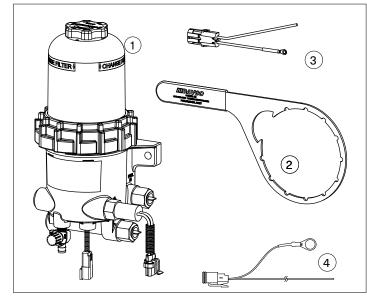
Technology, LLC

GENERIC DIESEL PRO 210 TO DIESEL PRO 243 CONVERSION INSTRUCTIONS

Diesel Pro 243



Item	QTY	DAVCO P/N	Description	
1	1	Specific to Kit	Diesel Pro 243 Asm.	
2	1	232007DAV	Wrench	
3	1	102376 (Specific to Kit)	Chassis Harness, Pre-heater	
4	1	102600 (Specific to Kit)	Chassis Harness, WIF	
Diesel Pro 210 Mounting Kit (P/N 103254)				

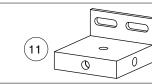
Item	QTY	DAVCO P/N	Description
5	1	102291	Mounting Bracket
6	1	103200	Shut-off Valve
7	4	102889	Bolt, 3/8"-16 X 1.50
8	4	014045	Hex Nut 3/8"-16
9	4	103137	Flat Washer, 3/8"
10	4	560095	Lock Washer, 3/8"

DAVCO Technology, LLC

1600 Woodland Drive, Saline, MI 48176-1629

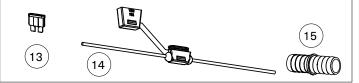
800-328-2611

www.davco.com F3199 REV A



Item	QTY	DAVCO P/N	Description	
11	1	103203	Fuel Bypass Asm.	
12	2	100565	Plug, 1/4" NPTF	

Diesel Pro 210 Coolant Bypass Kit (as required by application) (P/N 103256)



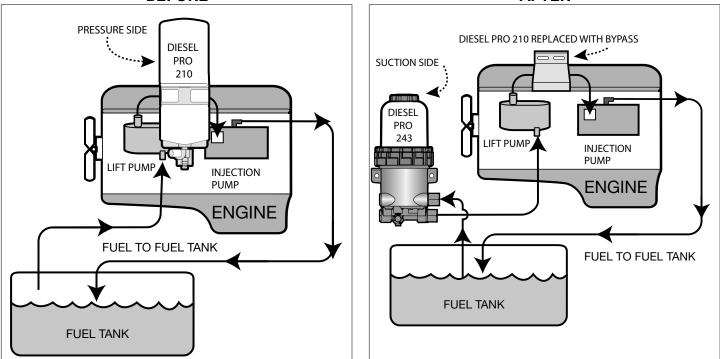
Item	QTY	DAVCO P/N	Description	
13	1	103207	Fuse, 20 amp	
14	1	102401	Holder, Inline Fuse	
15	1	102996	5/8" Barb Union	



GENERIC DIESEL PRO 210 TO DIESEL PRO 243 CONVERSION INSTRUCTIONS

AFTER

BEFORE



Overview.

The Diesel Pro 210 is mounted on the pressure side of the fuel system. In this installation, the Diesel Pro 210 is removed and the Diesel Pro 243 is mounted on the suction side of the fuel system.

The installation consists of the following sections: Diesel Pro 243 mounting (Steps 1-11), Fuel supply to Diesel Pro (Step 12), Fuel supply to engine (Step 13), Electrical routing to engine bay (Step 14), Diesel Pro 210 removal (Steps 15-19), Diesel Pro 210 bypass manifold installation (Steps 20-23) Priming the fuel system (Steps 24-27), Electrical connection (Steps 28-30).

Reference Form F1215 at <u>www.DAVCO.com</u> for complete parts list and troubleshooting information.

Diesel Pro 243 mounting

1. Locate a suitable mounting location for the Diesel Pro 243.

Keep the following items in mind:

- a. The Diesel Pro 243 is intended for the suction side of the fuel system.
- The clear cover needs to be pointing upwards.
- 3.5" clearance is required above the vent cap for priming and filter servicing.
- Mount the unit so the clear cover is at least 12" away from the turbo or exhaust system.
- b. Depending on the mounting location the inlet and outlet bushings can be swapped from side to side or

the same side to optimize fuel line routing (The Diesel Pro 243 in the kit comes configured with the fuel in right and fuel out left).

2. Install the shut of valve in the inlet bushing of the Diesel Pro 243 (required for servicing if the collar is lower than the FULL level of the fuel tank).

3. Install the appropriate inlet and outlet fittings using liquid thread sealant.

4. Temporarily install the mounting bracket.

5. Locate an acceptable location on the frame rail for mounting the Diesel Pro 243 and bracket and mark.

- 6. Using the bracket, mark the mount holes.
- 7. Confirm that the back of the frame is clear for drilling the mounting holes.
- 8. Drill (2) clearance holes for the 3/8" mounting hardware.

DAVCO Technology, LLC	1600 Woodland Drive, Saline, MI 48176-1629	800-328-2611	www.davco.com	F3199 REV A
-----------------------	--	--------------	---------------	-------------



GENERIC DIESEL PRO 210 TO DIESEL PRO 243 CONVERSION INSTRUCTIONS

9. Install the bracket using 3/8" Grade 8 mounting hardware.

10. Attach the pre-heater and WIF chassis harness grounding eyelets (serrated) to one of the mounting bolts and tighten.

11. Install the Diesel Pro 243 on the mounting bracket using 3/8" Grade 8 hardware and tighten.

12. Attach both chassis harnesses to the Diesel Pro 243 pre-heater and WIF sensor.

Fuel supply to Diesel Pro

13. Plumb a new fuel line from the fuel tank pickup to the inlet of the Diesel Pro 243.

Fuel supply to engine

14. Plumb a new fuel line from the Diesel Pro 243 outlet to the engine (lift pump).

Electrical routing to engine bay

15. Route both chassis harnesses (Pre-heater and WIF) along the fuel supply tubing towards the firewall with the existing fuel plumbing to the engine.

Diesel Pro 210 removal

16. Disconnect the electrical connections at the Diesel Pro 210 (save for later use).

17. Drain the Diesel Pro 210 and remove the spin on filter.

18. Disconnect the fuel inlet and outlet connections.

19. Remove the (2) mounting bolts and the Diesel Pro 210 from the vehicle.

20. Remove all inlet/outlet fittings, primer pumps, and Compucheck test port from the Diesel Pro 210 and install them in the to bypass manifold in the original orientation (using liquid thread sealant on pipe threads).

Diesel Pro 210 fuel bypass manifold installation

21. Install the Diesel Pro 210 bypass manifold onto the engine using the OEM hardware, leave the bolts loose for alignment.

22. Connect the fuel inlet and outlet connections by hand, adjust Diesel Pro 210 bypass manifold and tighten mounting hardware to OEM specifications.

23. Tighten the tube/hose connections using a wrench to OEM specifications.

24. The Diesel Pro 243 does not have a coolant heat option. Use the hose barb and clamps to connect heater hoses together. Trim and secure hoses to prevent wear if necessary.

Priming the fuel system

25. Make sure the drain is closed. Remove the vent cap and fill it the Diesel Pro 243 with clean diesel fuel. Replace vent cap.

26. Loosen the fitting on the inlet to the rail or injection pump, place a shop towel to catch any spilled fuel .

27. Apply 10 PSI or air pressure to the tank vent to prime the fuel system, remove air pressure when a solid flow of fuel is present at the inlet to the rail or injection pump. This process purges any air up to the rail or injection pump.

28. Tighten the fitting to OEM specifications.

Note: Use of a hand primer or a Shop Pro FXP through a test port is also acceptable.

Electrical connections (Pre-heater and WIF)

29. Remove the convoluted tubing from the existing Diesel Pro 210 preheater harness and identify the wiring - Options may vary.

- a. Existing red wire (12VDC key on power) connect to black wire from 12VDC chassis harness.
- b. Green wire (WIF connection) connect to green wire from WIF chassis harness.

Note: Trimming/extended the harness lengths may be needed, use only heat shrink style butt splices intended for exterior use.

30. Start the engine. When the lubrication system reaches its normal operating pressure, increase engine RPM to high idle for one to two minutes. After the air is purged loosen the vent cap until the fuel level lowers to just above the collar. Tighten the vent cap by hand only.

31. Return to idle and check for leaks.

Installation is complete.

29 800-328-2611

www.davco.com