

Page 1 of 2 Jan 24, 2018

# 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)	

#### **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 9-5%" 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

Page 2 of 2 Jan 24, 2018

## **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 ¼ x .950" ARP ring gear bolts)



A sensor bracket upgrade is available for all of the billet pinion supports to be able to moniter 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	Sensor bracket		
N1952SB 2 Sensor brack		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 0.001" from contacting the ring gear
- 3. Rotate assembly again. If drag is felt, loosen the load bolt an additional 0.001". 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				
23	F1282	10	%-24 nut	35	none				
24	N1950CB	12	%-16 x 1-¼ ARP screw	40	none				
25	N1922B	1	35 Spine pinion nut	250	red loctite				
26	L7010AB	4	%-18 12 point nut	120	anti-seize				
27	N1912R	-	1/4-20 x 1-1/2 screw	N/A	N/A				
28	N1912U	1	%-14 plug	40	none				
29	N1910T	1	Load bolt assembly (optional)	see note					
30a	D2004B	10	⅓6-20 ARP screw	65	red loctite				
30b	N1950K	10	½-20 ARP screw	85	red loctite				
31	N1912F	2	% main cap stud	hand tight (into case)					
32	H1180M	4	⁵⁄₁₅-24 nut	25	anti-seize				
33	N1905B	2	5/16-18 x 3/8 screw	10	none				

Note: Load bolt cannot be used with lightened gear

