



Technical Service Information

CHRYSLER A604 TRANSFER GEAR CHANGES (32 DEGREE)

CHANGE: Introduced as a running change, late in the 1991 model year, Chrysler changed the helix angle of the teeth on the transfer gears to 32 degrees instead of the previous 27.5 degrees.

REASON: To reduce a whining concern while the vehicle was in motion.

PARTS AFFECTED:

(1) TRANSFER GEARS - The helix angle of the teeth on both transfer gears changed from 27.5 degrees to 32 degrees. The new design transfer gears can be easily identified by the removal of the washer recess area in the center of the gears, as shown in Figure 1. This was done to create more spline engagement, to accommodate higher torque engines.

(2) REAR PLANETARY CARRIER - The spline area of the output shaft was increased by 1/8" to accommodate the increased spline area in the transfer gear, as shown in Figure 2.

(3) OUTPUT SHAFT BOLT - New output shaft bolt was introduced at the same time with a Locktite patch added to the thread area, and the bolt was cadmium plated. The new design bolt has a 5/16" head thickness instead of the previous 1/4" head thickness, as shown in Figure 3. All of this was done for a more stable torque retention.

(4) TRANSFER SHAFT NUT - Added Lock-tite patch to the thread area and cadmium plated for a more stable torque retention.

(5) TRANSFER GEAR COVER - Has an added dimple in the cover to accommodate the increased head thickness of the output shaft bolt as shown in Figure 4.

INTERCHANGEABILITY:

Individually the new design parts listed above ARE NOT interchangeable with previous design level parts. However, by using the new parts in kit form, a 1991 model transaxle can be upgraded to the new design 32 degree transfer gears (See "Service Information" on next page).

The only kit available for 1989-1990 model transaxles is a special "Low Lead Crown" 27.5 degree Transfer Gear Service Package. This kit is the only way to reduce gear whine concerns on these models. (See "Service Information" on next page).

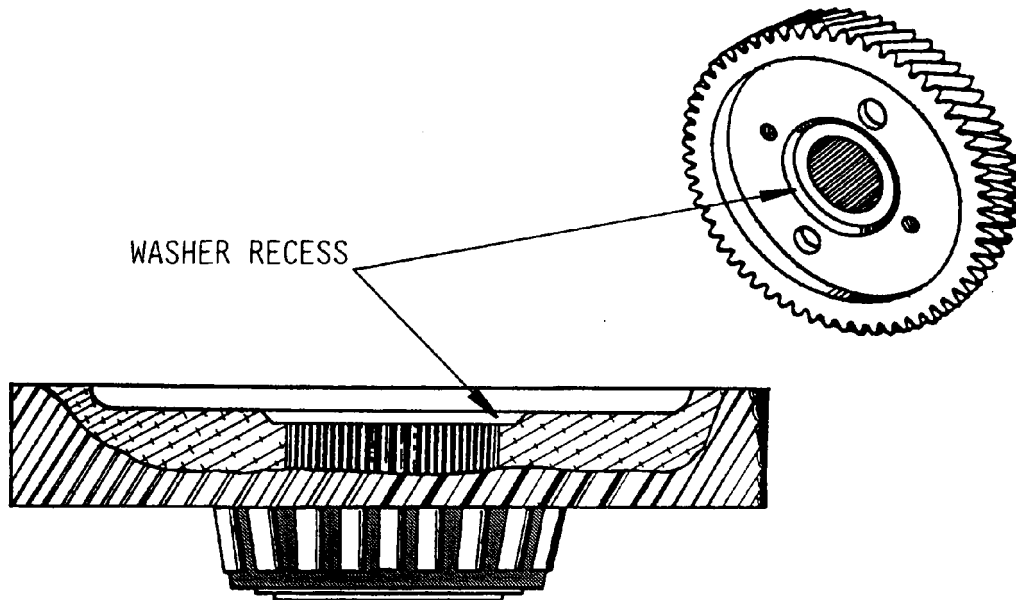


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SERVICE INFORMATION:

89-90 Models, Special "Low Lead Crown" Service Package	
54/59 Tooth Gear Set (2.36 Overall Gear Ratio ONLY)	4638737
1991 Models, 32 Degree Service Package	
46/50 Tooth Gear Set (2.36/2.19 Overall Gear Ratio ONLY)	4713139
1991 Models, 32 Degree Service Package	
49/47 Tooth Gear Set (2.52 Overall Gear Ratio ONLY)	4713140
50 Tooth Output Gear and Bearing	4713141
46 Tooth Transfer Gear and Bearing	4713142
49 Tooth Transfer Gear and Bearing	4713143
47 Tooth Output Gear and Bearing	4713144
Rear Planetary Carrier (New Design)	4713145
Output Gear Washer	6501832
Output Gear Bolt (New Design)	6503548
Transfer Gear Nut (New Design)	6502611
Transfer Gear Washer	6501833
Transfer Gear Cover (New Design)	4567255

CHRYSLER A604 TRANSFER GEARS
27.5 DEGREES HELIX



CHRYSLER A604 TRANSFER GEARS
32 DEGREES HELIX

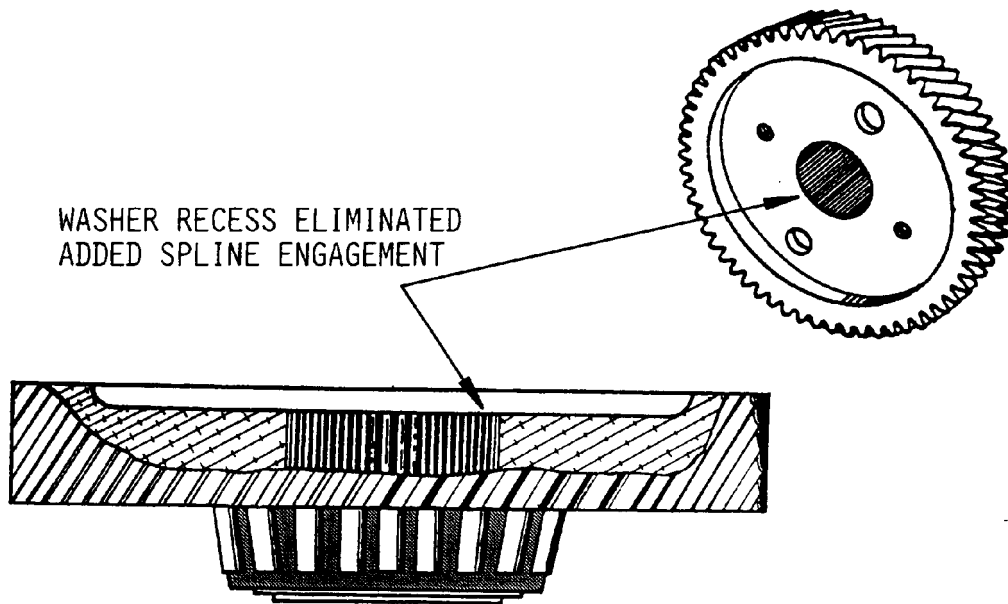


Figure 1

A604 REAR CARRIER ASSEMBLY

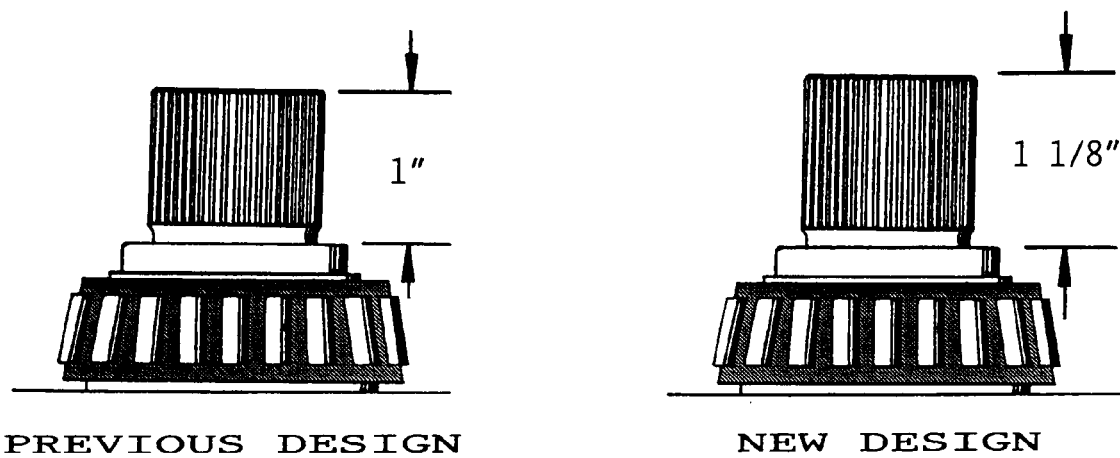
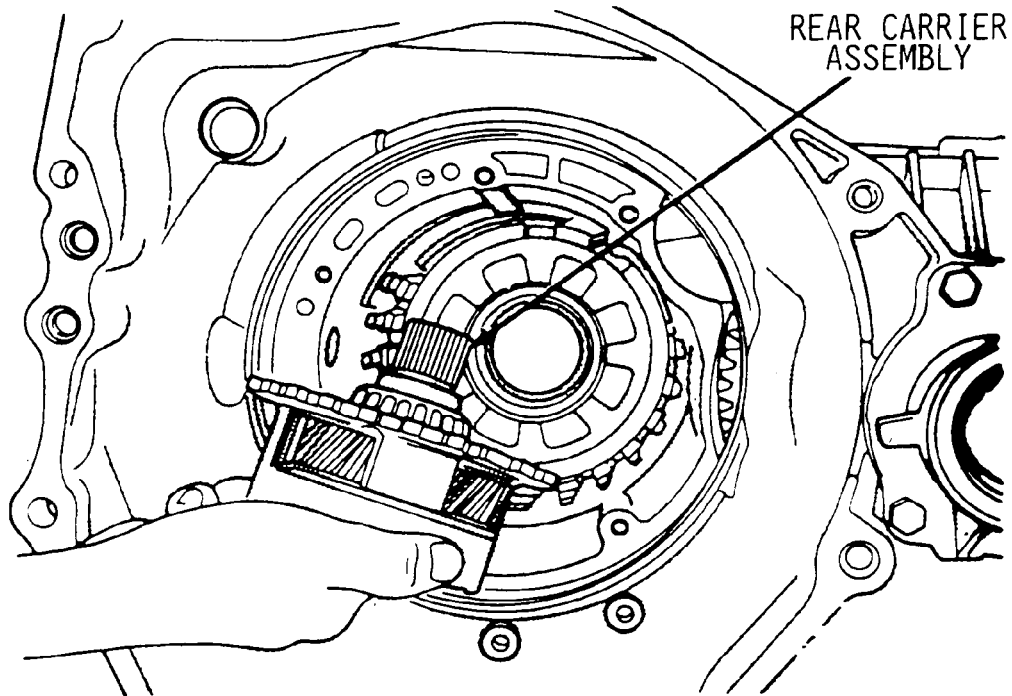


Figure 2

OUTPUT SHAFT BOLT

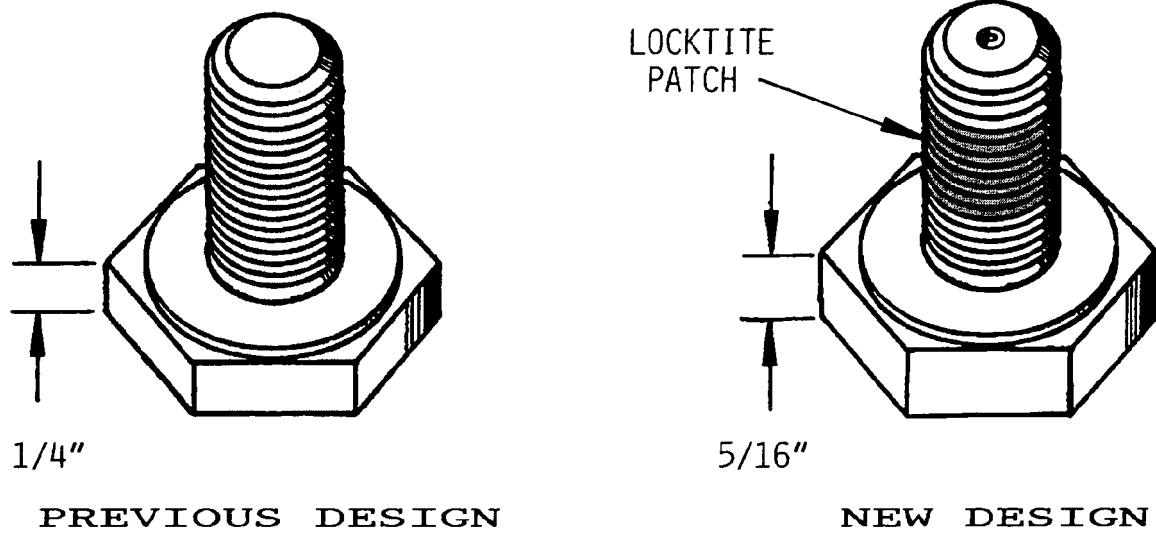
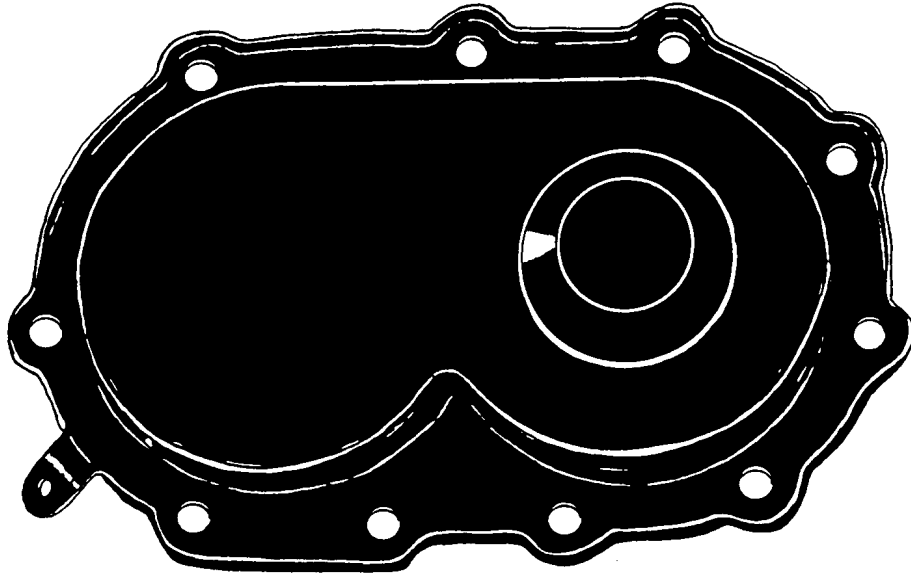
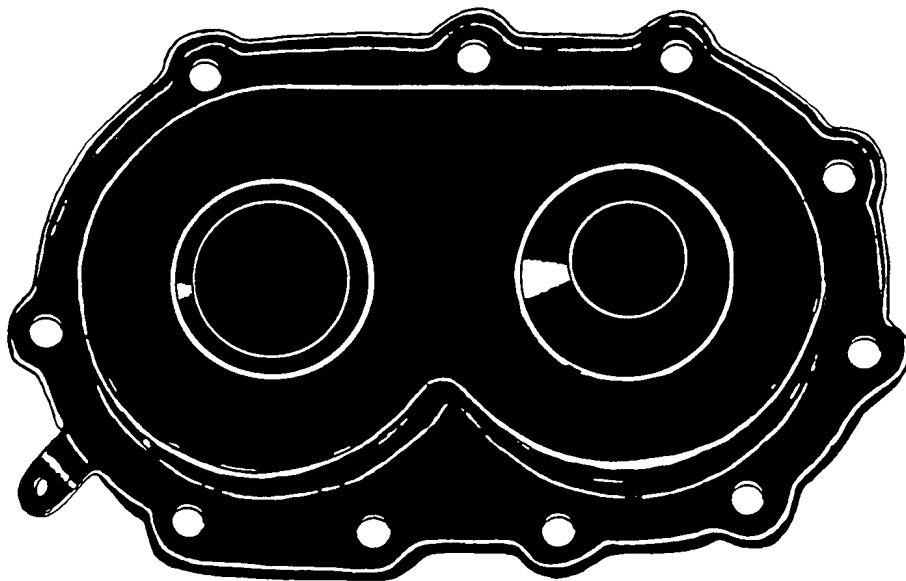


Figure 3

TRANSFER GEAR COVER



PREVIOUS DESIGN



NEW DESIGN

Figure 4