


| | | |
|--|-------------------------------|---|
|  HYUNDAI NEW THINKING. NEW POSSIBILITIES. | GROUP | NUMBER |
| | AUTOMATIC TRANSMISSION | 13-AT-015 |
| | DATE | MODEL |
| | AUGUST 2013 | Genesis Sedan (BH), Genesis Coupe (BK) and Equus (VI) |

SUBJECT: **AUTOMATIC TRANSAXLE (8-SPEED)
INHIBITOR SWITCH DTC P0705, P0706**

Description: An improperly adjusted or improperly operating inhibitor switch (range switch) may result in the following conditions. This bulletin provides the procedure to inspect and replace the inhibitor switch, if necessary.

- Malfunction Indicator Light (MIL) illuminated
- Diagnostic trouble codes:
 - P0705 - Range switch sensor circuit
 - P0706 - Range switch range/performance
- No engine crank in "P" or "N"

| Applicable Vehicles: | Model Year(s) | Model |
|----------------------|---------------|--------------------------------|
| | 2012~ | Genesis Sedan (BH), Equus (VI) |
| | 2013~ | Genesis Coupe (BK) |

PARTS INFORMATION:

| MODEL | PNC CODE | PART NUMBER |
|--------------------------|----------|-------------|
| 2012~ Genesis Sedan (BH) | 45956B | 42700-4E000 |
| 2012~ Equus (VI) | | 42700-4E000 |
| 2013~ Genesis Coupe (BK) | | 42700-4E000 |

WARRANTY INFORMATION:

| MODEL | OP CODE | OPERATION | OP TIME | CAUSAL PART | NATURE CODE | CAUSE CODE |
|--------------------------|----------|----------------------------------|---------|-------------|-------------|------------|
| 2012~ Genesis Sedan (BH) | 42700R00 | Replace inhibitor (range) switch | 0.3 | 42700-4E000 | N69 | C15 |
| 2012~ Equus (VI) | | | | | | |
| 2013~ Genesis Coupe (BK) | | | | | | |
| All | 42700RQ0 | GDS | 0.3 | | | |

SERVICE PROCEDURE:

1. Turn the ignition key to the ON position or push the Start/Stop Button two times without depressing the brake pedal.
2. Using a GDS, check for DTC in the “Automatic Transaxle” menu. **Record the DTC and description.** Delete the DTC.
3. Select the following parameters. Move the shift lever through all gears and confirm the GDS shows P, R, N and D.
 - Vehicle and A/T menu.
 - “Current Data”
 - Shift Lever Switch.



4. If the Shift Lever Switch shows:
 - The correct shift lever position (P, R, N and D), the wiring **currently** has no open/short circuits. Go to Step 6.
 - Does not show the correct shift lever position, go to Step 5.
5. Visually check the wiring harness between the PCM and inhibitor switch for any damaged wires or open circuit/short circuit to ground. Check for any damaged pins or pin not fully inserted into the connector.
 - If damage exists, repair or replace the control wiring and drive the vehicle to confirm the repair.
 - If no damage or open/short circuit is found, go to Step 6.

6. Move the shift lever to the "N" position.

Turn the ignition switch to the OFF position.



7. Raise the vehicle on a hoist.
Remove the transmission splash shield.

8. Disconnect the nut (A) that secures the shift cable.

Disconnect the nut (B) that secures the manual control lever. Remove the lever.



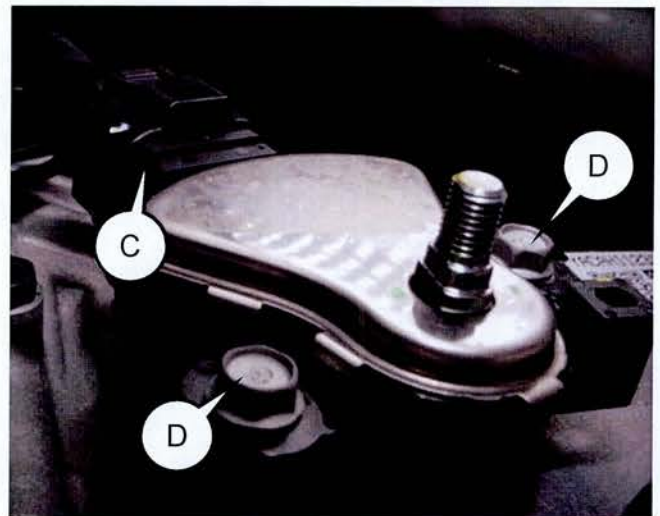
9. Disconnect the inhibitor switch connector (C).

Remove 2 mounting bolts (D) that secure the inhibitor switch and remove the switch.

Install a new inhibitor switch and reinstall the bolts (D).

Torque: 7~9 lb-ft (1.0~1.2kgf.m)

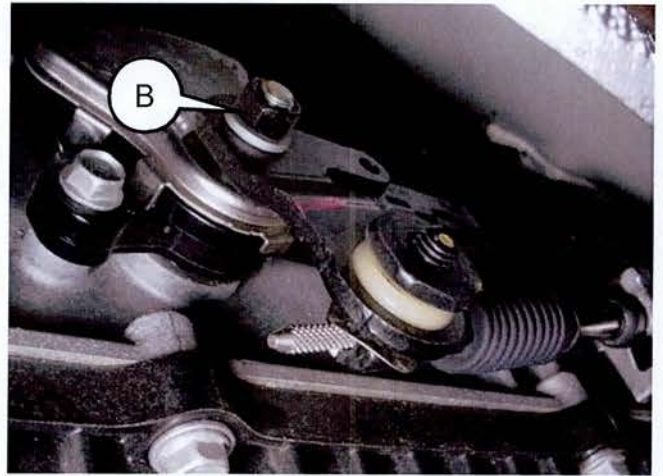
Reconnect the connector (C).



10. Insert the shift cable into the manual control lever.

Install the washer, manual control lever, lock washer and nut to the new inhibitor switch and tighten the nut (B).

Torque: 13~19 lb-ft (1.7~2.6 kgf.m)



- 11.

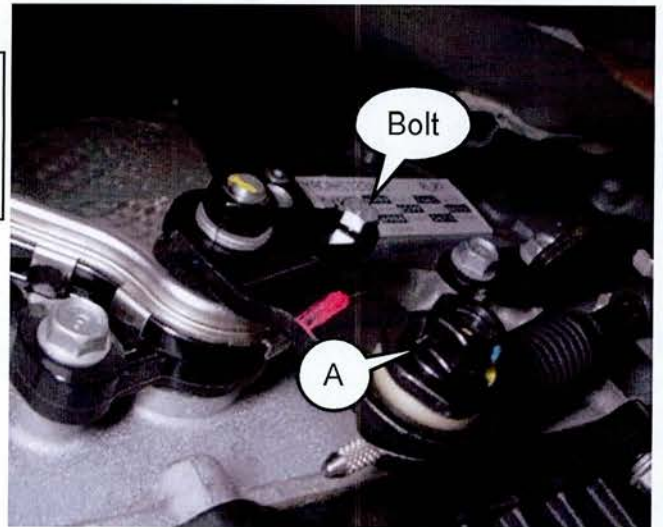
CAUTION

Insert a 5mm bolt or 5mm screwdriver in the alignment hole before tightening the nut.

Install the shift cable nut (A) and tighten the nut to specification.

Torque: 13~19 lb-ft (1.7~2.6 kgf.m)

Remove the bolt or screwdriver from the alignment hole.



12. Reinstall the transmission splash shield.
13. Clear DTC in the BlueLink system per instructions of TSB 12-BE-005-2.
14. Clear any DTC and test drive the vehicle for two drive cycles (two key-on to key-off driving cycles). If the DTC:
 - Does not occur again, return the vehicle to the customer.
 - Occurs again, repair or replace the control wiring between the PCM and inhibitor switch.
 - If the DTC occur again, replace the PCM/TCM.