

# BASIC DIAGNOSTIC PROCEDURE

## ENGINE (DIAGNOSTICS)

### 1. Basic Diagnostic Procedure

#### A: PROCEDURE

##### 1. ENGINE

Step	Check	Yes	No
1 <b>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)-59, Diagnostics for Engine Starting Failure.>
2 <b>CHECK ILLUMINATION OF CHECK ENGINE MALFUNCTION INDICATOR LAMP (MIL).</b> Does CHECK ENGINE malfunction indicator lamp illuminate?	CHECK ENGINE malfunction indicator light illuminates.	Go to step 3.	Inspection using "General Diagnostics Table". <Ref. to EN(H4SO)-340, INSPECTION, General Diagnostics Table.>
3 <b>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 the 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 is indicated.	Record the DTC. Repair the cause of the trouble. <Ref. to EN(H4SO)-75, List of Diagnostic Trouble Codes.> 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)-49, Engine Malfunction Indicator Lamp (MIL).>
4 <b>PERFORM THE DIAGNOSIS.</b> 1)Perform the clear memory mode. <Ref. to EN(H4SO)-46, Clear Memory Mode.> 2)Perform the inspection mode. <Ref. to EN(H4SO)-39, Inspection Mode.> Does the Subaru Select Monitor or OBD-II general scan tool indicate DTC?	DTC is indicated.	Inspect using "Diagnostics Procedure with Diagnostic Trouble Code (DTC)". <Ref. to EN(H4SO)-82, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

## 2. AUTOMATIC TRANSMISSION

When any diagnostic trouble code (DTC) related to the automatic transmission is shown on the display, carry out the following basic check. After that, carry out the replacement or repair work.

- 1) ATF level check <Ref. to AT-30, ATF.>
- 2) Differential gear oil level check <Ref. to AT-31, Differential Gear Oil.>
- 3) ATF leak check <Ref. to AT-30, ATF.>
- 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.>