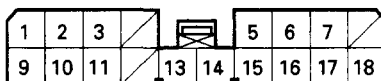


# EPS Control Unit Terminal Arrangement

## 18P CONNECTOR



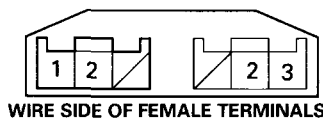
### WIRE SIDE OF FEMALE TERMINALS

VB: Battery voltage  
IG SW: Ignition switch

Terminal number	Wire color	Terminal sign/ Terminal name	Description	Voltage		
				Measurement terminals	Measurement Conditions With IG SW: ON (II)	Output voltage
1	YEL	IG1 (Ignition 1)	Detects ignition switch IG1 signal.	1-GND		VB
2	LT GRN/BLK	SPS (Sensor power supply)	Power source for torque sensor.	2-GND		Approx. 11 V
3	BLU/BLK	TRQ2 (Torque sensor 2)	Detects steering operation torque.	3-17	Turn to full right	Approx. 2.6 V
					Straight ahead	Approx. 2.8 V
					Turn to full left	Approx. 3.0 V
5	PNK/BLK	VSS2 (Vehicle speed sensor 2)	Detects vehicle speed signal. {Signal for TCM (AT) or PULSE UNIT (MT)} (50 Pulse/Rev)	5-GND	Raise the car off the ground and rotate the rear wheel	Approx. 4.7 V ↔ 0 V Pulse
6	BLK	LG1 (Logic ground 1)	Ground for the EPS control unit control circuit.	6-GND		Below 0.3 V
7	PNK/BLU	WARN (Warning lamp)	Drives EPS indicator light (Shuts off the indicator light ground circuit inside the EPS control unit to turn off the light when the system is normal).	7-GND	Light ON	Below 1.5 V
					Light OFF	VB
9	WHT/YEL	VBU (Back-up voltage)	Power source for diagnostic trouble code memory.	9-GND	At all time	VB
10	GRN/YEL	TRQ3 (Torque sensor 3)	Detects steering operation torque (TRQ1+TRQ2).	10-17	Turn to full right	Approx. 5.0 V
					Straight ahead	Approx. 2.5 V
					Turn to full left	Approx. 0 V
11	LT GRN/YEL	TRQ1 (Torque sensor 1)	Detects steering operation torque.	11-17	Turn to full right	Approx. 3.0 V
					Straight ahead	Approx. 2.8 V
					Turn to full left	Approx. 2.6 V
13	GRN/RED	VREF (Reference voltage)	Detects reference voltage for torque sensor.	13-17		Approx. 2.5 V
14	BLU	SCS (Service check signal)	Detects service check connector signal (diagnostic trouble code indication).	14-GND	Connected	Below 0.3 V
					Disconnected	Approx. 4.8 V
15	ORN	VSS1 (Vehicle speed sensor 1)	Detects vehicle speed signal. (4 Pulse/Rev)	15-GND	Raise the car off the ground and rotate the rear wheel	Approx. 5.0 V ↔ 0 V Pulse
16	BLK	LG2 (Logic ground 2)	Ground for the EPS control unit control circuits.	16-GND		Below 0.3 V
17	BLK/YEL	SG (Sensor ground)	Ground for the torque sensor.	17-GND		Below 0.3 V
18	WHT/BLU	CHG (Charg)	Detects engine operation (Activates EPS control unit with engine ON).	18-GND	Engine: OFF	Below 0.3 V
					Engine: ON	VB



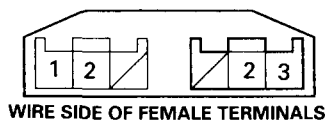
### 3P CONNECTOR (LEFT SIDE)



VB: Battery voltage  
IG SW: Ignition switch

Terminal number	Wire color	Terminal sign/ Terminal name	Description	Voltage		
				Measurement terminals	Measurement Conditions With IG SW: ON (II)	Output voltage
1	WHT	+B (+Battery)	Power supply	1-GND	At all time	VB
2	RED	MTR1 (Motor 1)	Drive the motor with MTR1 and MTR2.	2-GND	Turn to full right	Approx. 5.5 V
					Straight ahead (do not move)	Approx. 0.04 V
					Turn to full left	Approx. 10.7 V

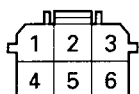
### 3P CONNECTOR (RIGHT SIDE)



VB: Battery voltage  
IG SW: Ignition switch

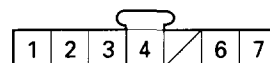
Terminal number	Wire color	Terminal sign/ Terminal name	Description	Voltage		
				Measurement terminals	Measurement Conditions With IG SW: ON (II)	Output voltage
2	BLK	PG (Power ground)	Ground	2-GND	At all time	0 V
3	BLU	MTR2 (Motor 2)	Drives the motor with MTR2 and MTR1.	3-GND	Turn to full right	Approx. 10.7 V
					Straight ahead (do not move)	Approx. 0.04 V
					Turn to full left	Approx. 5.5 V

### 6P CONNECTOR



Terminal number	Wire colors		Terminal sign
	Sensor side	Control unit side	
1	ORN	LT GRN/BLK	SPS
2	WHT/GRN	LT GRN/YEL	TRQ1
3	WHT/RED	BLU/BLK	TRQ2
4	BLU	BLK/YEL	SG
5	YEL/GRN	GRN/YEL	TRQ3
6	YEL/BLK	GRN/RED	VREF

### PULSE UNIT 7P CONNECTOR (MT)



Terminal number	Wire colors	Terminal sign/ Terminal name
1	BRN/BLK	SH DIF (Shield DIF)
2	PNK/BLK	VSS2 (Vehicle speed sensor 2)
3	BLU/GRN	DIF1 (Differential speed sensor 1)
4	YEL	IG1 (Ignition 1)
6	BLU/YEL	DIF2 (Differential speed sensor 2)
7	BLK	GND (Ground)