

**HYUNDAI**NEW THINKING.
NEW POSSIBILITIES.**Technical Service Bulletin**

GROUP	NUMBER
AUTOMATIC TRANSMISSION	13-AT-013
DATE	MODEL
JULY 2013	Tucson (LM), Santa Fe (CM/AN/NC), Sonata (YF/YF HEV), Elantra (UD/MD/GD/JK), Accent (RB), Azera (TG/HG), Veloster (FS)

SUBJECT:	AUTOMATIC TRANSAXLE (6-SPEED) INHIBITOR SWITCH DTC P0705, P0706, P0707 & P0708
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This TSB supersedes TSB 12-AT-022-1 to add 2013 models.

Description: An improperly adjusted or improperly operating inhibitor switch (range switch) may result in the following conditions:

- Diagnostic trouble codes:
 - P0705 - Range switch sensor circuit
 - P0707 - Range switch - open circuit
 - P0706 - Range switch range/performance
 - P0708 - Range switch - short circuit or multiple inputs
- Malfunction Indicator Light (MIL) illuminated
- Impossible engine start in "P" or "N"

	Model Year(s)	Model
	Applicable Vehicles:	2010~
2011~		Tucson (LM) produced from January 13, 2011
2011~		Sonata (YF) produced from August 26, 2010
2011~		Sonata (YF) HEV, Elantra (UD/MD) & Azera (TG)
2012~		Accent (RB), Azera (HG)
2013~		Veloster Turbo (FS), Elantra Coupe (JK), Elantra GT (GD) and Santa Fe (AN/NC)

PARTS INFORMATION:

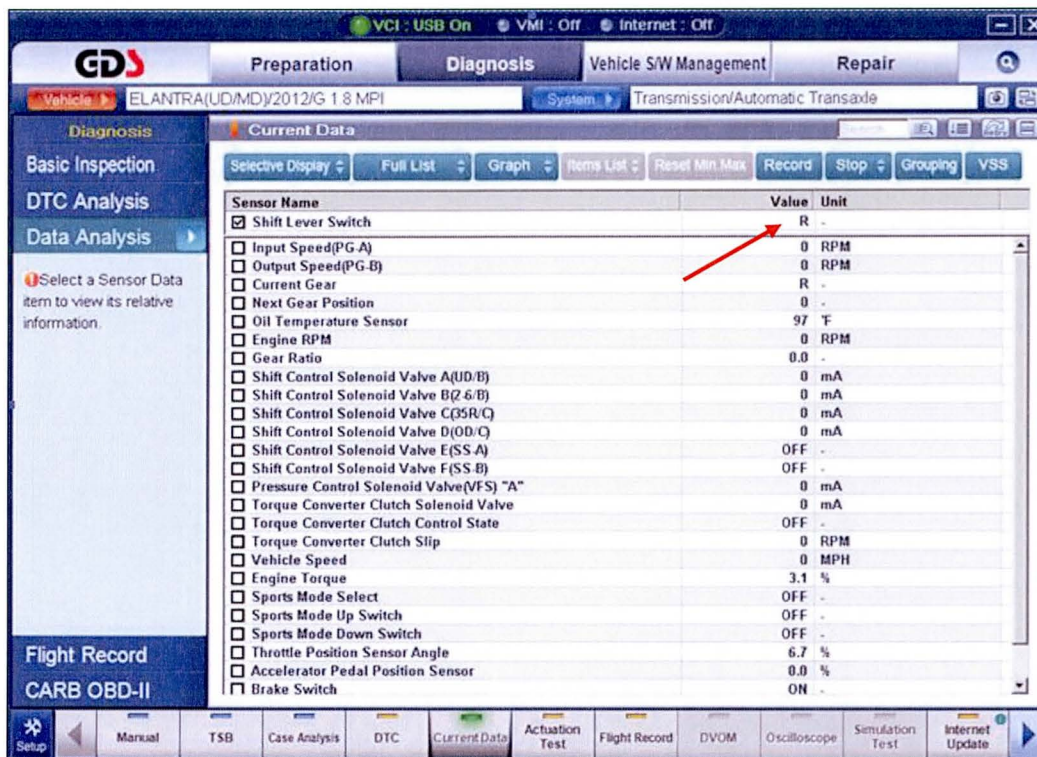
MODEL	APPLIED DATE	PNC CODE	PART NUMBER
2010~ Tucson (LM)	ALL	45956B	42700-3B000
2010~12 Santa Fe (CM)	ALL		42700-3B000
2013~ Santa Fe (AN/NC)	ALL		42700-3B100
2011~ Sonata (YF)	8/26/2010~		42700-26***
2011~ Sonata Turbo (YF)	ALL		42700-26***
2011~ Sonata HEV (YF HEV)	ALL		42700-26000
2011 Azera (TG)	ALL		42700-3B000
2012~ Azera (HG)	ALL		42700-3B100
2011~ Elantra (MD/UD)	ALL		42700-26000
2013~ Elantra Coupe (JK)	ALL		42700-26000
2013~ Elantra GT (GD)	ALL		42700-26000
2012~ Accent (RB)	ALL		42700-26000
2012~ Veloster Turbo	ALL		42700-3B100
2012~ Veloster (FS) DCT	ALL		42700-23000

WARRANTY INFORMATION:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL PART	NATURE CODE	CAUSE CODE
2010~ Tucson (LM)	42700R00	Replace inhibitor switch	0.4	See Parts Catalog	N69	C15
2010~ Santa Fe (CM)			0.5			
2013~ Santa Fe (AN/NC)			0.6			
2011~ Sonata (YF)			0.4			
2011~ Sonata YF HEV			0.4			
2011 Azera (TG)			0.6			
2012~ Azera (HG)			0.4			
2011~ Elantra (MD/UD)			0.4			
2013~ Elantra Coupe (JK)			0.4			
2013~ Elantra GT (GD)			0.4			
2012~ Accent (RB)			0.5			
2012~ Veloster (FS)			0.4			
All	42700RQ0	GDS	0.3			

SERVICE PROCEDURE:

1. Turn the ignition key to the ON position or push the Start/Stop Button two times.
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 monitor the sensors.
 - Vehicle and A/T menu.
 - “Current Data”
 - Shift Lever Switch.

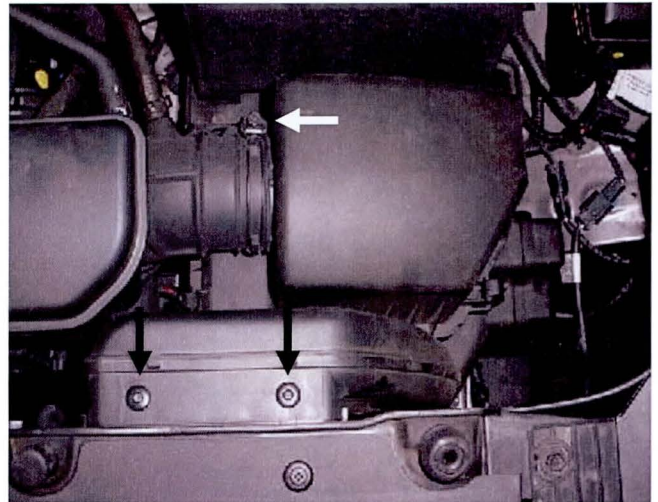


4. If the Shift Lever Switch shows:
 - The correct shift lever position, the wiring **currently** has no open/short circuits. Go to Step 6.
 - Does not show the correct shift lever position, go to Step 5.
5. Visually check the wiring harness between the PCM and inhibitor switch for a damaged wire or open circuit/short circuit to ground. Check for a damaged pin 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.

- Place the shift lever to the "N" position.
Turn the ignition switch to the OFF position.



- Remove the air duct and air cleaner, if needed, to access the inhibitor switch.



- Remove the battery, if needed, to access the inhibitor switch.

*** NOTE**

Record the preset radio stations and reset after repairs are completed.



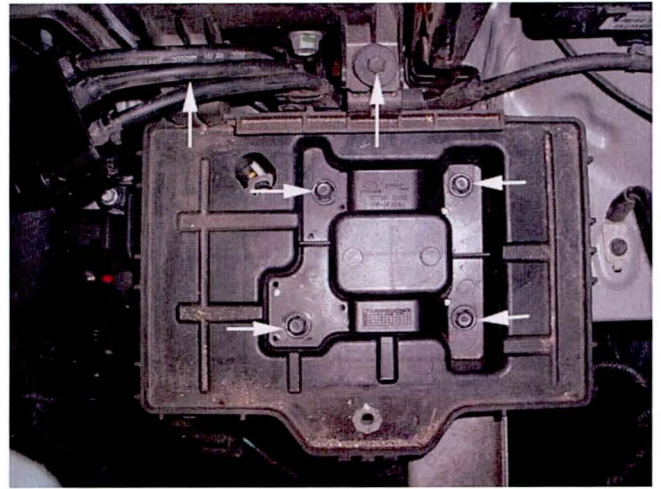
9. If the battery was removed in Step 8:

Remove 2 bolts to the air cleaner.

Remove 4 bolts to the battery tray and remove the battery tray.

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

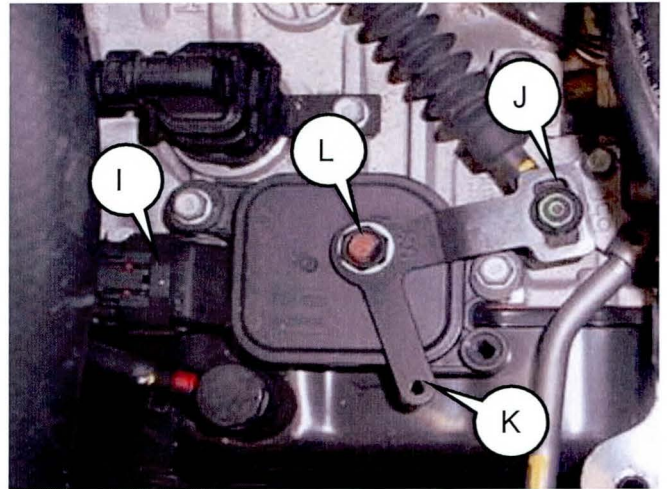
Move the battery tray aside to gain access to the inhibitor switch.



10. Disconnect the inhibitor switch connector (I).

Remove the shift cable mounting nut (J).

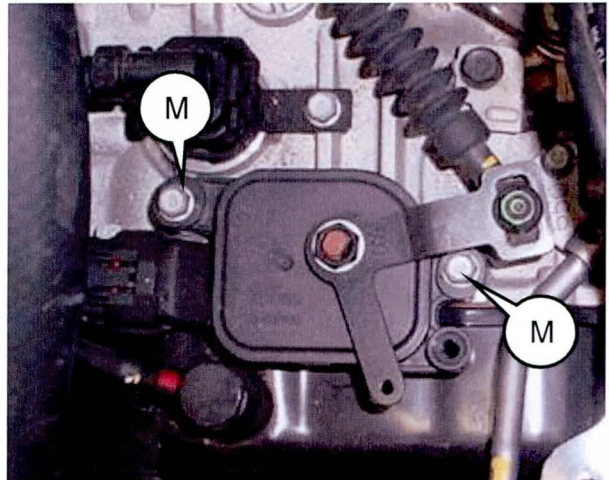
Remove the nut (L) and washer and remove the manual control lever (K).



11. Remove 2 mounting bolts (M) and remove the inhibitor switch assembly.

Install the new inhibitor switch assembly to the transaxle and tighten the mounting bolts.

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

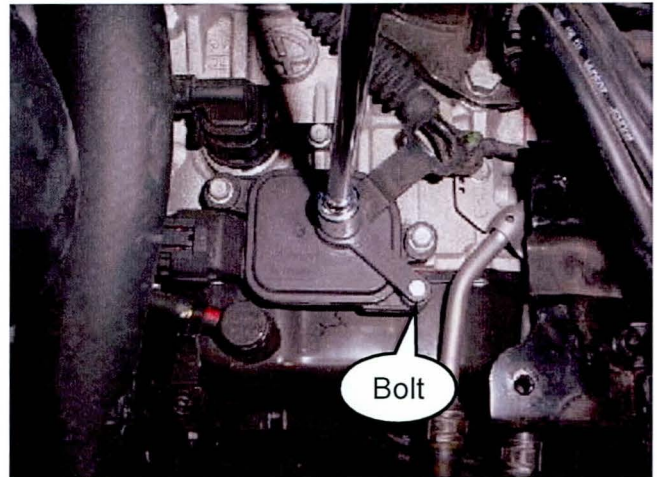


12. Install the manual control lever, washer and nut to the new inhibitor switch and tighten the nut.

Torque: 13~18 lb-ft (1.8~2.5kgf.m)

CAUTION

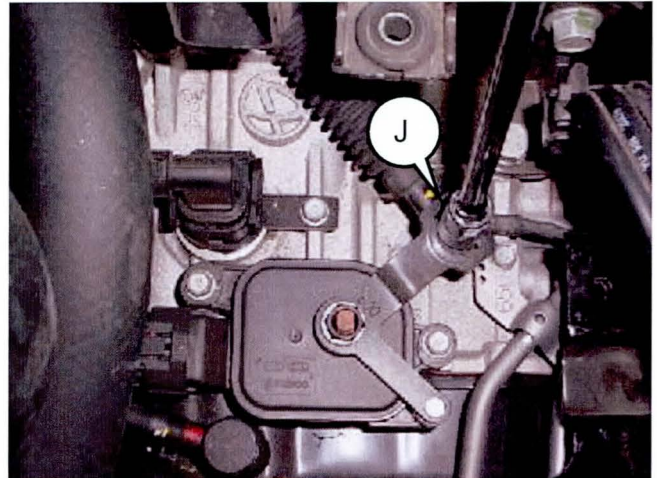
Insert a 5mm bolt or screwdriver in the alignment hole before tightening the nut.



13. Install the shift cable mounting nut (J) and tighten the mounting nut to specification.

Torque: 6~9 lb-ft (0.8 ~ 1.2 kgf.m)

Remove the bolt or screwdriver from the alignment hole.



14. Re-install all the removed parts in reverse order of removal

*** NOTE**

Reset the radio stations after repairs are completed.

15. Clear the codes and test drive the vehicle for two drive cycles (two key-on to key-off driving cycles). If the DTC:
- Do not occur again, return the vehicle to the customer.
 - Occur again, repair or replace the control wiring between the PCM and inhibitor switch.
 - If the DTC occur again, replace the PCM/TCM.