



## **TECH TIP**

**2022MY-2025MY L - SERIES TRUCKS**  
**“CHANGE STARTER & STARTER RELAY”**  
**MESSAGE RESET PROCEDURE**

**GROUP: 0-GENERAL**  
**TECH TIP NO: TT-24-012**  
**DATE: 07/08/2024**

**SUBJECT VEHICLES:** 2022 - 2025 L-Series trucks.

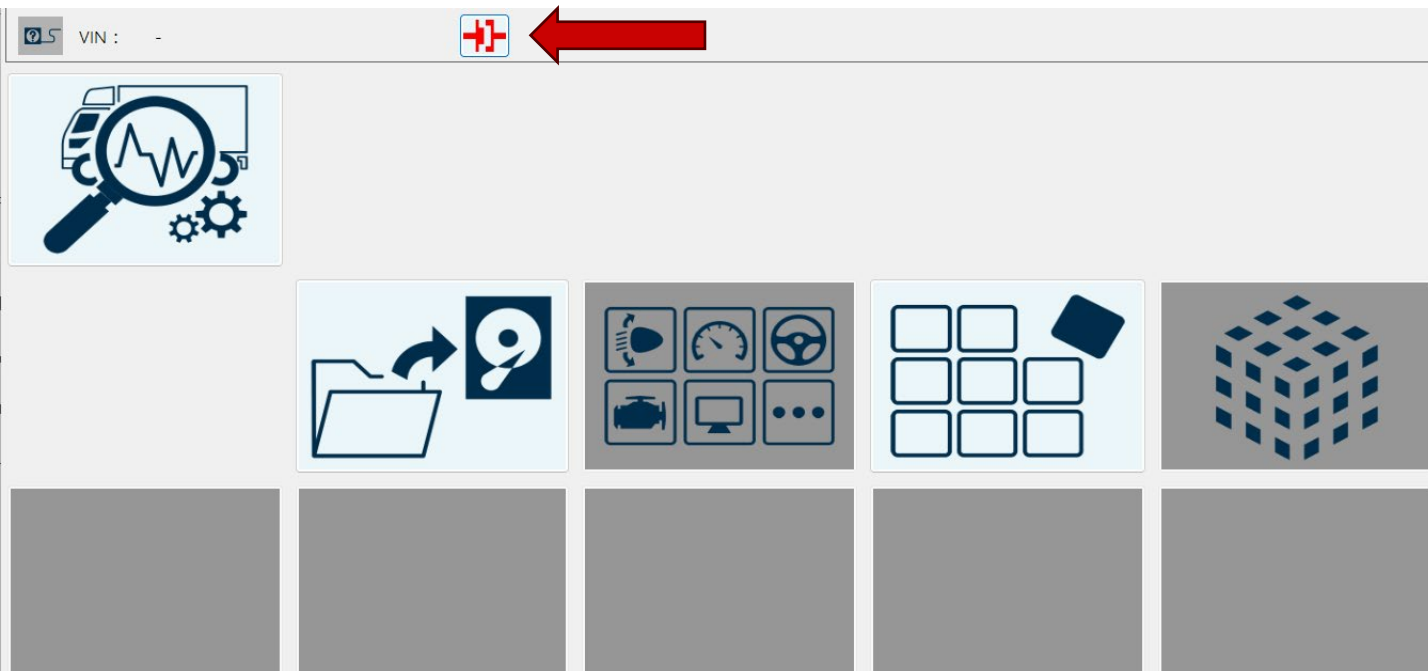
**Note:** This technical service bulletin is provided as technical information and is not authorization for a warrantable repair.

**OVERVIEW:** 2022 to 2025 MY L-series are equipped with an engine start detection frequency monitor. Once the monitor has detected a predetermined amount of starts the meter will display “Change starter & starter relay”. The monitor must be reset any time the starter is replaced .



## RESET PROCEDURE:

1. Using DX3 connect to the truck by clicking on the red connect icon.



## 2. Once connected to the truck select VCS > System Protection DATA > Engine Start Detection Frequency

System protection data

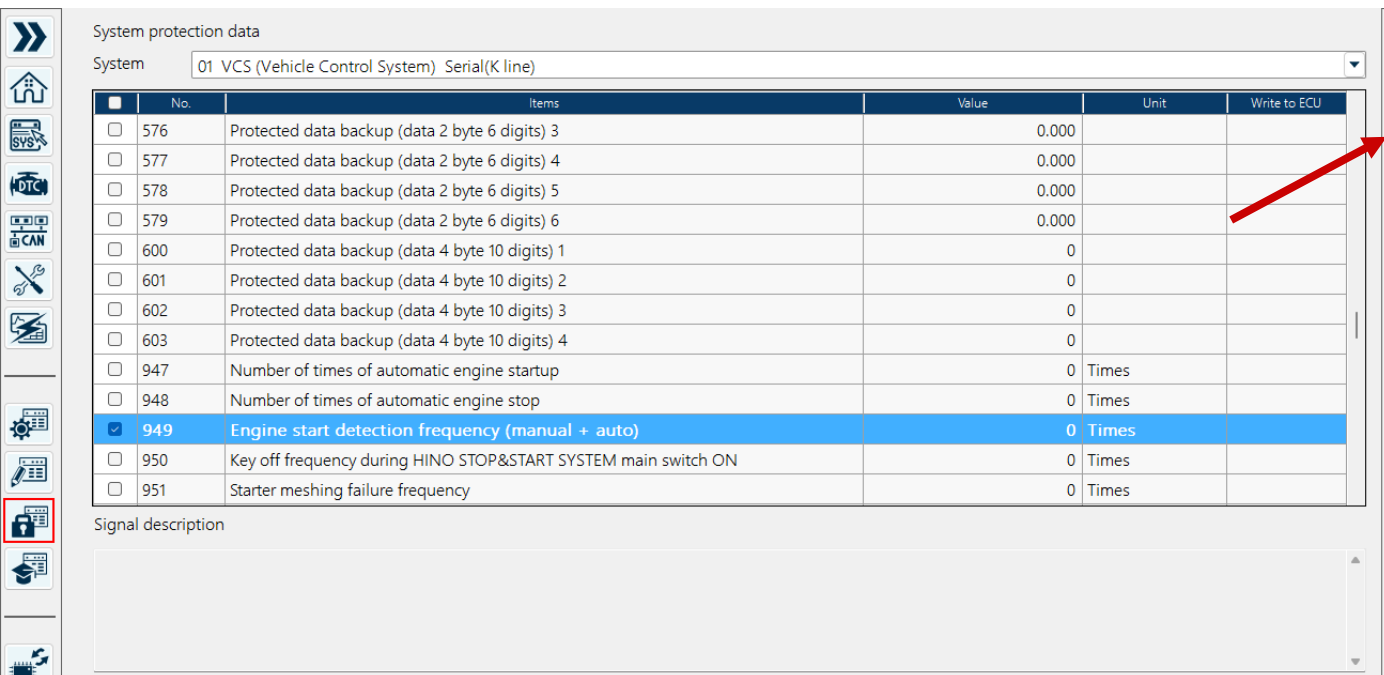
System

| No.                                     | Items  | Value | Unit      | Write to ECU |
|---|--|-------|-----------|--------------|
| <input type="checkbox"/> 528            | Number of actuation times of starter                                     |       | 0 Times   |              |
| <input type="checkbox"/> 531            | Auto regeneration completion frequency                                   |       | 0 Times   |              |
| <input type="checkbox"/> 532            | Manual regeneration completion frequency                                 |       | 0 Times   |              |
| <input type="checkbox"/> 540            | DPR inlet maximum exhaust gas temperature                                | 32    | °F        |              |
| <input type="checkbox"/> 541            | DPR outlet maximum exhaust gas temperature                               | 32    | °F        |              |
| <input type="checkbox"/> 542            | Catalyst deterioration temporary judgment frequency                      |       | 0 Times   |              |
| <input type="checkbox"/> 549            | Mileage after detecting DEF quality error                                |       | 0 Mile    |              |
| <input type="checkbox"/> 574            | Protected data backup (data 2 byte 6 digits) 1                           |       | 0 Times   |              |
| <input type="checkbox"/> 947            | Number of times of automatic engine startup                              |       | 0 Times   |              |
| <input type="checkbox"/> 948            | Number of times of automatic engine stop                                 |       | 0 Times   |              |
| <input checked="" type="checkbox"/> 949 | Engine start detection frequency (manual + auto)                         |       | 0 Times   |              |
| <input type="checkbox"/> 955            | Total travel time during HINO STOP&START SYSTEM main switch ON [seconds] |       | 0 Seconds |              |
| <input type="checkbox"/> 956            | Running time during HINO STOP&START SYSTEM main switch ON [seconds]      |       | 0 Seconds |              |

Signal description

3. Make sure the Engine Start Detection Frequency line is highlighted in blue.

4. Once highlighted select the re-write tab at the top right of the DX screen.



System protection data

System 01 VCS (Vehicle Control System) Serial(K line)

| No.                                     | Items  | Value | Unit  | Write to ECU |
|---|--|-------|-------|--------------|
| <input type="checkbox"/> 576            | Protected data backup (data 2 byte 6 digits) 3                 | 0.000 |       |              |
| <input type="checkbox"/> 577            | Protected data backup (data 2 byte 6 digits) 4                 | 0.000 |       |              |
| <input type="checkbox"/> 578            | Protected data backup (data 2 byte 6 digits) 5                 | 0.000 |       |              |
| <input type="checkbox"/> 579            | Protected data backup (data 2 byte 6 digits) 6                 | 0.000 |       |              |
| <input type="checkbox"/> 600            | Protected data backup (data 4 byte 10 digits) 1                | 0     |       |              |
| <input type="checkbox"/> 601            | Protected data backup (data 4 byte 10 digits) 2                | 0     |       |              |
| <input type="checkbox"/> 602            | Protected data backup (data 4 byte 10 digits) 3                | 0     |       |              |
| <input type="checkbox"/> 603            | Protected data backup (data 4 byte 10 digits) 4                | 0     |       |              |
| <input type="checkbox"/> 947            | Number of times of automatic engine startup                    | 0     | Times |              |
| <input type="checkbox"/> 948            | Number of times of automatic engine stop                       | 0     | Times |              |
| <input checked="" type="checkbox"/> 949 | Engine start detection frequency (manual + auto)               | 0     | Times |              |
| <input type="checkbox"/> 950            | Key off frequency during HINO STOP&START SYSTEM main switch ON | 0     | Times |              |
| <input type="checkbox"/> 951            | Starter meshing failure frequency                              | 0     | Times |              |

Signal description

**Note:** These screens shots were done in DX3 Simulation mode. The value shown above is zero. You may see a value of 29,000 or greater.

5. Select OK in the confirmation box and confirm the reset was carried out.

[C1001]

Confirmation

Reset the selected item to its initial value.  
Is it OK?

Caution

After writing is complete, turn the key switch OFF for a minimum of 60 seconds. Turn the key ON. Confirm if the value is written correctly or not.

OK

Cancel



6. Once the re-write is completed turn the key off for 60 seconds. Turn the key back on and confirm the value reads zero and the write to ECU reads Success.

System protection data

System 01 VCS (Vehicle Control System) Serial(K line)

| No.                                     | Items  | Value   | Unit    | Write to ECU |
|---|--|---------|---------|--------------|
| <input type="checkbox"/> 602            | Protected data backup (data 4 byte 10 digits) 3                          | 0       |         |              |
| <input type="checkbox"/> 603            | Protected data backup (data 4 byte 10 digits) 4                          | 0       |         |              |
| <input type="checkbox"/> 947            | Number of times of automatic engine startup                              | 0       | Times   |              |
| <input type="checkbox"/> 948            | Number of times of automatic engine stop                                 | 0       | Times   |              |
| <input checked="" type="checkbox"/> 949 | Engine start detection frequency (manual + auto)                         | 0       | Times   | Success      |
| <input type="checkbox"/> 950            | Key off frequency during HINO STOP&START SYSTEM main switch ON           | 0       | Times   |              |
| <input type="checkbox"/> 951            | Starter meshing failure frequency  | 0       | Times   |              |
| <input type="checkbox"/> 952            | Key startup frequency in case of auto stop                               | 0       | Times   |              |
| <input type="checkbox"/> 953            | Fuel consumption correction coefficient a                                | 0.00000 |         |              |
| <input type="checkbox"/> 954            | Not defined  | 0       |         |              |
| <input type="checkbox"/> 955            | Total travel time during HINO STOP&START SYSTEM main switch ON [seconds] | 0       | Seconds |              |
| <input type="checkbox"/> 956            | Running time during HINO STOP&START SYSTEM main switch ON [seconds]      | 0       | Seconds |              |
| <input type="checkbox"/> 957            | Vehicle stop time during HINO STOP&START SYSTEM main switch ON [seconds] | 0       | Seconds |              |

Signal description

7. Once the value and write to ECU are confirmed the rest has been completed.