

# TERAFLEX

## INSTALLATION GUIDE

## Installation Guide for the Low300 low-range gear kit for the Dana 300 transfer case

Jeep Dana 300      **Part #002123000**  
Scout Dana 300    **Part #002103000**  
Scout w/Auto  
& Dana 300      **Part #002103800**

*Scout owners: Scout owners can purchase Part #002103000 for 1980 Scouts (manual transmissions). Part #002103800 is designed for automatic transmissions. The Scout kit requires some internal case grinding.*

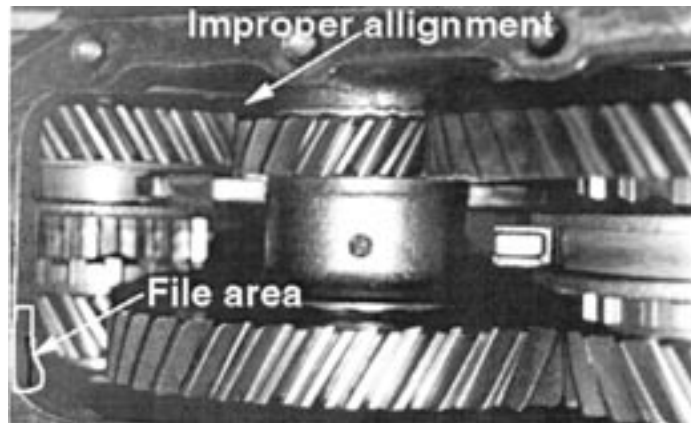


### Installation Notes

Please follow the Dana 300 rebuild instructions in the Jeep Service Manual, **EXCEPT** make the following change:  
Install shift rail, item #11, before installing the intermediate gear.

### Gear Alignment

Pay careful attention to the rear output shaft spacer. With the #53 spacer gone, the gears misalign by .180" or about 25% of the tooth surface area. See illustration. We have seen this situation on many stock rebuild jobs. It is a common mistake. Don't leave the spacer out.



### Case Filing/ Grinding

Because of the large intermediate gear, the assembly of the transfer case is more sequential than the stock case. We have found that by removing a small amount of the case it allows the intermediate gear to be put in independent of other gears. The illustration should help. A flat file works good for this job. You should not need to remove any of the gasket surface area.

### Gear Noise

To help shock load, Tera Manufacturing has redesigned the gear set to minimize gear backlash. This may cause some gear noise. After running the gears, the noise, if any, will decrease. To further improve the performance of the Tera Low300 gear set, we have included replacement gears #300-421E for the stock front and rear sliding gears. (Be sure to install both gears.)

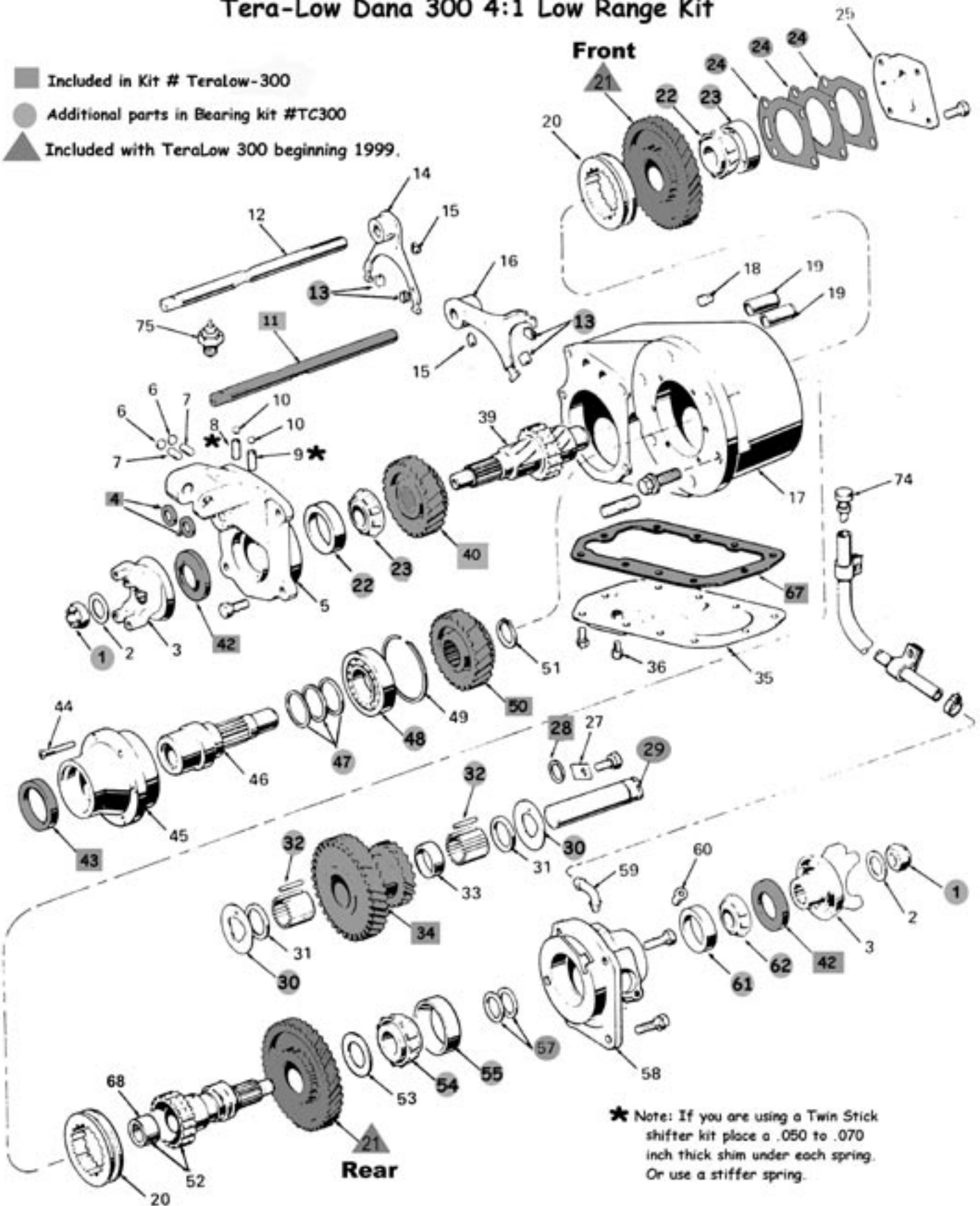
### Towing Applications

When flat towing your vehicle, we recommend putting your front hubs in the free position and disconnecting the rear driveline at the differential. Failure to do so will damage your TeraLow transfer case.

**Tera Manufacturing, Inc.**  
5251 South Commerce Dr.  
Murray, Utah 84107  
Phone/801.288.2585  
Fax/801.713.2313  
[www.teraflex.biz](http://www.teraflex.biz)

# Tera-Low Dana 300 4:1 Low Range Kit

- Included in Kit # TeraLow-300
- Additional parts in Bearing kit #TC300
- ▲ Included with TeraLow 300 beginning 1999.





## 300 Dana Spicer TRANSFER CASE with Tera-Low Gear kit

#	Description	Qty	Jeep Part #	Brg. #
1	NUT, Output Shaft(Front & rear)	2	1791575	
2	WASHER, Output Shaft (Front & Rear)	2	J4004913	
3	YOKE (Front & Rear) Use with straps (With U-bolts use J8130288)	1	J8131656	
4	<b>SEAL, Shift Rod Oil</b>	<b>2</b>	<b>J8131674</b>	
5	CAP. Front Output Bearing	1	J8131671	
6	PLUG Interlock	2	J8131677	
7	INTERLOCK	2	JA000965	
8	SPRING, Shift Rod Poppet (Front)	1	JA000966	
9	SPRING, Shift Rod Poppet (Rear)	1	J8131675	
10	BALL, Shift Rod	2	S0453593	
11	<b>ROD, Shift (Rear)</b>	<b>1</b>	<b>300-421D</b>	
12	ROD, Shift Front)	1	J8131673	
13	CLIP, Shift Fork	4	J8131670	
14	<i>FORK, Shift (Front)</i>	<i>1</i>	<i>J8131665</i>	
15	SCREW, Shift Fork	2	J0935727	
16	<i>FORK, Shift (Rear)</i>	<i>1</i>	<i>J8131666</i>	
17	<i>CASE, Transfer</i>	<i>1</i>	<i>J8133466</i>	
18	PLUG, Fill use 1/2" pipe plug	1		
19	THIMBLE, Shift Fork Rod	2	J0934281	
20	<i>COLLAR, Clutch</i>	<i>2</i>	<i>J8131667</i>	
21	<b>GEAR, Sliding Drive</b>	<b>2</b>	<b>300-421E</b>	
22	CONE. Bearing (Front)	2	2070316	M86649
23	CUP, Bearing (Front)	2	2070317	M86610
24	SHIM KIT (.003 .010 .030)	1	J8131668	
25	COVER, Front Output Rear	1	J8131657	
27	LOCKPLATE	1	JA001001	
28	<b>SEAL, Intermediate Shaft</b>	<b>1</b>	<b>J0942114</b>	
29	SHAFT, Intermediate	1	J0942115	
30	WASHER, Thrust	2	J8121813	
31	SPACER, Intermediate Bearing	2	J0809295	
32	BEARING, Needle	48	J0809294	
33	SPACER, Bearing	1	J8131661	
34	<b>GEAR, Intermediate</b>	<b>1</b>	<b>300-421A</b>	
35	COVER, Case (incl. Drain Plug)	1	J8131663	
36	PLUG, Drain	1	J8131664	
39	SHAFT, Front Output	1	J8131660	
40	<b>Gear, Front Output</b>	<b>1</b>	<b>300-421B</b>	
42	<b>SEAL, Oil</b>	<b>2</b>	<b>J8131669</b>	
43	<b>SEAL, Input Oil</b>	<b>1</b>	<b>J8131684</b>	
44	SCREW, Input Retainer	6	J8132677	
45	RETAINER, Input Bearing	1	J8131681	
46	SHAFT, Input	1	J8131687	
47	<i>SHIM KIT, Input Shaft.</i>	<i>1</i>	<i>J8131689</i>	
48	BEARING, Input	1	J8131682	#209
49	<i>RING, Bearing Snap</i>	<i>1</i>	<i>J8131683</i>	
50	<b>GEAR, Input</b>	<b>1</b>	<b>300-421C</b>	
51	RING, Input Gear Snap	1	J8131686	
52	SHAFT, Rear Output (integral speedometer Drive Gear)	1	J8133793	
53	<i>SPACER, Output Shaft</i>	<i>1</i>	<i>J8131662</i>	
54	CONE, Rear Output Inner Bearing	1	J8134239	#25880*
55	CUP, Rear Output Inner Bearing	1	J0052800	#25821
57	SHIM KIT, Rear Output Bearing	1	J0933743	
58	<i>CAP, Rear Output Snap ring</i>	<i>1</i>	<i>83500445</i>	
59	BREATHER	1	J8131659	
60	<i>BUSHING, Speedometer</i>	<i>1</i>	<i>JA000985</i>	
61	CUP, Rear Output Bearing Outer	1	J3124570	X15245
62	CONE, Rear Output Bearing Outer	1	J0933737	#15117
67	<b>GASKET, Pan</b>	<b>1</b>	<b>JA000954</b>	
68	BEARING, Pocket	1	J8134553	
74	CAP, Vent	1	J5352955	
75	SWITCH, Lockout	1	J3211322	

Bold items are included in Tera Low300 gear kit.

\*Bearing 25880 for 1981-1986 Dana 300s. 1980 Dana 300s use bearing number #25877

Limited availability items are in italics

Revised 26 June 00

Tera Manufacturing, Inc.  
5251 South Commerce Dr.  
Murray, UT 84107  
phone/801.288.2585 fax/801.713.2313

Revised 20 May 05