

DFS 910 Fuel System Operation Manual

Fill the two fluid tanks on the DFS 910 machine with approved products.

Induction: Use Only Induction Fluid. Add 2 lit/qt of DES 928 EGR Cleaner to the induction tank for a maintenance service. Set the air pressure to 80lbs. After the maintenance service is complete, *you **Must** add 1 lit/qt of DES 929 EGR RINSE to the machine and process it through the engine on both the intake and exhaust side of the system.*

For a vehicle that has heavy build up use 4 lit/qt of DES 928 cleaner. After the cleaning service is complete, *you **Must** add 2 lit/qt of DES 929 EGR RINSE to the machine and process it through the engine on both the intake and exhaust side of the system.*

This is for $\frac{3}{4}$ and 1 Ton Diesel engines.

For larger Diesel engines Add 4 lit/qt of DES 928 EGR Cleaner to the induction tank as a maintenance service. After the maintenance service is complete, *you **Must** add 2 lit/qt of DES 929 EGR RINSE to the machine and process it through the engine on both the intake and exhaust side of the system.*

. For heavy build up, do two services.

Fuel Rail: Use DES 925 fuel rail cleaner (1 lit/qt for $\frac{3}{4}$ - and 1 Ton Diesel engines, 2 lit/qt for larger Diesel engines).

**Caution: Do not mix fluids this could result in Engine failure
Use only the approved fluids listed.**

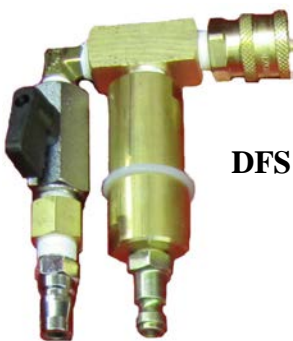
Approved fuel rail cleaner DES 925

- Disconnect fuel supply line before the diesel injector pump
- Connect the required adapter then connect the supply line from the DFS machine (blue hose)
- Disconnect the return line, which returns the fuel back to the fuel tank
- Connect the required adapter- then connect the return line from the DFS Machine (black hose)
- If needed disable vehicle fuel pump or use loop hose adapter to loop the fuel line
- **Fill the machine with fuel rail fluid pour the fluid into the tank with BLUE cap**
- Connect 12 volt power supply to the vehicle's battery. (NOTE: Before connecting power cord to battery, make sure the power switch is turned off)

- Turn on the pump/power switch, the pump will start circulating the fuel rail cleaning fuel
- Check for leaks on vehicle's return and supply connectors
- Set the pressure between 6 – 10 psi with the flow valve on the machine (+ to increase - to decrease)
- Set timer to 20 min
- Turn on alarm switch
- **If desired Hook up Induction Adapters and fill the tank with the aluminum cap marked Air Induction Cleaner Only**
- Start the engine leave at idle (NOTE: If the engine fails to start, bleeding the fuel system may be necessary) When 10 – 15 minutes are up the cleaning fuel should almost be depleted.
- When the complete service is finished turn vehicle off
- Turn pump switch off,
- Disconnect the power cord from the battery
- Uncouple the quick connectors from the hose adapters
- Disconnect hose adapters from Vehicles supply and return lines
- Reconnect the vehicle's supply and return lines
- Start the vehicle, Check for leaks

Cummins 6.7 Liter 2500 and 3500

1. Remove Plastic Engine Cover
2. Remove the exhaust pipe from the EGR Valve.
3. Attach adapter DFS 910-17 to the EGR exhaust pipe with clamp.
4. Attach the hose end of the DFS910-17 to the EGR and tighten clamp. Attach DFS 910-5 to DFS 910-17 make sure air valve is closed.
5. Remove EGR electronic solenoid and attach DFS 910-9 to where the solenoid was attached.
6. Start vehicle engine. Set air Pressure on Atomizer Tank to 80 psi.
7. Open EGR using the DFS 910-9
8. On the DFS910-5 Turn on the Air. Turn the DFS 910-17 to the Intake side. Turn Atomizer valve to ON position on the machine.
9. After 1 lit/qt turn atomizer valve off. Switch the DFS 910-17 to the Exhaust side.
10. Turn Atomizer to on position and turn air valve on DFS 910-5 to on. Run until atomizer fluid is empty.
11. Turn Atomizer valve of and Fill the Atomizer Tank with 1 lit/qt Rinse Solution and repeat the above steps.
12. Turn Atomizer Valve and Air valve on DFS 910-5 to OFF position. Turn Vehicle off, turn fuel pump off on the machine. Disconnect fuel hoses, adapters remove DFS 910-4 and reattach the EGR exhaust pipe and fuel lines.



DFS 910-5



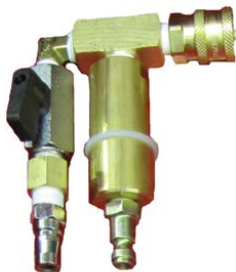
DFS 910-9

DFS 910-17



Cummins 6.7 Liter 4500 and 5500

1. Remove Plastic Engine Cover
2. Remove the EGR exhaust pipe temperature sensor. Attach DFS 910-2 to the temperature port.
3. Attach DFS 910-5 to DFS 910-2. Attach Blue and Black hoses to DFS 910-5.
4. Start vehicle engine. Set air Pressure on Atomizer Tank to 80 psi.
5. Turn Atomizer valve to ON position on the machine. Open the Air valve on the DFS 910-5
6. After 1 lit/qt disconnect the wire connector on the EGR valve run until Atomizer fluid tank is empty.
7. Turn Atomizer valve of and Fill the Atomizer Tank with 1 lit/qt Rinse Solution and repeat the above steps.
8. Turn Atomizer Valve and Air valve on DFS 910-5 to OFF position. Turn Vehicle off, turn fuel pump off on the machine. Disconnect fuel hoses, adapters and reattach the EGR exhaust pipe temperature sensor and fuel lines. Reconnect the wire connector to EGR valve.



DFS 910-5

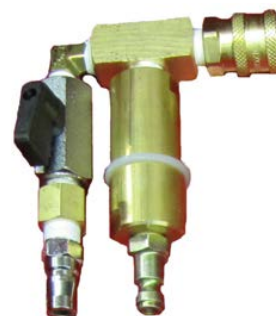


DFS 910-2

Mercedes Benz/Jeep 3.0 Liter

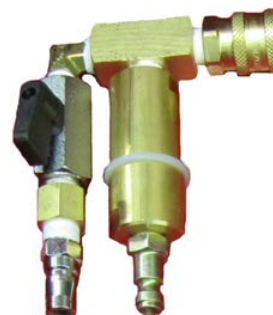
1. Remove Plastic Engine Cover
2. Remove Turbo Boost Pressure sensor on the intake.
3. Attach adapter DFS 910-8 to the Pressure sensor opening.
4. Attach DFS 910-5 to DFS 910-8. Attach Blue and Black hoses to DFS 910-5
5. Start vehicle engine. Set air Pressure on Atomizer Tank to 80 psi.
6. Turn Atomizer valve to ON position on the machine, and open air valve on DFS 910-5
7. After 2 lit/qt turn Atomizer valve to OFF position on the machine, and turn air valve off DFS 910-5.
8. Turn Atomizer valve of and Fill the Atomizer Tank with 1 lit/qt Rinse Solution and repeat the above steps.

- Turn Vehicle off, turn fuel pump off on the machine. Disconnect fuel hoses, adapters and reattach the Pressure Sensor and fuel lines.

**DFS 910-8****DFS 910-5**

Duramax

- Remove temperature sensor on the EGR Cooler (vehicles 2008 and newer the sensor toward front of engine) and attach adapter DFS 910-6 to the EGR cooler temperature sensor port.
- Remove Intake Boost pressure sensor and attach DFS 910-7 (use existing bolt and tighten bolt very lightly). Then attach DFS 910-5 to DFS 910-7. Attach Blue and Black hoses to DFS 910-5 adapter.
- Fill atomizer tank with 2 lit/qt of EGR cleaner
- Set air Pressure on Atomizer Tank to 80 psi. Start Engine.
- Open the Air valve on the DFS-910-5 and turn the Atomizer valve to ON position on the machine and run engine until 1 lit/qt of Induction cleaner is used up. Turn Atomizer valve to OFF position and close the Air valve on the DFS 910-5.
- Disconnect DFS 910-5 from DFS 910-7 and connect to DFS 910-6. Turn valve on DFS 910-5 to ON and the Atomizer valve on the machine to ON. Run until EGR cleaner has gone through.
- Turn the Atomizer valve OFF, turn DFS910-5 valve OFF.
- Fill the Atomizer Tank with 1 lit/qt Rinse Solution and repeat the above steps by running ½ lit/qt of Rinse solution through the intake side and ½ lit/qt through the exhaust side.
- Turn Atomizer Valve to OFF position. Turn Vehicle off, turn fuel pump off on the machine then disconnect fuel hoses, adapters and reattach the EGR temperature sensor, boost pressure sensor and fuel lines.

**DFS 910-6****DFS 910-7****DFS 910-5**

Ford 6.0 Liter Engine

1. Remove EGR valve (2 bolts). Install DFS 910-1, turn valve to Intake position and attach DFS 910-5 to DFS 910-1. Attach Blue and Black Hose (valve side) to DFS 910-5 close valve on DFS 910-5.
2. Set air Pressure on Atomizer Tank to 80 psi. Start Engine
3. On the machine turn Atomizer valve to ON position and open Air valve on DFS 910-5.
4. After 1 lit/qt turn valve to Exhaust position on adapter DFS 910-1 run until Atomizer fluid tank is empty.
5. Turn Atomizer valve of and Fill the Atomizer Tank with 1 lit/qt Rinse Solution and repeat the above steps.
6. When finished turn Atomizer Valve to OFF position. Turn Vehicle off, turn fuel pump off disconnect fuel hoses, adapters and reattach the EGR valve and fuel lines.



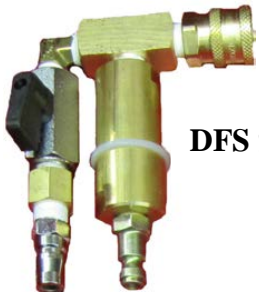
DFS 910-1



DFS 910-5

Ford 6.4 Liter Engine

1. Remove Temperature sensor on the EGR cooler. (Clean it with the Induction cleaner). Install adapter DFS 910-2 to the EGR cooler.
2. On the vehicle remove Induction tube then place the DFS 910-3 S-Hook nozzle in the induction tube and attach Blue hose to DFS 910-3 S-Hook Sprayer.
3. Set air Pressure on Atomizer Tank to 80 psi.
4. Start Engine
5. On the machine turn Atomizer valve to ON position.
6. After 1 lit/qt turn Atomizer valve to OFF position on the machine and remove DFS 910-3 S-Hook from vehicle induction tube and remove Blue hose from S-Hook Sprayer.
7. Attach Blue and Black hoses to DFS 910-5 adapter and attach DFS 910-5 to DFS 910-2.
8. Open Air valve on DFS 910-5 adapter then turn the Atomizer valve to ON position on the machine, run until Atomizer fluid tank is empty.
9. Turn Atomizer valve of and Fill the Atomizer Tank with 1 lit/qt Rinse Solution and repeat the above steps.
10. Turn Atomizer Valve to OFF position. Turn Vehicle off, turn fuel pump off on the machine then disconnect fuel hoses, adapters and re attach the EGR temperature sensor, reconnect fuel lines and reattach the induction tube.



DFS 910-5



DFS 910-2



DFS 910-3

Ford 6.7 Liter Engine

- 1) Remove tube shown in picture (both ends)
- 2) Attach DFS 910-18 adapter in place of tube making sure that the intake and exhaust sides of the adapter are on the correct side.
- 3) Attach the DFS 910-5 to the DFS 910-18 and connect the blue and black hoses to the DFS 910-5
- 4) Start the engine and let it get to operating temp.
With the engine at operating temperature use your scan tool to open the EGR.
- 5) Making sure that the Atomizer Valve is closed
- 6) Set the pressure on the induction side of the DFS 910 to 80lbs
- 7) With the Engine still running open the air valve on the DFS 910-5 and turn the Atomizer valve to the on position. When half (1 liter of the cleaner) is used turn the Atomizer valve to off and switch the valve on the DFS 910-18 to the Exhaust side. Using your scan tool you can now close the EGR. Run the rest of the cleaner out. Repeat step seven with the Rinse using half on the intake side and the rest on the exhaust side.



DFS 910-18

DFS 910 Fuel System Operation Manual

Commercial Diesel Engines

Fill the two fluid tanks on the DFS 910 machine with approved products.

Use Only Induction Fluid DES 928 EGR (2 lit/qt and 4 lit/qt for larger Diesel engines). Then you **Must add 2 lit/qt of DES 929 EGR *RINSE to the machine and process it through the engine on both the intake and exhaust side of the system.***

Approved fuel rail cleaner DES 925 (3 lit/qt for larger Diesel engines)

Caution: Do not mix fluids this could result in Engine failure

- Disconnect fuel supply line before the diesel fuel pump
- Connect the required adapter then connect the supply line from the DFS machine (blue hose)
- Disconnect the return line, which returns the fuel back to the fuel tank
- Connect the required adapter- then connect the return line from the DFS Machine (black hose)
- **Fill the machine with fuel rail fluid pour the fluid into the tank with BLUE cap**
- Connect 12 volt power supply to the vehicle's battery. The new fluid light will come on. (NOTE: Before connecting power cord to battery, make sure the power switch is turned off)
- Turn on the pump switch, the pump will start circulating the fuel rail cleaning fuel
- Check for leaks on vehicle's return and supply connectors
- Set the pressure between 6 – 15 psi with the flow valve on the machine (+ to increase - to decrease)
- **If desired Hook up Induction Adapters and fill the tank with the aluminum cap marked Air Induction Cleaner Only**
- Start the engine leave at idle (NOTE: If the engine fails to start, bleeding the fuel system may be necessary) When 15 – 20 minutes are up the cleaning fuel should almost be depleted the light will go off
- When the complete service is finished turn vehicle off
- Turn pump switch off
- Disconnect the power cord from the battery
- Uncouple the quick connectors from the hose adapters
- Disconnect hose adapters from Vehicles supply and return lines
- Reconnect the vehicle's supply and return lines

- Start the vehicle, Check for leaks

Commercial Diesel Engines

1. For most Large Diesel Engines use one of the following adapters DFS-910-2, DFS-910-3, DFS-910-4 and attach DFS 910-5 to one of these adapters.
2. Attach Blue and Black hoses to DFS 910-5.
3. Set air Pressure on Atomizer Tank to 80 psi Start Engine.
4. Open air valve on DFS 910-5 adapter then turn the Atomizer valve to ON position on the machine run until Atomizer fluid tank is empty.
5. Turn Atomizer valve of and Fill the Atomizer Tank with 1 lit/qt Rinse Solution and repeat the above steps.
6. Turn Atomizer Valve to OFF position. Turn Vehicle off, turn fuel pump off on the machine then disconnect fuel hoses, adapters and reattach the EGR temperature sensor, boost pressure sensor, reconnect fuel lines and reattach induction parts.

