05L6O–08

REGISTRATION

NOTICE:

- **When an injector is replaced, the injector's compensation code must be input into the ECM. When the ECM is changed, all of the existing injector compensation codes must be input into the new ECM.**
- **Injector compensation codes are unique, 30–digit, alphanumeric values printed on the head portion of each injector. If an incorrect injector compensation code is input into the ECM, the engine assembly may rattle or engine idling may become rough. In addition, engine failure may occur and the life of the engine may be shortened.**

1. When replacing the ECM with a new one, input all the injectors' compensation codes into the new ECM as follows:

(a) Prior to replacing the ECM, use the intelligent tester II read and save each injector's compensation code. The codes are stored in the original ECM (see page 05–442).

(b) After installing a new ECM, input the saved compensation codes into the new ECM using the tester.

(c) Turn the ignition switch OFF and then turn the intelligent tester II OFF.

(d) Wait for at least 30 seconds.

(e) Turn the ignition switch ON and then turn the intelligent tester II ON.

(f) Clear DTC P1601/89 stored in the ECM using the intelligent tester II (see page 05–466).

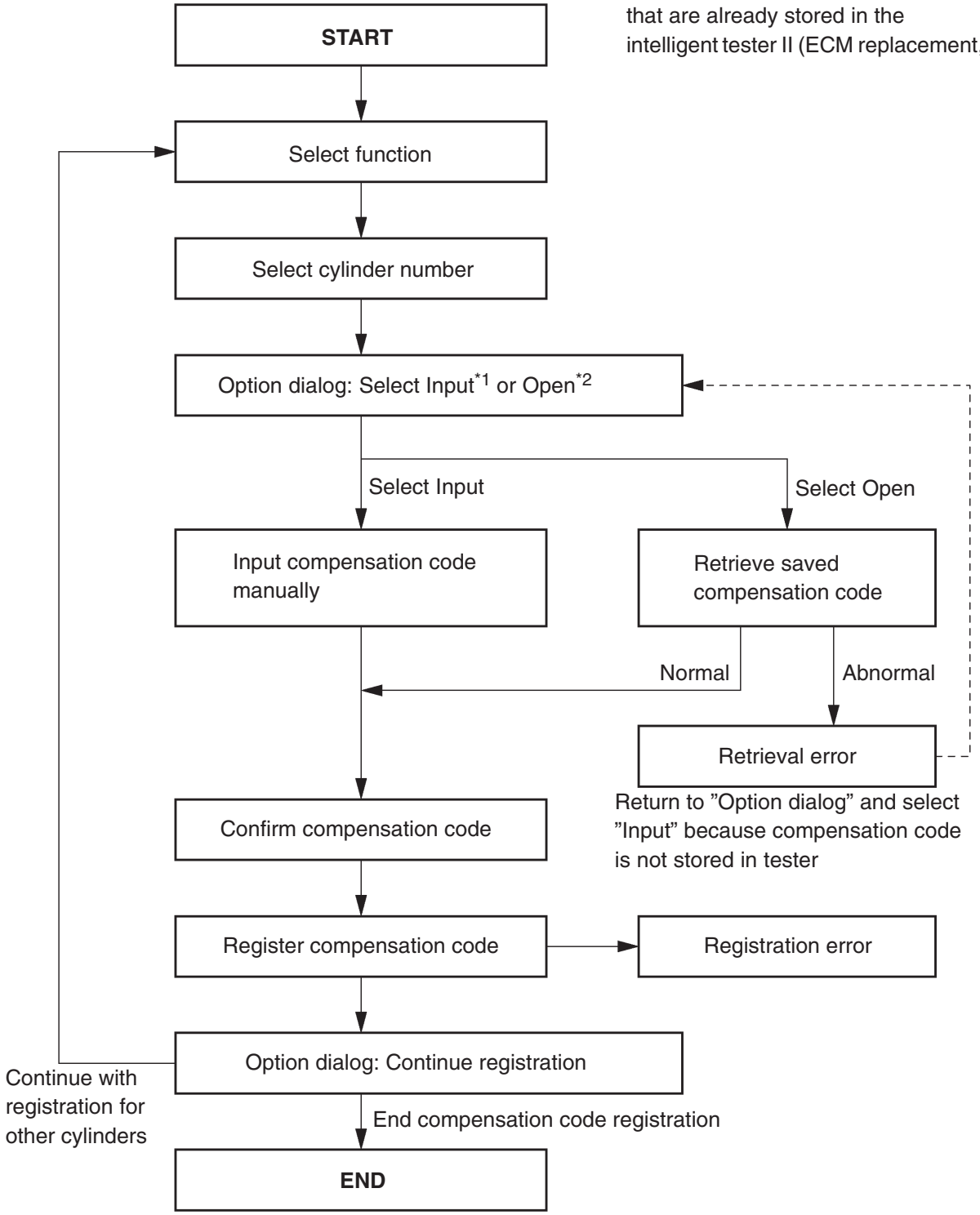
HINT:

- Each injector has different fuel injection characteristics. In order to optimize the fuel injections, the ECM uses the compensation codes to balance the different fuel injections between each injector.
- When you first turn the ignition switch ON after replacing the ECM or an injector(s), DTC P1601/89 is set. This is to inform you that an injector compensation code(s) is/are required to be registered. Manually clear the DTC upon completion of the compensation code registration.

How to register Injector compensation codes using intelligent tester II (Conduct prior to replacing the injector)

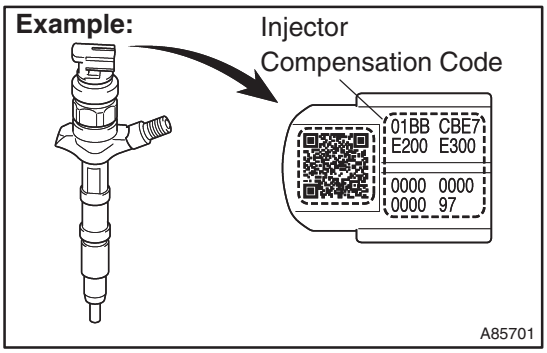
*1: When registering compensation codes by manual input (injector replacement, etc.)

*2: When registering compensation codes that are already stored in the intelligent tester II (ECM replacement, etc.)



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2. REGISTER COMPENSATION CODE

(a) Connect the intelligent tester II to the DLC3.

(b) Turn the ignition switch ON.

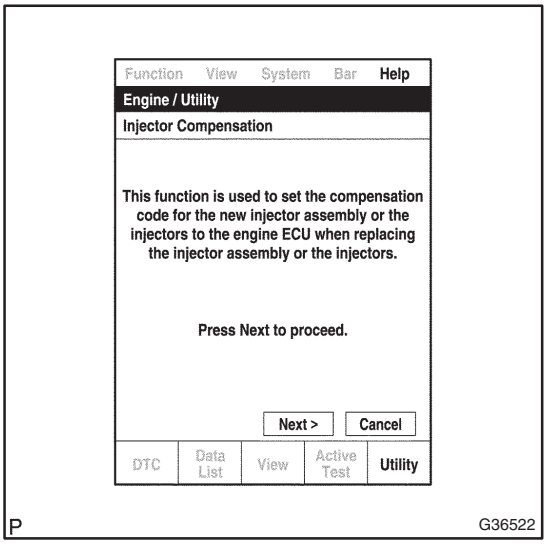
(c) Turn the intelligent tester II ON.

NOTICE:

Do not start the engine.

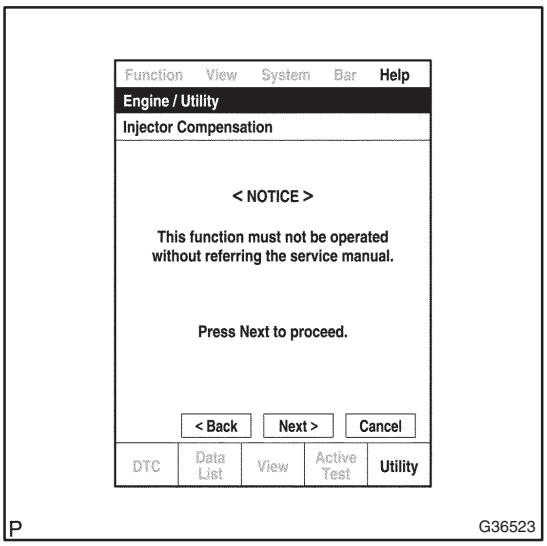
HINT:

The injector compensation code is imprinted on the head portion of each injector.

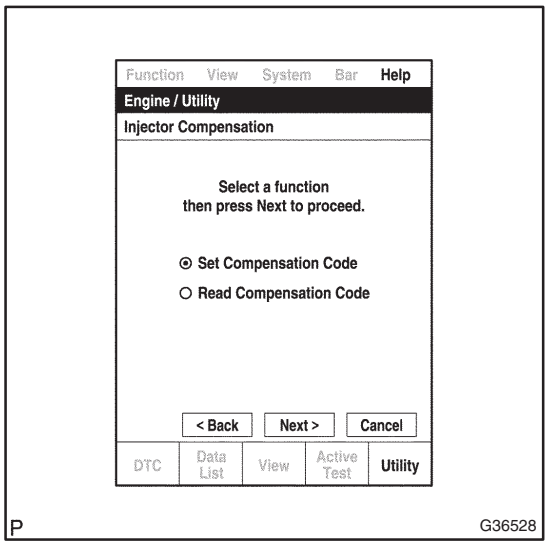


(d) Enter menu options in this order: Enter / Powertrain / Engine / Utility / Injector Compensation.

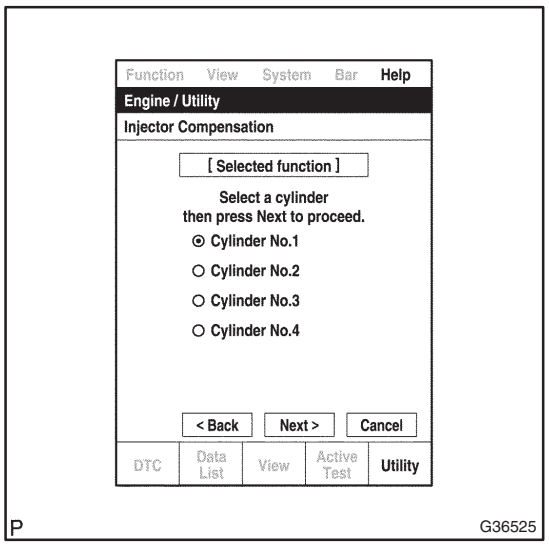
(e) Press Next.



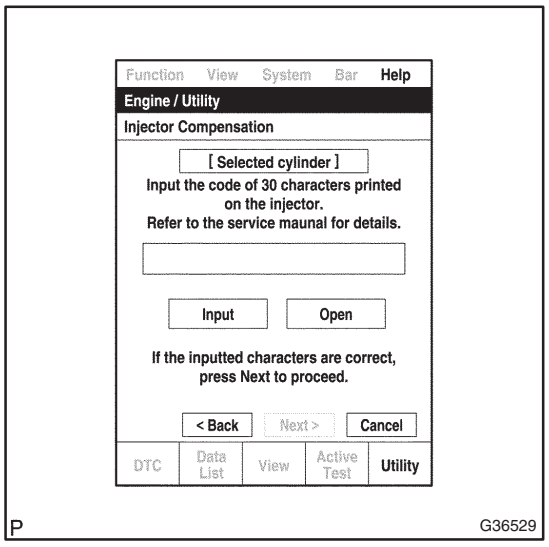
(f) Press Next again to proceed.



(g) Select Set Compensation Code.
(h) Press Next.



(i) Select the number of the cylinder corresponding to the injector compensation code that you want to read.
(j) Press Next.



(k) If one or more injectors were installed (the injector compensation code for the selected cylinder does not exist in the tester):
(1) Press Input.

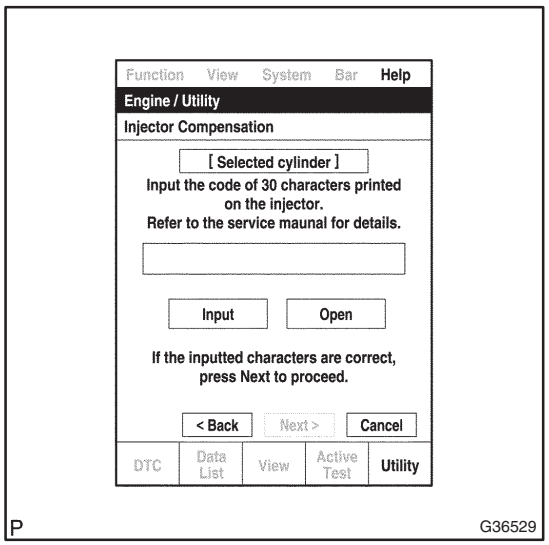


(2) Manually input the cylinder's compensation code using the keyboard on the tester screen. The code is a 30–digit, alphanumeric value imprinted on the injector's head portion.

HINT:

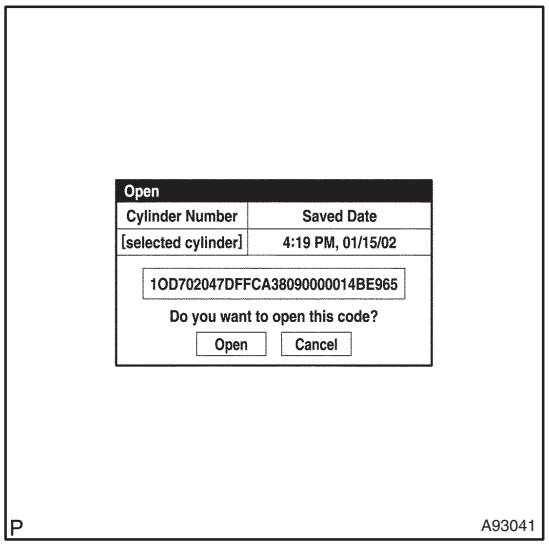
Each injector compensation code is unique. The correct compensation code must be input into each cylinder selected on the tester.

(3) Check that the compensation code is correct for the selected cylinder, and then press OK (proceed to step (m)).



(l) If a new ECM was installed (and all the injectors' compensation codes have been saved in the tester):

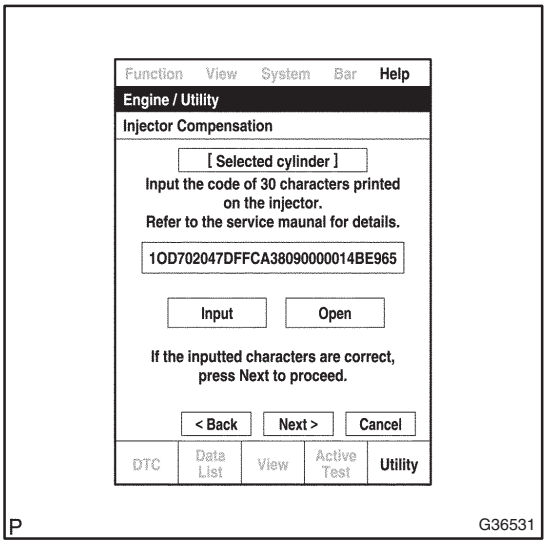
(1) Press Open.



(2) Press Open again to retrieve the saved compensation code.

HINT:

If the retrieving process fails, manual input with the tester is an alternative option. Refer to step (k).



(m) Check that the compensation code displayed on the screen is correct by comparing it with the 30–digit alphanumeric value on the head portion of the injector.

NOTICE:

If an incorrect injector compensation code was input into the ECM, the engine assembly may rattle or engine idling may become rough. In addition, engine failure may occur and the life of the engine may be shortened.

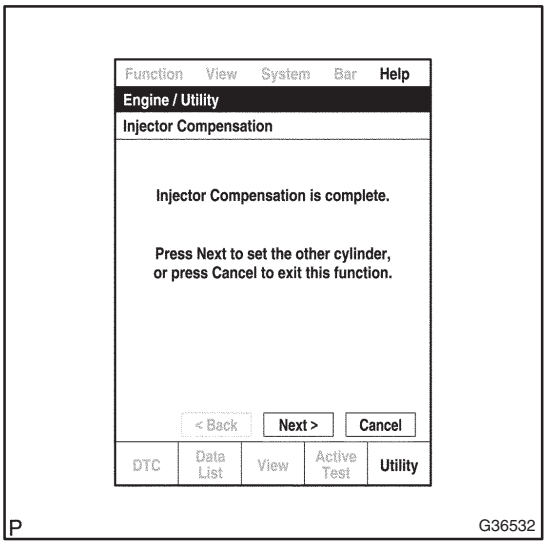
HINT:

If a wrong compensation code was input or read, return to the Input Value screen by pressing Input. The saving process may fail due to a problem with the wire harness or a bad connection with the DLC3. Check the wire harness and the DLC3 connection. If no problem is found with either, the ECM is may be malfunctioning. Check the ECM and repeat this operation.

(n) Press Next to set the compensation code to the ECM.

HINT:

- If the setting process fails, the compensation code may be incorrect. Check the compensation code again.
- If the attempted compensation code is correct, a problem with the wire harness or a bad connection with the DLC3 may cause the failure. Check the wire harness and the DLC3 connection. If no problem is found with either, the ECM may be malfunctioning. Check the ECM and restart this operation.



(o) If you want to continue with other compensation code registrations, press Next. To finish the registration, press Cancel.

(p) Turn the tester OFF and then turn the ignition switch OFF.

(q) Wait for at least 30 seconds.

(r) Turn the ignition switch ON and then turn the tester ON.

(s) Clear DTC P1601/89 stored in the ECM using the tester (see page 05–466).