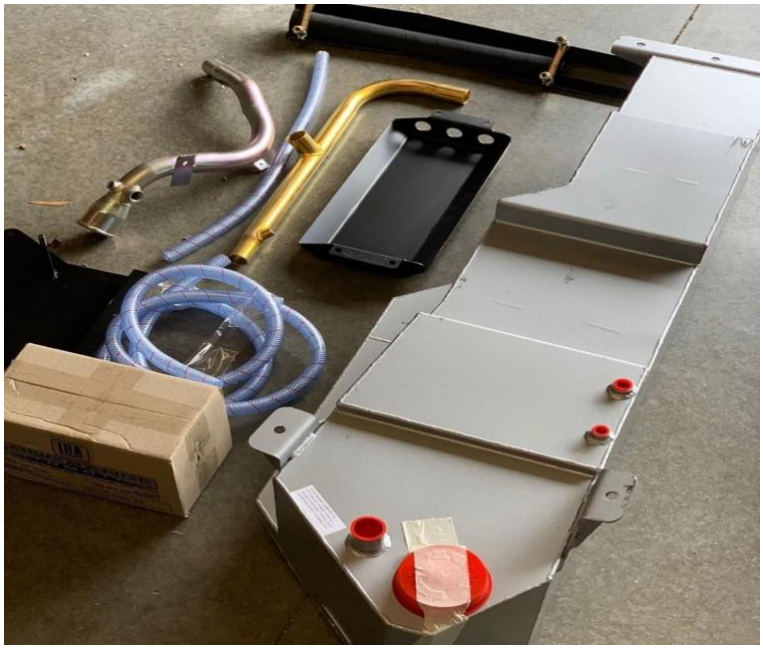
2012-2018 Jeep Wrangler JK Four Door 16 Gallon
Auxiliary Tank Instructions

Product Information/Install Instructions for

Jeep Wrangler JK 2012-2018 Four Door Petrol/Gas

Kit P/N JWJKPA36





D. INSTALLATION KIT CONTENTS

HARDWARE	HOSE & CLAMPS	MISC PARTS
1 x M8 Nyloc Nut	1 x 8mm Hose @ 44" Long	1 x SC91 Fuel Cap
1 x M8 x 25mm Washer	1 x 8mm Hose @ 56" Long	1 x FNJWJKPA Filler Neck
2 x M10 x 50mm Bolt	1 x 32mm Hose @ 4" Long	1 x FPJWJKPA Intermediate Fill Pipe
2 x M10 x 75mm Bolt	1 x 32mm Hose @ 17" Long	1 x Exhaust Heat Shield C/W Nuts & Clamps
2 x M6 Flat Washer	1 x 16mm NTP Hose @ 24" Long	1 x Resonator Heat Shield
8 x M10 x 30mm Flat Washer	1 x 16mm NTP Hose @ 41" Long	1 x 16mm x 44mm Crush Tube
4 x M10 Nylock Nut	1 x 16mm NTP Hose @ 59" Long	1 x 25mm IDP Clip
5 x M5 x 8mm Pan Head Screw	7 x 1/4" Hose Clamp	1 x 16mm IDP Clip
1 x M6 x 16mm Bolt	6 x 5/8" Hose Clamp	1 x Evap Canister Bracket
1 x M6 Nyloc Nut	4 x 1-1/4" Hose Clamp	2 x C12 Exhaust Clamps
7 x Tek Screw	1 x EFI Hose Clamp	10 x 7" Cable Ties
2 x 30mm Tek Screw		5 x 11" Cable Ties
		1 x Z14K Filter
		1 x Fuel Transfer Pump
		1 x Fuel Transfer Pump Mounting Bracket
		Magnet (for auxiliary fuel tank)
BRASS	**ELECTRICAL**	
1 x P3 5/16" X 1/8" Straight	1 x 3mm Two Core @ 158" Long	
1 x P3 5/16" X 1/4" Straight	1 x Red Insulated Terminal	
1 x P6 5/16" X 1/8" Elbow	3 x 6mm Blue Eye Terminals	
2 x P6 5/8" X 3/8" Elbow	1 x 3/16" Wiring Grommet	
	3 x Heat Shrink Tube	
	1 x LRA-PG210 Switch Gauge	
	1 x 0-90 Ohm Sender Unit c/w 15-3/4" Ground	

A. GET READY

1. We recommend power washing the underside of the vehicle, to remove mud and debris.
2. Unpack tank and installation kit. Review packing list and kit.

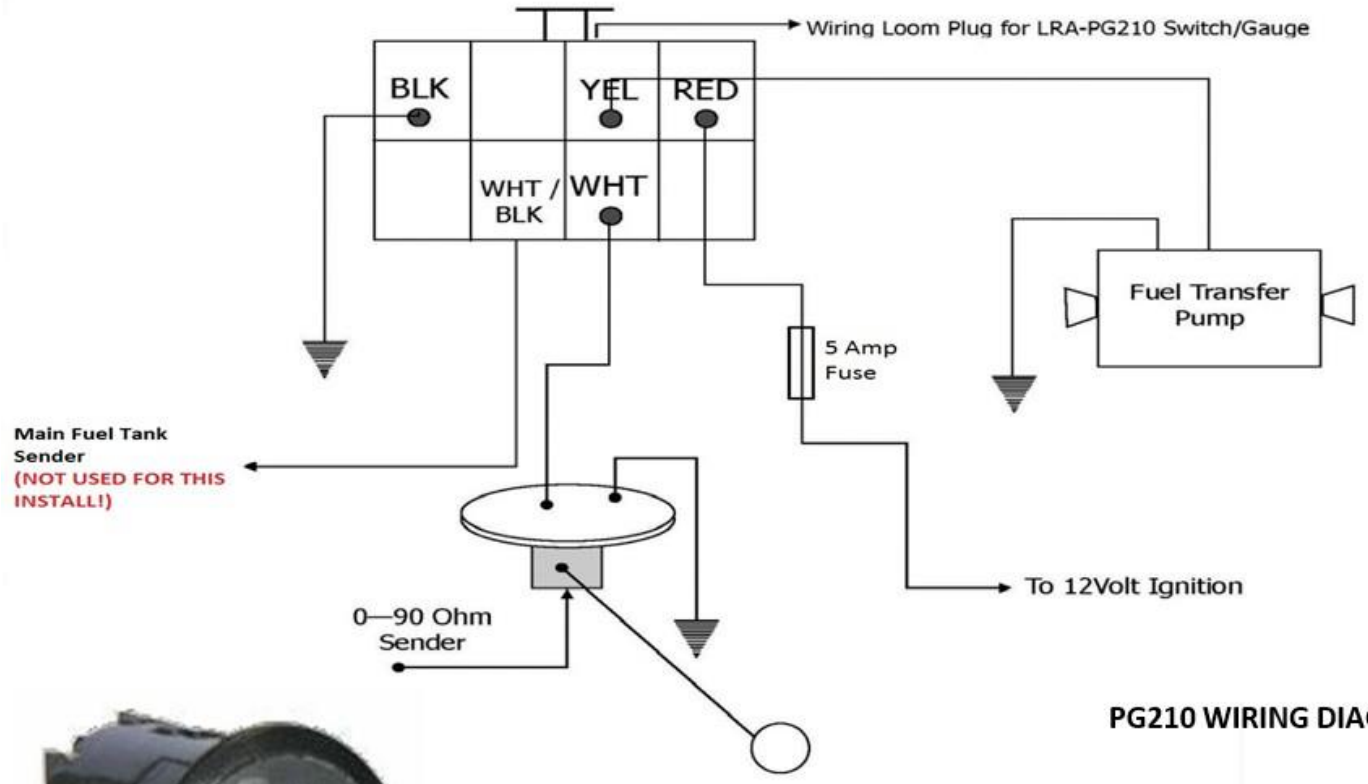
B. INSTALLATION

1. Select a suitable location in the dash to mount the switch/gauge unit. Using a Uni-Bit (stepped drill bit), drill a 20mm hole to mount the unit. Use a small file to carefully adjust the hole size as needed.
2. The switch is fairly sensitive to installation. The hole diameter needs to be just the right size (20mm or .78”). If it is too small, and the switch is forced into place, the switch may be damaged or not function properly. You will need to test-fit and file or cut out more material if needed. **DO NOT FORCE SWITCH INTO PLACE WHILE TEST-FITTING.**

C. WIRING

3. Connections should be soldered and heat shrunk, not just crimped.
4. Double-check all connections when done.
5. A 12 volt ignition source can be found under the right-hand side of the steering column, pink wire with white trace (check this with test light). Carry out wiring as per the wiring diagram on page 7. The 5 amp fuse and fuse holder are used in the red power wire that is connected to the ignition power source.
6. Run the 3mm twin core under the scuff plate then exit out through the floor under the left-hand front seat (drill an 8mm hole and use grommet supplied), run to rear of the vehicle for later connection to the fuel transfer pump and auxiliary tank fuel gauge sending unit.
7. Leave enough wire to reach the sending unit.

PLEASE REFER TO OPERATING INSTRUCTIONS FOR THIS UNIT ON PAGE



PG210 WIRING DIAGRAM



A. ATTACH NEW HEAT SHIELDS

1. Bolt the new exhaust and resonator heat shields in place on the side of the pipe facing the tank.

B. REMOVE BODY ITEMS

1. Remove the left-hand rear wheel and arch cover (bolt “A” secures the cover and also connects to the body to mount a bracket for the fuel line—hard to get at).
2. Remove the left-hand rear tail light assembly.





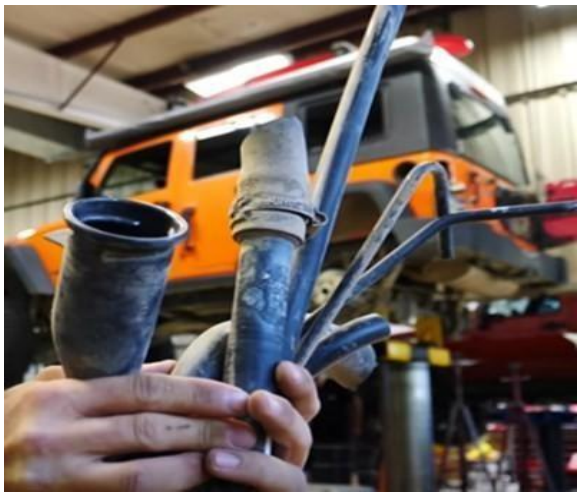




B. **REMOVE BODY ITEMS *(continued)***

3. Remove the OEM filler, fast fill and 8mm vent lines. (Note you will need to cut the filler neck to get it out).

Make sure you disconnect from the original tank before cutting. The neck and pipes will not be reused.



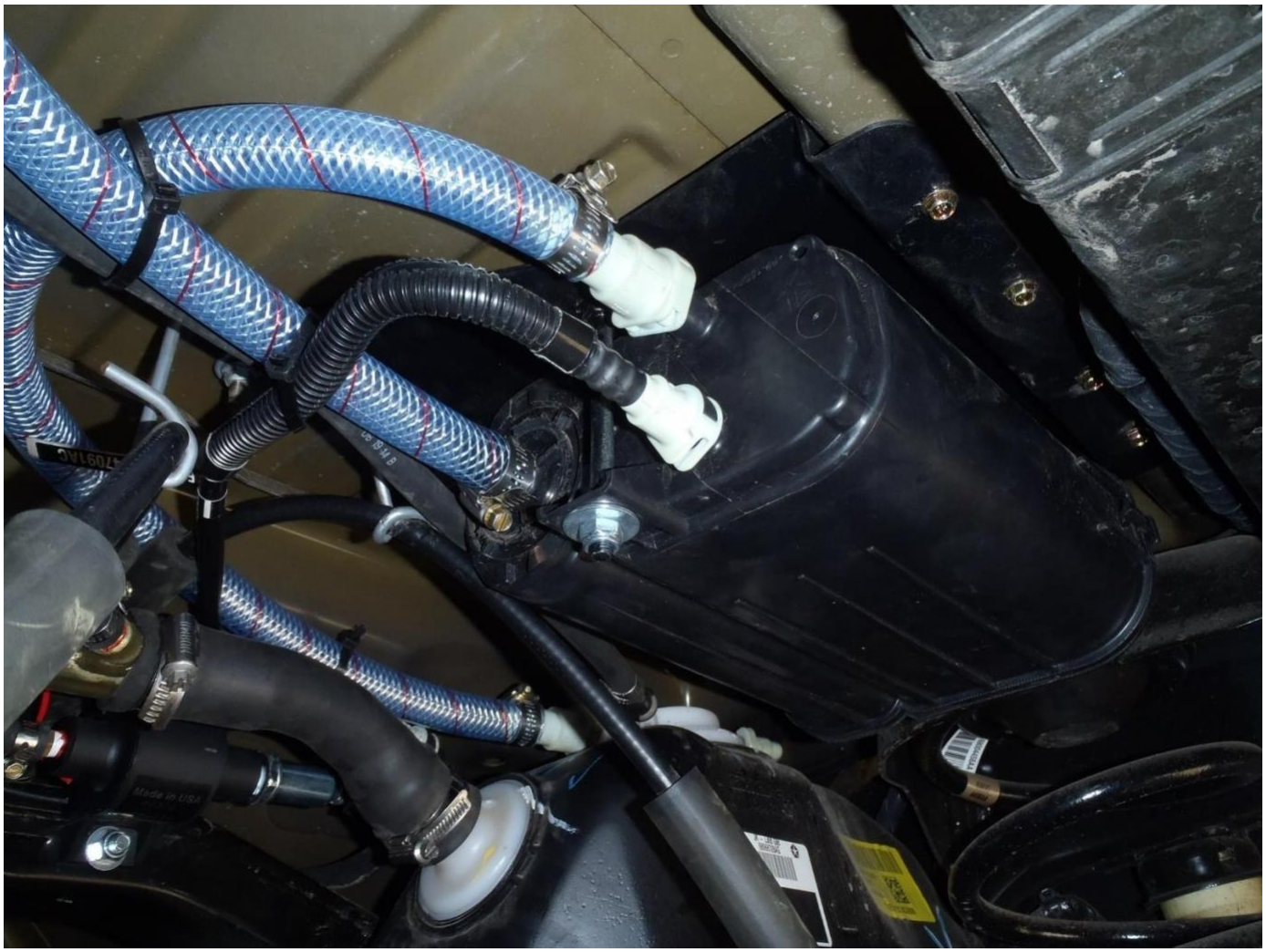
4. Carefully remove the couplings from the tank ends of both the fast fill vent and the 8mm vent lines. Also remove the fast fill vent end cap that is riveted or zip tied to the filler neck.



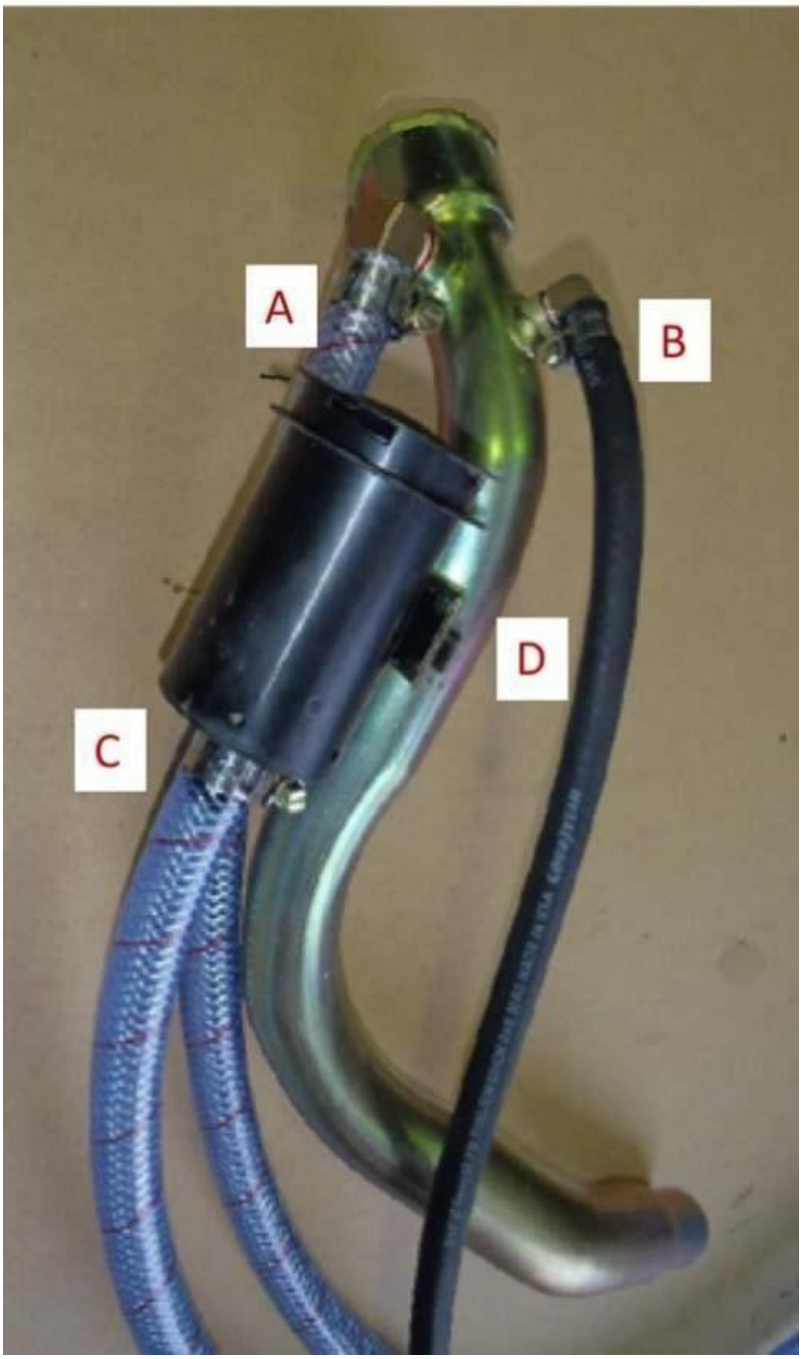
5. Remove the evaporative emission (evap) canister from the vehicle and unclip the unit from the OEM bracket.

C. MODIFY/MOVE EVAP CANISTER

1. Fit the evap canister to the new bracket and secure with M8 Nyloc and washer. The new bracket with canister locates under the right-hand stud from the park brake cable support and four TEK screws along the rear.
2. Connect the 41-inch length of 16mm hose that comes from the fast fill vent end cap to the FRONT fitting on the evap canister in its new location.
3. The REAR fitting on the evap canister uses one of the original couplings and the 24-inch length of 16mm hose and loops forward on to the 16mm coupling that comes from the top of the original tank.



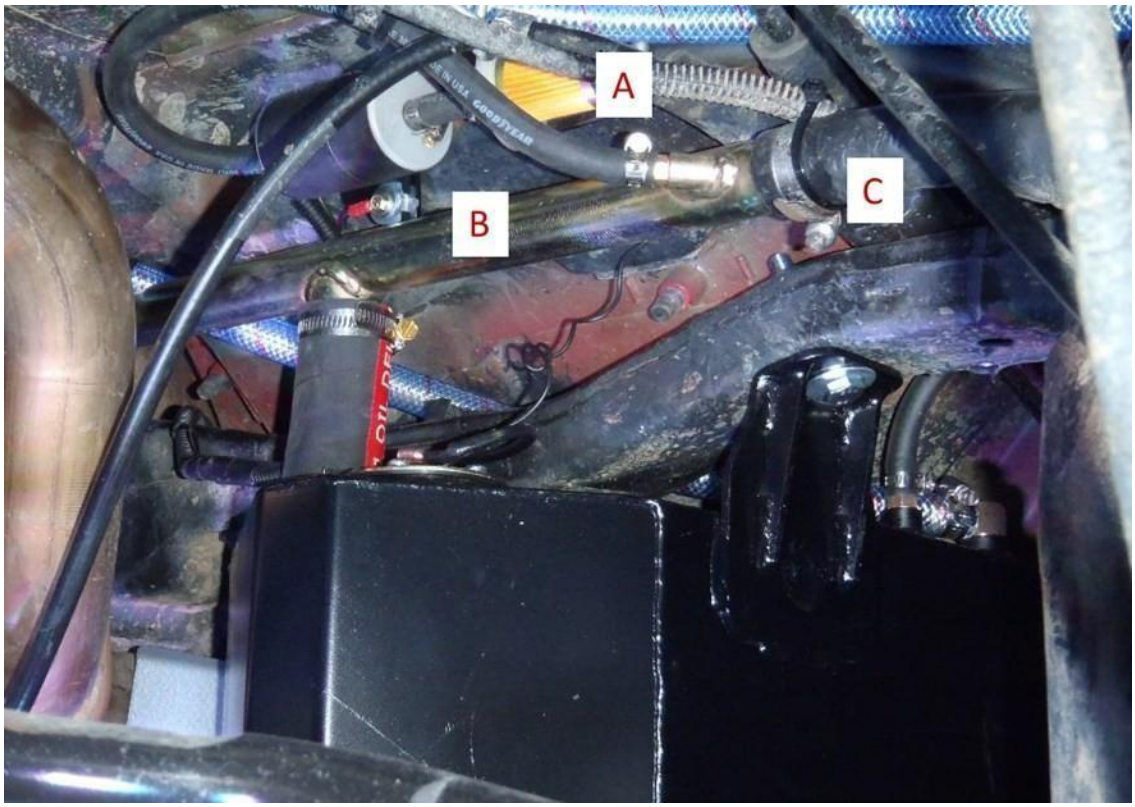
1. Locate the replacement filler neck and perform the following:
   - Screw the P6 5/8 " x 3/8" (A) and the P6 5/16" x 1/8" (B) elbows into the filler neck .
   - Fit the 59-inch length of 16mm hose and the 56-inch length of 8mm hose to the new filler neck.
   - Fit the fast fill vent end cap (C) to the 41-inch length of 16mm hose and attach to the bracket on the new filler neck (D).



- The other end of the 8mm line from fitting “B” on the new filler neck goes back to the top of the original tank, and uses one of the OE couplings salvaged from the original 8mm line that was removed with the original filler to connect to the same connection on the OEM tank as it was connected when it was connected to the OEM filler neck (see arrow, below):



- Refit the new neck to the vehicle and fix to body with M6 x 16mm bolt, washers and Nyloc nut.
- Fit 17-inch length of 32mm hose to the fill neck.
- Screw the P3 5/16” x 1/8” straight fitting (A) into the intermediate pipe (B) and fit pipe in position connecting back to the original tank with the original hose (C).



2. Screw the fittings into the tank. P6 5/8” x 3/8” elbow points towards the filler neck and P3 5/16” x 1/4” straight goes into the fuel pick up.
3. Drop the supplied magnet into the new tank in the vicinity of the fuel inlet or swirl pot.

1. Jack the tank into position, on the top of the front cross member you will find a hole that lines up with the front in board bolt hole, mark all holes and drill out to 10.5mm. (You may find it easier to move the tank out of the way to do this).
2. Bolt the tank into position, 16mm x 44mm crush tube is for the left-hand rear mount. Secure with M10 bolt washers and Nyloc nuts.
3. Screw the fuel transfer pump to the mounting bracket and mount above the rear of the auxiliary tank. **THE PUMP MUST BE INSTALLED ABOVE THE FUEL LEVEL OF THE NEW TANK, AND WITHIN 12 VERTICAL INCHES OF THE NEW TANK BOTTOM. THE FUEL PUMP SHOULD BE MOUNTED WITH THE OUTLET HORIZONTAL OR ABOVE THE INLET. THIS WILL HELP TO PREVENT LOCATION-RELATED GRAVITY FEED, CHECK ENGINE LIGHTS (CELs), AND VAPOR LOCK ISSUES.**
4. Complete the wiring of the pump. **DO NOT** ground the pump to the mounting bracket, instead, drill a hole in the body and clear an area for the body ground grommet to be firmly connected to bare metal. The transfer pump is sensitive to power interruption when on and a good ground is **imperative**. For a video showing fuel transfer pump mounting location, please follow this link: https://youtu.be/YBCxCebRE9M?t=639 (index 10:35)
5. Connect remaining hoses and fuel gauge sending unit wires (including the ground).
6. Check all clearances and neatly cable tie all hoses and wiring. Refit wheel arch cover and tail light.
7. Reconnect vehicle battery.
8. To test, fill both tanks and drive as normal. When the fuel level in the main tank has run down by one-quarter tank, test transfer pump operation and make sure the gauge is working properly, the level lights are correct and listen for undue noise (a “tic-tock” noise is normal when the pump is running).
9. Check again for leaks.
10. Use photo below as an aid in determining whether additional skid plating/protection is needed:



A. Are all hose clamps tight and secure?

B. Are all nuts and bolts secured?

C. Are mounting brackets and straps secure?

D. Are Fuel Gauge Sending Unit bolts secured?

E. Are all fuel lines secure with no kinks?

F. Does tank interfere with, or rub on, other vehicle components?

G. Is tank calibration accurate?

☐ Congratulations! You have completed the install!