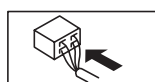
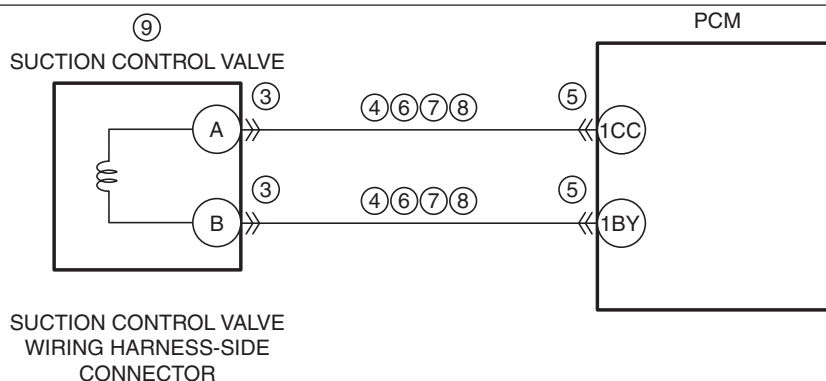


DTC P062A: 00	Suction control valve circuit problem
DETECTION CONDITION	<ul style="list-style-type: none"> Any of following conditions occurs: <ul style="list-style-type: none"> When the following conditions are met, the suction control valve control current 1.0 A or less for a continuous 1 s: MONITORING CONDITIONS <ul style="list-style-type: none"> Battery voltage: 8—20 V Engine running Suction control valve control duty value: 100 % When the following conditions are met, the suction control valve control current exceeds 1.0 A for a continuous 1 s: MONITORING CONDITIONS <ul style="list-style-type: none"> Battery voltage: 8—20 V Engine running Suction control valve control duty value: 0 % <p>Diagnostic support note</p> <ul style="list-style-type: none"> This is an intermittent monitor (fuel system). The check engine light illuminates if the PCM detects the above malfunction condition during the first drive cycle. FREEZE FRAME DATA (Mode 2)/Snapshot data is available. DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	<ul style="list-style-type: none"> PCM restricts engine torque. Increase the idle speed. Inhibits the EGR control. Inhibits the diesel particulate filter regeneration control. Inhibits engine-stop by operating the i-stop function. PCM restricts engine-transaxle integration control.
POSSIBLE CAUSE	<ul style="list-style-type: none"> Suction control valve connector or terminals malfunction Short to ground in wiring harness between the following terminals: <ul style="list-style-type: none"> Suction control valve terminal A—PCM terminal 1CC Suction control valve terminal B—PCM terminal 1BY PCM connector or terminals malfunction Short to power supply in wiring harness between the following terminals: <ul style="list-style-type: none"> Suction control valve terminal A—PCM terminal 1CC Suction control valve terminal B—PCM terminal 1BY Suction control valve circuits are shorted to each other Open circuit in wiring harness between the following terminals: <ul style="list-style-type: none"> Suction control valve terminal A—PCM terminal 1CC Suction control valve terminal B—PCM terminal 1BY Suction control valve malfunction PCM malfunction

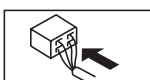
DTC P062A:
00

Suction control valve circuit problem



PCM WIRING HARNESS-SIDE CONNECTOR

1EE1EA1DW1DS1DO1DK1DG	1DA1CW1CS1CO1CK1CG1CC1BY	1BR1BM1BH1BC1AX1AS1AN1AI	1AD1Y1T1O1J1E1A
1EF1EB1DX1DT1DP1DL1DH	1DB1CX1CT1CP1CL1CH1CD1BZ	1BS1BN1BI1BD1AY1AT1AO1AJ	1AE1Z1U1P1K1F1B
		1BT1BO1BJ1BE1AZ1AU1AP1AK	1AF1AA1V1Q1L1G1C
1EI1EG1EC1DY1DU1DQ1DM1DI	1DE1DC1CY1CU1CQ1CM1CI1CE1CA1BW	1BU1BP1BK1BF1BA1AV1AQ1AL	1AG1AB1W1R1M1H1D
1EJ1EH1ED1DZ1DV1DR1DN1DJ	1DF1DD1CZ1CV1CR1CN1CJ1CF1CB1BX	1BV1BQ1BL1BG1BB1AW1AR1AM	1AH1AC1X1S1N1I



Diagnostic Procedure

STEP	INSPECTION		ACTION
1	VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA HAS BEEN RECORDED • Has the FREEZE FRAME DATA (Mode 2)/ snapshot data been recorded?	Yes	Go to the next step.
		No	Record the FREEZE FRAME DATA (Mode 2)/snapshot data on the repair order, then go to the next step.
2	VERIFY RELATED SERVICE INFORMATION AVAILABILITY • Verify related Service Information availability. • Is any related Service Information available?	Yes	Perform repair or diagnosis according to the available Service Information. • If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	INSPECT SUCTION CONTROL VALVE CONNECTOR CONDITION • Switch the ignition off. • Disconnect the suction control valve connector. • Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the connector and/or terminals, then go to Step 10.
		No	Go to the next step.
4	INSPECT SUCTION CONTROL VALVE CIRCUIT FOR SHORT TO GROUND • Verify that the suction control valve connector is disconnected. • Inspect for continuity between the following terminals (wiring harness-side) and body ground: — Suction control valve terminal A — Suction control valve terminal B • Is there continuity?	Yes	If the short to ground circuit could be detected in the wiring harness: • Repair or replace the wiring harness for a possible short to ground. If the short to ground circuit could not be detected in the wiring harness: • Replace the PCM (short to ground in the PCM internal circuit). (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) Go to Step 10.
		No	Go to the next step.

STEP	INSPECTION	ACTION	
5	INSPECT PCM CONNECTOR CONDITION <ul style="list-style-type: none"> • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction? 	Yes	Repair or replace the connector and/or terminals, then go to Step 10.
		No	Go to the next step.
6	INSPECT SUCTION CONTROL VALVE CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> • Verify that the suction control valve and PCM connectors are disconnected. • Switch the ignition ON (engine off). • Measure the voltage at the following terminals (wiring harness-side): <ul style="list-style-type: none"> — Suction control valve terminal A — Suction control valve terminal B • Is the voltage 0 V? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible short to power supply, then go to Step 10.
7	INSPECT SUCTION CONTROL VALVE CIRCUIT FOR SHORT TO EACH OTHER <ul style="list-style-type: none"> • Verify that the suction control valve and PCM connectors are disconnected. • Switch the ignition off. • Inspect for continuity between suction control valve terminals A and B (wiring harness-side). • Is there continuity? 	Yes	Repair or replace the wiring harness for a possible short to each other, then go to Step 10.
		No	Go to the next step.
8	INSPECT SUCTION CONTROL VALVE CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> • Verify that the suction control valve and PCM connectors are disconnected. • Inspect for continuity between the following terminals (wiring harness-side): <ul style="list-style-type: none"> — Suction control valve terminal A—PCM terminal 1CC — Suction control valve terminal B—PCM terminal 1BY • Is there continuity? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 10.
9	INSPECT SUCTION CONTROL VALVE <ul style="list-style-type: none"> • Inspect the suction control valve. (See SUCTION CONTROL VALVE INSPECTION [SKYACTIV-D 2.2].) • Is there any malfunction? 	Yes	Replace the suction control valve, then go to the next step. (See SUCTION CONTROL VALVE REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
		No	Go to the next step.
10	VERIFY DTC TROUBLESHOOTING COMPLETED <ul style="list-style-type: none"> • Always reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].) • Perform the KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-D 2.2].) • Is the same DTC present? 	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) Go to the next step.
		No	Go to the next step.
11	VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none"> • Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].) • Are any DTCs present? 	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-D 2.2].)
		No	DTC troubleshooting completed.