



Technical Service Information

MISTUBISHI/HYUNDAI

F4A-40/50 SERIES

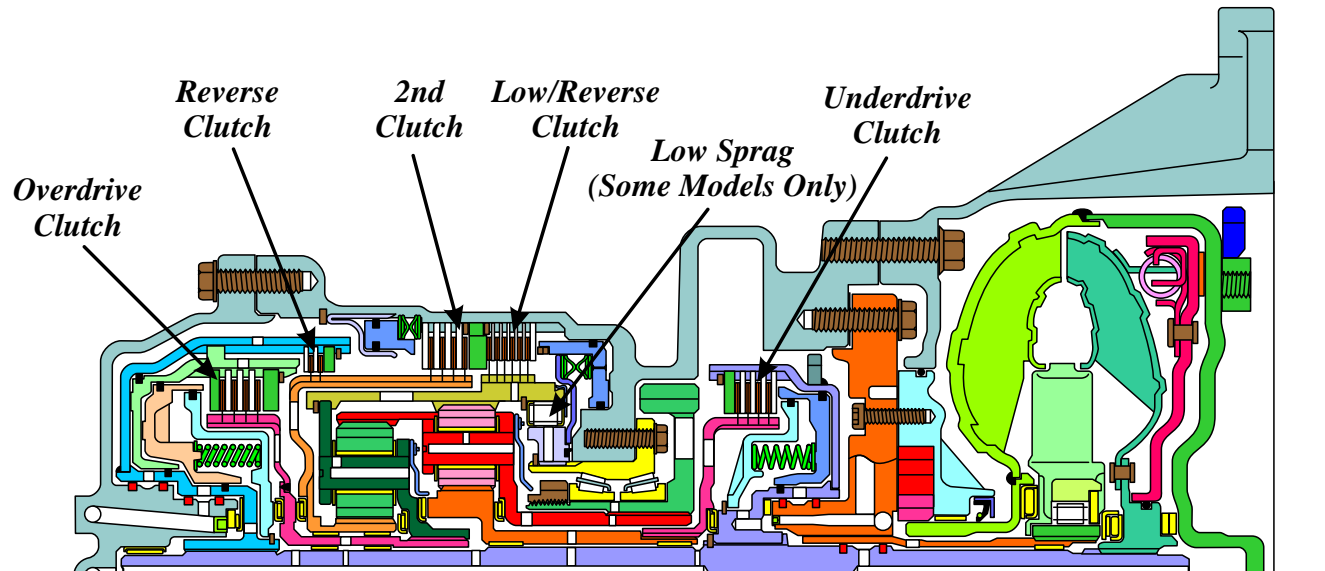
NEUTRALIZING AT 6MPH OR ON 2-1 DOWNSHIFT

COMPLAINT: Before or after overhaul, Mitsubishi and or Hyundai vehicles equipped with the F4A-40 or F4A- 50 series transaxles, may exhibit a neutral while taking off from a stop at 6 mph while in 1st gear or while the vehicle is coming to a stop and making a 2-1 downshift. When the shifter is moved to Manual Low 1st gear will re-engage.

CAUSE: The cause may be a bad Low Sprag. Figure 1 shows the computer strategy of the Low Reverse Clutch application thru the Low Reverse Solenoid. The chart shows the Low Reverse Clutch is turned OFF at 6 mph. It is the responsibility of the Low Sprag to hold from 6mph up until the 1-2 upshift occurs. The Low Sprag also has to come back on during the 2-1 downshift. If the sprag does not hold it will cause the neutralizing effect. Notice that when the selector is in Manual Low, the Low Reverse Clutch stays ON while in 1st gear.

CORRECTION: Replace the Low Sprag as shown in Figure 2 and ensure the inner and outer races are good. Refer to Figures 2 to ensure the sprag is assembled correctly in the Output Internal Ring Gear, and verify that the carrier freewheels in the correct direction as shown in Figure 3.

MITSUBISHI F4A41, F4A42, F4A51 COMPONENT AND SOLENOID APPLICATION CHART



INTERNAL COMPONENT AND SOLENOID APPLICATION CHART

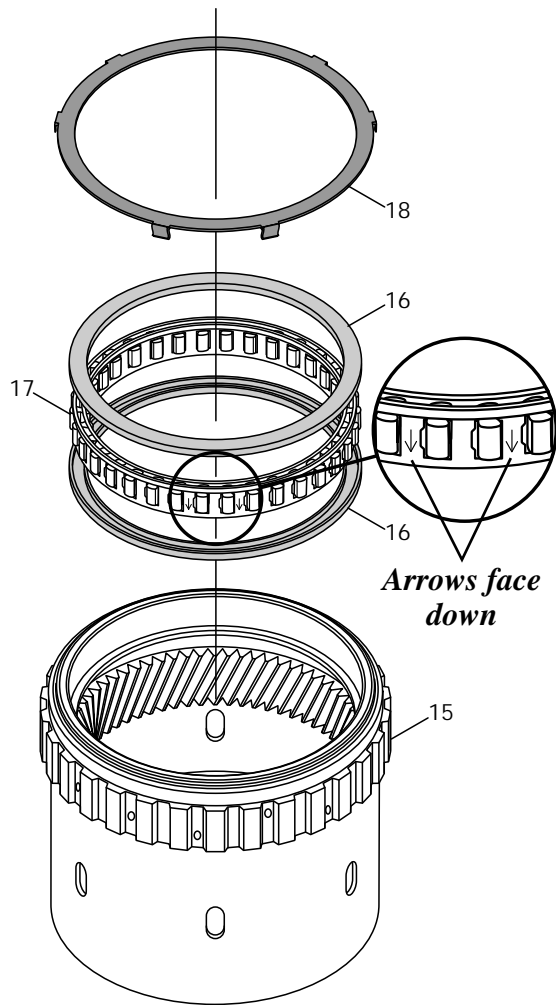
| <i>Gear Range</i> | <i>Reverse Clutch</i> | <i>Underdrive Clutch</i> | <i>2nd Clutch</i> | <i>Overdrive Clutch</i> | <i>Low/Rev Clutch</i> | <i>Low Sprag</i> | <i>U.D. Sol</i> | <i>2nd Sol</i> | <i>O.D. Sol</i> | <i>L/R Sol</i> |
|-------------------|-----------------------|--------------------------|-------------------|-------------------------|-----------------------|------------------|-----------------|----------------|-----------------|----------------|
| <i>Park</i> | | | | | ON | | ON | ON | ON | OFF |
| <i>Reverse</i> | ON | | | | ON | | ON | ON | ON | OFF |
| <i>Neutral</i> | | | | | | | ON | ON | ON | ON |
| <i>Dr-1st</i> | | ON | | | ON* | HOLD | OFF | ON | ON | OFF to ON* |
| <i>Dr-2nd</i> | | ON | ON | | | | OFF | OFF | ON | ON |
| <i>Dr-3rd</i> | | ON | | ON | | | OFF | ON | OFF | ON |
| <i>Dr-4th</i> | | | ON | ON | | | ON | OFF | OFF | ON |
| <i>M-3rd</i> | | ON | | ON | | | OFF | ON | OFF | ON |
| <i>M-2nd</i> | | ON | ON | | | | OFF | OFF | ON | ON |
| <i>M-1st</i> | | ON | | | ON | | OFF | ON | ON | OFF |

* Low/Reverse clutch is applied below 6 mph then turned OFF, on units equipped with low sprag . This is controlled by the turning the Low Reverse Solenoid from OFF to ON.

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Figure 1

LOW SPRAG LOCATION AND INSTALLATION

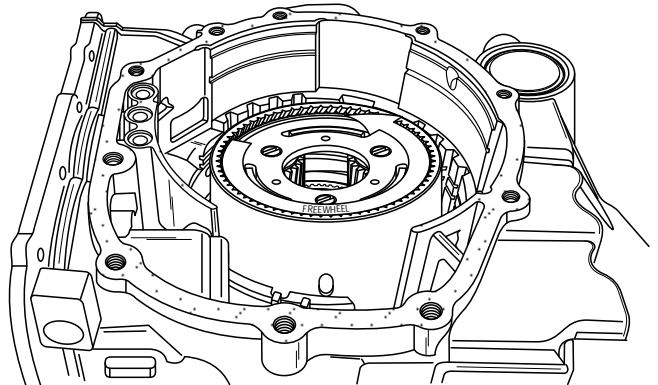


- 15 OUTPUT INTERNAL RING GEAR.
- 16 LOW SPRAG END BEARINGS (2 REQUIRED).
- 17 LOW SPRAG ASSEMBLY.

Figure 2

LOW SPRAG FREEWHEEL OPERATION

***PLANETARY SHOULD
FREEWHEEL COUNTER-CLOCKWISE
AND LOCK CLOCKWISE***



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Figure 3