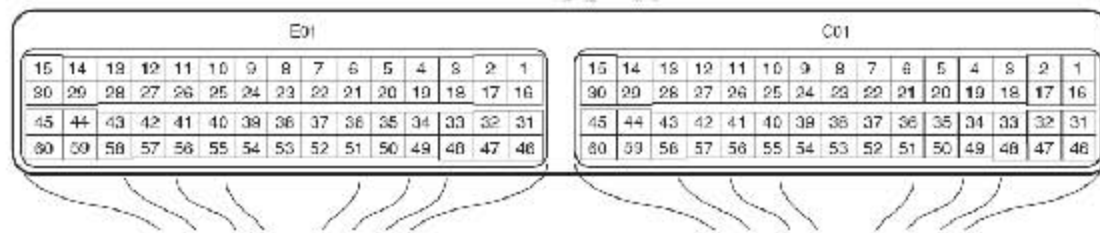
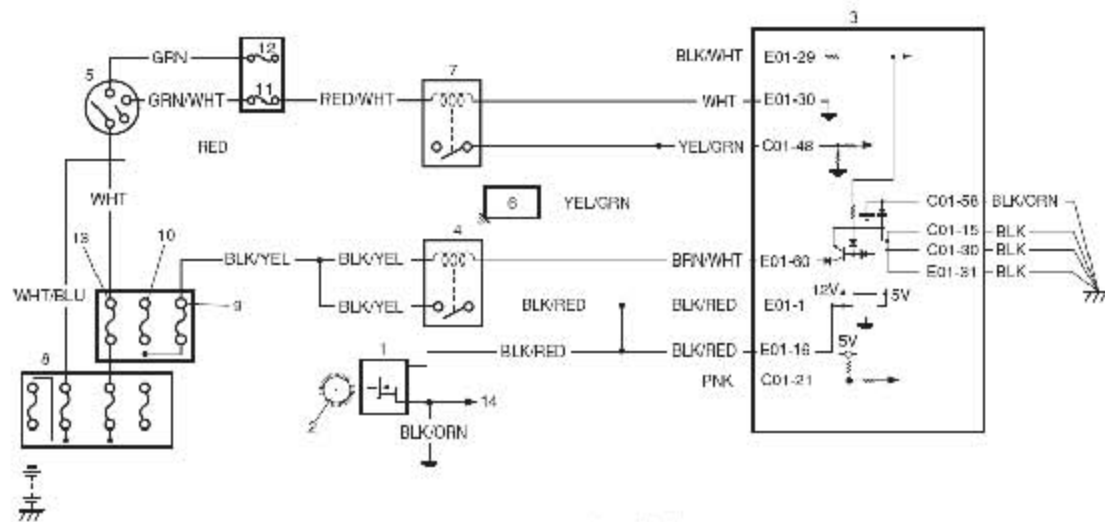


P0335: Crankshaft Position (CKP) Sensor Circuit

Wiring Diagram



1.	CKP sensor	6.	Starting motor	11.	"ST SIG" fuse
2.	Sensor plate on crankshaft	7.	Starting motor control relay	12.	"IG COIL" fuse
3.	ECM	8.	Main fuse box	13.	"IGN" fuse
4.	Main relay	9.	"FI" fuse	14.	To CMP sensor
5.	Ignition switch	10.	"ST MOT" fuse		

DTC Detecting Condition and Trouble Area

DTC detecting condition	Trouble area
No CKP sensor signal for 2 sec. even if starting motor signal is inputted at engine cranking. (1 driving cycle detection logic)	<ul style="list-style-type: none">• CKP sensor circuit open or short• Sensor plate teeth damaged• CKP sensor malfunction, foreign material being attached or improper installation• ECM• Engine start signal circuit malfunction

DTC Confirmation Procedure

- 1) With ignition switch turned OFF, connect scan tool.
- 2) Turn ON ignition switch and clear DTC using scan tool.
- 3) Crank engine for 3 – 5 sec.
- 4) Check DTC and pending DTC.

LAUNCH

DTC Troubleshooting

Step	Action	Yes	No
1	Was "Engine and Emission Control System Check" performed?	Go to Step 2.	Go to "Engine and Emission Control System Check".
2	CKP sensor and connector for proper installation check Is CKP sensor installed properly and connector connected securely?	Go to Step 3.	Correct.
3	Wire harness and connection check 1) Disconnect connector from CKP sensor with ignition switch turned OFF. 2) Check for proper connection to CKP sensor at "BLK/ RED", "PNK" and "BLK/ORN" wire terminals. 3) If OK, turn ON ignition switch and check voltage at "BLK/ RED", "PNK" and "BLK/ORN" wire terminals of disconnected CKP sensor connector. CKP sensor voltage Terminal "B+": 10 – 14 V Terminal "Vout": 4 – 5 V Terminal "GND": 0 V Is check result satisfactory?	Go to Step 7.	Go to Step 4.
4	Was terminal "Vout" voltage in Step 3 within specification?	Go to Step 5.	"PNK" wire is open or shorted to ground / power supply circuit. If wire and connection are OK, substitute a known-good ECM and recheck.

Step	Action	Yes	No
5	Ground circuit check 1) Turn ignition switch to OFF position. 2) Measure resistance between "BLK/ORN" wire terminal of CKP sensor connector and engine ground. Is measured resistance value less than 3 Ω ?	Go to Step 6.	"BLK/ORN" wire is open or high resistance.
6	Was terminal "B+" voltage in Step 3 within specification?	Go to Step 7.	"BLK/RED" wire is open circuit. If wire and connection are OK, substitute a known-good ECM and recheck.
7	Engine start signal check 1) Check starting motor circuit for opening and short referring to Step 2 of "DTC P0616: Starter Relay Circuit Low" and Step 3 and 4 of "DTC P0617: Starter Relay Circuit High". Is check result satisfactory?	Go to Step 8.	Repair or replace.
8	CKP sensor check 1) Check CKP sensor and sensor plate tooth referring to "Camshaft Position (CMP) Sensor Inspection in Section 1C". Is check result satisfactory?	Substitute a known-good ECM and recheck.	Replace CKP sensor and/or sensor plate.