

Authorized Field Change

NAVISTAR®

AFC 12929

Date: October 2012

Subject File: ENGINE

Subject: 2010 MaxxForce® 11 & 13 High-Pressure (HP) Fuel Pump Replacement

Model: PayStar®, WorkStar®, TranStar®, LoneStar®, and ProStar®

Start Date: 20 June 2011 End Date: 30 November 2011

Engine Family: MaxxForce® 11 & 13

DESCRIPTION

Certain HP fuel pumps for MaxxForce® 11 and 13 engines that failed in 2011 were serviced with a replacement pump that also fell into a suspect build period. This AFC describes a repair procedure to replace the HP fuel pump for all vehicles marked with AFC 12929.

IMPORTANT: This AFC applies only to vehicles marked in Service Portal with AFC 12929 that have an HP fuel pump build date of 30 November 2011 or earlier.

NOTE: All removed HP fuel pumps will be called back to Warranty Return under the normal return guidelines except U.S. dealer returns will be sent to Elmhurst, Illinois. Specific return shipping instructions for U.S. dealers only can be found in the Parts Return Information section of this AFC. For both U.S. and Canadian warranty returns, to prevent damage to the pump drive train and shaft threads, all caps on the high-pressure pump being installed should be saved and installed on the pump being sent back under Warranty Return. Whether the caps are black, yellow, or transparent, it is critical to put the caps back on the returned pump in the same locations as on the pump being installed. In addition, the returned pump should be put back in the plastic bag and box to provide additional protection during shipping.

PARTS INFORMATION

Table 1. [Parts Information](#)

Part Number	Description	Quantity
5010670R91	HP Fuel Pump Kit for Sold Vehicles with MaxxForce® 11 or 13	1
3535854C1	Bolt, special 7/16 - 20 UNF	1
273896	Nut, lock 7/16 – 20 UNF	1
26272R1	Washer, flat 7/16 in	1
ZTSE4891	Air and Fuel Cap and Plug Kit	1
Obtain locally	Wacker® A-442 RTV sealant	1

SERVICE PROCEDURE



WARNING: Park vehicle on hard flat surface, turn the engine off, set the parking brake, and block the wheels to prevent the vehicle from moving in both directions. Failure to do so may result in property damage, personal injury, or death.



WARNING: If the vehicle must be raised, do not work under the vehicle supported only by jacks. Jacks can slip or fall over, potentially resulting in property damage, personal injury, or death.



WARNING: Always wear safe eye protection when performing vehicle maintenance. Failure to do so may result in serious eye injury.



WARNING: Keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases. Failure to heed this warning may result in property damage, personal injury, and/or death.



WARNING: Remove the ground cable from the negative terminal of the battery box before disconnecting any electrical components. Always connect the ground cable last. Failure to heed this warning may result in property damage, personal injury, and/or death.

HP FUEL PUMP REMOVAL

NOTE: The HP fuel pump and drive housing can be removed as an assembly without removing the fuel filter assembly.

1. Turn steering wheel to left.
2. Install wheel chocks.
3. Remove battery box cover and disconnect negative cables from batteries.
4. Open hood and flip down front bumper (if equipped).

HP FUEL PUMP REMOVAL (CONT.)



Figure 1. Bosch HP Fuel Pump Label

1. Manufacture date in YY-MM-DD format
 2. HP fuel pump serial number
5. Check label on side of HP fuel pump (Figure 1). Capture HP fuel pump manufacturing date and serial number. To confirm that the pump should be replaced, call Denise Slaski in Navistar Powertrain Reliability and Quality at 331-332-1465 with HP fuel pump manufacturing date and serial number. Denise will confirm that HP fuel pump should be replaced.
 6. Remove left front fender assembly and bracket.
 7. Remove air filter housing and tube. Install protective caps from Air and Fuel Cap and Plug Kit ZTSE4891.
 8. Remove charge air cooler pipe and install protective caps.
- CAUTION:** To avoid damaging the steering shaft, use a pry bar to detach the steering shaft from the steering gear.
9. Detach steering shaft from steering gear and position away from fuel pump. Discard bolt, flat washer, and lock nut.
 10. Remove oil dipstick brace and oil filler pipe.

HP FUEL PUMP REMOVAL (CONT.)

11. Unlock and disconnect all electrical connectors from Electronic Control Module (ECM) (Figure 2).

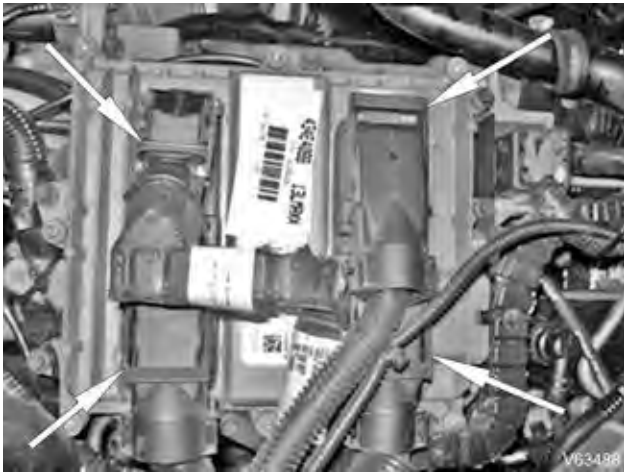


Figure 2. ECM Harness Connector (4)

12. Remove eight mounting bolts and remove ECM from support (Figure 3).

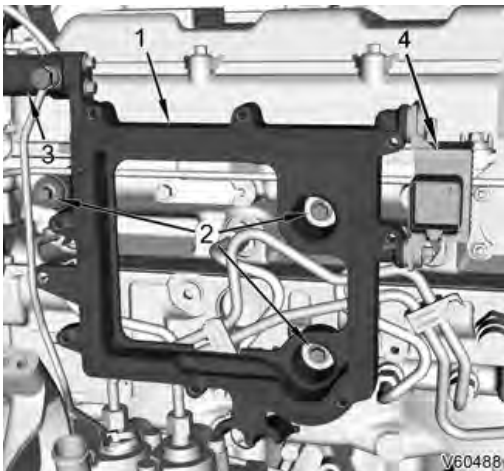


Figure 3. ECM Support

1. ECM support bracket
2. Mounting bolt with attached insulator (3)
3. Cold Start Solenoid (CSS)
4. Cold Start Relay

13. Remove two attachment bolts and CSS from ECM support bracket and position it out of the way.

14. Remove ECM support bracket. Retain mounting insulators.

NOTE: Place a drain pan under the power steering pump to catch any fluid.

HP FUEL PUMP REMOVAL (CONT.)

15. Disconnect power steering pressure tubes and drain power steering (Figure 4).



Figure 4. Power Steering Pump Connections

1. Power steering pump
2. Pressure tube fitting nut (2)

NOTE: To assist with HP fuel pump removal, the power steering pressure tubes, with two insulated support brackets, must be laid aside as an assembly. The two support brackets must be tightly contained before loosening attachment fasteners, or reassembly can be very difficult.

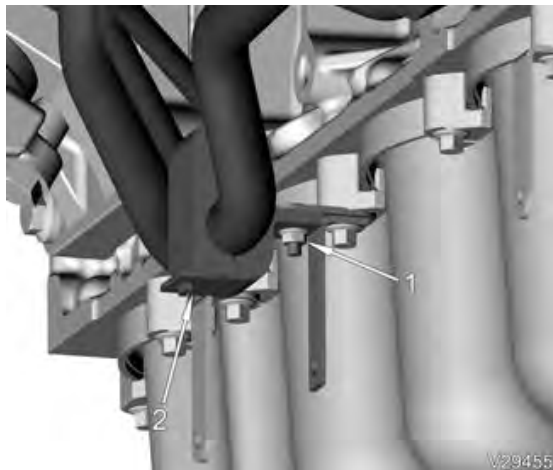


Figure 5. Pressure Tubes Support Bracket

1. Nut
2. Lower support bracket

HP FUEL PUMP REMOVAL (CONT.)

16. Install tie straps on both upper and lower support brackets to prevent opening of brackets when removed in next step (Figure 6).



Figure 6. Tie Strap Installed

17. Remove upper and lower support bracket nuts. Slide support brackets off studs and lean pressure tube assembly aside.

NOTE: The tie straps will hold the brackets together for easier installation.

18. Disconnect rubber power steering hose at return tube. Disconnect HP power steering line and position it out of the way (Figure 7).

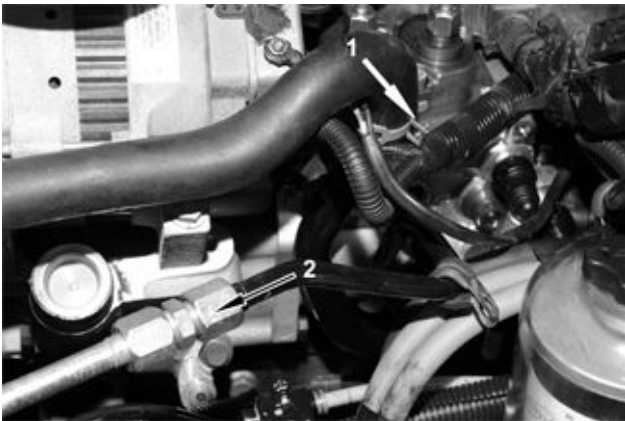


Figure 7. Power Steering Supply and Return Lines

1. Spring clamp on power steering return tube
2. Disconnect point for HP power steering line

19. Release auto-tensioner and remove drive belt.

HP FUEL PUMP REMOVAL (CONT.)

20. Remove two bracket-to-pump bolts and loosen but do not remove two bracket-to-crankcase bolts at HP fuel pump support bracket (Figure 8).

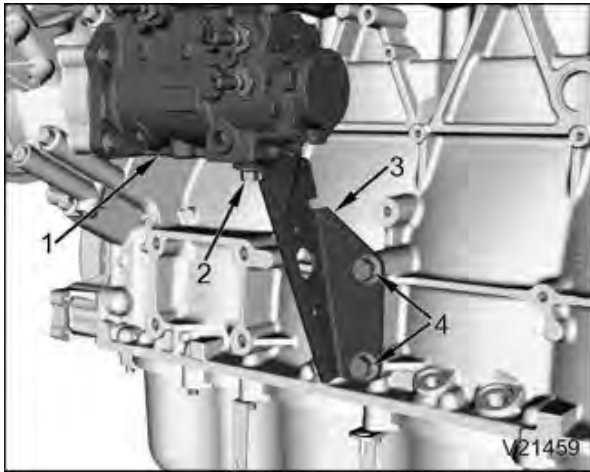


Figure 8. HP Fuel Pump Support Bracket

- 1. HP fuel pump
- 2. Bracket-to-pump bolt (2)
- 3. Support bracket
- 4. Bracket-to-crankcase bolt (2)

21. Label and disconnect alternator wiring, and remove alternator assembly.

22. Disconnect 21-way harness connector at mounting bracket (Figure 9).



Figure 9. Harness 21-way Connector

23. Disconnect harness from Fuel Pressure Control Valve (FPCV) on HP fuel pump.

HP FUEL PUMP REMOVAL (CONT.)

! WARNING: To prevent personal injury or death, engine must be stationary for at least 5 minutes before doing any work on HP fuel system to allow for system depressurization.

! WARNING: To prevent personal injury or death, whenever any fuel line (tubing) in the HP fuel system is removed, it must be replaced with new.

CAUTION: To prevent engine damage, install Disposable Air and Fuel Caps (ZTSE4891) immediately after each fuel line is removed.

24. Remove HP fuel pump to rail tube assemblies 1 and 2. Cap open fuel rail connections with clean protective Air and Fuel Caps (ZTSE4891) (Figure 10).

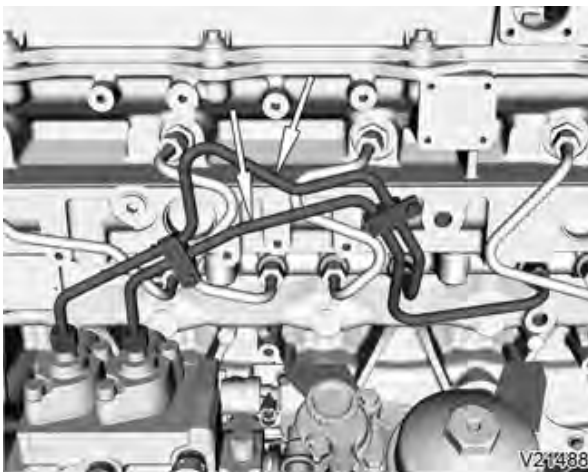


Figure 10. HP Fuel Pump-to-Rail Tube Assembly

NOTE: Label the four low-pressure fuel lines on the HP fuel pump before removing them for proper re-installation.

HP FUEL PUMP REMOVAL (CONT.)

25. Label and disconnect four fuel lines from side of HP fuel pump (Figure 11).

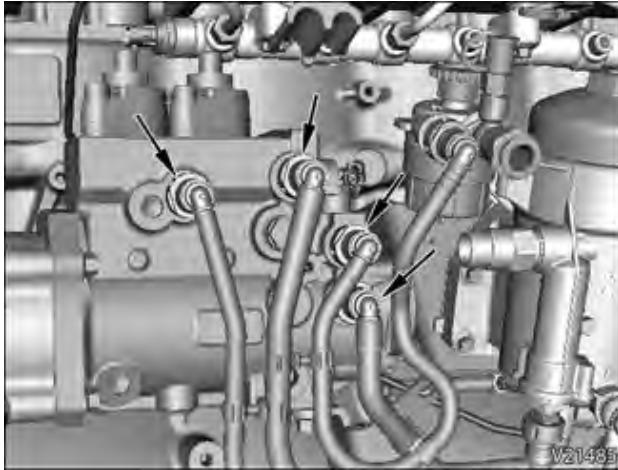


Figure 11. Low-pressure Fuel Lines

26. Remove four mounting bolts and remove HP fuel pump and drive housing assembly from crankcase (Figure 12 and Figure 13).

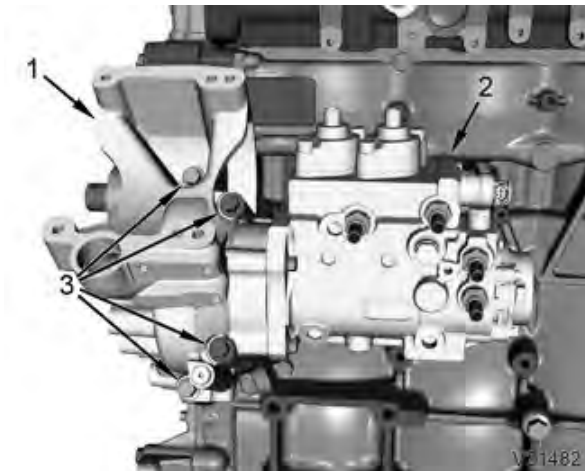


Figure 12. HP Fuel Pump and Drive Housing

1. HP fuel pump drive housing
2. HP fuel pump
3. Mounting bolt (4)

CAUTION: To prevent tool damage, make sure the pins on Holding Plate (ZTSE6044) align between the teeth on the pump gear when installing the drive housing on the Holding Plate.

HP FUEL PUMP REMOVAL (CONT.)

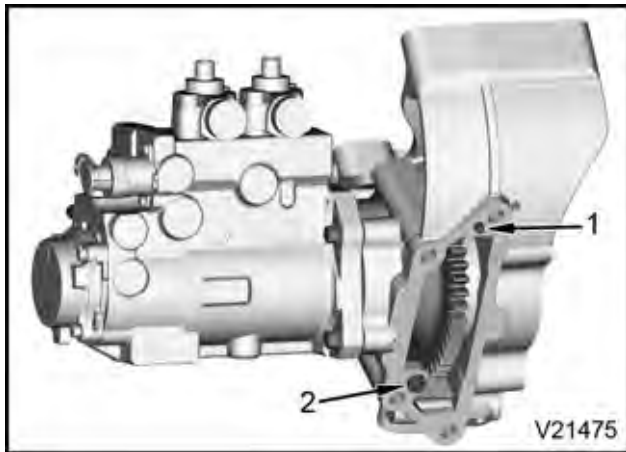


Figure 13. Dowel Pin and Sleeve

- 1. Dowel pin
- 2. Sleeve

27. Secure Holding Plate in a vise (Figure 14).

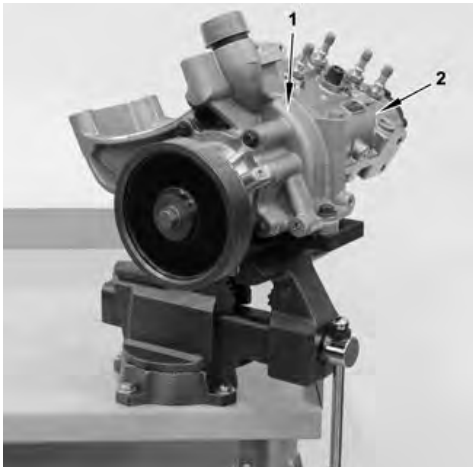


Figure 14. Holding Plate and Drive Housing

- 1. HP fuel pump (drive belt) pulley housing
- 2. HP fuel pump

NOTE: A dowel pin and sleeve are used to ensure correct placement of drive housing on the engine block. Holding Plate ZTSE6044 may be bolted to the drive housing with the dowel pin and sleeve in place.

28. Install HP fuel pump drive housing on Holding Plate using four mounting bolts removed in previous step. Torque four mounting bolts to 35 lb-ft (47 N•m). Pump gear will be locked in place by Holding Plate.

29. Remove four attachment bolts and remove HP fuel pump pulley housing with pulley still attached.

HP FUEL PUMP REMOVAL (CONT.)

30. Remove jam nut and washer securing pump gear to pump shaft (Figure 15).

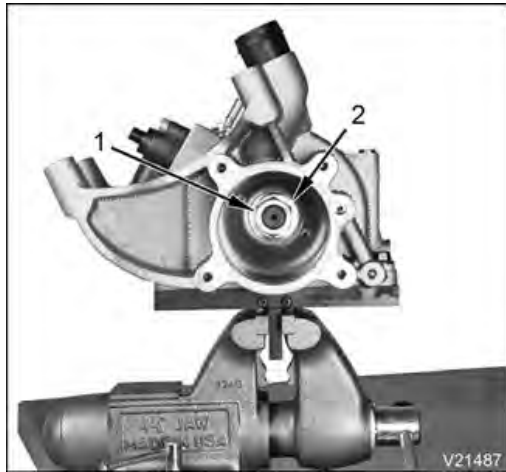


Figure 15. Holding Plate and Drive Housing

- 1. Jam nut
- 2. Washer

31. Remove four pump-to-drive housing bolts and install two guide studs (12-454-01-2) (Figure 16) on opposite sides of HP fuel pump (Figure 16).

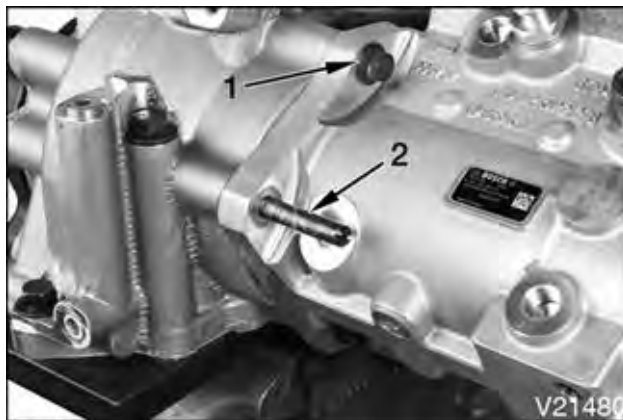


Figure 16. HPP Guide Studs

- 1. Pump-to-drive housing bolt (4)
- 2. Guide stud 12-454-01-2 (2)

HP FUEL PUMP REMOVAL (CONT.)

32. Install Forcing Screw Adapter 12-454-01-4 using two Socket Head Bolts 12-454-01-3. Only thread Socket Head Bolts 12-454-01-3 halfway into holes in pump gear (Figure 17).

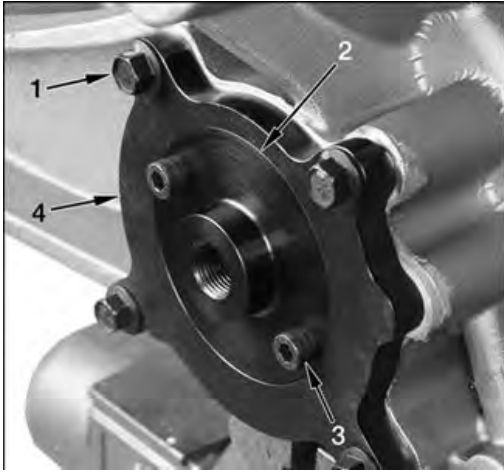


Figure 17. HP Fuel Pump Removal Tool on Drive Housing

1. M10 x 40 bolt (4)
2. Forcing Screw Adapter (flush with Forcing Screw Adapter Holding Plate) 12-454-01-4
3. Socket Head Bolt 12-454-01-3 (2)
4. Forcing Screw Adapter Holding Plate 12-454-01-1

33. Install Forcing Screw Adapter Holding Plate (12-454-01-1) on drive housing with four pump-to-drive housing bolts removed in previous step (Figure 17). Torque to 20 lb-ft (27 N·m).

34. Install Forcing Screw 12-454-01-5 by hand into Forcing Screw Adapter 12-454-01-4 until it contacts HP fuel pump shaft and forcing screw adapter 12-454-01-4 is flush with Forcing Screw Adapter Holding Plate 12-454-01-1.

HP FUEL PUMP REMOVAL (CONT.)

35. Tighten two Socket Head Bolts (12-454-01-3) until they come in contact with Forcing Screw Adapter (12-454-01-4) (Figure 18).

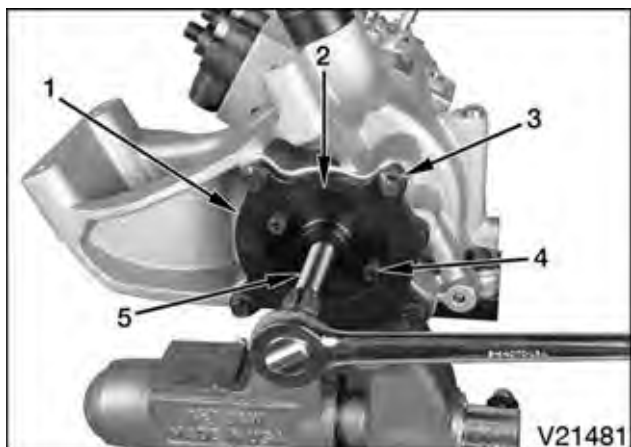


Figure 18. HP Fuel Pump Removal

1. Forcing Screw Adapter Holding Plate 12-454-01-1
2. Forcing Screw Adapter 12-454-01-4
3. M10 x 40 bolt (4)
4. Socket Head Bolt 12-454-01-3 (2)
5. Forcing Screw 12-454-01-5

CAUTION: To avoid damage to components, do not use air tools to turn forcing screw (12-454-01-5).

36. Turn Forcing Screw (12-454-01-5) clockwise until HP fuel pump is removed from drive housing.
37. Remove HP fuel pump from Guide Studs (12-454-01-2).
38. Remove Socket Head Bolts (12-454-01-3), Forcing Screw Adapter (12-454-01-4), and Forcing Screw Adapter Holding Plate (12-454-01-1) from drive housing.

HP FUEL PUMP INSTALLATION

1. Install a new 100 x 3.349 O-ring on new fuel pump mounting flange collar (Figure 19).

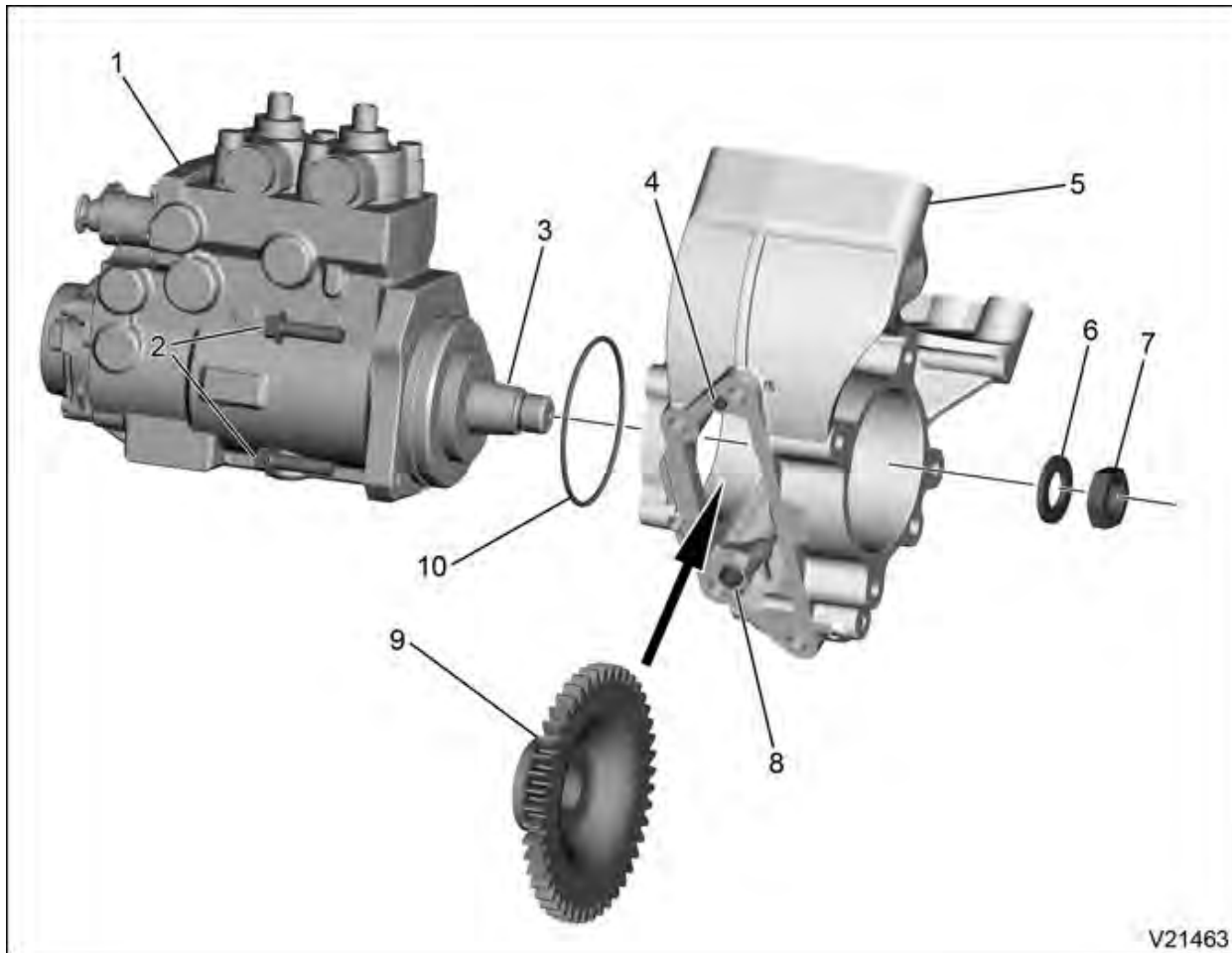


Figure 19. HP Fuel Pump and Drive Housing Assembly

1. HP fuel pump
2. M10 x 40 bolts (4)
3. Key
4. Dowel pin
5. Drive housing
6. 25 x 44 x 4 washer
7. M24 jam nut
8. Sleeve
9. HP fuel pump gear
10. 100 x 3.349 O-ring

CAUTION: Install components and tighten bolts within five minutes of RTV sealant application.

2. Clean and then apply Wacker® A-442 RTV sealant to joining faces of drive housing and HP fuel pump.

HP FUEL PUMP INSTALLATION (CONT.)

3. Install HP fuel pump to guide studs 12-454-01-2 while guiding pump shaft through center of pump gear.
4. Remove guide pins and install four M10 x 40 bolts. Torque bolts to 46 lb-ft (62 N·m).
5. Install 25 x 44 x 4 washer and M24 jam nut. Torque M24 jam nut to 210 lb-ft (285 N·m) (Figure 20).

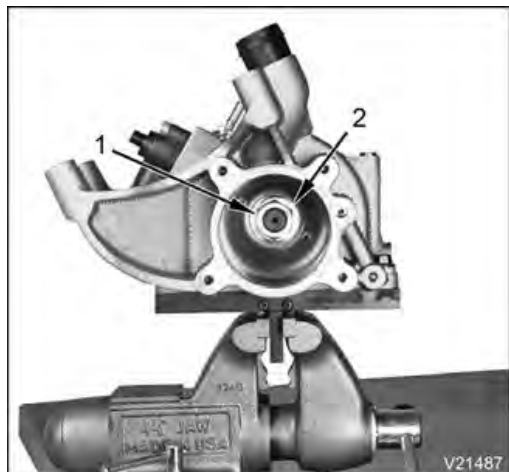


Figure 20. Holding Plate and Drive Housing Mounted in Vise

1. M24 jam nut
 2. 25 x 44 x 4 washer
6. Clean and apply Wacker® A-442 RTV sealant to joining faces of HP fuel pump pulley housing and HP fuel pump drive housing. Install HP fuel pump pulley housing to HP fuel pump drive housing. Install and torque four M10 x 40 bolts to 46 lb-ft (62 N·m) (Figure 21).

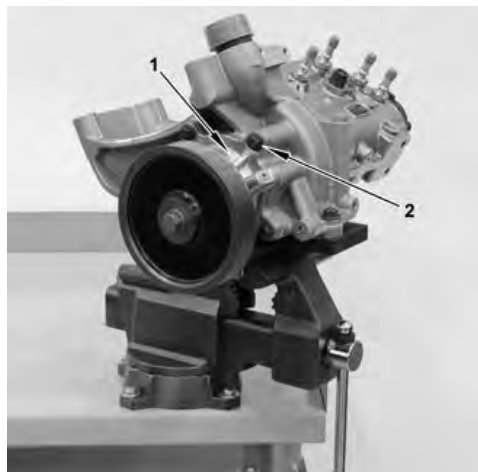


Figure 21. HP Fuel Pump Pulley Housing

1. HP fuel pump pulley housing
 2. M10 x 40 bolt (4)
7. Remove drive housing and HP fuel pump from Holding Plate.

HP FUEL PUMP INSTALLATION (CONT.)

8. Check that dowel pin and sleeve are properly seated in fuel pump drive housing or crankcase (Figure 22).

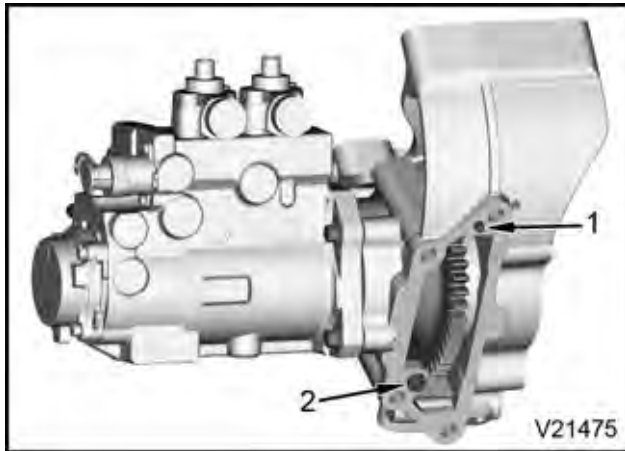


Figure 22. Dowel Pin and Sleeve Placement

1. Dowel pin
2. Sleeve

9. Clean and apply Wacker® A-442 RTV sealant to mating faces of drive housing and crankcase.
10. Position HP fuel pump and drive housing assembly on crankcase using care to align pump drive gear with idler gear. Install M12 x 40, M12 x 90, and two M12 x 130 bolts and torque bolts to 77 lb-ft (105 N·m) (Figure 23).

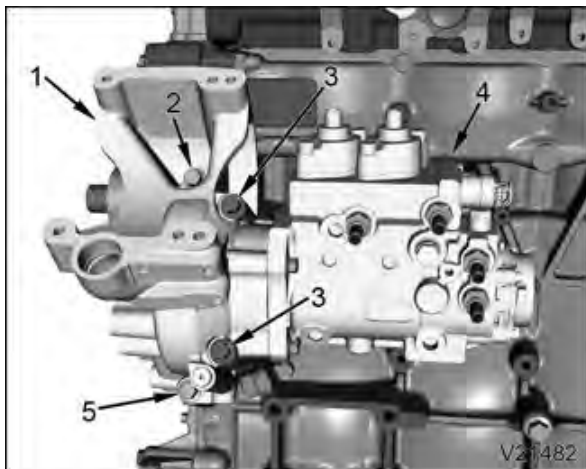


Figure 23. HP Fuel Pump and Drive Housing

1. HP fuel pump drive housing
2. M12 x 90 bolt
3. M12 x 130 bolt (2)
4. HP fuel pump
5. M12 x 40 bolt

11. Align support bracket in position below HP fuel pump and install two M12 x 30 bolts (Figure 24).

HP FUEL PUMP INSTALLATION (CONT.)

- Install all four bolts on support bracket finger tight.
- Torque two M12 x 30 bolts to 79 lb-ft (107 N·m).
- Torque two M14 x 30 bolts to 126 lb-ft (172 N·m).



Figure 24. HP Fuel Pump and Support (Bracket)

1. HP fuel pump
2. M12 x 30 bolt (2)
3. Support (bracket)
4. M14 x 30 bolt (2)

12. If not installed on replacement unit, transfer four M16 x 1.5 quick-connect fittings with new 16.7 x 24 seal rings to HP fuel pump. Torque fittings to 22 lb-ft (30 N·m) (Figure 25).

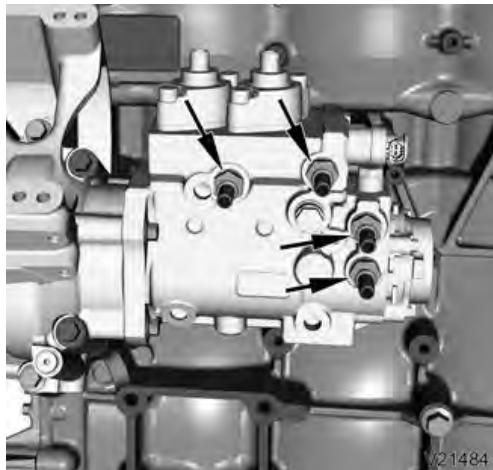


Figure 25. M16 x 1.5 Quick-connect Fittings

HP FUEL PUMP INSTALLATION (CONT.)

13. Connect four previously labeled low-pressure fuel lines with quick-connect fittings to HP fuel pump (Figure 26).

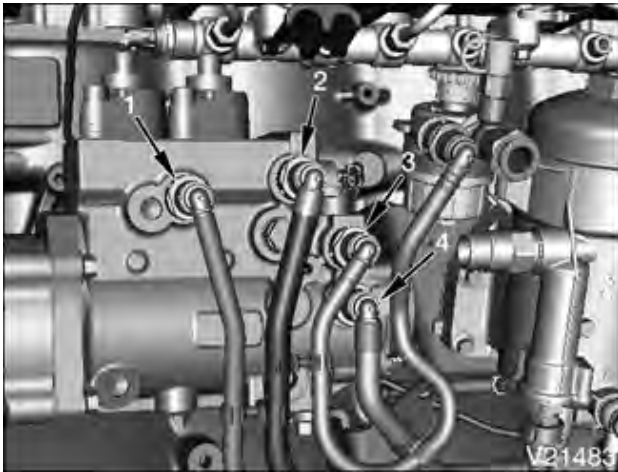


Figure 26. Low-pressure Fuel Lines

1. Fuel drain hose
2. After-filter fuel supply hose
3. Pre-pump fuel supply hose
4. Pre-filter fuel supply hose

14. Install new HP fuel pump to rail tube assembly between HP fuel pump and fuel rail. Hand tighten line fitting nuts: start with those at fuel rail first, and then at fuel pump (Figure 27).

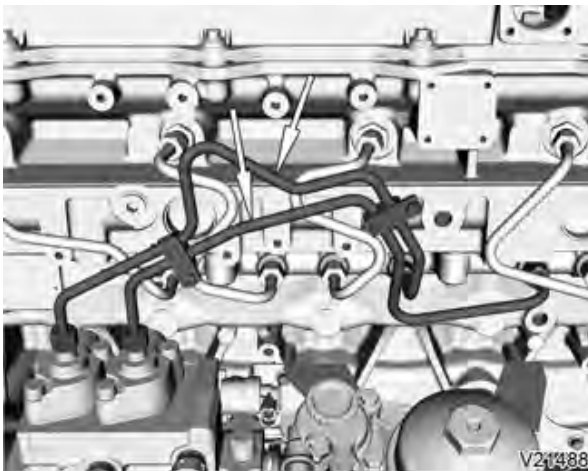


Figure 27. Fuel to Rail Supply Clamp Assembly

1. HP fuel pump-to-rail tube assembly (2)

15. Using a crowfoot wrench, torque fittings at fuel rail first and then at fuel pump. Torque fittings to 17 lb-ft (23 N·m). Tighten fittings an additional 60°.
16. Install alternator with four mounting bolts. Torque bolts to 45 lb-ft (61 N·m) and connect alternator wiring.

HP FUEL PUMP INSTALLATION (CONT.)

17. Position ECM support bracket on engine and reinstall six bracket insulators and three M8 x 40 bolts. Torque bolts to 120 lb-in (13.6 N·m) (Figure 28).

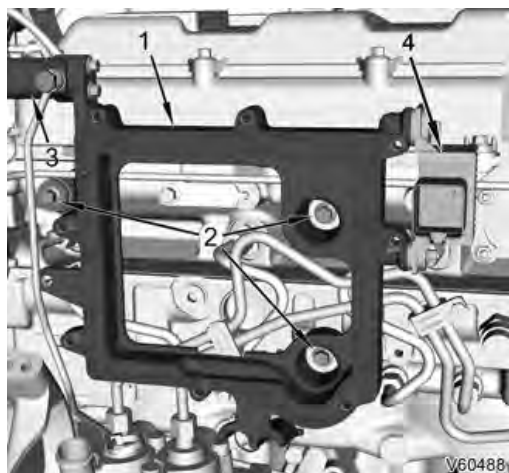


Figure 28. ECM Support

1. ECM support bracket
2. Mounting bolt with attached insulators
3. Cold Start Solenoid (CSS)
4. Cold Start Relay

18. Install CSS on ECM support. Torque two M6 x 20 bolts to 53 lb-in (6 N·m) (Figure 29).



Figure 29. ECM Mounting Bolts

1. Tie straps in "X" configuration
2. Main vertical molded harness
3. Tie strap (loose)

19. Install two tie straps around main vertical molded harness that runs adjacent to ECM support bracket. Install and tighten tie straps in an "X" configuration. This will pull molded harness tightly against ECM support bracket and away from HP fuel tube assemblies (Figure 29).

HP FUEL PUMP INSTALLATION (CONT.)

20. Install an additional tie strap around vertical molded harness near lower ear, but do not tighten until ECM has been reinstalled (Figure 29).
21. Position ECM on ECM support and install eight M6 x 30 bolts finger tight. Torque bolts in sequence shown to 89 lb·in (10 N·m) (Figure 30).

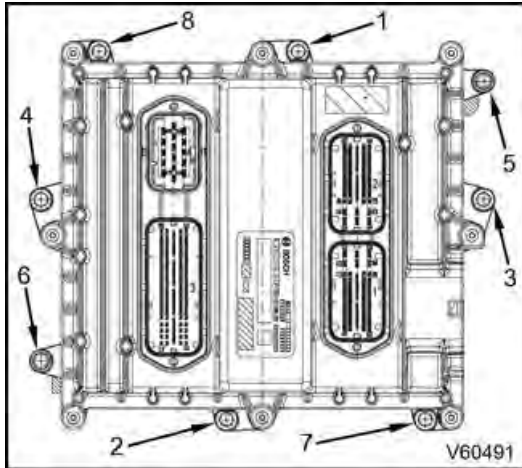


Figure 30. ECM Bolt Tightening Sequence

22. Tighten previously loose tie strap around lower left ECM support bolt (Figure 31).

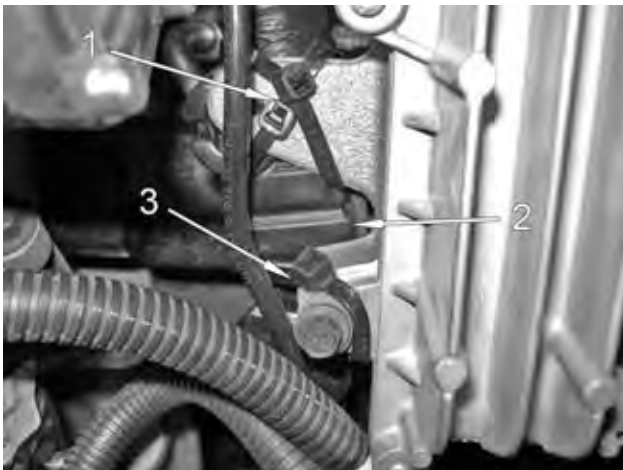


Figure 31. ECM Support and Engine Sensor Harness

1. Tie straps in "X" configuration
2. Main vertical molded harness
3. Tie strap (tight)

HP FUEL PUMP INSTALLATION (CONT.)

23. Align engine harness connectors with mating terminals and push connectors straight in. Push down on lock lever to draw in and secure connectors (Figure 32).
24. Install new tie straps to one lower and two upper tie strap locations (Figures 32 and 33).



Figure 32. ECM Harness Connectors

1. Upper tie strap locations
2. ECM connectors

25. Secure harnesses to lower tie strap location to prevent harness chafing on top of HP fuel pump. Use more than one tie strap if needed to properly support harnesses (Figure 33).



Figure 33. Lower Tie Strap Location

NOTE: Make sure that no harness is rubbing.

HP FUEL PUMP INSTALLATION (CONT.)

26. Connect 21-way chassis harness connector at connector bracket (Figure 34).



Figure 34. Harness 21-way Connector

27. Position HP and low-pressure tube as an assembly. Align HP power steering line at union and tighten finger tight (Figure 7).

28. Install M6 x 1.0 nut onto extension clip stud to secure rear support bracket at oil pan (Figure 35). Do not tighten at this time.

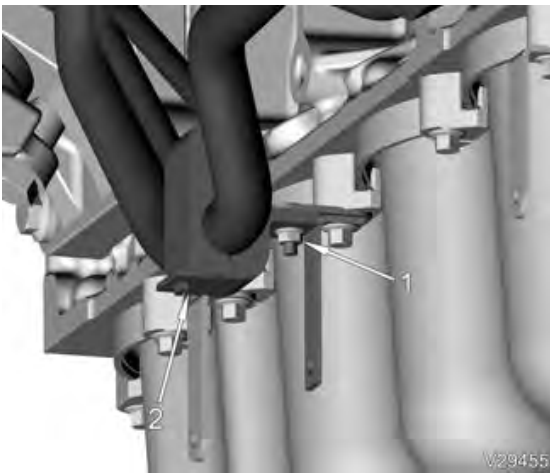


Figure 35. Pressure Tubes Support Bracket

1. M6 nut
2. M6 x 20 stud
3. Rear support bracket

29. Install upper support bracket.

30. If equipped, install front support bracket to stud on front engine support and tighten with M6 x 1.0 flange nut finger tight.

HP FUEL PUMP INSTALLATION (CONT.)

31. Torque both nuts to 115 lb-in (13 N·m).
32. Torque HP tube fitting nuts to 45 lb-ft (62 N·m) and low-pressure to 120 lb-ft (164 N·m) (Figure 36).

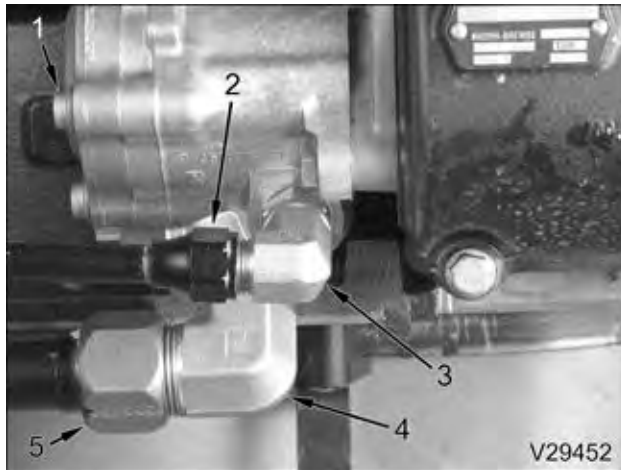


Figure 36. Power Steering Pump Connections

1. Power steering pump
2. HP tube fitting nut
3. 1/2" 90 degree tube elbow
4. 1 - 1/16" 90 degree tube elbow
5. Low-pressure tube fitting nut

33. Install dipstick brace and oil filler pipe and torque three bolts to 18 lb-ft (24 N·m). Attach power steering supply tube and dipstick tube P-clamps and bolt.

NOTE: A new special bolt 7/16 - 20, flat washer, and lock nut must be used when connecting the steering shaft to the steering gear.



Figure 37. Old and New Special 7/16 - 20 Bolts

1. Old special 7/16 - 20 bolt
2. New special 7/16 - 20 bolt

HP FUEL PUMP INSTALLATION (CONT.)

34. Connect steering shaft to power steering gear, observing alignment keyway. Install new special bolt, flat washer, and lock nut. Tighten bolt until head breaks off.
35. Install power steering return tube, supply line, and P-clamp. Torque to 45 lb-ft (62 N·m) (Figure 7).
36. Release auto-tensioner and install drive belt (Figure 38).

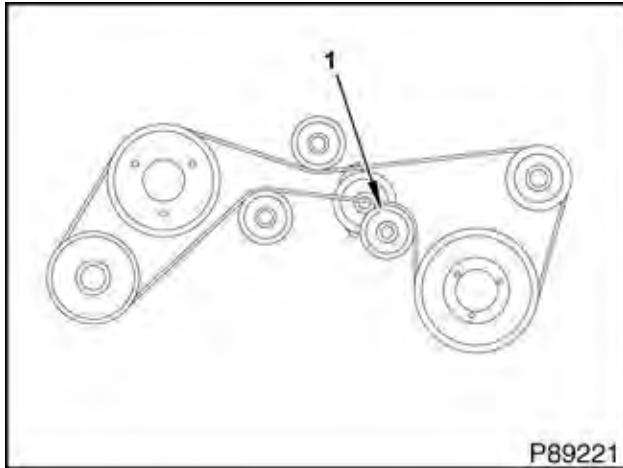


Figure 38. Accessory Belt Routing - Low Mount Fan Drive

1. Auto tensioner

37. Remove protective caps and install Charge Air Cooler outlet hose.
38. Remove protective caps and install air filter housing and tube.
39. Add 15W-40 motor oil to power steering reservoir.
40. Connect negative battery cables and install battery box cover.

CAUTION: Make sure to prime fuel system before attempting to start engine.

FUEL SYSTEM HAND PRIMER PUMP METHOD

1. Prime engine at hand primer pump (Figure 39):
 - a. Turn fuel primer pump knob counterclockwise to unlock pump stem.
 - b. Pump fuel priming pump a minimum of 250 times (approximately 3 minutes). Continue pumping even after higher pumping force is required. Make sure to raise and lower knob completely on each stroke.
 - c. After priming, depress fuel primer pump knob fully and turn fuel primer pump knob clockwise until tight to secure the pump stem.

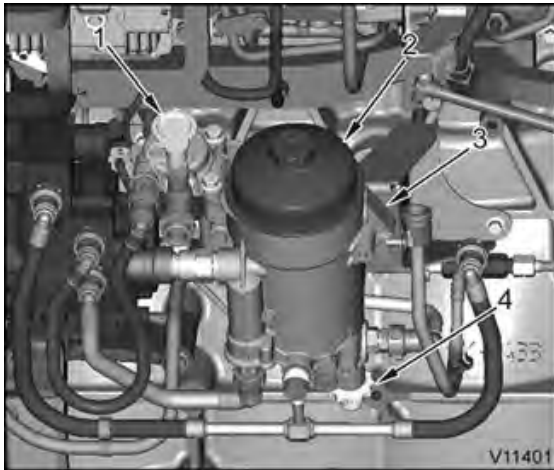


Figure 39. Fuel Primer Pump

1. Fuel primer pump
2. Fuel filter cover
3. Fuel filter housing
4. Water drain valve (closed)

CAUTION: To prevent engine starter damage, if engine fails to start after 20 seconds of cranking, stop cranking engine and wait two minutes to allow the starter motor to cool. After each 20 seconds of cranking, wait 2 more minutes before trying to start the engine again.

2. Start engine and check for fuel leaks. If engine does not start, prime again. Let engine run at 1,200 RPM for 2 minutes.
3. Verify that power steering reservoir is full.
 - a. Turn steering wheel to right until it hits axle stop.
 - b. Turn steering wheel to the left until it hits axle stop.
 - c. Refill power steering reservoir.
4. Install left front fender assembly and bracket.
5. Flip up and secure front bumper (if equipped).
6. Close and secure hood.

FUEL SYSTEM HAND PRIMER PUMP METHOD (CONT.)

7. Remove wheel chocks.

FUEL SYSTEM PRIMING TOOL METHOD

Refer to Fuel System Priming Tool (15-922-01) Instructions for proper connection and use of priming tool.

LABOR INFORMATION

Operation number must appear on all claims.

Table 2. Labor Information

Operation No.	Description	Time
A40-12929-2	Inspect and replace HP fuel pump – ProStar®, WorkStar®, PayStar®, and TranStar® with MaxxForce 11 or 13	4.0 hr

PARTS RETURN INFORMATION

All dealers – Please expedite the return of the take-off pumps by shipping them as soon as you receive your R5185 form.

U.S. dealers – Attach a copy of the form to the part and return to the Elmhurst, IL Product Review Center. Send via UPS Ground Collect Billing Account 866E68. Do not exceed 125 pounds per package or 200 pounds per shipment. Only the parts for this campaign are to be returned to the Elmhurst Product Review Center at this time. All other parts are to go to the Ft. Wayne PRC using UPS ground collect billing account 445033.

Navistar, Inc.
Product Review Center
1000 County Line Road, Dock 45
Elmhurst, IL. 60126

NOTE — For both U.S. and Canadian warranty returns, to prevent damage to the pump drive train and shaft threads, all caps on the high-pressure pump being installed should be saved and installed on the pump being sent back under Warranty Return. Whether the caps are black, yellow, or transparent, it is critical to put the caps back on the returned pump in the same locations as on the pump being installed. In addition, the returned pump should be put back in the plastic bag and box to provide additional protection during shipping.

Canadian dealers – Follow your normal process to return warranty parts to Canadian Central Core. Make sure an R5185 form is attached to each part.

FOR ADDITIONAL PUMP PACKAGING INSTRUCTIONS

Important: Follow this link for additional pump packaging instructions.

ADMINISTRATIVE PROCEDURE

Expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Authorized Field Change Number G-12929.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submissions, items acquired locally must be submitted in the “Other Charges” tab. The cost of any bulk items (bag of cable tie straps, roll of wire, barrel of oil, tube of silicone, etc.) should be prorated for the cost of the individual pieces / amount used during each repair.

To assure this important improvement is made in a timely manner, all claims for G-12929 activity must be submitted by July 30 2013 or within the normal warranty period for the vehicle, if after July 30 2013.

GROUP	NOUN	C	WARR.	TP	PAD
<div>GROUP — Enter number G —</div> <div>NOUN — Leave blank</div> <div> <div>C (CAUSE) — Enter either 1, 2, 3. (See below)</div> <div> <div>1. Inspected (No repair required).</div> <div>2. Inspected and repaired.</div> <div>3. Defective part from parts stock.</div> </div> </div> <div>WARRANTY — (Warranty Code) Enter 40.</div> <div>TYPE PART — Enter P for type part causing failure.</div> <div>PAD — Enter 100</div>					