

## BASIC DIAGNOSTIC PROCEDURE

ENGINE (DIAGNOSTICS)

### 1. Basic Diagnostic Procedure

#### A: PROCEDURE

#### 1. ENGINE

Step	Value	Yes	No
<b>1 CHECK ENGINE START FAILURE.</b> 1) Ask the customer when and how the trouble occurred using the interview check list. <Ref. to EN(H4SO)-4, CHECK, Check List for Interview.> 2) Start the engine. Does the engine start?	Engine starts.	Go to step 2.	Inspection using "Diagnostics for Engine Start Failure". <Ref. to EN(H4SO)-62, Diagnostics for Engine Starting Failure.>
<b>2 CHECK ILLUMINATION OF CHECK ENGINE MALFUNCTION INDICATOR LAMP (MIL).</b> Does CHECK ENGINE malfunction indicator lamp illuminate?	MIL illuminates.	Go to step 3.	Inspection using "General Diagnostics Table". <Ref. to EN(H4SO)-360, INSPECTION, General Diagnostic Table.>
<b>3 CHECK INDICATION OF DTC ON DISPLAY.</b> 1) Turn ignition switch to OFF. 2) Connect the Subaru Select Monitor or the OBD-II general scan tool to data link connector. 3) Turn ignition switch to ON and the Subaru Select Monitor or OBD-II general scan tool switch to ON. 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?	DTC indicated.	Go to step 4.	Repair the related parts. <b>NOTE:</b> If DTC is not shown on display although the MIL illuminates, perform diagnostics of MIL (CHECK ENGINE malfunction indicator lamp) circuit or combination meter. <Ref. to EN(H4SO)-52, Engine Malfunction Indicator Lamp (MIL).>
<b>4 PERFORM THE DIAGNOSIS.</b> 1) Inspect using "Diagnostics Procedure with Diagnostic Trouble Code (DTC)".  <b>NOTE:</b> <Ref. to EN(H4SO)-90, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>  <b>NOTE:</b> Carry out the basic check, only when DTC about automatic transmission is shown on display. <Ref. to EN(H4SO)-41, Read Diagnostic Trouble Code.> 2) Repair the trouble cause. 3) Perform the clear memory mode. <Ref. to EN(H4SO)-49, Clear Memory Mode.> 4) Perform the inspection mode. <Ref. to EN(H4SO)-42, Inspection Mode.> Does the Subaru Select Monitor or OBD-II general scan tool indicate DTC?	DTC indicated.	Inspect using "Diagnostics Procedure with Diagnostic Trouble Code (DTC)".  <b>NOTE:</b> <Ref. to EN(H4SO)-90, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Complete the diagnosis.

### 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.>