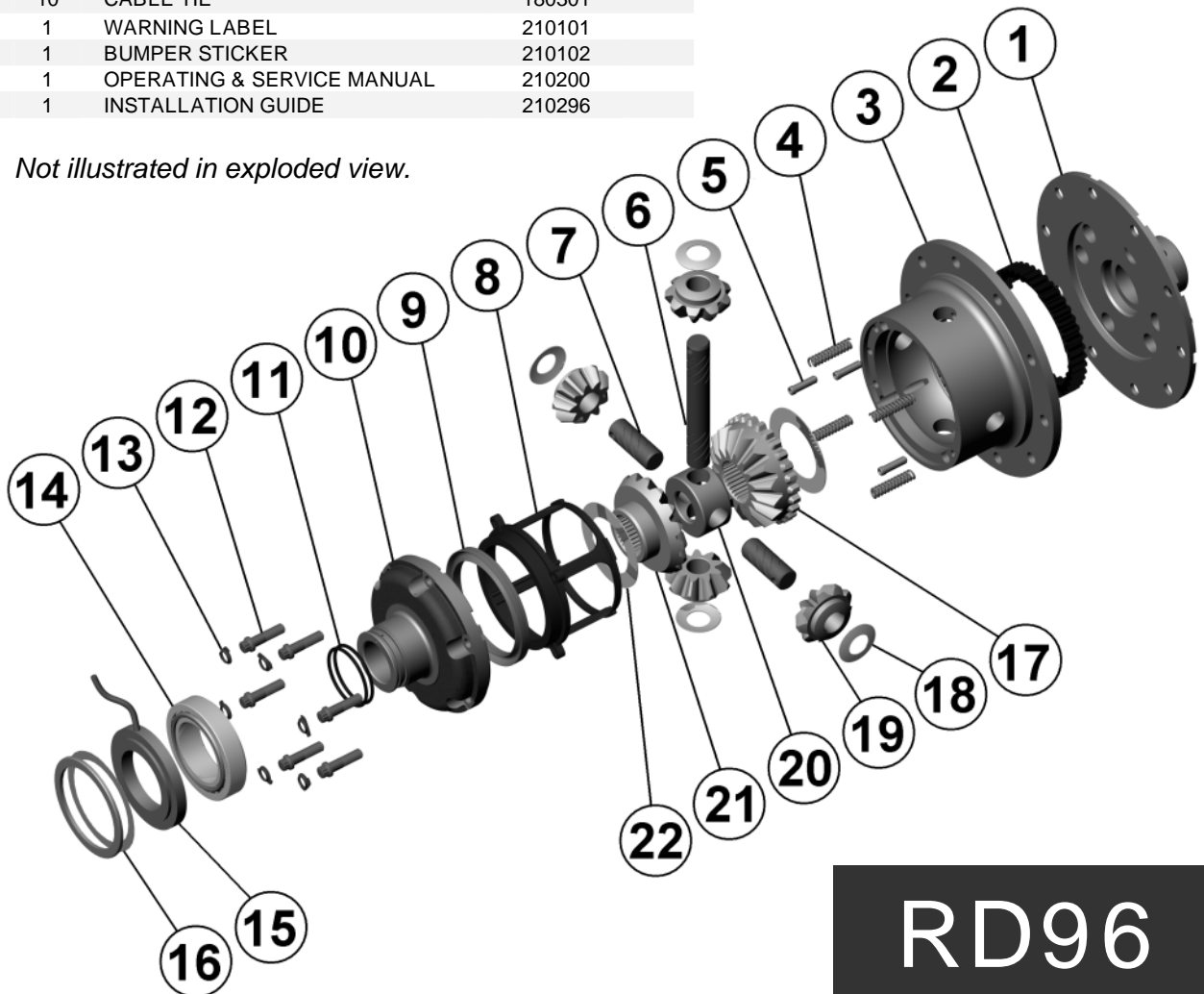
Notes:

- 1 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](#)).

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	

* Not illustrated in exploded view.



RD96



ARB AIR LOCKER *Air Operated Locking Differentials*

RD97 Dana 70,32 SPL,4.56 & UP

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]

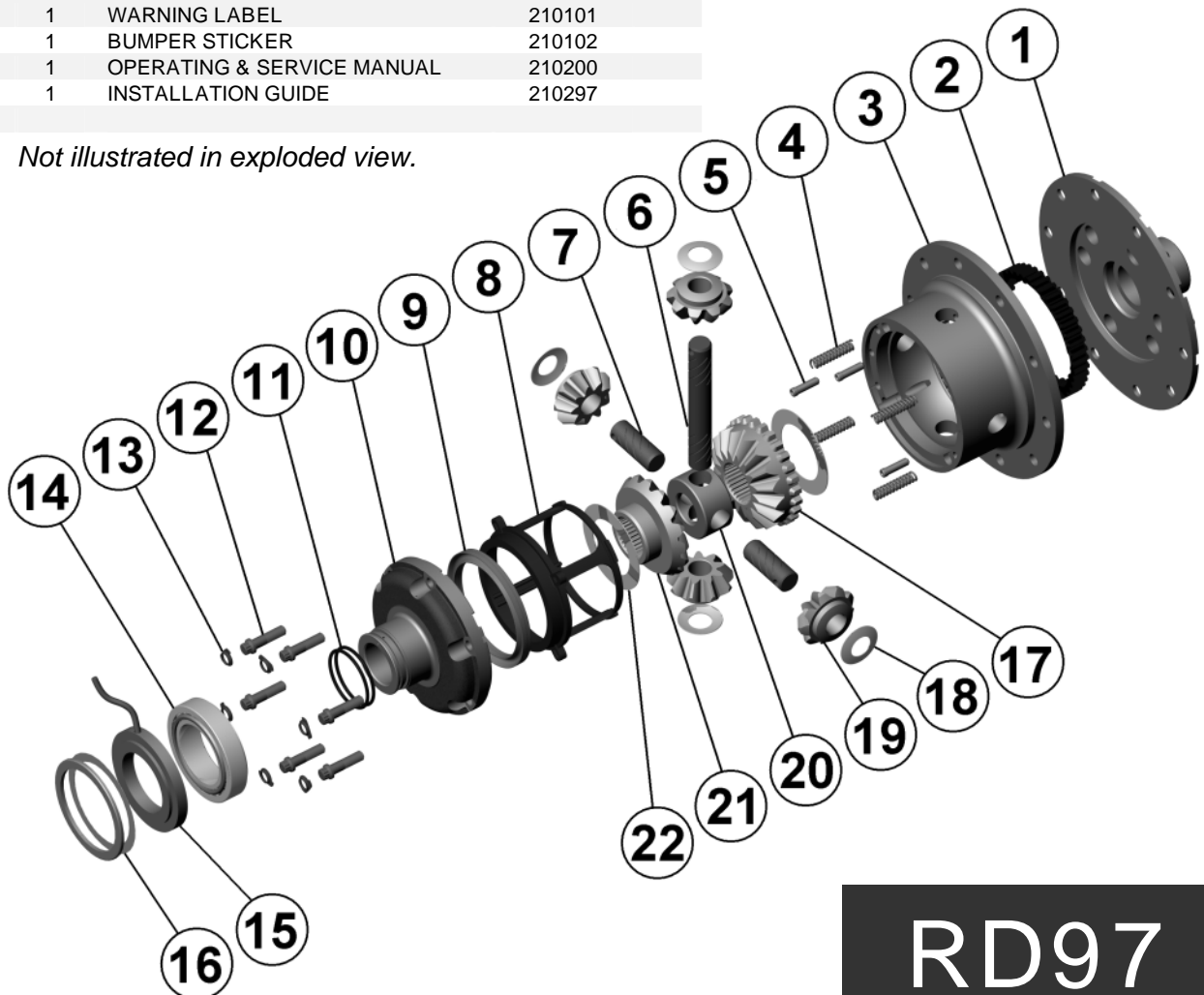
Notes:

- 1 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](#)).

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	
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	210297	

* *Not illustrated in exploded view.*



RD97



ARB AIR LOCKER *Air Operated Locking Differentials*

RD98 Dana 70,32 SPL,4.10 & DN

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]

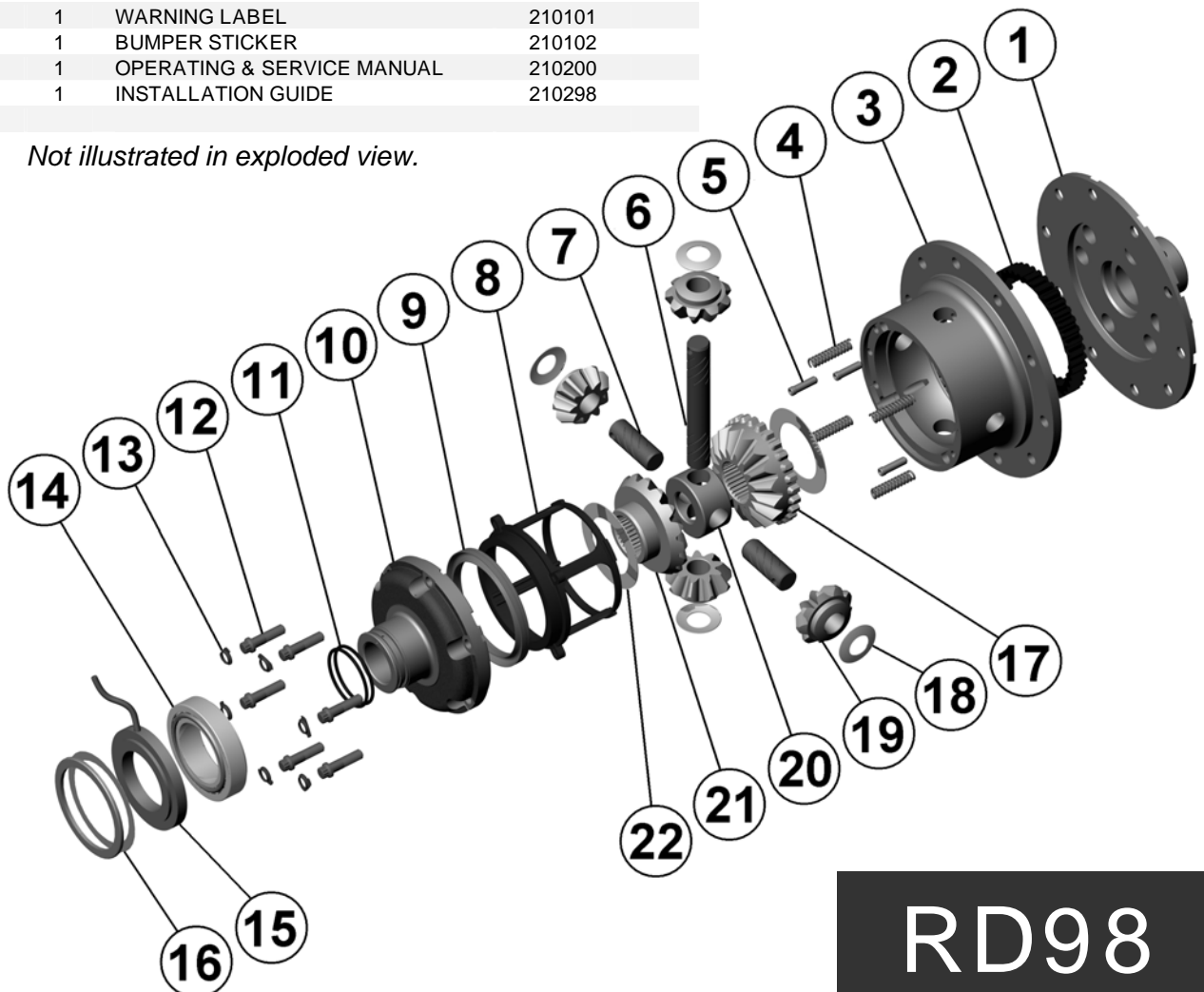
Notes:

- 1 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](#)).

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 illustrated in exploded view.*



RD98



ARB AIR LOCKER *Air Operated Locking Differentials*

RD99 Ford 9",35 SPL,2" BRNG

Specs:

Axle Spline	35 tooth, Ø38.1mm [1.50"]
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 BS136 Viton 75.

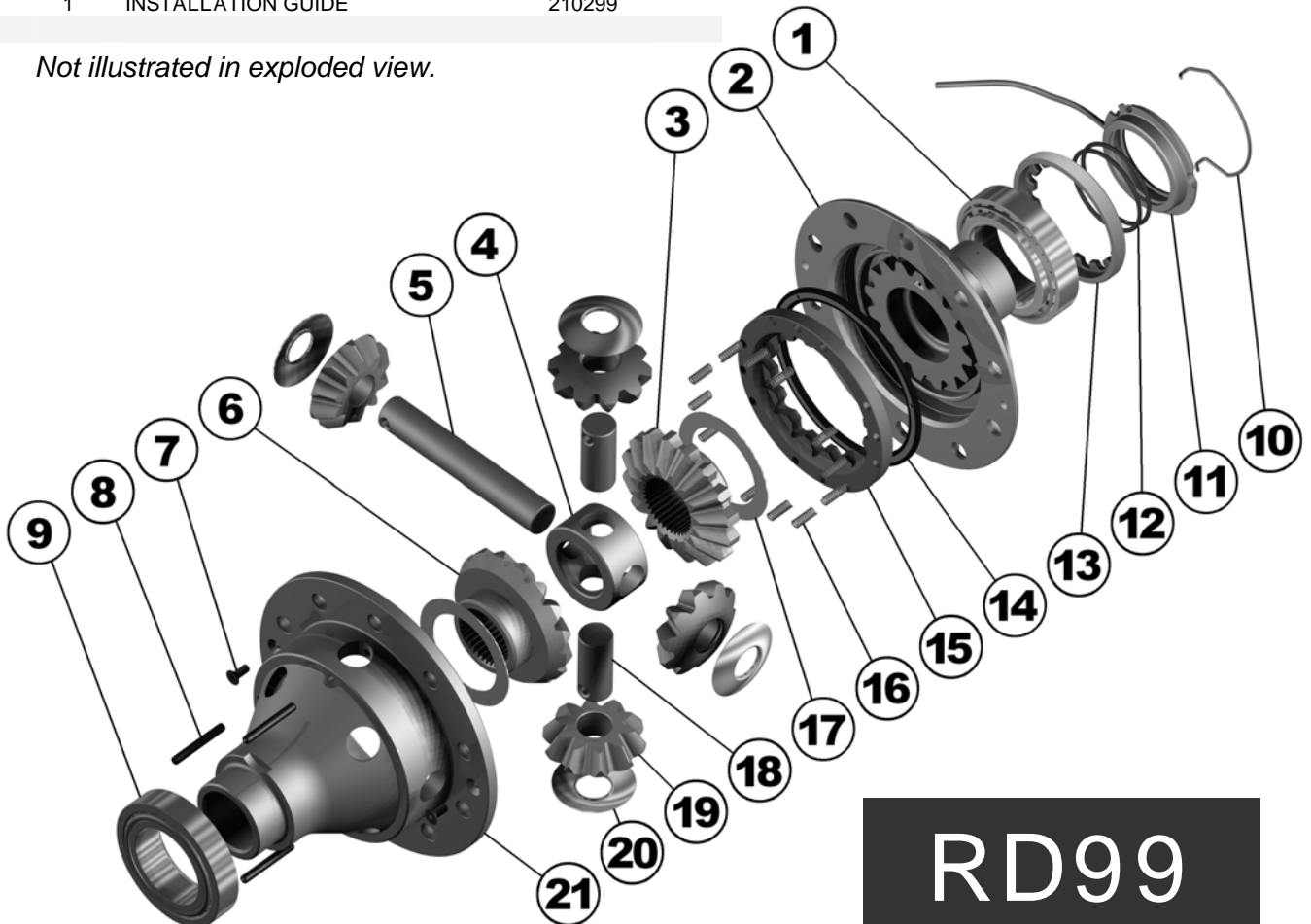
For the 31 spline Ford 9" refer to RD119 (Section 2.119).

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.

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	

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD100 Dana 30,27 SPL,3.73 & UP

Specs:

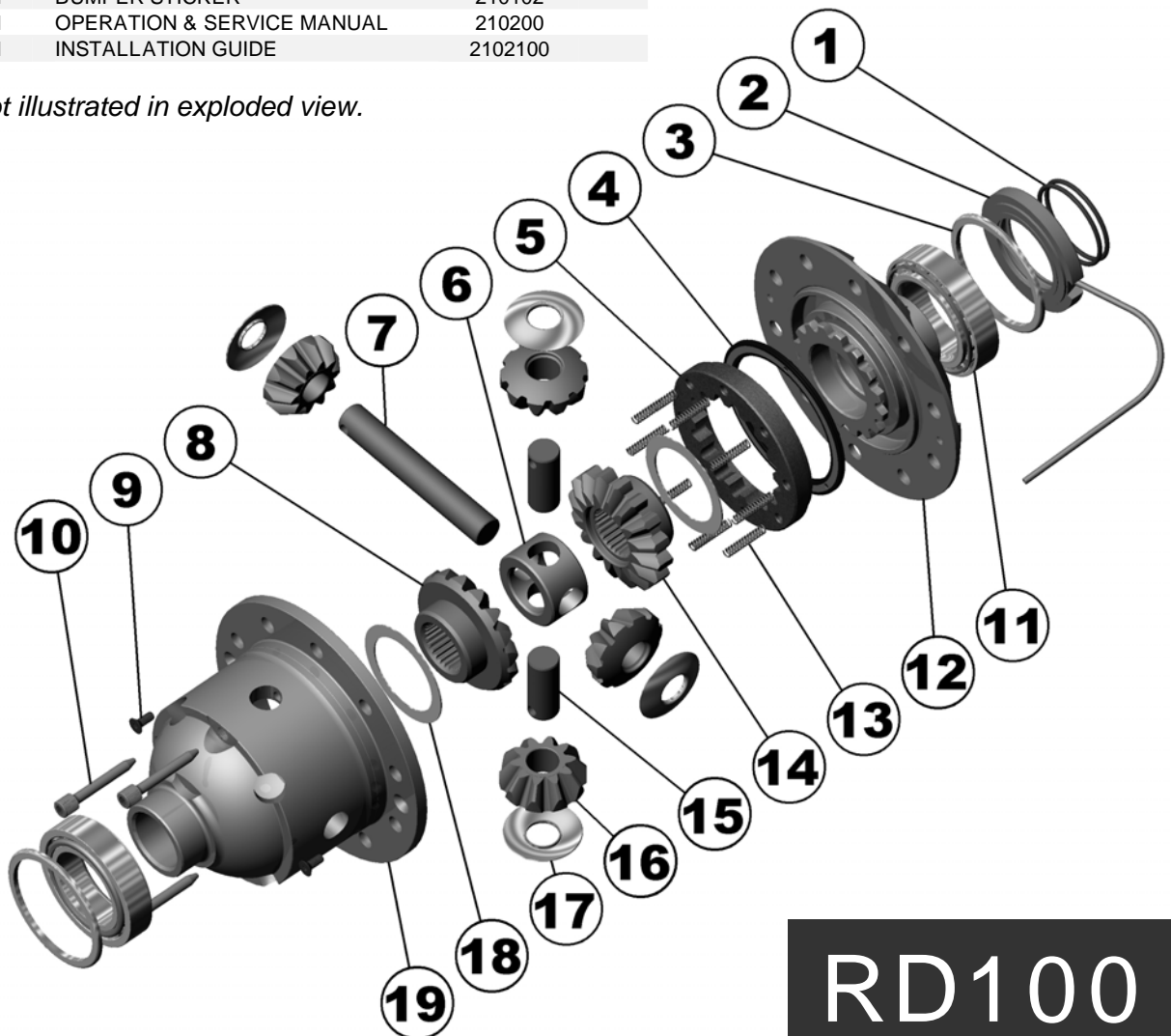
Axle Spline	27 tooth, Ø29.5mm [1.16"]
Ratio Supported	3.73:1 & up
Ring Gear ID	114.3mm [4.50"]
Ring Gear OD	183mm [7.2"]
Ring Gear Bolts	10 bolts on Ø133mm [5.25"]
Ring Gear Torque	75Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb] (see note 3)

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	

Notes:

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

* Not illustrated in exploded view.



RD100



ARB AIR LOCKER *Air Operated Locking Differentials*

RD101 Dana 30,27 SPL,3.54 & DN

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)

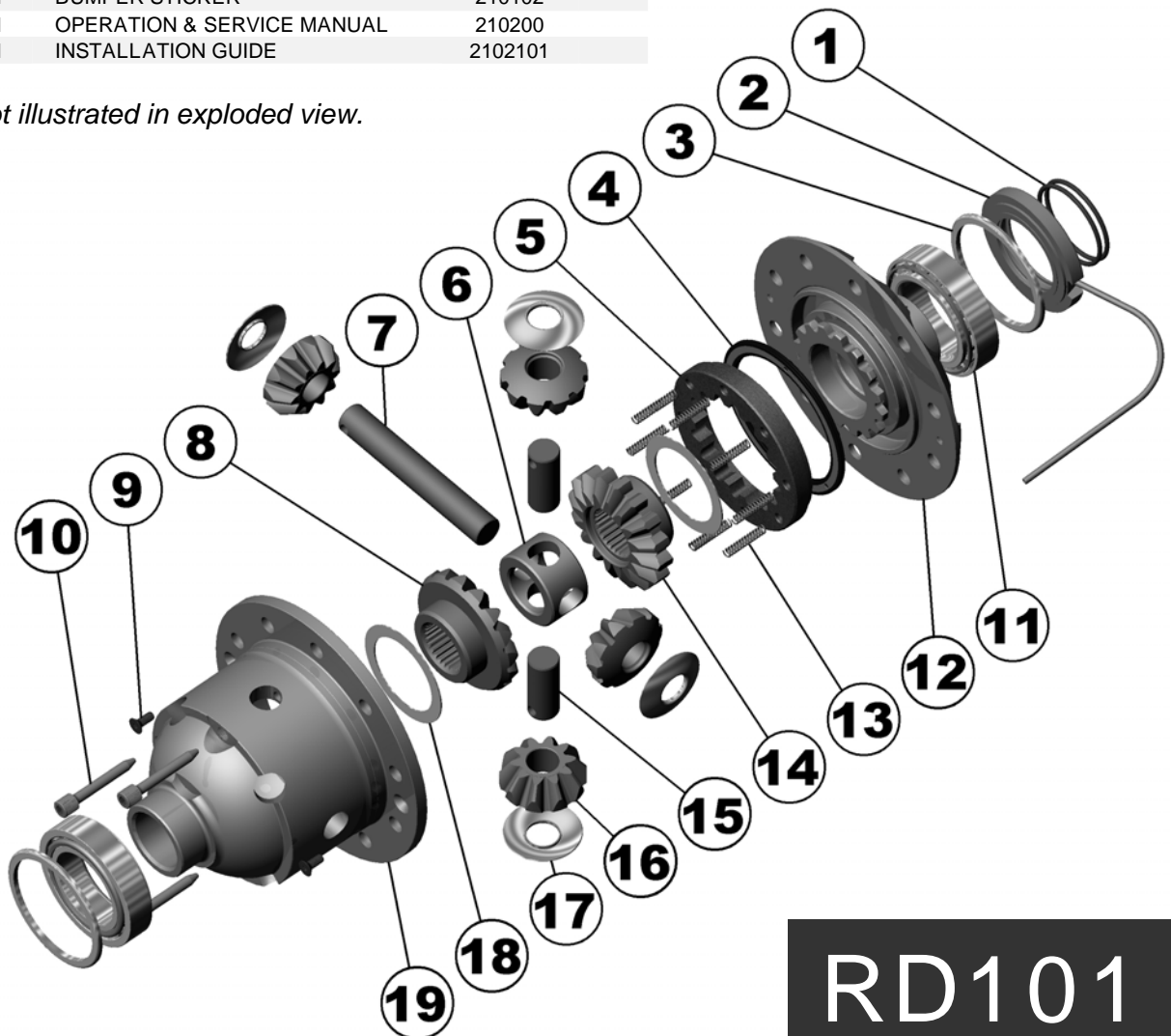
ITEM #	QTY	DESCRIPTION	PART #	NOTES
1	2	SEAL HOUSING O-RING	160235	1
2	1	SEAL HOUSING ASSEMBLY	081801	
3	2	SHIM KIT	SHK003	
4	1	BONDED SEAL	160701	
5	1	CLUTCH GEAR	050803	
6	1	SPIDER BLOCK	070503	
7	1	LONG CROSS SHAFT	061302	
8	1	SIDE GEAR	131501H	
9	2	COUNTERSUNK SCREW	200213	
10	3	CROSS SHAFT RETAINING 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	

Notes:

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

* Not illustrated in exploded view.



RD101



ARB AIR LOCKER *Air Operated Locking Differentials*

RD102 Dana 35,27 SPL,3.54 & UP

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:

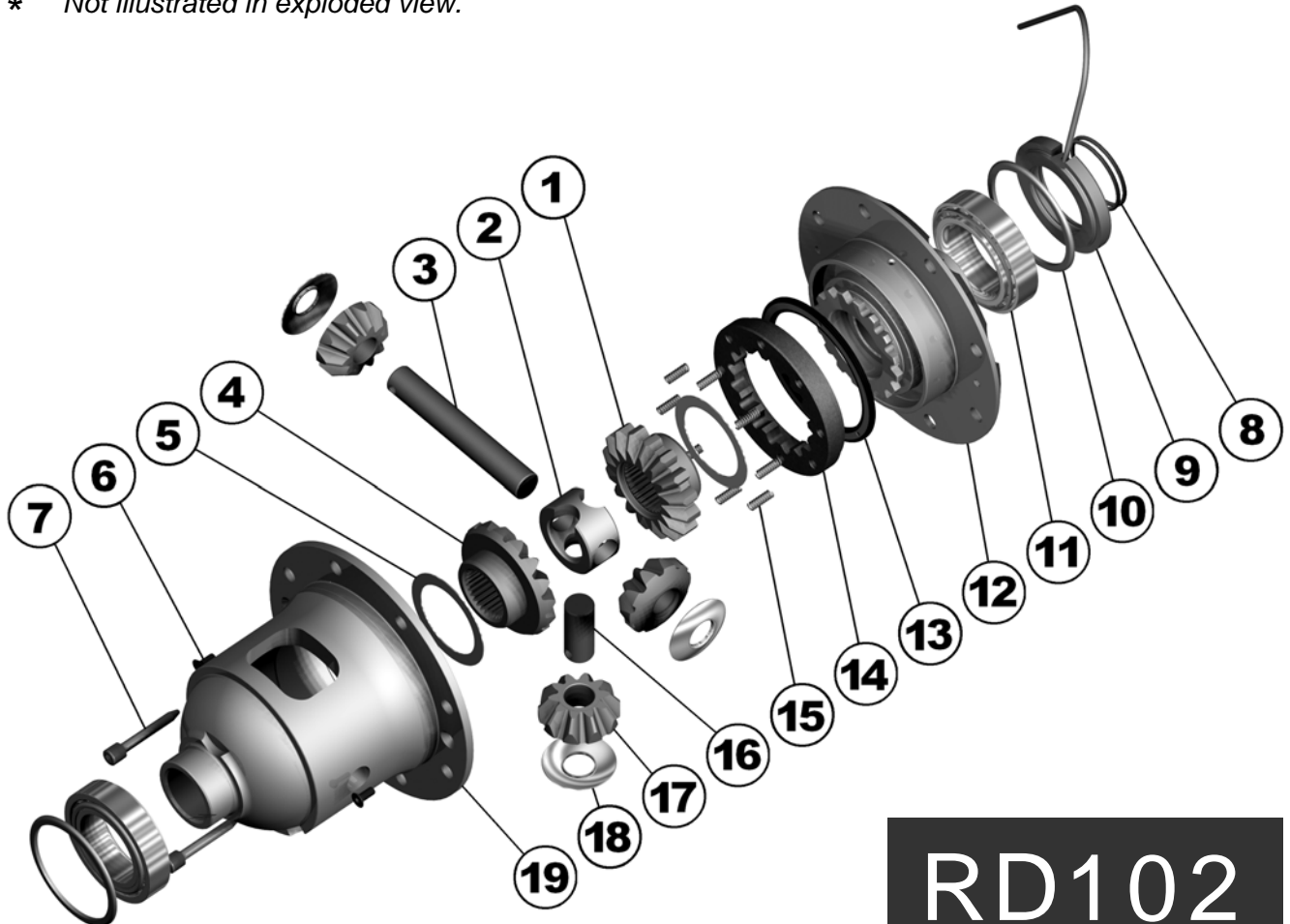
- 1 For replacement O-rings use only BS133 Viton 75.
- 2 For replacement bearing use Timken part # LM102949 / LM102910.

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.

* Not illustrated in exploded view.



RD102



ARB AIR LOCKER *Air Operated Locking Differentials*

RD103 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	

* Not illustrated in exploded view.

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]

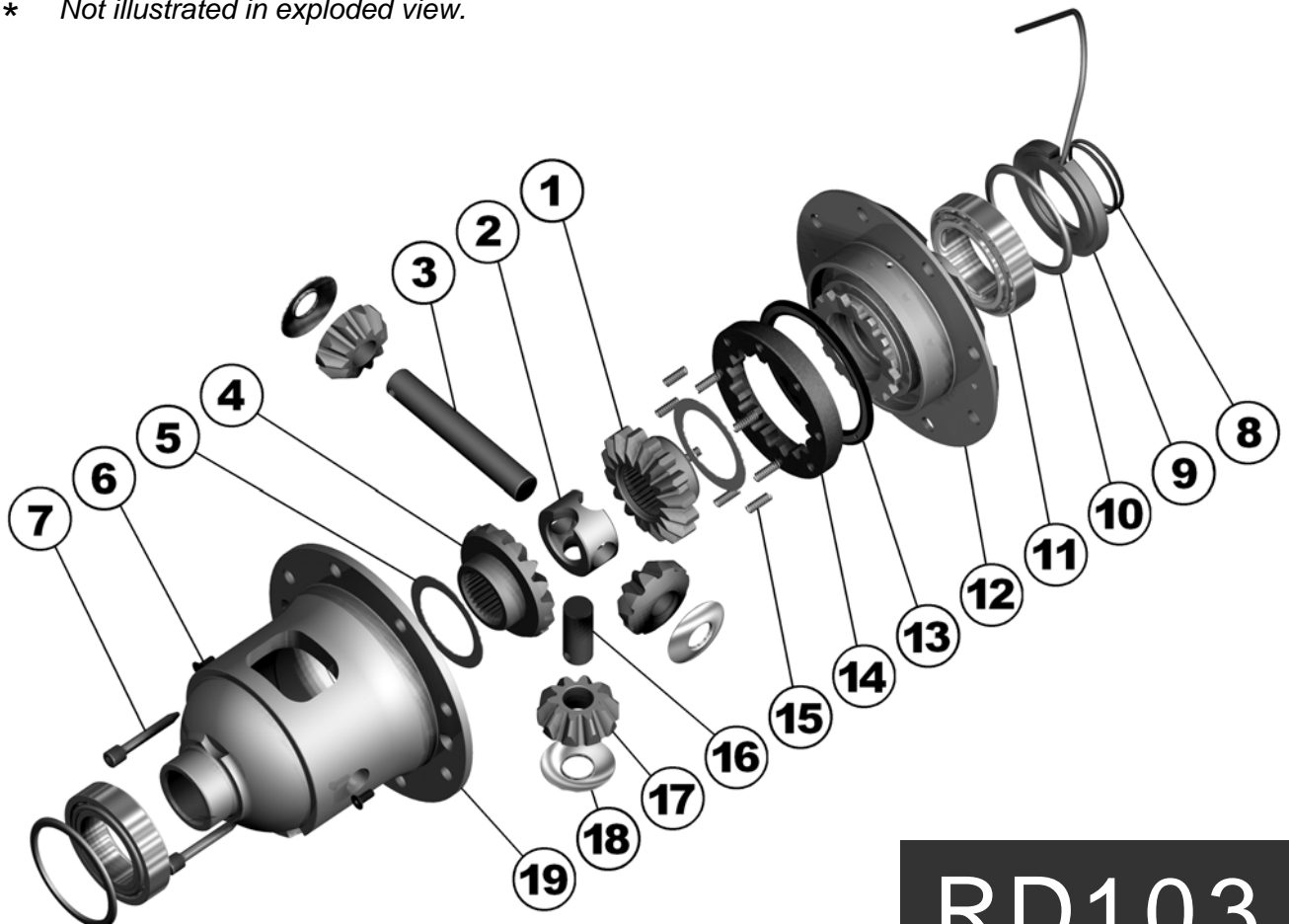
Notes:

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



RD103



ARB AIR LOCKER *Air Operated Locking Differentials*

RD104 Dana 30,30 SPL,3.73 & UP

Specs:

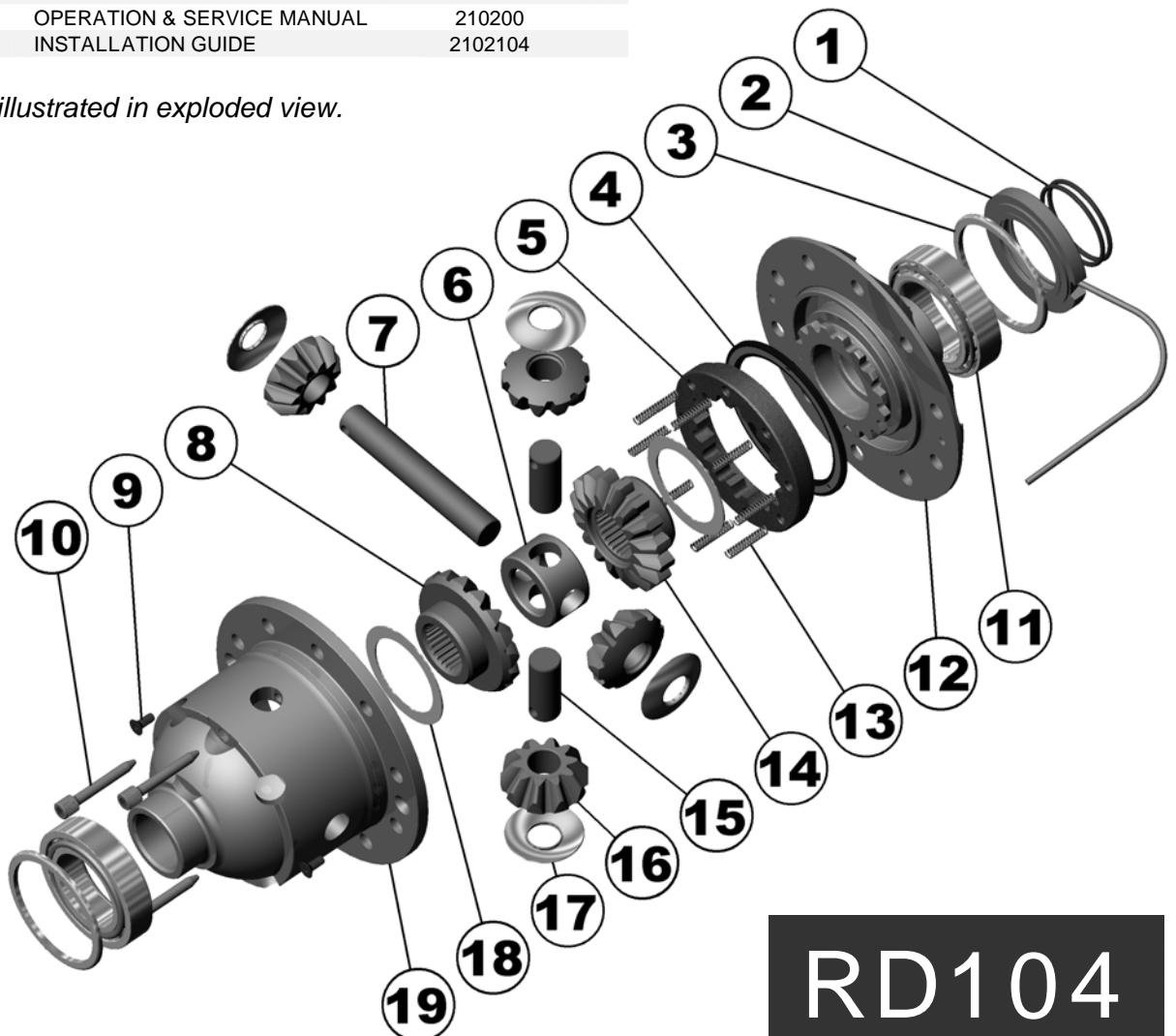
Axle Spline	30 tooth, Ø33.3mm [1.31"]
Ratio Supported	3.73:1 & up
Ring Gear ID	114.3mm [4.50"]
Ring Gear OD	183mm [7.2"]
Ring Gear Bolts	10 bolts on Ø133mm [5.25"]
Ring Gear Torque	75Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb] (see note 3)

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	

Notes:

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

* Not illustrated in exploded view.



RD104



ARB AIR LOCKER *Air Operated Locking Differentials*

RD105 Dana 35,30 SPL,3.54 & UP

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.

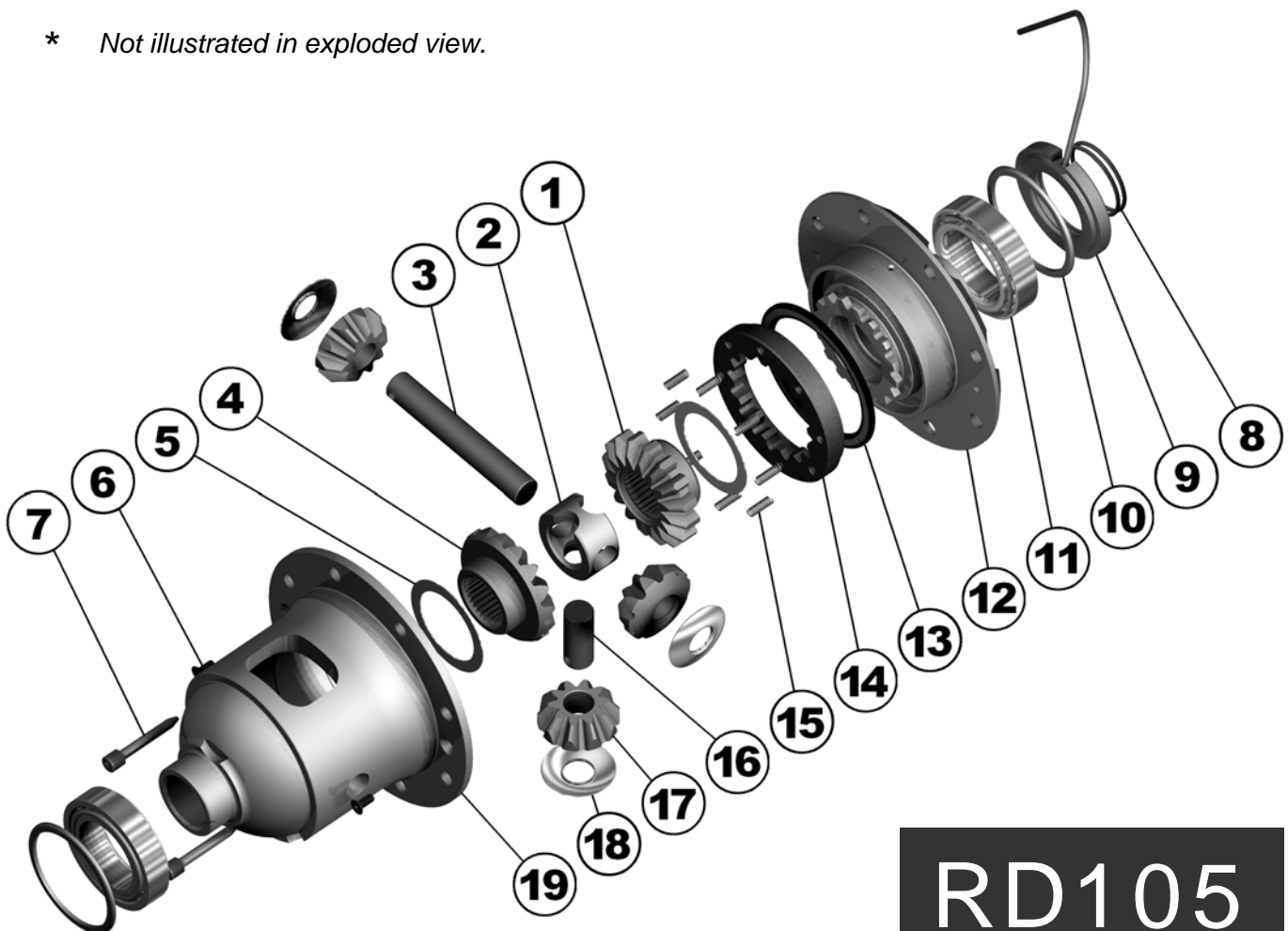
Newer OEM Dana 35 ring and pinion sets use 7/16" bolts. The flange holes of the Air Locker must be reamed from Ø3/8" to Ø7/16" to suit.

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.

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	

* Not illustrated in exploded view.



RD105

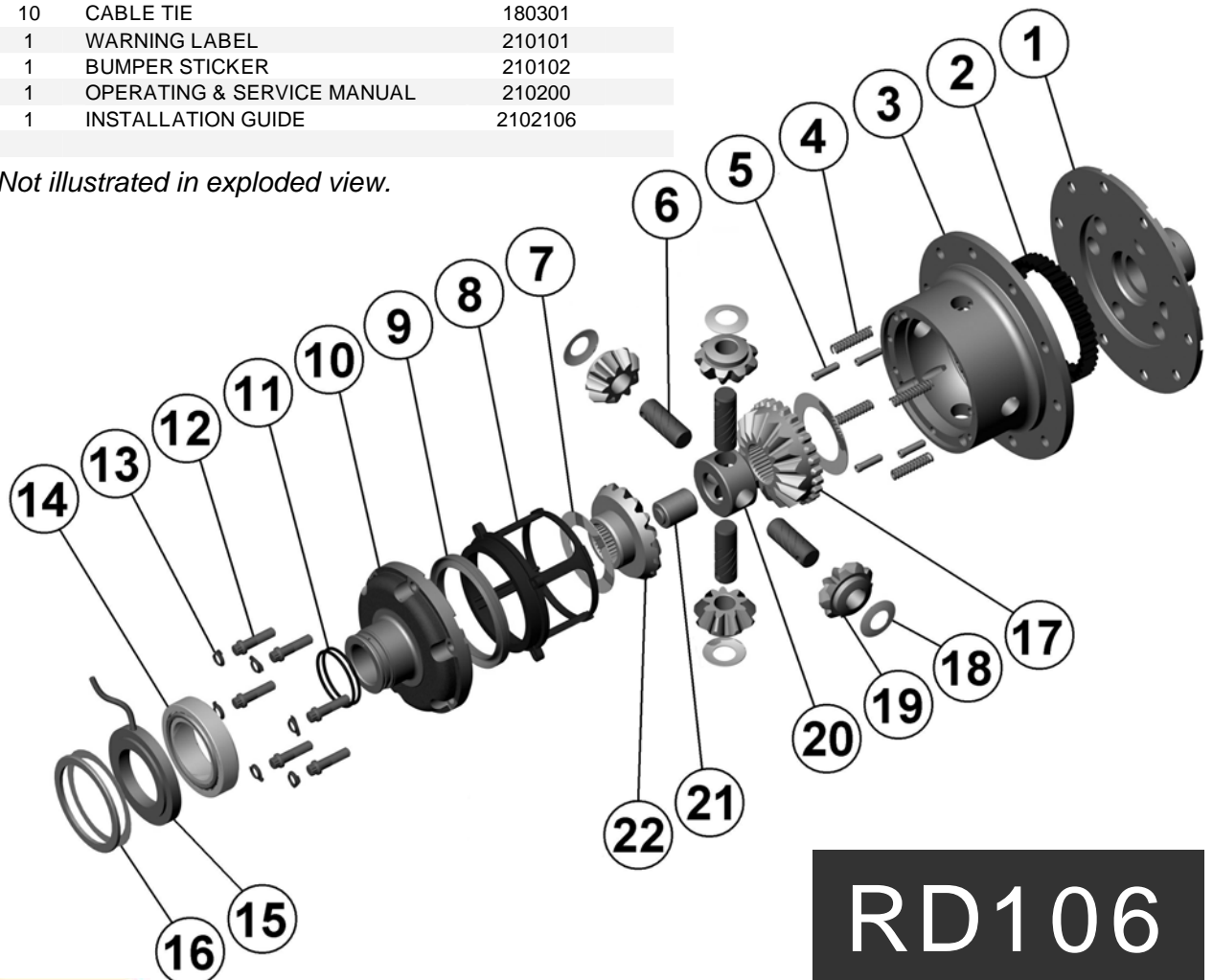


ARB AIR LOCKER *Air Operated Locking Differentials*

RD106 Nissan C200,31 SPL

ITEM #	QTY	DESCRIPTION	PART #	NOTES
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	4	SHORT CROSS SHAFT	060308	
07	2	SIDE GEAR THRUST WASHER	151003	
08	1	PISTON	040103	
09	1	BONDED SEAL	160701	
10	1	CYLINDER CAP	030133	
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	080802	
16	1	SHIM KIT	SHK004	
17	1	SPLINED SIDE GEAR	130313H	
18	4	PINION THRUST WASHER	151101	
19	4	PINION GEAR	140101	
20	1	SPIDER BLOCK	070101	
21	1	THRUST BLOCK	110501	
22	1	SIDE GEAR	130113H	
*	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	2102106	

* Not illustrated in exploded view.



Specs:

Axle Spline	31 tooth, Ø32.0mm [1.26"]
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.

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]

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

RD106

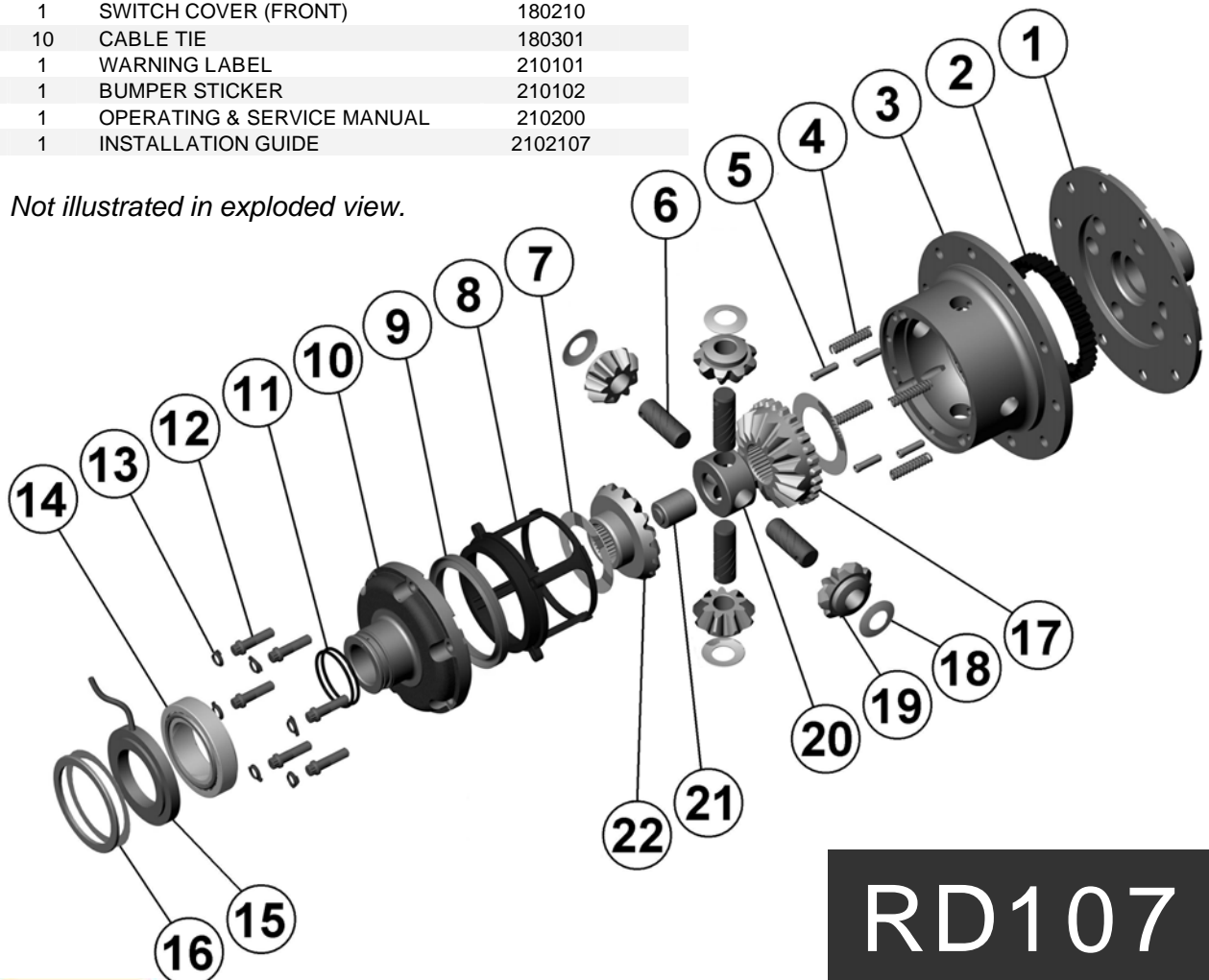


ARB AIR LOCKER *Air Operated Locking Differentials*

RD107 Nissan C200/R200A,29 SPL

ITEM #	QTY	DESCRIPTION	PART #	NOTES
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	4	SHORT CROSS SHAFT	060308	
07	2	SIDE GEAR THRUST WASHER	151003	
08	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	080802	
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	
*	1	THRUST BLOCK (THREADED)	110401	
21	1	THRUST BLOCK	110501	
22	1	SIDE GEAR	130107	
*	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	2102107	

* Not illustrated in exploded 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:

- 1 For replacement O-rings use only BS030 Viton 75.

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]

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

RD107



ARB AIR LOCKER *Air Operated Locking Differentials*

RD109 Dana 44,35 SPL,3.92 & UP

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)

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	

Notes:

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

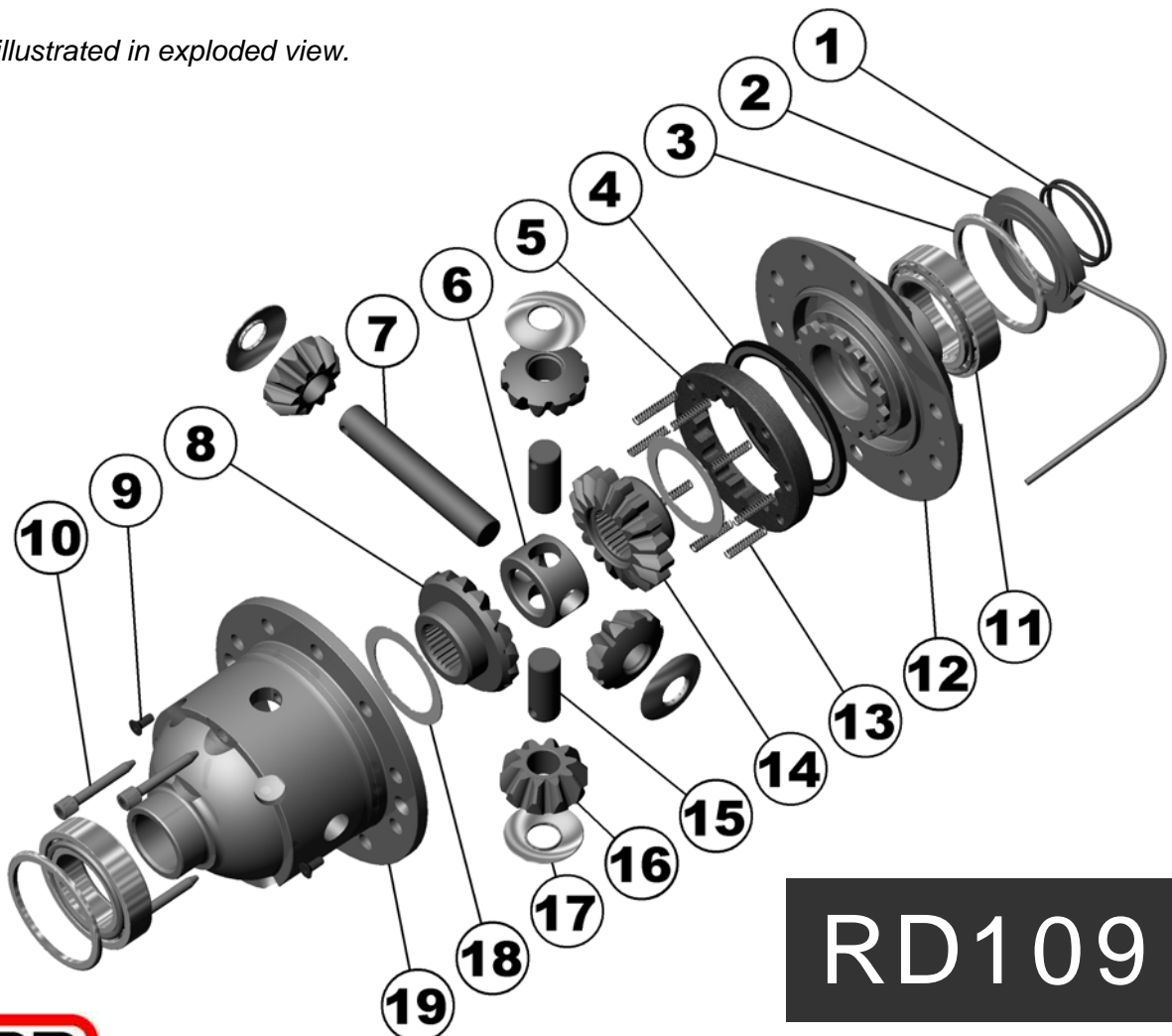
For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.

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.

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD110 MITSUBISHI IFS,28 SPL

Specs:

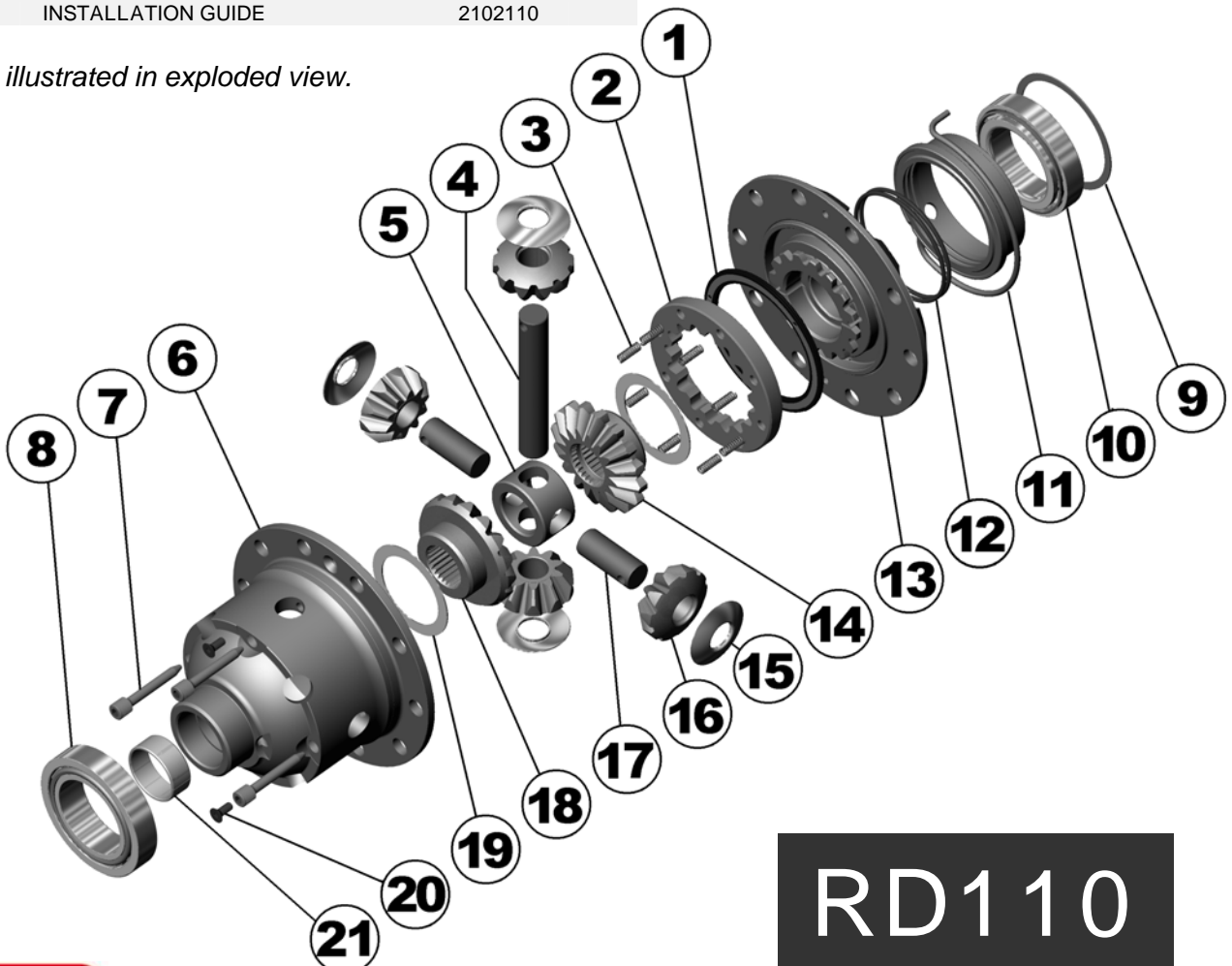
Axle Spline	28 tooth, Ø28.8mm [1.13"]
Ratio Supported	All
Ring Gear ID	124.0mm [4.88"]
Ring Gear Bolts	10 bolts on Ø150mm [5.91"]
Ring Gear Torque	85Nm [63 ft-lb]
Backlash	0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque	60Nm [44 ft-lb]

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	

Notes:

- 1 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.

* Not illustrated in exploded view.



RD110



ARB AIR LOCKER *Air Operated Locking Differentials*

RD111 Toyota 8" IFS, 53mm BRNG

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"]

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	
08	---	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	210211	

Notes:

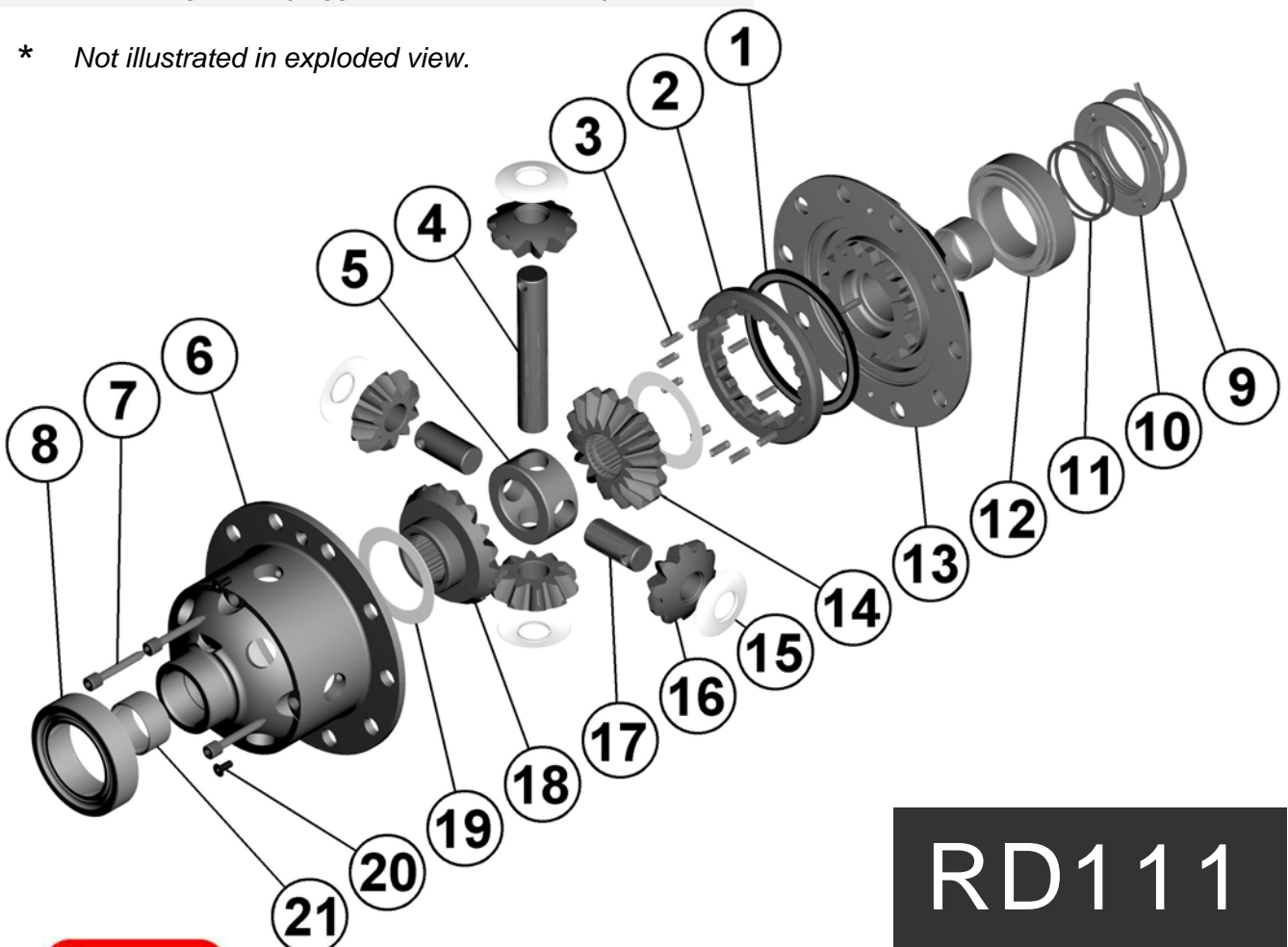
1 For replacement O-rings use only BS136 Viton 75.

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](#)).

* Not illustrated in exploded view.



RD111



ARB AIR LOCKER *Air Operated Locking Differentials*

RD112 Chrysler 8.25",27 SPL

Specs:

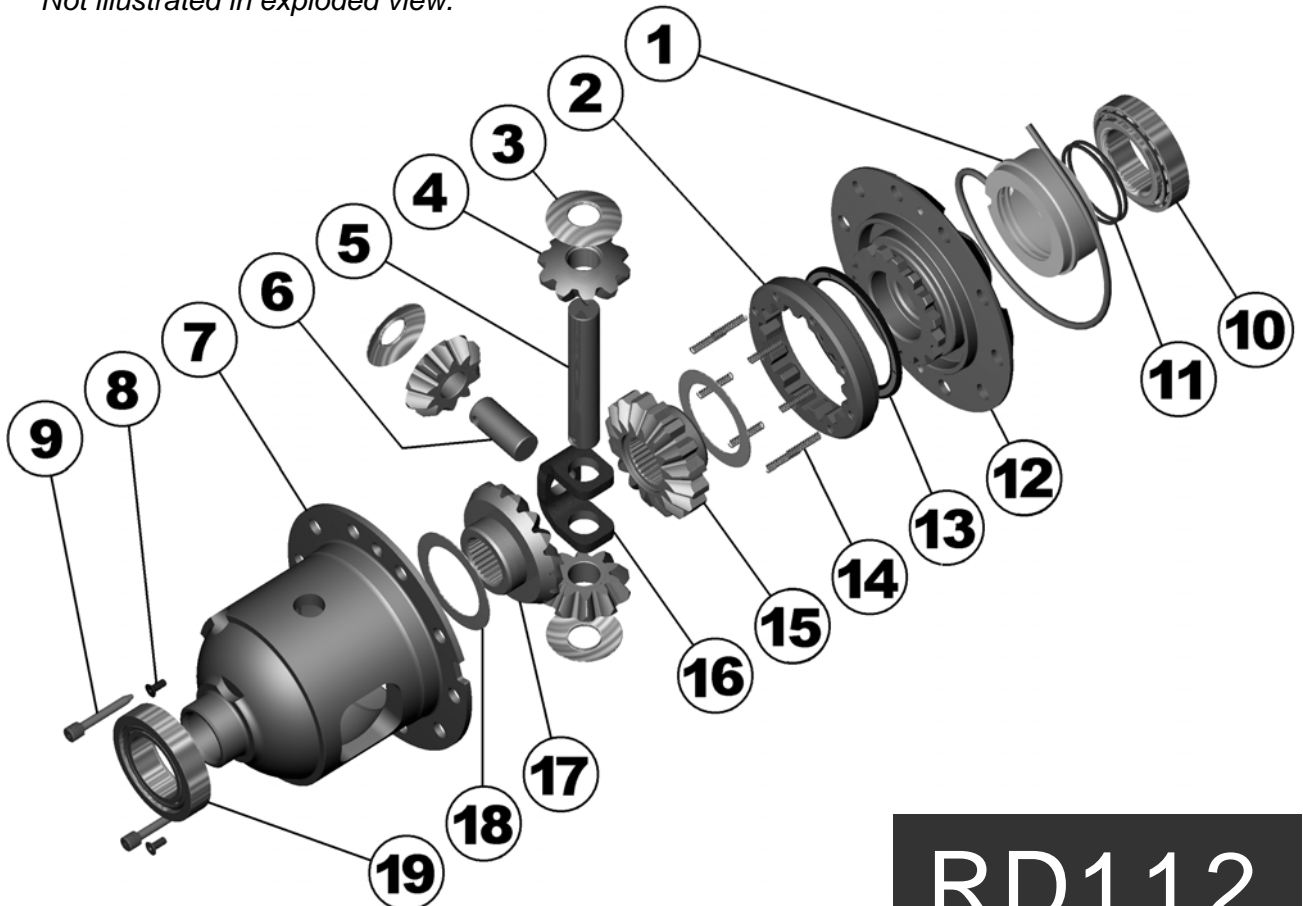
Axle Spline	27 tooth, Ø29.5mm [1.16"]
Ratio Supported	All
Ring Gear ID	130.5mm [5.14"]
Ring Gear OD	210mm [8.25"]
Ring Gear Bolts	10 bolts on Ø153 mm [6.00"]
Ring Gear Torque	76Nm [55 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb]

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	

Notes:

- For replacement O-rings use only BS138 Viton 75.
 - 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.

* Not illustrated in exploded view.



RD112



ARB AIR LOCKER *Air Operated Locking Differentials*

RD113 Dana 44,33 SPL,3.92 & UP

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.

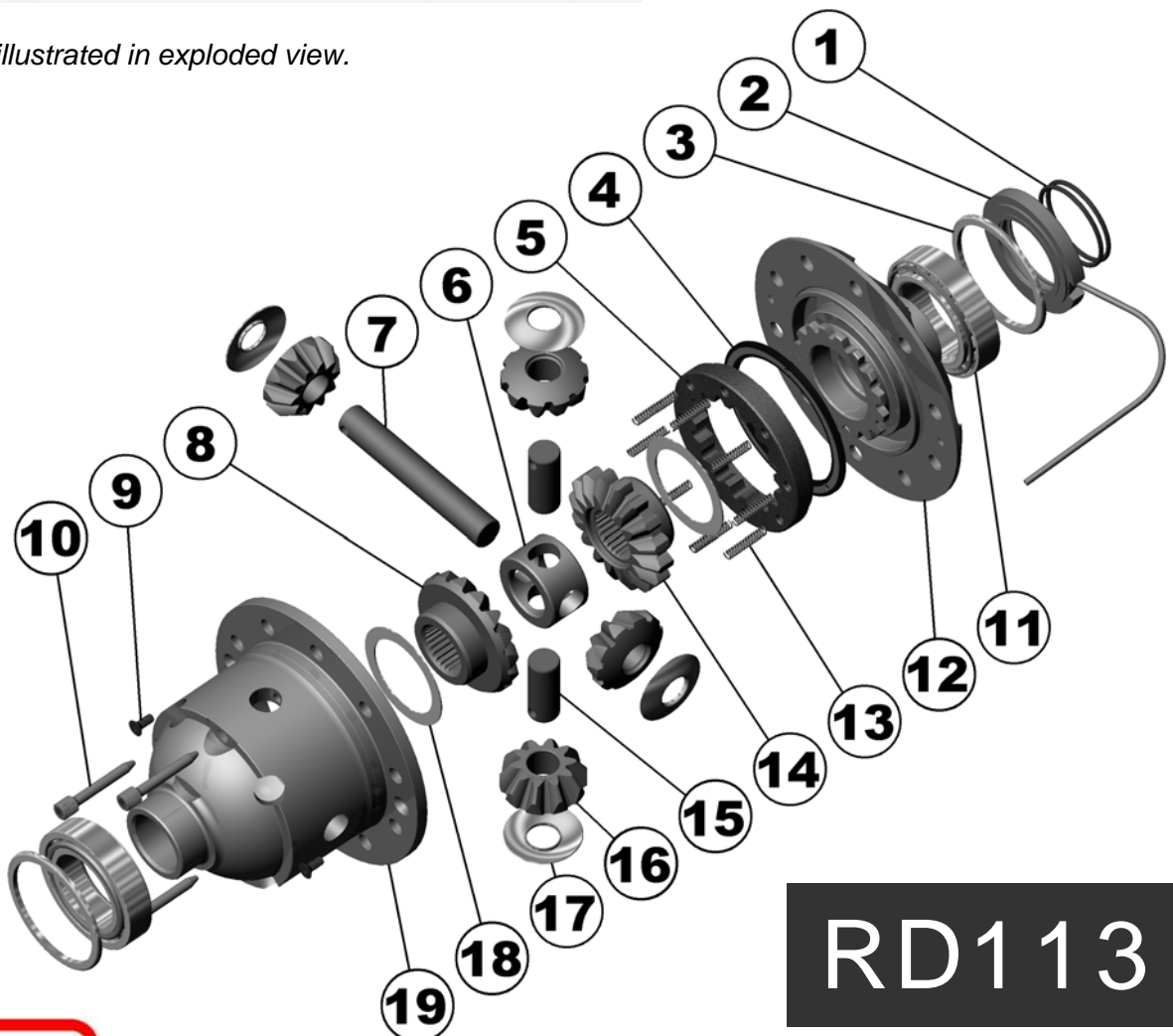
33 spline Dana 44 is a performance upgrade requiring aftermarket axle shafts.

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.

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	

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD114 GM 14 Bolt, 10.5", FF

Specs:

Axle Spline	30 tooth, Ø39.2mm [1.54"]
Ratio Supported	4.10:1 & down
Ring Gear ID	163.513mm [6.4375"]
Ring Gear OD	267mm [10.5"]
Ring Gear Bolts	12 bolts on Ø197.6mm [7.78"]
Ring Gear Torque	163Nm [120 ft-lb]
Backlash	0.13-0.20mm [0.005-0.008"]
Bearing Cap Torque	183Nm [135 ft-lb]

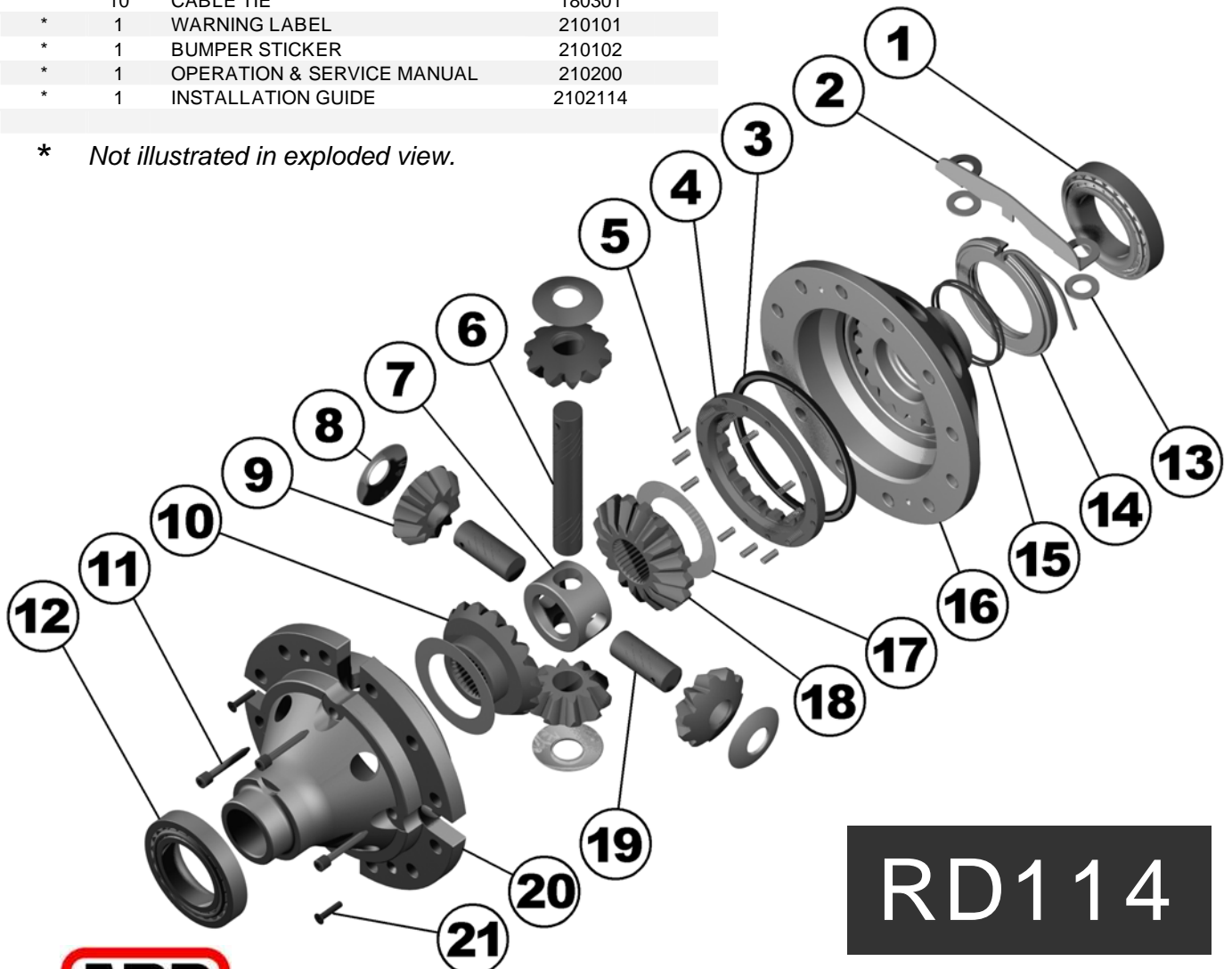
Notes:

- 1 For replacement O-rings use only BS148 Viton 75.

Does not support OE ring & pinion ratios of 4.56:1 & up, however, most known aftermarket ring & pinion sets of the 4.56:1 & up range are made 'thick' to suit the 4.10:1 & down carrier.

ITEM #	QTY	DESCRIPTION	PART #	NOTES
1	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
2	1	SEAL HOUSING BRACKET	220202	
3	1	BONDED SEAL	160706	
4	1	CLUTCH GEAR	050805	
5	8	RETURN SPRING	150113	
6	1	LONG CROSS SHAFT	061501	
7	1	SPIDER BLOCK	070402	
8	4	PINION THRUST WASHER	151113	
9	4	PINION GEAR	140901R	
10	1	SIDE GEAR	131701R	
11	3	CROSS SHAFT RETAINING PIN	120601	
12	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
13	2	WASHER	151205	
14	1	SEAL HOUSING ASSEMBLY	082101	
15	2	SEAL HOUSING O-RING	160233	1
16	1	FLANGE CAP ASSEMBLY	028601	
17	2	SIDE GEAR THRUST WASHER	151007	
18	1	SPLINED SIDE GEAR	131801R	
19	2	SHORT CROSS SHAFT	061601	
20	1	DIFFERENTIAL CASE	013201	
21	2	COUNTERSUNK SCREW	200214	
*	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	2102114	

* Not illustrated in exploded view.



RD114



ARB AIR LOCKER *Air Operated Locking Differentials*

RD115 Dana 70HD,37 SPL,4.56 & UP

Specs:

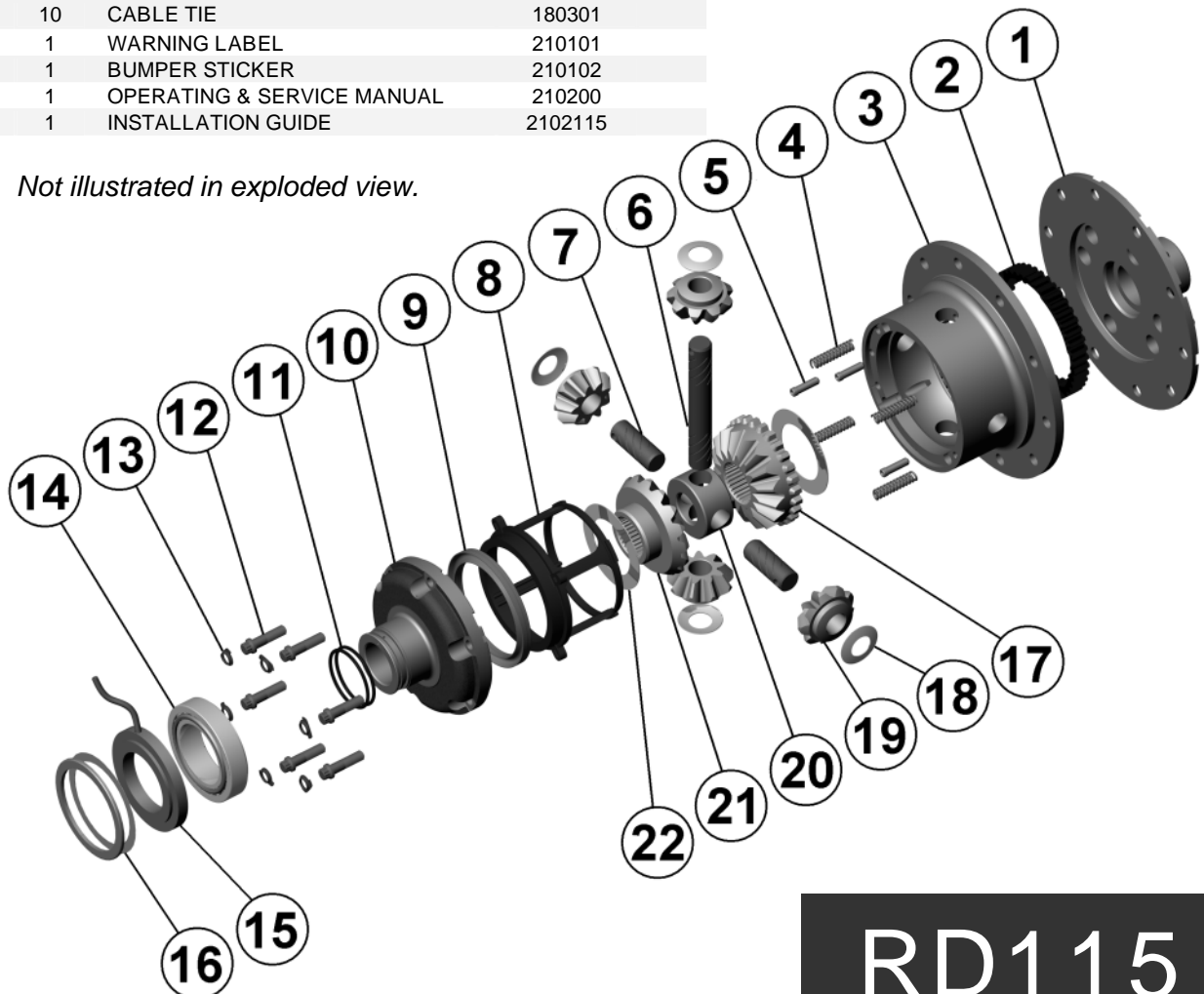
Axle Spline	37 tooth, Ø40.6mm [1.60"]
Ratio Supported	4.56:1 & up
Ring Gear ID	174.9mm [6.89"]
Ring Gear OD	267mm [10.5"]
Ring Gear Bolts	12 bolts on Ø203mm [8.00"]
Ring Gear Torque	149Nm [110 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	108Nm [80 ft-lb]
Carrier Bearing OD	104.78mm [4.125"]

Notes:

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

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	
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	080703	
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 (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	2102115	

* Not illustrated in exploded view.



RD115



ARB AIR LOCKER *Air Operated Locking Differentials*

RD116 Dana 44,30 SPL,3.92 & UP

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)

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	

Notes:

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

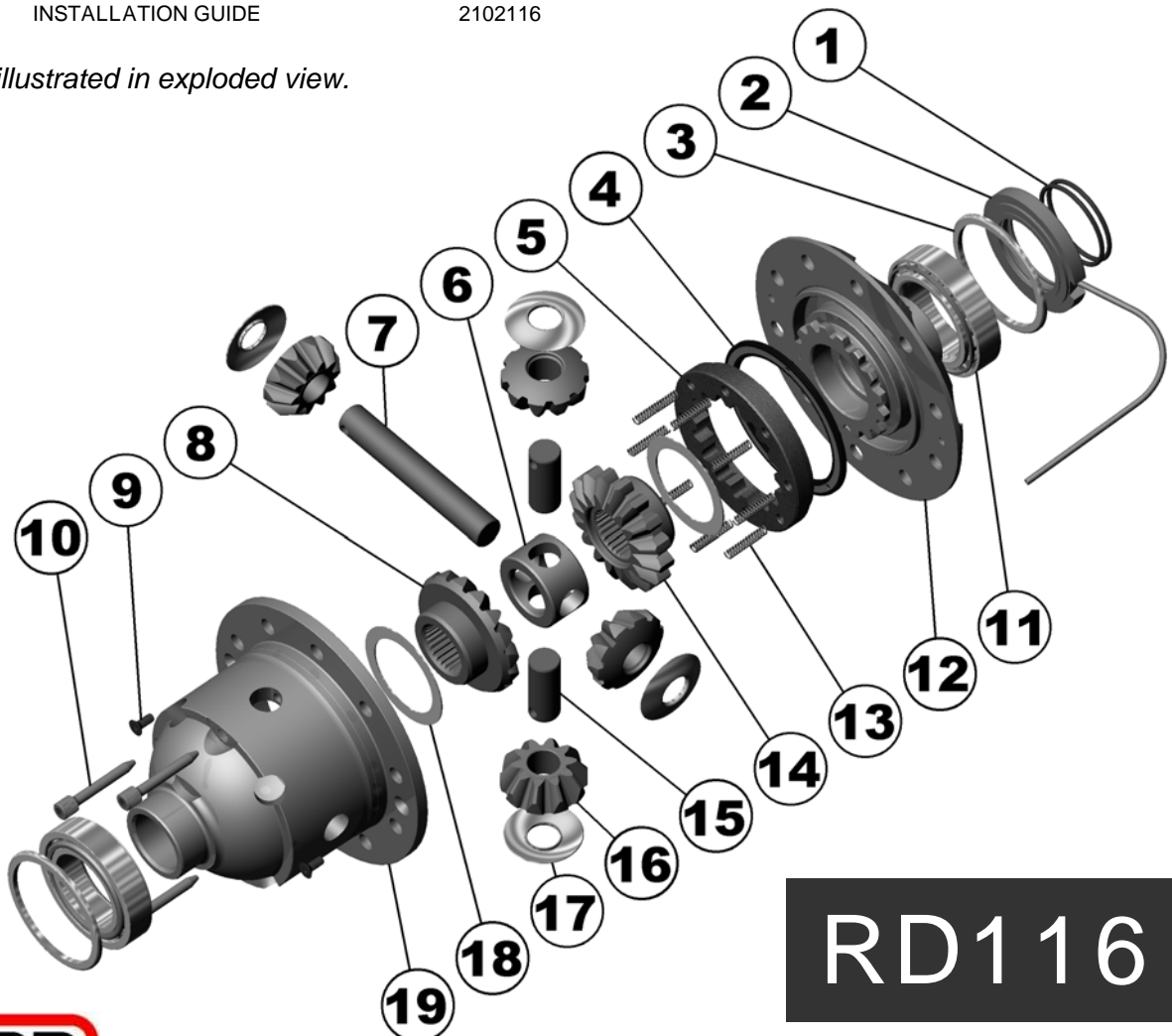
For Ford IFS installation refer to tech note (Section 5.12) for alternative to C-clip use.

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.

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD117 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	

* Not illustrated in exploded view.

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:

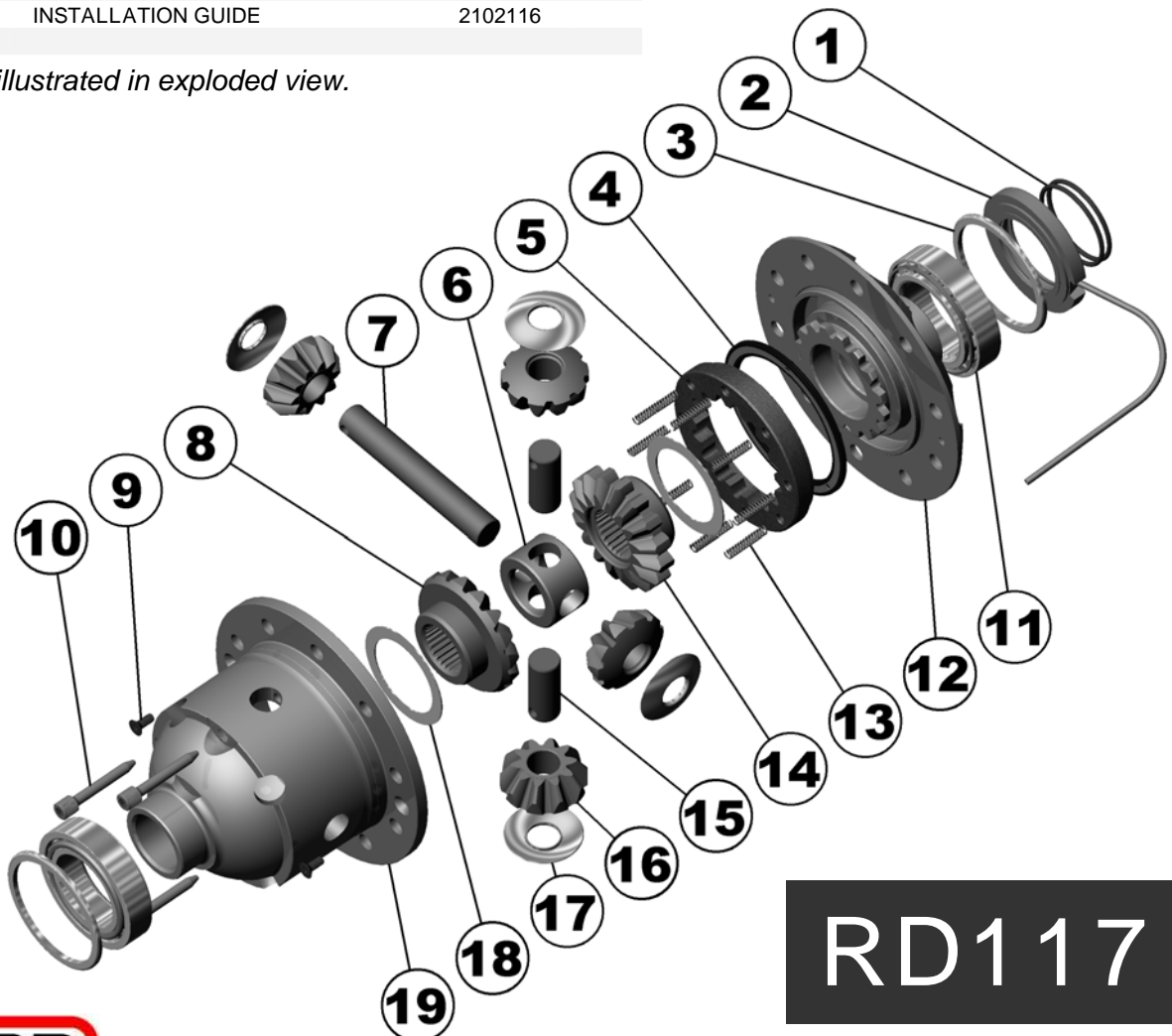
- For replacement O-rings use only BS136 Viton 75.
- For replacement bearing use Timken part # LM104949 / LM104912.

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

For ratios of 3.92:1 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.



ARB AIR LOCKER *Air Operated Locking Differentials*

RD118 Suzuki Jimny,FR,22 SPL,10 Bolt RG

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	85Nm [63 ft-lb]
Backlash	0.10-0.20mm [0.004-0.008"]
Bearing Cap Torque	50Nm [37 ft-lb]

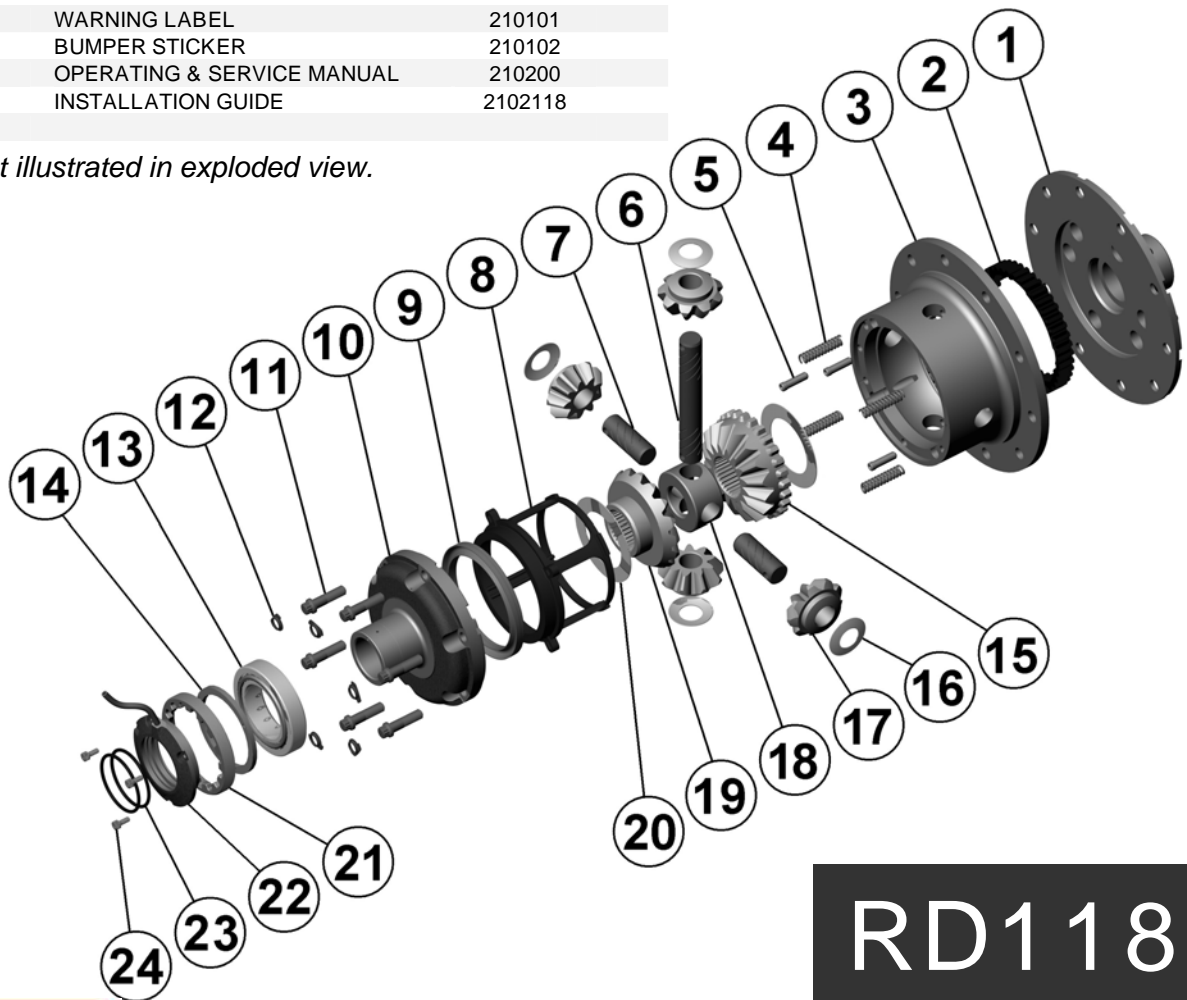
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	023703	
02	1	CLUTCH GEAR	050701	
03	1	DIFFERENTIAL CASE	012805	
04	4	RETURN SPRING	150107	
05	3	CROSS SHAFT RETAINING PIN	120403	
06	1	LONG CROSS SHAFT	060106	
07	2	SHORT CROSS SHAFT	060306	
08	1	PISTON	040801	
09	1	U-RING	160306	
10	1	CYLINDER CAP ASSEMBLY	031303	
11	8	CYLINDER CAP RETAINING BOLT	200211	
12	8	LOCKING TAB (6mm)	150402	
13	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
14	1	CLAMPING PLATE	090401	
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	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)	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	210102	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102118	

Notes:

- 1 For replacement O-rings use only BS030 Viton 75.

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

* Not illustrated in exploded view.



RD118

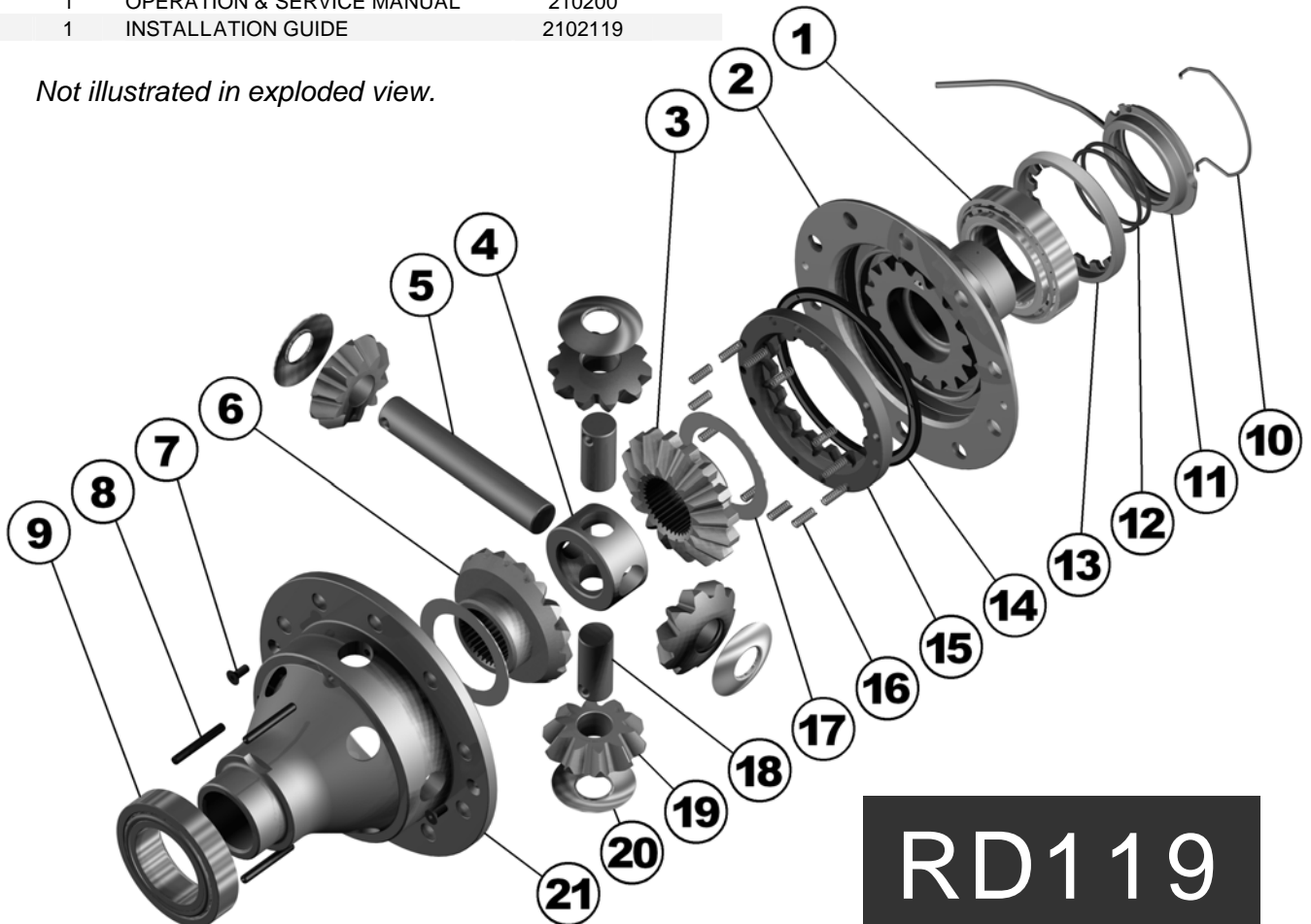


ARB AIR LOCKER *Air Operated Locking Differentials*

RD119 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	
08	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	

* Not illustrated in exploded view.



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).

ARB AIR LOCKER *Air Operated Locking Differentials*

RD121 Toyota 8" IFS, 53mm BRNG

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"]

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	
08	---	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	210211	

Notes:

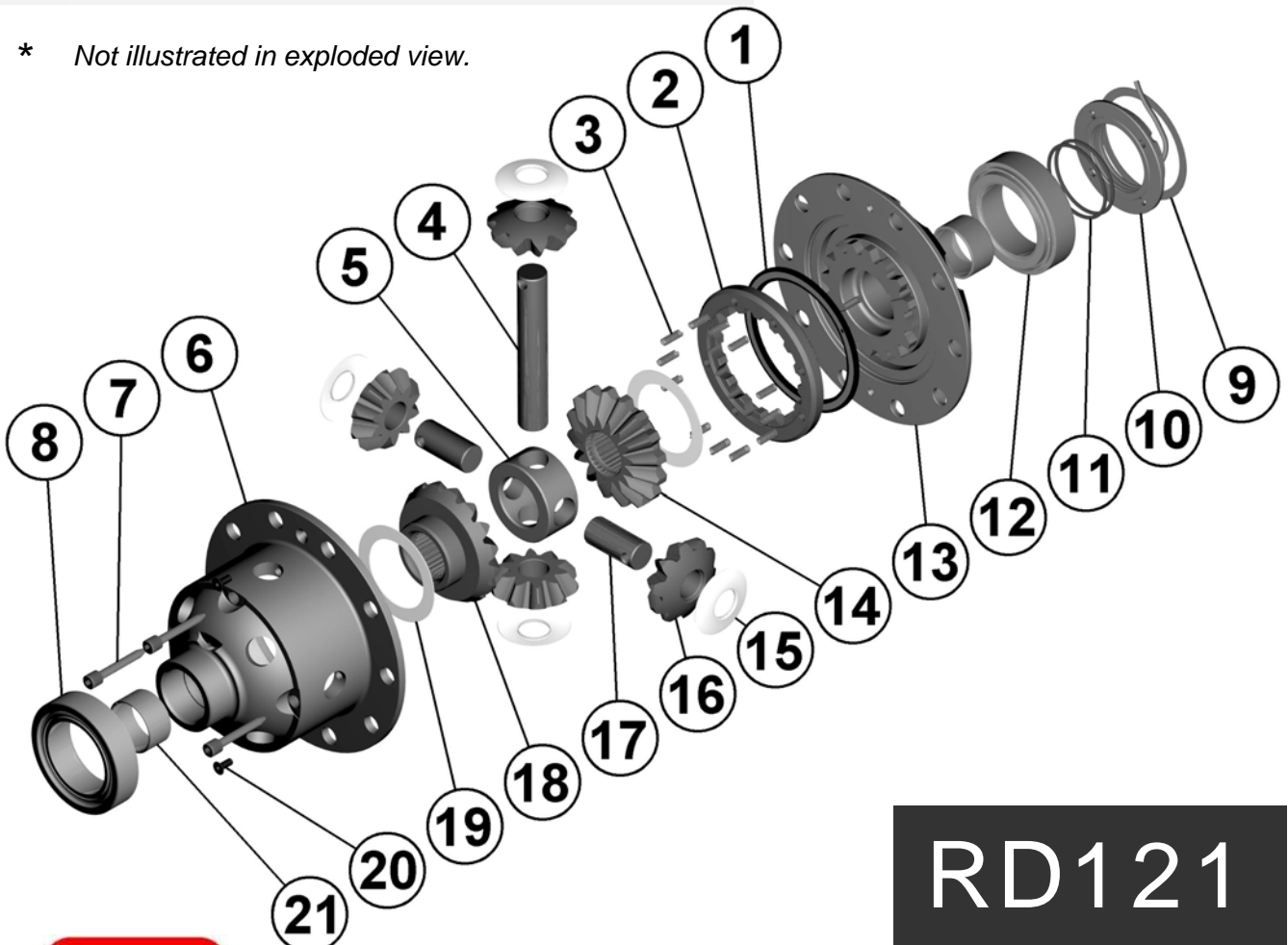
1 For replacement O-rings use only BS136 Viton 75.

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](#)).

* Not illustrated in exploded view.



RD121



ARB AIR LOCKER *Air Operated Locking Differentials*

RD123 Mazda 8",RR,shim adjusted

Specs:

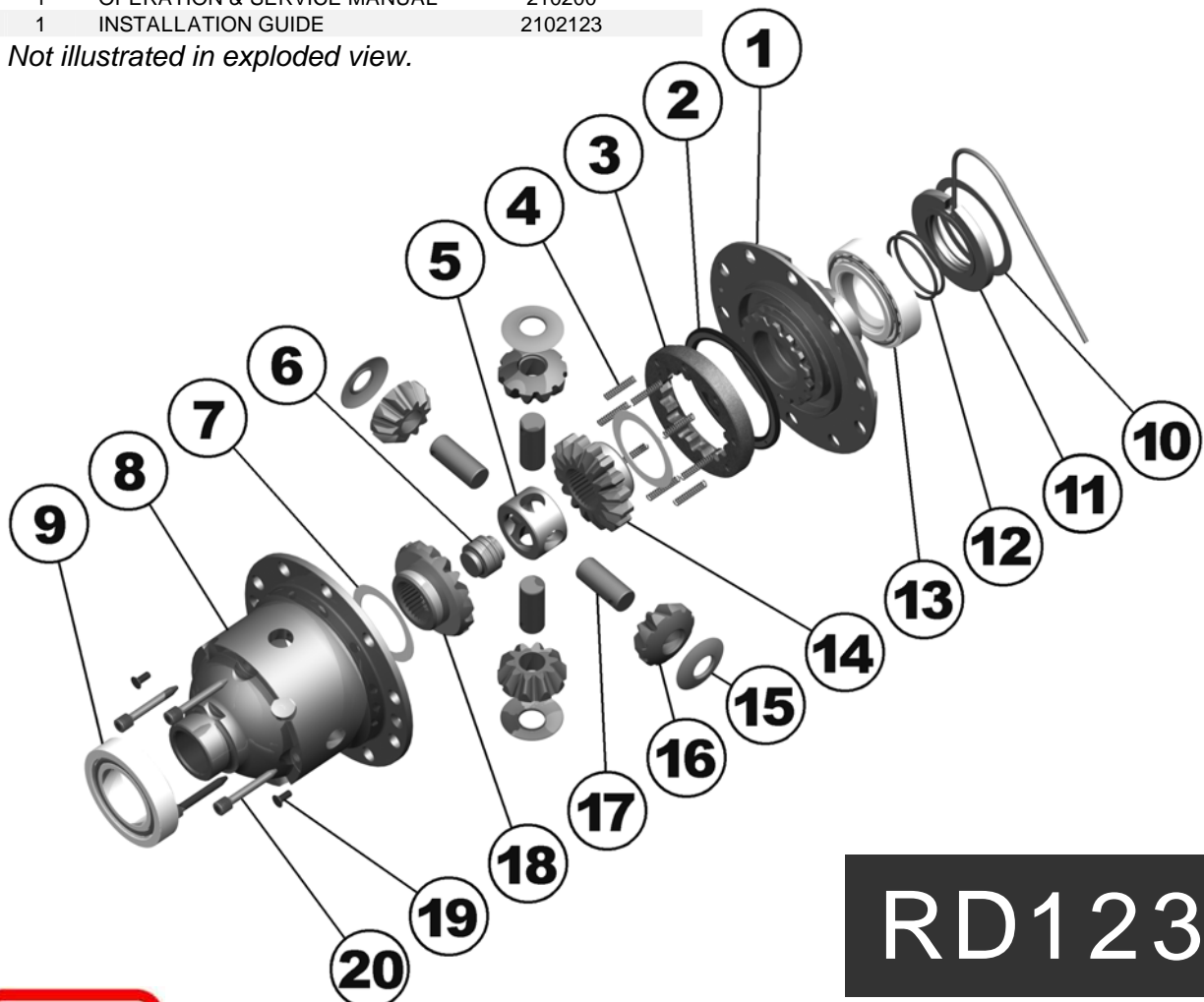
Axle Spline	30 tooth
Ratio Supported	All
Ring Gear ID	121.3mm [4.77"]
Ring Gear OD	205.5mm [8.09"]
Ring Gear Bolts	10 bolts on Ø146.25 [5.75"]
Ring Gear Torque	95Nm [70 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	81Nm [60 ft-lb]

Notes:

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

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 illustrated in exploded view.



RD123

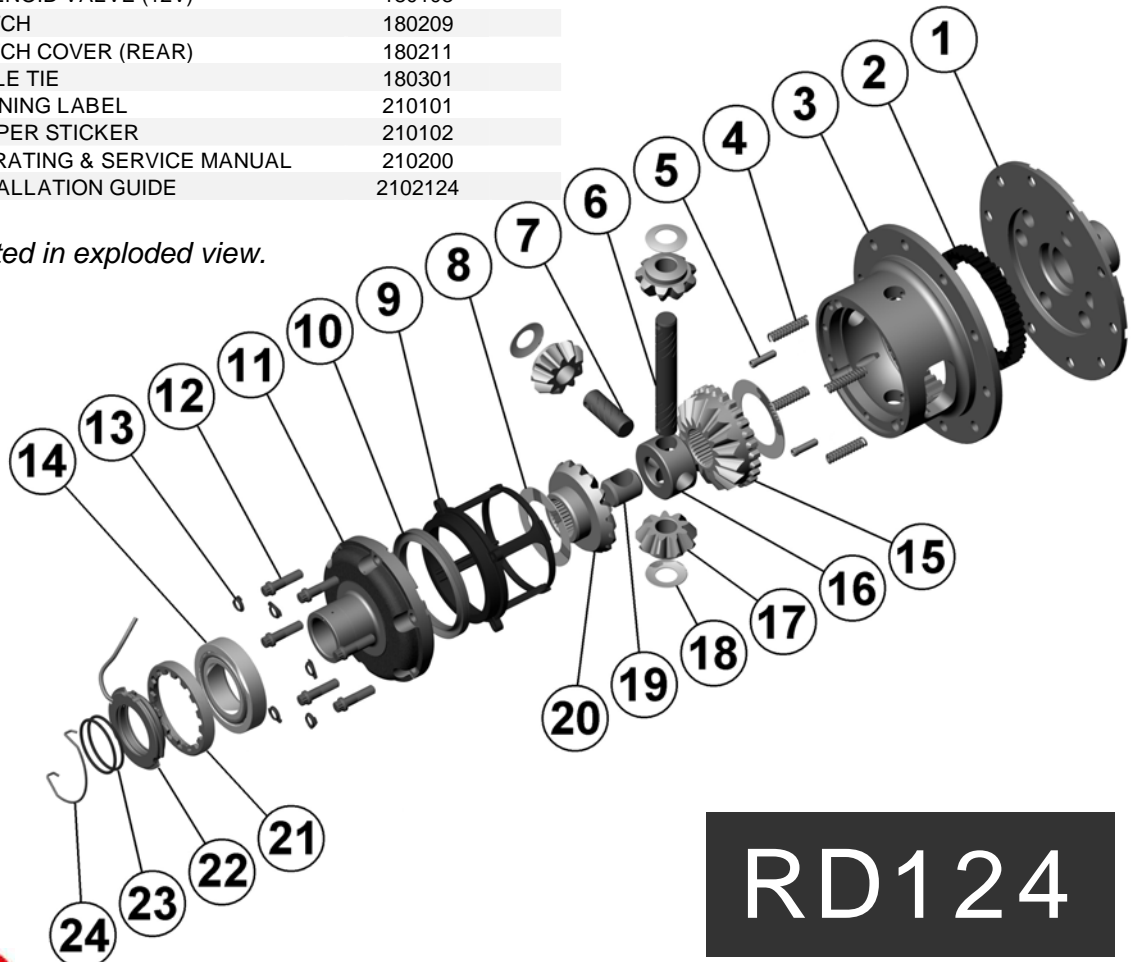


ARB AIR LOCKER *Air Operated Locking Differentials*

RD124 Toyota 8.9", C-clip, 50mm BRNG

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	021703	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	011005	
04	8	RETURN SPRING	150101	
05	1	CROSS SHAFT RETAINING PIN	120303	
06	1	LONG CROSS SHAFT	060205	
07	1	SHORT CROSS SHAFT	060402	
08	2	SIDE GEAR THRUST WASHER	151002	
09	1	PISTON	040202	
10	1	BONDED SEAL	160705	
11	1	CYLINDER CAP	030224	
12	6	CYLINDER CAP RETAINING BOLT	200205	
13	6	LOCKING TAB (8mm)	150401	
14	1	TAPERED ROLLER BEARING	NOT SUPPLIED	
15	1	SPLINED SIDE GEAR	130401	
16	1	SPIDER BLOCK	070201	
17	3	PINION GEAR	140201	
18	3	PINION THRUST WASHER	151102	
19	1	THRUST BLOCK	110102	
20	1	SIDE GEAR	130201	
21	1	ADJUSTER NUT	100101	
22	1	SEAL HOUSING ASSEMBLY	081901	
23	2	SEAL HOUSING O-RING	160207	1
24	1	SEAL HOUSING RETAINING CLIP	150601	
*	1	C-CLIP KIT	CCK004	
*	1	SOCKET HEAD CAP SCREW (M8)	200504	
*	2	CYLINDER CAP RETAINING BOLT	200207	
*	2	LOCKING TAB (6mm)	150402	
*	1	LOCK WASHER	4581046	
*	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	2102124	

* Not illustrated in exploded view.



Specs:

Axle Spline	30 tooth, Ø33mm [1.31"]
Ratio Supported	All
Ring Gear ID	138.1mm [5.44"]
Ring Gear OD	225mm [8.9"]
Ring Gear Bolts	12 bolts on Ø156mm [6.14"]
Ring Gear Torque	120Nm [89 ft-lb]
Backlash	0.15-0.20mm [0.006-0.008"]
Bearing Cap Torque	110Nm [81 ft-lb]

Notes:

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

For 8.9" with 45mm carrier bearing ID, 50mm bearings must be acquired. ARB part #160116 and Timken part #32010X-32010X.

For 8.9" non C-clip model (i.e., full floating) refer to RD33 (Section 2.33).

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

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

RD124



ARB AIR LOCKER *Air Operated Locking Differentials*

RD125 Dana 35, non C-clip, 30 SPL, 3.54 & UP

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]

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	

Notes:

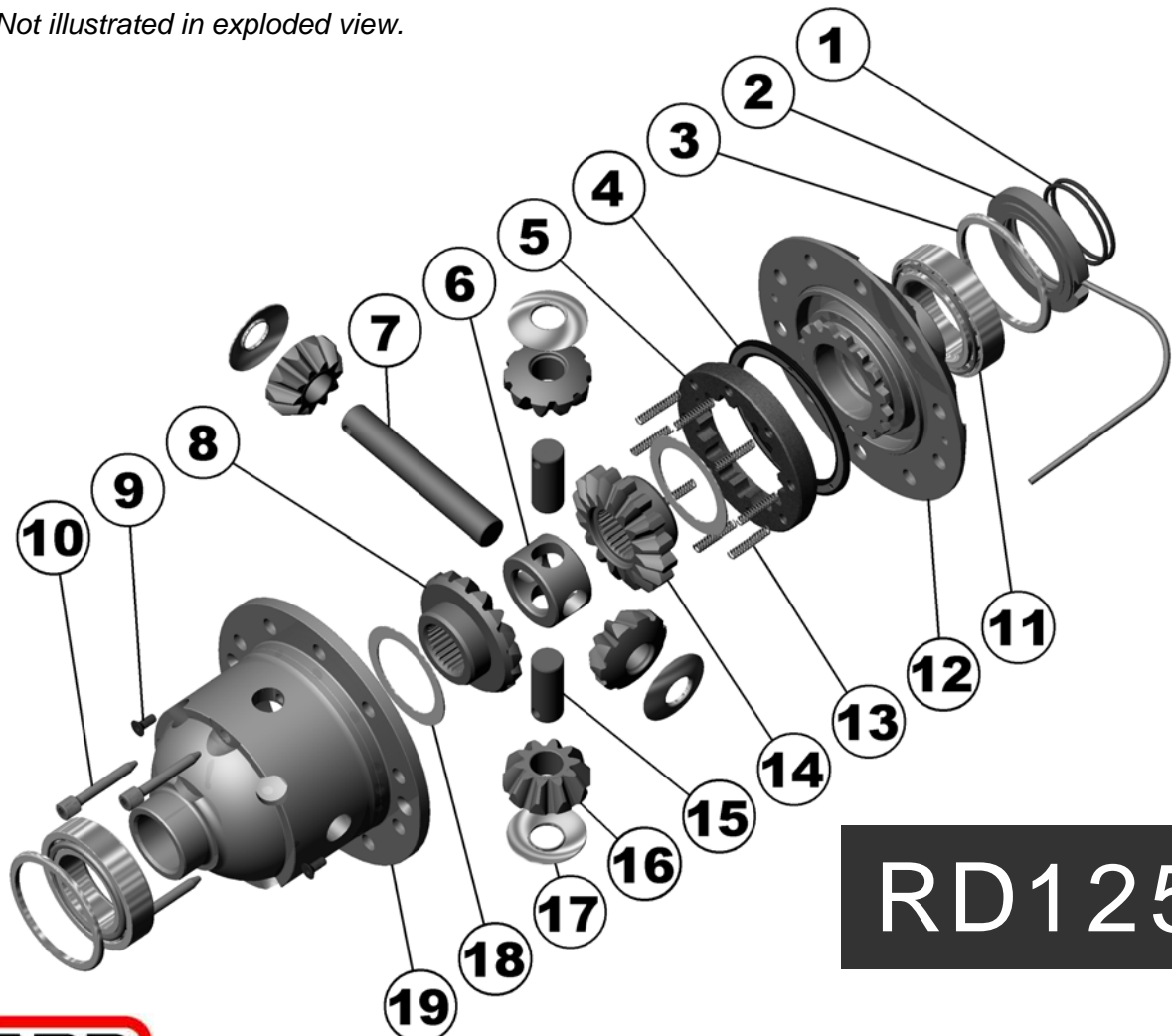
- For replacement O-rings use only BS133 Viton 75.
- For replacement bearing use Timken part # LM501349 / LM501310.

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.

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

* *Not illustrated in exploded view.*



ARB AIR LOCKER *Air Operated Locking Differentials*

RD126 Santana PS-10,RR

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"]

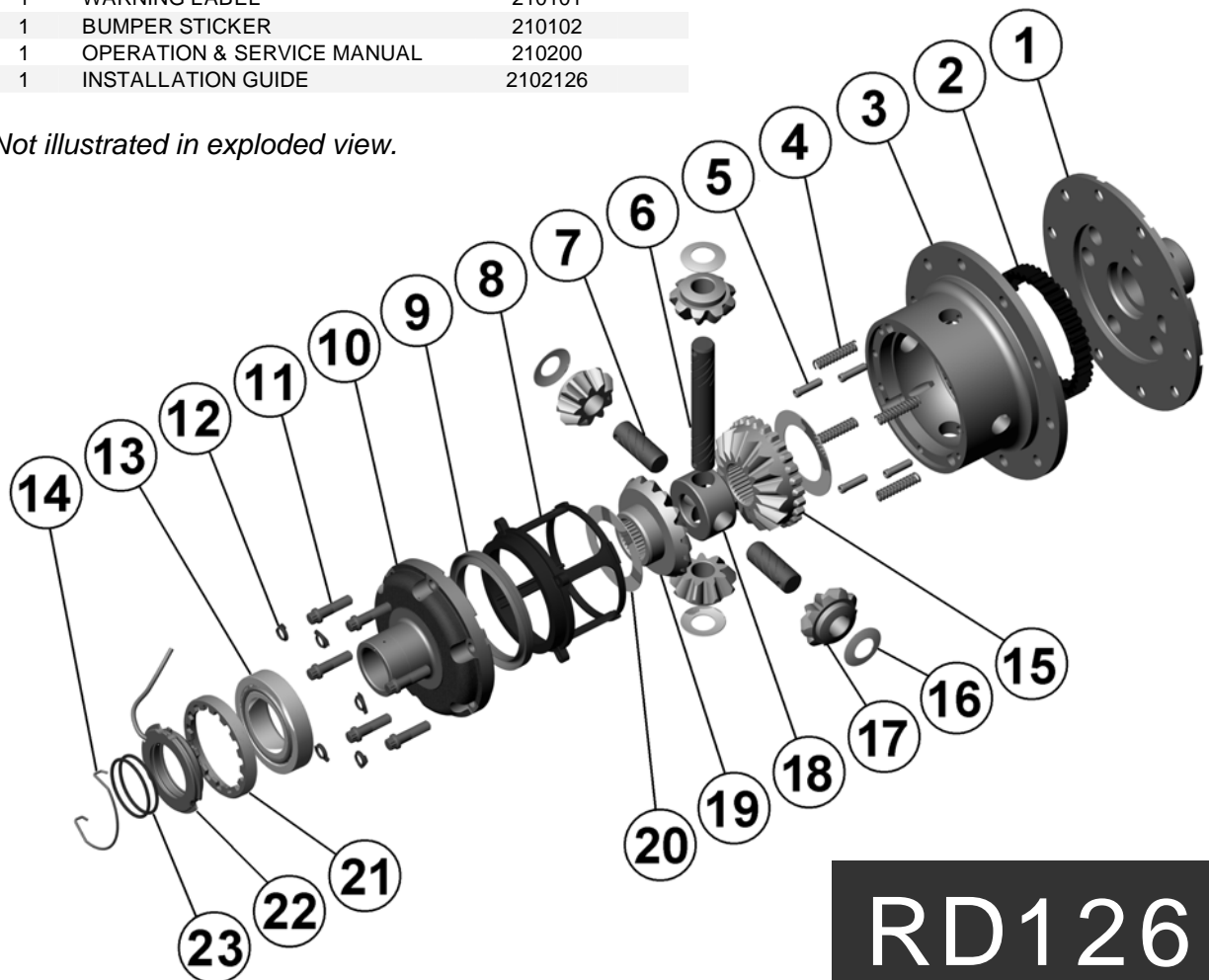
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	FLANGE CAP	022604	
02	1	CLUTCH GEAR	050202	
03	1	DIFFERENTIAL CASE	011304	
04	4	RETURN SPRING	150101	
05	3	CROSS SHAFT RETAINING PIN	120303	
06	1	LONG CROSS SHAFT	060205	
07	2	SHORT CROSS SHAFT	060402	
08	1	PISTON	040202	
09	1	BONDED SEAL	160705	
10	1	CYLINDER CAP ASSEMBLY	030504	
11	8	CYLINDER CAP RETAINING BOLT	200205	
12	8	LOCKING TAB (8mm)	150401	
13	1	TAPERED 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	SPIDER BLOCK	070201	
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	
*	10	CABLE TIE	180301	
*	1	WARNING LABEL	210101	
*	1	BUMPER STICKER	210102	
*	1	OPERATION & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	2102126	

Notes:

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

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

* Not illustrated in exploded view.



RD126



ARB AIR LOCKER *Air Operated Locking Differentials*

RD129 Toyota Tacoma,RR

Specs:

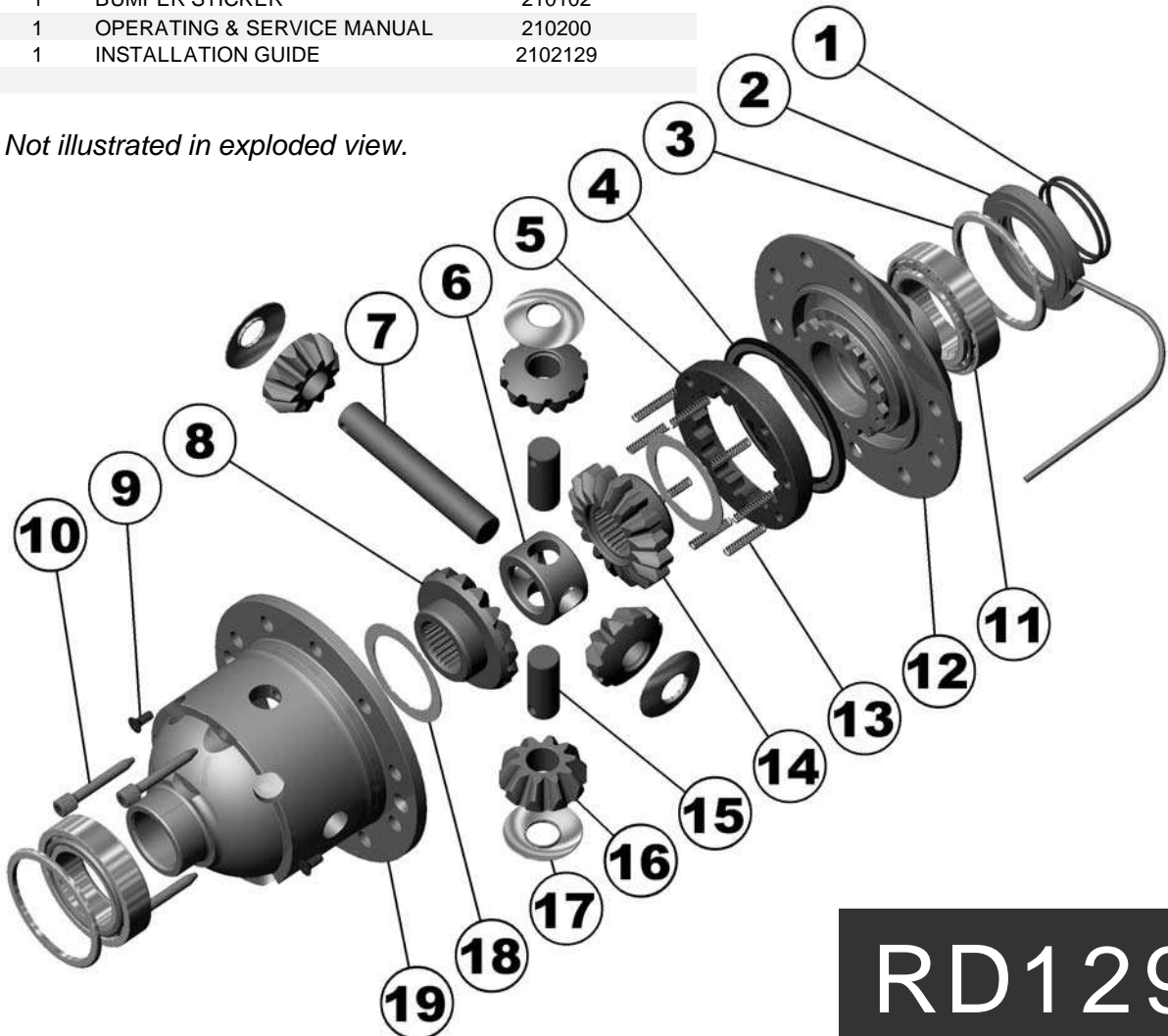
Axle Spline	30 tooth, Ø33.0mm [1.30"]
Ratio Supported	All
Ring Gear ID	127.5mm [5.02"]
Ring Gear OD	213mm [8.4"]
Ring Gear Bolts	12 bolts on Ø152mm [5.98"]
Ring Gear Torque	96Nm [71 ft-lb]
Backlash	0.13-0.18mm [0.005-0.007"]
Bearing Cap Torque	85Nm [63 ft-lb]

Notes:

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

ITEM #	QTY	DESCRIPTION	PART #	NOTES
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	
08	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	

* Not illustrated in exploded view.



RD129



ARB AIR LOCKER *Air Operated Locking Differentials*

RD132 Toyota 8", 50mm BRNG

Specs:

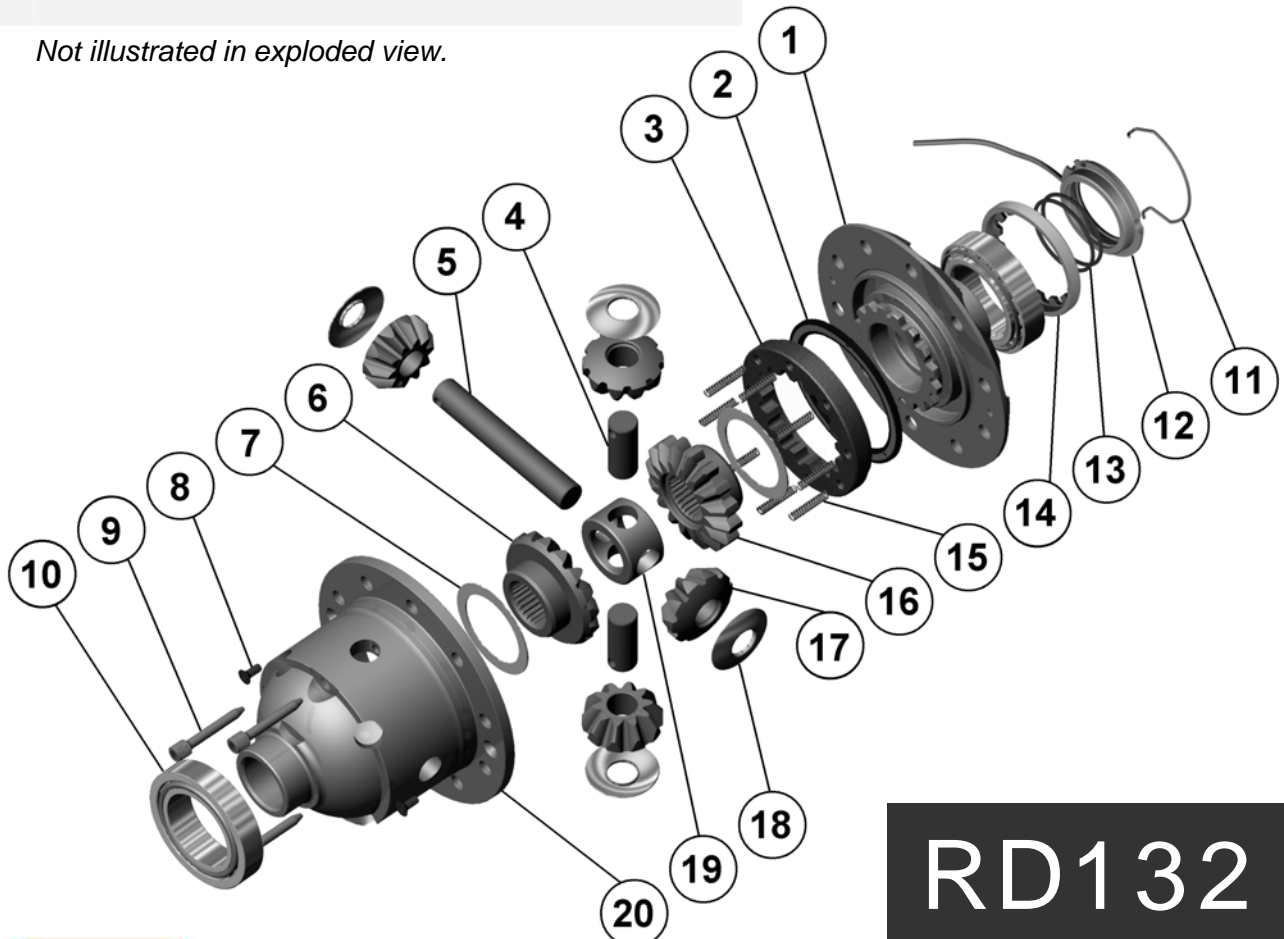
Axle Spline	30 tooth, Ø33mm [1.31"]
Ratio Supported	All
Ring Gear ID	126.0mm [4.96"]
Ring Gear OD	200mm [8"]
Ring Gear Bolts	10 bolts on Ø160mm [6.30"]
Ring Gear Torque	95Nm [70 ft-lb]
Backlash	0.15-0.25mm [0.006-0.010"]
Bearing Cap Torque	95Nm [70 ft-lb]

ITEM #	QTY	DESCRIPTION	PART #	NOTES
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	
08	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	

Notes:

- For replacement O-rings use only BS136 Viton 75.
 - 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 shim pre-loaded 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](#)).

* *Not illustrated in exploded view.*



RD132



ARB AIR LOCKER *Air Operated Locking Differentials*

RD133 Toyota 8" RR, shim adjusted

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 illustrated in exploded view.*

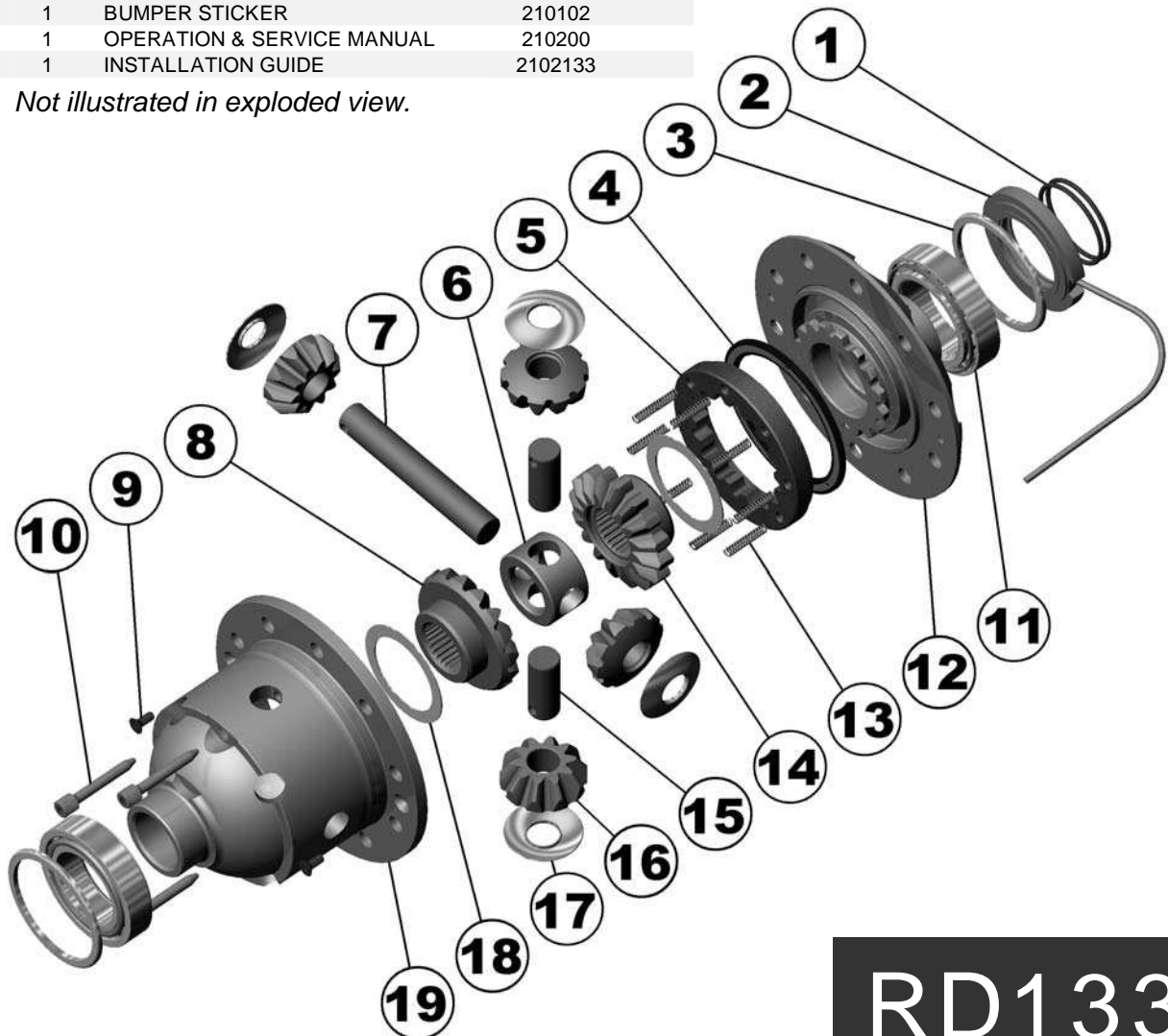
Specs:

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](#)).



RD133

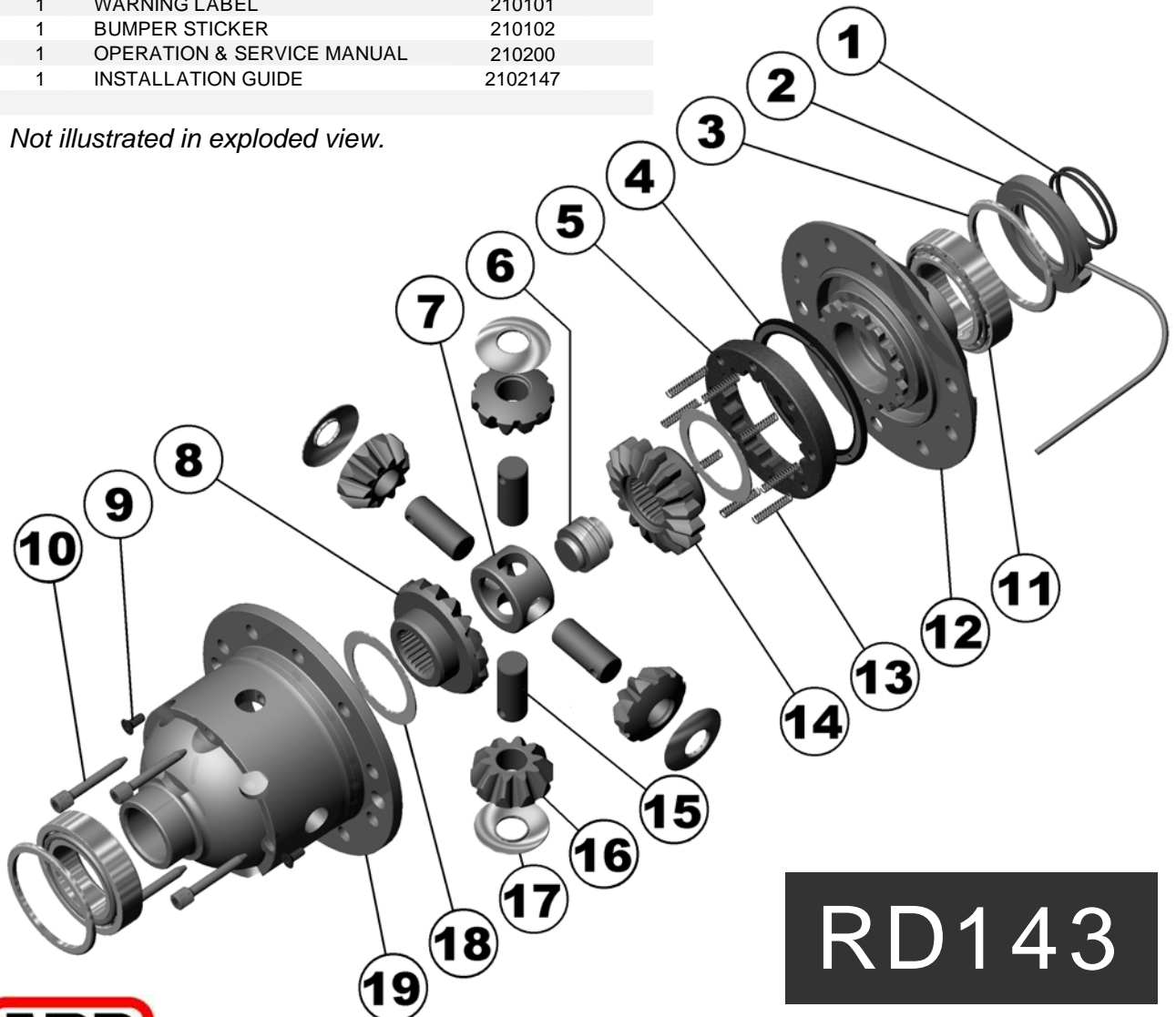


ARB AIR LOCKER *Air Operated Locking Differentials*

RD143 Dana 44,32 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	THRUST BLOCK	110509	
7	1	SPIDER BLOCK	070201	
8	1	SIDE GEAR	131317H	
9	2	COUNTERSUNK SCREW	200213	
10	4	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	131417H	
15	4	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	

* Not illustrated in exploded view.



Specs:

Axle Spline	32 tooth, Ø35.8mm [1.41"]
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.

ARB AIR LOCKER *Air Operated Locking Differentials*

RD147 Dana 44,35 SPL,3.73 & DN

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]

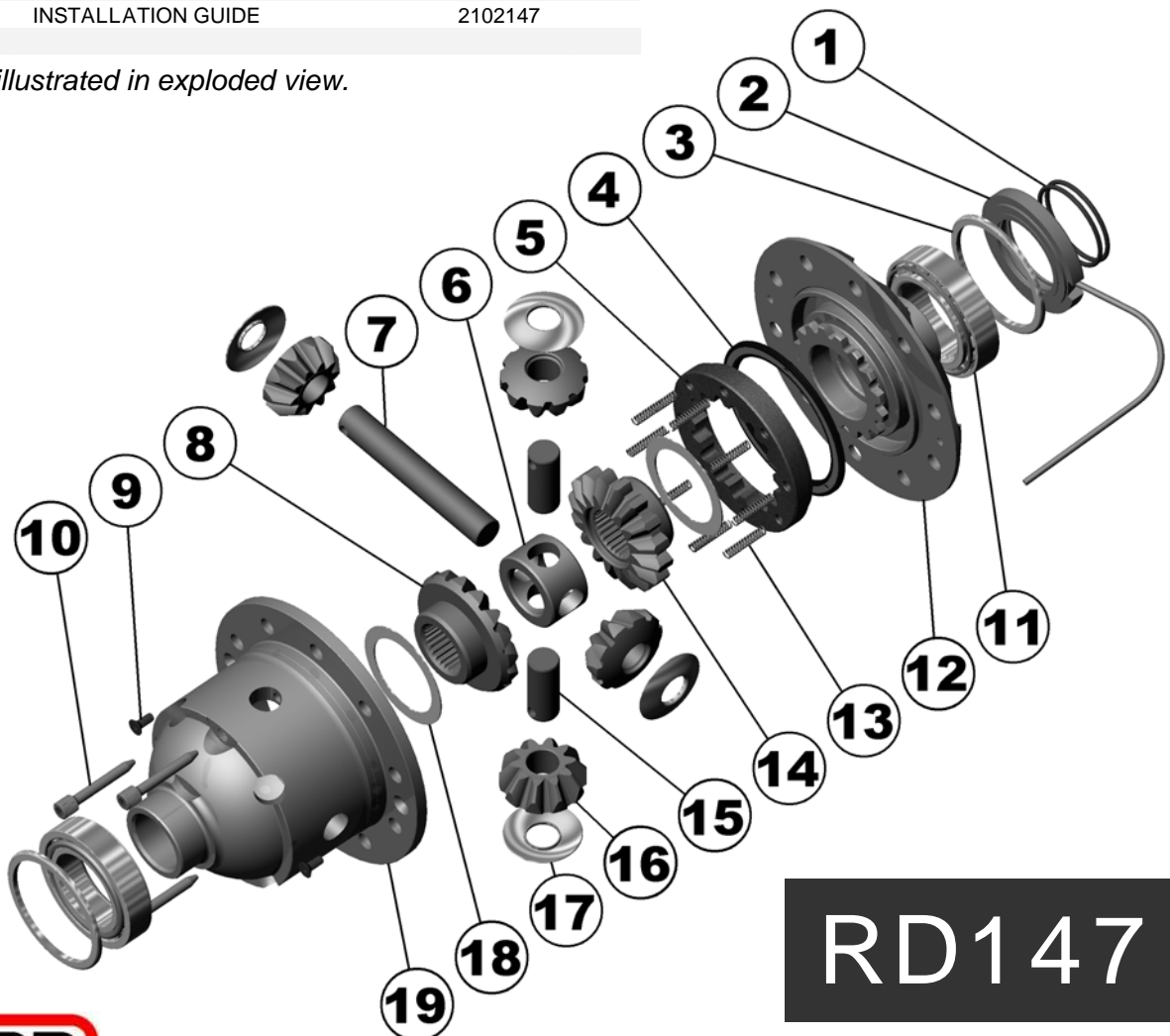
Notes:

- 1 For replacement O-rings use only BS136 Viton 75.
- 2 For replacement bearing use Timken part # LM104949 / LM104912.
- 3 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.

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	

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

RDCKA & RDCKA24 Air Compressor

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:

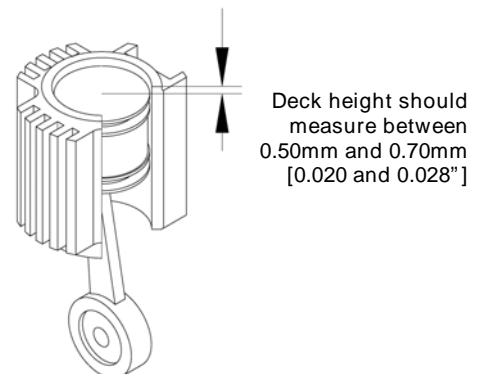
Voltage	12 Volts (RDCKA), 24 Volts (RDCKA24)
Current Draw	No-Load 12A (RDCKA), 7A (RDCKA24) Load 18A (RDCKA), 12A (RDCKA24)
Air Flow	33.0L/min @ 0kPa [1.17CFM @ 0psi] 26.4L/min @ 200kPa [0.93CFM @ 29psi]
Total Weight	4.3kg [9.5lbs]
Size	176mm x 170mm x 170mm [6.9" x 6.7" x 6.7"]
Manifold Port	1/4" npt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

Notes:

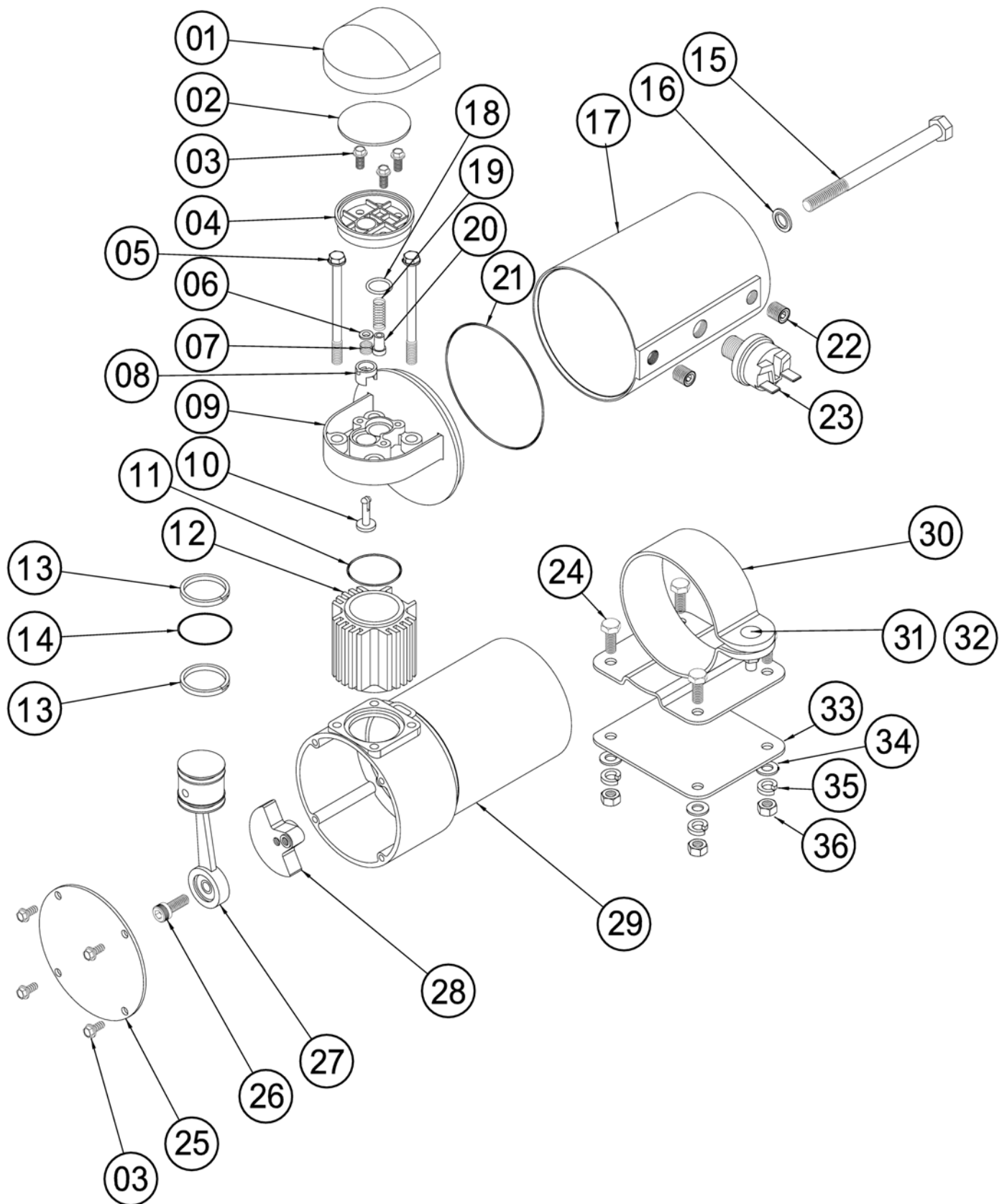
- Used on RDCKA only.
- Used on RDCKA24 only.
- The air filter should be cleaned regularly. To do this, unclip the black cover (01) and remove the element (02). Wash in hot, soapy water, rinse and let dry completely. Reinsert the element into the base (SMOOTH SIDE DOWN), wipe out the cover, and clip 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. Do not over tighten. Run the compressor and check for any air leaks.
- For replacement O-ring use BS041 Viton 75.
- For replacement O-ring use BS025 Viton 75.
- For replacement O-ring use BS014 Viton 75.
- 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



ARB AIR LOCKER *Air Operated Locking Differentials*

RDCP & RDCPA Portable Air Compressor

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]

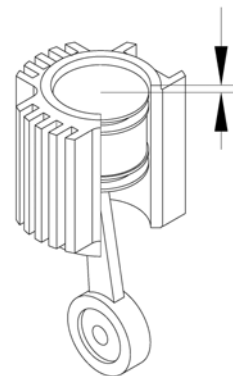
Notes:

- Used on RDCP only.
- 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.

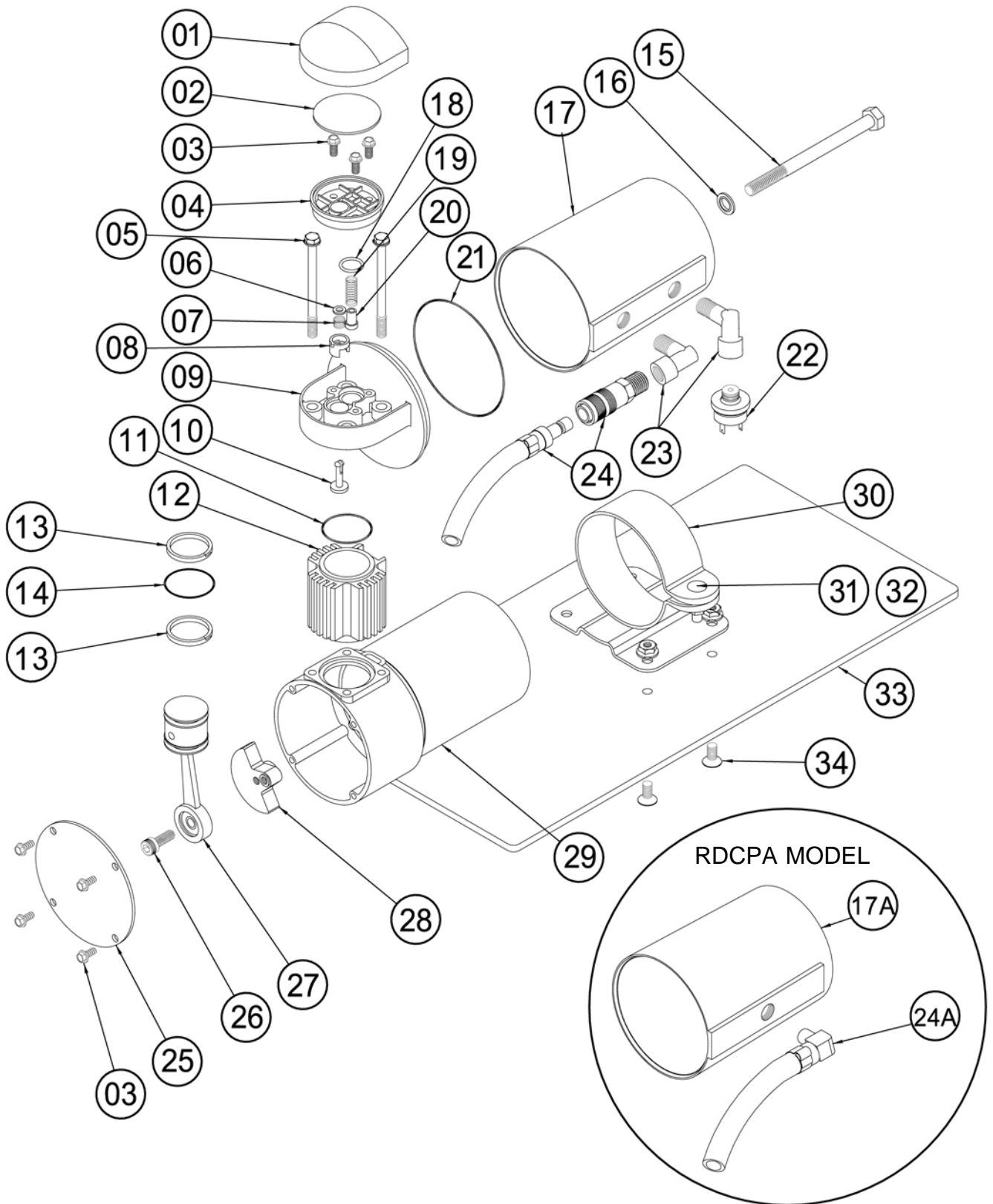
Refit manifold making sure that the O-ring is in its correct position; insert the bolt with the seal under the head. Torque the bolt up to 9.5Nm. Do not over tighten. Run the compressor and check for any air leaks.

- For replacement O-ring use BS041 Viton 75.
- 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 MODEL SHOWN



RDCP & RDCPA



ARB AIR LOCKER *Air Operated Locking Differentials*

CKSA12 On-Board Air Compressor Kit

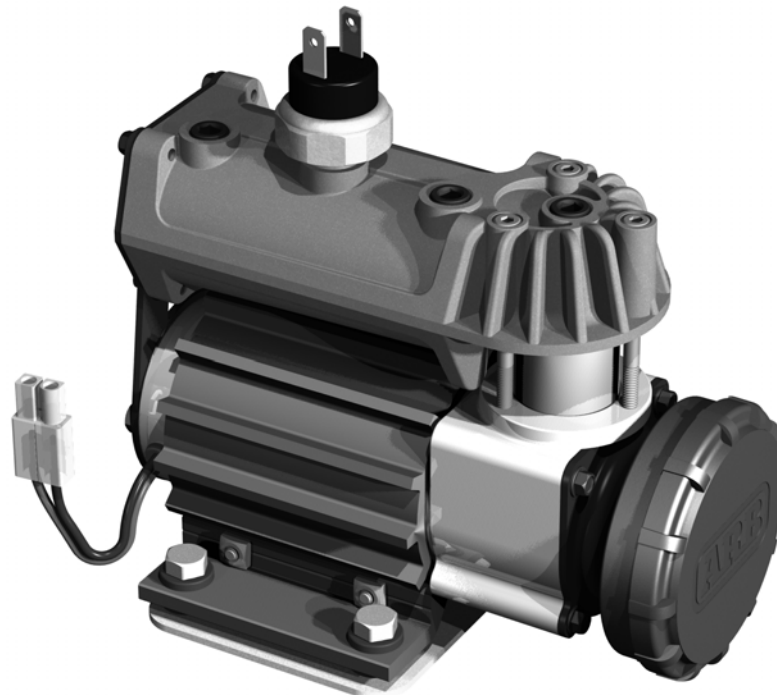
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	3	HEAD BOLT	310202	
02	1	HEAD ASSEMBLY	310102	
03	1	BARREL O-RING	---	1
04	1	BARREL	310201	
05	1	BARREL GASKET	---	1
06	1	PISTON/COUNTERWEIGHT ASSEMBLY	310103	
07	1	CRANKCASE COVER GASKET	---	1
08	1	CRANKCASE COVER	---	2
09 & 16	1	COVER BOLTS (M4 HEX FLANGE)	310203	
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	

* *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.



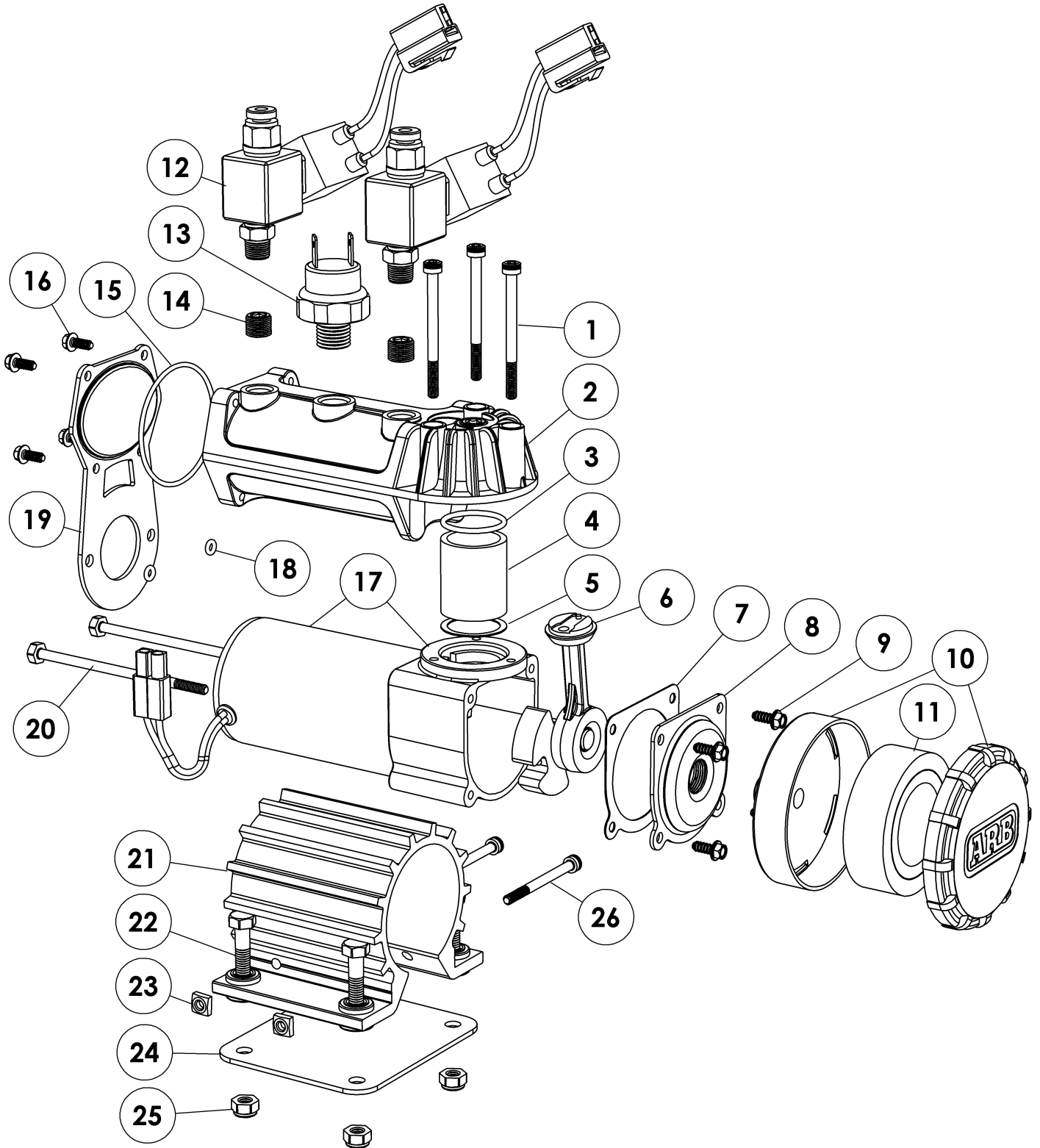
Specs:

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 @ 200psi]
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:

- 1 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)

CKSA12 On-Board Air Compressor Kit



CKSA12



ARB AIR LOCKER *Air Operated Locking Differentials*

CKMA12 & CKMA24 Air Compressor

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	O-RING (BS010V75)	160242	5
02	1	MANIFOLD CAP (1/4" NPT)	320214	
03	1	PRESSURE SWITCH (1/4" NPT)	CO35	
04	2	O-RING (BS031N70)	160241	5
05	1	MANIFOLD TUBE	320215	
06	2	HEX BOLT (M6 x 60mm)	200703	
07	1	COMPRESSOR HEAD ASSEMBLY	320102	
08	1	SAFETY VALVE POPPET	320205	1
09	1	SAFETY VALVE SPRING	150115	1
10	1	SAFETY VALVE FITTING	320204	1
11	1	HEX BOLT (M6 x 125mm)	200704	
12	4	HEX BOLT (M6 x 12mm)	200702	
13	1	MANIFOLD SUPPORT BRACKET	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
18	1	VALVE PLATE ASSEMBLY	320105	
19	1	BARREL	320201	
20	1	PISTON ASSEMBLY (SERVICE KIT)	320302	6
21	1	STICKER, CKM COMPRESSOR	210122	
22	1	MOUNT ASSEMBLY	320101	
23(a)	1	MOTOR ASSEMBLY (12V)	320104	2
23(b)	1	MOTOR ASSEMBLY (24V)	320106	2
24	4	HEX BOLT (M6 x 25mm)	200405	
*	4	CARRIAGE BOLT (M6 x 25mm)	6151082	
25	4	FLAT WASHER (M6)	200709	
26	1	BACKING PLATE	290603	
27	4	NYLON LOCK-NUT (M6)	6151223	
28	1	AXLE	320203	
29	1	CAP SCREW (M4 x 20mm)	200708	7
30	1	AIR FILTER FLANGE (1/4" NPT)	320212	
31	1	AIR FILTER BASE	320501B	3
32	1	AIR FILTER ELEMENT (DISK TYPE)	290503	3
33	1	AIR FILTER COVER	320501A	3
34	1	O-RING (BS028N70)	160243	5
*	1	WIRING LOOM (CKMA12 & CKMA24)	180409	4
*	1	RELAY (12V,40A)	CO42	
*	1	SWITCH (12V)	180209	
*	1	SWITCH COVER (COMPRESSOR)	180212	
*	1	SCOTCH LOCK ELEC. CONNECTOR (564)	CO45	
*	2	PLUG (1/8" BSPT)	170802	
*	2	EYE TERMINAL,10MM (YELLOW)	180702	
*	1	EYE TERMINAL,10MM (BLUE)	CO44	
*	1	INSTALLATION GUIDE,CKMA	2102MA12	
*	1	FUSE,40A,MAXI TYPE	180703	

Available separately or included with Air Locker kits.

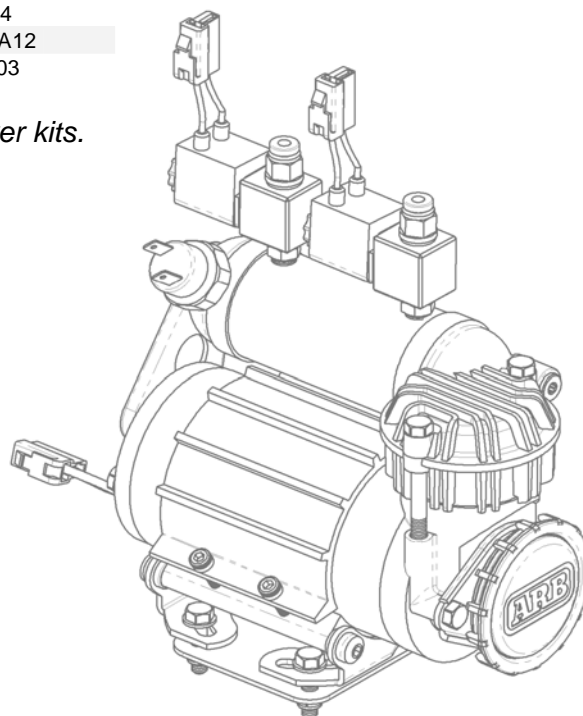
* Not illustrated in exploded view.

Specs:

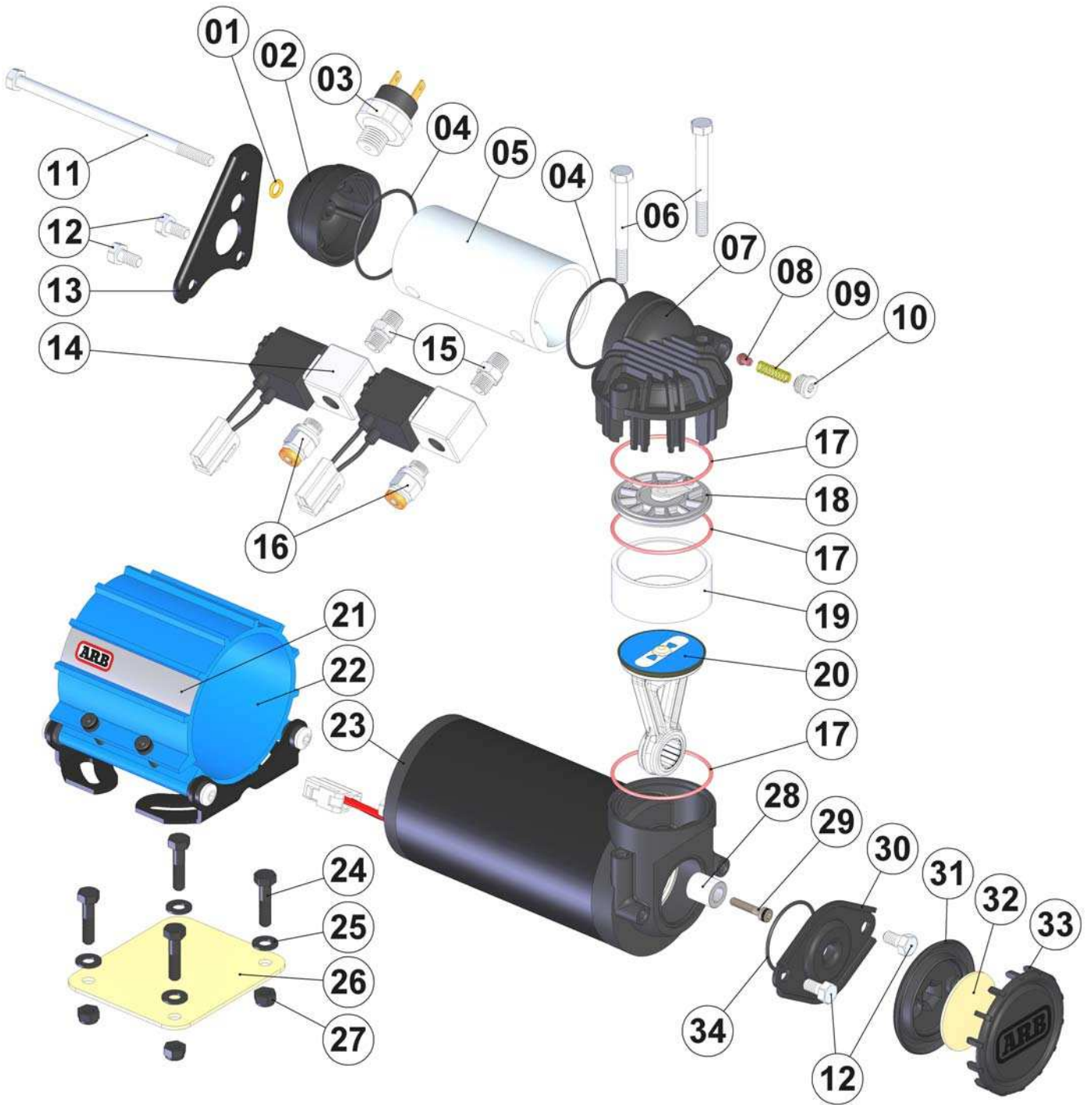
Voltage	12 Volts (CKMA12), 24 Volts (CKMA24)
Current Draw	No-Load 13A (CKMA12 only) Load 23A (CKMA12 only)
Air Flow	75.1L/min @ 0kPa [2.65CFM @ 0psi] 61.6L/min @ 200kPa [2.18CFM @ 29psi]
Total Weight	4.5kg [9.9lbs]
Size	145mm x 190mm x 98mm (H,L,W) [5.7" x 7.5" x 3.9"]
Manifold Port	1/4" NPT [Pressure 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.



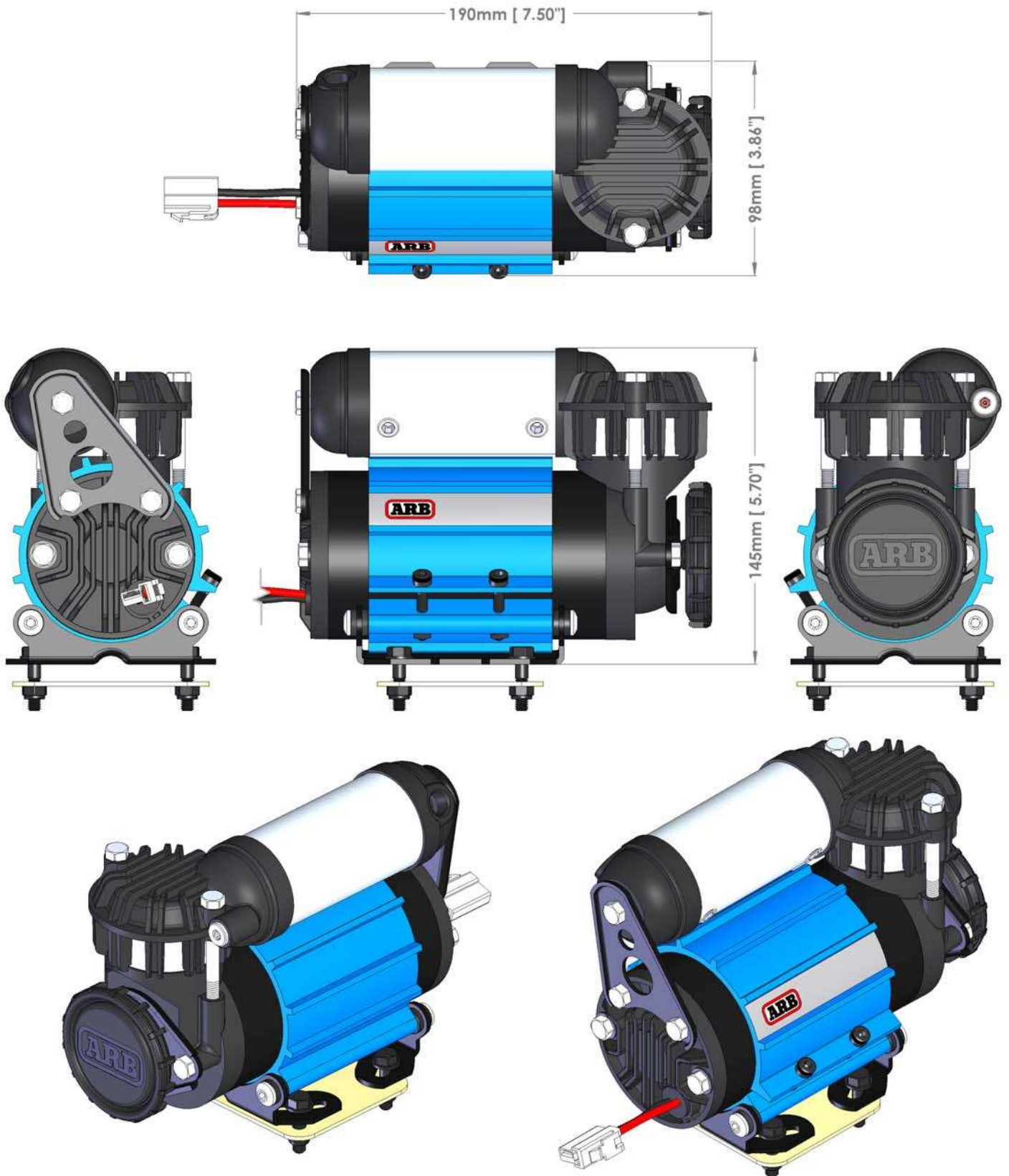
CKMA12 & CKMA24 Air Compressor – Exploded Parts Diagram



CKMA12 & CKMA24

ARB AIR LOCKER *Air Operated Locking Differentials*

CKMA12 & CKMA24 Air Compressor – Overall Sizes



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.

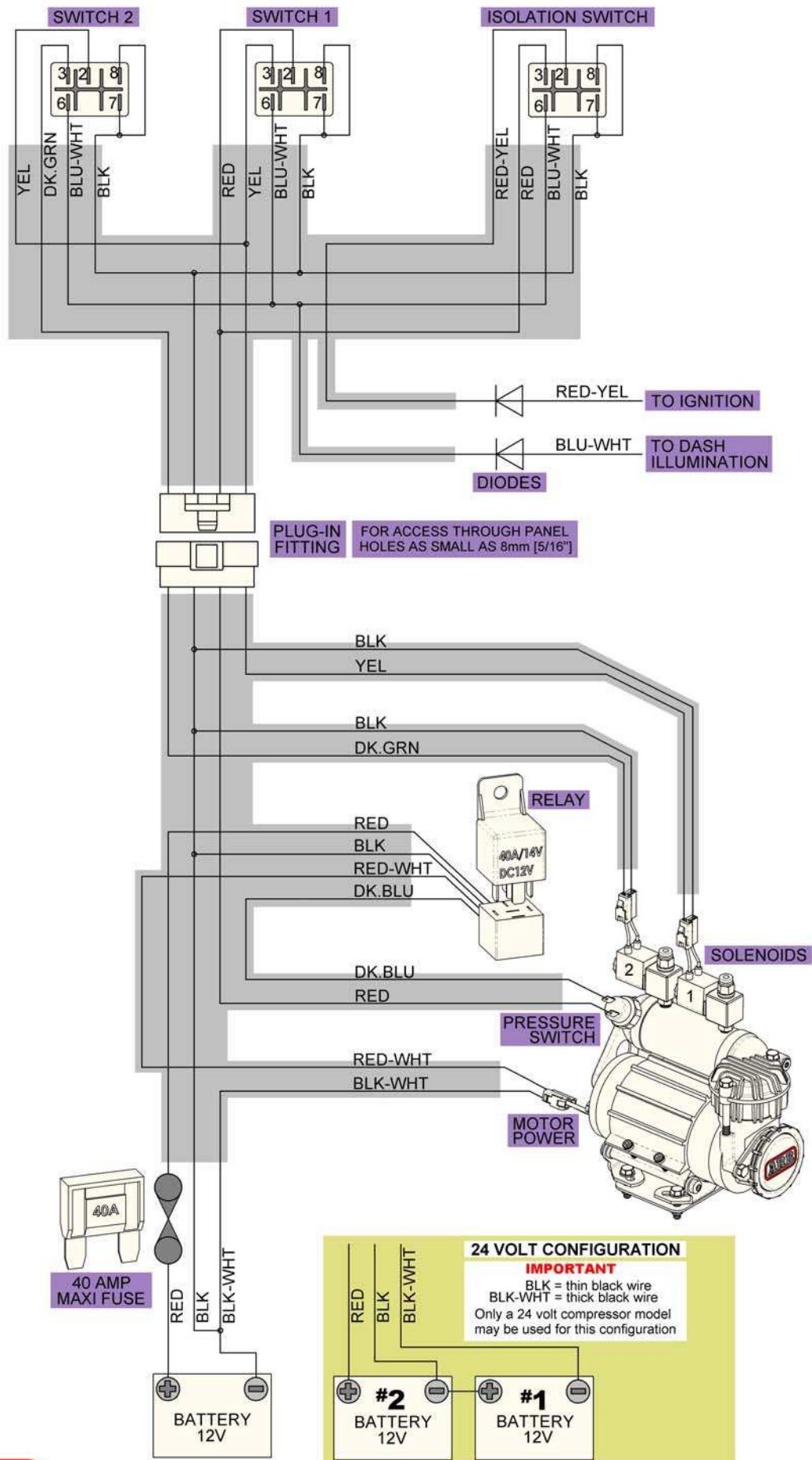
Kit Includes:

- 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



ARB AIR LOCKER *Air Operated Locking Differentials*

170102 Bulkhead Fitting Kit, 5mm to 3/16"

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 3/16")	170604	
06	1	BULKHEAD BODY	170605	
07	1	FERRULE (3/16")	170606	3
08	1	INNER COMPRESSION NUT (3/16")	170607	
09	-	AIR LINE (3/16" STEEL)	N/A	2
*	1	BULKHEAD JUNCTION SUPPORT SPRING	170701	

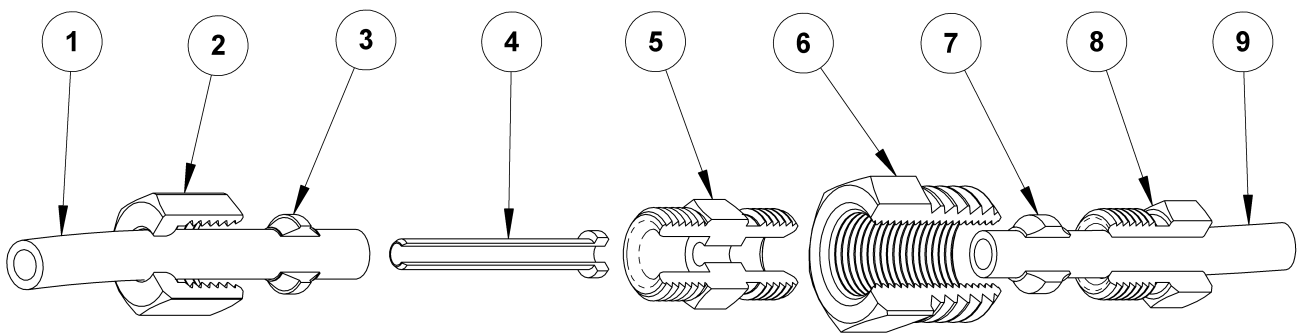
Specs:

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).

* Not illustrated in exploded view.



170103 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	

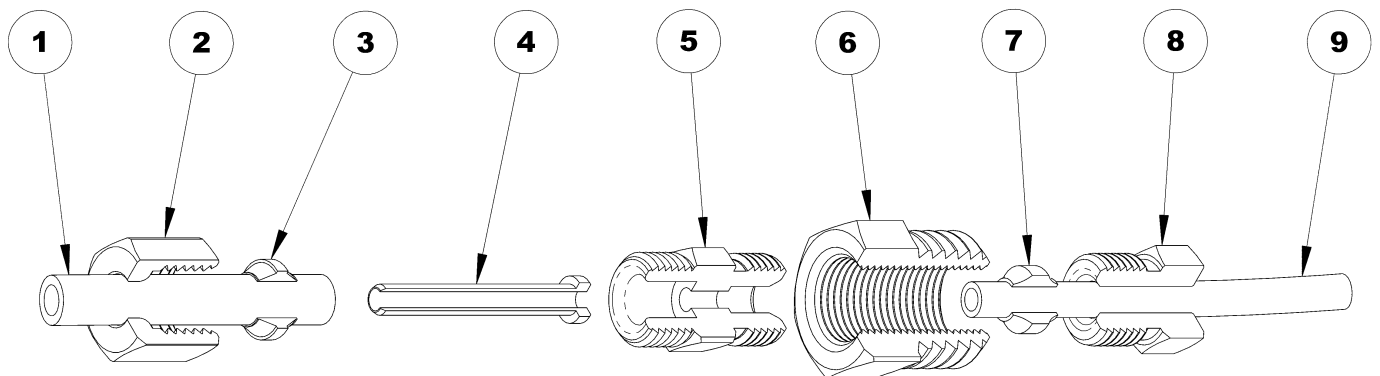
Specs:

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).

* Not illustrated in exploded view.



ARB AIR LOCKER *Air Operated Locking Differentials*

170105 Bulkhead Fitting Kit, 3.5mm O-ring 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	

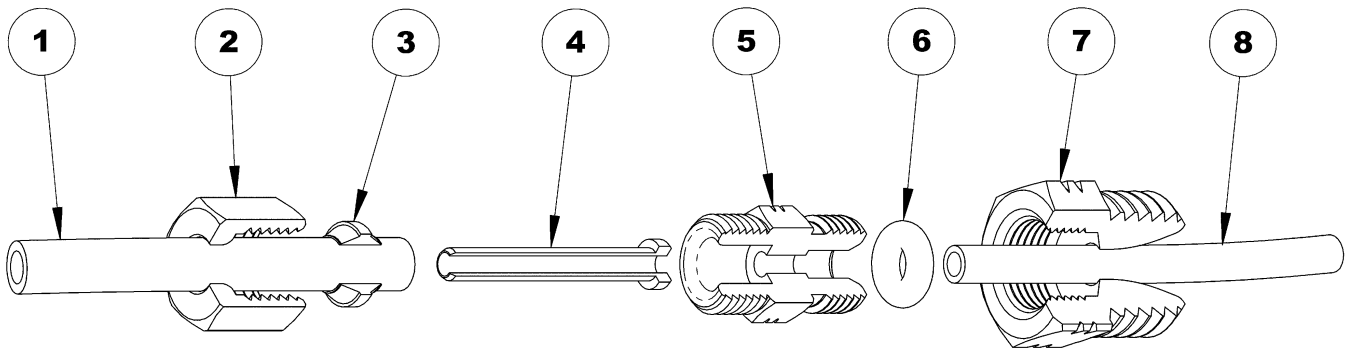
* Not illustrated in exploded view.

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.
- 3 Air line is from seal housing.



170108 Bulkhead Fitting Kit, 5 to 3.5mm

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
08	1	INNER COMPRESSION NUT (3.5mm)	170613	
09	-	AIR LINE (3.5mm COPPER)	N/A	2
*	1	BULKHEAD JUNCTION SUPPORT SPRING	170701	

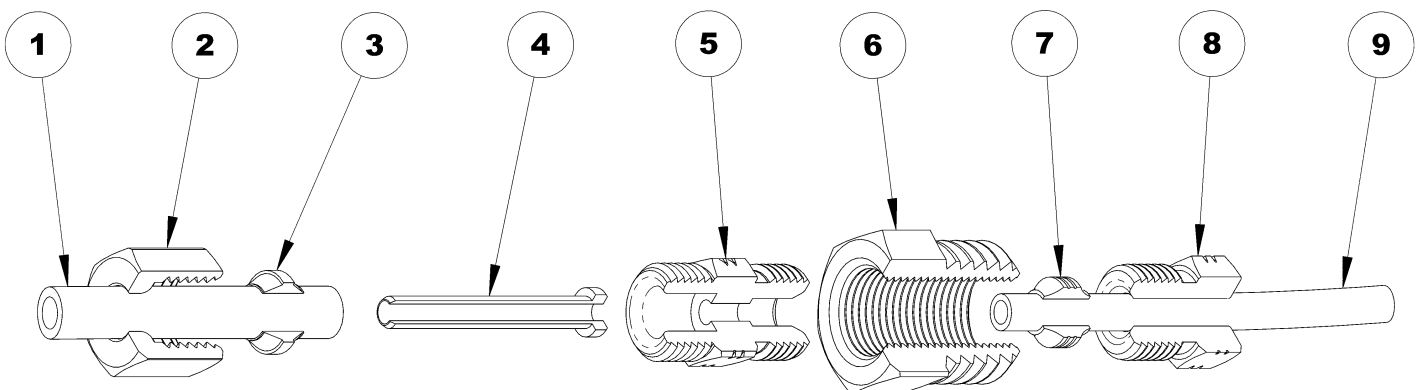
* Not illustrated in exploded view.

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).



ARB AIR LOCKER *Air Operated Locking Differentials*

170109 Air Junction Kit, 3.5mm to 3.5mm

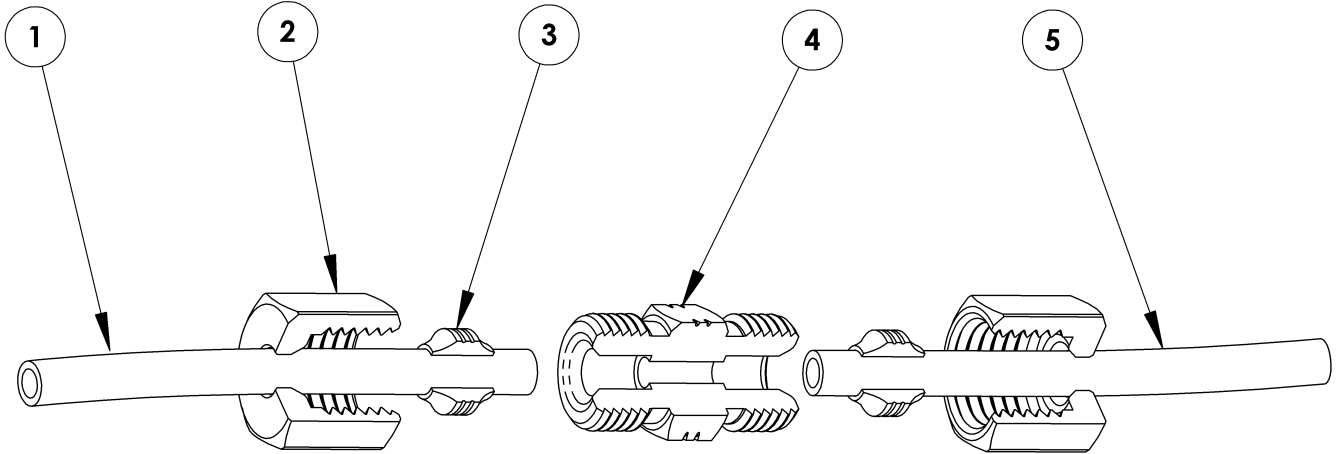
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	AIR LINE (3.5mm COPPER, 250mm LONG)	170406	
02	2	OUTER COMPRESSION NUT (3.5mm)	170612	
03	2	FERRULE (3.5mm)	170614	
04	1	CENTRAL COMPRESSION NUT (3.5 to 3.5mm)	170616	
05	-	EXISTING AIR LINE (3.5mm COPPER)	N/A	1

Specs:

Tube Size 3.5mm

Notes:

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



ASK001 Air Line Service Kit, 5mm

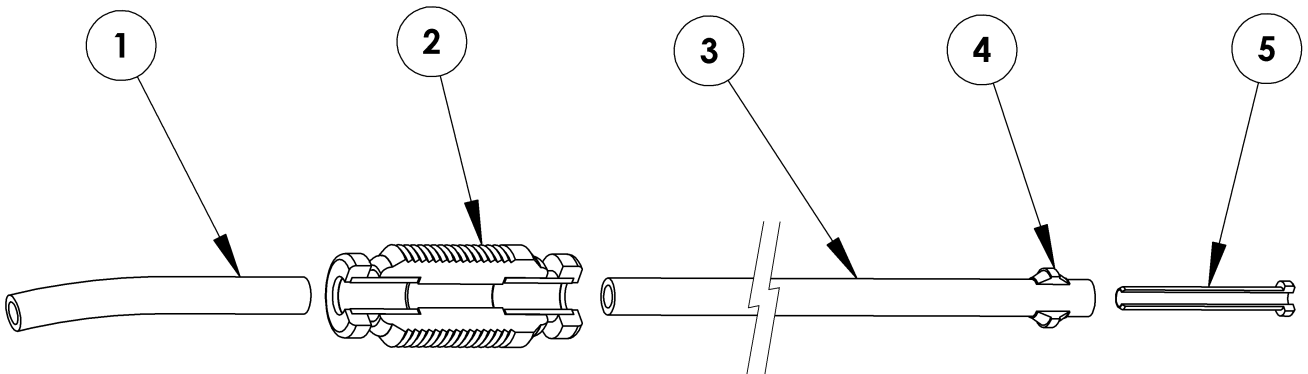
ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	-	EXISTING AIR LINE (5mm NYLON)	N/A	1
02	1	CONNECTOR (5mm)	170206	
03	1	AIR LINE (5mm DIA X 2m LONG)	170302	
04	1	FERRULE (5mm)	170603	
05	1	AIR LINE SUPPORT TUBE (5mm)	170601	

Specs:

Tube Size 5mm

Notes:

- 1 Only one 2 meter length of air line is supplied.



ARB AIR LOCKER *Air Operated Locking Differentials*

HDAL 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:

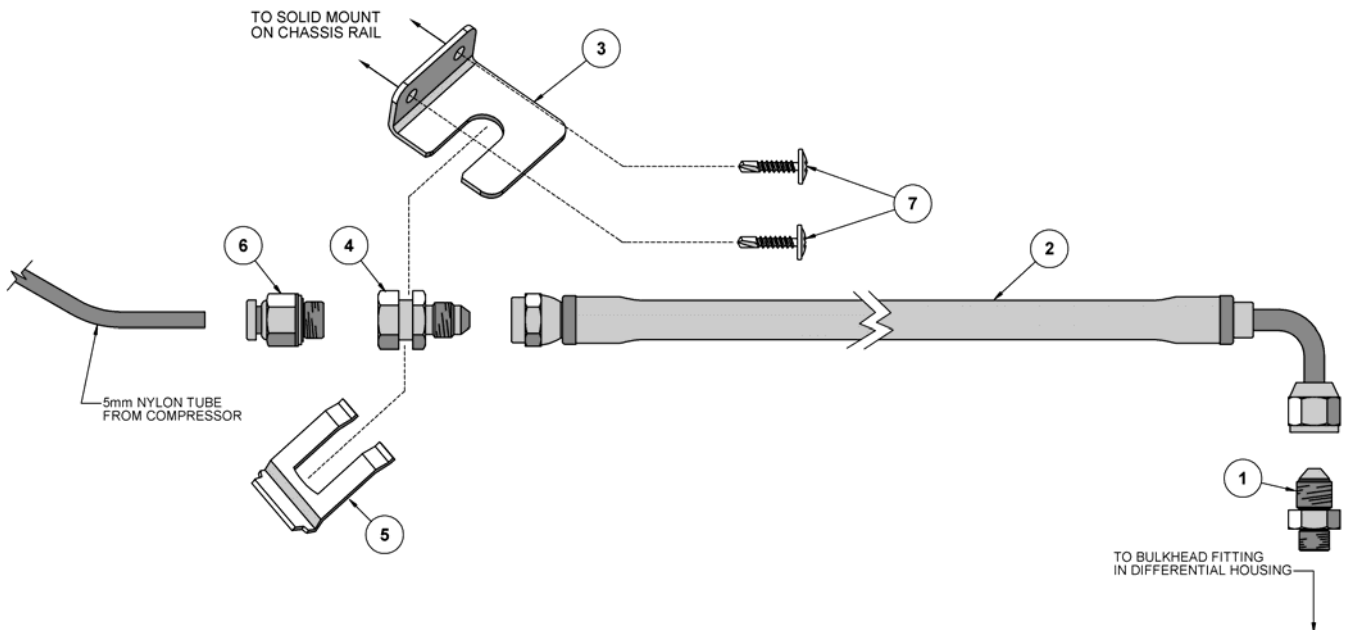
Push-in Size 5mm
 Bulkhead Thread 3/8-24 UNF
 Hose Length 1.2 meters [47.25"]

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.



HDAL



290311 RD Compressor Piston Service Kit

ITEM #	QTY	DESCRIPTION	PART #	NOTES
08	1	BARREL	290309	
14	1	PISTON/CONROD ASSEMBLY	290310	
*	1	SHIM 0.2mm [0.008"]	150501	1
*	1	SHIM 0.4mm [0.016"]	150502	1
07	1	HEAD O-RING	160214	
*	2	PISTON RING	290302	
*	1	BACKING O-RING	160213	
*	1	INSTALLATION GUIDE	210508	

Specs:

Suits RDCKA, RDCKA24, RDCP, RDCPA

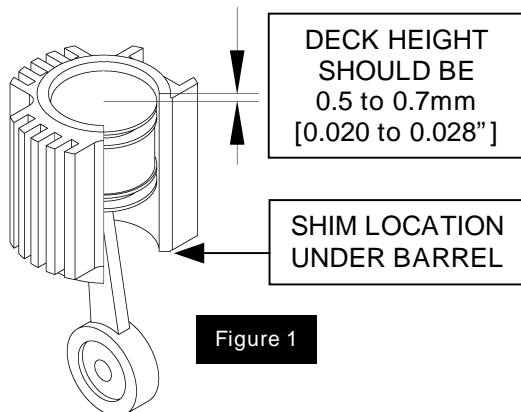
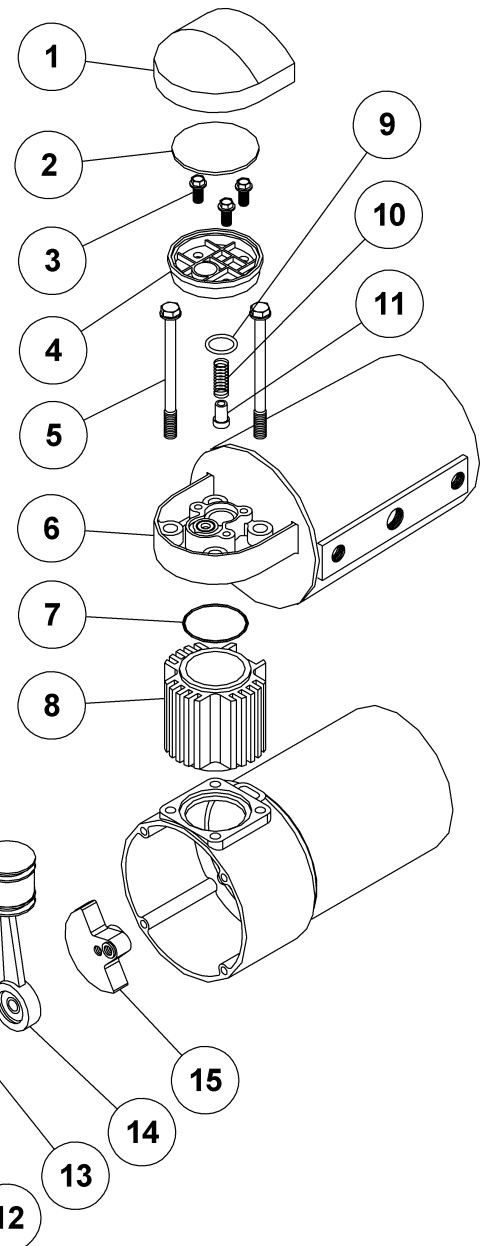
Notes:

- 1 Shims required only for deck height adjustment.

* *Not illustrated in exploded view.*

INSTALLATION:

1. 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 must also be used in the rebuild.
5. Remove the barrel (08), piston and conrod as an assembly and discard.
6. Clean the cap screw (13) threads and apply Loctite 272 as per tube instructions.
7. 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).
10. 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.
13. 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).
15. 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	

Specs:

Suits CKMA12, CKMA24, CKMP12

Notes:

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

* *Not illustrated in exploded view.*

PISTON REMOVAL:

1. Unscrew the air filter assembly. Remove air filter flange bolts (13), air filter flange (12) and O-ring (14).
2. Remove head bolts (01) and head assembly (02). On CKMA models the bolts securing the manifold support bracket will also need to be removed.
3. 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.
4. Unscrew the CAP SCREW (11) in an anti-clockwise direction and extract it along with the AXLE (10).
5. Lift the PISTON ASSEMBLY (09) from the compressor motor.
6. Discard the PISTON ASSEMBLY, BARREL, AXLE and CAP SCREW.

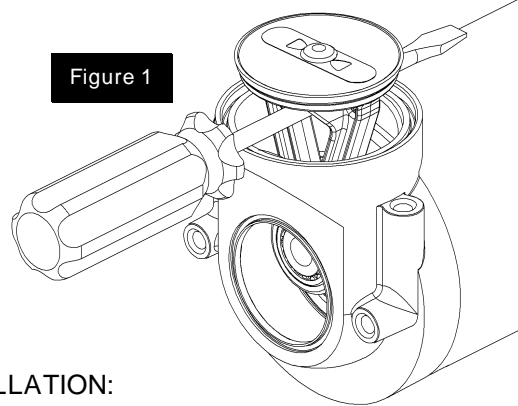


Figure 1

PISTON INSTALLATION:

7. 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.
10. 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.

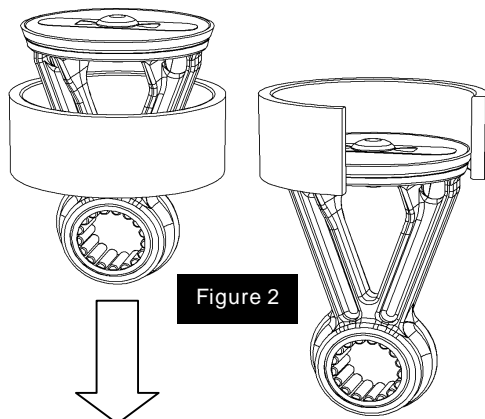
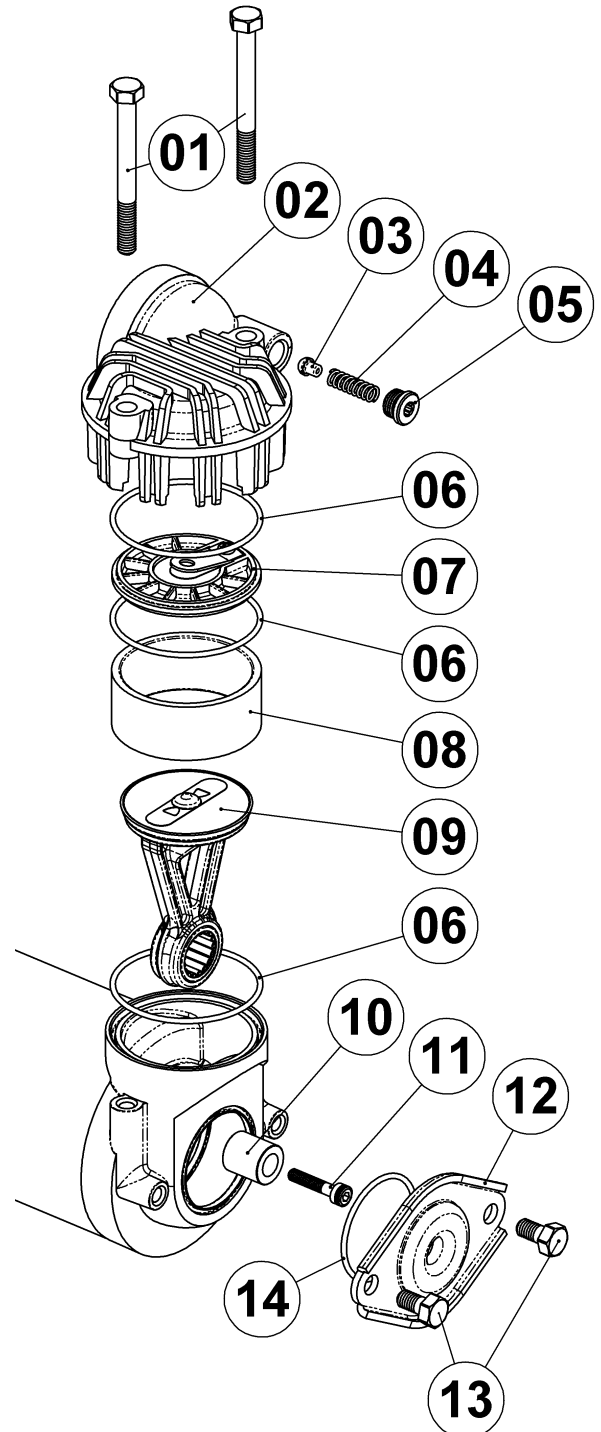


Figure 2



320302

ARB AIR LOCKER *Air Operated Locking Differentials*

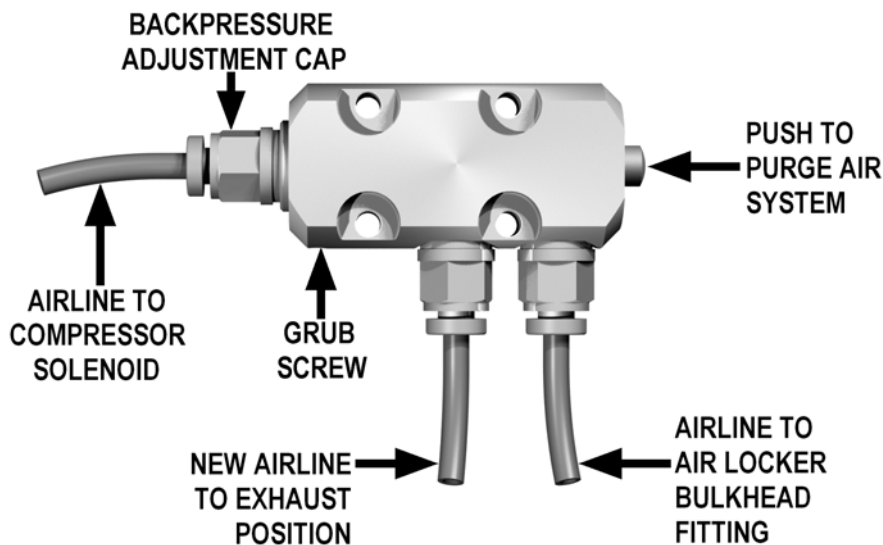
170110 Purge Valve Kit

ITEM #	QTY	DESCRIPTION	PART #	NOTES
1	1	PURGE VALVE ASSEMBLY	170110	
4	4	SCREW, BUT HEAD TEK, 32mm X 8G	6151319	
2	2	CABLE TIE	180302	
1	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 where 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 tapping 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.

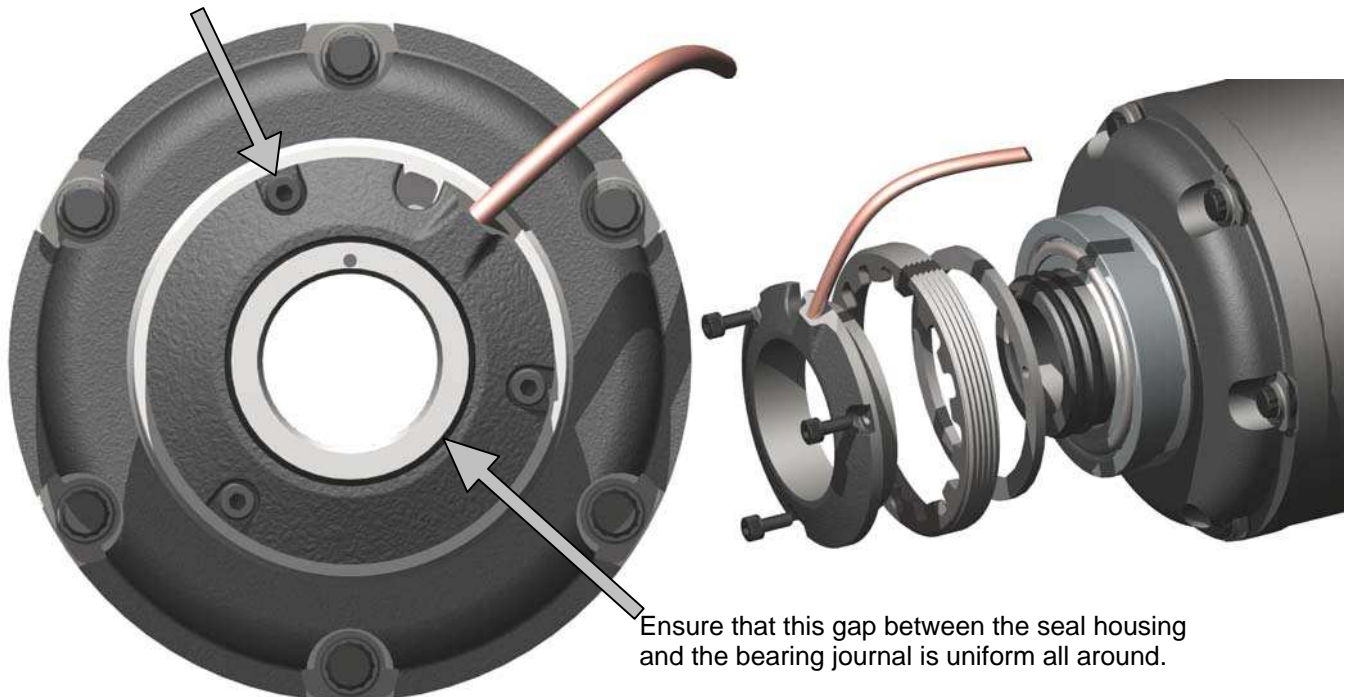


5.1 SCREW SECURED SEAL HOUSING SET-UP

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].



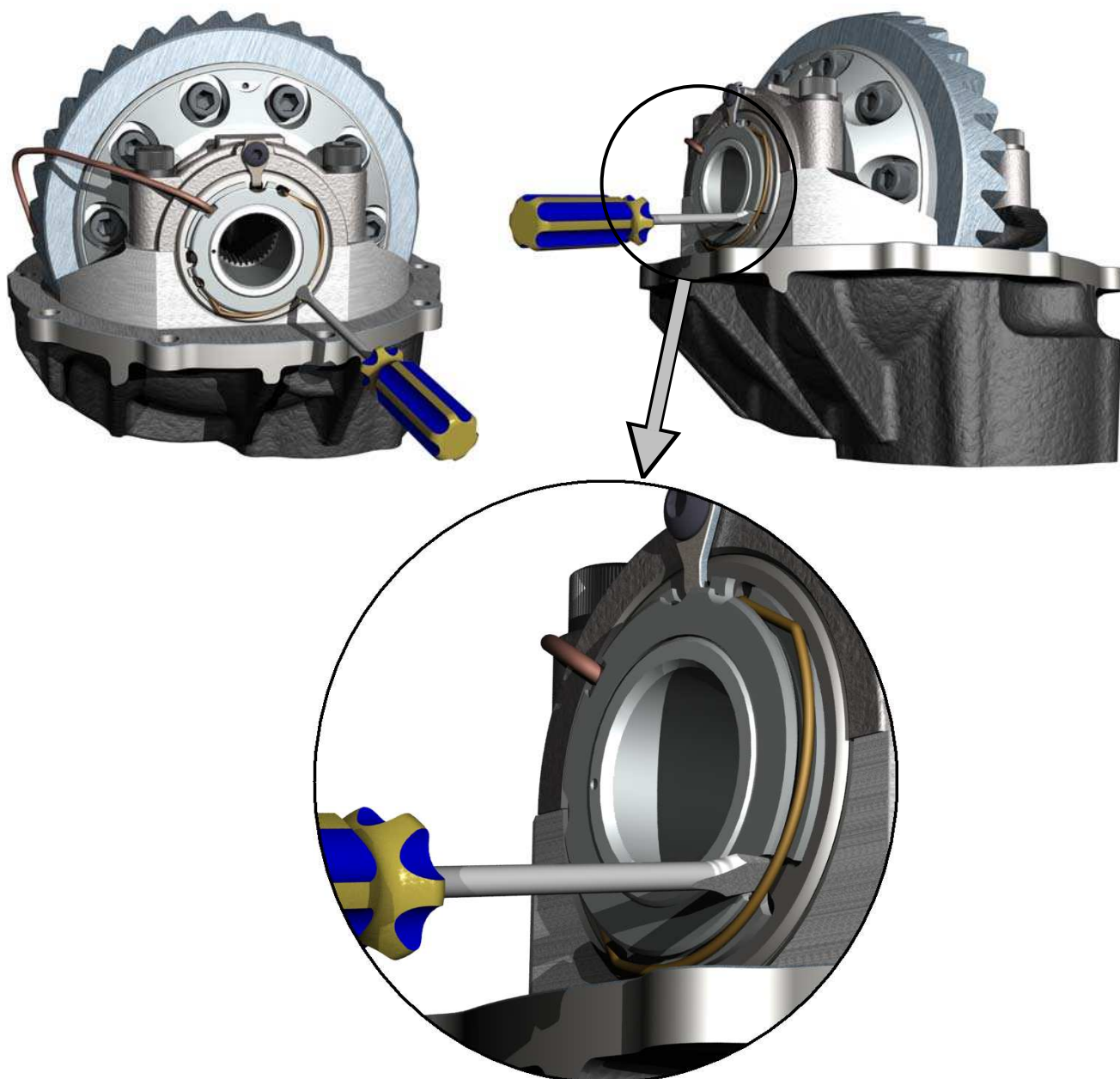
The following installation procedure is recommended to ensure that the seal housing is concentric to the bearing journal and that the seals are airtight:

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

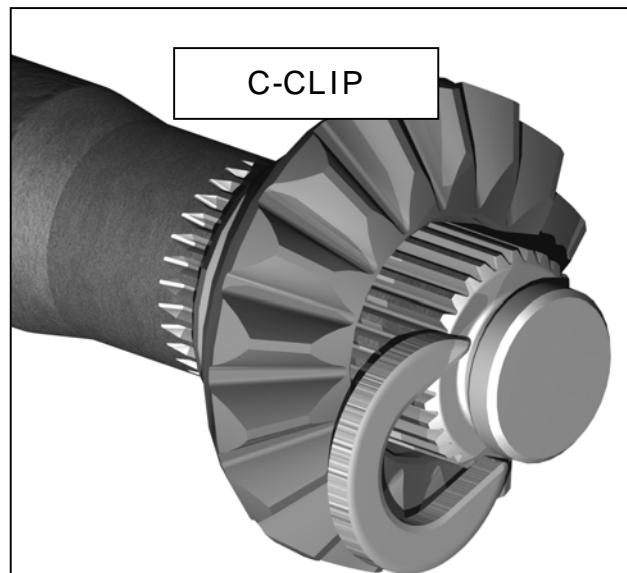
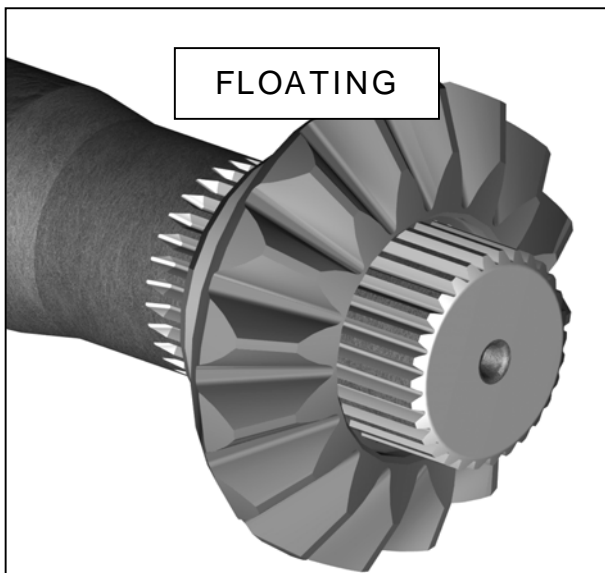
9. Check that the seal housing is now secured from rotating and that it is sitting flat against the adjuster nut.
10. Check that the toe of the adjuster nut locking tab is not in contact with the seal housing as this would prevent the seal housing from floating correctly. Bend the toe of the tab upward 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.

5.3 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).

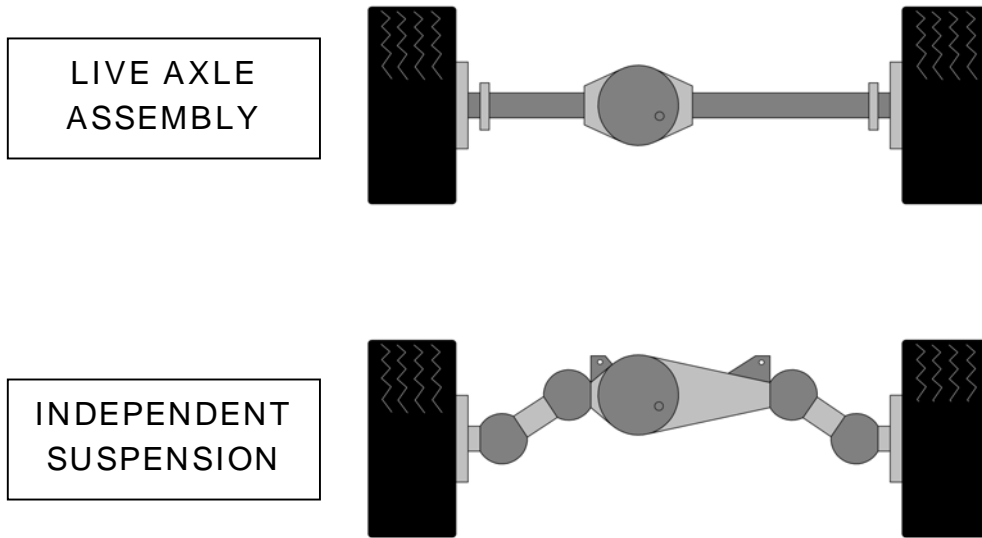


5.3

AXLE IDENTIFICATION

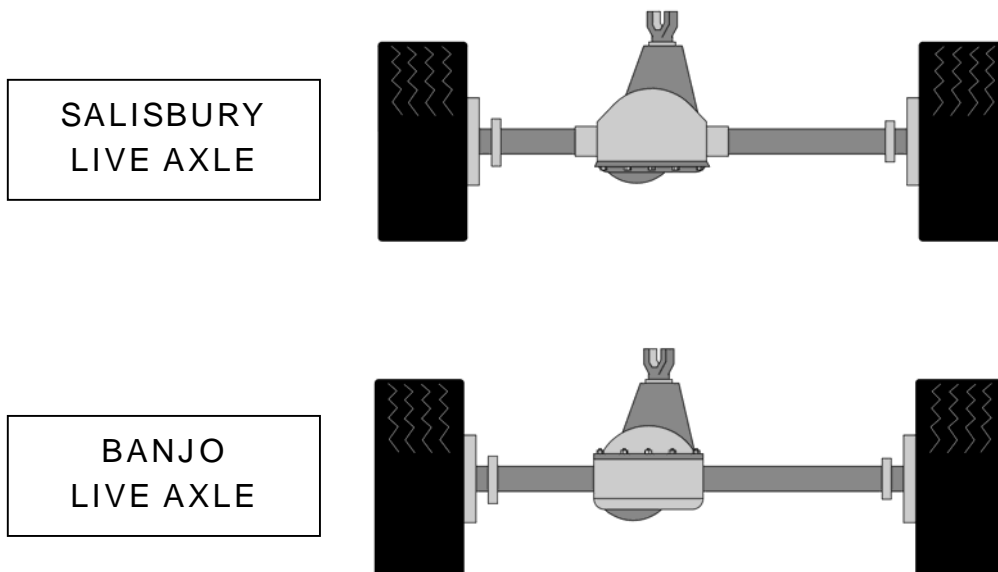
LIVE AXLE ASSEMBLIES vs. INDEPENDENT SUSPENSION (IFS & IRS)

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.



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.



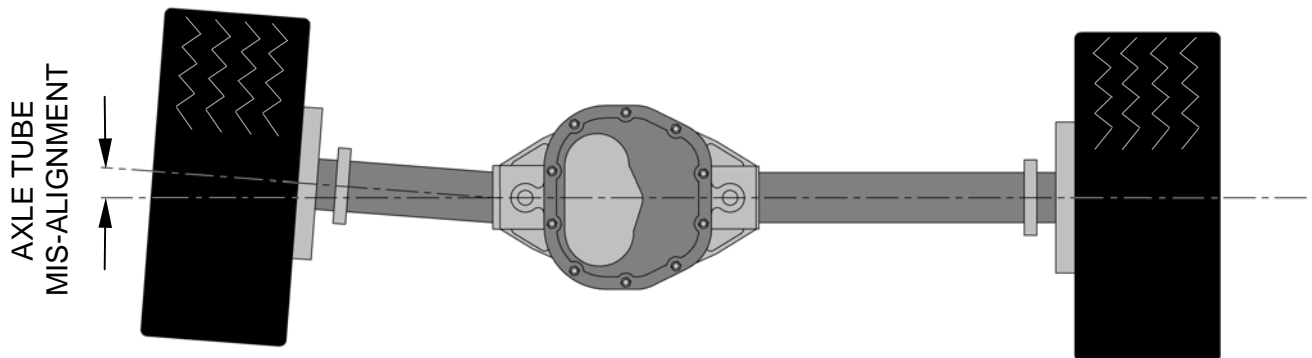
5.5

INSPECTION FOR BENT AXLES

Collision damage or heavy off-road 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.



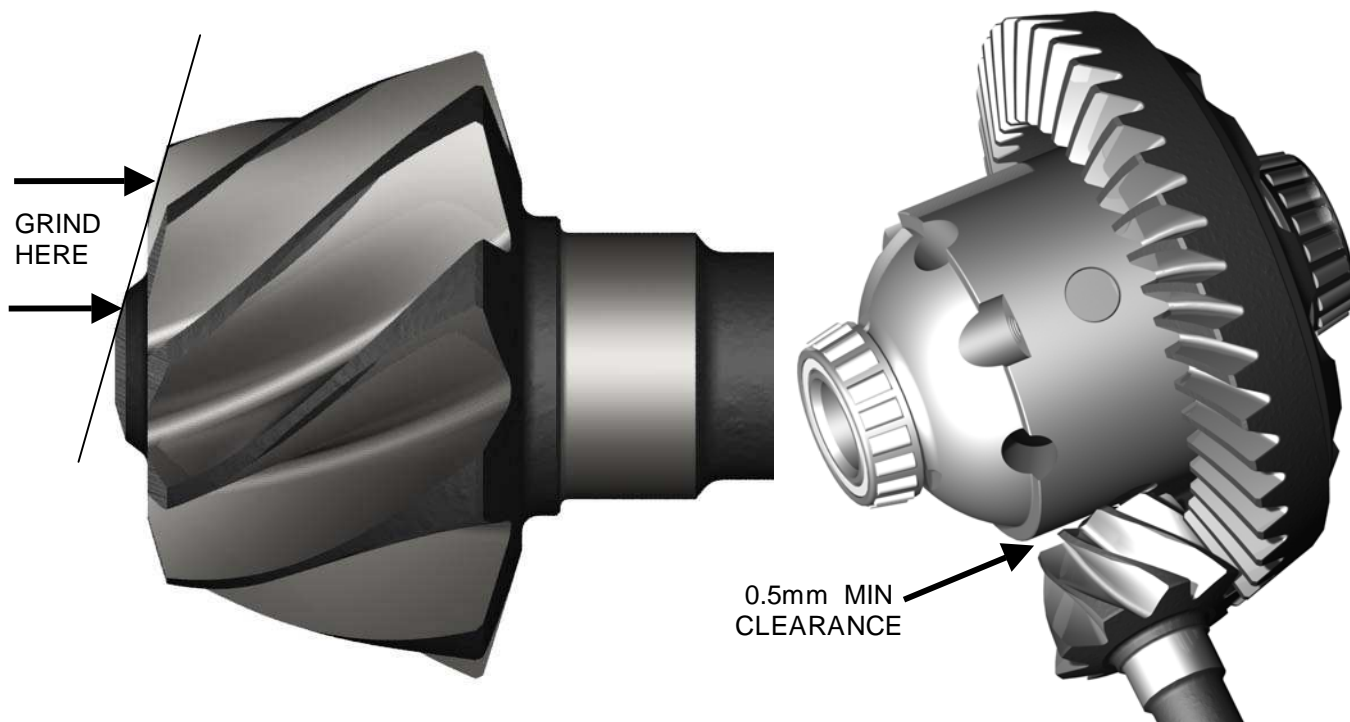
5.6 RING & PINION GEAR MODIFICATIONS

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.

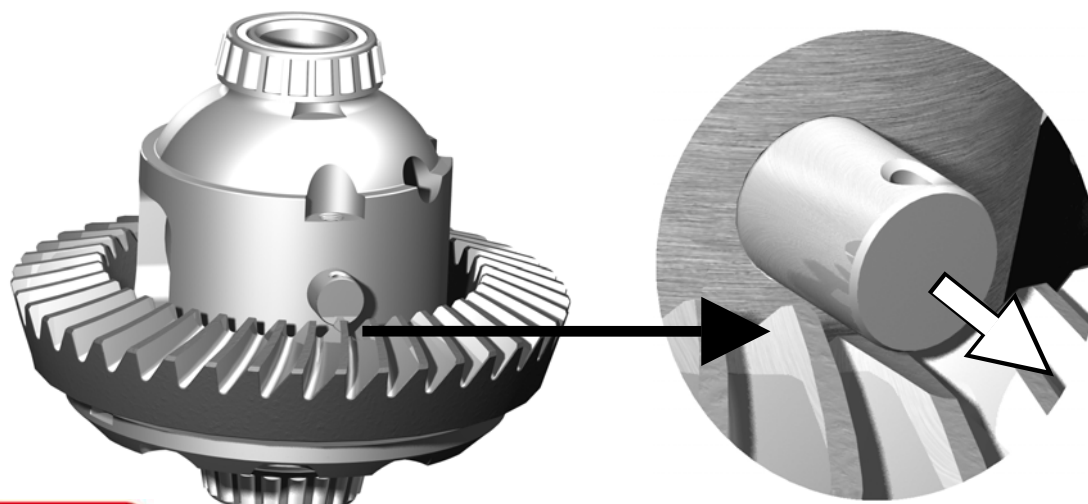
NOTE : If less than 0.5mm [0.020"] of clearance exists between the pinion gear and the Air Locker then contact could still be made when the assembly flexes under high torque.

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.



5.7

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:

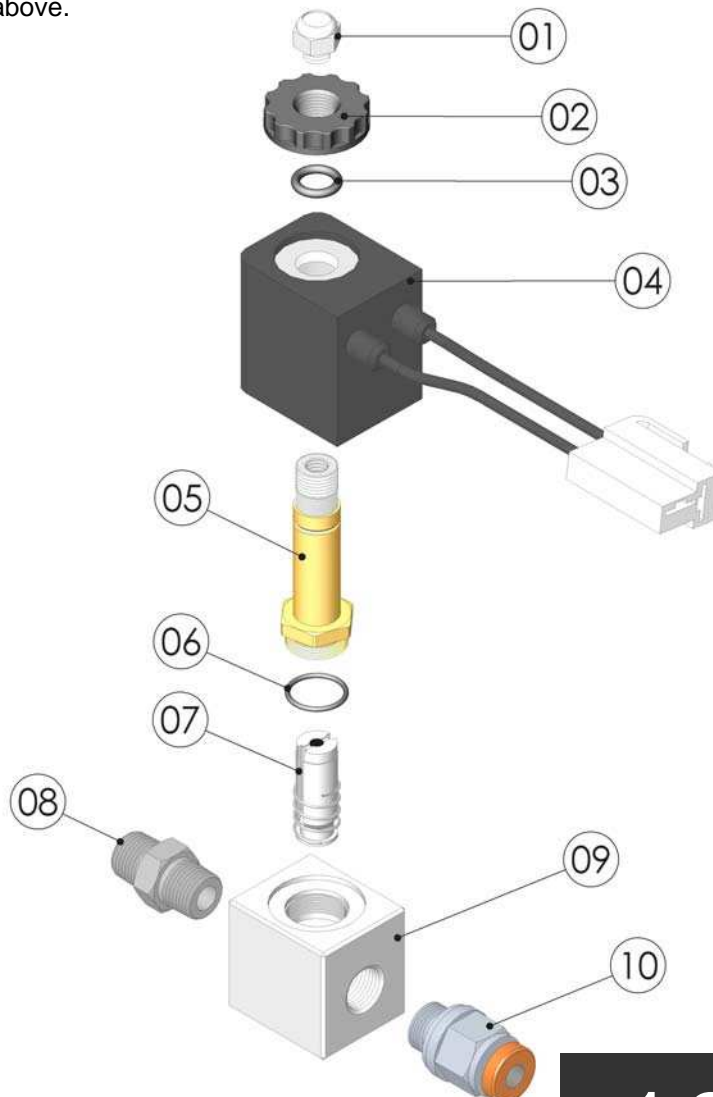
Pressure 0-10 Bar (145psi)
Voltage 12V/5W

Notes:

- 1 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 it can be easily serviced. The procedure for dismantling the solenoid valve is as follows:

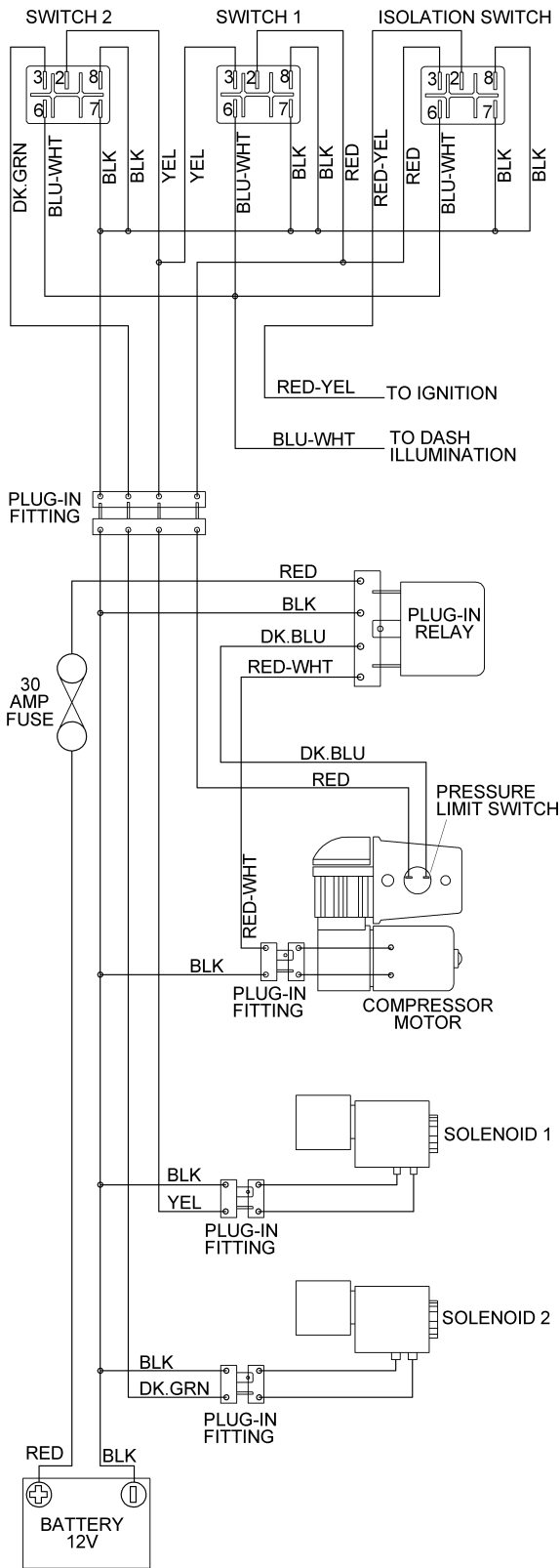
1. Unscrew and remove the Dust Filter (01), Top Nut (02), O-Ring (03) and Coil (04).
2. Unscrew the Valve Stem (05) from the Valve Body (09).
3. Remove the Plunger (07) from the Valve Stem.
4. The valve can now be cleaned and serviced, making sure the bottom of the plunger and its seat in the body are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



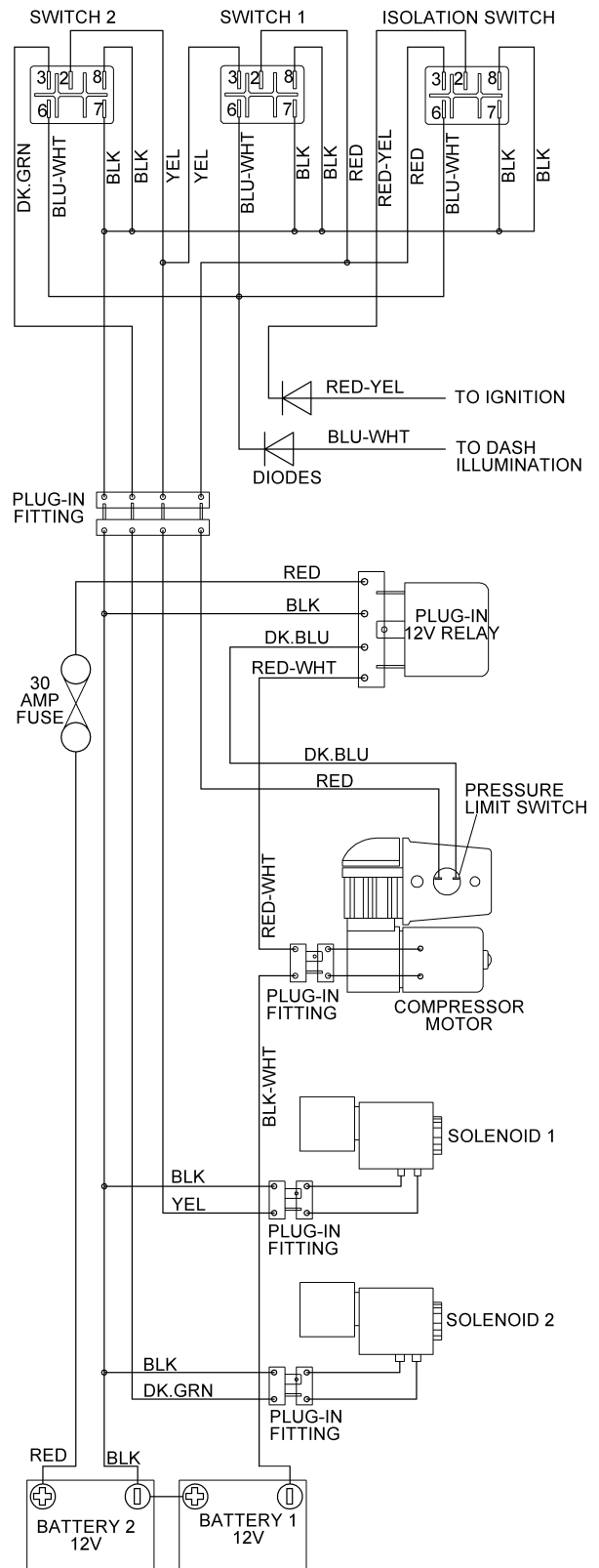
180103

5.8 COMPRESSOR WIRING DIAGRAMS

RDCKA 12V VEHICLE LOOM

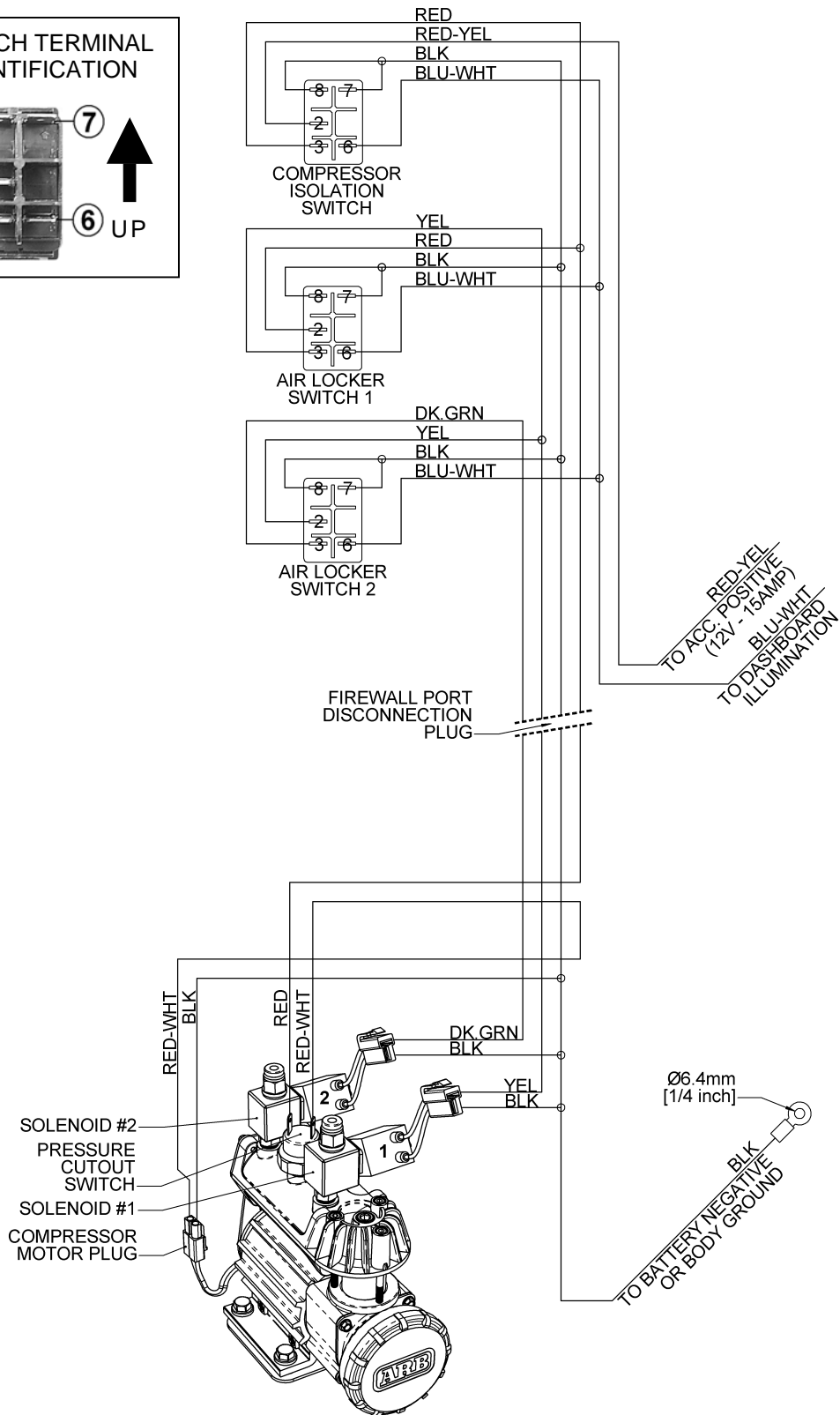
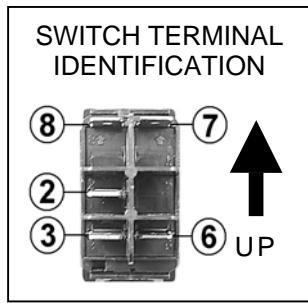


RDCKA24 24V VEHICLE LOOM



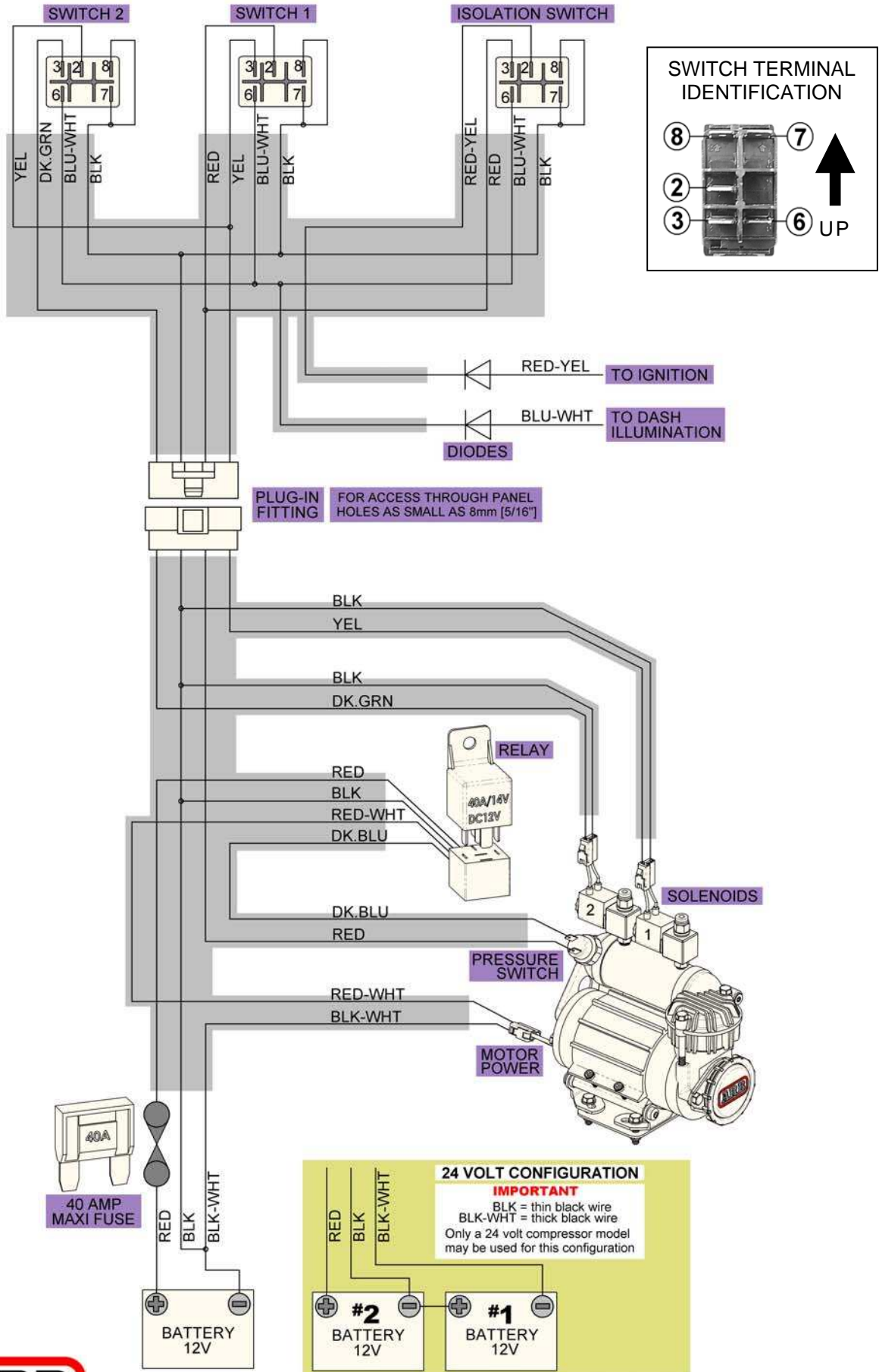
5.8 COMPRESSOR WIRING DIAGRAMS

CKSA12 12V-15A VEHICLE LOOM (180408)



5.8 COMPRESSOR WIRING DIAGRAMS

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



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.

2 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.

3 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.

4 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.

5 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.

6 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

7 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.

8 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.

9 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.

10 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.

11 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.

12 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.

13 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.

14 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 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.

2 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.

3 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 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.
 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.

6

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.

7

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.

8

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.

9

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.

10

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.

11

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

STEP #

12

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.

13

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?

YES Proceed to STEP 14.

NO Wiring fault between the relay and the compressor motor connector. Replace wiring.

14

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?

YES Intermittent wiring fault or internal compressor problem. Contact ARB.

NO Wiring fault in the ground wire between the battery [#1] and the compressor motor. Replace 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.

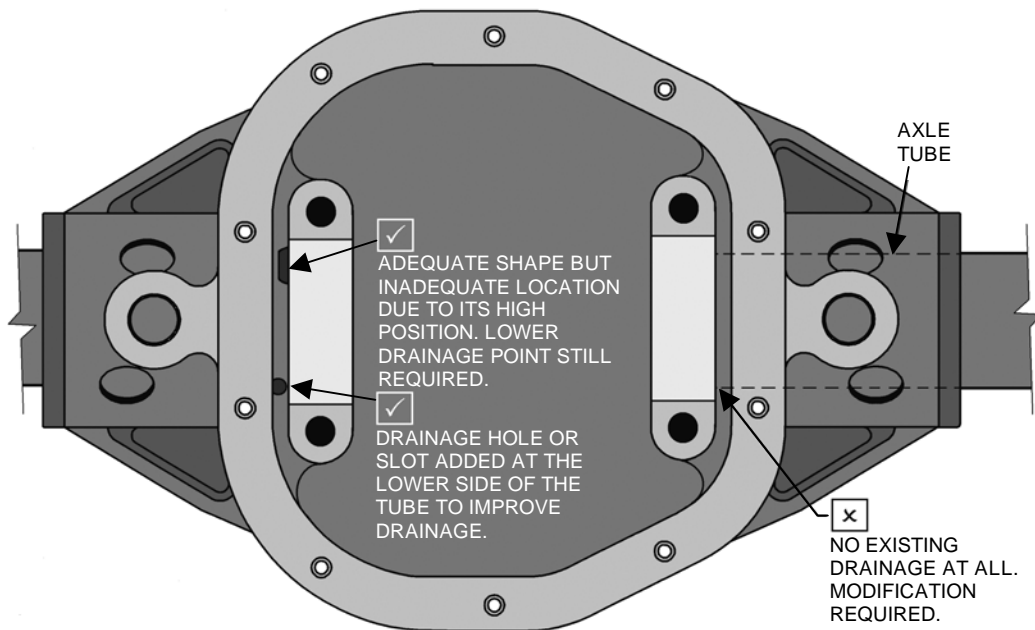
The model number of unpackaged/unidentified Air Lockers can be cross referenced by contacting ARB.

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).

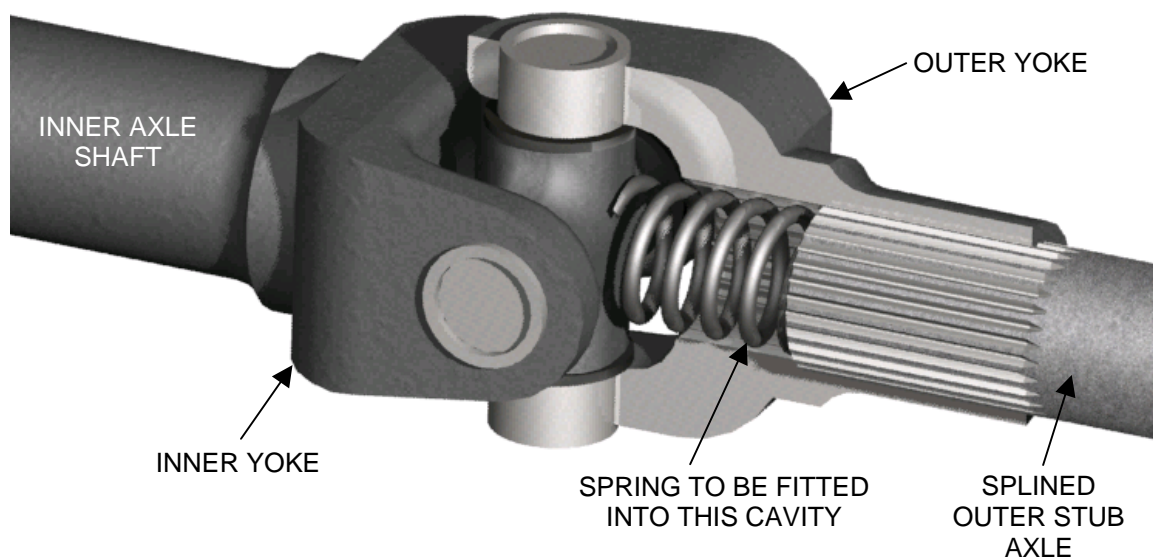
Note that before any modifications it is important to cover the differential housing cavity and the axle tube openings with a rag to protect them from metal filings. Afterwards, remove any sharp edges and thoroughly clean the housing.



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.

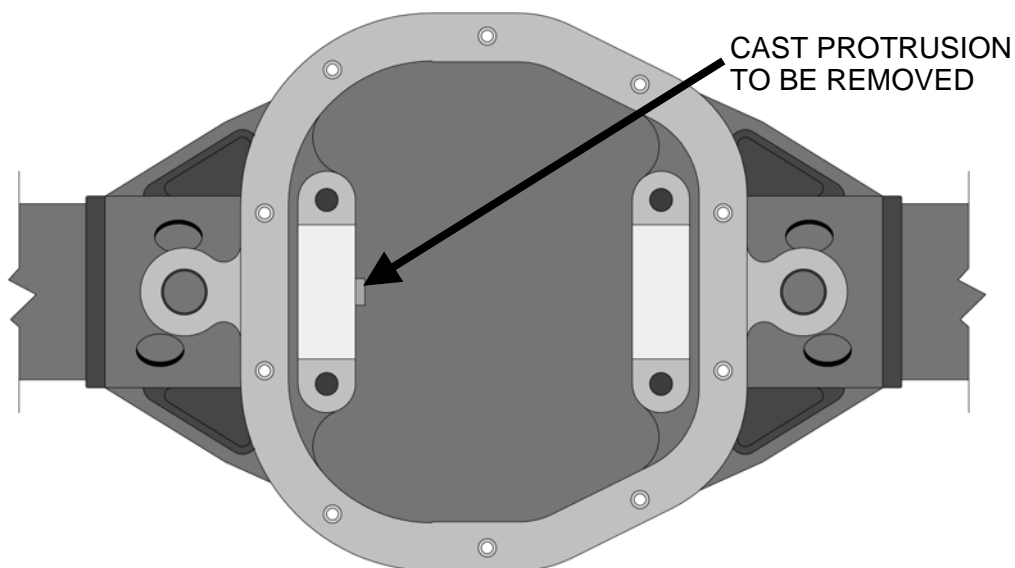


5.13 LAND ROVER SALISBURY HOUSING MODIFICATION

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.

Components to Convert an RD03 to an RD56

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:

- 1 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
<i>Normal/Typical Use:</i> highway and light to medium off road use between -12 and +100°C [10 to 212°F]	Shell Diff Oil (SAE 90) Mobil Mobilube GX90
<i>Heavy Off Road Use:</i> high horsepower/high torque use between -9 and + 100°C [16 to 212°F]	Shell Spirax HD 85W-140 Mobil Mobilube GX140
<i>High Temperature/Desert Use:</i> mainly off road use between -30 and +100°C [-22 to 212°F]	Shell Spirax S 80W-140 Mobil Mobilube SHC 80W-140
<i>Low Temperature/Winter Use:</i> mainly off road use between -48 and +100°C [-54 to 212°F]	Shell Spirax S 75W-90 Mobil Mobilube SHC 75W-90
To find other lubricants that are equivalent to the examples above, please contact your authorised ARB Air Locker 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 KIT SPECIFICATIONS

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"]
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"]

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"]

SHK005

PART #	QTY	DESCRIPTION	THICKNESS	OUTSIDE DIA.	INSIDE DIA
150337	2	SHIM	0.76mm [0.030"]	89.7 [3.53"]	74.2 [2.92"]
150338	2	SHIM	0.25mm [0.010"]	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	SHIM	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 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"]



6.3 ADJUSTER NUT SPECIFICATIONS

NOTE: This table is for identification purposes only and should not be used for manufacturing data.

PART #	DESCRIPTION	THREAD SIZE (major Ø)	THREAD PITCH
100101	ADJUSTER NUT, ANK001, ANK004	81.8mm	1.5mm
100102	ADJUSTER NUT, ANK002	82mm	2.0mm
100103	ADJUSTER NUT, ANK004	85mm	1.5mm
100104	ADJUSTER NUT, ANK006	3.35"	16TPI
100105	ADJUSTER NUT, ANK009	3 5/16"	16 TPI
100201	ADJUSTER NUT, ANK003, ANK005	75mm	1.5mm (ISO)
100301	ADJUSTER NUT, ANK003	3 1/16"	16TPI (Whitworth)
100501	ADJUSTER NUT, ANK007	102mm	2mm
100601	ADJUSTER NUT, ANK008	69.6mm	2mm
100703	ADJUSTER NUT, ANK010	2.950"	16TPI
100704	ADJUSTER NUT, ANK010	3.150"	16TPI

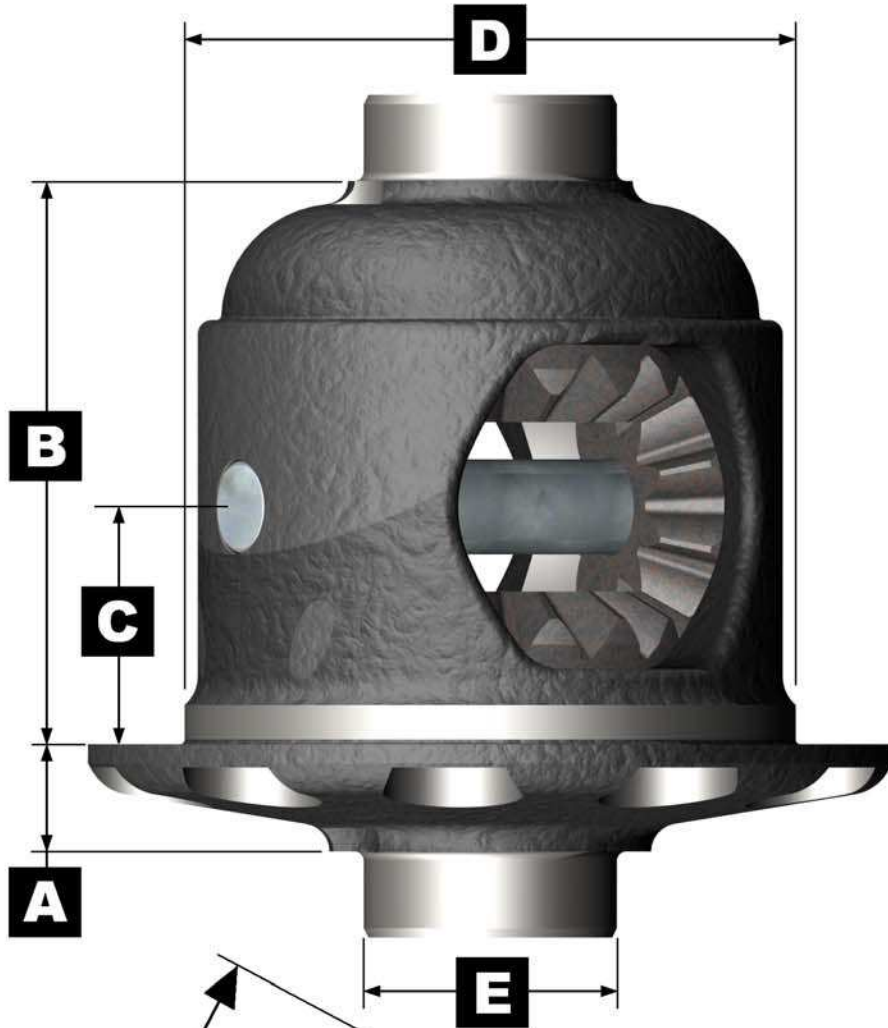
6.4 DIFFERENTIAL RATIO CALCULATOR

		NUMBER OF TEETH ON PINION GEAR														
		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
NUMBER OF TEETH ON RING GEAR	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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.



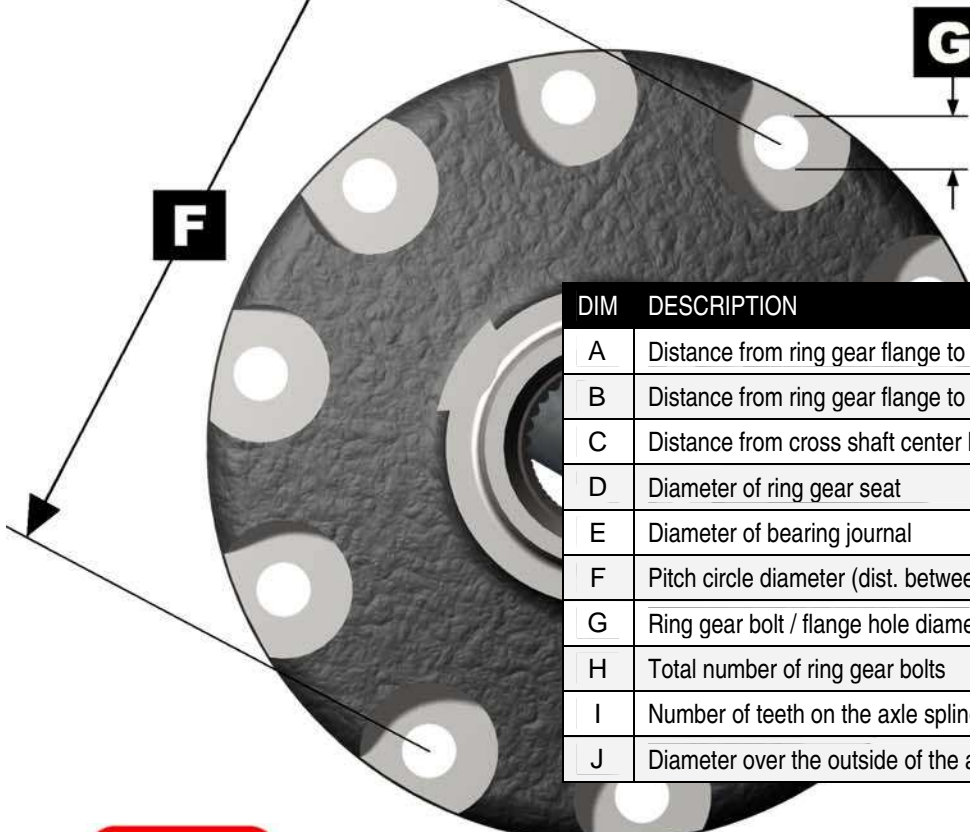
6.5 DIFFERENTIAL MEASUREMENT REFERENCE



This reference diagram has been provided for the purpose of communicating the key measurements of a standard differential.

If you experience any difficulty in the identification of a suitable Air Locker replacement for a vehicle you may be asked to perform any number of the measurements listed here in order to best determine the solution.

Please measure as accurately as possible.



DIM	DESCRIPTION	RESULT
A	Distance from ring gear flange to flange bearing seat	
B	Distance from ring gear flange to case bearing seat	
C	Distance from cross shaft center line to ring gear flange	
D	Diameter of ring gear seat	
E	Diameter of bearing journal	
F	Pitch circle diameter (dist. between 2 furthest bolt centers)	
G	Ring gear bolt / flange hole diameter	
H	Total number of ring gear bolts	
I	Number of teeth on the axle spline	
J	Diameter over the outside of the axle shaft spline	



6.6 PACKAGING WEIGHTS 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 mm	L x W x H [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]





4x4 AIR

TECHNICAL SPEC

ARB AIR COMPRESSOR RANGE		SUPPLY VOLTAGE	PERFORMANCE UNDER NO LOAD				PERFORMANCE UNDER LOAD				WEIGHT -compressor & included accessories		DUTY CYCLE % @ 22°C [72°F] (on time / off time)	SIZE mm []	
			CURRENT DRAW	AIR FLOW		CURRENT DRAW	AIR FLOW		Kgs	Lbs				HEIGHT	LENGTH
MODEL NUMBER	DESCRIPTION	@ 0KPa		@ 0PSI	@ 200KPa		@ 29PSI								
CKSA12	COMPACT ON-BOARD	12	5A	25.0L/m	0.88CFM	6.5A	13.4L/m	0.47CFM	2.4	5.3	35% 21/39	122mm [4.8"]	162mm [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"]	190mm [7.5"]		
CKMA24	HIGH VOL ON-BOARD	24	---	---	---	---	---	---	4.5	9.9	50% 30/30	142mm [5.6"]	190mm [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"]	440mm [17.3"]		
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"]	170mm [6.7"]		
RDCKA24	STD ON-BOARD	24	7A	---	---	12A	---	---	4.3	9.5	25% 15/45	176mm [6.9"]	170mm [6.7"]		
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"]	440mm [17.3"]		
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"]	440mm [17.3"]		

-All ARB Air Compressors are individually leak tested, pressure tested, current draw tested and flow tested under load at the factory before packaging.
 -ARB Air Compressor pressure switches are specially designed to suit the working pressure range of an ARB Air Locker air operated locking device.
 -All specifications here are average nominal values recorded during factory testing, and these values may vary as materials technology and construction evolves.

