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Model Year Start: 2014	Model: ES300H	Prod Date Range: [08/2013 -]
Title: INTRODUCTION: REPAIR INSTRUCTION: INSPECTION MODE PROCEDURE; 2014 MY ES300H [08/2013 -]		

INSPECTION MODE PROCEDURE

1. INSPECTION MODE

NOTICE:

When the vehicle is run in inspection mode for an operation such as a speedometer test, a DTC may be set. Therefore, if the warning light comes on, after canceling inspection mode, check for DTCs using the Techstream and clear the DTCs.

HINT:

If the engine is warmed up and the HV battery is charged, the engine of the vehicle will stop after the vehicle stops. For example, if the engine is required to run continuously even after the vehicle stops, such as for an ignition timing check, switch to maintenance mode.

(a) The following table shows the types of inspection modes that are available, their purpose and the control that occurs in each mode.

MODE (DISPLAY)	PURPOSE	CONTROL
MAINTENANCE MODE (2WD for measuring Exhaust Gas)	<ul style="list-style-type: none"> • Inspection of ignition timing etc. when performing engine maintenance, idle speed exhaust emissions testing (CO, HC), etc. • Tests using a speedometer tester, two-wheel chassis dynamometer, etc. 	<ul style="list-style-type: none"> • Keeps the engine idling when the shift lever in P • Cancels traction control
CERTIFICATION MODE (2WD for cutting TR(A)C)	Tests using a speedometer tester, two-wheel chassis dynamometer, etc.	Cancels traction control

(b) Vehicle conditions

(1) Before activating inspection mode, turn the air conditioning off, start the hybrid system with the shift lever in P, and check that the engine stops within several seconds after starting (engine warm up check).

(2) Activate the appropriate inspection mode and inspect the vehicle:

TEST ITEM	MODE
1. Vehicle straight traveling test (side slip inspection)	Maintenance mode or normal mode
2. Braking force test	Normal mode
3. Speedometer test	Maintenance mode
4. Exhaust gas test (idling)	Maintenance mode
5. Headlight test	Maintenance mode or normal mode

(3) Cancel inspection mode immediately after completion of inspection.

NOTICE:

Driving the vehicle without canceling inspection mode may damage the transaxle.

(c) Special notes for speedometer test

CAUTION:

Be sure to perform the test in maintenance mode.

NOTICE:

Do not perform rapid starting or quick acceleration on a speedometer tester. If rapid starting or quick acceleration is performed on a speedometer tester, damage may occur to the transaxle.

(1) Depress the accelerator pedal slowly and gradually accelerate the vehicle. Make a measurement.

(2) After the measurement, use the brakes to gradually decelerate the vehicle.

(d) Special notes for using a chassis dynamometer

CAUTION:

Be sure to perform the inspection in maintenance mode.

NOTICE:

Sudden acceleration or deceleration of the vehicle on a chassis dynamometer under minimal load may damage the transaxle.

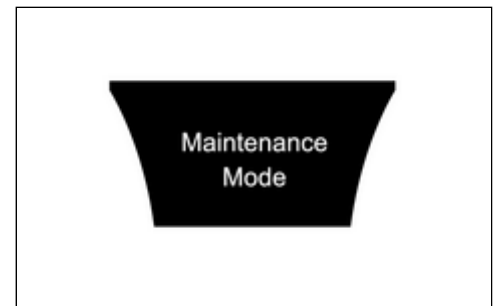
(1) Always set an appropriate load before starting the test.

(e) Activating maintenance mode (Not using the Techstream)

(1) Perform the following steps from (A) through (D) in 60 seconds.

1. Turn the power switch on (IG). (Step A)
2. Fully depress the accelerator pedal twice with the shift lever in P. (Step B)
3. Fully depress the accelerator pedal twice with the shift lever in N. (Step C)
4. Fully depress the accelerator pedal twice with the shift lever in P. (Step D)

(2) Check that "Maintenance Mode" is displayed on the multi-information display.



(3) Start the engine by turning the power switch on (READY) while depressing the brake pedal.

HINT:

The idle speed in maintenance mode is approximately 1000 rpm with the shift lever in P. The engine speed increases to 1500 rpm when the accelerator pedal is depressed midway with the shift lever in P. When the accelerator pedal is depressed more than midway, or when the accelerator pedal is fully depressed, the engine speed increases to approximately 2500 rpm.

(f) Activating maintenance mode (Using the Techstream)

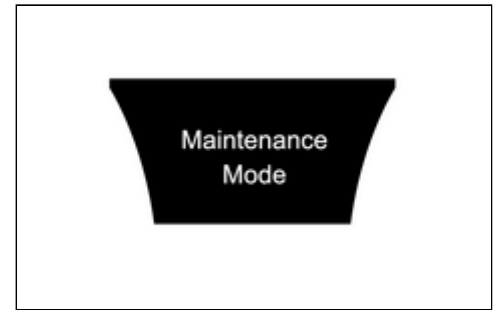
(1) Connect the Techstream to the DLC3.

(2) Turn the power switch on (IG).

(3) Turn the Techstream on.

(4) Enter following menus: Powertrain / Hybrid Control / Utility / Inspection Mode - 2WD for measuring Exhaust Gas.

- (5) Check that "Maintenance Mode" is displayed on the multi-information display.



- (6) Start the engine by turning the power switch on (READY) while depressing the brake pedal.

HINT:

The idle speed in maintenance mode is approximately 1000 rpm with the shift lever in P. The engine speed increases to 1500 rpm when the accelerator pedal is depressed midway with the shift lever in P. When the accelerator pedal is depressed more than midway, or when the accelerator pedal is fully depressed, the engine speed increases to approximately 2500 rpm.

- (g) Activating certification mode (Not using the Techstream)

- (1) Perform the following steps from (A) through (D) in 60 seconds.
1. Turn the power switch on (IG). (Step A)
 2. Fully depress the accelerator pedal three times with the shift lever in P. (Step B)
 3. Fully depress the accelerator pedal three times with the shift lever in N. (Step C)
 4. Fully depress the accelerator pedal three times with the shift lever in P. (Step D)

- (2) Check that "Certification Mode" is displayed on the multi-information display.



- (3) Start the engine by turning the power switch on (READY) while depressing the brake pedal.

- (h) Activating certification mode (Using the Techstream)

- (1) Connect the Techstream to the DLC3.
- (2) Turn the power switch on (IG).
- (3) Turn the Techstream on.
- (4) Enter following menus: Powertrain / Hybrid Control / Utility / Inspection Mode - 2WD for cutting TR(A)C.

- (5) Check that "Certification Mode" is displayed on the multi-information display.



(6) Start the engine by turning the power switch on (READY) while depressing the brake pedal.

(i) Deactivating inspection mode

(1) Turn the power switch off. The hybrid system turns off simultaneously.

NOTICE:

- If a DTC is set during inspection mode, the master warning light will illuminate and a warning message will appear on the multi-information display.
- When the master warning light and the warning message illuminate during inspection mode, cancel inspection mode, and check for DTC(s).
- Driving the vehicle without canceling inspection mode may damage the transaxle.

