2020+ Jeep Gladiator JT 17 Gallon Auxiliary Tank Instructions

Product Information/Install Instructions for

Jeep Gladiator JT 2020+ Four Door Pickup
Petrol/Gas

Kit P/N JGJTPA





D. INSTALLATION KIT CONTENTS

HARDWARE	HOSE & CLAMPS	MISC PARTS
4 x M8 x 20mm Bolt	1 x 8mm Fuel Hose @ 19.7" Long	1 x TFJGLTPA 38mm diameter Tee Filler with ICV (Inlet Control Valve)
3 x M10 x 30mm Bolt	1 x 8mm Fuel Hose @ 7.9" Long	1 x Front Secondary Bracket (2 Pieces)
1 x M10 x 75mm Bolt	1 x 16mm Fuel Hose @ 5.1" Long	1 x Tank Heat Shield
1 x M10 x 100mm Bolt	1 x 16mm Fuel Hose @ 19.7" Long	1 x Right-Hand Rear Top Mount Plate
20 x M8 x 20mm Washer	1 x 16mm Fuel Hose @ 21.5" Long	1 x FLVV TUNDRA w/P6 5/8" x 3/8"
9 x M10 x 25mm Washer	1 x 35mm Hose @ 2.95" Long	1 x BS337 O-Ring
12 x M8 Nyloc Nut	1 x 35mm Hose @ 6.3" Long	1 x WG2 Wiring Grommet
5 x M10 Nyloc Nut	CF20 Conduflex @ 17.7" Long	1 x Fuel Pump w/Filter
2 x Tek Screw	4 x 1/4" Hose Clamp	1 x Fuel Pump Mounting Plate
6 x M5 x 12mm Pan Head Screw	6 x 5/8" Hose Clamp	5 x 7" Cable Ties
6 x M5 Spring Washer	2 x 1" Hose Clamp	3 x 11" Cable Ties
1 x 10mm Spring Washer	4 x 1 1/4" Hose Clamp	JGJTPAEM Exhaust Kit (includes pipes and muffler to convert OEM exhaust for use with new tank) (If Ordered)
1 x M10 x 27mm 3mm H/D Washer		
BRASS	**ELECTRICAL**	
2 x P6 5/16" x 1/8" Elbow	1 x LRA-PG210 Switch/Gauge	
1 x P6 5/16" x 1/4" Elbow	1 x 3mm Two Core Wire @ 157.5" Long	
1 x TS16 Norma Tee	1 x 4mm Single Core Blue Wire @ 11.8"	
	1 x 5 AMP Fuse	
	1 x Fuse Holder	
	2 x Fuse Holder Terminals	
	1 x Red Insulated Terminal	
	2 x 5mm Red Eye Terminal	
	1 x 8mm Blue Eye Terminal	
	3 x 3mm Shrink Tube	
	1 x 0-90 OHM Sender c/w 15.75" Long Ground, installed using 5 x M5 x 10 Pan Heads and 5 x M5 Spring Washers	

A. SPECIAL NOTES

1. **Fitment requires modification of OEM exhaust by a specialist shop OR modifying the OEM exhaust with exhaust kit JGJTPAEM (available for sale with this tank).**

A. GET READY

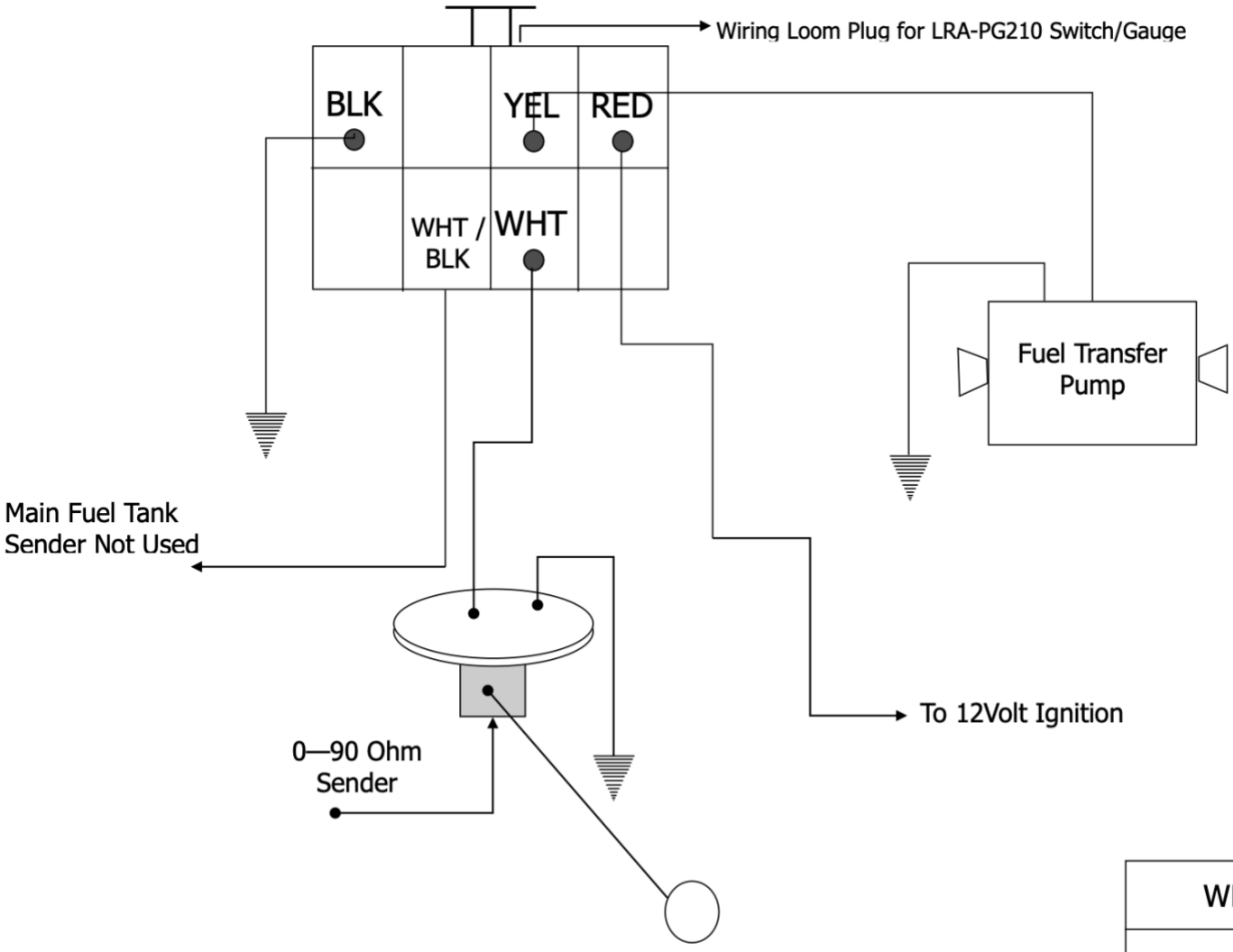
1. We recommend power washing the underside of the vehicle, to remove mud and debris.
2. Unpack tank and installation kit. Review packing list and kit.

B. INSTALLATION

1. Find a suitable mounting location in the dash or center console. Check for adequate space behind the target panel prior to making any cut or hole. Drill a pilot hole where you will be installing the switch/ gauge.
2. Use a Step Drill Bit to drill a 20mm/0.78” hole, using the pilot hole as a guide. Use a small file to carefully adjust the hole size as needed. 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 carefully file or cut out more material if needed. **DO NOT FORCE SWITCH INTO PLACE WHILE TEST-FITTING OR AT ANY TIME.**
3. Connections should be soldered and heat shrunk, **not just crimped**.
4. Double-check all connections when done.



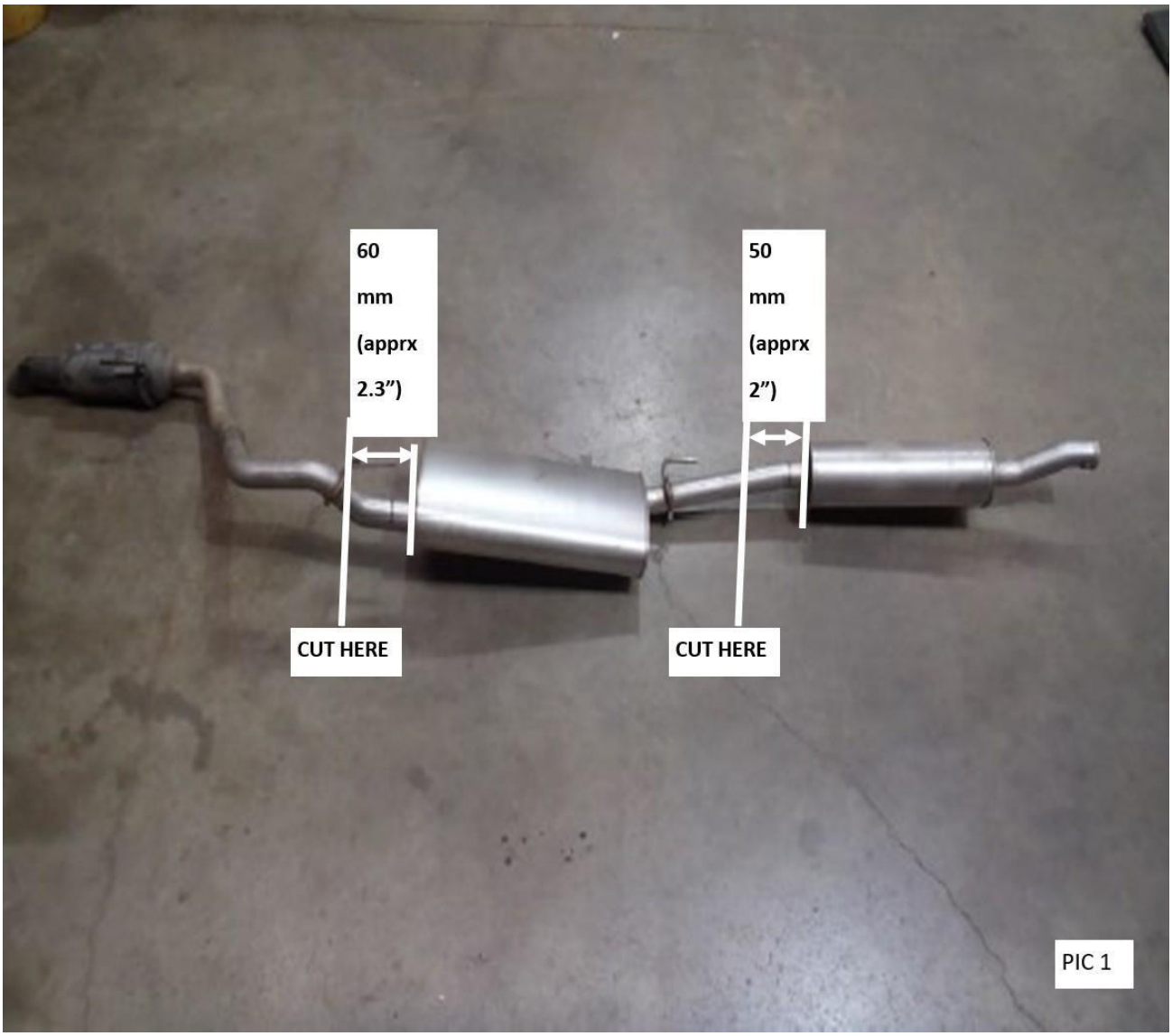



Wiring Loom Plug for LRA-PG210 Switch/Gauge
BLK
YEL
RED
WHT / BLK
WHT
Fuel Transfer Pump
Main Fuel Tank Sender Not Used
To 12Volt Ignition
0—90 Ohm Sender

WDSGPG210

A. REMOVE & MODIFY EXHAUST (OPTIONAL JGJTPAEM KIT, IF ORDERED)/INSTALL FRONT TANK MOUNT

1. Safely lift vehicle, supported by the frame rails.
2. Remove the transfer case skid plate.
3. Disconnect the exhaust system at the slip joint next to the transfer case. Unbolt the rear exhaust mounts and remove the OEM exhaust from the vehicle.
4. Measure and cut the exhaust pipe 50mm from the rear of the **front** resonator and 60mm from the rear of the muffler (PIC 1):



A. REMOVE & MODIFY EXHAUST (OPTIONAL JGJTPAEM KIT, IF ORDERED)/INSTALL FRONT TANK MOUNT *(continued)*

5. Before refitting the exhaust, fit the new front tank mount using M8 x 20 bolts, nuts and washers. Use the transfer case skid plate bolt for location of bracket (PIC 2):



A. INSTALL MODIFIED EXHAUST (JGJTPAEM)

1. Fit the new exhaust mount to the left-hand chassis rail with the rubber mount installed (PIC 3):



2. Re-fit the front resonator and fit the new muffler assembly, making sure the resonator is as close to the left-hand chassis rail as possible at the front.





B. **INSTALL MODIFIED EXHAUST (JGJTPAEM)** ***(continued)***

1. Refit the rear tail pipe section and bolt in place. Check for alignment and clamp all slip joints and use sealer on all joints (if possible, we recommend welding the new muffler section in place). Bolt the exhaust pipe heat shield to the pipe (PIC 4):



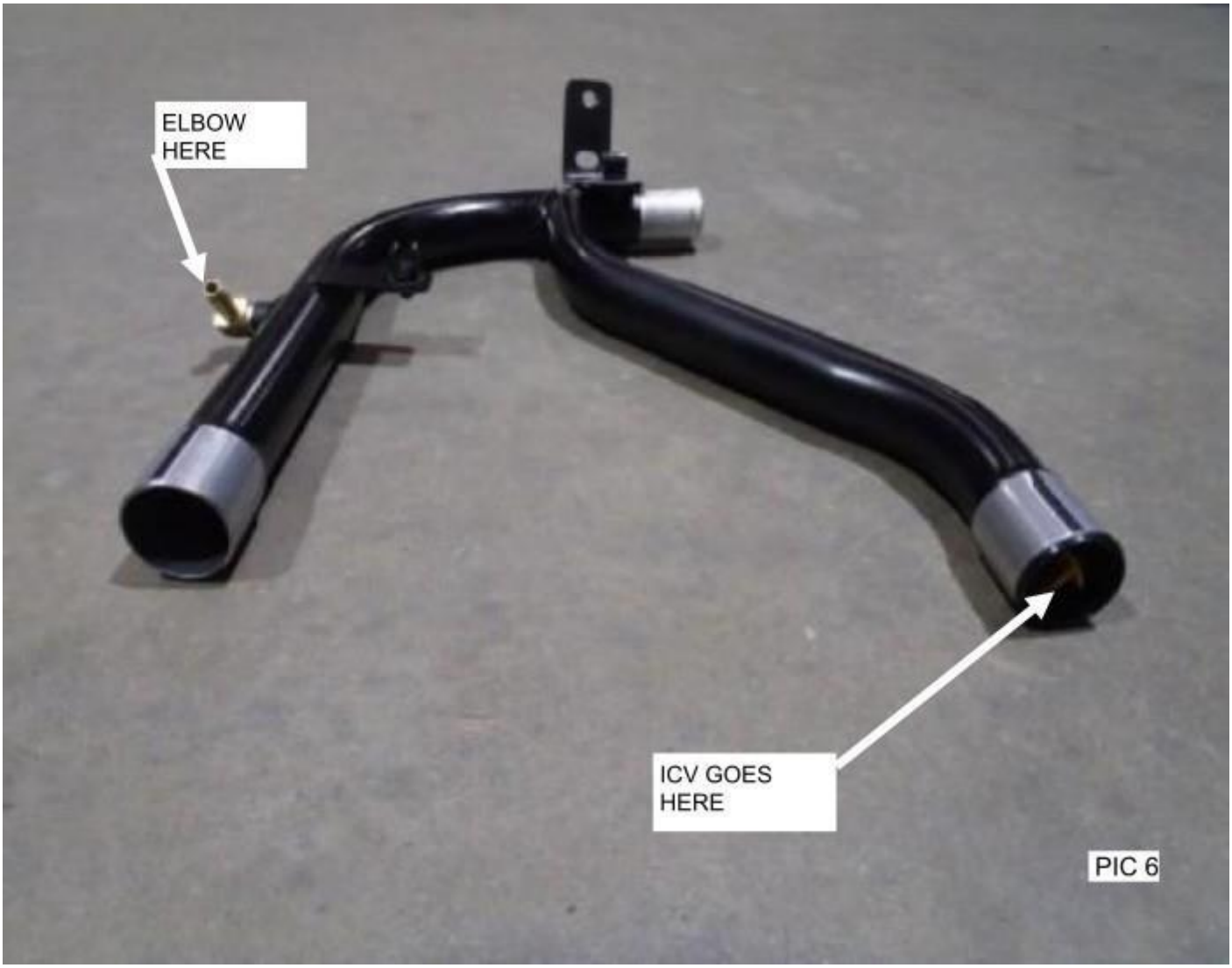
B. MODIFY FILLER PIPES/HOSES

1. Disconnect the filler hose from the main tank. Unclip the 8mm plastic line and the charcoal canister vent line from the pipe (cap off the fuel tank filler pipe to keep debris out of the main fuel tank).
2. Once disconnected, cut the fill pipe 50mm from the mounting bracket. **DO NOT USE A SPARKING CUTTER OR FLAME TO MAKE THIS CUT!** Unbolt and remove from the vehicle (PIC 5):



C. MODIFY FILLER PIPES/HOSES *(continued)*

1. Fit P6 5/16” x 1/8” elbow into the main tank leg, with tee filler pointing up. Make sure the ICV is fitted to the auxiliary tank leg (PIC 6):



2. Cut 115mm from the small end of the OEM rubber fill hose. Use this piece and a new 75mm length of 35mm diameter hose at the OE main tank.

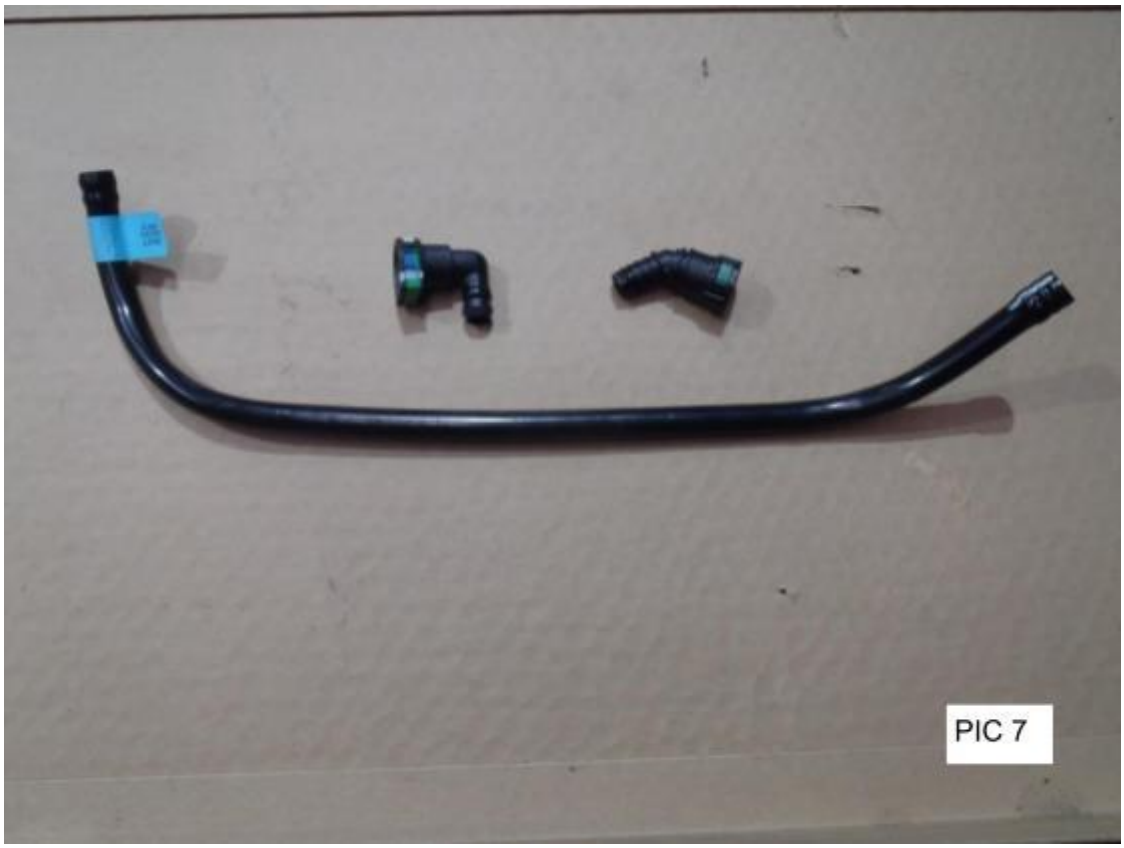
C. **MODIFY FILLER PIPES/HOSES *(continued)***

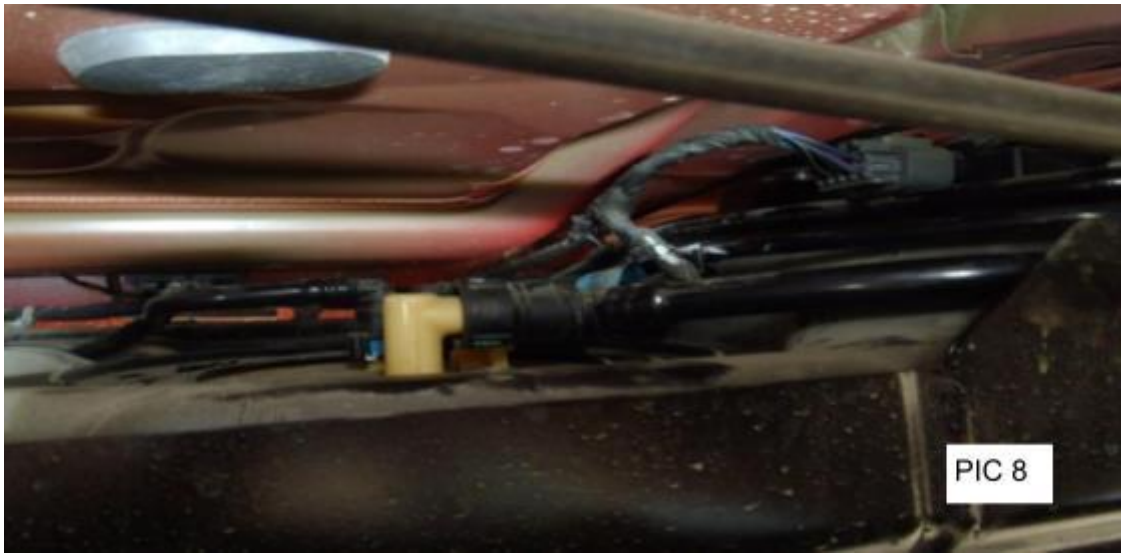
3. Refit the tee filler. Bolt in place and re-clip plastic lines.



C. REVISE CHARCOAL CANISTER PLUMBING

1. Disconnect the FLVV line from the OE tank to the charcoal canister (you will need to cut the line to remove). THERE ARE TWO LINES THAT RUN ACROSS THE TOP OF THE OEM TANK, THE ONE YOU WANT IS THE GAS VENT LINE (The one with 90 and 45 degree ends and green clips), per photos below (PIC 7, 8). DO NOT CUT THE OTHER LINE!





D. **REVISE CHARCOAL CANISTER PLUMBING *(continued)***

1. Remove the quick connect fitting and fit to the new rubber hoses and plastic tee provided (PIC 9):



2. Reinstall between the OE main tank and the charcoal canister, running hose outside the OE tank shield mount. Cover with 450mm Conduflex.

E. DRILL HOLES FOR MIDDLE AND REAR AUXILIARY TANK MOUNTS

1. Drill a 7/16-inch diameter hole thru both inboard rear and middle cross-members to accommodate the middle and rear auxiliary tank mounts. As standard, there is only a hole in the bottom face, it needs to be drilled through the top face (PIC 10):



D. ASSEMBLE/INSTALL/WIRE FUEL TRANSFER PUMP

1. Fit fuel transfer pump to mounting bracket. Screw the 5/16" x 1/8" elbow to the outlet side of the pump and filter to the inlet side.

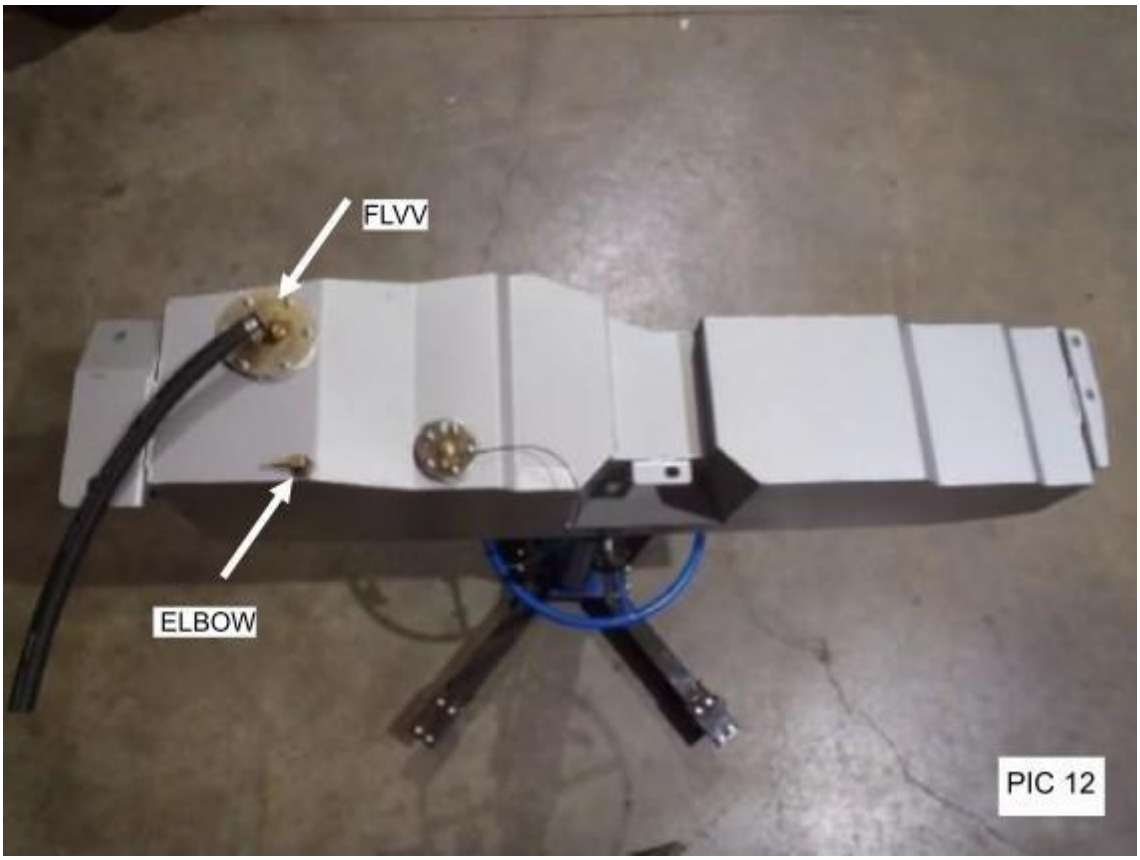
2. Mount the fuel transfer pump to the stud which holds the right-hand side of the hand brake locator. Connect the outlet of the pump to the elbow installed in the main tank leg of the filler pipe. **THE PUMP MUST BE INSTALLED ABOVE THE FUEL LEVEL OF THE NEW TANK, AND WITHIN 12 VERTICAL INCHES OF THE 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** (PIC 11)**.**



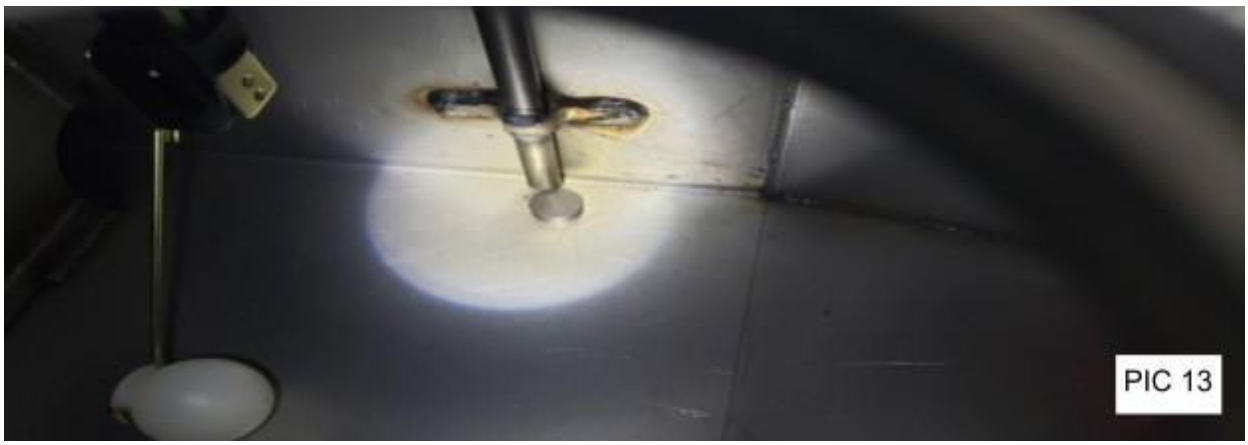
3. Complete electrical wiring by connecting white wire to the aux fuel tank sending unit, yellow wire to the fuel transfer pump, and connect ground wire. **DO NOT** ground the fuel transfer pump to the mounting bracket, instead, drill a hole in the body and clear an area for the body ground terminal to be firmly connected to bare metal. The transfer pump is sensitive to power interruption when on and a good ground is **imperative**.

A. AUXILIARY TANK PREPARATION

1. Screw the 5/16” x 1/4” elbow into the remaining open socket and point to the rear of the vehicle. Connect the 19.7” length of 8mm hose to the elbow and clamp (PIC 12):

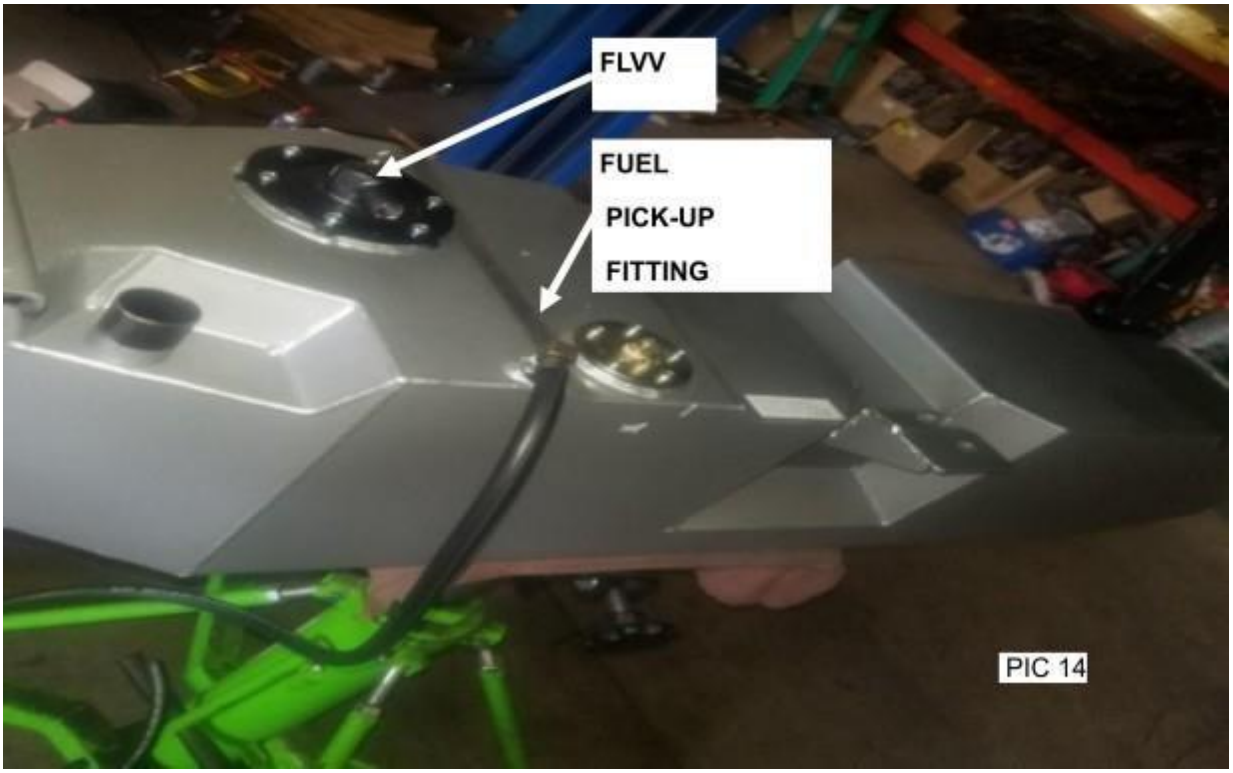


2. Remove the FLVV (if installed), drop the supplied magnet into the tank, and locate as close to the fuel pick-up point as possible without blocking it (PIC 13). Reinstall the FLVV when complete.



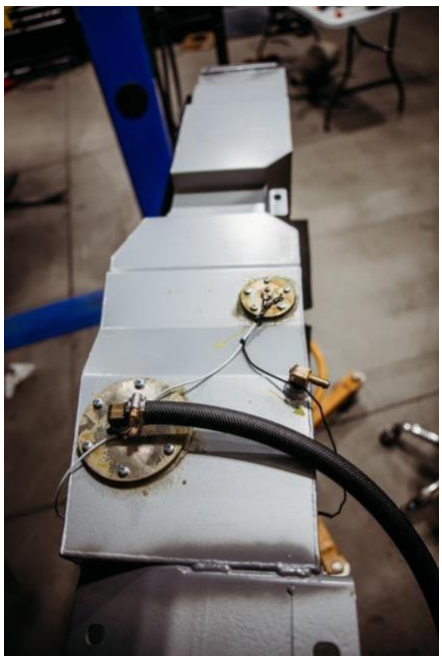
A. AUXILIARY TANK PREPARATION *(continued)*

1. If not installed, using the six supplied M5 x 12mm pan head screws and spring washers, O-ring and hold-down ring, install the plastic FLVV (the Fill Limit Vent Valve, or FLVV, is designed to maximize fuel tank capacity and facilitate automatic nozzle shutoff). Fit the 19.7" long section of 16mm hose to the auxiliary tank FLVV and clamp (PIC 14):



2. Fit the 19.7" length of 8mm hose to the elbow (fuel pick-up fitting) and clamp.
3. Fit the 6.3 inch length of 35mm hose to the auxiliary tank filler pipe and clamp.

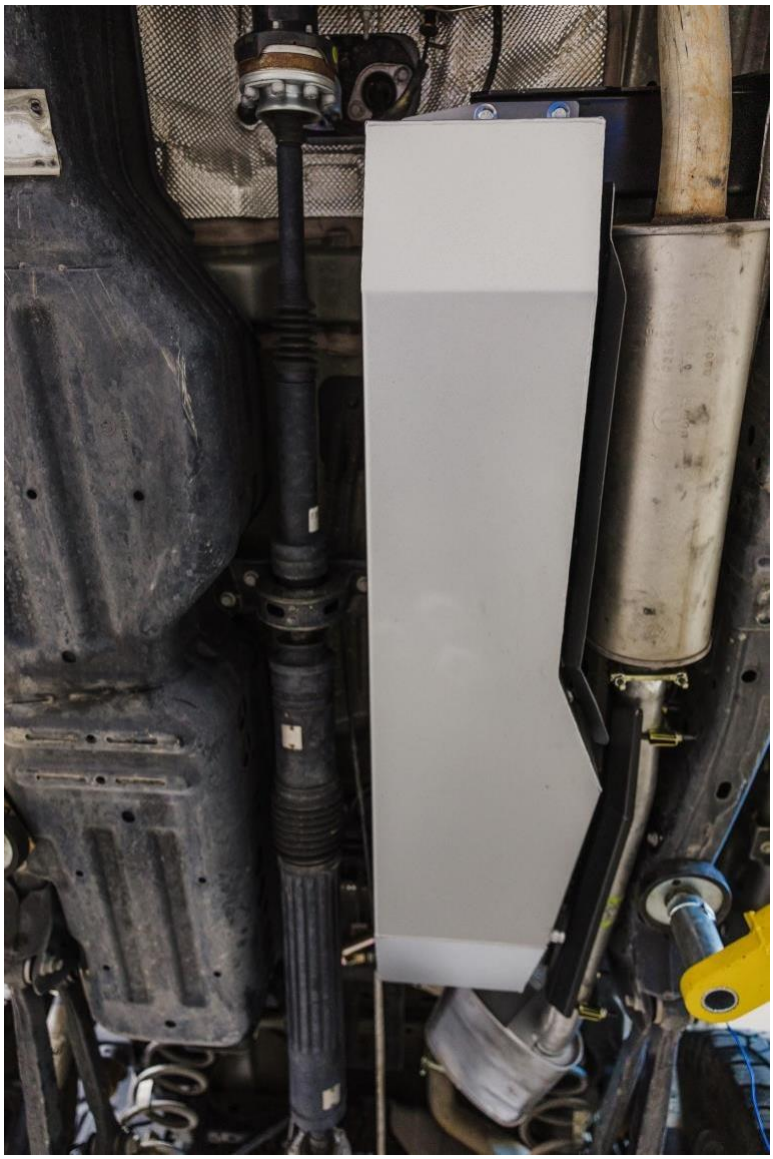
A. JACK THE TANK INTO POSITION AND SECURE



1. Carefully lift the tank into position, making sure not to pinch or kink any hoses.
2. Guide the fill hose onto the fuel filler T-pipe and clamp.
3. When tank is in position, secure tank with 2 x M10 x 30 bolts, nuts and washers for the front mount, M10 x 75 bolt, nut and washer for the center mount, and M10 x 30 and M10 x 100 bolt, support plate and nut, using heavy duty washer and spring washer on the underside of the rear inboard mount.
4. Connect the hose from the FLVV to the remaining barb on the tee piece for the charcoal canister plumbing.
5. Connect the 8mm fuel pick-up hose to the inlet side of the fuel transfer pump.
6. Connect the white wire from the auxiliary fuel gauge to the sender unit on the tank and connect the sender unit to ground.

C. FINISH INSTALLATION

1. Check all clearances and neatly cable tie all hoses and wiring. Make sure all hose clamps and mounting hardware are tightened.
2. Check for resonator clearance at the front of the tank (JGJTPAEM exhaust kit only)
3. Refit the transfer case skid plate.
4. Reconnect vehicle battery.
5. To test, fill both tanks, check for leaks 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). Check operation of gauge. Check again for leaks after the first 50 miles



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