# 15.Malfunction Indicator Light

# A: PROCEDURE

1. Activation of malfunction indicator light <Ref. to EN(STI)(diag)-61, ACTIVATION OF MALFUNCTION INDICATOR LIGHT, Malfunction Indicator Light.>

2. Malfunction indicator light does not come on <Ref. to EN(STI)(diag)-63, MALFUNCTION INDICATOR LIGHT DOES NOT COME ON, Malfunction Indicator Light.>

3. Malfunction indicator light does not go off <Ref. to EN(STI)(diag)-63, MALFUNCTION INDICATOR LIGHT DOES NOT GO OFF, Malfunction Indicator Light.>

4. Malfunction indicator light does not blink <Ref. to EN(STI)(diag)-64, MALFUNCTION INDICATOR LIGHT DOES NOT BLINK, Malfunction Indicator Light.>

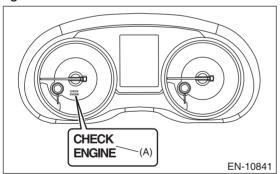
5. Malfunction indicator light remains blinking <Ref. to EN(STI)(diag)-66, MALFUNCTION INDICATOR LIGHT REMAINS BLINK-ING, Malfunction Indicator Light.>

# B: ACTIVATION OF MALFUNCTION INDICATOR LIGHT

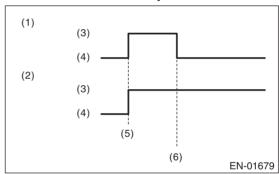
1) When the ignition switch is turned to ON (engine OFF), the malfunction indicator light (A) in the combination meter illuminates.

#### NOTE:

If the malfunction indicator light does not illuminate, perform diagnostics of the malfunction indicator light circuit or the combination meter circuit. <Ref. to EN(STI)(diag)-63, MALFUNCTION INDICATOR LIGHT DOES NOT COME ON, Malfunction Indicator Light.>

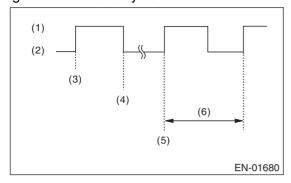


2) After starting the engine, the malfunction indicator light goes out. If it does not go off, any of the engine and emission control system has malfunction.



- (1) No DTC
- (2) Trouble occurs
- (3) ON
- (4) OFF
- (5) Ignition switch ON
- (6) Engine start

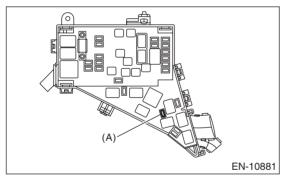
3) If the diagnostic system detects a misfire which could damage the catalyst, the malfunction indicator light will blink at a cycle of 1 Hz.



- (1) ON
- (2) OFF
- (3) Ignition switch ON
- (4) Engine start
- (5) Misfire start
- (6) 1 second
- 4) Turn the ignition switch to OFF and install the delivery mode fuse (A).

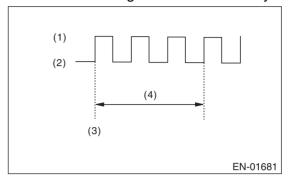
#### **CAUTION:**

Do not use any fuses that are installed on the vehicle.



- (1) When the ignition switch is turned to ON (engine OFF), the malfunction indicator light illuminates.
- (2) After the engine starts, malfunction indicator light blinks in a cycle of 0.5 Hz. (During diagnosis)

(3) Malfunction indicator light blinks at a cycle of 3 Hz after diagnosis if there is no trouble. Malfunction indicator light illuminates if faulty.



- (1) ON
- (2) OFF
- (3) Ignition switch ON
- (4) 1 second

## C: MALFUNCTION INDICATOR LIGHT DOES NOT COME ON

#### TROUBLE SYMPTOM:

When the ignition switch is turned to ON (engine OFF), malfunction indicator light does not illuminate.

NOTE:

Refer to IDI section for diagnostic procedure. <Ref. to IDI(diag)-2, Basic Diagnostic Procedure.>

# D: MALFUNCTION INDICATOR LIGHT DOES NOT GO OFF

#### TROUBLE SYMPTOM:

Although malfunction indicator light comes on when the engine runs, DTC is not shown on the Subaru Select Monitor or general scan tool display.

	Step	Check	Yes	No
1	CHECK DTC.	Is DTC of engine or LAN sys-	Check the appro-	Check the combi-
		tem displayed? <ref. th="" to<=""><th>priate DTC using</th><th>nation meter sys-</th></ref.>	priate DTC using	nation meter sys-
		EN(STI)(diag)-42, OPERA-	the "List of Diag-	tem. <ref. th="" to<=""></ref.>
		TION, Read Diagnostic Trouble	nostic Trouble	IDI(diag)-2, Basic
		Code (DTC).>	Code (DTC)".	Diagnostic Proce-
			<ref. th="" to<=""><th>dure.&gt;</th></ref.>	dure.>
			EN(STI)(diag)-86,	
			List of Diagnostic	
			Trouble Code	
			(DTC).> <ref. th="" to<=""><th></th></ref.>	
			LAN(diag)-70, List	
			of Diagnostic Trou-	
			ble Code (DTC).>	

## **E: MALFUNCTION INDICATOR LIGHT DOES NOT BLINK**

#### **DIAGNOSIS:**

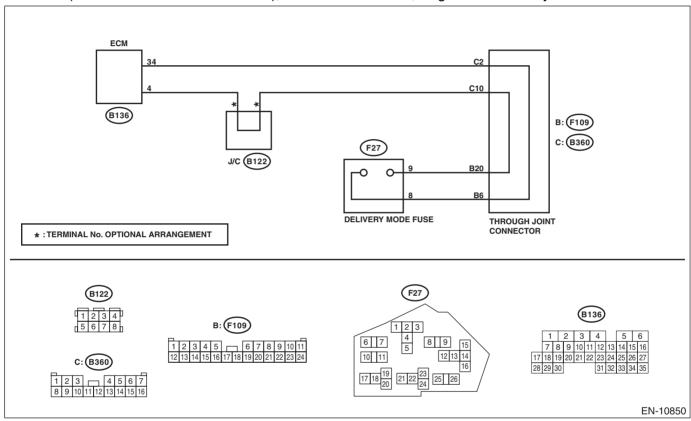
- The malfunction indicator light circuit is open or shorted.
- Delivery mode fuse circuit is open.

#### **TROUBLE SYMPTOM:**

Malfunction indicator light does not blink during Inspection Mode.

#### **WIRING DIAGRAM:**

- Engine Electrical System ENGINE TYPE EJ (WITHOUT PUSH BUTTON START) <Ref. to WI-198, ENGINE TYPE EJ (WITHOUT PUSH BUTTON START), WIRING DIAGRAM, Engine Electrical System.>
- Engine Electrical System ENGINE TYPE EJ (WITH PUSH BUTTON START) <Ref. to WI-218, ENGINE TYPE EJ (WITH PUSH BUTTON START), WIRING DIAGRAM, Engine Electrical System.>



	Step	Check	Yes	No
1	CHECK STATUS OF MALFUNCTION INDI- CATOR LIGHT.  1) Turn the ignition switch to OFF.  2) Make sure that the delivery mode fuse is removed.  3) Turn the ignition switch to ON. (engine OFF)	Does the malfunction indicator light illuminate?		Repair the mal- function indicator light circuit. <ref. to EN(STI)(diag)- 63, MALFUNC- TION INDICATOR LIGHT DOES NOT COME ON, Mal- function Indicator Light.&gt;</ref. 

# **Malfunction Indicator Light**

# ENGINE (DIAGNOSTICS)

	Step	Check	Yes	No
2	CHECK HARNESS BETWEEN ECM AND DE-LIVERY MODE FUSE.  1) Turn the ignition switch to OFF. 2) Disconnect the connector from ECM. 3) Install the delivery mode fuse. 4) Measure the resistance of harness between ECM connectors.  Connector & terminal (B136) No. 34 — (B136) No. 4:	Is the resistance less than 1 $\Omega$ ?		Repair the harness and connector.  NOTE: In this case, repair the following item:  Open circuit in harness between ECM connector  Poor contact of each connector between ECM connector
3	CHECK FOR POOR CONTACT. Check for poor contact of ECM connector.	Is there poor contact of ECM connector?	contact of ECM	Replace the ECM. <ref. fu(sti)-<br="" to="">56, Engine Control Module (ECM).&gt;</ref.>

## F: MALFUNCTION INDICATOR LIGHT REMAINS BLINKING

#### **DIAGNOSIS:**

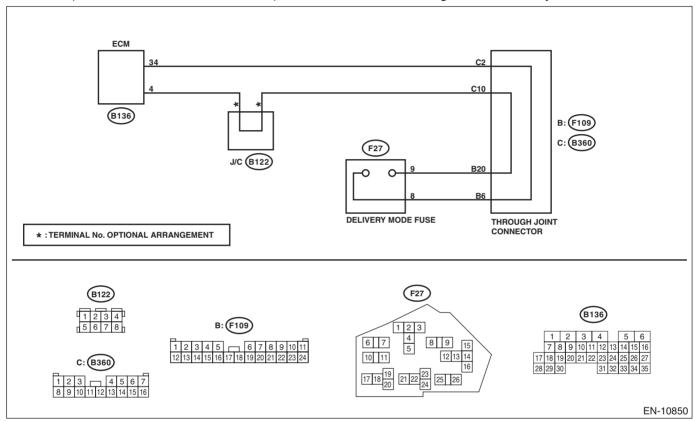
Delivery mode fuse circuit is shorted to ground.

#### TROUBLE SYMPTOM:

Malfunction indicator light blinks when delivery mode fuse is not installed.

#### **WIRING DIAGRAM:**

- Engine Electrical System ENGINE TYPE EJ (WITHOUT PUSH BUTTON START) <Ref. to WI-198, ENGINE TYPE EJ (WITHOUT PUSH BUTTON START), WIRING DIAGRAM, Engine Electrical System.>
- Engine Electrical System ENGINE TYPE EJ (WITH PUSH BUTTON START) <Ref. to WI-218, ENGINE TYPE EJ (WITH PUSH BUTTON START), WIRING DIAGRAM, Engine Electrical System.>



	Step	Check	Yes	No
1	CHECK DELIVERY MODE FUSE.  1) Make sure that the delivery mode fuse is removed.  2) Turn the ignition switch to ON.	Does the malfunction indicator light blink?	Go to step 2.	System is normal. NOTE: Malfunction indicator light blinks at a cycle of 3 Hz when delivery mode fuse is installed.
2	CHECK HARNESS BETWEEN ECM AND DE- LIVERY MODE FUSE.  1) Turn the ignition switch to OFF. 2) Disconnect the connector from ECM. 3) Measure the resistance between ECM connector and chassis ground.  Connector & terminal  (B136) No. 34 — Chassis ground:	Is the resistance 1 $M\Omega$ or more?	Replace the ECM. <ref. fu(sti)-<br="" to="">56, Engine Control Module (ECM).&gt;</ref.>	Repair the short circuit to ground in harness between ECM connector and delivery mode fuse.