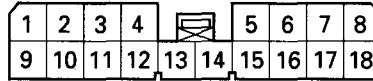


EPS Control Unit Terminal Arrangement

18P CONNECTOR



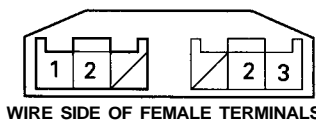
WIRE SIDE OF FEMALE TERMINALS

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 | 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 and rotation 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 |
| 4 | LT GRN/WHT | ROT1 (Rotation sensor 1) | Detects steering operation speed. | 4-12 | Turn to right (1 turn/sec) | Approx. 2.7 V |
| | | | | | Straight ahead | Approx. 2.5 V |
| | | | | | Turn to left (1 turn/sec) | Approx. 2.3 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 |
| 8 | LT GRN/RED | PHC (Phase control) | Phase adjustment of the torque sensor signal. | 8-GND | | Approx. 4.8 V |
| 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 |
| 12 | LT GRN | ROT2 (Rotation sensor 2) | Detects steering operation speed. | 12-4 | Turn to right (1 turn/sec) | Approx. 2.3 V |
| | | | | | Straight ahead | Approx. 2.5 V |
| | | | | | Turn to left (1 turn/sec) | Approx. 2.7 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 and steering rotation 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 |



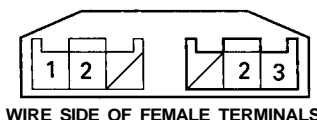
3P CONNECTOR (LEFT SIDE)



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 | 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 |

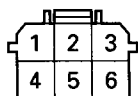
3P CONNECTOR (RIGHT SIDE)



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 | 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 |

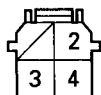
6P CONNECTOR



WIRE SIDE OF FEMALE TERMINALS

| 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 |

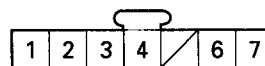
4P CONNECTOR



WIRE SIDE OF FEMALE TERMINALS

| Terminal number | Wire colors | | Terminal sign |
|-----------------|-------------|-------------------|---------------|
| | Sensor side | Control unit side | |
| 2 | WHT | LT GRN/RED | PHC |
| 3 | WHT/BLK | LT GRN/WHT | ROT1 |
| 4 | YEL | LT GRN | ROT2 |

PULSE UNIT 7P CONNECTOR (MT)



WIRE SIDE OF FEMALE TERMINALS

| 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) |