Brake System

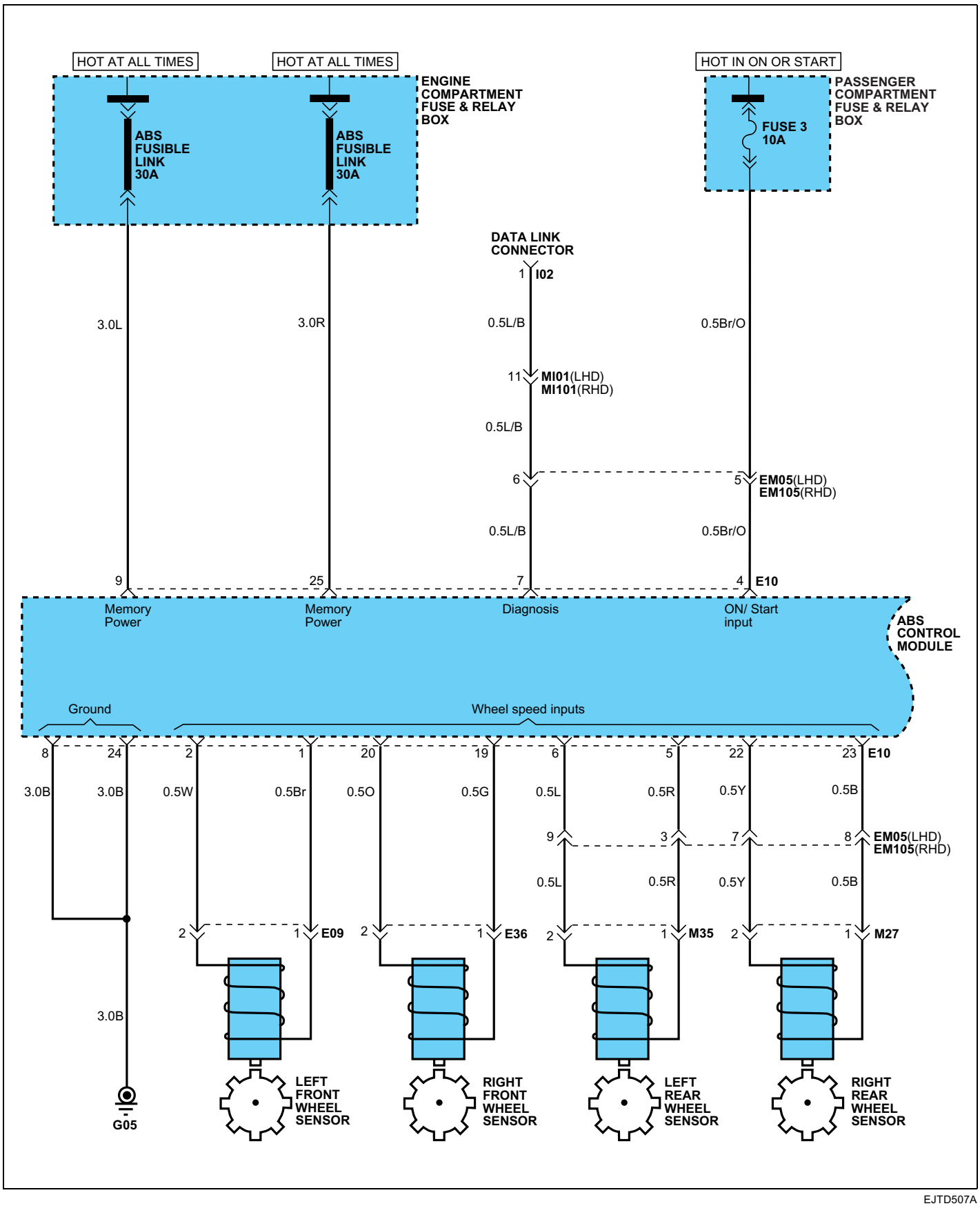
GENERAL

SPECIFICATIONS EJTD0010

Master cylinder	
Type	Tandem type
I.D. mm(in.)	20.64 mm (0.813 in.)
Fluid level warning sensor	Provided
Brake booster	
Type	Vacuum
Boosting ratio	4.5 : 1
Proportioning valve	
Cut-in pressure (Split point)	15 kg/cm²
Decompression ratio	0.27 : 1
Front brake	
Type	Floating type with ventilated disc
Disc O.D.	234 mm (9.213 in.)
Disc thickness	18 mm (0.709 in.)
Pad thickness	10 mm (0.394 in.)
Pad effective thickness	8 mm (0.315 in.)
Cylinder I.D.	51.1 mm (2.01 in.)
Rear brake	
Type	Leading trailing drum
Drum I.D.	180 mm (7.09 in.)
Brake lining thickness	4.6 mm (0.181 in.)
Cylinder I.D.	15.88 mm (0.625 in.)
Clearance adjustment	Automatic
Parking brake	
Type	Mechanical brake acting on rear wheels
Braking Type	Lever type
Cable arrangement	V type

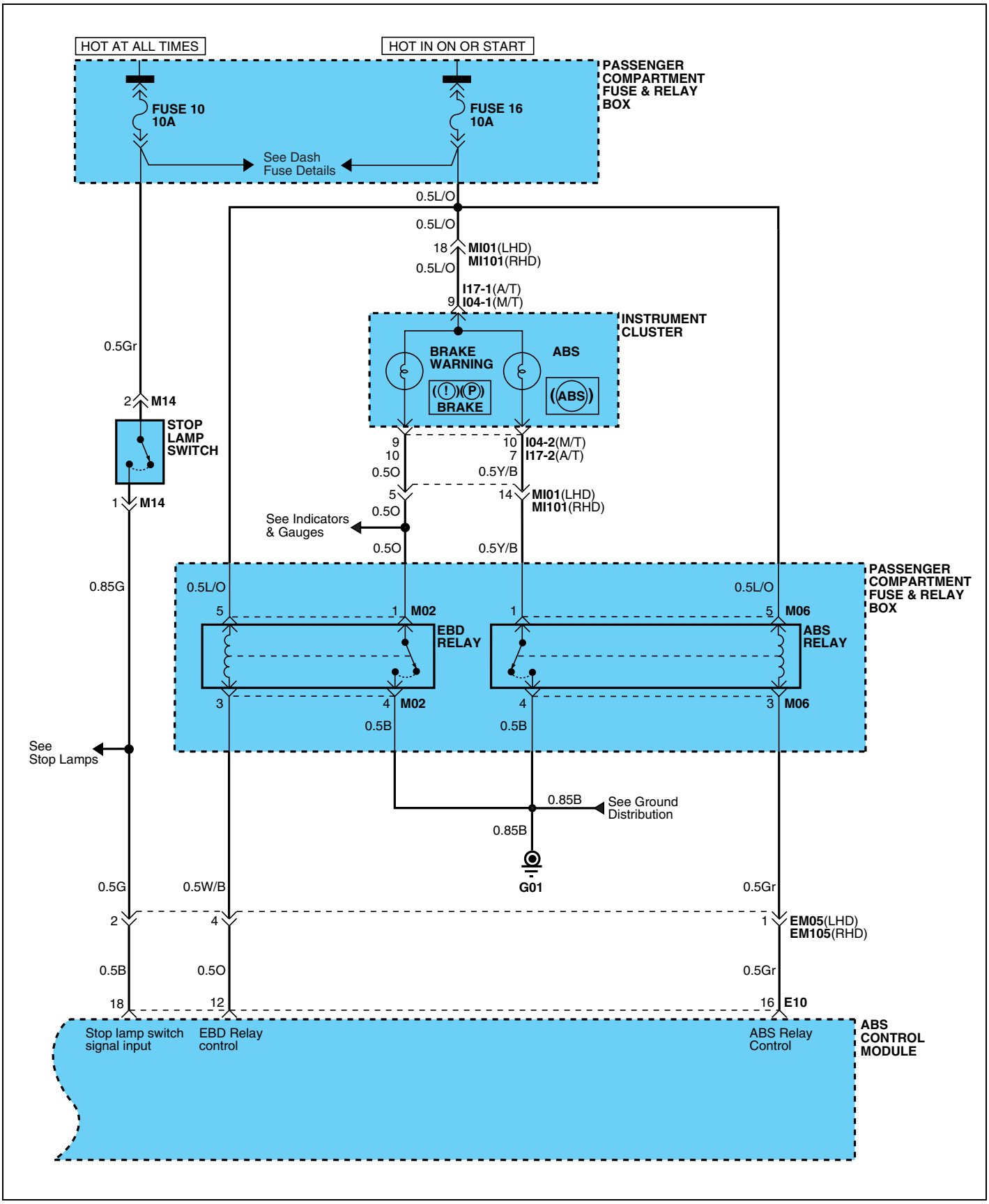
ANTI-LOCK BRAKE SYSTEM EJTD5070

CIRCUIT DIAGRAM (1)



EJTD507A

CIRCUIT DIAGRAM (2)



EJTD507B

SYSTEM FUNCTION EJTD5060

ABS OPERATION

1. NORMAL BRAKING

Solenoid valve	State	Valve	Passage	Pump motor
IN (NO)	OFF	OPEN	Master cylinder ⇔ Wheel cylinder	OFF
OUT (NC)	OFF	CLOSE	Wheel cylinder ⇔ Reservoir	

Under the normal braking, voltage is not supplied to solenoid valve, inlet valve is opened and outlet valve is closed. When the brake is depressed, brake fluid is supplied to the wheel cylinder via solenoid valve to activate the brake. When the brake is released, brake fluid is back to the master cylinder via inlet valve and check valve.

2. DUMP MODE

Solenoid valve	State	Valve	Passage	Pump motor
IN (NO)	ON	CLOSE	Master cylinder ⇔ Wheel cylinder	ON
OUT (NC)	ON	OPEN	Wheel cylinder ⇔ Reservoir	

Under the emergency braking, if the wheels start to lock up, HECU sends a signal to the solenoid valve to decrease the brakefluid, then voltage is supplied to each solenoid. At this time inlet valve is closed and brake fluid is blocked from the master cylinder. Conversely outlet valve is opened and brake fluid passes through wheel cylinder to reservoir, resulting in pressure decrease.

3. HOLD MODE

Solenoid valve	State	Valve	Passage	Pump motor
IN (NO)	ON	CLOSE	Master cylinder ⇔ Wheel cylinder	ON
OUT (NC)	OFF	CLOSE	Wheel cylinder ⇔ Reservoir	

When the brake fluid pressure is maximally decreased in wheel cylinder, HECU sends a signal to solenoid valve to keep the fluidpressure, voltage is supplied to inlet valve but it is not supplied to outlet valve. At this time inlet and outlet valves are closed and brake fluid is kept in wheel cylinder.

4. INCREASE MODE

Solenoid valve	State	Valve	Passage	Pump motor
IN (NO)	OFF	OPEN	Master cylinder ⇔ Wheel cylinder	ON
OUT (NC)	OFF	CLOSE	Wheel cylinder ⇔ Reservoir	

If HECU det ermines there's no lock-up in the wheel, HECU cuts voltage to solenoid valve. So voltage is not supplied to each solenoid valve, brake fluid passes through the inlet valve to wheel cylinder, resulting in pressure increase.

Note: Please refer to the related "Shop Manual" published earlier for full section details.