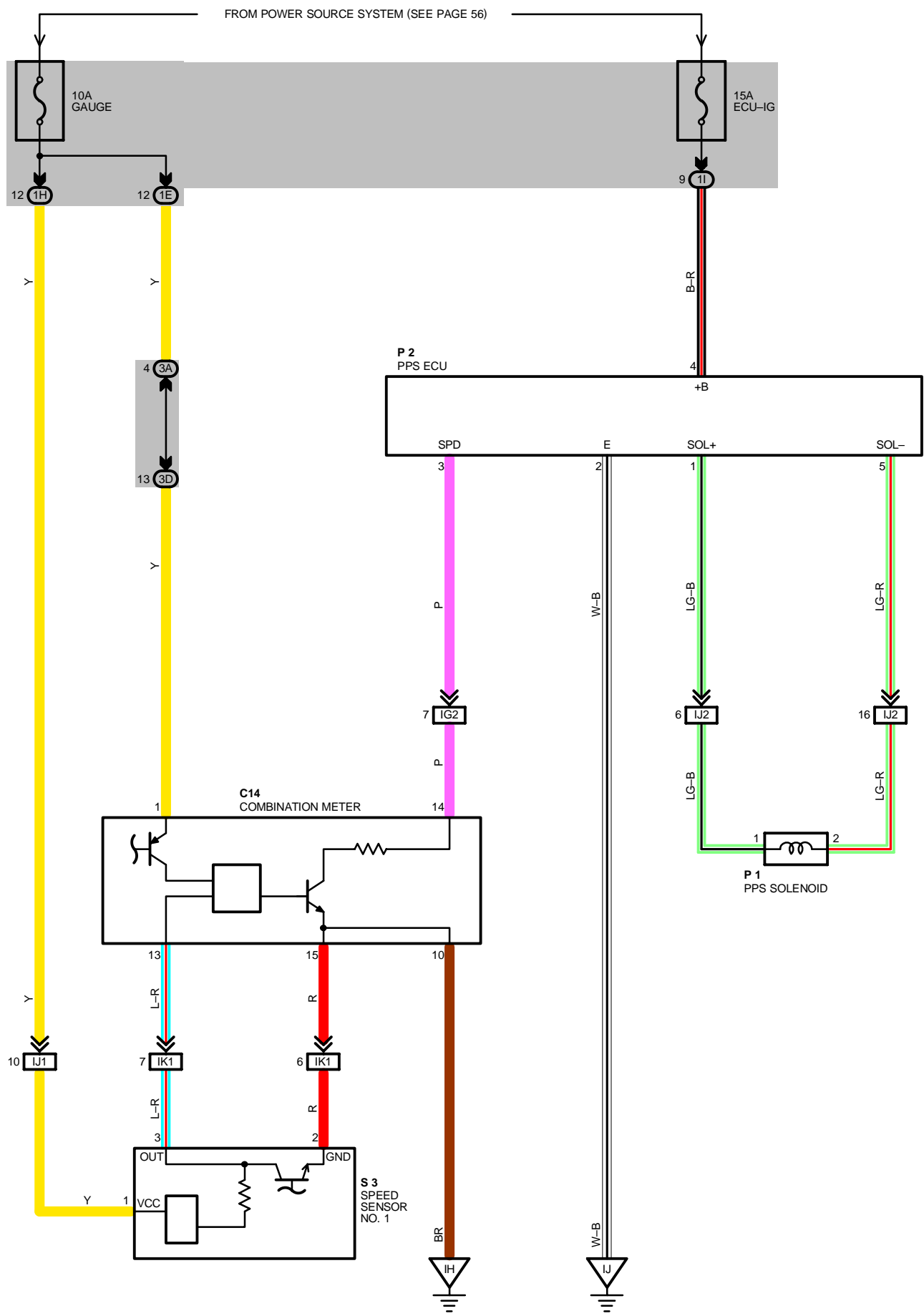


# PPS (PROGRESSIVE POWER STEERING)



## SYSTEM OUTLINE

THE PPS (HYDRAULIC REACTION TYPE) CONTROLS THE HYDRAULIC PRESSURE APPLIED TO THE HYDRAULIC REACTION CHAMBER IN THE GEAR BOX CONTROL UNIT USING THE PPS ECU, TO CHANGE THE STEERING FORCE AND PROVIDE OPTIMUM STEERING FEELING AT ANY VEHICLE SPEED AND UNDER ANY STEERING CONDITIONS.

(PPS OPERATION)

WHEN THE IGNITION SW IS TURNED ON THE STARTING CURRENT FLOWS FROM THE **ECU-IG** FUSE TO **TERMINAL 4** OF THE PPS ECU. THE SPEED SENSOR MONITORS THE VEHICLE SPEED AND TRANSMITS CONTROL SIGNALS TO **TERMINAL 3** OF THE ECU. WHEN THE VEHICLE SPEED IS LOW, THE PPS ECU SENDS A HIGHER-VOLTAGE FROM **TERMINAL 1** OF THE ECU → **TERMINAL 1** OF THE SOLENOID VALVE → **TERMINAL 2** → **TERMINAL 5** OF THE ECU → **TERMINAL 2** → **GROUND**, INCREASING THE SOLENOID VALVE OPENING ANGLE TO PROVIDE COMFORTABLE STEERING OPERATION. WHEN THE VEHICLE SPEED IS HIGH, THE PPS ECU DECREASES THE SOLENOID VALVE OPENING ANGLE BY REDUCING THE VOLTAGE TO THE VALVE TO PROVIDE RESPONSIVE STEERING FEELING.

## SERVICE HINTS

### P 1 PPS SOLENOID

1-2 : APPROX.  $7.7\Omega$  (25°C, 77°F)

### P 2 PPS ECU

4-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION

2-GROUND : ALWAYS CONTINUITY

1-5 : APPROX. 0.8A WITH VEHICLE SPEED BELOW 20 KM/H (12 MPH)

APPROX. 0.45A WITH VEHICLE SPEED AT 80 KM/H (48 MPH)

APPROX. 0.2A WITH VEHICLE SPEED ABOVE 160 KM/H (96 MPH)

## ○ : PARTS LOCATION

| CODE       | SEE PAGE           | CODE       | SEE PAGE           | CODE | SEE PAGE |
|------------|--------------------|------------|--------------------|------|----------|
| <b>C14</b> | <a href="#">28</a> | <b>P 2</b> | <a href="#">29</a> |      |          |
| <b>P 1</b> | <a href="#">27</a> | <b>S 3</b> | <a href="#">27</a> |      |          |

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

| CODE      | SEE PAGE           | JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION) |
|-----------|--------------------|--|
| <b>1E</b> | <a href="#">20</a> | INSTRUMENT PANEL WIRE                                |
| <b>1H</b> | <a href="#">20</a> | COWL WIRE  |
| <b>1I</b> |                    |  |
| <b>3A</b> | <a href="#">23</a> | INSTRUMENT PANEL WIRE                                |
| <b>3D</b> |                    |  |

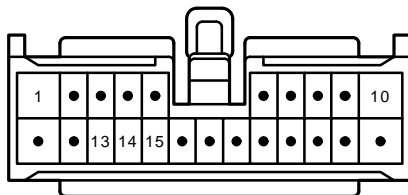
## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

| CODE       | SEE PAGE           | JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION) |
|------------|--------------------|--|
| <b>IG2</b> | <a href="#">36</a> | INSTRUMENT PANEL WIRE AND COWL WIRE (R/B NO. 5)            |
| <b>IJ1</b> | <a href="#">36</a> | ENGINE WIRE AND COWL WIRE (RIGHT KICK PANEL)               |
| <b>IJ2</b> |                    |  |
| <b>IK1</b> | <a href="#">36</a> | ENGINE WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)   |

## ▽ : GROUND POINTS

| CODE      | SEE PAGE           | GROUND POINTS LOCATION |
|-----------|--------------------|------------------------|
| <b>IH</b> | <a href="#">36</a> | UNDER THE ASHTRAY LH   |
| <b>IJ</b> | <a href="#">36</a> | RIGHT KICK PANEL       |

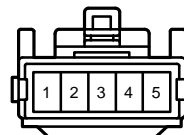
C14



P 1 GRAY



P 2



S 3 GRAY

