

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 ⅜ x .950” ARP ring gear bolts)

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

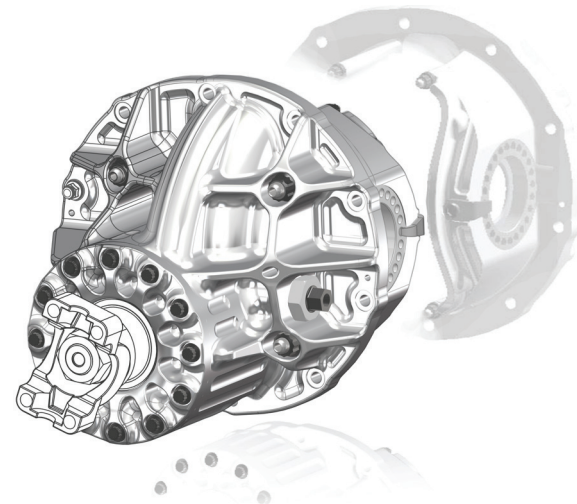
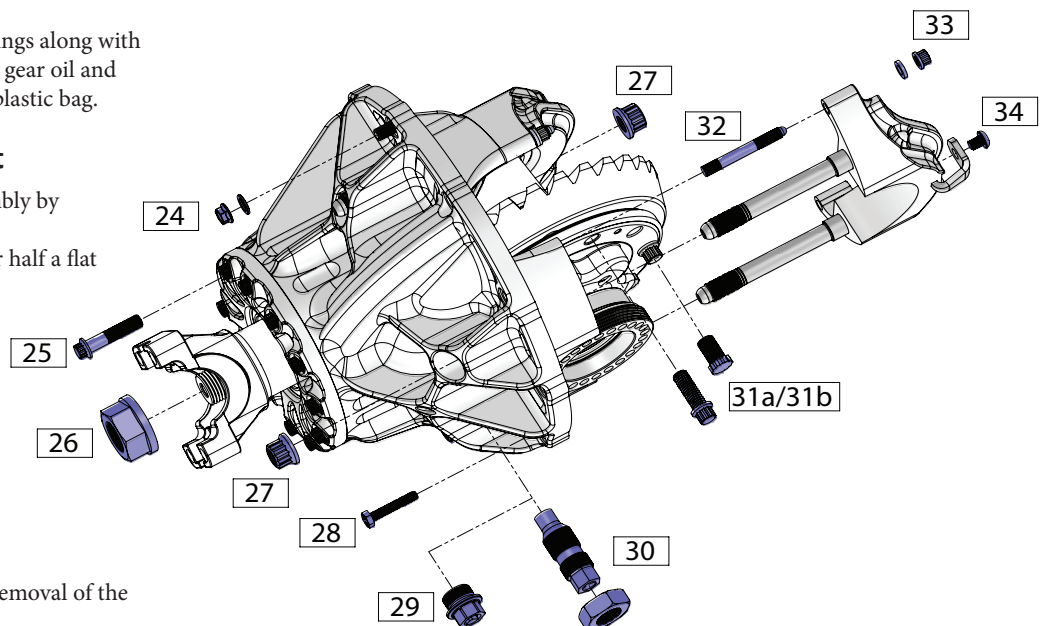
- SAE 85W-140 non synthetic gear oil
- 9” cases require 2.5 quarts of gear oil

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.



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	⅜-18 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	⅜-20 ARP screw	85	red loctite
31b	N1950K	10	½-20 ARP screw	120	red loctite
32	N1912F	2	⅜ main cap stud	hand tight	(into case)
33	H1180M	4	⅜-24 nut	25	anti-seize
34	N1905B	2	⅜-18 x ⅜ screw	10	none

Note: Load bolt cannot be used with lightened gear

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.