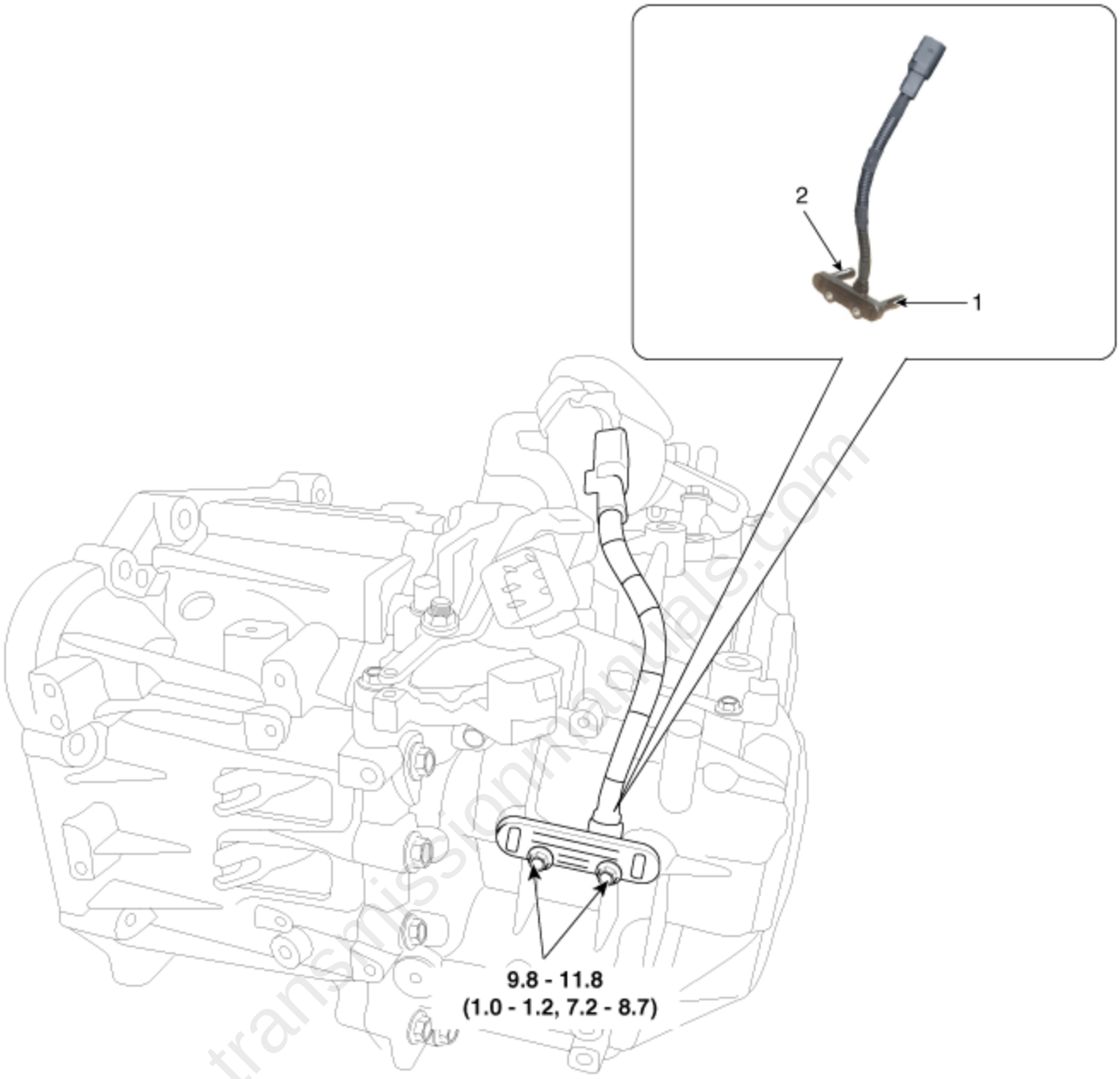
Dual Clutch Transmission Control System / Input Speed Sensor 1

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Components and components location

Component Location



Torque: N·m (kgf·m, lb·ft)

1. Input shaft speed sensor 1 (Odd)
2. Input shaft speed sensor 2 (Even)

Specifications

Specification

Item	Specification

Type	Hall effect sensor
Operating condition	-40 to 302°F (-40 to 150°C)
Output signal	High: 11.8 - 16.8 mA
	Low: 5.9 - 8.4 mA

Description and operation

Description

- The input shaft speed sensor is important in that it detects the input shaft RPM and sends this information to the Transmission Control Module (TCM).
- This data is necessary for all operations including feedback control, gear shift control and failure detection of other sensors.

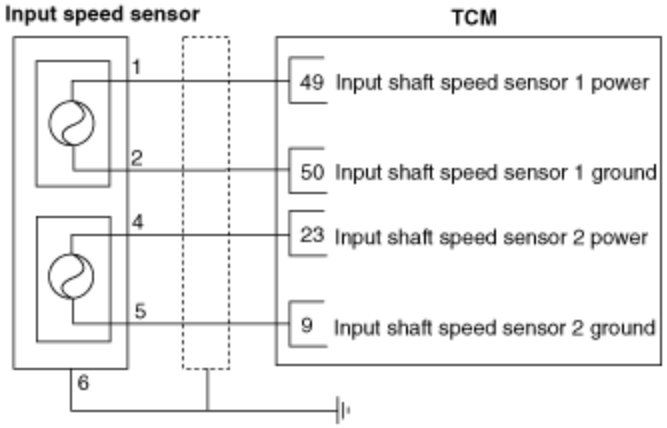


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Schematic diagrams

Circuit Diagram

[Circuit Diagram]



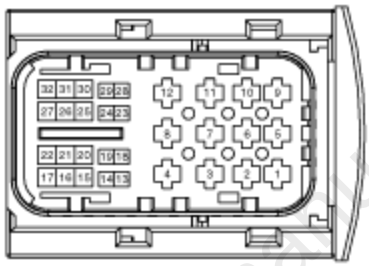
[Connection Information]

Terminal	Connected to	Function
1	TCM(49)	Input shaft speed sensor 1 power
2	TCM(50)	nput shaft speed sensor 1 ground
3	-	-
4	TCM(23)	Input shaft speed sensor 2 power
5	TCM(9)	Input shaft speed sensor 2 ground
6	Sensor ground	Sensor Shield

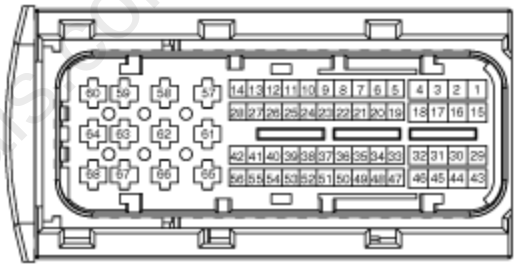
[Harness Connector]



Input shaft speed sensor connector



Connector [A] TCM



Connector [B] TCM

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Repair procedures

Removal

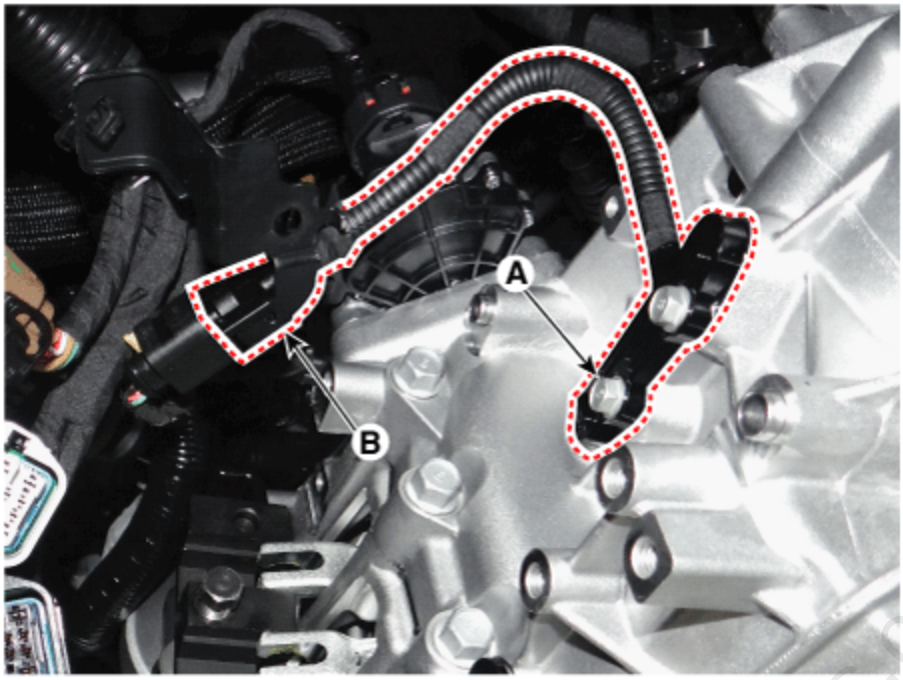
1. Remove the clutch actuator.

   (Refer to Dual Clutch Transmission Control System - "Clutch Actuator Assembly")

2. Remove the input speed sensor (A) by loosening the bolts after disconnecting the connector (B).

   Tightening torque :

   9.8 - 11.8 N·m (1.0 - 1.2 kgf·m, 7.2 - 8.7 lb·ft)



Installation

1. Install in the reverse order of removal.

NOTICE

Before installing the input speed sensor, check the assembled state of the O-rings (A) and apply gear oil to the surface of O-rings.



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Gear Actuator Assembly

Components and components location Component Location 1. Gear actuator assembly 2. Shift motor (Even) 3. Shift motor (Odd) 4. Select solenoid (Even) 5. S ...

Input Speed Sensor 2

Components and components location Component Location 1. Input shaft speed sensor 1 (Odd) 2. Input shaft speed sensor 2 (Even) Specification ...

Other information:

Kia Forte 2019-2023 (BD) Service Manual: Room Lamp

Repair procedures Removal When removing with a flat-tip screwdriver or remover, wrap protective tape around the tools to prevent damage to components. 1. Disconnect the negative (-) batt ...

Kia Forte 2019-2023 (BD) Service Manual: Valve Clearance

Repair procedures Inspection [Gamma 1.6 MPI/T-GDI] Check the valve clearance. If necessary, adjust the valve clearance by replacing the tappets. – For valve clearance inspection inspection and adjustment. [Gamma 1.6 MPI] (Refer to Engine Mechanical System - & ...

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