

UPS Ford F59 Package Truck Poor/ Improper Fuel Gauge Reading ENP-731 April 9, 2020



1. Introduction

The Agility Fuel Solutions LLC ("Agility") service team has identified certain Package Trucks built on the Ford F59 chassis, powered by the Ford V10 with an Agility® CNG system, that are exhibiting improper dash fuel gauge readings. These readings include but are not limited to, premature low fuel warning, inoperative fuel gauge, and perceived poor MPG. There was a running change/product enhancement that was found and released after some units were produced and shipped to the end user.

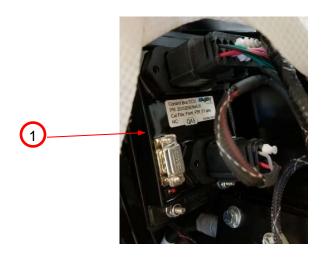


Figure 1 Agility® Fuel Control Module (1)

1.1 Warning Messages Used in this Bulletin

ACAUTION

Damage to equipment, engine, fuel system or vehicle is possible if instructions are not followed.

NOTICE

Best practices or hints to help an operation or procedure go smoothly.

2. Affected Units

271 188 Ford F59 Package trucks



3. Tools and Materials

Description	
Terminal Removal Tool	Ratchet
10 mm socket	Heat Gun
Side cutters	Rust Inhibitor Spray
Agility® fuel control module p/n 20102905 Agility® Harness Kit p/n 69000535 containing: Qty: 1 – Ground Harness, p/n 60140015 Qty: 1 – Self Tapping Bolt, p/n 61090123 Qty: 10- Zip ties, p/n 61090092 Oty: 2- Heat shrink tube, p/n 62040001	

4. Corrective Action / Procedure

For those units identified to be needing ground harness rework and Agility® control module replacement, continue with the following procedure.

For those units identified to be needing the Agility® control module ONLY go to page 15, step 15.

ACAUTION

Observe all safety measures for CNG vehicle repair including all facility requirements.

ACAUTION

Park vehicle, set parking brake, remove ignition key, and secure vehicle tires with wheel chocks.



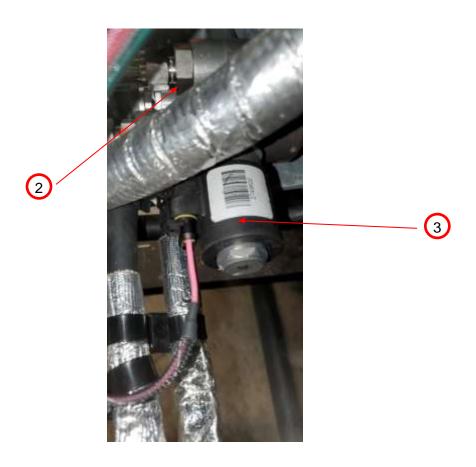


Figure 2: Fuel Pressure Regulator (2), Fuel Supply Solenoid (3)

- 1. Locate the high-pressure regulator (2) on the driver side frame rail near the transmission.
- 2. The supply solenoid (3) is located on the inboard side of the inboard side of the regulator with the connector to the rear of the vehicle.





Figure 3: Fuel Supply Harness (4)

3. Remove the supply solenoid connector from the supply solenoid by gently lifting on the connector tab while sliding the connector out of the solenoid.



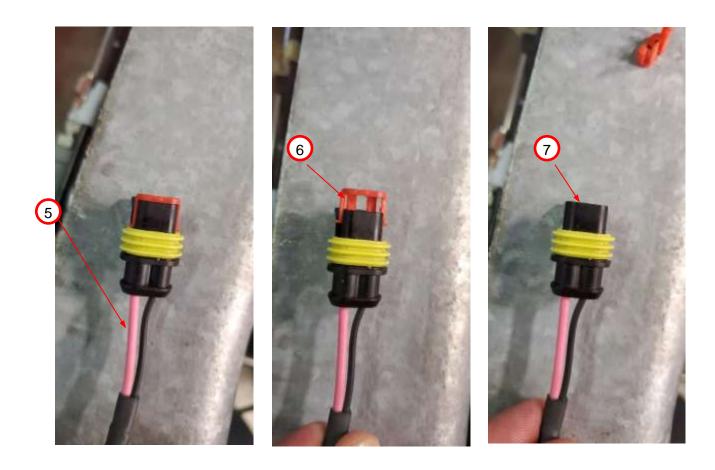


Figure 4: Supply Harness removed (5), TPA Clip (6), TPA removed (7)

4. Remove the Red TPA by lifting on either ear and sliding it out of the top of the connector.



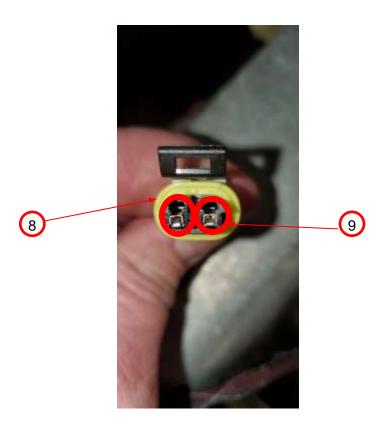


Figure 5: Connector (8), Ground Terminal (9)

5. Using an appropriate terminal depinning tool lift the terminal lock (circled) from the ground terminal (9) and slide the terminal out the rear of the connector.



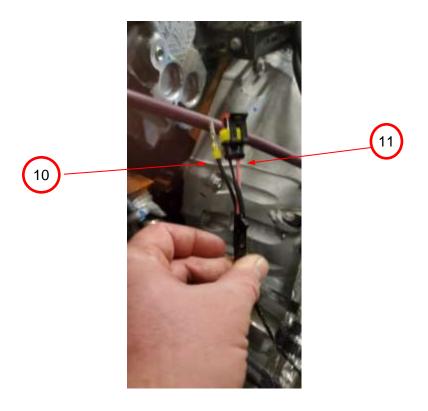


Figure 6: Original ground terminal removed (10), New Supply ground harness installed (11)

6. Install the new ground terminal into cavity B on the supply solenoid connector. An audible click should be heard when the terminal has seated into the lock. Gently pull on the wire to confirm it is seated.



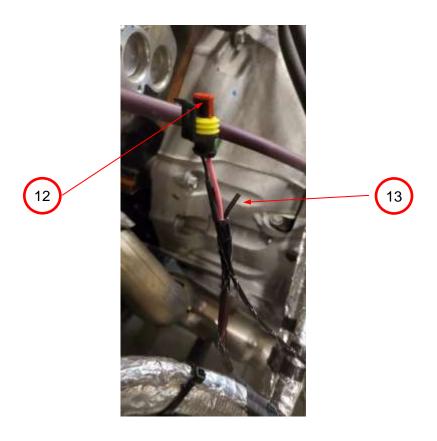


Figure 7: TPA reinstalled (12), Original ground wire (13)

- 7. Install the TPA and ensure that the TPA tangs are flush to the body of the connector (12). If the TPA is binding remove it and inspect to make sure that the connector to ensure that the terminal locks are fully seated.
- 8. Trim the main harness ground approximately 0.50" from the heat shrink tube (13).



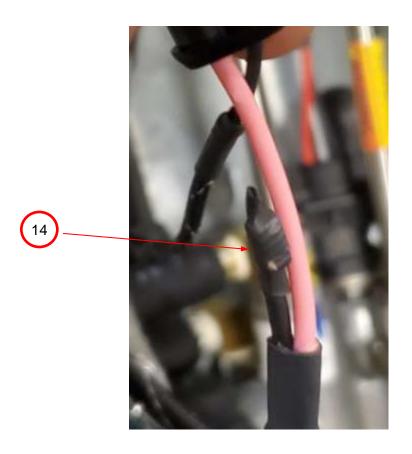


Figure 8: Original ground harness sealed off (14)

- 9. Install adhesive lined heat shrink tubing onto the trimmed ground and when hot crimp the end shut with pliers to ensure a watertight seal.
- 10. Fold the tab onto itself and install another piece of heat shrink tubing to ensure a complete seal.



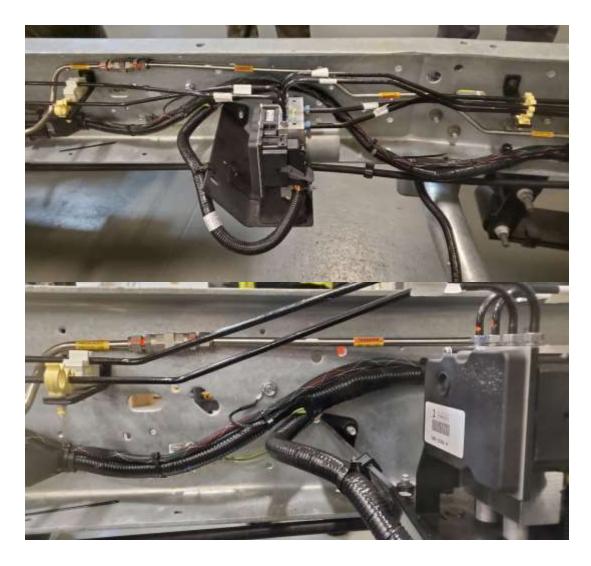


Figure 9: New ground harness secured to chassis harness.

- 11. Secure the harness to the main Agility® harness.
- 12. Route the harness along the frame rail securing it to the main harness with zip ties as needed.





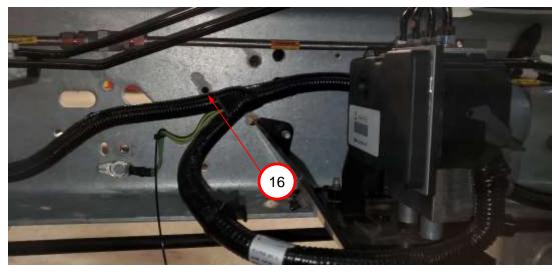


Figure 10: Location of hole to be used for grounding location (15), Zoomed in location of hole to be used (16)

13. Using the supplied self-tapping bolt secure the ground eyelet to the chassis in the location indicated on the left. We recommend using a drill or impact driver to install this.



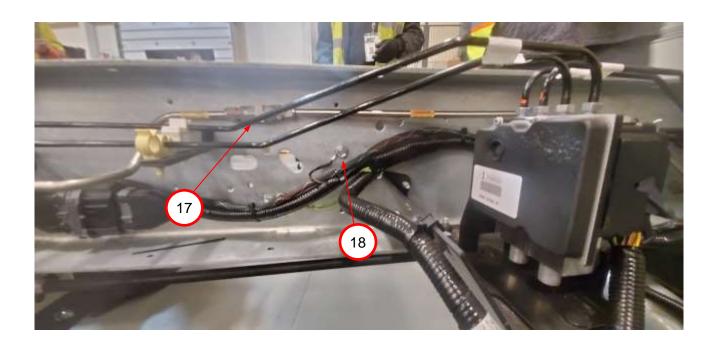


Figure 341: Driver side frame rail 1/4 turn valve (17), Ground bolt installed (18)



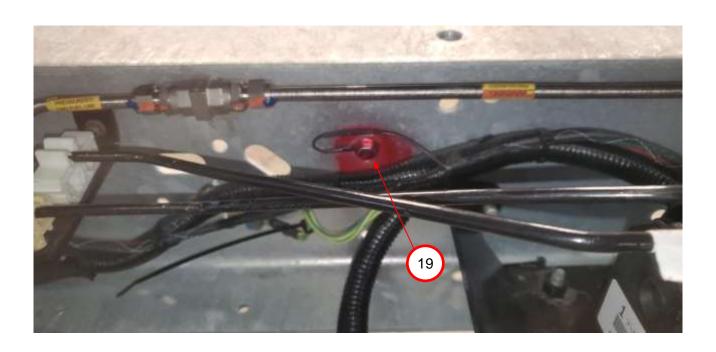


Figure 442: Ground bolt sprayed with anti-corrosion spray (19)

14. Spray anti-corrosion spray on ground bolt.



Agility® Fuel Control Module Replacement

- 15. Set parking brake and secure vehicle with wheel chocks.
- 16. Remove vehicle negative battery terminal(s). Refer to OEM procedure.

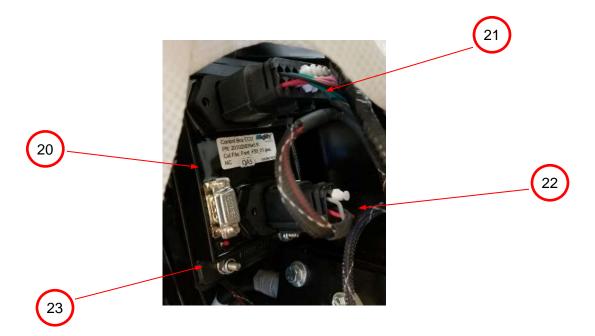


Figure 13: Agility® Fuel Control Module (20), Cabin harness connector (21), 4-pin connector (22), bracket (23)

17. Disconnect cabin harness 16-pin connector (21) and 4-pin connector (22) from ECU (20). Figure 14.





Figure 14: Agility® fuel control module (24), Controller fasteners (circled), Controller bracket (25)

- 18. Remove four lock nuts, four bolts and four washers *(circled)* retaining ECU (24) to ECU bracket (25). *Figure 15*
- 19. Remove controller (24).



Agility® Fuel Control Module Installation

20. Use four lock nuts, four hex cap bolts, and four washers to secure controller (24) to controller bracket (25). Figure 14



Torque screws to 7 ft-lbs (9.5Nm) to 9-ft-lbs (12.2Nm).

- 21. Apply dielectric grease to controller cabin harness 16-pin and 4-pin connectors.
- 22. Connect cabin harness 16-pin connector (21) and cabin harness 4-pin connector (22) to controller (20). Figure 13
- 23. Connect negative battery cable(s) Refer to OEM procedure
- 24. Verify proper operation.



For parts and support, contact Agility® Customer Care: +1 949 267 7745, toll free: +1 855 500 2445 or support@agilityfs.com

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