

ARB AIR LOCKER *Air Operated Locking Differentials*

RD81 Ford 8.8",31 SPL

ITEM #	QTY	DESCRIPTION	PART #	NOTES
1	1	SEAL HOUSING ASSEMBLY	081501	
2	1	CLUTCH GEAR	050801	
3	3	PINION THRUST WASHER	151110	
4	3	PINION GEAR	SEE NOTE	3
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	SEE NOTE	3
16	1	SPIDER BLOCK	070902	
17	1	SIDE GEAR	SEE NOTE	3
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)	170111	
*	1	PUSH-IN FITTING (5mm to 1/8"BSPP)	170201	
*	1	SOLENOID VALVE (12V)	180103	
*	10	CABLE TIE	180301	
*	1	NIPPLE (1/8" to 1/8" BSPT)	170501	
*	1	SWITCH	180209	
*	1	SWITCH COVER (REAR)	180211	
*	1	BUMPER STICKER	210102	
*	1	WARNING STICKER	210101	
*	1	OPERATING & SERVICE MANUAL	210200	
*	1	INSTALLATION GUIDE	210281	

Specs:

Axle Spline	31 tooth, Ø33.5mm [1.32"]
Ratio Supported	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.

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

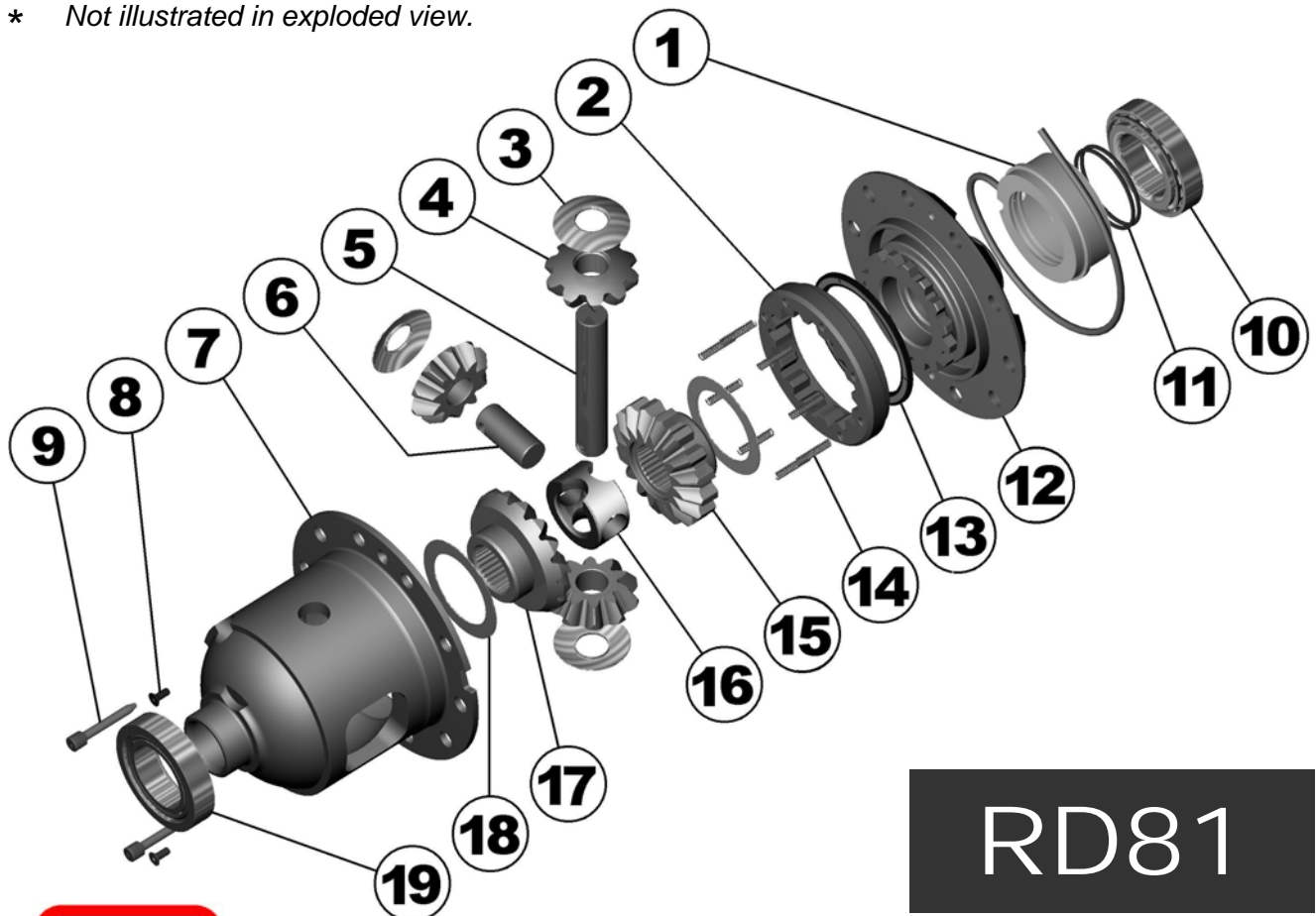
For the 28 spline model see RD82 ([Section 2.82](#)).

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](#)).
- Available only as complete 5 gear set #728H011C

* Not illustrated in exploded view.



RD81

