


[illegible]



9	Oil Lubrication	From underneath, slide the provided large black tubing over the black barb.	
	Pinch Clamp Pliers		
10	1/8" Allen Wrench	<b>20-0461 Fuel Level Switch and Indicator Installation</b> The float can be flipped for Normally Open (NO) or Normally Closed (NC) configuration by removing the E-clip. To be closed during low fuel, the float arrow should be pointing downward. Remove the 2AN ORB plug from the top plate. Apply PTFE paste to the threads of the float switch. Route switch wires through the top plate's threaded hole from underneath. To screw in the switch, first hand tighten. Then add another 1.5 to 3 turns with a wrench until tight and sealed. The 2 wires can be routed for the installer's specific purposes. The switch will trigger when fuel level drops by 20% or more.	
	PTFE Sealing Paste		
	1/4" Wrench		
11	Diagonal Cutter	<b>20-0508 Diagnostic Indicator Kit</b> Route the 2 pink wires (from the 20-0461 fuel level switch) through the included black aluminum tube. Lubricate the O-ring and thread the tube into the top plate and tighten. Route 1 of the switch wires back down into the tube and out 1 of the side holes of the aluminum tube. Pull slack out. Cut the other switch wire and red LED wire to length and solder together. Cover this connection with the included shrink tube.	
	Oil		
	1/2" Wrench		
	Wire Stripper		
	Solder Station		
	Heat Gun		
12		<b>20-0508 Diagnostic Indicator Kit</b> Route the LED black wire down into the tube and out the same hole as the other level switch wire. Push the LED down into the tube until it is fully seated, as shown. Cover both loose wires with the protective sleeving and route to the power source. For simplicity, this can be the pump power terminals.	
13	Wire Stripper	<b>20-0508 Diagnostic Indicator Kit</b> Crimp the ring terminals to the power and ground wires. Connect the red to the positive terminal and black to the negative terminal. Use heat shrink on the ring terminal crimps. NOTE: The wiring described above puts the switch on the positive side of the LED. However, the switch can also be put on the negative side of the LED, as shown in the wiring diagram.	
	Crimper		
	Heat Gun		
14		Make sure the O-ring is properly seated in the FST canister groove, as shown.	

15	3mm Allen Wrench	Install the fuel hat pickup assembly into the surge tank. The orientation should be considered for optimal hose plumbing.	
	in-lb Torque Wrench		
		Install the 9 perimeter bolts and tighten in an alternating cross pattern to 30 in-lb.	
		Assembly Complete	

## MOUNTING

The FST should be firmly mounted to a stable, structural component of the vehicle away from moving parts, excessive heat, and collision prone areas. The FST should not shake or vibrate excessively during operation. It is designed to be mounted in a standing vertical orientation only. Surge protection effectiveness will suffer if excessively tilted from the vertical position.

A threaded plate or M6x1.0mm nuts are required to secure the FST using the provided M6 x 1.0mm mounting bolts (shown). If necessary, rubber isolating sandwich mounts (not included) can be used to reduce noise/vibration transmission to the chassis.



## PLUMBING

The PICKUP port(s) route to the inlet(s) of the external high pressure fuel pump(s).

The other 3 ports are female threaded for 8AN ORB (3/4"-16). The SUPPLY port receives fuel from the lift pump to fill the FST. The RETURN port accepts fuel from the FPR to fill the FST. The OVERFLOW port allows excess fuel to drain back to the main tank. If installing in a vehicle without a return port, the OVERFLOW port needs to enter the tank through some other means. This may require installing a fitting on the filler hose, pump module, and/or modifying the fuel tank. For proper function, DO NOT swap these ports around.



## START UP

The FST must be primed with fuel before the engine can start. Remove the high pressure fuel pump fuse(s) and leave the lift pump fuse installed. Cycle the vehicle's ignition power several times. This will activate the lift pump for a few seconds each time. After 3-4 cycles the engine should be ready. Reinstall the fuel pump fuse(s) and start the engine. Fix any potential leaks and adjust fuel pressure.

