



Dual Fueler Kit

Dodge Cummins 5.9L

2003 - 2004		(213001100)
2003 - 2004	no pump	(213001000)
2004.5 - 2007		(213002000)
2004.5 - 2007	no pump	(213002100)

Installation Guide

Parts in Kit (2003-2004):



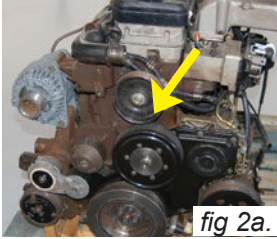
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|-------------------------------------|---|
| 26. 8" Zip Ties (3) | 17. 3/8" Nut (4) |
| 5. 5/16" x 18 x 2" Bolt (2) | 12. 3/8" Washers (4) |
| 25. 8 x 0.5" Self-Tapping Screw (2) | 10. 8 x 1.25 Nut (4) |
| 6. 5/16 x 18 x 2.25 Bolt (1) | 15. 8mm Washer (4) |
| 8. 18 x 1.5 Nut (1) | 1. 8 x 1.25 x 30 Bolt (1) |
| 16. 5/16 x 18 Nut (3) | 3. 3/8 x 16 x 2 Bolt (1) |
| 11. 5/16 Washer (3) | 2. 8 x 1.25 x 25 Bolt (2) |
| 9. 18mm Washer (1) | 4. 3/8 x 16 x 1.75 Bolt (2) |
| 21. 5/16" Brass Fuel Tee (2) | 28. Transmission Kick Brace (1) |
| 22. 5/16" Hose Clamp (8) | 19. Fuel Line Bracket (1) |
| 13. 10mm Washer (1) | 27. Dipstick Bracket (1) |
| 7. 10 x 1.50 x 25 Bolt (3) | 40. H.P. Fuel Line 515-006-2171 (1) |
| 14. 8 x 1.25 x 12 Bolt (1) | 36. 21" x 5/16" Fuel hose (1) |
| 18. 6 - 1.0 x 25 Bolt (1) | 35. 18" x 5/16" Fuel Hose (1) |
| 23. 2.25" Hose Clamp (3) | 43. Coolant Reroute Tube - Single Tab (1) |
| 24. 2.5" Hose Clamp (1) | 45. Transmission Kick Bracket (1) |
| 32. H.P. 3 Way Fuel Block (1) | 46. Serpentine Belt 2003-2009 (1) |
| 49. Idler Pulley (1) | 47. Duel Fueler Pump Bracket (1) |
| 34. Duel Fueler Controller (1) | 48. Duel Fueler Pump Pulley (1) |
| 39. H.P. Fuel Line 515-006-2170 | 50. Coolant Hose - Long "V" Shape |
| 41. H.P. Fuel Line 515-006-2172 | 51. Coolant Hose - Short |

Parts in Kit (2004.5-2007):

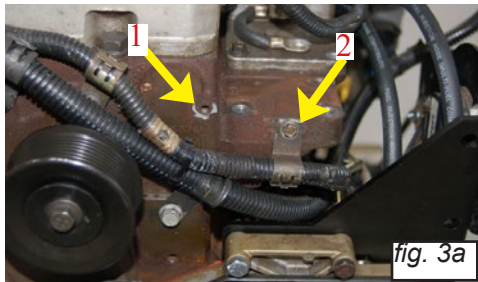


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|-----|---------------------------------|-----|-----------------------------------|
| 26. | 8" Zip Ties (3) | 49. | Idler Pulley |
| 5. | 5/16 x 18 x 2 Bolt (2) | 34. | Dual Fueler Controller |
| 25. | 8 x 0.5" Self Tapping Screw (2) | 39. | H.P. Fuel Line 515-006-2170 (1) |
| 6. | 5/16" x 18 x 2.25" Bolt (1) | 41. | H.P. Fuel Line 515-006-2172 (1) |
| 8. | 18 x 1.5 Nut (1) | 10. | 8 x 1.25 Nut (1) |
| 16. | 5/16" x 18 Nut (3) | 15. | 8mm Washer (1) |
| 11. | 5/16" Washer (3) | 19. | Fuel Line Bracket (1) |
| 9. | 18mm Washer (1) | 27. | Dipstick Bracket (1) |
| 21. | 5/16" Brass Fuel Tee (2) | 40. | H.P. Fuel Line 515-006-2171 |
| 22. | 1/16" Hose Clamp (8) | 36. | 21" x 5/16" Fuel Hose |
| 13. | 10mm Washer (1) | 35. | 18" x 5/16" Fuel Hose |
| 7. | 10 x 1.50 x 25 Bolt (3) | 43. | Coolant Reroute Tube – Single Tab |
| 14. | 8 x 1.25 x 12 Bolt (1) | 46. | Serpentine Belt 2003-2009 |
| 18. | 6 – 1.0 x 25 Bolt (1) | 47. | Dual Fueler Pump Bracket |
| 23. | 2.25" Hose Clamp (3) | 48. | Dual Fueler Pump Pulley |
| 24. | 2.5" Hose Clamp (1) | 50. | Coolant Hose – Long "V" Shape |
| 32. | H.P. 3 Way Fuel Black (1) | 51. | Coolant Hose Short |

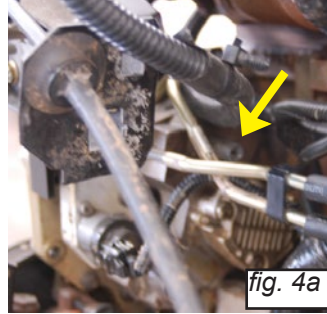
- 1) Remove the Radiator Hose, Fan Shroud Bracket and Engine Belt.
- 2) Remove the Idler Pulley, and replace with **#5a** Idler Pulley as shown (fig. 2a), by using the stock spacer (remove it from the stock pulley, fig. 2b) and insert **#5b** Washer as shown (fig. 2c, 2d). Install this assembly back onto engine (same place as fig. 2a).



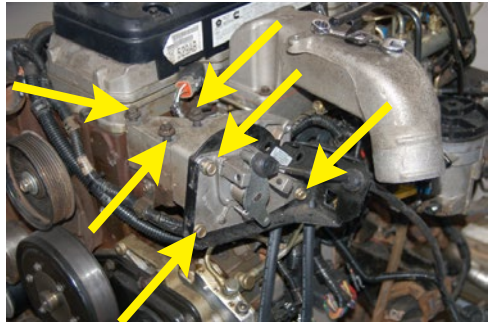
- 3) Remove the Harness wire bracket bolt, and move to the position as shown from arrow **1** to arrow **2** (fig. 3a).



- 4) Remove the inlet high pressure fuel line from the stock fuel pump (fig. 4a) and the fuel rail (fig 4b).



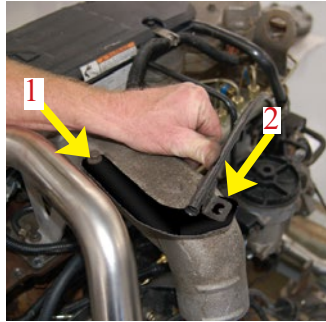
- 5) Remove 6 bolts on the assembly for the transmission kickdown (as shown). The transmission kickdown will be relocated.



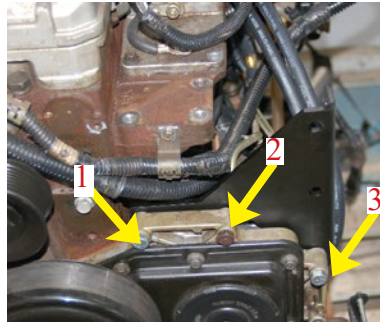
- 6) Install #16a Radiator Pipe (as shown) with stock bolt and making sure to reattach ground wire (as shown).



- 7) Install **#14 Dipstick Support bracket** by using the stock bolt on arrow **1**, and the supplied **#14 bolt, washer and nut** on arrow **2**.



- 8)* Install **#12a transmission kickdown bracket** as shown by using the **3 #12b bolts washers and nuts** as shown. On arrow **2**, use the longer **12b bolt** and don't secure the nut or washer until the next step.



*2003 and 2004 only.

- 9)* Secure **transmission kickdown** by bolting the **#12a transmission kickdown bracket** with the **#13b transmission kickdown support bolt** (fig. 9a), and secure the **#13a transmission kickdown support** as shown (fig. 9b). Use the longer **#13b bolt** on **Arrow 3**, and secure the other end of **#13a** with the longer bolt from **#12b** in step 8 (**Arrow 4**).

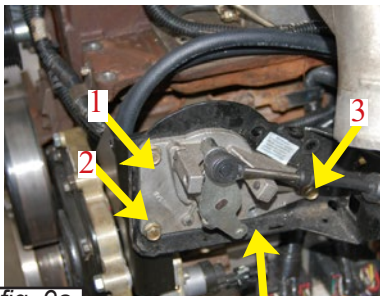


fig. 9a

Transmission Kickdown

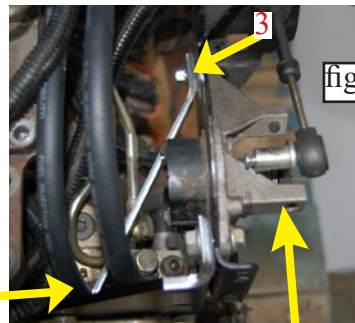
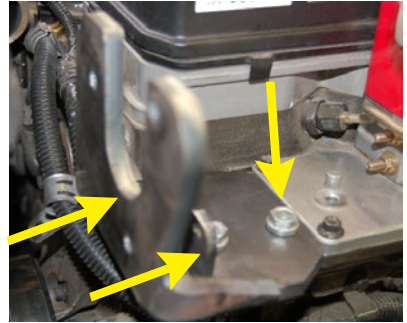
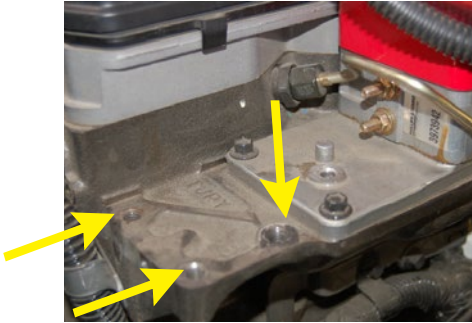


fig. 9b

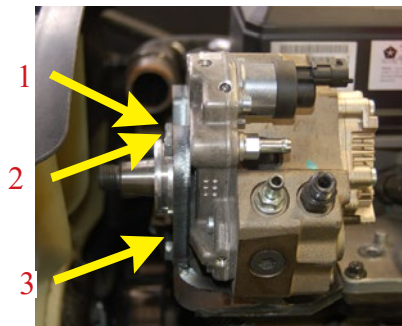
Transmission Kickdown

*2003 and 2004 only.

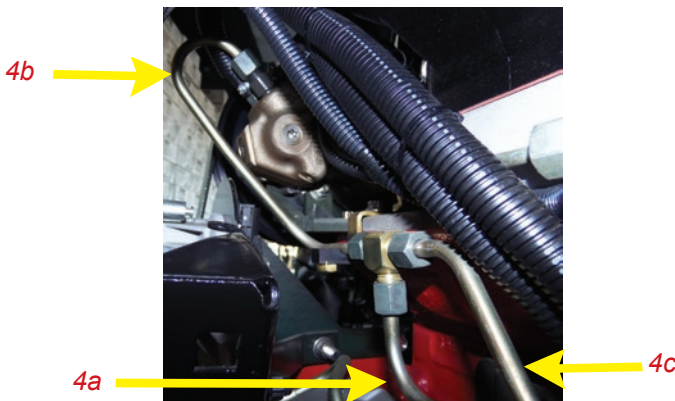
- 10) Install the **#8a fuel pump bracket** to the top front of the engine as shown below with 3 supplied **#8b** bolts.



- 11) Install **#6a Fuel Pump** by sliding it into position onto the bracket, and bolt on with 3 **#6b 5/16-18 bolts**. See figure to the below. The longer **#6b** bolt is on **arrow #3**.

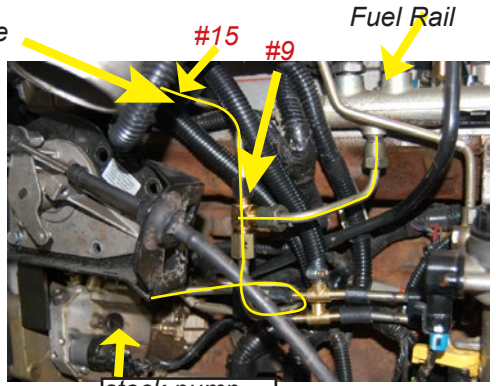
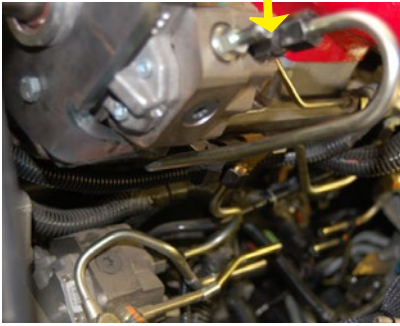


- 12) Install the **#15 high pressure line fastener** as shown. Install the **#4a** line from the factory CP3 pump to the T, **#4b** line from the second pump to the T and **#4c** line from the fuel rail to the T. Dual Fueler pump all connected with the **#9 fuel T connector**.

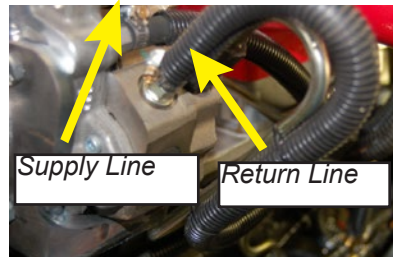
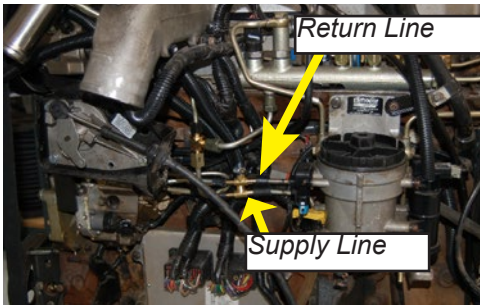


12) cont.

Dual Fueler High Pressure Line

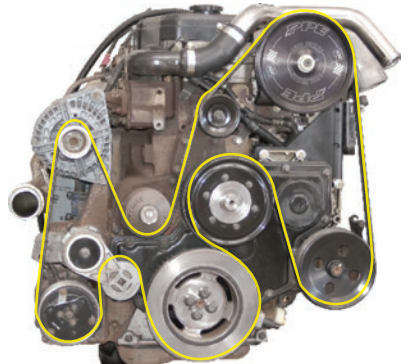


13) Cut the return fuel and supply line hose about 3/4 the way along the length (as shown below), and insert **#2 & #3 5/16" T fittings** into the return fuel line and supply fuel line hoses. Secure with **#11 hose clamps**. Then connect the **#2 supply line** and **#3 return line** to the Dual Fueler Pump, secure with a **#11 hose clamps**.



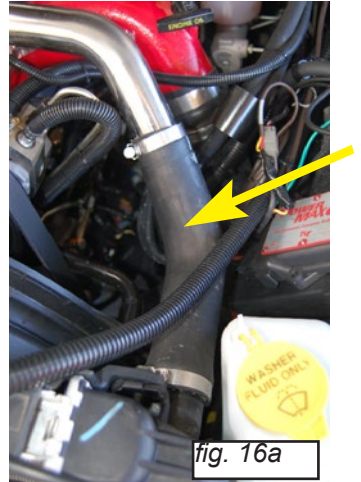
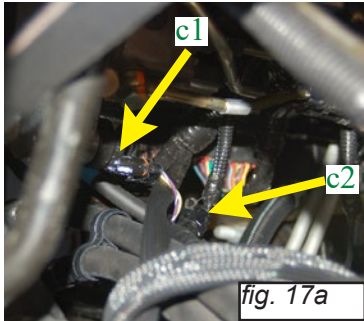
14) Install Fuel Pump Pully, torque nut to 35 ft lbs.

15. Install the new engine belt. Follow the belt routing below.



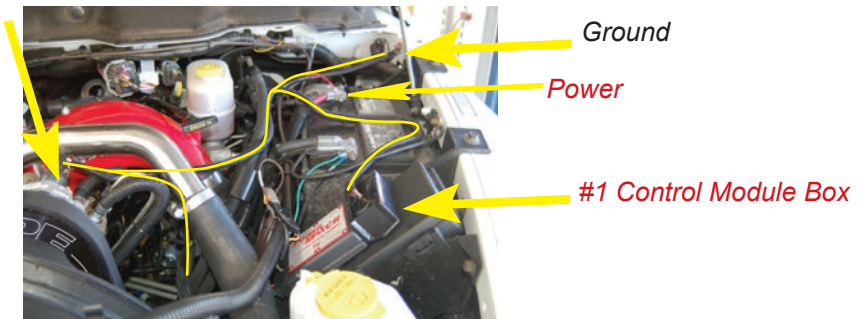
16) Install Radiator Hoses **16b & 16c** to radiator pipe and radiator using **#17a** and **#17b** hose clamps (fig. 16a).

- 17) Disconnect OEM fuel pump connector **c2** from stock fuel pump socket **c1** and connect **control module Y connector** into stock fuel pump **c1** and stock connector **c2**. (fig. 17a)



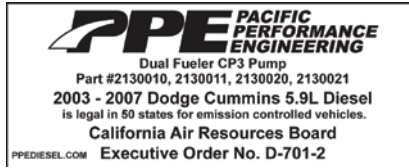
- 18) Route control module wiring from stock fuel pump and connect **control module connector** to dual fueler as shown. Route remaining control module to connect **Ground** to chassis ground and **Power** to battery. Mount **#1 control module box** with **#19 Control Module Mounting Screws** or **tie straps**.

Control Module Connector



- 19) Check coolant levels and add coolant as needed.

20) Place supplied Dual Fueler decal on the engine shield in the designated area for use during future smog testing.



Troubleshooting

Engine noisy - Too Much Fuel Pressure or fuel delivery code.

- 1) Cause: Check the fuse is good and in the controller's fuse holder securely. All power connections are secure, and that connectors for both pumps are fully plugged in.
- 2) The lift pump pressure supplied to both CP3 pumps is too high. Supply pressure from lift the pump should be 12 - 15 PSI, not more.

DISCLAIMER OF LIABILITY

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