FF: Power Steering Pressure (PSP) Switch



FF1 CHECK FOR DIAGNOSTIC TROUBLE CODES (DTC)

Are DTCs P1650 or P1651 present?

Yes	No
For KOEO DTC P1650, GO to FF3.	
For KOER DTC P1650, GO to FF2.	For all others, GO to Section 4, <u>Diagnostic</u> <u>Trouble Code (DTC) Charts and Descriptions</u> .
For continuous memory DTC P1651, GO to FF7.	

FF2 KOER DTC P1650: CARRY OUT TURNING THE STEERING WHEEL ONE HALF TURN

Did you turn the steering wheel at least one half turn within 20 seconds of starting the KOER self-test?

Yes	No
GO to FF3.	CARRY OUT the KOER self-test.

FF3 DTC P1650: CHECK THE PSP PID

- Ignition ON, engine running.
- Access the PCM and monitor the PSP PID.
- Turn the steering wheel back and forth.

Does the PID state change?

Yes	No
GO to FF7.	GO to FF4.

FF4 CHECK THE PSP CIRCUITS TO THE PSP SWITCH FOR CYCLING

- Ignition OFF.
- PSP Switch connector disconnected.
- Ignition ON, engine OFF.
- Access the PCM and monitor the PSP PID.
- For Fusion/Milan 2.3L, Edge/MKX or MKZ,
- Connect a 5 amp fused jumper wire between the following:

Point A PSP Switch Connector, Harness Side	Point B
PSPSW	Ground

- For all others,
- Connect a 5 amp fused jumper wire between the following:

Point A PSP Switch Connector, Harness Side	Point B PSP Switch Connector, Harness Side
PSPSW	SIGRTN

• Remove the jumper wire(s).

Does the PID state change?

Yes	No
INSTALL a new PSP switch. CLEAR the DTCs. REPEAT the self-test.	GO to FF5.

FF5 CHECK THE PSP AND SIGRTN CIRCUIT FOR AN OPEN CIRCUIT IN THE HARNESS

- Ignition OFF.
- PCM connector disconnected.
- Measure the resistance between:

(+) PCM Connector, Harness Side	(-) PSP Switch Connector, Harness Side
PSPSW	PSPSW
SIGRTN	SIGRTN

Are the resistances less than 5 ohms?

Yes	No
	REPAIR the open circuit. CLEAR the DTCs. REPEAT the self-test.

FF6 CHECK THE PSP CIRCUIT(S) FOR A SHORT TO SIGRTN OR GND IN THE HARNESS

• Measure the resistance between:

(+) PSP Switch Connector, Harness Side	(-)
PSPSW	Ground

• Measure the resistance between:

(+) PSP Switch Connector, Harness Side	(-) PSP Switch Connector, Harness Side
PSPSW	SIGRTN

Are the resistances greater than 10K ohms?

Yes	No
I(∃() t∩ FFX	REPAIR the short circuit. CLEAR the DTCs. REPEAT the self-test.

FF7 DTC P1651: CHECK THE PSP CIRCUIT(S) FOR INTERMITTENT CONCERNS

Note: Be aware that P1651 could be set if the vehicle is towed with the engine running, or if a power

steering hydraulic concern is present.

- Ignition ON, engine OFF.
- Access the PCM and monitor the PSP PID.
- Check for open circuits while carrying out the following (a concern is indicated by a sudden change in the PCM-PSP PID):
 - Shake, wiggle, and bend the PSP and SIGRTN circuit(s).
 - Lightly tap on the PSP to simulate road shock
- PSP Switch connector disconnected.
- Check the PSP circuit for a short to ground. Shake, wiggle and bend the PSP circuits.

Is a concern present?

Yes	No
	CONNECT the PSP switch. Unable to duplicate or identify the concern at this time.
CLEAR the DTCs. REPEAT the self-test.	GO to Pinpoint Test <u>Z</u> .

FF8 CHECK FOR CORRECT PCM OPERATION

- Disconnect all the PCM connectors.
- Visually inspect for:
 - pushed out pins
 - corrosion
- Connect all the PCM connectors and make sure they seat correctly.
- Carry out the PCM self-test and verify the concern is still present.

Is the concern still present?

Yes	No
Memory (FEPROM) Programming the VID Block	concern may have been caused by a loose or