

# Component Procedures: Automatic Transmission/Transaxle

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# Component Procedures: Automatic Transmission/Transaxle

## Parts and Labor (itype\_189)

### Parts

Qualifier	Part #	Name	Price	Note
Automatic Transaxle	2321125050	Drive Plate	81.40	
Automatic Transaxle	NOT LISTED	Pan Gasket	0.00	
Automatic Transaxle > Filter	463212F000	Korea Built	56.00	
Automatic Transaxle > Filter	463213F800	Us Built	76.56	
Automatic Transaxle > Trans ?	954402DCE2	With Sport	1107.15	
Automatic Transaxle > Trans ?	954402CCA2	Without Sport	887.19	
Automatic Transaxle > Transa?	450002F550	Korea Built	5725.23	
Automatic Transaxle > Transa?	450002F560	Us Built	5459.35	
Case & Related Parts	451002F100	Torque Converter	966.90	
Case & Related Parts > Press?	463132F100	Right	74.98	
Case & Related Parts > Press?	463133B011	Center Lower	102.40	
Case & Related Parts > Press?	463133B030	Center Upper	99.19	
Case & Related Parts > Press?	463133B000	Lower	143.27	
Case & Related Parts > Press?	463132F200	Upper	74.98	
Switches	4270026700	Neutral Safety Switch	84.97	
Gear Shift Control	46700F2110	Gear Shift Assembly	179.66	
Gear Shift Control	46790F2100	Shift Control Cable	166.16	

### Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Diagnosis	Automatic Transaxle > Oil Leak, Diagnosis	B	0.5	0.0
Diagnosis	Automatic Transaxle > Transmission, Diagnosis	A	1.8	0.0
Remove & Replace	Automatic Transaxle > Filter, R&R	B	7.8	0.0
Remove & Replace	Automatic Transaxle > Input Sensor, R&R	B	2.5	0.0
Remove & Replace	Automatic Transaxle > Output Sensor, R&R	B	2.5	0.0
Remove & Replace	Automatic Transaxle > Trans Controller, R&R	B	0.7	0.0
Remove & Replace	Automatic Transaxle > Transaxle, R&R	B	7.4	0.0
Remove & Replace	Automatic Transaxle > Transaxle, R&R > NOTE >?		0.6	
Remove & Replace	Automatic Transaxle > Transaxle, R&R > NOTE >?		0.2	
Remove & Replace	Automatic Transaxle > Transaxle, R&R > NOTE >?		0.2	
Remove & Replace	Case & Related Parts > Oil Pan Gasket, R&R	C	1.5	0.0
Remove & Replace	Case & Related Parts > Oil Pan, R&R	C	1.5	0.0
Remove & Replace	Case & Related Parts > Solenoid, R&R	B	3.6	0.0
Remove & Replace	Gear Shift Control > Gear Shift Assembly, R&R	B	1.9	0.0
Remove & Replace	Gear Shift Control > Shift Control Cable, R&R	B	1.5	0.0
Remove & Replace	Mounts > Trans Mount, R&R	B	1.1	0.0
Remove & Replace	Oil Cooler > Hoses, R&R > Each	B	0.9	0.0
Remove & Replace	Switches > Range Sensor, R&R	B	0.7	0.0
Remove & Replace	Valve Body > Valve Body, R&R	B	2.9	0.0
Overhaul	Automatic Transaxle > Transaxle, Overhaul	A	14.4	0.0
Overhaul	Automatic Transaxle > Transaxle, Overhaul > N?		0.6	
Overhaul	Automatic Transaxle > Transaxle, Overhaul > N?		1.5	
Overhaul	Automatic Transaxle > Transaxle, Overhaul > N?		1.4	
Adjust	Gear Shift Control > Shift Control Cable, Adj?	B	0.4	0.0
Change	Automatic Transaxle > Trans Fluid, Change	C	0.5	0.0
Remove & Install	Automatic Transaxle > Transaxle, R&I	B	6.8	0.0
Remove & Install	Automatic Transaxle > Transaxle, R&I > NOTE >?		0.2	
Remove & Install	Automatic Transaxle > Transaxle, R&I > NOTE >?		0.2	

## Specifications Quick Reference (itype\_439)

### Quick Specifications

- item

## Automatic Transaxle (Article 44317)

Non Standards

- Automatic Transmission Control System - Description and Operation (44351)
- Clutch & Brake - Description and Operation (44340)
- Hydraulic System - Description and Operation (44318)

## Automatic Transaxle (Article 44429)

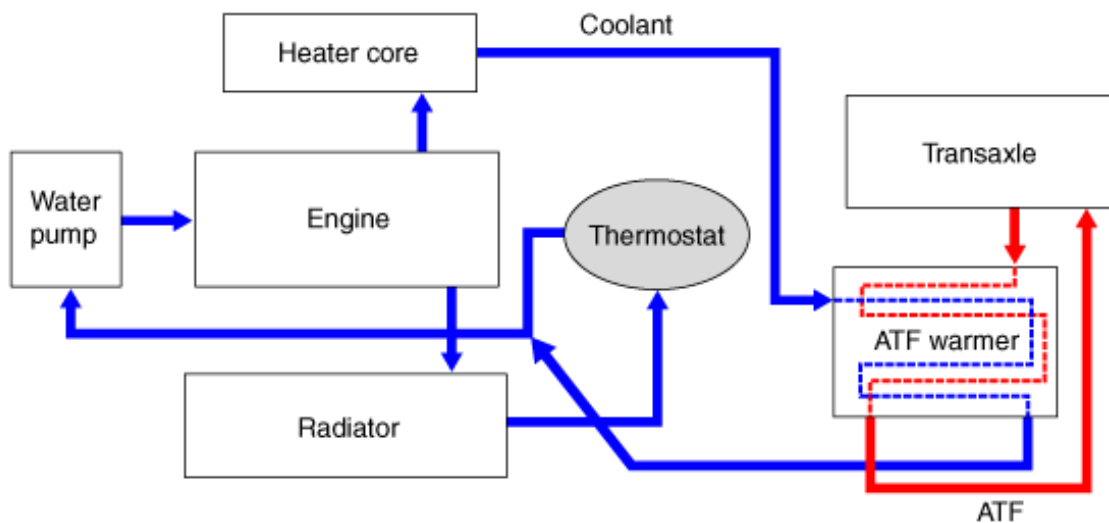
Non Standards

- Automatic Transaxle Control System - Schematic Diagrams (44430)

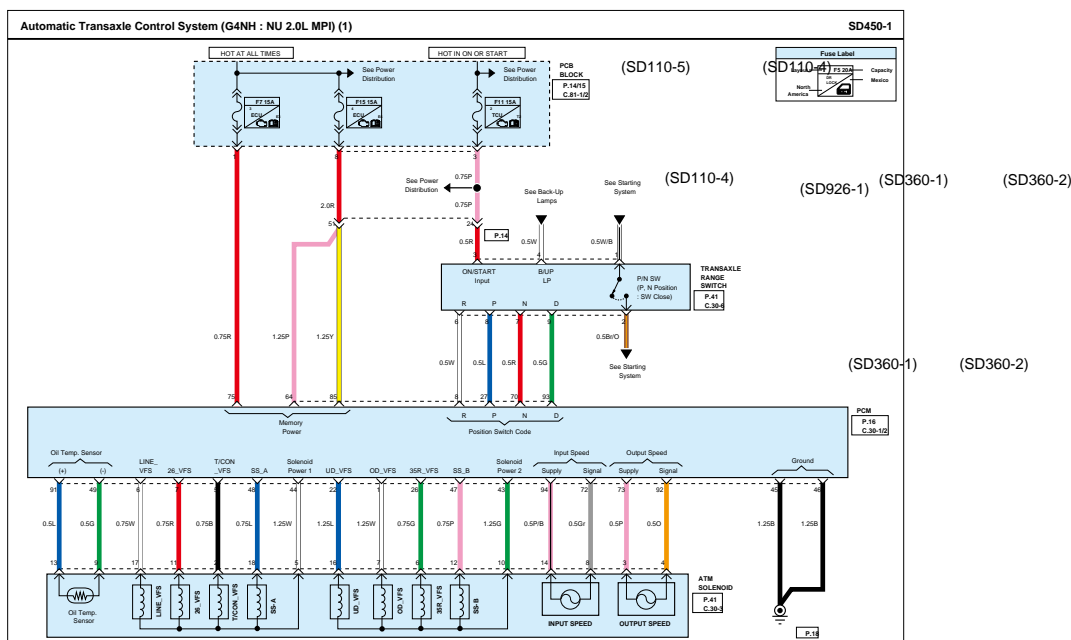
## Automatic Transaxle Cooling System - Description and Operation (Article 44344)

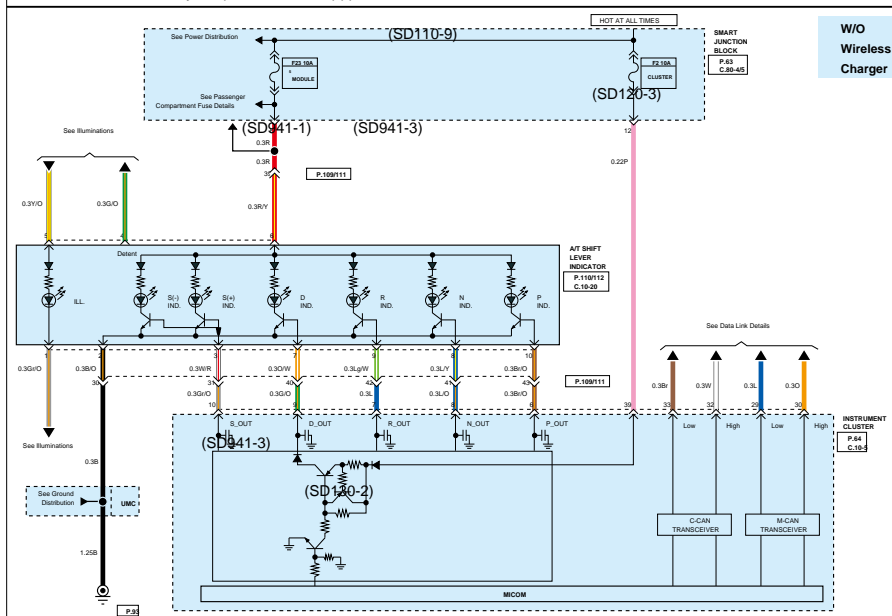
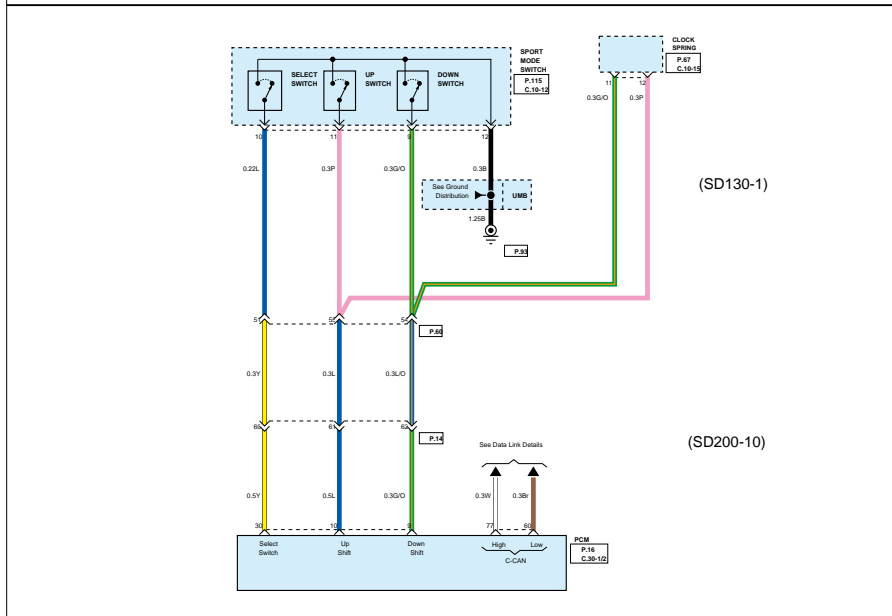
- Description
- Engine coolant is used for circulating heat in order to heat and cool the transaxle oil.
- Prevents over heating of the transaxle oil while the vehicle is moving.

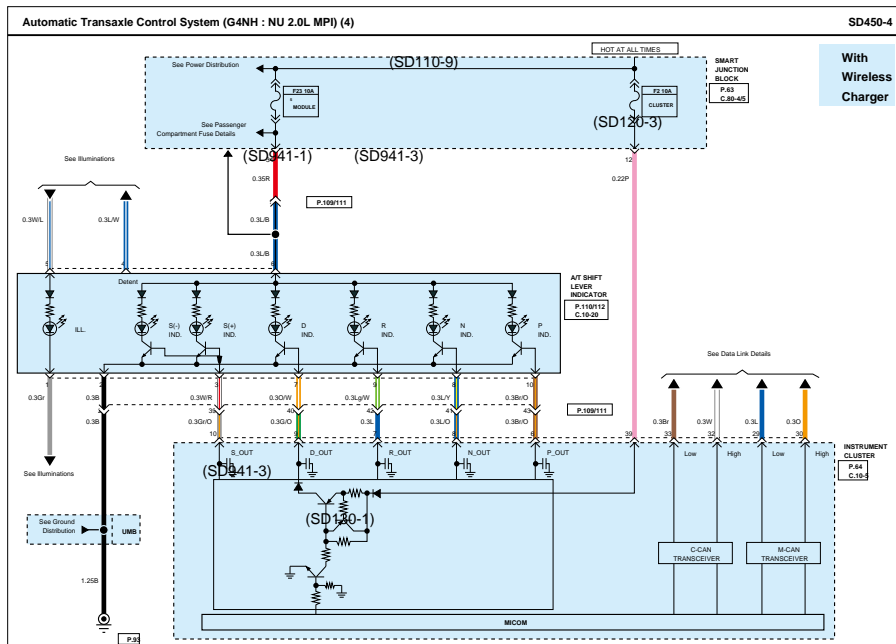
Coolant Flow



## Automatic Transaxle Control System - Schematic Diagrams (Article 42660)







## Automatic Transaxle (Article 44342)

Non Standards

- Clutch & Brake - Flow Diagram (44343)

## Automatic Transaxle (Article 44313)

Non Standards

- Automatic Transaxle - Components and Components Location (44314)
- Clutch & Brake - Components and Components Location (44341)
- Fluid - Components and Components Location (44326)
- Hydraulic System - Components and Components Location (44319)

## Automatic Transaxle (Article 44315)

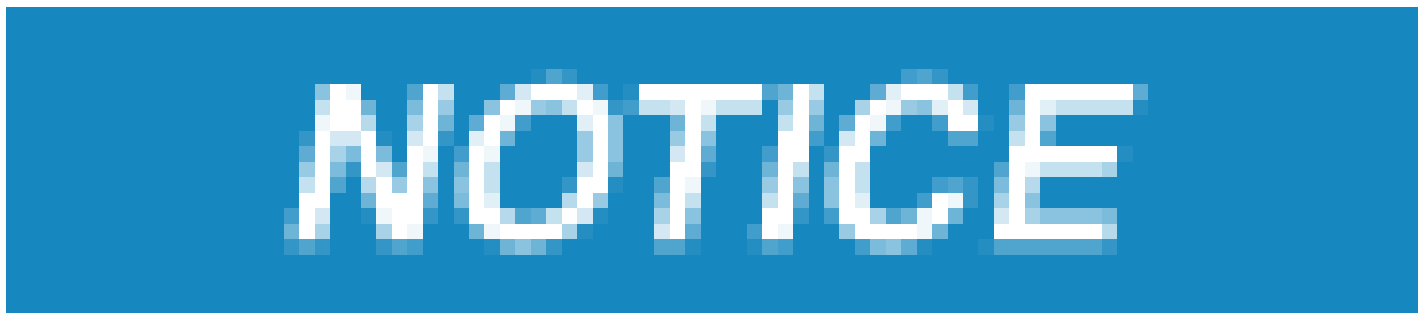
Non Standards

- Automatic Transaxle - Repair Procedures (44316)
- Automatic Transaxle Control System - Repair Procedures (44431)

## Engine and Transaxle Assembly - Repair Procedures (Article 45321)

- Removal

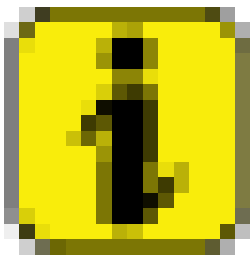
Use fender covers to avoid damaging painted surfaces. To avoid damage, unplug the wiring connectors carefully while holding the connector portion.



- Use fender covers to avoid damaging painted surfaces.

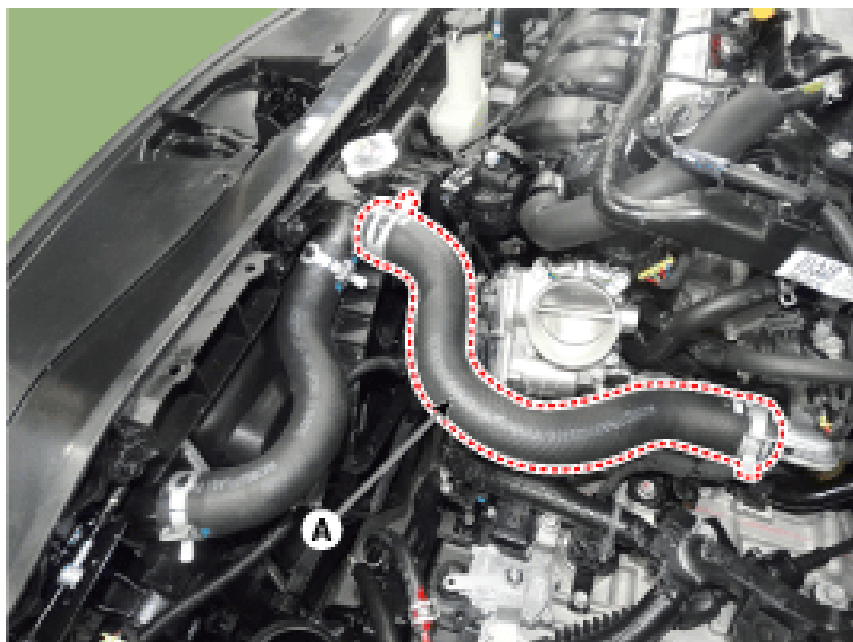
- To avoid damage, unplug the wiring connectors carefully while holding the connector portion.

Mark all wiring and hoses to avoid misconnection. For release the fuel system pressure before remove the engine assembly, start the engine without fuel pump relay. and then turn off the ignition switch after engine stops.

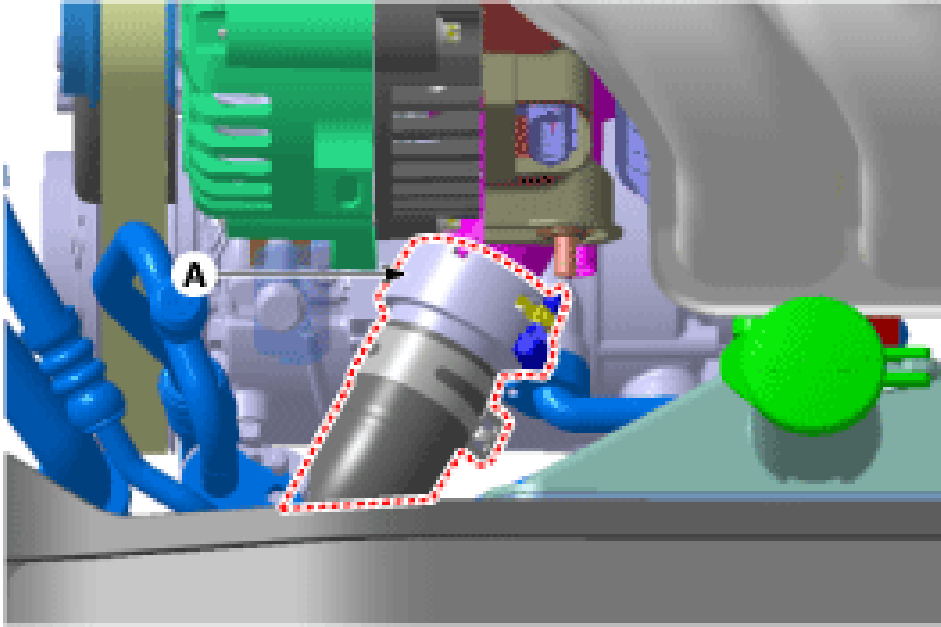


# Information

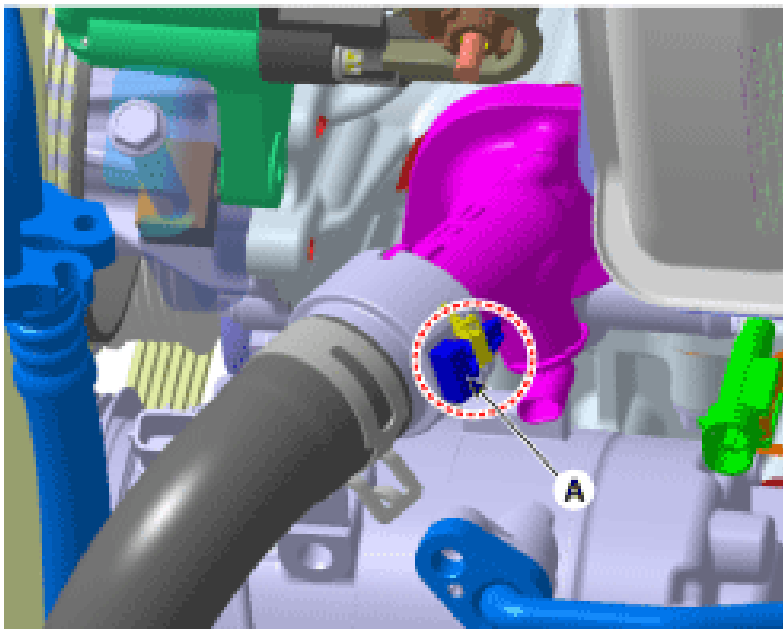
- Mark all wiring and hoses to avoid misconnection.
- For release the fuel system pressure before remove the engine assembly, start the engine without fuel pump relay. and then turn off the ignition switch after engine stops.
- Remove the engine cover. (Refer to Engine and Transaxle Assembly - "Engine Cover")
- Remove the air duct and air cleaner assembly. (Refer to Intake and Exhasut System - "Air Cleaner")
- Remove the battery. (Refer to Engine Electrical System - "Battery")
- Remove the ECM (Engine Control Module ). (Refer to Engine Control / Fuel System - "Engine Control Module (ECM)")
- Remove the battery tray. (Refer to Engine Electrical System - "Battery")
- Remove the engine room under cover. (Refer to Engine and Transaxle Assembly - "Engine Room Under Cover")
- Drain the engine coolant. (Refer to Cooling System - "Coolant")
- Disconnect the radiator upper hose (A).



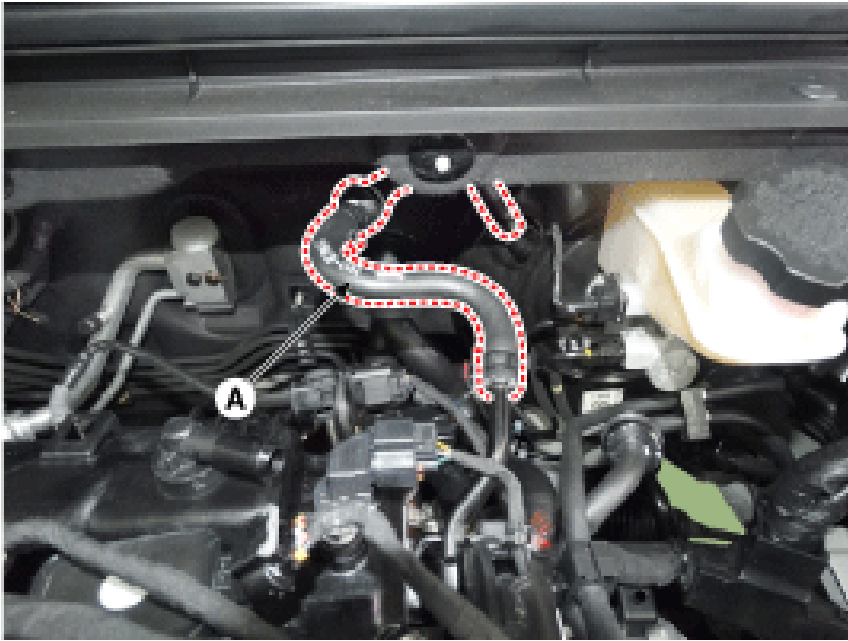
- Disconnect the Radiator lower hose quick connector (A). When the hose detached, remove the holder clip (A) and then disconnect the quick connector.



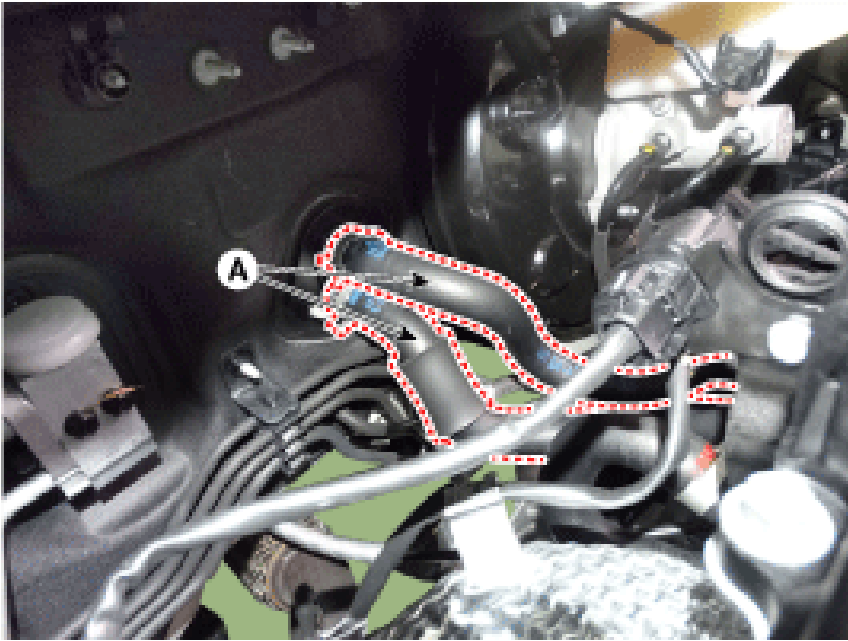
When the hose detached, remove the holder clip (A) and then disconnect the quick connector.  
 - When the hose detached, remove the holder clip (A) and then disconnect the quick connector.



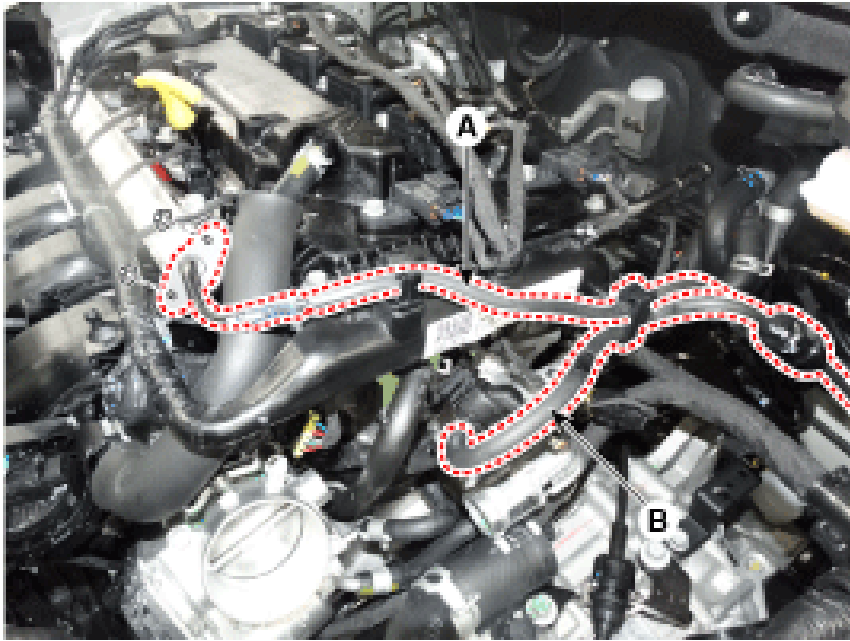
- Recover the refrigerant and then remove the high pressure pipe and low pressure pipe. (Refer to Heating, Ventilation Air conditioning - "Compressor")
- Remove the transaxle wire harness connectors and control cable from the transaxle. (Refer to Automatic Transaxle System - "Automatic Transaxle")
- Disconnect the brake booster vacuum hose (A).



- Disconnect the heater hoses (A).

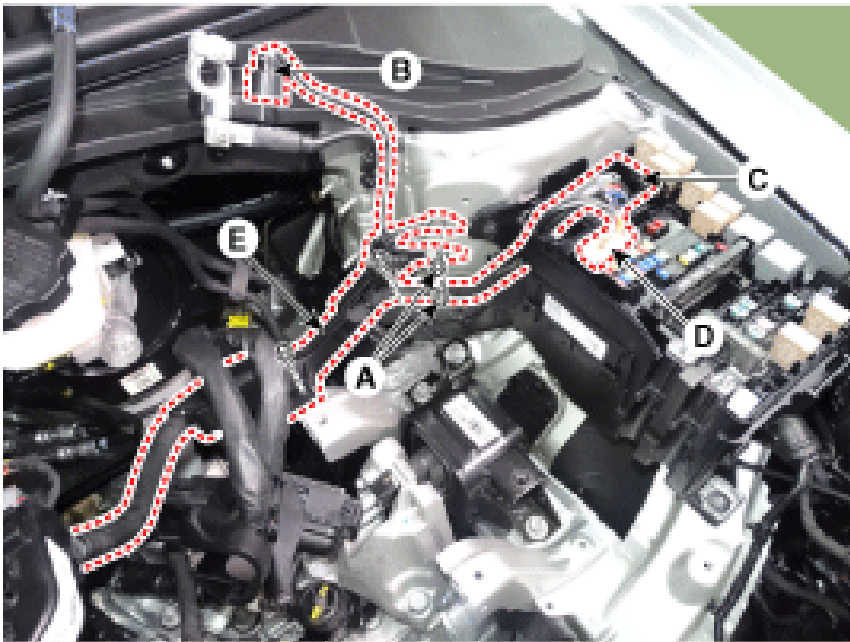


- Disconnect the fuel hose (A) and the purge control solenoid valve ( PCSV ) hose (B).

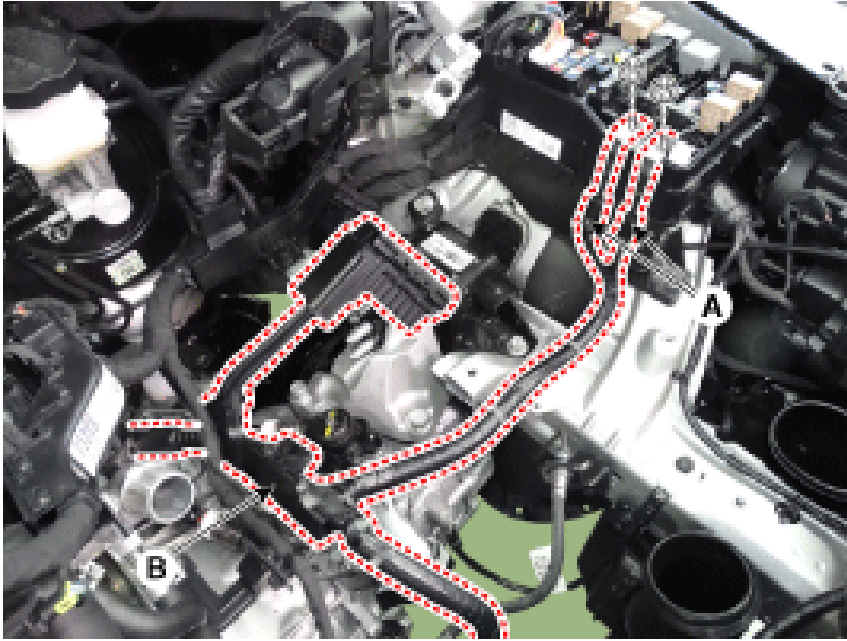


- Disconnect the wiring harness from the engine room. Remove the ground bolt (A). Disconnect the battery negative terminal connector (B). Disconnect the front harness connector (C). Disconnect the PCB block (D). Disconnect the wiring protector (E). Disconnect the battery positive wirings (A). Disconnect the wiring protector (B).

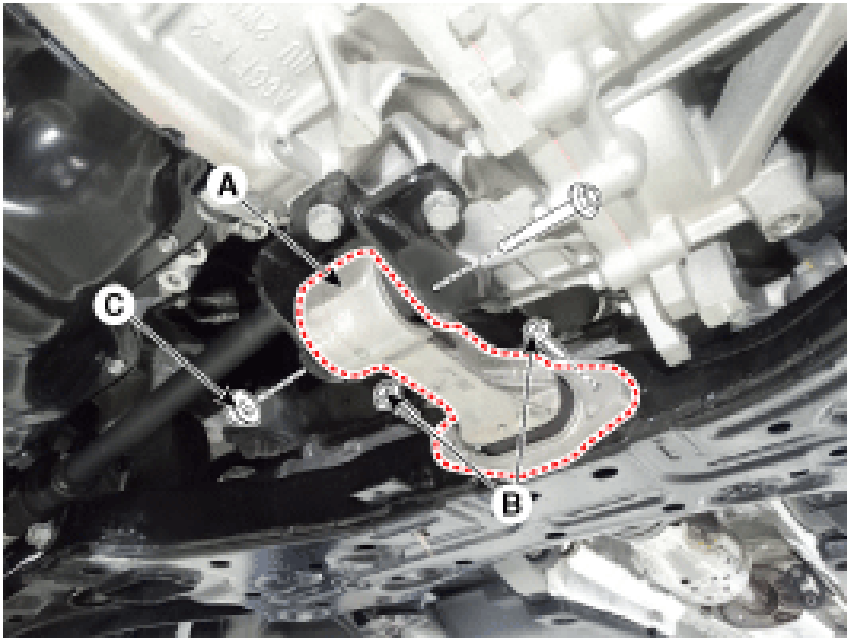
- Remove the ground bolt (A).
- Disconnect the battery negative terminal connector (B).
- Disconnect the front harness connector (C).
- Disconnect the PCB block (D).
- Disconnect the wiring protector (E).



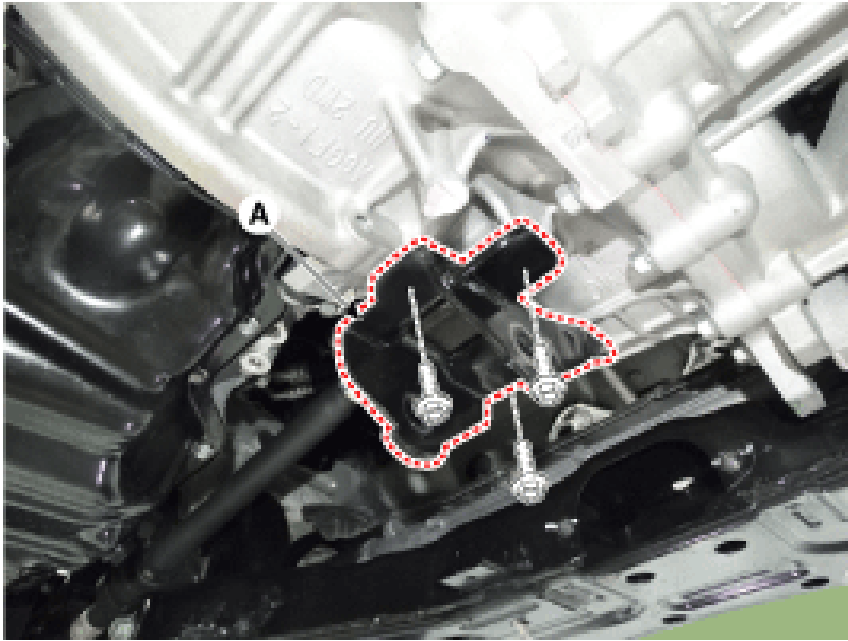
- Disconnect the battery positive wirings (A).
- Disconnect the wiring protector (B).



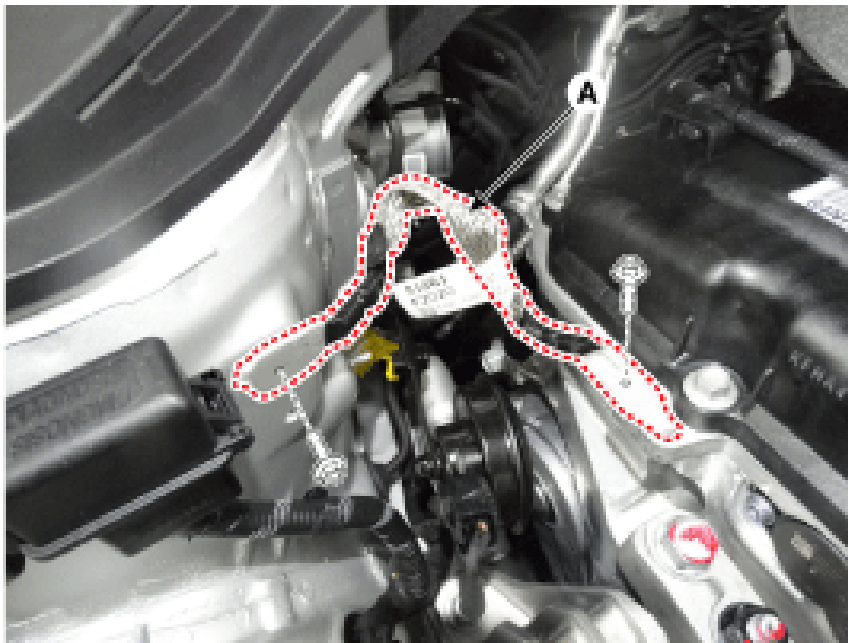
- Remove the front muffler. (Refer to Intake and Exhaust System - "Muffler")
- Remove the steering U-joint mounting bolts. (Refer to Steering System - "Steering Column and Shaft")
- Remove the roll rod bracket (A). Tightening torque Bolts (B) : 49.0 - 63.7 N.m (5.0 - 6.5 kgf.m, 36.2 - 47.0 lb-ft) Nut (C) : 107.9 - 127.5 N.m (11.0 - 13.0 kgf.m, 79.6 - 94.0 lb-ft)



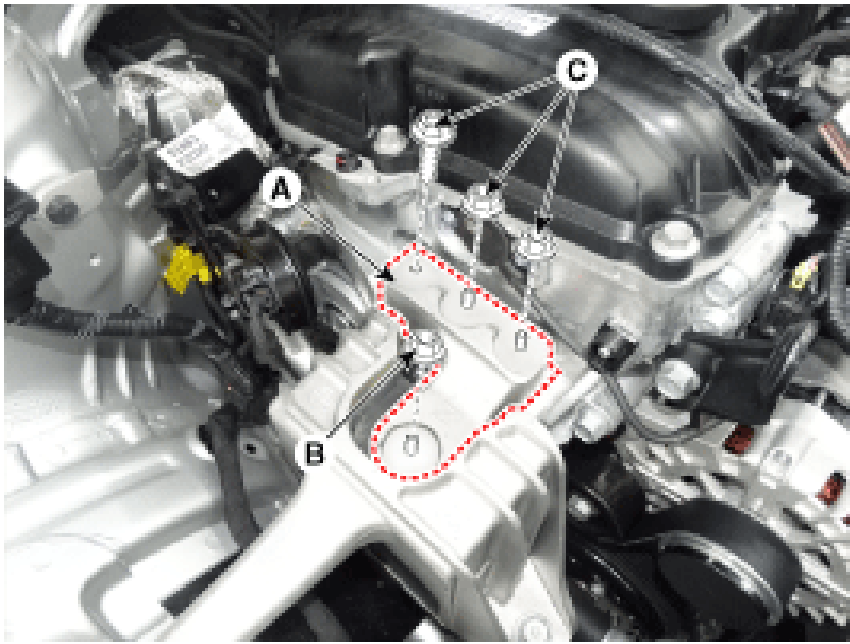
- Remove the roll rod mounting support bracket (A). Tightening torque : 49.0 - 68.6 N.m (5.0 - 7.0 kgf.m, 36.2 - 50.6 lb-ft)



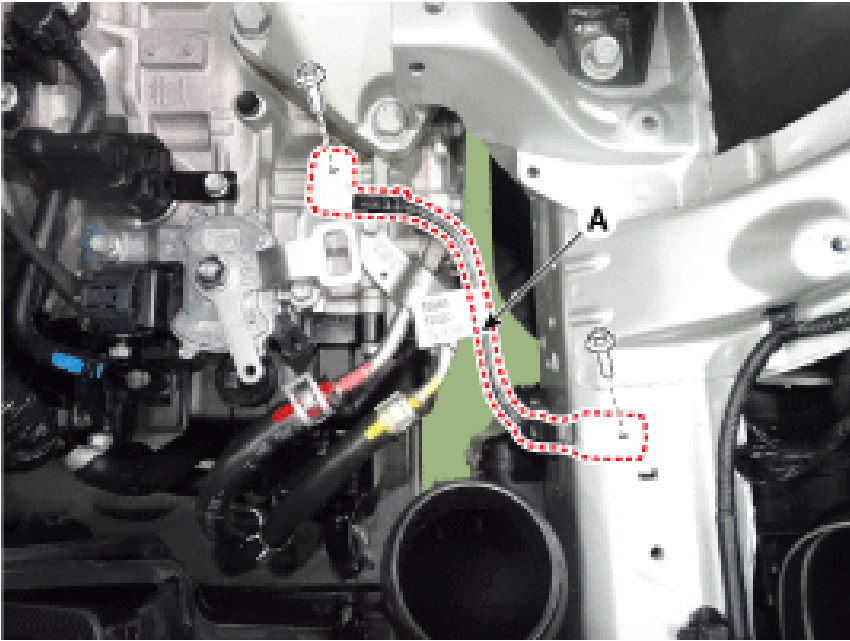
- Remove the sub frame. (Refer to Suspension System - "Sub Frame")
- Support the engine and transaxle assembly with a floor jack.
- Disconnect the ground cable (A). Tightening torque : 10.8 - 13.7 N.m (1.1 - 1.4 kgf.m. 8.0 - 10.1 lb-ft)



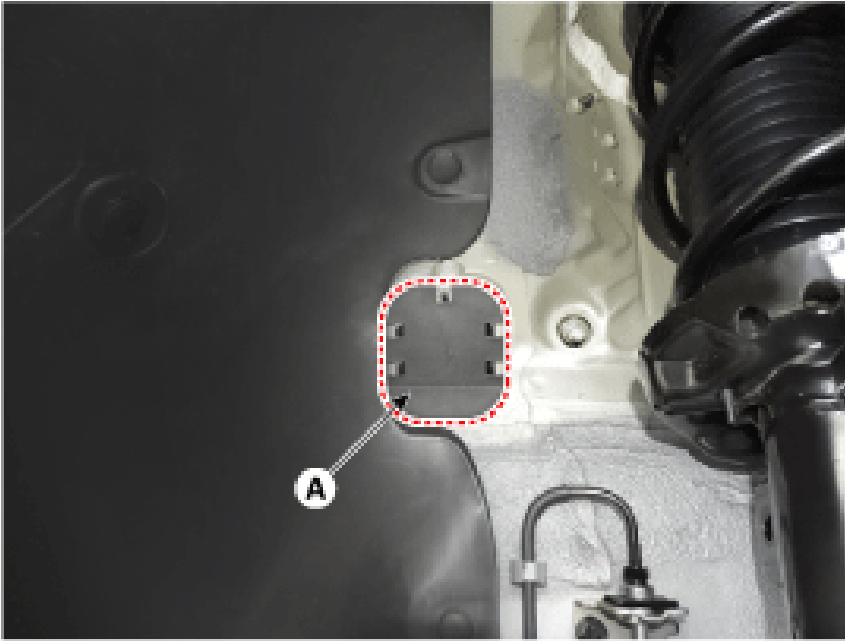
- Remove the engine mounting support bracket (A). Tightening torque Nut (B) : 88.3 - 107.9 N.m (9.0 - 11.0 kgf.m, 65.1 - 79.6 lb-ft) Bolt, Nuts (C) : 58.8 - 73.5 N.m (6.0 - 7.5 kgf.m, 43.4 - 54.2 lb-ft)



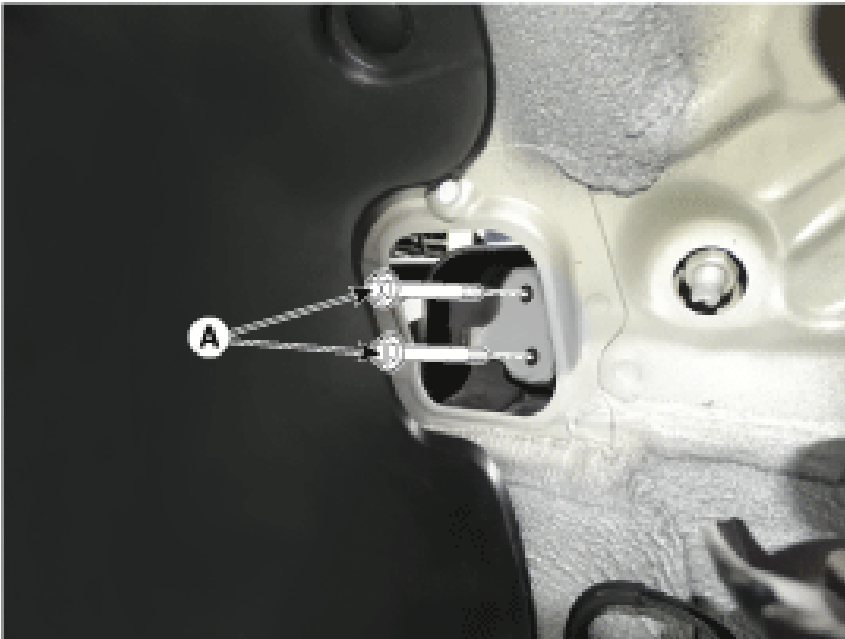
- Disconnect the ground line (A). Tightening torque : 10.8 - 13.7 N.m (1.1 - 1.4 kgf.m, 8.0 - 10.1 lb-ft)



- Remove the service cover (A).



- Remove the transaxle support bracket mounting bolts (A). Tightening torque : 88.3 - 107.9 N.m (9.0 - 11.0 kgf.m, 65.1 - 79.6 lb-ft)



- Remove the engine and transaxle assembly by lifting vehicle. Before removing the engine and transaxle assembly, make sure hoses and wire connectors are disconnected. When removing the engine and transaxle assembly, be careful not to damage any surrounding parts or body components.



Before removing the engine and transaxle assembly, make sure hoses and wire connectors are disconnected. When removing the engine and transaxle assembly, be careful not to damage any surrounding parts or body components.

- Before removing the engine and transaxle assembly, make sure hoses and wire connectors are disconnected.
- When removing the engine and transaxle assembly, be careful not to damage any surrounding parts or body components.
- Installation
- Adjust shift cable .
- Adjust throttle cable.
- Refill engine with engine oil.
- Refill transaxle with fluid.
- Refill radiator and reservoir tank with engine coolant.
- Place heater control knob on "HOT" position.
- Bleed air from the cooling system.
- (Refer to Cooling System - "Coolant")
- Clean battery posts and cable terminals with sandpaper assemble them, then apply grease to prevent corrosion.
- Inspect for fuel leakage.
- After assemble the fuel line, turn on the ignition switch (do not operate the starter) so that the fuel pump runs for approximately two seconds and fuel line pressurizes.
- Repeat this operation two or three times, then check for fuel leakage at any point in the fuel line.

### **Automatic Transaxle (Article 44299)**

Non Standards

- Automatic Transaxle System - Specifications (44300)

### **Automatic Transaxle (Article 44301)**

Non Standards

- Automatic Transaxle System - Specifications (44302)

### **Automatic Transaxle (Article 44303)**

Non Standards

- Automatic Transaxle System - Specifications (44304)

### **Automatic Transaxle (Article 44305)**

Non Standards

- Automatic Transaxle System - Specifications (44306)

## **All New Technical Service Bulletins (itype\_432)**

Tsbs

- AUTOMATIC TRANSMISSION FLUID (ATF) AND DCT/IVT GEAR OIL (24-AT-004H, 2024/09/16)
- AUTOMATIC TRANSMISSION INCORRECT RATIO DTC P0731, P0732, P0733, P0734, P0735, P0736, P0729, P076F & P0730 (24-AT-002H, 2024/04/09)

## **All Technical Service Bulletins (itype\_100)**

Tsbs

- AUTOMATIC TRANSMISSION (ATM) POLICY (20-AT-016H, 2020/04/15)
- AUTOMATIC TRANSAXLE OIL TEMPERATURE SENSOR DTC P071100, P071200 & P071300 (20-AT-015H, 2020/04/09)
- AUTOMATIC TRANSMISSION DTC P0880/P088000 (20-AT-018H, 2020/05/21)
- AUTOMATIC TRANSAXLE SOLENOID DTC P074100, P074300, P074800, P075300, P075800, P076300, P076800, P077300 (20-AT-007H, 2020/02/21)
- OIL PRESSURE DATA TRANSFER USING GDS MOBILE (6-SPEED TRANSMISSION) (19-AT-010H, 2019/05/08)
- AUTOMATIC TRANSMISSION STALL TEST PROCEDURE (19-AT-021H-1, 2019/12/18)
- AUTOMATIC TRANSMISSION FLUID (ATF) AND DCT/IVT GEAR OIL (24-AT-004H, 2024/09/16)
- AUTOMATIC TRANSMISSION INCORRECT RATIO DTC P0731, P0732, P0733, P0734, P0735, P0736, P0729, P076F & P0730 (24-AT-002H, 2024/04/09)
- AUTOMATIC TRANSAXLE DIAGNOSIS (6-SPEED) INHIBITOR/RANGE SWITCH DTC P0705, P0706, P0707 & P0708 (19-AT-024H, 2019/11/15)
- AUTOMATIC TRANSAXLE INPUT/OUTPUT SPEED SENSOR DTC P071700, P072100 & P072200 (20-AT-012H, 2020/03/25)

## **Automatic Transaxle (Article 44311)**

Non Standards

- General Information - Troubleshooting (44312)

## **Automatic Transaxle (Article 44309)**

Non Standards

- Automatic Transaxle System - Special Service Tools (44310)

## **Driveability (itype\_131)**

Tsbs

- AUTOMATIC TRANSAXLE DIAGNOSIS (6-SPEED) INHIBITOR/RANGE SWITCH DTC P0705, P0706, P0707 & P0708 (19-AT-024H, 2019/11/15)

## **Poor performance (itype\_162)**

Tsbs

- AUTOMATIC TRANSAXLE DIAGNOSIS (6-SPEED) INHIBITOR/RANGE SWITCH DTC P0705, P0706, P0707 & P0708 (19-AT-024H, 2019/11/15)

## **Slipping (itype\_168)**

Tsbs

- AUTOMATIC TRANSMISSION STALL TEST PROCEDURE (19-AT-021H-1, 2019/12/18)

## **OEM Policies and Procedures (itype\_120)**

Tsbs

- AUTOMATIC TRANSMISSION (ATM) POLICY (20-AT-016H, 2020/04/15)
- OIL PRESSURE DATA TRANSFER USING GDS MOBILE (6-SPEED TRANSMISSION) (19-AT-010H, 2019/05/08)