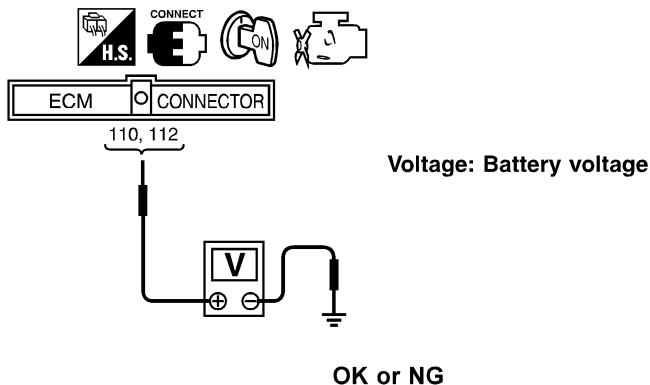


DTC P1320 IGNITION SIGNAL

Diagnostic Procedure (Cont'd)

3 CHECK IGNITION COIL POWER SUPPLY CIRCUIT-I

1. Turn ignition switch ON.
2. Check voltage between ECM terminals 110, 112 and ground with CONSULT-II or tester.



SEF366X

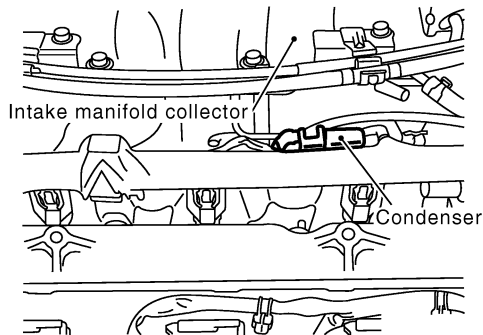
OK or NG

OK		GO TO 4.
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NG	▶	Go to TROUBLE DIAGNOSIS FOR POWER SUPPLY, EC-157.
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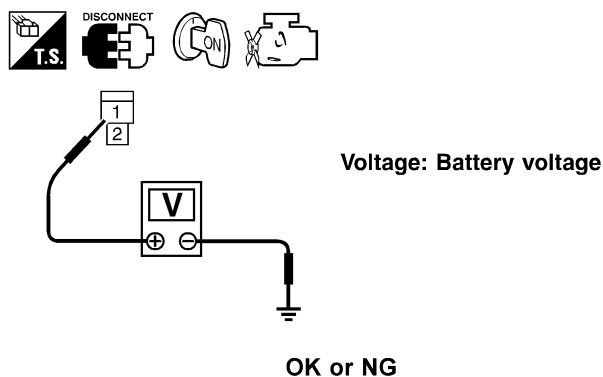
4	CHECK IGNITION COIL POWER SUPPLY CIRCUIT-II
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1. Turn ignition switch OFF.
2. Disconnect condenser harness connector.



SEF275X

3. Turn ignition switch ON.
4. Check voltage between condenser terminal 1 and ground with CONSULT-II or tester.



SEF367X

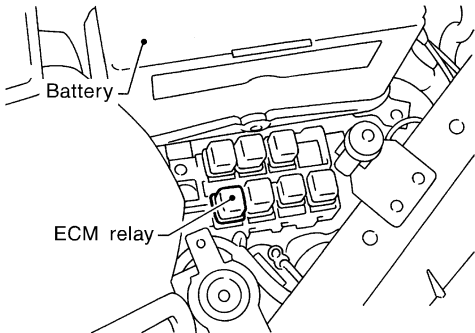
OK or NG

OK	▶	GO TO 10.
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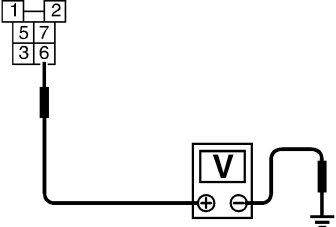
NG	▶	GO TO 5.
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DTC P1320 IGNITION SIGNAL

Diagnostic Procedure (Cont'd)

5	CHECK IGNITION COIL POWER SUPPLY CIRCUIT-III	
<div>1. Turn ignition switch OFF.</div> <div>2. Disconnect ECM relay.</div> <div></div> <div>SEF589PB</div> <div>3. Check harness continuity between ECM relay terminal 7 and condenser terminal 1. Refer to Wiring Diagram.</div> <div>Continuity should exist.</div> <div>4. Also check harness for short to ground and short to power.</div> <div>OK or NG</div>		
OK	▶	GO TO 7.
NG	▶	GO TO 6.

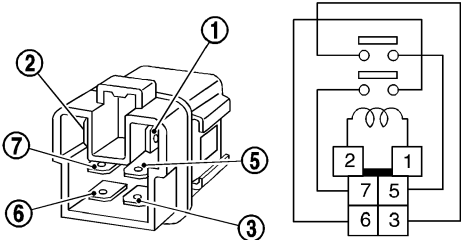
6	DETECT MALFUNCTIONING PART	
Check the following. <ul style="list-style-type: none">● Harness connectors F18, E15● Harness for open or short between ECM relay and condenser		
	▶	Repair open circuit or short to ground or short to power in harness or connectors.

7	CHECK IGNITION COIL POWER SUPPLY CIRCUIT-IV	
Check voltage between ECM relay terminal 6 and ground with CONSULT-II or tester.		
<div><div></div><div></div></div> <div>Voltage: Battery voltage</div> <div>SEF368X</div> <div>OK or NG</div>		
OK	▶	GO TO 9.
NG	▶	GO TO 8.

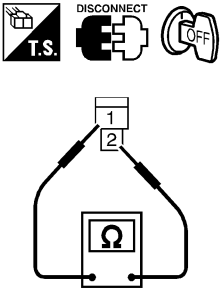
8	DETECT MALFUNCTIONING PART	
Check the following. <ul style="list-style-type: none">● 15A fuse● Harness for open and short between ECM relay and fuse		
	▶	Repair or replace harness or connectors.

DTC P1320 IGNITION SIGNAL

Diagnostic Procedure (Cont'd)

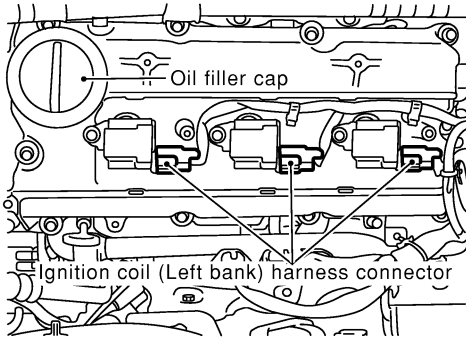
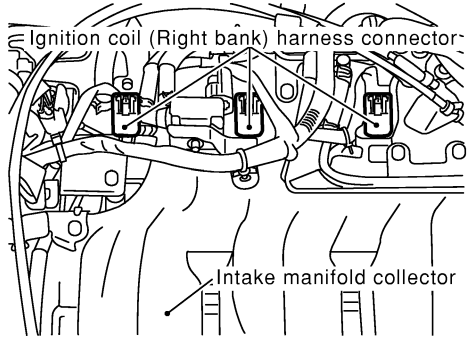
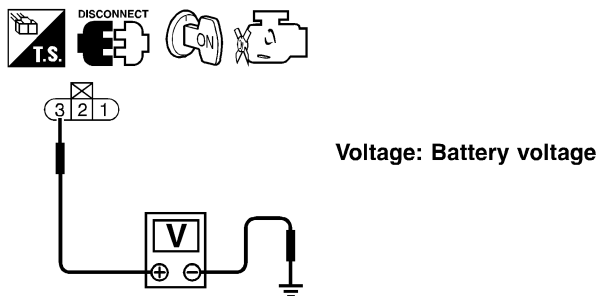
9	CHECK ECM RELAY							
1. Apply 12V direct current between ECM relay terminals 1 and 2. 2. Check continuity between ECM relay terminals 3 and 5, 6 and 7.								
<div style="display: flex; align-items: center;">  <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Condition</th> <th>Continuity</th> </tr> </thead> <tbody> <tr> <td>12V direct current supply between terminals 1 and 2</td> <td>Yes</td> </tr> <tr> <td>OFF</td> <td>No</td> </tr> </tbody> </table> </div>			Condition	Continuity	12V direct current supply between terminals 1 and 2	Yes	OFF	No
Condition	Continuity							
12V direct current supply between terminals 1 and 2	Yes							
OFF	No							
SEF296X								
OK or NG								
OK	▶	GO TO 17.						
NG	▶	Replace ECM relay.						

10	CHECK CONDENSER GROUND CIRCUIT FOR OPEN AND SHORT	
1. Turn ignition switch OFF. 2. Check harness continuity between condenser terminal 2 and engine ground. Refer to Wiring Diagram. Continuity should exist. 3. Also check harness for short to ground and short to power.		
OK or NG		
OK	▶	GO TO 11.
NG	▶	Repair open circuit or short to ground or short to power in harness or connectors.

11	CHECK CONDENSER	
Check resistance between condenser terminals 1 and 2.		
<div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>Resistance: Above 1MΩ at 25°C (77°F)</p> </div> </div>		
SEF369X		
OK or NG		
OK	▶	GO TO 12.
NG	▶	Replace condenser.

DTC P1320 IGNITION SIGNAL

Diagnostic Procedure (Cont'd)

12	CHECK IGNITION COIL POWER SUPPLY CIRCUIT-V
<ol style="list-style-type: none"> 1. Turn ignition switch OFF. 2. Reconnect harness connectors disconnected. 3. Disconnect ignition coil harness connector. 	
 	
<ol style="list-style-type: none"> 4. Turn ignition switch ON. 5. Check voltage between ignition coil terminal 3 and ground with CONSULT-II or tester. 	
	
OK or NG	
OK	▶ GO TO 14.
NG	▶ GO TO 13.

SEF274X

SEF370X

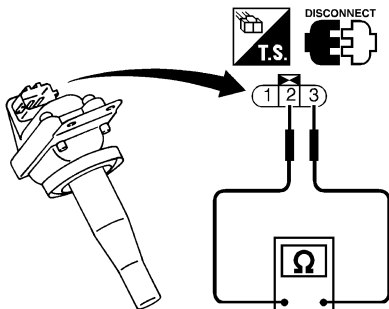
13	DETECT MALFUNCTIONING PART
Check the harness for open or short between ignition coil and harness connector F18.	
	▶ Repair or replace harness or connectors.

14	CHECK IGNITION COIL GROUND CIRCUIT FOR OPEN AND SHORT
<ol style="list-style-type: none"> 1. Turn ignition switch OFF. 2. Check harness continuity between ignition coil terminal 2 and engine ground. Refer to Wiring Diagram. Continuity should exist. 3. Also check harness for short to ground and short to power. 	
OK or NG	
OK	▶ GO TO 15.
NG	▶ Repair open circuit or short to ground or short to power in harness or connectors.

DTC P1320 IGNITION SIGNAL

Diagnostic Procedure (Cont'd)

15	CHECK IGNITION COIL OUTPUT SIGNAL CIRCUIT FOR OPEN AND SHORT	
<div>1. Disconnect ECM harness connector.</div> <div>2. Check harness continuity between ECM terminals 21, 22, 23, 30, 31, 32 and ignition coil terminal 1. Refer to Wiring Diagram.</div> <div>Continuity should exist.</div> <div>3. Also check harness for short to ground and short to power.</div>		
OK or NG		
OK	▶	GO TO 16.
NG	▶	Repair open circuit or short to ground or short to power in harness or connectors.

16	CHECK IGNITION COIL WITH POWER TRANSISTOR									
Check resistance between ignition coil terminals 2 and 3.										
<div><div></div><div><table><tr><th>Terminals</th><th>Resistance</th><th>Result</th></tr><tr><td rowspan="2">2 and 3</td><td>Not 0Ω</td><td>OK</td></tr><tr><td>0Ω</td><td>NG</td></tr></table></div></div>			Terminals	Resistance	Result	2 and 3	Not 0Ω	OK	0Ω	NG
Terminals	Resistance	Result								
2 and 3	Not 0Ω	OK								
	0Ω	NG								
SEF371X										
OK or NG										
OK	▶	GO TO 17.								
NG	▶	Replace ignition coil with power transistor.								

17	CHECK INTERMITTENT INCIDENT	
Refer to "TROUBLE DIAGNOSIS FOR INTERMITTENT INCIDENT", EC-156.		
	▶	INSPECTION END