

## 9" Billet Aluminum Case Overview & Torque Specifications

Item #	Part #	Quantity	Description
1	D1592A	2	Cup 3.812 side -382A
2	D3530	2	Cone 3.812 side -387A
3	N1912J	1	Tail bearing retainer plate
4	N1912K	3	10-24 x 1/2 FHSCS
5	N1912PM	1	Case-3.812 bore billet 9"
6a	N1924A	1	0.580 Pinion preload spacer (Taper BRG Pinion)
6b	N1921B	1	0.459 Pinion preload spacer (Ball BRG Pinion)
7	N1931	1	Cup 9" front #2729
8	N1936	1	Cone 9" LG. stem -2788
9	N1943	1	Wide 9" tail bearing. M-5204-TV
10a	N1950AB	1	Taper/Taper support for 9 and 9-1/2 inch gear
10b	N1950AC	1	Taper/Taper support for 10 inch gear
10c	N1950AE	1	Taper/Ball Pinion support for 10 inch gear
10d	N1950AF	1	Taper/Ball Pinion support for 9 and 9-1/2 inch gear
11	N1950B	1	#158 O-RING
12	N1950CW	12	3/8 Pinion support bolt washer
13	N1950D	2	.003" depth shim
14	N1950E	2	.007" depth shim
15	N1950F	2	.008" depth shim
16	N1950G	2	.010" depth shim
17	N1961	1	9"Pinion seal -472015-LG.Stem
18	N2001E	1	Cup Timken 55437 (Taper BRG Pinion)
19	N2001F	1	Cone Timken 55187C (Taper BRG Pinion)
20	N1920D	1	0.220" Thick spacer (Ball BRG Pinion)
21	N1920BM	1	Bearing Ball Mod #7309 (Ball BRG Pinion)
22	N1961L	1	CR Seal #21164 (Ball BRG Pinion)
23	N1950AS	1	Seal Retainer ring

### Features and Benefits

- 7075-T73 Aluminum
- Case and pinion support are 1.5 lbs lighter than a standard 3.812" bore Ultra case
- Accepts a true 9- $\frac{5}{8}$ " diameter ring gear
- Heat treated and vibratory stress relieved following rough machining ensures consistent mechanical properties throughout
- Thick mounting flange provides a solid case foundation
- Raised cross rib design
- Extra wide tail bearing for increased load capacity
- Massive wall sections provide exceptional tail bearing support by restraining the pinion gear head and ensuring proper gear mesh and life
- Oil scavenging channel for enhanced pinion bearing lubrication
- Type 2 anodized for appearance and corrosion protection
- Bolt on tail bearing retainer plate
- Optional load bolt
- Optional driveshaft sensor bracket

## Important Notes

### Pinion support Options

- N1950AB - Taper/Taper bearings used with 9, 9-½" gears  
Parent stock code P5381LT
- N1950AC - Taper/Taper bearings used with 10" gears  
Parent stock code P5381LT-10
- N1950AE - Taper/Ball bearings used with 10" gears  
Parent stock code P5381LB-10
- N1950AF - Taper/Ball bearings used with 9, 9-½" gears  
Parent stock code P5381LB

### Spool Options

- D2002 - Lightweight steel 40 spline spool
- D2004 - Billet aluminium 40 spline spool  
(Uses ⅞ x .950" ARP ring gear bolts)
- D2006 - 2-piece 40 spline spool

### Sensor Bracket Assembly N1952T

A sensor bracket upgrade is available for all of the billet pinion supports to be able to monitor drive shaft speed.

Part#	Quantity	Description
N1950CW	2	3/8 Pinion support washer
N1950CS	2	3/8-16 x 1.75" 12 pt. bolt
N1952S	1	Sensor bracket
N1952SB	2	Sensor bracket spacer

### Pinion yoke Options

- 35 spline Pinion yokes
- 1350 Chrome Moly Yoke - U1604
- 1350 Billet yoke - U1604B
- 1480 Billet yoke - U2304

### Gear Oil

- SAE 85W-140 non synthetic gear oil
- 9" cases require 2.5 quarts of gear oil

### Storage of center sections

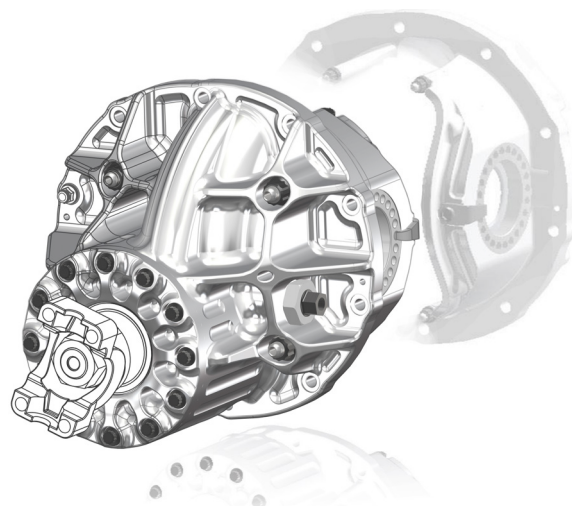
Differential, pinion and ring gear bearings along with the gears should be liberally oiled with gear oil and then sealed from the atmosphere in a plastic bag.

### Load bolt set-up & adjustment

1. Tighten load bolt while turning assembly by hand until drag is felt.
2. Loosen load bolt approximately 30° or half a flat from contacting the ring gear.
3. Rotate assembly again. If drag is felt, loosen the load bolt an additional 30°. If no drag is felt, hold load bolt in place and tighten the jam nut.
4. Load bolt may need readjustment after every 4-8 passes depending on frequency of runs.

### Center section removal

- Use provided jackscrews (5) to aid in removal of the center section from the rear end.
- Do not leave the jackscrew installed during operation.



### PARTS LIST CONTINUED (TORQUE SPECS)

ITEM#	PART#	QTY	DESCRIPTION	TORQUE (ft.-lbs)	NOTES
24	F1282	10	⅜-24 nut	35	none
25	N1950CB	12	⅜-16 x 1-¼ ARP screw	40	none
26	N1922B	1	35 Spine pinion nut	250	red loctite
27	L7010AB	4	⅝-18 12 point nut	120	anti-seize
28	N1912R	-	¼-20 x 1-½ screw	N/A	N/A
29	N1912U	1	⅞-14 plug	Hand Tight	none
30	N1910T	1	Load bolt assembly (optional)	see note	
31a	D2004B	10	⅞-20 ARP screw	85	red loctite
31b	N1950K	10	½-20 ARP screw	120	red loctite
32	N1912S	2	⅝ main cap stud	hand tight w/ red loctite (into case)	
33	H1180M	4	⅝-24 nut	20	anti-seize
34	N1905B	2	⅝-18 x ⅜ screw	10	none

**Note:** Load bolt cannot be used with lightened gear

