



HYUNDAI Technical Service Bulletin

Group	TRANSAXLE
Number	05-40-016
Date	OCTOBER, 2005
Model	ALL

Subject

AUTOMATIC TRANSAXLE - NO MOVEMENT IN DRIVE OR REVERSE GEAR

DESCRIPTION:

If you are servicing a vehicle with no movement in drive or reverse gear, follow the procedure shown below:

REPAIR PROCEDURE:

1. Check for DTC in both the "Engine" and "Automatic Transaxle" menus:
 - If DTC are found, refer to TSB 05-40-008 or 04-40-020 for repair guidance.
 - If no DTC are found, go to Step 2.
2. Remove the dipstick and check the ATF for a **strong burnt smell**. If the smell does not provide conclusive results, remove the oil pan and check for metal particles in the pan:
 - If a strong burnt smell or metal particles are found, replace the transaxle
 - If not, go to Step 3

NOTE: ATF that is a dark brown or black color does not indicate an internal transaxle concern; do not replace the transaxle. SPiII may change color to a dark brown after 10,000 to 25,000 miles in service. This change is normal for this type of ATF.

VERIFY THE RANGE SWITCH ADJUSTMENT:

3. Move the shift lever to "N".



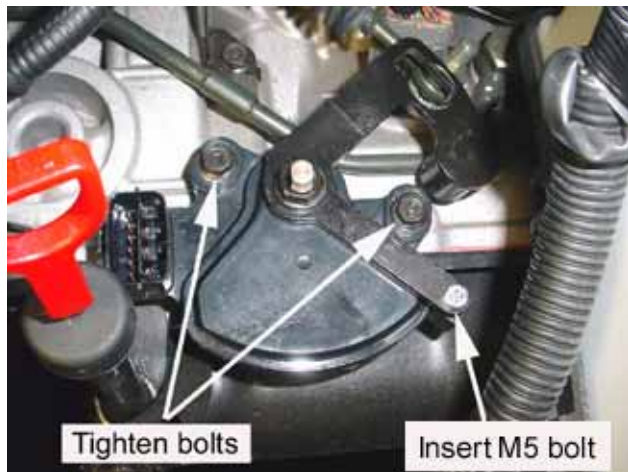
4. Insert a 5 mm drill or M5 (5 mm) bolt in the adjustment hole of the range switch. Check that the drill or bolt fits into the adjustment holes.

- If not, go to Step 5
- If so, go to Step 9



5. Loosen the two 10 mm mounting bolts.
6. Disconnect the shift cable at the lever.
7. Insert a 5 mm drill or M5 (5 mm) bolt in the adjustment hole of the range switch. Tighten the two 10 mm mounting bolts to specification.

Specification: 7-8 ft.lb (10-12 Nm, 100-120 kg.cm)



8. Move the shift lever to the "N" position. Attach the shift cable to the lever and install the nut. Tighten the nut to specification.

Specification: 9-10 ft.lb (12-13 Nm, 120-130 kg.cm)

Remove the 5 mm drill or M5 bolt.





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VERIFY THE SIGNAL FROM THE RANGE SWITCH:

9. Attach a Hi-Scan Pro and select:

- “Hyundai Vehicle Diagnosis”
- Vehicle
- “Automatic Transaxle” menu
- “Current Data” menu
- “Select Lever Switch” and “Shift Position:

10. Move the shift lever to Reverse.

- Monitor “Select Lever Switch”.
 - If “R” is displayed, the TCM is receiving the correct signal from the range switch. Go to Step 11.
 - If not, check the connector at the TCM and the range switch for a bent pin or pin not fully inserted. Check the wiring harness for an open or short circuit. If ok, replace the range switch.

1.2 CURRENT DATA		15/29						
LR SOLENOID DUTY	0.0 %	▲ ■ ▼						
UD SOLENOID DUTY	0.0 %							
2ND SOLENOID DUTY	0.0 %							
OD SOLENOID DUTY	0.0 %							
RED SOLENOID DUTY	0.0 %							
OIL TEMPERATURE	91 °F							
SHIFT POSITION	-							
SELECT LEVER SW.	R							
<table border="1"> <tr> <td>FIX</td> <td>SCRN</td> <td>FULL</td> <td>PART</td> <td>GRPH</td> <td>HELP</td> </tr> </table>			FIX	SCRN	FULL	PART	GRPH	HELP
FIX	SCRN		FULL	PART	GRPH	HELP		

11. Move the shift lever to Drive.

- Monitor “Shift Position” and “Select Lever Switch”.
 - If “D” and “GEAR 1” are displayed, the TCM is receiving the correct signal from the range switch. Go to Step 12.
 - If not, check the connector at the TCM and the range switch for a bent pin or pin not fully inserted. Check the wiring harness for an open or short circuit. If ok, replace the range switch.

1.2 CURRENT DATA		15/29						
LR SOLENOID DUTY	0.0 %	▲ ■ ▼						
UD SOLENOID DUTY	0.0 %							
2ND SOLENOID DUTY	0.0 %							
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RED SOLENOID DUTY	0.0 %							
OIL TEMPERATURE	91 °F							
SHIFT POSITION	1 GEAR							
SELECT LEVER SW.	D							
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FIX	SCRN		FULL	PART	GRPH	HELP		

12. Install the A/T Tester, P/N 09450-AT000, to the vehicle:

- Shift the transaxle to “D”. Move the gear selector switch of the A/T Tester and shift manually in 1, 2, 3, 4, and 5 gears (if equipped).

NOTE: Use the “EF, XG” switch for side-pan transaxles and the “LC” switch for bottom-pan transaxles.



- Disconnect the A/T Tester from the solenoid. Do not reconnect the harness connector to the solenoid. Shift the transaxle to “R”.
 - If no movement, replace the transaxle.
 - If the vehicle moves, check the harness connector at the TCM and the solenoid for a bent pin or pin not fully inserted. Check the wiring harness for an open or short circuit.
 - If no problem is found, swap a TCM from a similar vehicle and test for movement in Drive and Reverse. If the vehicle moves in Drive and Reverse, replace the TCM.

WARRANTY INFORMATION:

Applicable Warranty Applies.