



DEF TANK REMOVE/REPLACE

WORK INSTRUCTION: WI-900-035

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1.0 PURPOSE

- 1.1 The purpose of this document is to provide instructions for removal and replacement of the DEF tank on 4400 T4.

2.0 SCOPE

- 2.1 This process applies to all customers and field service technicians exchanging the DEF tank on 4400 Tier 4 GPU's.

3.0 RECORDS

- 3.1 None

4.0 ASSOCIATED DOCUMENTS

- 4.1 None

5.0 DEFINITIONS

- 5.1 DEF – Diesel Exhaust Fluid

6.0 RESPONSIBILITY

- 6.1 Field Service Technicians and customers

7.0 TOOLS, GAGES, FIXTURES

- 7.1 Flat head Screw Driver, 6mm wrench or socket

8mm or 5/16" socket or nut driver (preferred) or flathead screwdriver for hose clamps

10mm wrench or socket for cover bolts

Automotive hose line clamps to prevent coolant leakage

8.0 SAFETY REQUIREMENTS

- 8.1 Ensure engine is off and cool.

9.0 INSTRUCTIONS

- 9.1 Gain access to DEF tank connections by removing outer cover. Remove 4 bolts as indicated and slide cover off.

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Figure 1: Remove 4 bolts per arrows.

- 9.2** The unit may have one of two styles of DEF headers, photos that follow detail the two styles of DEF heads. The connections are swapped but fit on the head with no modification.

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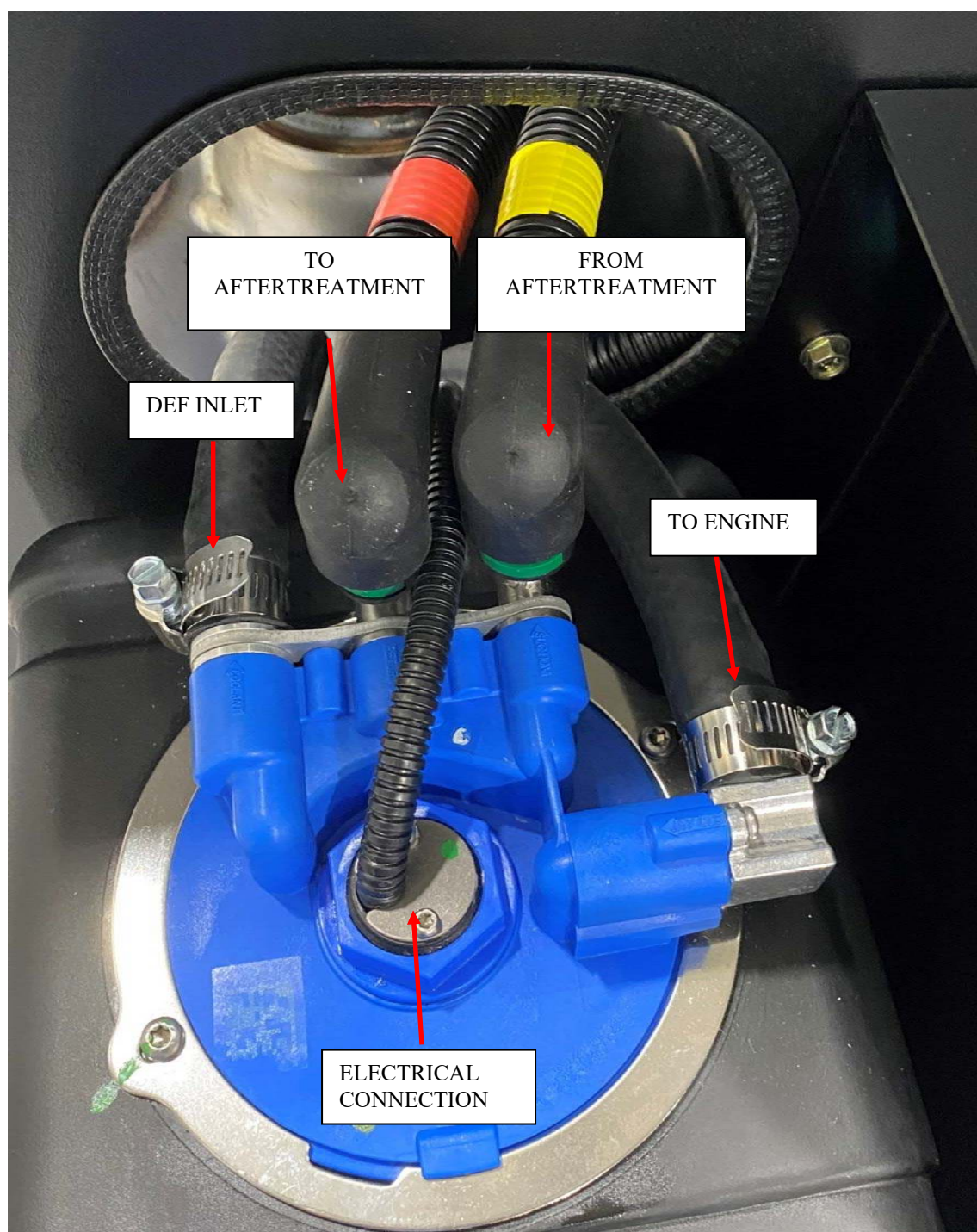


Figure 2: DEF head style A with connections identified

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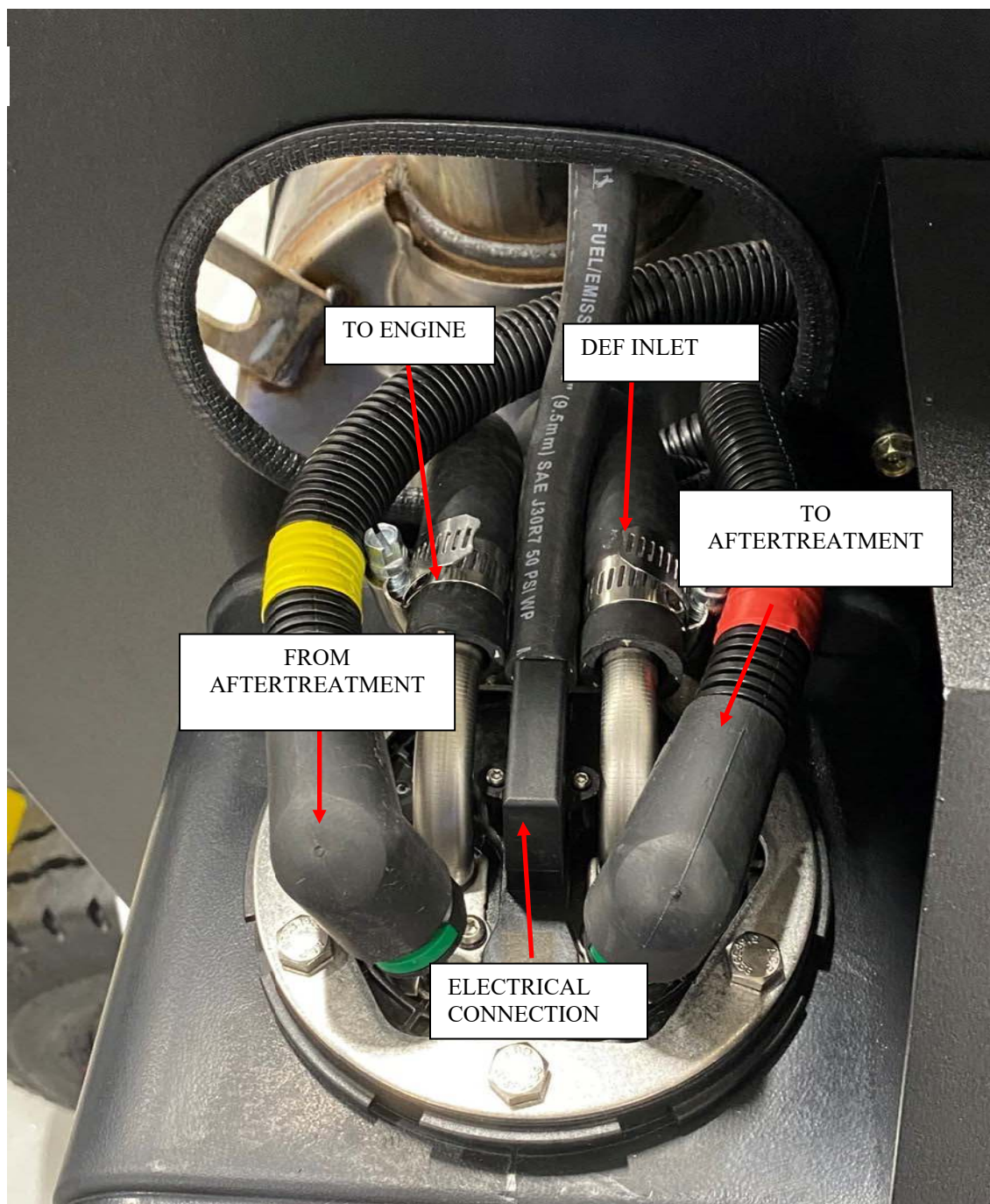


Figure 3: DEF head style B with connections identified

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9.3 The photos that follow indicate the hose placement differences for those not marked red or yellow.



Figure 4: DEF inlet style A



Figure 5: DEF inlet style B



Figure 6: To Engine style A

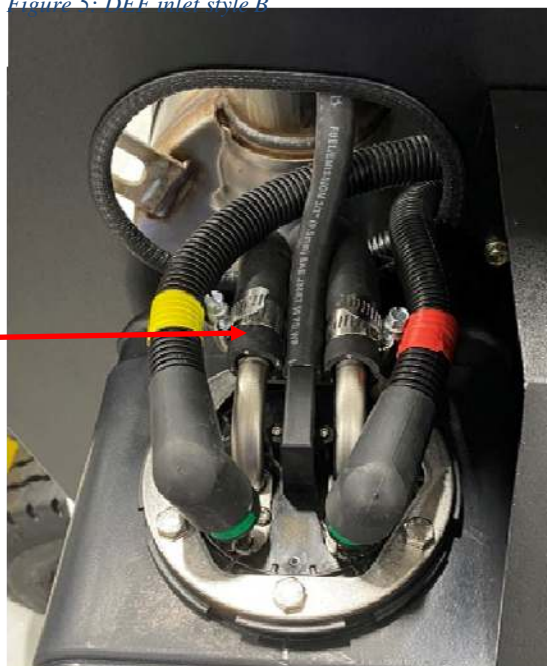


Figure 7: To Engine style B

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9.4 Remove the hoses from the faulty DEF tank.

CAUTION Clamp coolant lines before removal to control spillage.

9.5 Disconnect the electrical connector from the unit harness.



Figure 8: Electrical connector to the 4400. Both heads connect the same to the unit.

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*Figure 9: DEF plug P6*

- 9.6** Remove the faulty tank from the tank well.
- 9.7** Place the new tank in the tank well.
- 9.8** Connect the lines per photographs 4 through 9.
- 9.9** Connect DEF sensor plug to unit P6.
- 9.10** Reinstall tank well panels removed in Step 9.1
- 9.11** Remove DEF cap and fill with DEF fluid. Replace cap.
- 9.12** Perform an operational checkout. Any old DEF codes should clear themselves after running 20-30 minutes. If not, a Cummins technician will be needed to clear the codes from the ECM.

NOTES for Cummins:

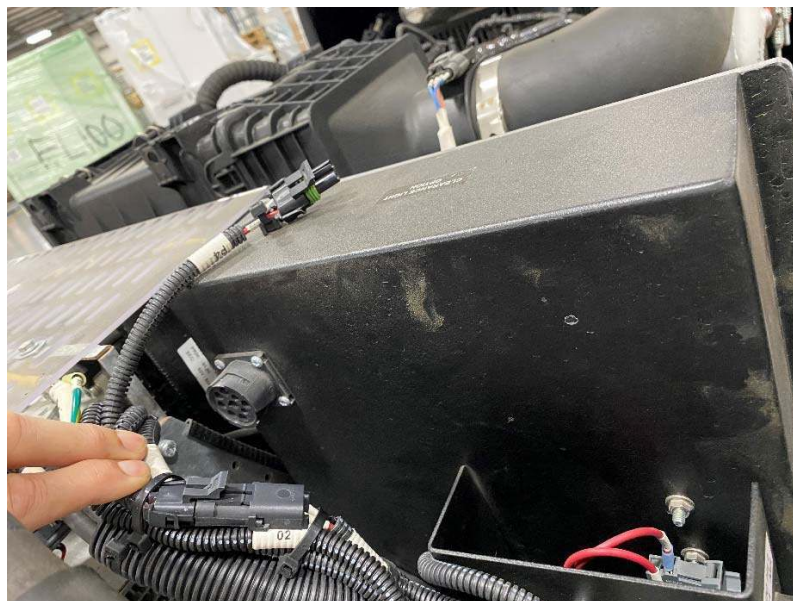
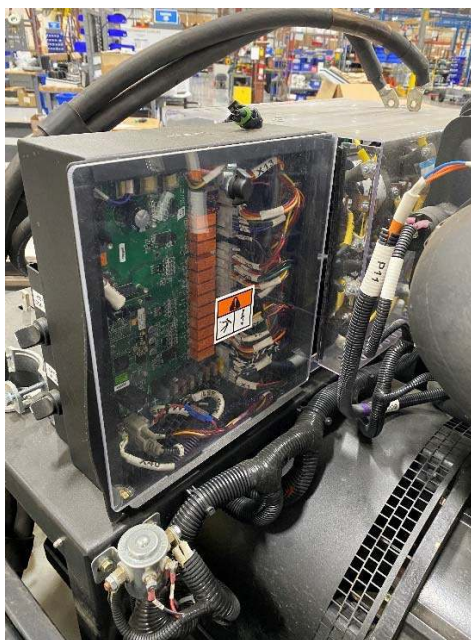
The ECM dongle connection is located on the rear of the control box. Access by sliding the canopy back, duck underneath and the connector is on the upper left wall of the box.

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*Figure 10: rear of control box**Figure 11: Front of control box for reference*

Verify DEF tank is full of fluid.

Certain codes may not clear unless the ECM is re-flashed with latest calibration.

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To access and power up ECM without running the engine, set the unit to Engine Interface mode via the menu.

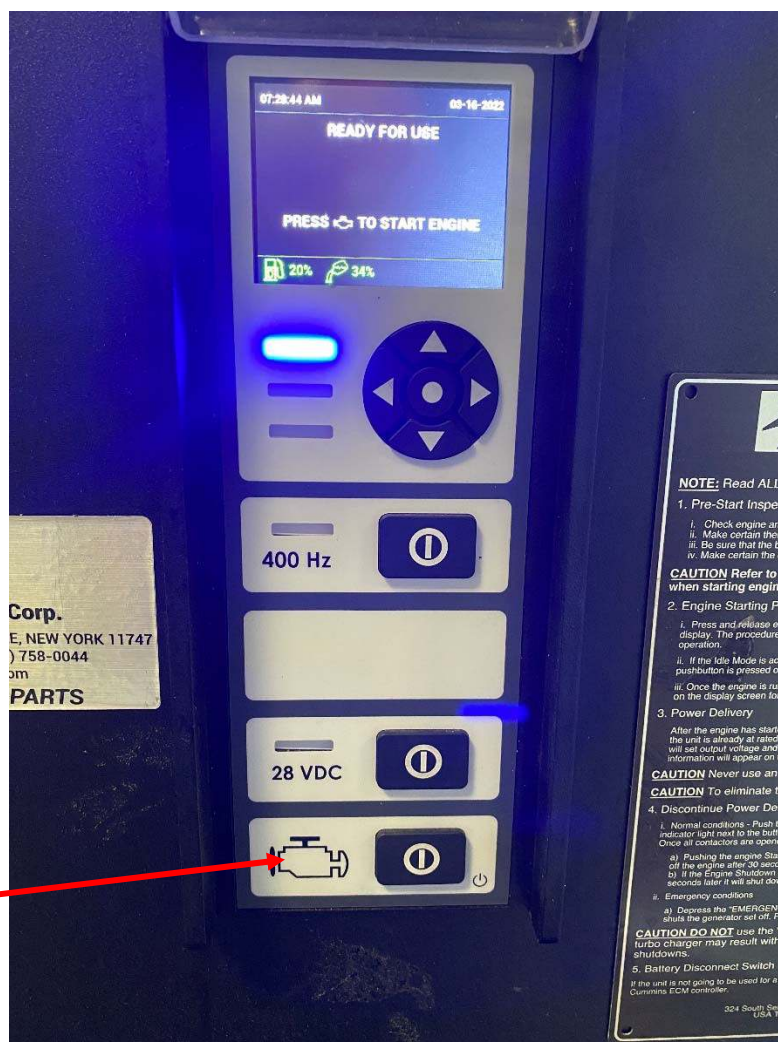


Figure 12: Press the Engine icon to wake the unit up

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Figure 13: Press and hold the center button until the Home screen appears

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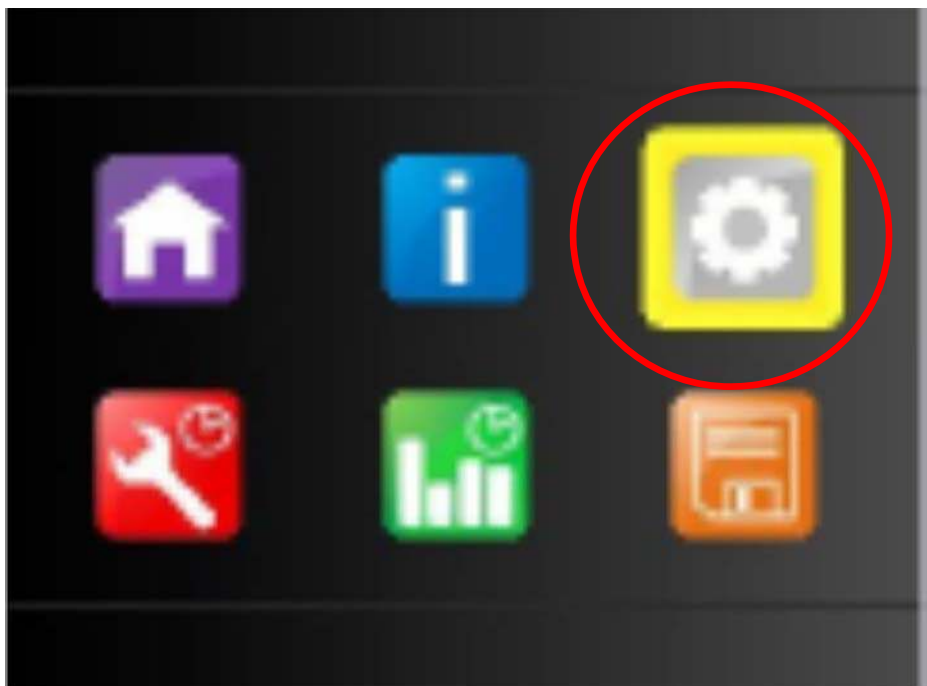


Figure 14: Use Right arrow until the gear icon is highlighted.



Figure 15: Press center button to enter the setup menus

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Figure 16: Use the bottom arrow to scroll until Diagnostic Mode is highlighted green

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Figure 17: Press center button and Diagnostic mode will appear

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Figure 18: Press center button to highlight Disabled

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Figure 19: Use Up/Down buttons until Engine Interface is displayed and press center button to save

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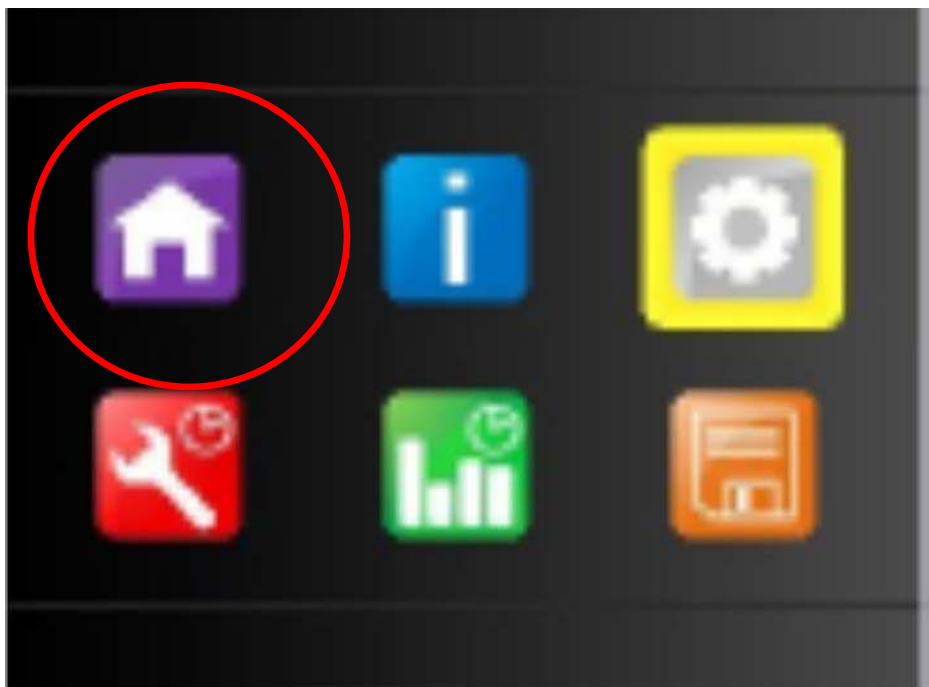


Figure 20: Press the left arrow button until you return to the home screen. Then press the Home Icon

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Figure 21: Note the unit is in Generator Diagnostic mode

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Figure 22: Press the Engine button, the ECM will now be powered.

Once the codes have been cleared and the ECM re-flashed, return to the menus and reset Diagnostic mode to Disabled.

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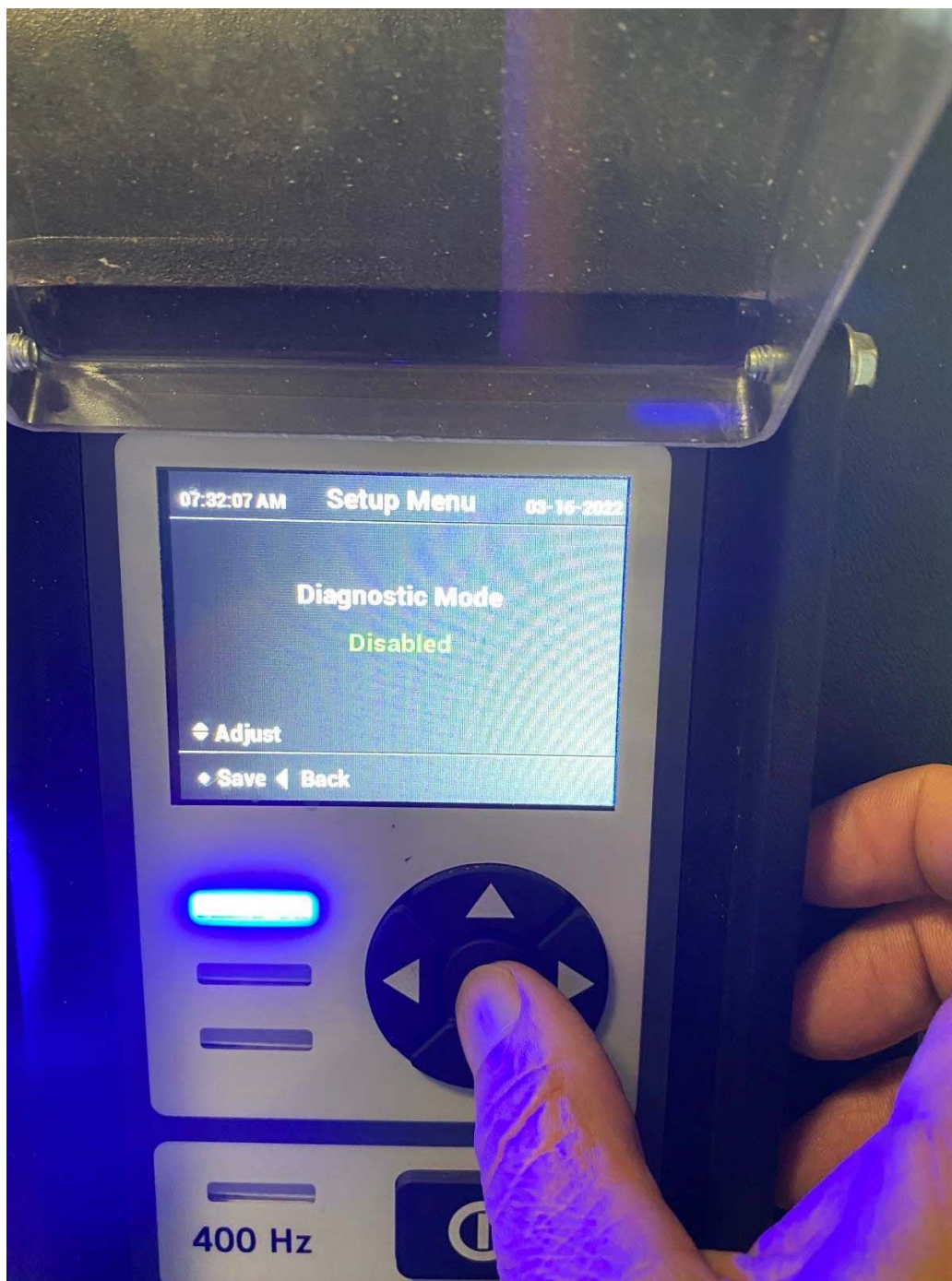


Figure 23: Set Diagnostic mode to Disabled

Return to the home screen and press the center button. Unit should say Ready For Use.

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