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FILLING VOLUME AND SPECIFICATIONS

Item	Capacity	Specification
Engine lubricant (L)	3.2±0.1 (when not replacing the fuel filter) 3.5±0.1 (when replacing the fuel filter)	See oil recommendation
Transmission lubricant (L)	1.8±0.1(5MT)	GL-5 140 for high-temperature regions
		GL-4 75W-80 for high-altitude, low-temperature regions
		GL-4 80W-90 for common regions
	1.7±0.1(6AMT)	GL-4 75W-90
Engine coolant (L)	5.0	-35 degrees, for common regions and high-temperature regions
		-45 degrees, for high-altitude, low-temperature regions
Brake fluid/clutch fluid (L)	0.6±0.02(5MT) 0.57±0.02(6AMT)	DOT4
Air-conditioning refrigerant (g)	510±10	HFC-134a in general use outside the EU
Windshield washing liquid (L)	2.8	-35 °C
Gasoline (L)	40	Unleaded gasoline rated 92 or above

OIL RECOMMENDATION

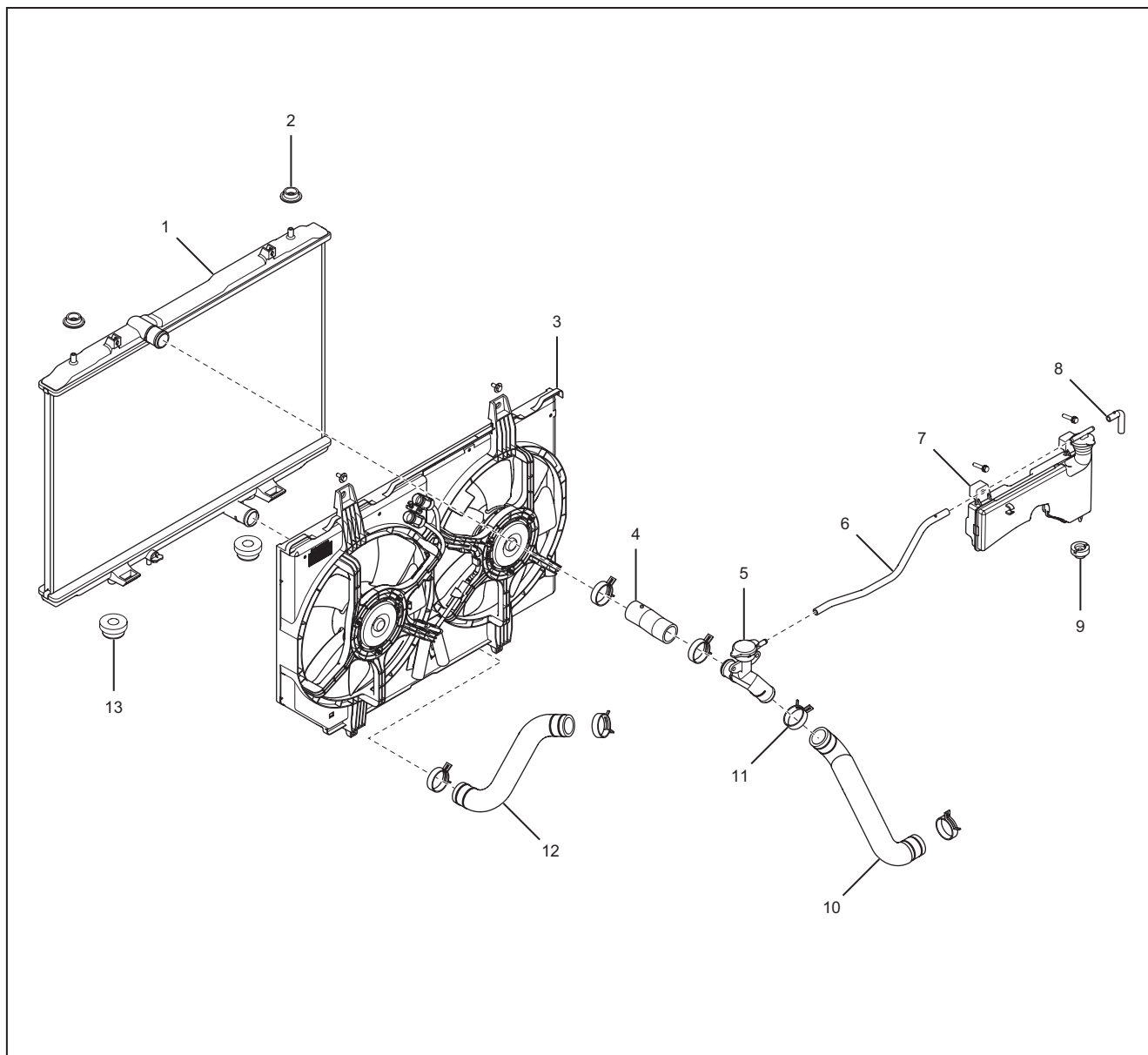
Ambient temperature	Above -25 degrees Celsius			Above -30 degrees Celsius		Even lower temperatures	
API rating	SL	SM	SN	SM	SN	SM	SN
	Recommended	Higher grade		Recommended	Higher grade	Recommended	Higher grade
	Low ———→ High			Low ———→ High		Low ———→ High	
Viscosity grade	10W-40			5W-30		0W-30	

COOLING SYSTEM

OVERVIEW

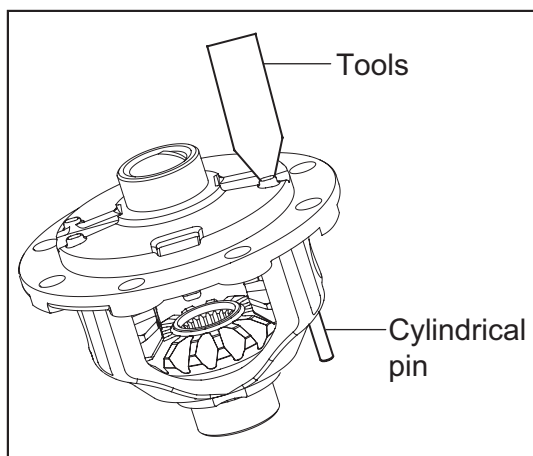
The cooling system comprises components such as the radiator, electric fan and the expansion tank. The cooling system serves to keep the working temperature of the engine within optimal levels. Common faults with the cooling system include high coolant temperatures, low coolant temperatures, coolant leakage and loud engine noises.

SCHEMATICS

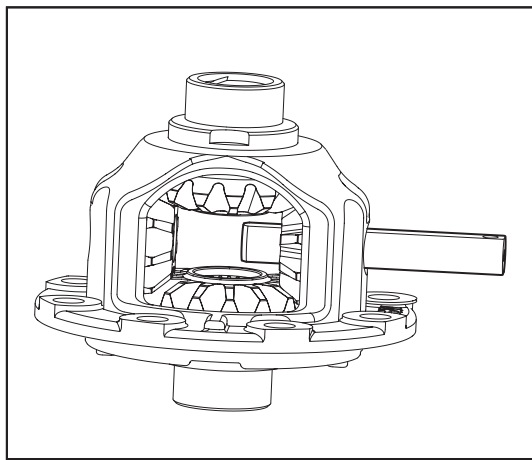


1. Radiator Assembly
2. Upper Radiator Suspension
3. Electric Fan Assembly
4. Radiator Intake Pipe Connection
5. Radiator Fuel Filler Cap Assembly
6. Overflow Pipe
7. Expansion Tank Assembly

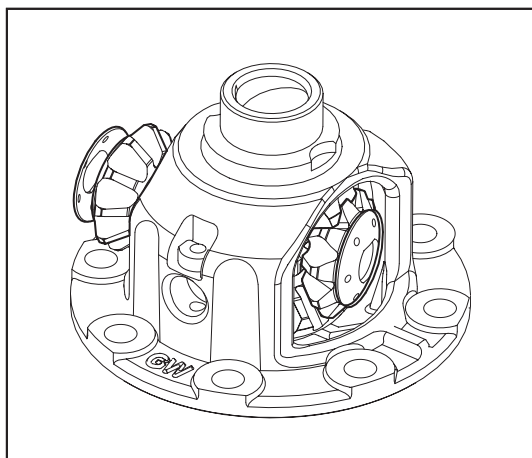
8. Expansion Tank Ventilation Pipe
9. Expansion Tank Suspension
10. Radiator Intake Pipe
11. Steel Band Elastic Hoop
12. Radiator Outlet Pipe
13. Lower Radiator Suspension



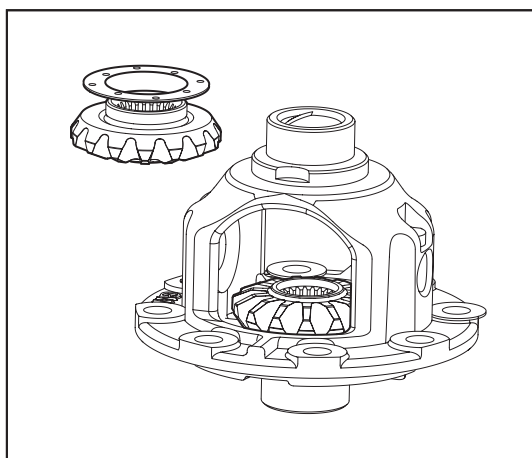
4. Remove cylindrical pin that fixes the planetary gear shaft using dedicated tool



5. Remove planetary gear shaft



6. Rotate the two planetary wheels with a horizontal 90° turn, remove planetary wheel and planetary wheel spherical Shim



7. Remove axle shaft gear and side gear wheel shim

CLUTCH SELF-LEARNING

CODE: \$01

Function

Clutch engagement self-learning.

Description

Clutch engagement self-learning, and data storage in EEPROM.

Conditions

The engine is not running.

The vehicle is stationary.

Power connected.

To be used

Offline: When establishing vehicle initialization settings.

Servicing: After clutch actuator has been installed.

After the TCU has been replaced.

CODE: \$02

Function:

Clutch biting point self-learning.

Description:

Clutch biting point self-learning, and data storage in EEPROM.

Conditions

The vehicle is stationary.

The engine is running.

The transmission is in N gear.

Power connected.

To be used

Offline: When establishing vehicle initialization settings.

Servicing: After clutch actuator has been installed.

After the TCU has been replaced.

After clutch or clutch components have been replaced.

CODE: \$03

Function

Clutch EEPROM initialization (clutch protection data).

Description

Initialization includes the corresponding clutch protection EEPROM data range.

Conditions

Power connected

To be used

Offline: When establishing vehicle initialization settings.

Servicing: EOL after TCU replacement.

After clutch or clutch components have been replaced.

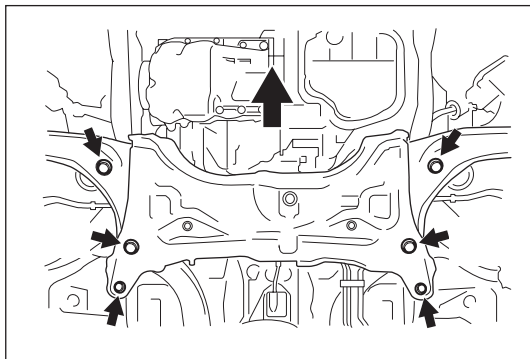
DIAGNOSIS AND INSPECTION

PRECAUTIONS

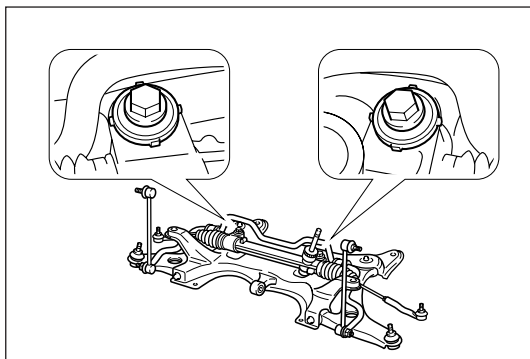
1. When removing or replacing the transmission or clutch, you must clean the transmission shaft 1 spline and clutch driven plate spline (be careful not to damage the splines) using a cleaning agent.
2. After cleaning, you must apply a layer of grease on the transmission shaft 1 spline (lubricant type: MI-SETRAL-43N; application position: on the transmission shaft 1 spline, 4 mm-8 mm from the separator shaft bearing to the spline end; application amount: 0.2 g-0.3 g).
3. Apply with a small brush on the transmission shaft 1 spline from the inside to the outer edge. Make sure that the entire spline shaft is lubricated evenly (just a thin layer of grease is needed, and avoid applying too much grease on the release bearing so that excess grease will not splash on the clutch driven plate during operations).

FAULT SYMPTOM CHECKLIST

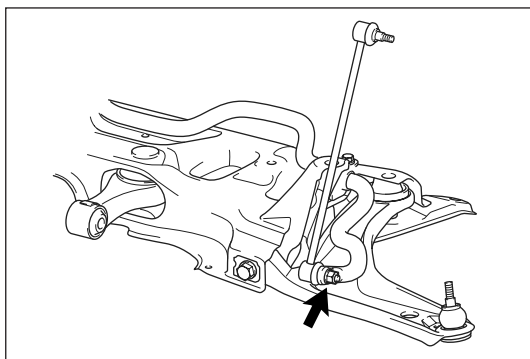
Symptoms	Possible causes
Clutch shake	<ol style="list-style-type: none"> 1. Engine suspension (loose) 2. Clutch driven plate assembly (excessive runout) 3. Clutch driven plate assembly (oil-stained) 4. Clutch driven plate assembly (wear and tear) 5. Clutch driven plate torsion damper (damaged) 6. Clutch driven plate assembly (worn out) 7. Diaphragm spring (top end not aligned)
Clutch pedal feels slack	<ol style="list-style-type: none"> 1. Clutch pipeline (air ingress into the pipeline) 2. Clutch master cylinder cup (damaged) 3. Clutch slave cylinder cup (damaged)
Abnormal clutch noises	<ol style="list-style-type: none"> 1. Clutch release bearing sub-assembly (worn, dirty or damaged) 2. Clutch driven plate torsion damper (damaged) 3. Pressure plate 4. Clutch pedal 5. Fork
Clutch slip	<ol style="list-style-type: none"> 1. Clutch pedal (free travel needs adjustment) 2. Clutch driven plate assembly (oil-stained) 3. Clutch driven plate assembly (wear and tear) 4. Diaphragm spring (worn) 5. Pressure plate (deformed) 6. Flywheel sub-assembly (deformed)
Clutch not fully disengaged	<ol style="list-style-type: none"> 1. Clutch pedal (free travel needs adjustment) 2. Clutch pipeline (air ingress into the pipeline) 3. Clutch master cylinder cup (damaged) 4. Clutch slave cylinder cup (damaged) 5. Clutch driven plate assembly (not installed correctly) 6. Clutch driven plate assembly (excessive runout) 7. Clutch driven plate assembly (cracks) 8. Clutch driven plate assembly (filthy or burnout) 9. Clutch driven plate assembly (oil-stained) 10. Clutch driven plate assembly (spline not lubricated)

**11. Remove subframe assembly**

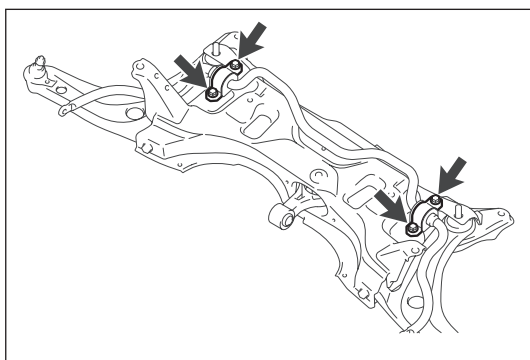
- (a) Hold subframe using tool.
- (b) Remove the 6 bolts that secure the part to the vehicle body.
- (c) Remove subframe assembly.

**12. Remove steering gear assembly**

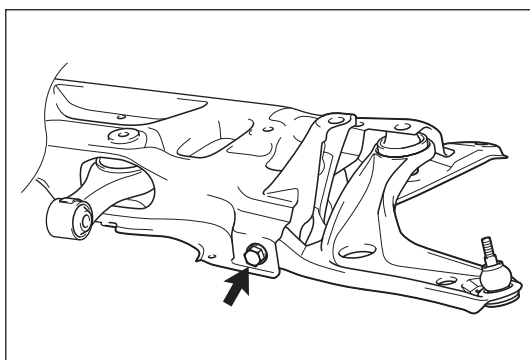
- (a) Remove steering gear and subframe bolt.
- (b) Remove steering gear assembly.

**13. Remove connecting rod**

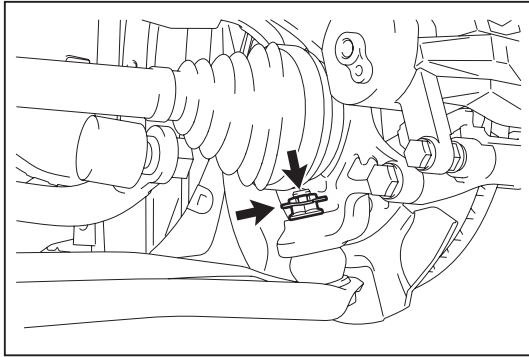
Remove stabilizer bar and bar nut, then remove connecting rod.

**14. Remove stabilizer bar assembly**

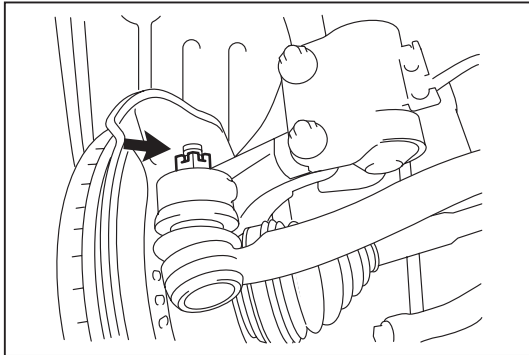
- (a) Remove 4 bolts.
- (b) Remove stabilizer bar bracket and bushing.
- (c) Remove stabilizer bar assembly.

**15. Remove front lower arm assembly**

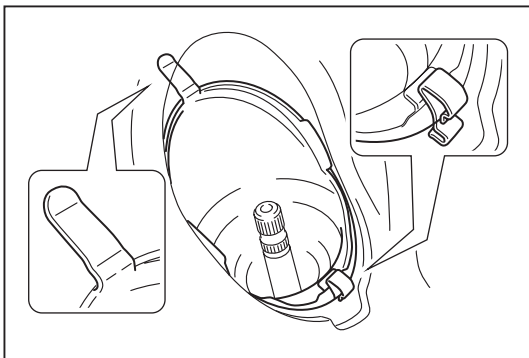
Remove subframe and control arm bolt.



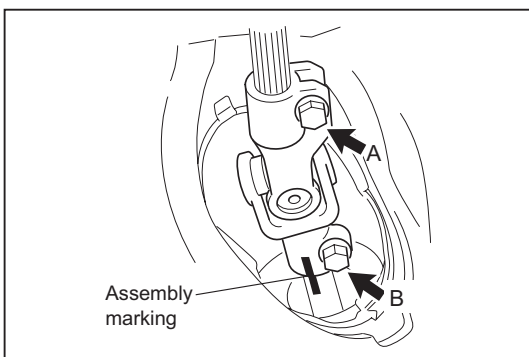
6. **Install front left suspension lower control arm**
Install nut and cotter pin.
7. **Install front right suspension lower control arm**
8. **Install lateral stabilizer bar linkage**



9. **Install steering gear outer left ball assembly**
Install nut and cotter pin.
10. **Install steering gear outer right ball assembly**



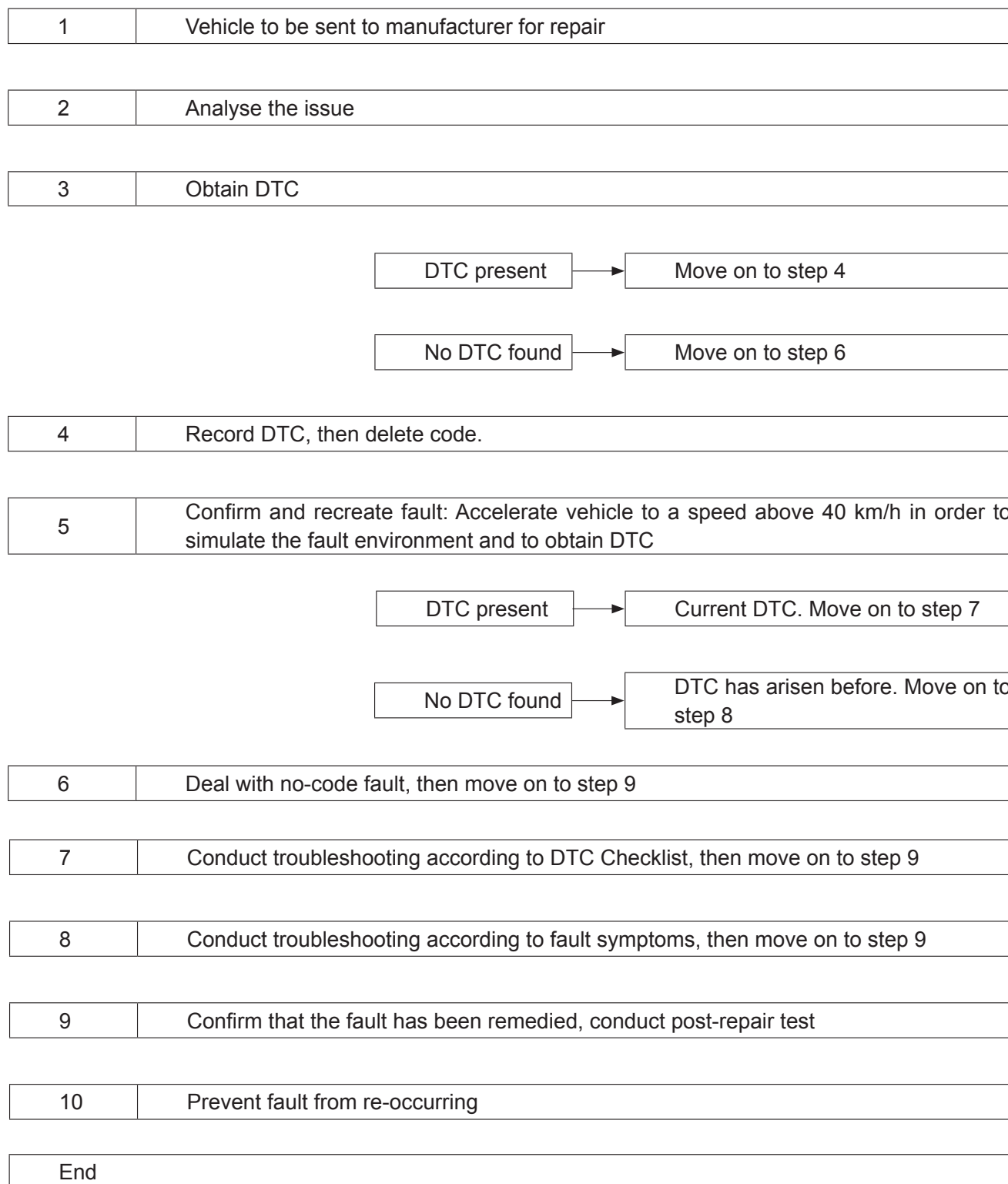
11. **Install front wheel**
12. **Install steering transmission shaft dust boot and collar assembly**
(a) Secure the 2 clips on the steering transmission shaft dust boot and collar assembly.



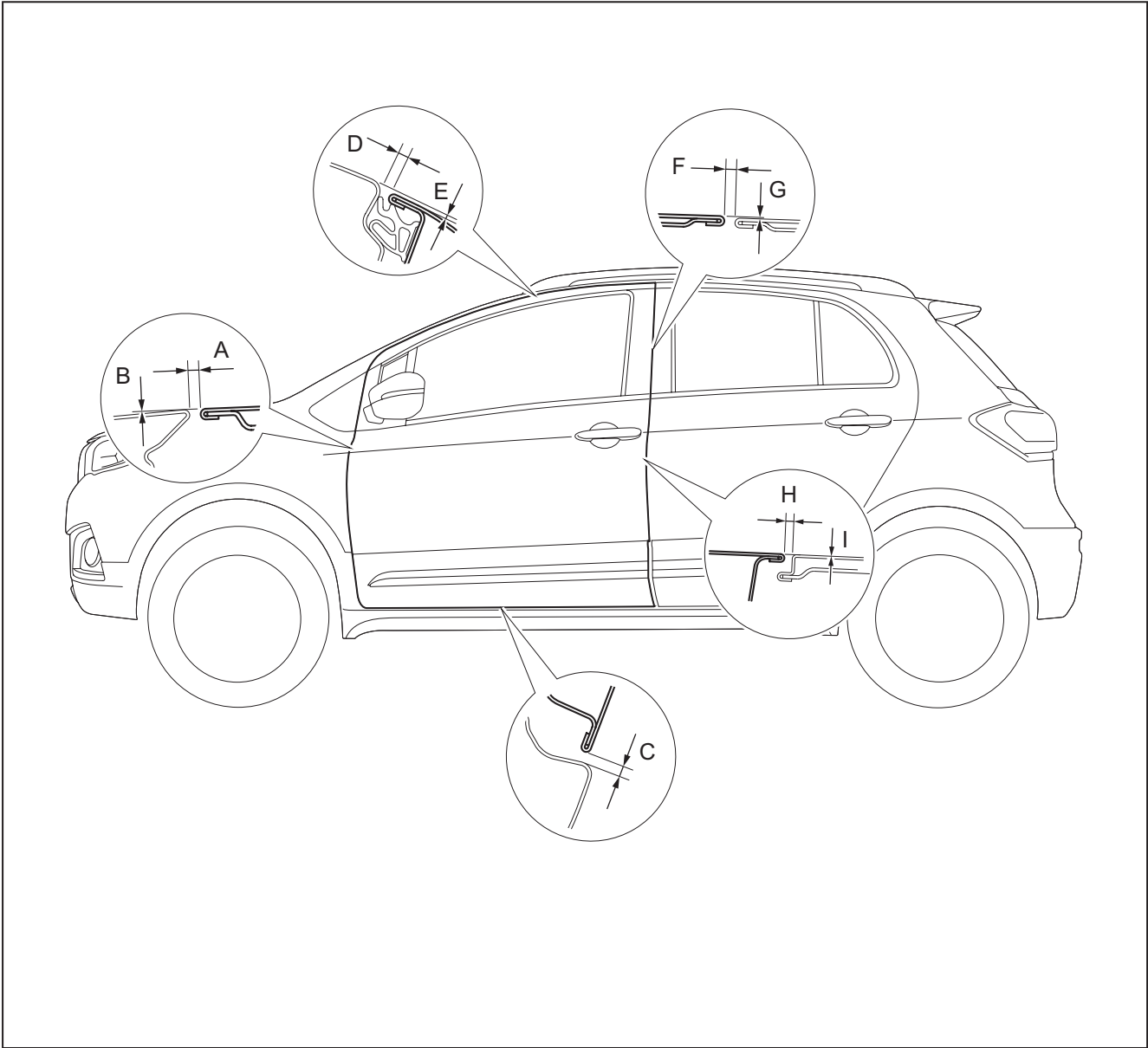
13. **Install steering-drive shaft connection**
Apply screw thread glue, fastening bolt.
Tightening torque: (33±3) N·m

14. **Align front wheels so that they face the front**
15. **Install steering column cover assembly**
16. **Check and adjust front wheel alignment**

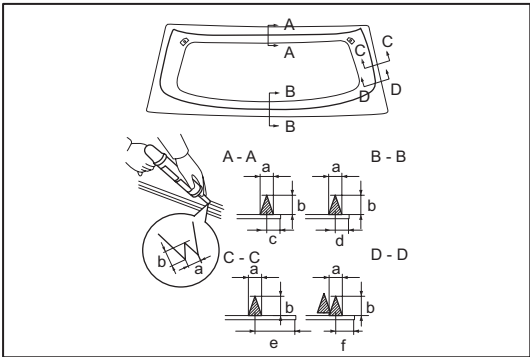
DIAGNOSIS FLOWCHART



FRONT DOOR



Part	Measured value mm
A	3.5±0.5
B	0±0.5
C	5.5±1.0
D	4±0.5
E	-3.6±0.5
F	3.5±0.5
G	0±1.0
H	3.5±0.5
I	0±1.0



4. Apply the adhesive material from the back side

- (a) Cut off the nozzle end of the tube of adhesive material.

Attention:

- After cutting off the end, use all of the adhesive material before the time listed in the table below.

Useful lifespan:

Temperature	Useful lifespan
35 °C (95°F)	15 min
20 °C (68°F)	1 h 40 min
5 °C (41°F)	8 h

- (b) Place the tube of adhesive material in a glue gun.

- (c) Coat the glass with the adhesive material.

Specification:

Part	Measured value
a	8.0 mm
b	12.5 mm
c	10.0 mm
d	12.8 mm
e	30.0 mm
f	30.0 mm

5. Install the glass on the vehicle body

- (a) Use tape or a similar product to secure the back-window glass to the vehicle body until the adhesive material hardens.

Attention:

- The primer should dry for at least 3 minutes.
- Check the snaps and confirm that they are correctly installed on the vehicle body.
- Check the clearance between the vehicle body and glass.

- (b) Gently press on the front of the glass to ensure that it fits tightly.

- (c) Use a scratcher to remove excess or protruding adhesive material (A).

Attention:

- Coat the exterior edges of the glass with the adhesive material.
- Do not drive the vehicle within the times listed in the table below.

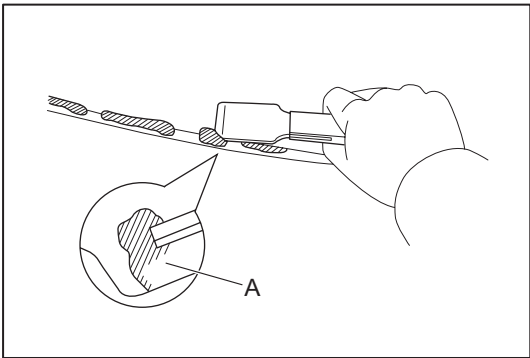
Minimum period:

Temperature	Minimum period before driving
35 °C	1 h 30 min
20 °C	5 h
5 °C	24 h

6. Check whether there are leaks

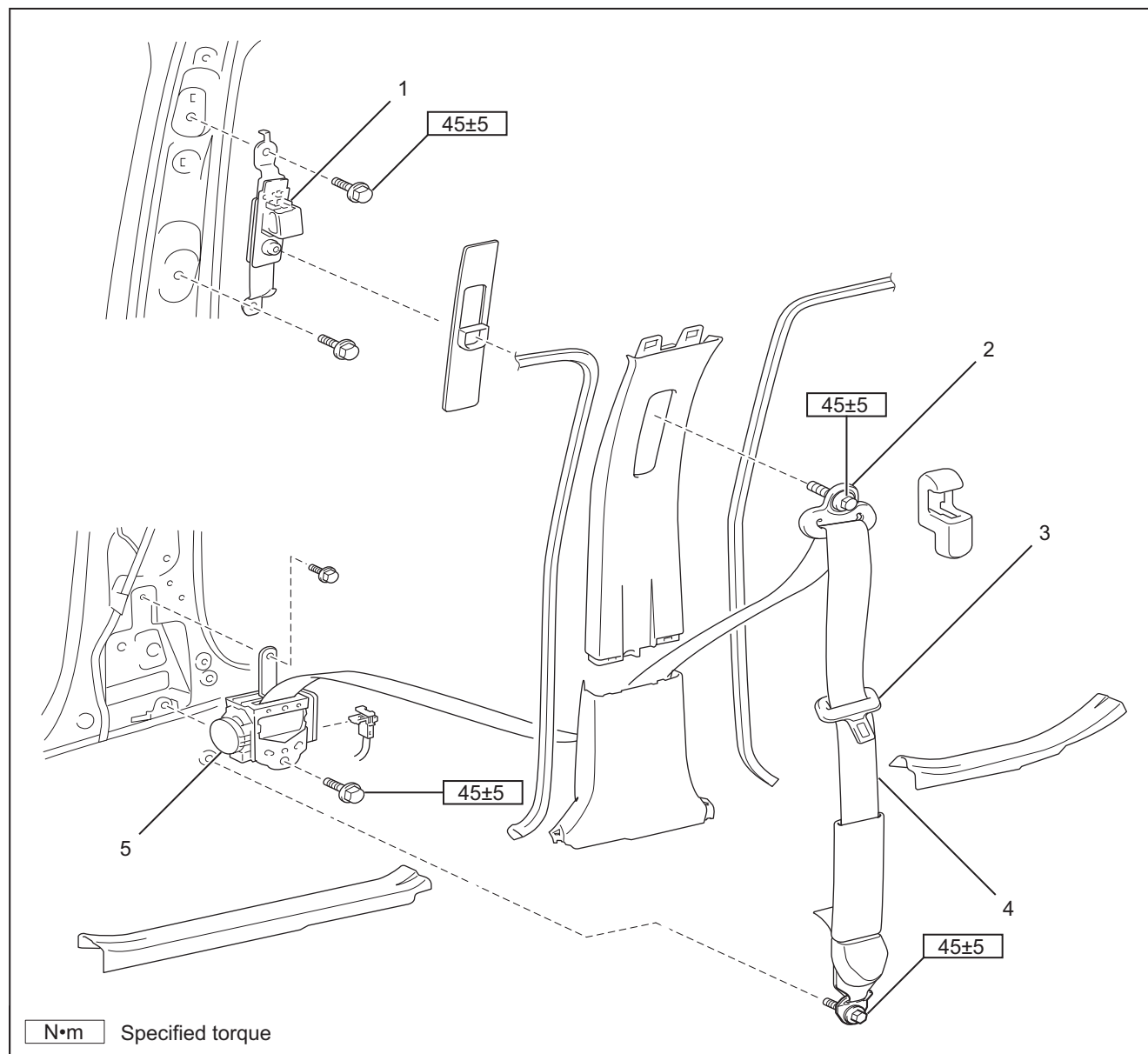
- (a) Perform a leak test after the adhesive material completely hardens.

- (b) Use vehicle-glass sealant to seal any leaks.



SCHEMATICS

FRONT SEAT BELT



1. Height Adjuster
2. Guide Ring
3. Lock pin

4. Webbing
5. Retractor

SIDE AIRBAG

Remark:

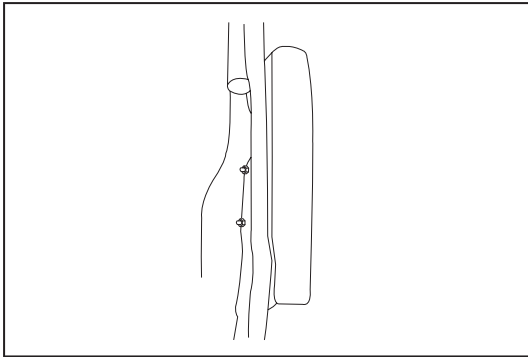
- Before repair or maintenance, put on a pair of gloves to protect your hands, and see the section on seats in the chapter on interior and exterior trim for the removal procedure for seats.

Removal

1. **Disconnect negative terminal of the battery**

Attention:

- **After turning off the ignition switch and disconnecting negative terminal of the battery, wait 90 seconds before continuing.**
2. **Disconnect the side-airbag wiring connector**
 3. **Remove the seat assembly and seat back assembly**
 4. **Remove the assembly nut and side airbag**



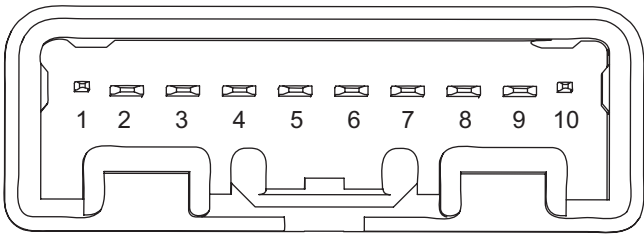
Installation

Install in the reverse of the removal procedure.

Attention:

- **Use new mounting bolts.**
- **When replacing the side airbag, ensure that the seat back is installed correctly. Incorrect installation can lead to abnormal deployment.**
- **Ensure that the wiring wire is installed and that it will not press tightly against or interfere with other parts.**

COMBINATION SWITCH ASSEMBLY (10-PIN)



Function \ Terminal		1	2	3	4				6	7	8	9	10	
Front wiper switch	MIST			○	○									Auto return to position
	OFF													
	INT			○	○	○								
	LO			○	○									
	HI		○	○										
	Wash								○	○				Auto return to position
	INT adjustment							○	○	○			○	
Rear wiper switch	Wash								○	○	○			Auto return to position
	OFF													
	ON								○	○	○	○		
	Wipe and wash								○	○	○	○		Auto return to position

Pin No.	Function	Rated current (A)
1	—	—
2	High speed	0.01
3	GND	—
4	Low speed	0.01
5	—	—
6	GND	—
7	Front wipe and wash	0.01
8	Rear wipe and wash	0.2
9	Rear wipe	0.2
10	Front wiper interval adjustment	0.01

FUSE BOX NO. 2 (INSIDE ENGINE COMPARTMENT) LAYOUT

