

DRIVE SHAFT AND AXLE**4110-01****GENERAL INFORMATION****1. SPECIFICATIONS**

Category	Items	Specifications
Common for 2WD and AWD	Front drive shaft	Joint type Inner: Tripod joint Outer: Ball joint
		Max. allowed angle Inner: 23° Outer: 46°
	Compensation for bending angle	DSL-AT (2WD) Non-same length shaft (Hollow shaft)
		Others Same length shaft
Dedicated AWD	Rear drive shaft	Joint type Inner: Tripod joint Outer: Ball joint
		Max. allowed angle Inner: 23° Outer: 46°
	Rear differential carrier	Type Split axle type (IRDA)
		Reduction gear type Hypoid gear
		Reduction gear ratio 2.533
		Diameter of ring gear Φ145mm
		Oil type Hypoid gear oil (SAE 80W/90, API GL-5)
		Pinion offset 22mm
		Hypoid gear backlash Max 0.15mm
		Differential gear backlash Max 0.05mm
		Air breather type Built-in type

Modification basis	
Application basis	
Affected VIN	

OVERVIEW AND OPERATING PROCESS

1. COMPONENTS

2WD model

Front hub assembly

Front view	Rear view

Drive shaft (LH)

Intermediate shaft

※ (excluding diesel A/T 2WD model)

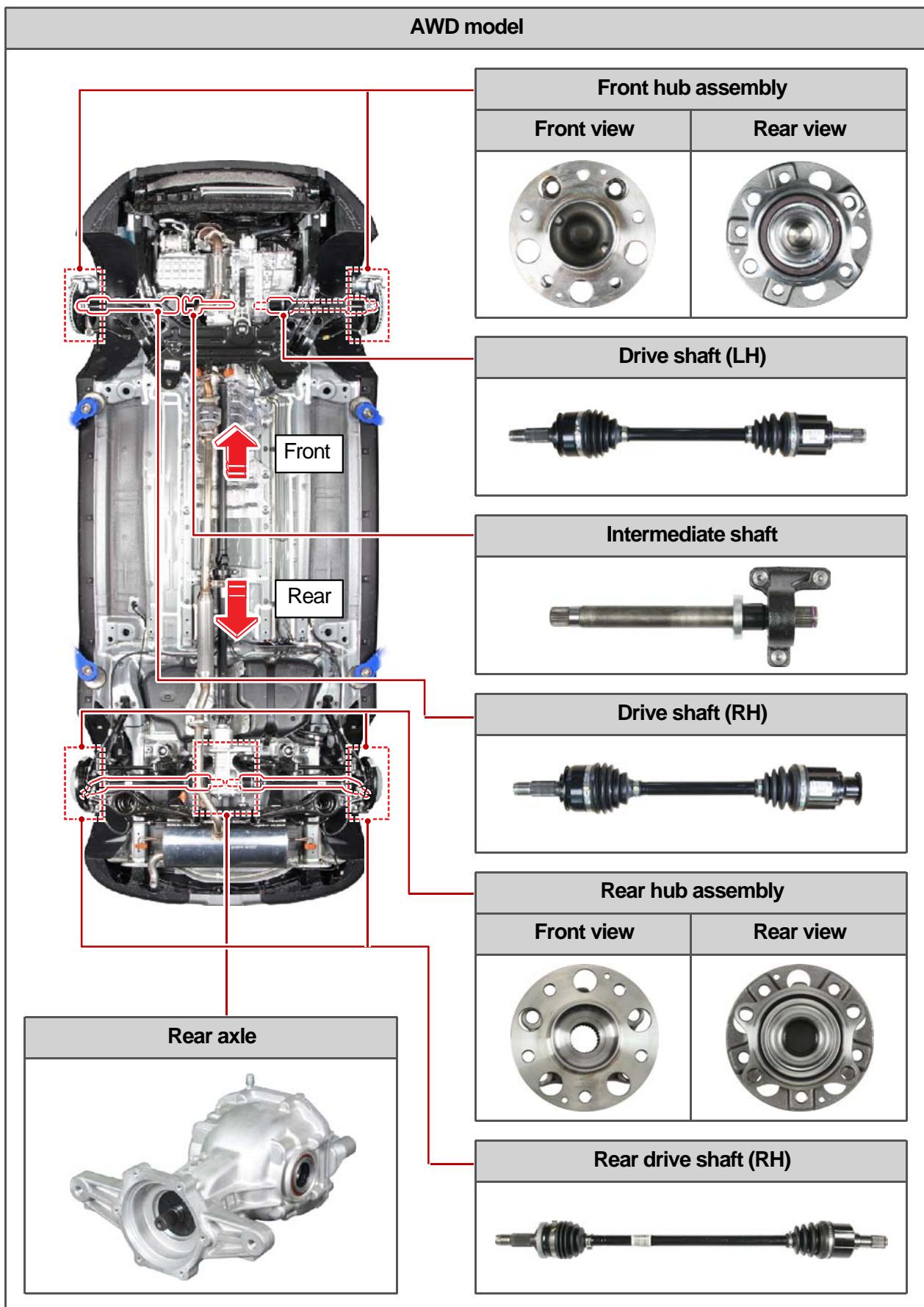
Drive shaft (RH)

Drive shaft (RH) - diesel A/T 2WD

Rear hub assembly

Front view	Rear view

Modification basis	
Application basis	
Affected VIN	



Modification basis	
Application basis	
Affected VIN	

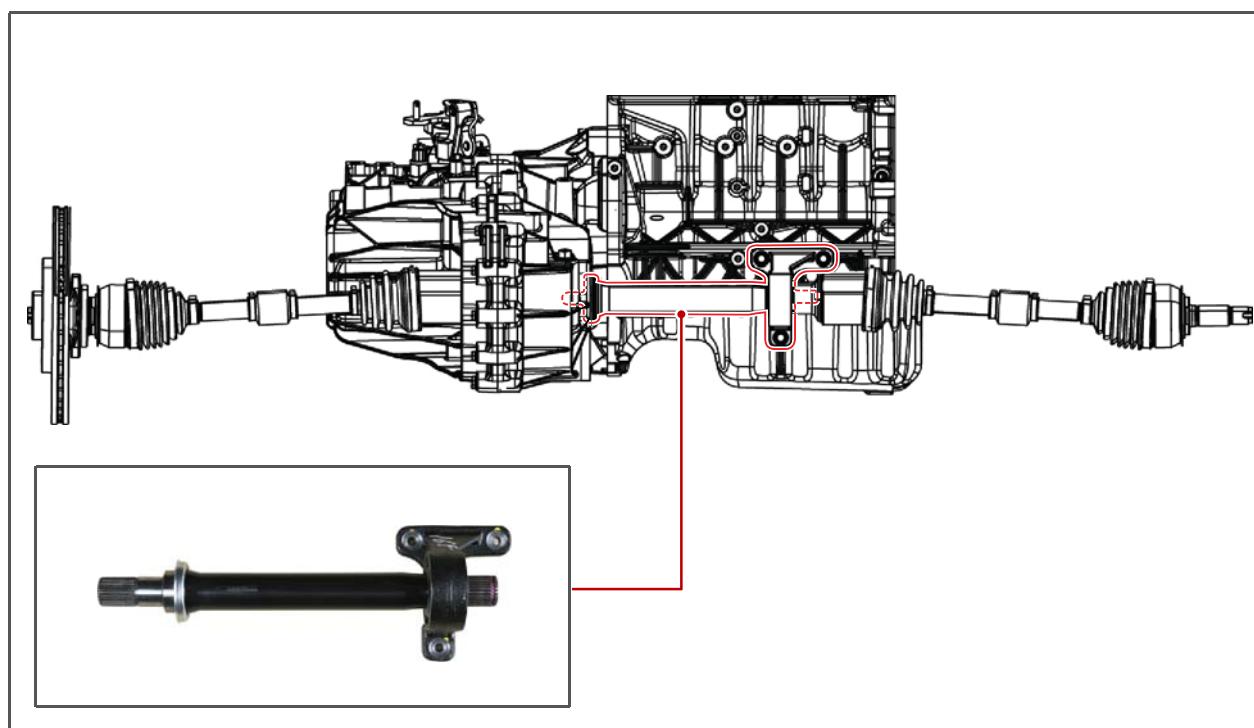
AISIN 6 SPEED MT PROPELLER CLUTCH DRIVE SHAFT AWD SUSPENSION BRAKE SYSTEM ESP ABS ELECTRIC POWER WHEEL AND TIRE TPMS SUB FRAME

2. TORQUE STEER

Torque steer is a condition in which a vehicle pulls to either side because of an inequality of traction between the left and right driving wheels when a large torque is applied to the front wheels of a FWD or 4WD vehicle.

Especially for a FWD vehicle, this mechanical condition can cause the steering effect because of the output torque (rotational force) produced by the gyroscope. This rotational force is due to the difference in distance between the left/right front wheels and the transaxle, which leads to the change of the shaft bending angle.

To prevent this, the intermediate shaft, called equivalent length shaft, is employed so that the bending angle and the length are kept constant for both sides.



NOTE

Gyroscope: Gyroscope is a device consists of a spinning mass like a top, usually mounted on a gimbal so that its axis can turn freely in any directions and thereby maintain its orientation regardless of any movement of the base.

Modification basis	
Application basis	
Affected VIN	