

Irate Diesel Regulated Return install:

1. Remove IC piping and intake Y. It may also be easier to remove the Downpipe and turbo to gain access to the back fittings. This will depend upon how much you want to work around them.
2. Remove factory wiring harness and lay over the the passenger side of the engine bay. This will allow you to get the lines where they need to go to the back ports. The lines will lay just over the top of the heads.
3. Remove AC compressor and lay to the side (don't break the lines).
4. Remove alternator.
5. With AC compressor and Alternator removed you can take the bolts out of the front accessory brackets. Pull the brackets forward so that you can gain access to the front ports on the heads.
6. With everything removed install the 1/8npt x 6 jic straight fitting into the back passenger head.



7. Install the 1/8npt x 6jic 90* fitting into the back driver side head pointing straight up.



8. Install the 1/8npt x 6 jic 45* fittings into the front ports pointing straight up.



9. With all fittings installed you can now install the back lines and connect them to the supplied 6jic t in the valley of the motor.



10. Install the front lines. The short line goes on the driver side head the line has a 15° and a 30° bend. The 15° bend will go down. You can now attach the regulator to this line and install the other line from the passenger side. Attach the lines loosely and get all lined up and then tighten into place. Be sure not to over tighten the JIC fittings!



11. With all lines in place and tight you can now put every thing back together on the truck.

12. Once back together with the fuel pressure gauge installed key on power and check for leaks. You may have to cycle the key a couple of times to check everything. If no leaks then start the truck and set the fuel pressure on the regulator. We typically set them around 65psi. They can be ran between 60 and 70psi.

If installing a full OBS fuel system:

1. Cut supply line off of hard line after the selector valve at the frame, insert the 5/16" brass barb and install hose clamp. It is a good idea to clamp the line off as to not have fuel coming out of the line while completing the next few steps.
2. Mount Fuel bracket on inside of frame. This is easiest done by clamping the bracket to the frame and drilling two holes for the 3/8" bolts to bolt to the frame. Once the bracket is mounted you can then add onto the black hose as needed with the new supplied hose to attach to the pre pump filter. Use the supplied fitting brass push-lok fitting.



Once plumbed and mounted you can now run the new line from the post pump filter to the motor. Once ran to the motor we typically run the line where the factory hard lines ran behind the AC compressor.

3. Once the supply line is attached to the T fitting in the valley you can now run the new line off of the regulator behind the AC compressor also. This line will attach to the factory hard line on the frame. The return line is located just behind the drivers side front tire. The line raises of the frame about 1.5-2". That is the return line. If you remove the line from the return line you can then slide the new push-lok hose over the factory hard line and clamp it in place.
4. The supplied wiring harness can then be ran. There are instructions with the wiring kit. The only piece that needs extra attention is the inertia switch. This needs to be wired between the relay and the signal wire. You can run the signal wire off of a key power inside of the cab or off of a key power in the engine compartment.
5. Once all plumbing and wiring is complete you can key on and inspect for leaks. Be sure to route all lines and wiring so that nothing is close to high heat sources.

Super Duty Installation:

1. After dropping the tank and installing the pickup tube, mount the fuel bracket to the frame using the supplied 3/8" bolts. This can be mounted right behind the transfer case. This is a photo using the single Walbro pump but frame mounting will be in the same fashion.



2. Once the filter and pump bracket is mounted to the frame you can now route the 5/8 Push-Lok hose and cut it to the length needed and install the fitting and attach it to the pre pump filter.
3. Run the 1/2" 801-8 line to the motor and connect to the t fitting in the valley using the supplied 8 hose x 6 jic reducer.
4. Once the supply line is ran you can now run the return line form the regulator back to the tank. This line can be routed behind the alternator where the factory lines were routed. We remove the factory lines when installing the systems. You can then hook the return line to the old factory supply line so you have a higher flowing return all the way into the tank.
5. The supplied wiring harness can now be installed. We typically ground the pump to the frame on a mounting bolt so that an extra wire doesn't need to be ran back to the motor. The relay will be triggered off of the factory wiring, this will keep the factory inertia switch in place.
6. Once all is ran you can prime the system, you may need to crack a filter so that the pump can gain prime easier. This may take a few key cycles to get the filters primed.
7. Check the system after installation for leaks and ensure all fittings and connections are tight and noting is rubbing that could cause future failure.