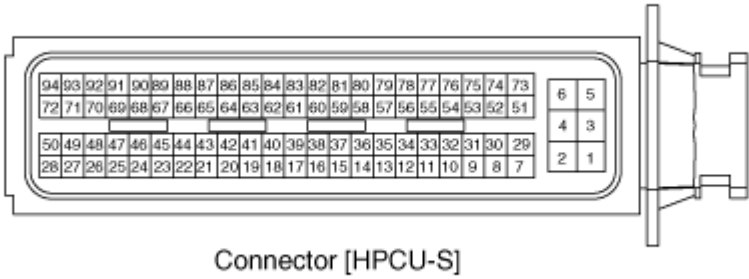


HCU Terminal and Input / Output Signal



Terminal Function

Connector [HPCU-S]

| Pin No | Description                 | Connected to                       |
|--------|-----------------------------|------------------------------------|
| 1      | HCU Ground                  | Chassis Ground                     |
| 2      | HCU Ground                  | Chassis Ground                     |
| 3      | HCU Ground                  | Chassis Ground                     |
| 4      | Battery Power (B+)          | Battery                            |
| 5      | Battery Power (B+)          | Battery                            |
| 6      | Battery Power (B+)          | Battery                            |
| 7      | Wake Up Signal              | Engine Control Module (ECM)        |
| 8      | -                           |                                    |
| 9      | -                           |                                    |
| 10     | -                           |                                    |
| 11     | -                           |                                    |
| 12     | -                           |                                    |
| 13     | -                           |                                    |
| 14     | -                           |                                    |
| 15     | -                           |                                    |
| 16     | -                           |                                    |
| 17     | -                           |                                    |
| 18     | -                           |                                    |
| 19     | HEV Relay Status            | Integrated Body Control Unit (IBU) |
| 20     | -                           |                                    |
| 21     | -                           |                                    |
| 22     | -                           |                                    |
| 23     | -                           |                                    |
| 24     | -                           |                                    |
| 25     | Brake Switch 2 signal input | Brake Switch (NC, IG1)             |
| 26     | Brake Switch 1 signal input | Brake Switch (NO, B+)              |
| 27     | -                           |                                    |
| 28     | -                           |                                    |
| 29     | -                           |                                    |

|    |                                       |                                    |
|----|---------------------------------------|------------------------------------|
| 30 | -                                     |                                    |
| 31 | -                                     |                                    |
| 32 | Sensor Ground                         | HSG Temperature Sensor             |
| 33 | HSG Temperature Sensor signal input   | HSG Temperature Sensor             |
| 34 | Sensor Shield                         | HSG Temperature Sensor             |
| 35 | -                                     |                                    |
| 36 | -                                     |                                    |
| 37 | -                                     |                                    |
| 38 | Sensor Ground                         | Motor Temperature Sensor           |
| 39 | Motor Temperature Sensor signal input | Motor Temperature Sensor           |
| 40 | Sensor Shield                         | Motor Temperature Sensor           |
| 41 | -                                     |                                    |
| 42 | -                                     |                                    |
| 43 | -                                     |                                    |
| 44 | -                                     |                                    |
| 45 | -                                     |                                    |
| 46 | ON/START Power                        | Smart Key Unit                     |
| 47 | -                                     |                                    |
| 48 | -                                     |                                    |
| 49 | -                                     |                                    |
| 50 | Start signal input                    | Integrated Body Control Unit (IBU) |
| 51 | -                                     |                                    |
| 52 | HSG Resolver (SNSR 1)                 | HSG Resolver                       |
| 53 | HSG Resolver (SNSR 3)                 | HSG Resolver                       |
| 54 | HSG Resolver (SNSR 2)                 | HSG Resolver                       |
| 55 | HSG Resolver (SNSR 4)                 | HSG Resolver                       |
| 56 | Shield                                | HSG Resolver                       |
| 57 | -                                     |                                    |
| 58 | Motor Resolver (SNSR 1)               | Motor Resolver                     |
| 59 | Motor Resolver (SNSR 3)               | Motor Resolver                     |
| 60 | Motor Resolver (SNSR 2)               | Motor Resolver                     |
| 61 | Motor Resolver (SNSR 4)               | Motor Resolver                     |
| 62 | Shield                                | Motor Resolver                     |
| 63 | -                                     |                                    |
| 64 | -                                     |                                    |
| 65 | -                                     |                                    |
| 66 | -                                     |                                    |
| 67 | Water Pump (LIN)                      | Electric Water Pump                |
| 68 | -                                     |                                    |
| 69 | -                                     |                                    |
| 70 | -                                     |                                    |
|    |                                       |                                    |

|    |                                      |                       |
|----|--------------------------------------|-----------------------|
| 71 | -                                    |                       |
| 72 | -                                    |                       |
| 73 | IGN signal input                     | Smart Key Unit        |
| 74 | -                                    |                       |
| 75 | -                                    |                       |
| 76 | -                                    |                       |
| 77 | HSG Resolver (+)                     | HSG Resolver          |
| 78 | HSG Resolver (-)                     | HSG Resolver          |
| 79 | -                                    |                       |
| 80 | -                                    |                       |
| 81 | -                                    |                       |
| 82 | -                                    |                       |
| 83 | Motor Resolver (+)                   | Motor Resolver        |
| 84 | Motor Resolver (-)                   | Motor Resolver        |
| 85 | -                                    |                       |
| 86 | -                                    |                       |
| 87 | L-CAN [High]                         | Clutch Actuator       |
| 88 | L-CAN [Low]                          | Clutch Actuator       |
| 89 | -                                    |                       |
| 90 | Powertrain P-CAN [High] signal input | Other control modules |
| 91 | Powertrain P-CAN [Low] signal input  | Other control modules |
| 92 | -                                    |                       |
| 93 | Hybrid H-CAN [High] signal input     | Other control modules |
| 94 | Hybrid H-CAN [Low] signal input      | Other control modules |

Circuit Diagram

