

# BASIC DIAGNOSTIC PROCEDURE

ENGINE (DIAGNOSTICS)

## 1. Basic Diagnostic Procedure

### A: PROCEDURE

#### 1. ENGINE

Step	Check	Yes	No
<b>1 CHECK ENGINE START FAILURE.</b> 1) Ask the customer when and how the trouble occurred using the check list for interview. <Ref. to EN(H4SO)-4, CHECK, Check List for Interview.> 2) Start the engine.	Does the engine start?	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 MALFUNCTION INDICATOR LIGHT.</b>	Does malfunction indicator light illuminate?	Go to step 3.	Inspection using "General Diagnostics Table". <Ref. to EN(H4SO)-323, INSPECTION, General Diagnostic Table.>
<b>3 CHECK INDICATION OF DTC ON DISPLAY.</b> 1) Turn the ignition switch to OFF. 2) Connect the Subaru Select Monitor or the OBD-II general scan tool to data link connector. 3) Turn the 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?	Record the DTC. Repair the trouble cause. <Ref. to EN(H4SO)-77, List of Diagnostic Trouble Code (DTC).> Go to step 4.	Repair the related parts.  NOTE: If DTC is not shown on display although the malfunction indicator light illuminates, perform diagnostics of malfunction indicator light circuit or combination meter. <Ref. to EN(H4SO)-52, Malfunction Indicator Light.>
<b>4 PERFORM THE DIAGNOSIS.</b> 1) Perform the clear memory mode. <Ref. to EN(H4SO)-49, Clear Memory Mode.> 2) Perform the inspection mode. <Ref. to EN(H4SO)-40, Inspection Mode.>	Does the Subaru Select Monitor or OBD-II general scan tool indicate DTC?	Inspect using "Diagnostics Procedure with Diagnostic Trouble Code (DTC)". <Ref. to EN(H4SO)-84, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Complete the diagnosis.

## 2. AUTOMATIC TRANSMISSION

When the DTC 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 4AT-29, Automatic Transmission Fluid.>
- 2) Differential gear oil level check <Ref. to 4AT-30, Differential Gear Oil.>
- 3) ATF leak check <Ref. to 4AT-29, Automatic Transmission Fluid.>
- 4) Differential gear oil leak check <Ref. to 4AT-30, Differential Gear Oil.>
- 5) Stall test <Ref. to 4AT-32, Stall Test.>
- 6) Line pressure test <Ref. to 4AT-35, Line Pressure Test.>
- 7) Transfer clutch pressure test <Ref. to 4AT-37, Transfer Clutch Pressure Test.>
- 8) Time lag test <Ref. to 4AT-34, Time Lag Test.>
- 9) Road test <Ref. to 4AT-31, Road Test.>
- 10) Shift characteristics <Ref. to 4AT-37, Transfer Clutch Pressure Test.>