## **BASIC DIAGNOSTIC PROCEDURE**

ENGINE (DIAGNOSTICS)

# 1. Basic Diagnostic Procedure

### A: PROCEDURE

### 1. ENGINE

	Step	Value	Yes	No
1	<ul> <li>CHECK ENGINE START FAILURE.</li> <li>1) Ask the customer when and how the trouble occurred using the interview check list. <ref. check="" check,="" en(h6do)-4,="" for="" interview.="" list="" to=""></ref.></li> <li>2) Start the engine. Does the engine start?</li> </ul>	Engine starts.	Go to step 2.	Inspection using "Diagnostics for Engine Start Fail- ure". <ref. to<br="">EN(H6DO)-75, Diagnostics for Engine Starting Failure.&gt;</ref.>
2	CHECK ILLUMINATION OF CHECK ENGINE MALFUNCTION INDICATOR LAMP (MIL). Does CHECK ENGINE malfunction indicator lamp illuminate?	Indicator lamp illuminates.	Go to step 3.	Inspection using "General Diagnos- tics Table". <ref. to EN(H6DO)-380, INSPECTION, General Diagnos- tic Table.&gt;</ref. 
3	<ul> <li>CHECK INDICATION OF DTC ON DISPLAY.</li> <li>1) Turn ignition switch to OFF.</li> <li>2) Connect the Subaru Select Monitor or the OBD-II general scan tool to data link connector.</li> <li>3) Turn ignition switch to ON and the Subaru Select Monitor or OBD-II general scan tool switch to ON.</li> <li>4) Read DTC on the Subaru Select Monitor or OBD-II general scan tool. Does the Subaru Select Monitor or OBD-II general scan tool indicate DTC?</li> </ul>	DTC indicated.	Go to step 4.	Repair the related parts. NOTE: If DTC is not shown on display although the MIL il- luminates, per- form diagnostics of MIL (CHECK EN- GINE malfunction indicator lamp) cir- cuit or combination meter. <ref. to<br="">EN(H6DO)-62, En- gine Malfunction Indicator Lamp (MIL).&gt;</ref.>
4	<ul> <li>PERFORM THE DIAGNOSIS.</li> <li>1) Inspect using "Diagnostics Procedure with Diagnostic Trouble Code (DTC)".</li> <li>NOTE:</li> <li><ref. (dtc).="" code="" diagnostic="" en(h6do)-100,="" procedure="" to="" trouble="" with=""></ref.></li> <li>NOTE:</li> <li>Carry out the basic check, only when DTC about automatic transmission is shown on display. <ref. code.="" diagnostic="" en(h6do)-50,="" read="" to="" trouble=""></ref.></li> <li>2) Repair the trouble cause.</li> <li>3) Perform the clear memory mode. <ref. clear="" en(h6do)-59,="" memory="" mode.="" to=""></ref.></li> <li>4) Perform the inspection mode. <ref. en(h6do)-51,="" inspection="" mode.="" to=""></ref.></li> <li>Does the Subaru Select Monitor or OBD-II general scan tool indicate DTC?</li> </ul>		Inspect using "Diagnostics Pro- cedure with Diag- nostic Trouble Code (DTC)". NOTE: <ref. to<br="">EN(H6DO)-100, Diagnostic Proce- dure with Diagnos- tic Trouble Code (DTC).&gt;</ref.>	Complete the diagnosis.

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#### **BASIC DIAGNOSTIC PROCEDURE**

#### 2. AUTOMATIC TRANSMISSION

When trouble code about automatic transmission is shown on display, carry out the following basic check. After that, carry out the replacement or repair work.

1) ATF level check <Ref. to AT-30, Automatic Transmission Fluid.>

2) Differential gear oil level check <Ref. to AT-31, Differential Gear Oil.>

3) ATF leak check <Ref. to AT-30, Automatic Transmission Fluid.>

4) Differential gear oil leak check <Ref. to AT-31, Differential Gear Oil.>

5) Stall test <Ref. to AT-33, Stall Test.>

6) Line pressure test <Ref. to AT-36, Line Pressure Test.>

7) Transfer clutch pressure test <Ref. to AT-38, Transfer Clutch Pressure Test.>

8) Time lag test <Ref. to AT-35, Time Lag Test.>

9) Road test <Ref. to AT-32, Road Test.>

10) Shift characteristics <Ref. to AT-38, Transfer Clutch Pressure Test.>

ENGINE (DIAGNOSTICS)

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