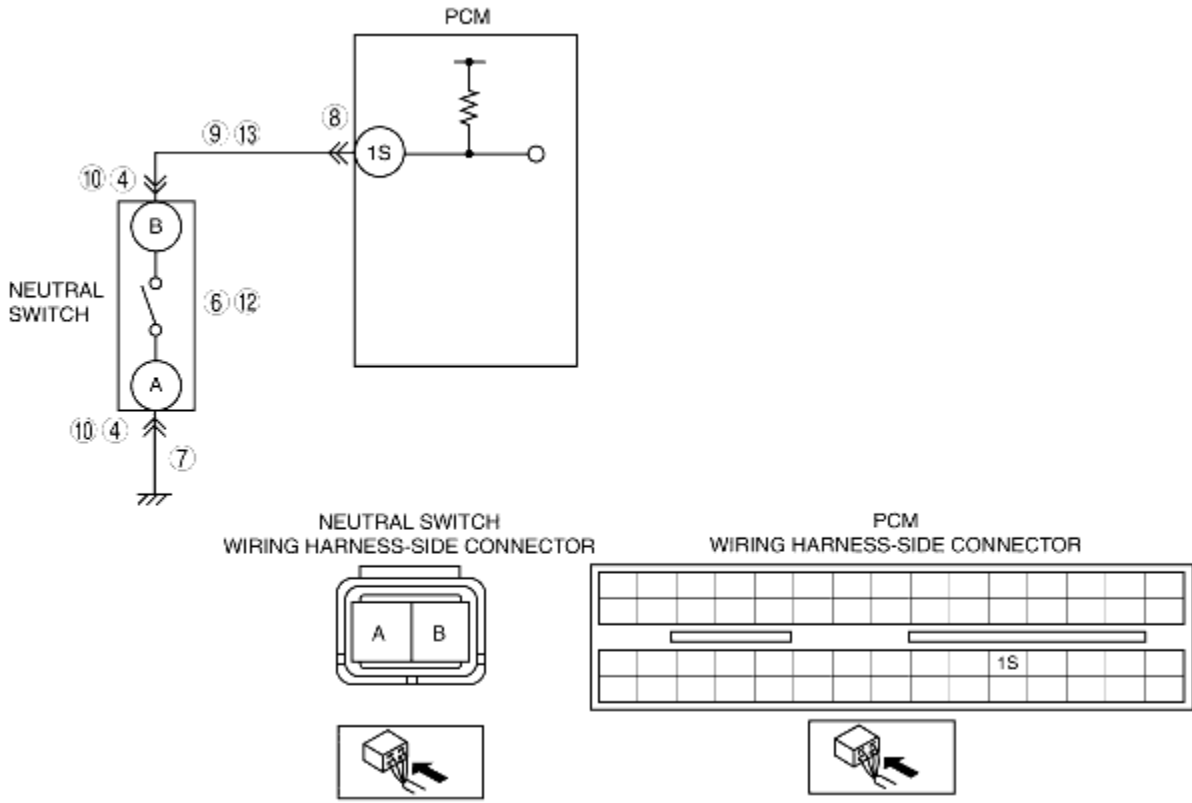


DTC P0850 [LF]

B3E010201089W03

DTC P0850	Neutral switch input circuit problem
DETECTION CONDITION	<ul style="list-style-type: none"> The PCM monitors changes in input voltage from the neutral switch. If the PCM does not detect PCM terminal 1S voltage changes while running vehicle with vehicle speed above 30 km/h {19 mph} and clutch pedal turns press and depress 10 times repeatedly, the PCM determines that the neutral switch circuit has malfunction <p>Diagnostic support note</p> <ul style="list-style-type: none"> This is a continuous monitor (CCM). The MIL illuminates if the PCM detects the above malfunction condition in two consecutive drive cycles or in one drive cycle while the DTC for the same malfunction has been stored in the PCM. PENDING CODE is available if the PCM detects the above malfunction condition during first drive cycle. FREEZE FRAME DATA is available. The DTC is stored in the PCM memory.
POSSIBLE CAUSE	<ul style="list-style-type: none"> Neutral switch malfunction Poor connection of neutral switch connector or PCM connector Short to ground in wiring harness between neutral switch terminal B and PCM terminal 1S Open circuit in wiring harness between neutral switch terminal B and PCM terminal 1S Open circuit in wiring harness between ground and neutral switch terminal A PCM malfunction
	

Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED	Yes Go to the next step.
		No Record the FREEZE FRAME DATA on repair

	• Has FREEZE FRAME DATA been recorded?		order, then go to the next step.
2	VERIFY RELATED REPAIR INFORMATION AVAILABILITY • Verify related service repair information availability. • Is any related repair information available?	Yes	Perform repair or diagnosis according to available repair information. • If vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	CLASSIFY HIGH INPUT OR LOW INPUT • Connect the WDS or equivalent to DLC-2. • Access CPP PID. • Verify CPP PID when gear is neutral position. • Is CPP PID always OFF?	Yes	Go to the next step.
		No	Go to Step 10.
4	INSPECT NEUTRAL SWITCH CONNECTOR FOR POOR CONNECTION • Turn the ignition switch off. • Disconnect neutral switch connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there malfunction?	Yes	Repair or replace the terminal, then go to Step 14.
		No	Go to the next step.
5	CLASSIFY NEUTRAL SWITCH OR CIRCUIT • Connect the WDS or equivalent to the DLC-2. • Access CPP PID. • Connect a jumper wire between neutral switch terminal A and B. • Is CPP PID on?	Yes	Go to the next step.
		No	Go to Step 7.
6	INSPECT NEUTRAL SWITCH • Perform the neutral switch inspection. (See NEUTRAL SWITCH INSPECTION [LF] .) • Is neutral switch normal?	Yes	Go to Step 14.
		No	Replace the neutral switch, then go to Step 14.
7	INSPECT NEUTRAL SWITCH GROUND CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between neutral switch terminal A and ground. • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace neutral switch ground circuit for open circuit, then Go to Step 14.
8	INSPECT PCM CONNECTOR FOR POOR CONNECTION • Turn the ignition switch off. • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there malfunction?	Yes	Repair or replace the terminal, then go to Step 14.
		No	Go to the next step.
9	INSPECT NEUTRAL SWITCH SIGNAL CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between neutral switch terminal B and PCM terminal 1S. • Is there continuity?	Yes	Repair or replace the wiring harness for open circuit, then go to Step 14.
		No	Go to Step 14.
10	INSPECT NEUTRAL SWITCH CONNECTOR FOR POOR CONNECTION • Turn the ignition switch off. • Disconnect the neutral switch connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there malfunction?	Yes	Repair or replace the terminal, then go to Step 14.
		No	Go to the next step.
11	CLASSIFY NEUTRAL SWITCH OR CIRCUIT • Connect the WDS or equivalent to DLC-2. • Access CPP PID. • Verify that CPP PID changes from ON to OFF when the neutral switch connector disconnected. • Does CPP PID change from ON to OFF?	Yes	Go to the next step.
		No	Go to Step 13.
	INSPECT NEUTRAL SWITCH	Yes	Go to Step 14.

12	<ul style="list-style-type: none"> • Perform neutral switch inspection. (See NEUTRAL SWITCH INSPECTION [LF].) • Is neutral switch normal? 	No	Replace the neutral switch, then go to Step 14.
13	INSPECT NEUTRAL SWITCH SIGNAL CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> • Inspect for continuity between neutral switch terminal B and ground. • Is there continuity? 	Yes	Repair or replace wiring harness for short to ground, then go to Step 14.
		No	Go to the next step.
14	VERIFY TROUBLESHOOTING OF DTC P0850 COMPLETED <ul style="list-style-type: none"> • Make sure to reconnect all disconnected connectors. • Start the engine. • Clear the DTC from the PCM memory using the WDS or equivalent. • Drive the vehicle above 30 km/h {19 mph} and stop vehicle. • Depress and release the clutch pedal more than 10 times during drive cycle. • Is the PENDING CODE for this DTC present? 	Yes	Replace the PCM, then go to the next step. (See PCM REMOVAL/INSTALLATION [LF] .)
		No	Go to the next step.
15	VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none"> • Perform the "After Repair Procedure". (See AFTER REPAIR PROCEDURE [LF].) • Are any DTC present? 	Yes	Go to the applicable DTC troubleshooting. (See DTC TABLE [LF] .)
		No	Troubleshooting completed.