

# ARB AIR LOCKER *Air Operated Locking Differentials*

## RD83 GM 10 Bolt, 8.5", 28 SPL

### Specs:

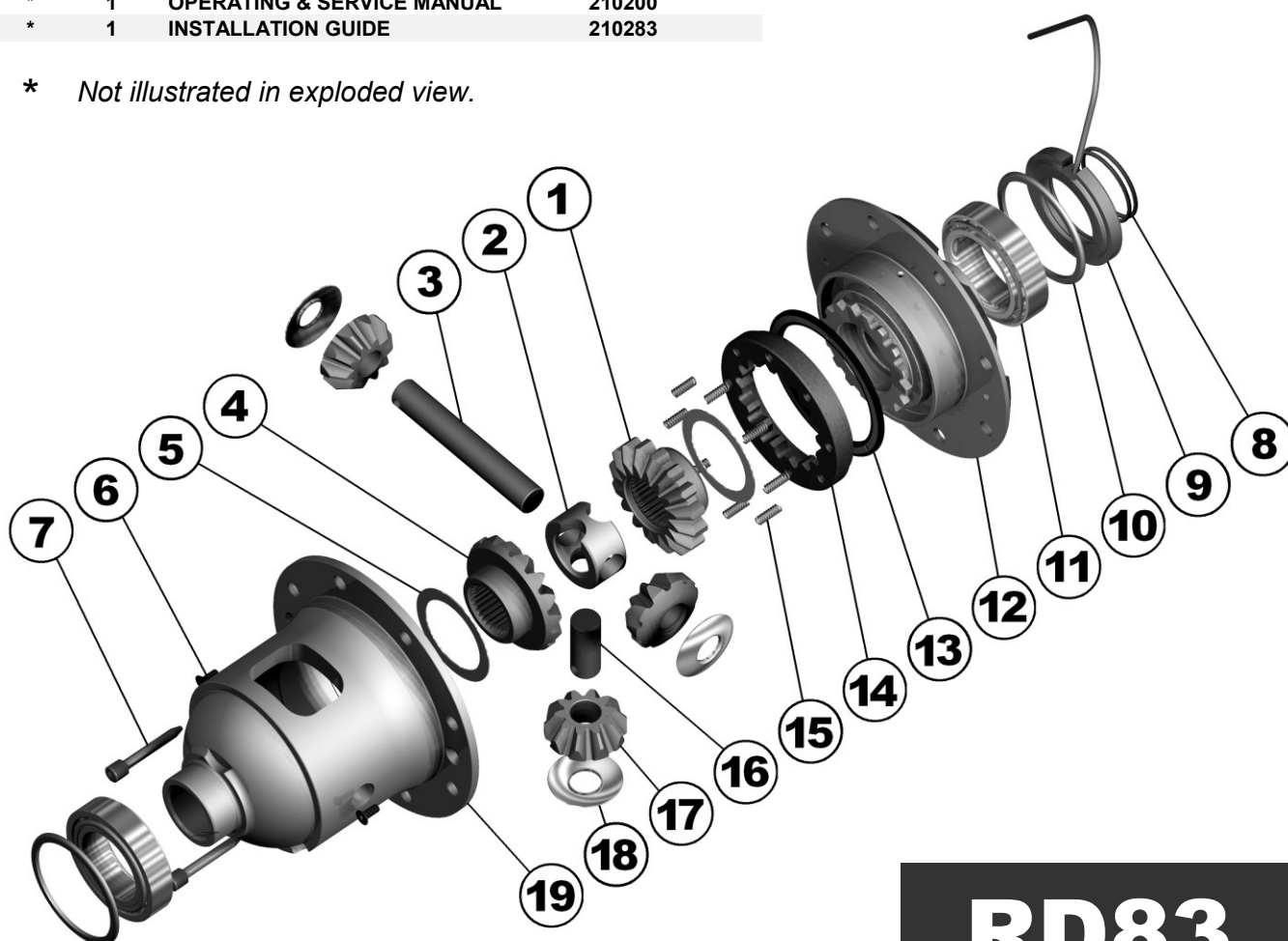
|                    |                              |
|--------------------|------------------------------|
| Axle Spline        | 28 tooth, Ø30.5mm [1.20"]    |
| Ratio Supported    | 2.73:1 & up                  |
| Ring Gear ID       | 127.0mm [5.00"]              |
| Ring Gear OD       | 216mm [8.5"] & 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:

- For replacement O-rings use only BS133 Viton 75.
- 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](#)).
- Available only as complete 5 gear set #728H041C

| ITEM # | QTY | DESCRIPTION                        | PART #   | NOTES |
|--------|-----|------------------------------------|----------|-------|
| 1      | 1   | SPLINED SIDE GEAR                  | SEE NOTE | 3     |
| 2      | 1   | SPIDER BLOCK                       | 070902   |       |
| 3      | 1   | LONG CROSS SHAFT                   | 060204   |       |
| 4      | 1   | SIDE GEAR                          | SEE NOTE | 3     |
| 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   |       |
| *      | 1   | MASTER SHIM                        | 150325   |       |
| 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                        | SEE NOTE | 3     |
| 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) | 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                 | 210283   |       |

\* Not illustrated in exploded view.



# RD83

