



MITSUBISHI F4A50 SERIES HARSH OR FLARED 2-3/3-2 AND OR GEAR RATIO ERRORS

COMPLAINT: After overhaul or transmission replacement, Mitsubishi vehicles equipped with the F4A50 series transmission may exhibit a complaint of a harsh or flared 2-3 upshift and harsh 3-2 downshift which may be accompanied with or without gear ratio errors, P0732 (42) for second gear, P0734 (44) for 4th gear, and P0736 (46) for reverse.

CAUSE: The cause may be, that the transmission was replaced with a incompatible planetary ratio, or that during overhaul the overdrive planetary gear set and reverse/second sun gear and shell were replaced with the incorrect tooth counts/ratio. Beginning in the 2004 model year the overdrive planetary gear set and reverse/second sun gear changed tooth counts which changes the ratio for 2nd, 4th and Reverse. The ratio difference between the two is very small and that is the reason that there are sometimes no gear ratio error codes set. ***Note: to verify, place selector in Manual 2nd and hold the range, this will typically cause the P0732 code to show up quickly.*** Refer to Figure 1 for a model I.D.

CORRECTION: To correct this condition, refer to Figure 2 for the locations of the overdrive planetary and reverse/second sun gear and shell assembly, and Figure 3 for the tooth counts to verify that the correct ratio is installed into the transmission.

MITSUBISHI F4A51RATIO AND MODEL I.D.

RATIO CHART "A"

1st Gear 2.842
2nd Gear 1.495
3rd Gear 1.000
4th Gear .731
Reverse 2.720

VEHICLE APPLICATIONS

04 & EARLIER DIAMANTE
03 & EARLIER ECLIPSE
03 & EARLIER GALANT

RATIO CHART "B"

1st Gear 2.842
2nd Gear 1.529
3rd Gear 1.000
4th Gear .686
Reverse 2.193

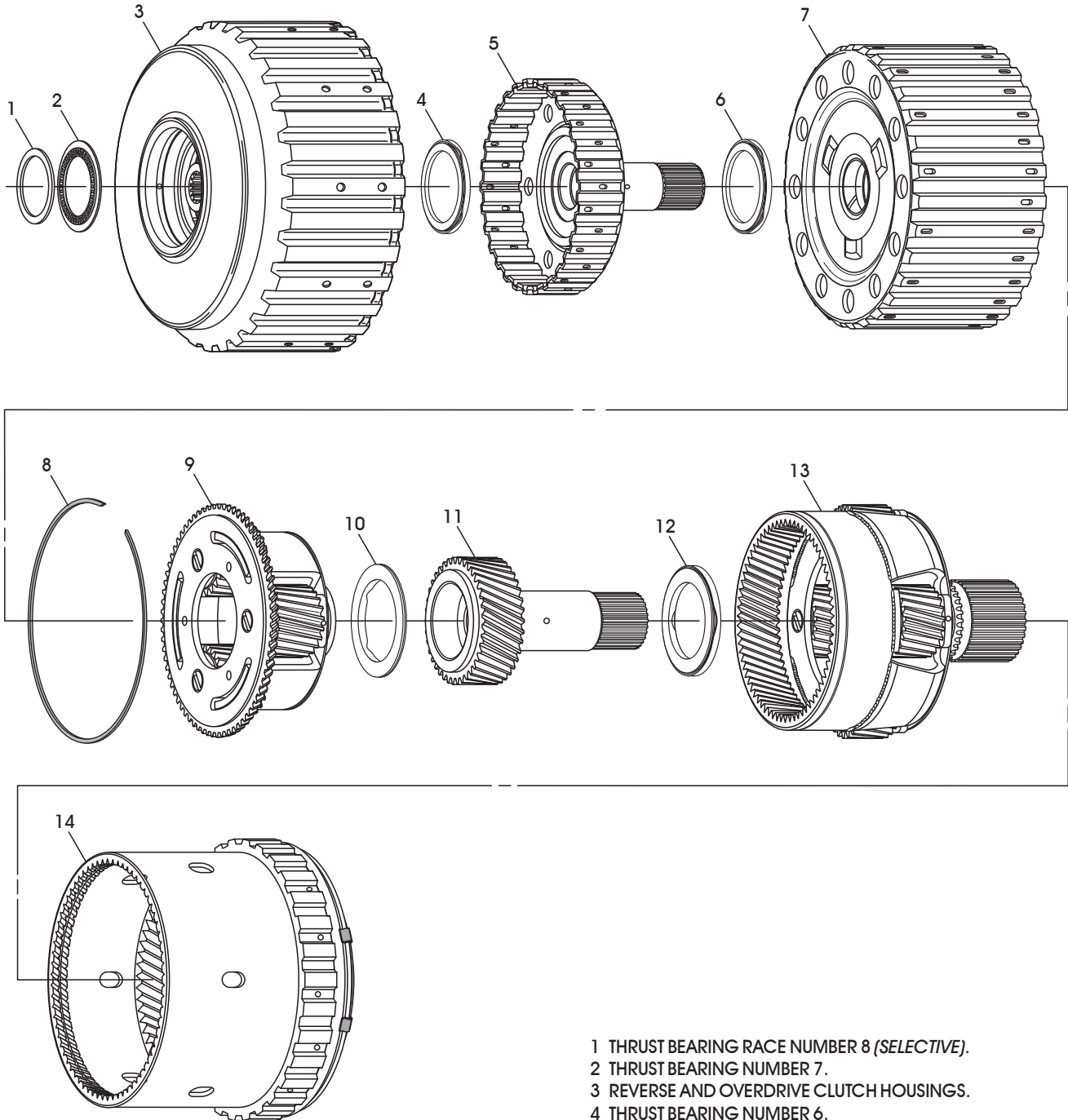
VEHICLE APPLICATIONS

04 & UP ENDEAVOR
04 & UP ECLIPSE
04 & UP GALANT

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Figure 1

GEAR TRAIN EXPLODED VIEW



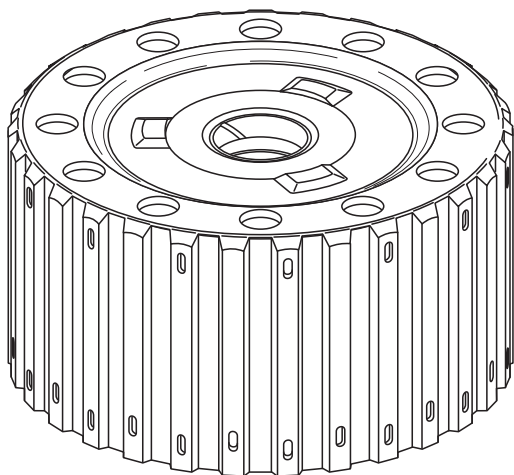
- 1 THRUST BEARING RACE NUMBER 8 (SELECTIVE).
- 2 THRUST BEARING NUMBER 7.
- 3 REVERSE AND OVERDRIVE CLUTCH HOUSINGS.
- 4 THRUST BEARING NUMBER 6.
- 5 OVERDRIVE CLUTCH HUB.
- 6 THRUST BEARING NUMBER 5.
- 7 REVERSE/2nd SUN GEAR AND SHELL ASSEMBLY.
- 8 PLANETARY RETAINING SNAP RING.
- 9 OVERDRIVE PLANETARY CARRIER.
- 10 THRUST BEARING NUMBER 4.
- 11 UNDERDRIVE SUN GEAR.
- 12 THRUST BEARING NUMBER 3.
- 13 OUTPUT PLANETARY CARRIER ASSEMBLY.
- 14 OUTPUT INTERNAL RING GEAR.

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Figure 2

TOOTH COUNTS

REVERSE/2nd SUN GEAR AND SHELL



SUN GEAR TOOTH COUNTS

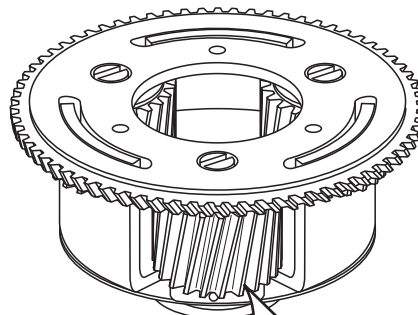
RATIO CHART "A"



RATIO CHART "B"



OVERDRIVE PLANETARY



PINION TOOTH COUNTS

RATIO CHART "A"



RATIO CHART "B"



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Figure 3