Installation Instructions for F250DCSBA Ford F250 Dual Cab Short Bed V8 Diesel 125L Auxiliary Tank

This 125L Auxiliary Tank fits up on the RHS of the vehicle in front of the rear axle. The exhaust system will need to be re-worked so that the muffler is on the outside of the chassis rail. Fuel is transferred via an electric pump that will pump fuel from the auxiliary tank into the OEM tank. A combination switch/gauge will be located into a suitable position in the dash. When the switch is in operation an ORANGE light will be on, indicating that the transfer pump is in operation. A series of lights will also indicate fuel level. All GREEN lights ON showing FULL, one RED light flashing showing empty.

(DO NOT OPERATE TRANSFER PUMP WITH NO FUEL IN AUXILIARY TANK OR PUMP FAILURE WILL OCCUR).

1. Mount switch/gauge into a suitable place in the dash. Remove LH kick panel and scuff plate, run twin core wire out through floor at rear of cabin, connect all wires as shown in wiring diagram and refit trim.

2. Remove original filler. Screw fittings into new twin filler P6 5/8 x 3/8 fittings go into the sockets on the angled faces of the twin filler. The P6 5/16 x 1/4 fitting goes into the socket in the main tank fill pipe, this is the transfer port. The remaining socket is the vent, this takes the P6 1/4 x 1/4 fitting. Lift new twin filler up into place and mark mounting holes in flange, drill holes in flange to enable the original screws to be re-used. Secure new twin filler in place and re-connect the original fill hose and the original fast fill hose by using the 19mm to 16mm reducer and the short length of 16mm NTP hose. Connect fill pipe for auxiliary tank to remaining pipe on twin filler. This fill pipe runs over the top of the original fuel tank.

3. Remove sections of exhaust system and heat shielding from under the vehicle in the tank mounting area. Lift tank up into position and, (using mounting straps as a template), mark where holes need to be drilled in RH chassis rail and cross members. (NOTE: Tank needs to be mounted as close as possible to the RH chassis rail to ensure tail shaft clearance when suspension is articulated). Drill strap mounting holes at previously marked points and install M10 x 30 Bolt and stiffening plate to front inner strap, mount tank and the remaining 3 x M10 bolts with plates welded to them, to the remaining holes. Install brass fitting to tank, P6 3/8 x 1/4

fitting goes into the pick-up socket on the top of the tank and points towards the left hand side of the vehicle, as does the vent hose fitting. Install vent and pickup hoses to these fittings. Glue rubber straps to underside of cross members in tank seating area. The 100mm long strap is glued to the flat section of the rear crossmember.

4. Check gauge sender OHMS readings by rolling tank. EMPTY should be 0.5 - 2.5 OHMS, FULL should be 88 - 93 OHMS. If readings are outside this window, correct fault. Lift tank up into position and secure using straps, plain and nyloc nuts. Mount transfer pump on left hand side of body, P3 3/8 x 1/8 fitting is for fuel pump inlet. Connect all hoses to their correct points. Complete any remaining wiring, neatly cable tie wiring and hoses away from any moving parts or heat sources. Fill with fuel and check for leaks. Also check gauge and pump operation.

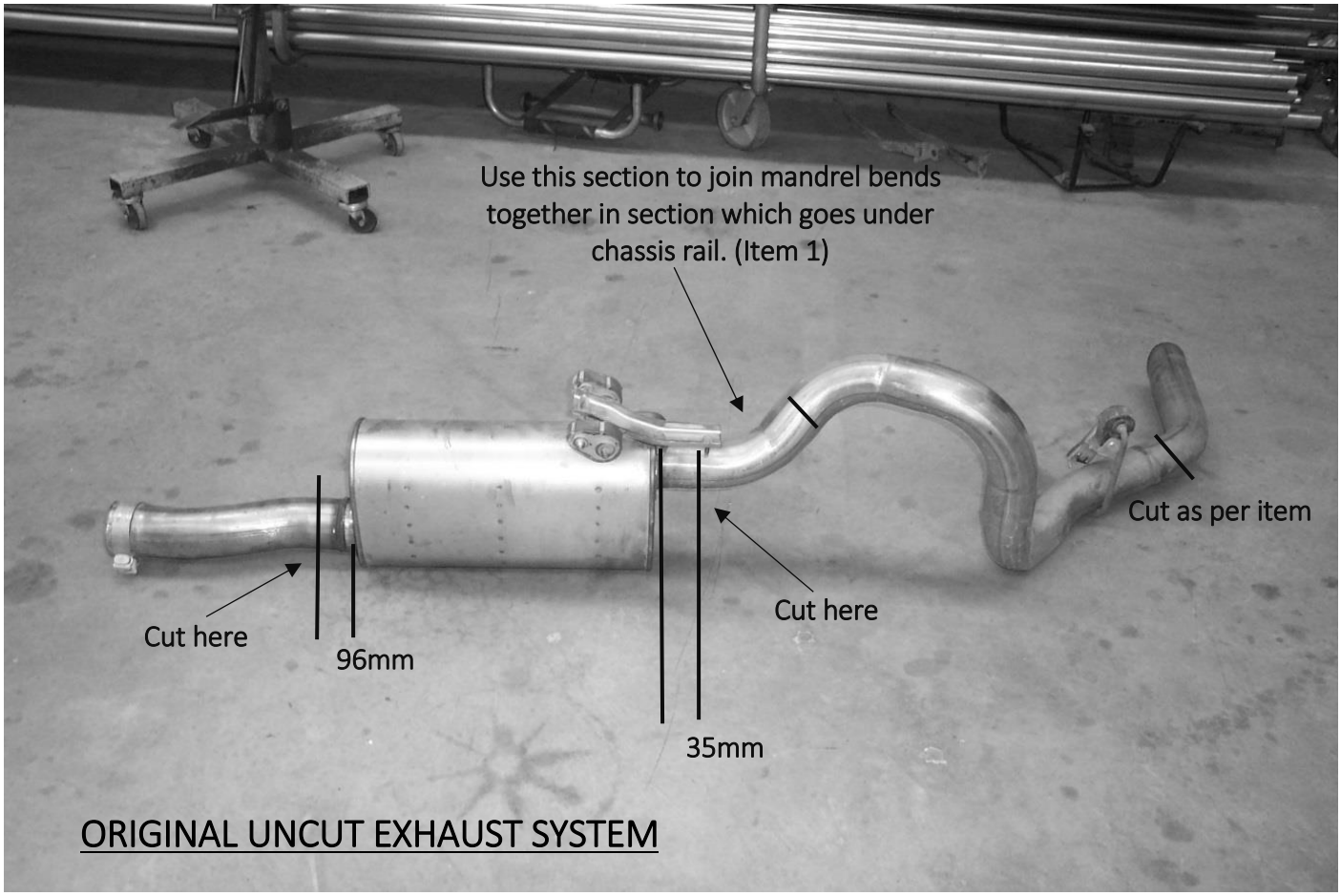
NOTE: USE A HIGH QUALITY SEALER ON ALL FITTINGS. E.G. PERMATEX 3J

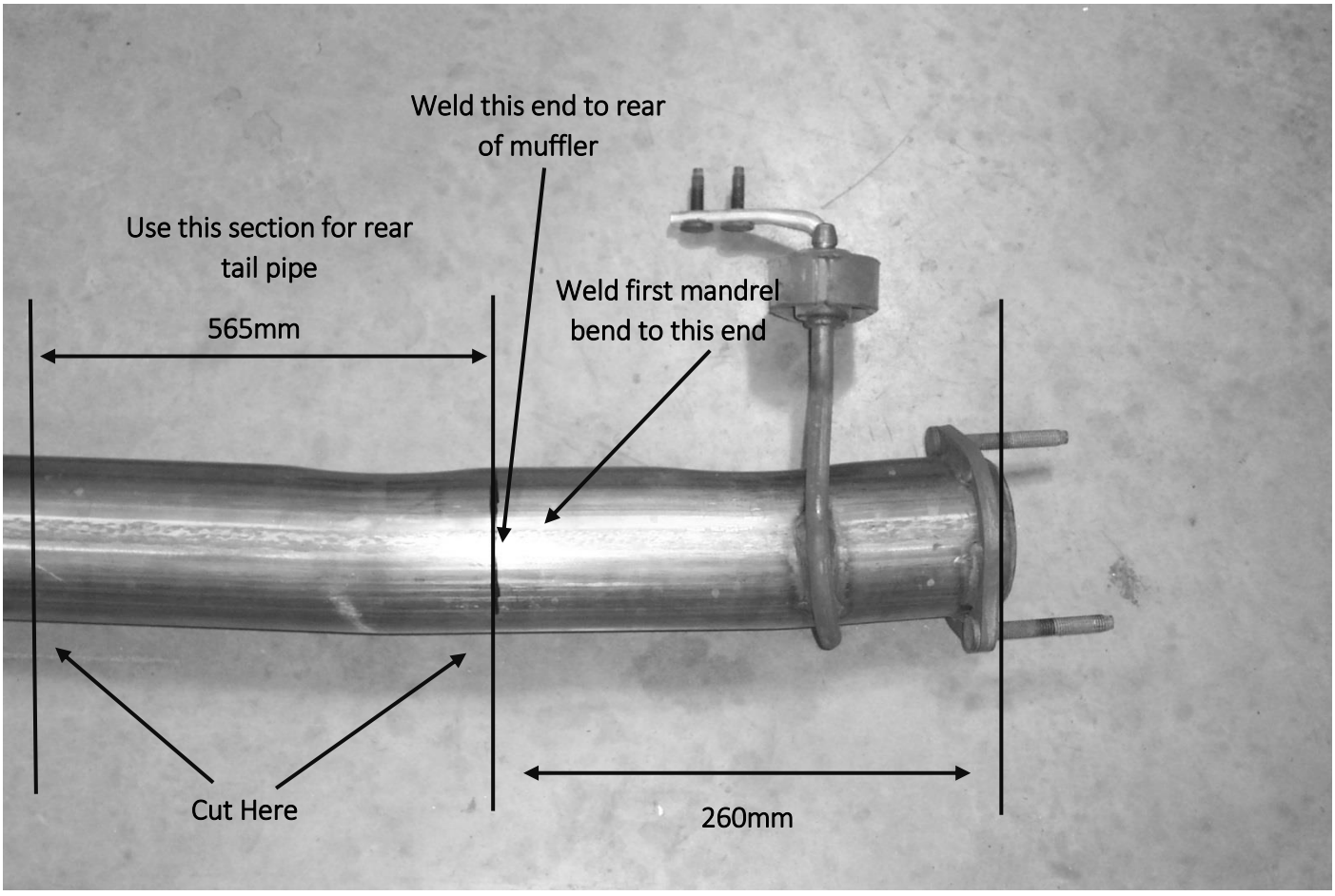
FITTING KIT CONTENTS F250DCSBA

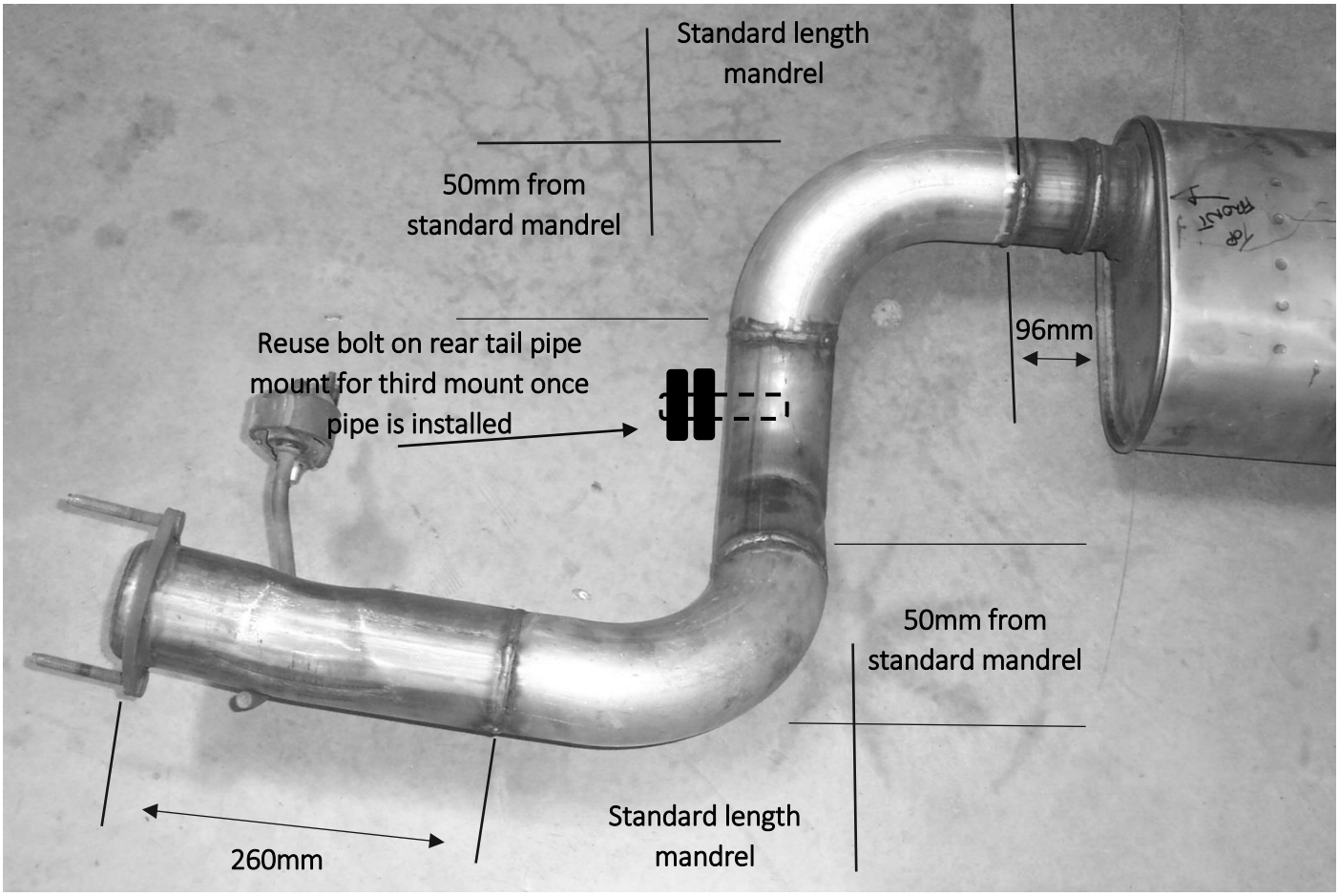
Brass:	Electrical:
○ 1 x P6 1/4 x 1/4 Elbow ○ 2 x P6 5/16 x 1/4 Elbow ○ 1 x P3 5/8 x 1/4 Straight ○ 2 x P6 5/8 x 3/8 Elbow ○ 1 x P6 1/4 x 1/8 Elbow	○ 1 x LRA-PG210 Switch/Gauge ○ 1 x 3mm Two Core Wire @ 5500mm ○ 3 x 6mm Blue Eye Terminals ○ 1 x Red Male Terminal ○ 2 x Red Female Insulated Terminals
Bolts / Nuts:	**Misc Parts:**
○ 1 x M10 x 30 Bolt ○ 4 x M10 Flat Washers ○ 4 x M10 Nyloc Nuts ○ 4 x M10 Nuts ○ 5 x M5 x 10 Pan Head Screws ○ 4 x TEK Screws (for Filler Neck)	○ 1 x Twin Filler Assembly #TFFSERAUX ○ 1 x Fill Pipe #FPFSERAUX ○ 1 x P3 5/8 x 1/4 Straight Screwed into Uncut Socket used as Fast Fill Reducer ○ 3 x 5 x 50 x 250 Rubber Strips ○ 1 x 50 x 5 x 100 Rubber Strips ○ 5 x 32 x 50 x 5 Strap Reinforcing Plates With 10.5mm Hole ○ 3 x 40 x 50 x 5 Plates With M10 x 40 Bolts Welded In ○ 2 x Tank Mounting Straps ○ 2 x 3 1/2" Mandrel Exhaust Bends ○ 1 x Exhaust Mounting Bracket
Hose Clamps:	**Cable Ties:**
○ 8 x 1/4" Hose Clamps ○ 4 x 5/8" Hose Clamps ○ 4 x 1 1/2" Hose Clamps	○ 7 x 7" Cable Ties ○ 8 x 11" Cable Ties
Sender:	**Pumps & Filters:**
○ 1 x VDO 220-004 Sender Set Up in Tank With 500mm Earth Lead Soldered On	○ 1 x Z14K Filter ○ 1 x Fuel Pump

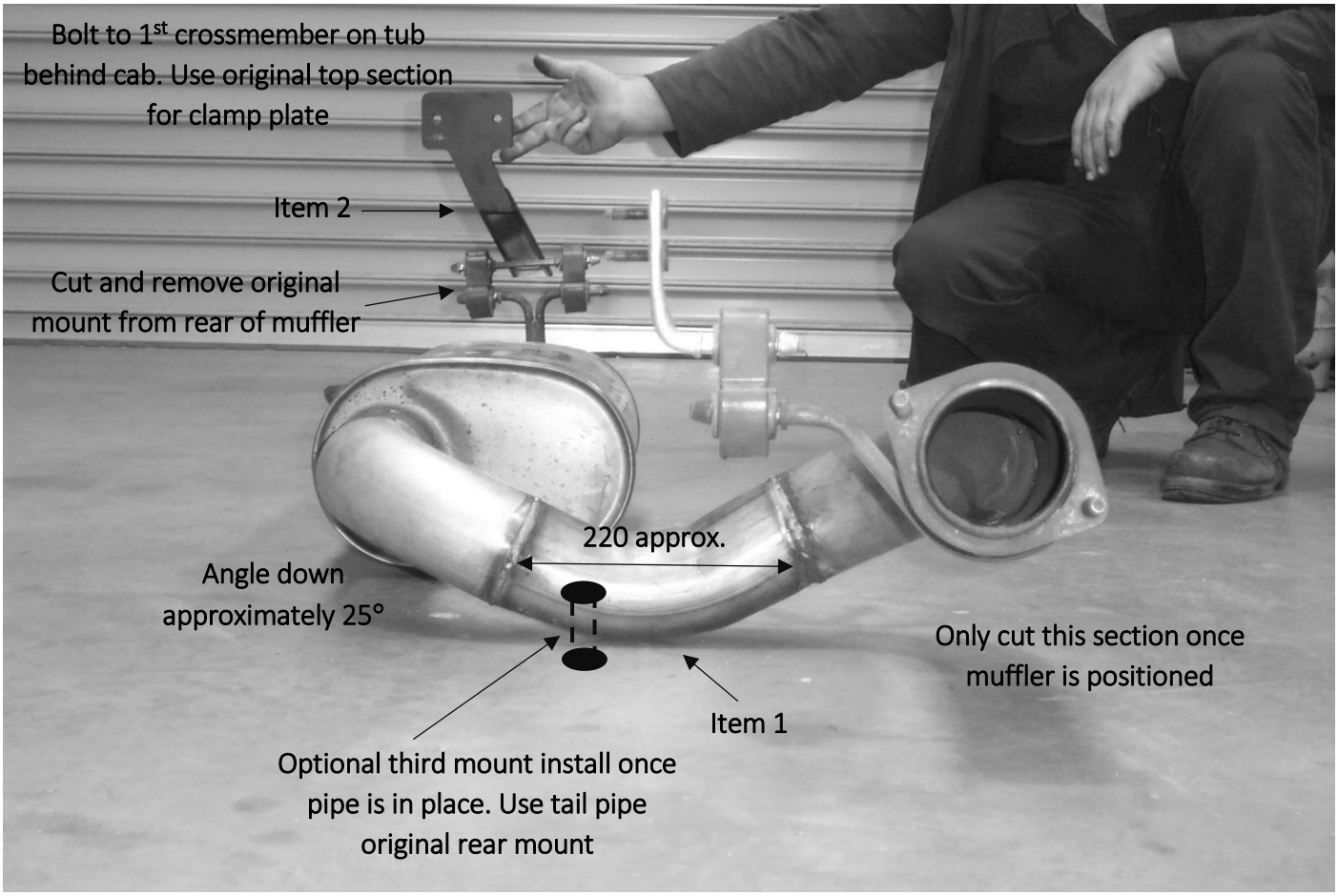
Hose:	14 Pages of Fitting Instructions Consisting of:
○ 1 x 6mm Hose @ 1500mm ○ 1 x 8mm Hose @ 700mm ○ 1 x 8mm Hose @ 1200mm ○ 1 x 44mm Hose @ 120mm ○ 1 x 44mm Hose @ 240mm ○ 1 x 16mm NTP Hose @ 400mm ○ 1 x 16mm NTP Hose @ 1200mm	○ 2 x Pages Fitting Instructions ○ 2 x Pages Fitting Kit Contents ○ 5 x Pages Exhaust Modification Pictures ○ 1 x WDSGPG210 Diagram

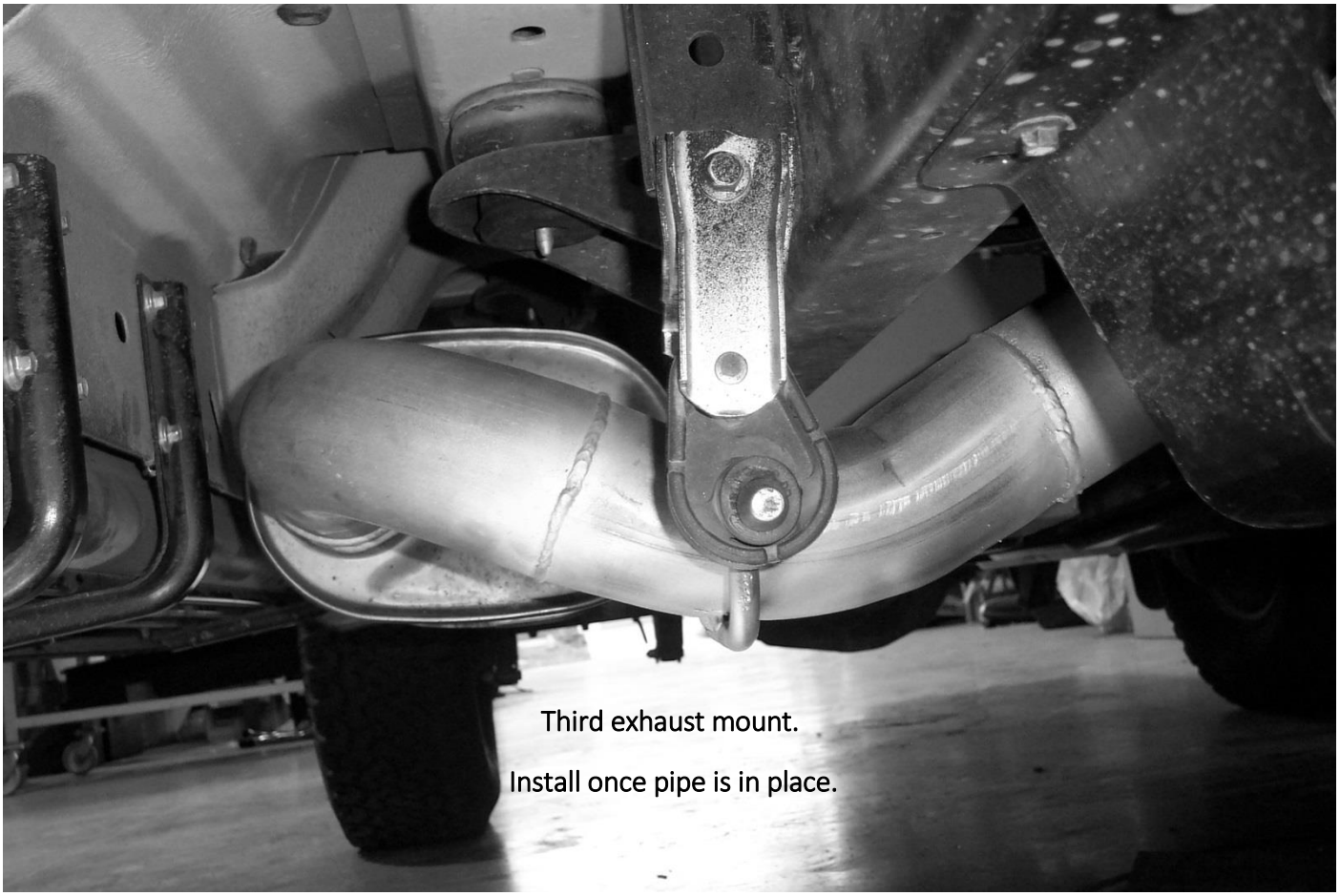
Kit Packed By_____ Checked By _____


Use this section to join mandrel bends together in section which goes under chassis rail. (Item 1)
Cut as per item
Cut here
Cut here
96mm
35mm
ORIGINAL UNCUT EXHAUST SYSTEM


Weld this end to rear of muffler
Use this section for rear tail pipe
565mm
Weld first mandrel bend to this end
Cut Here
260mm

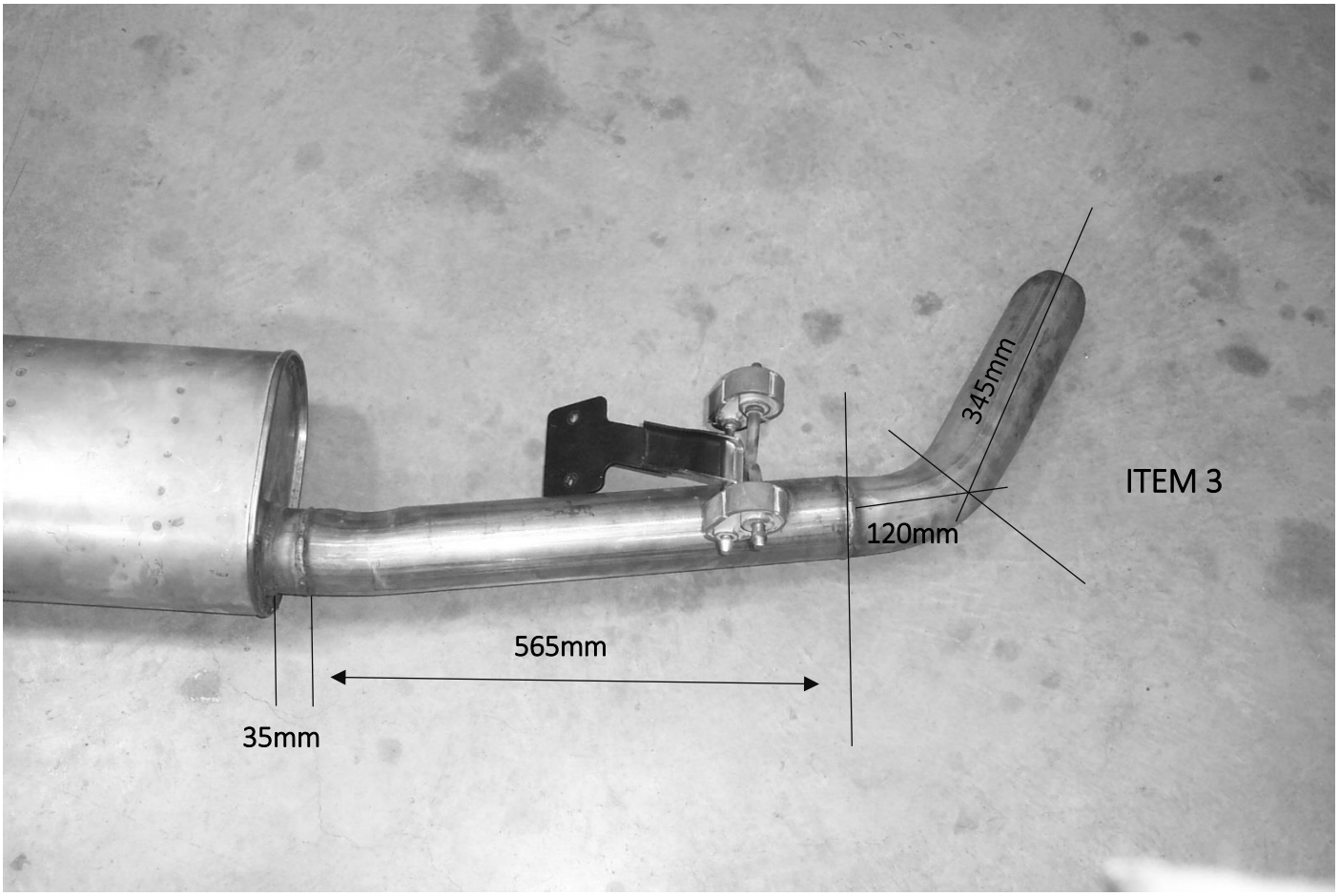

Standard length mandrel
50mm from standard mandrel
Reuse bolt on rear tail pipe mount for third mount once pipe is installed
96mm
50mm from standard mandrel
Standard length mandrel
260mm


Bolt to 1st crossmember on tub behind cab. Use original top section for clamp plate
Item 2
Cut and remove original mount from rear of muffler
220 approx.
Angle down approximately 25°
Only cut this section once muffler is positioned
Item 1
Optional third mount install once pipe is in place. Use tail pipe original rear mount

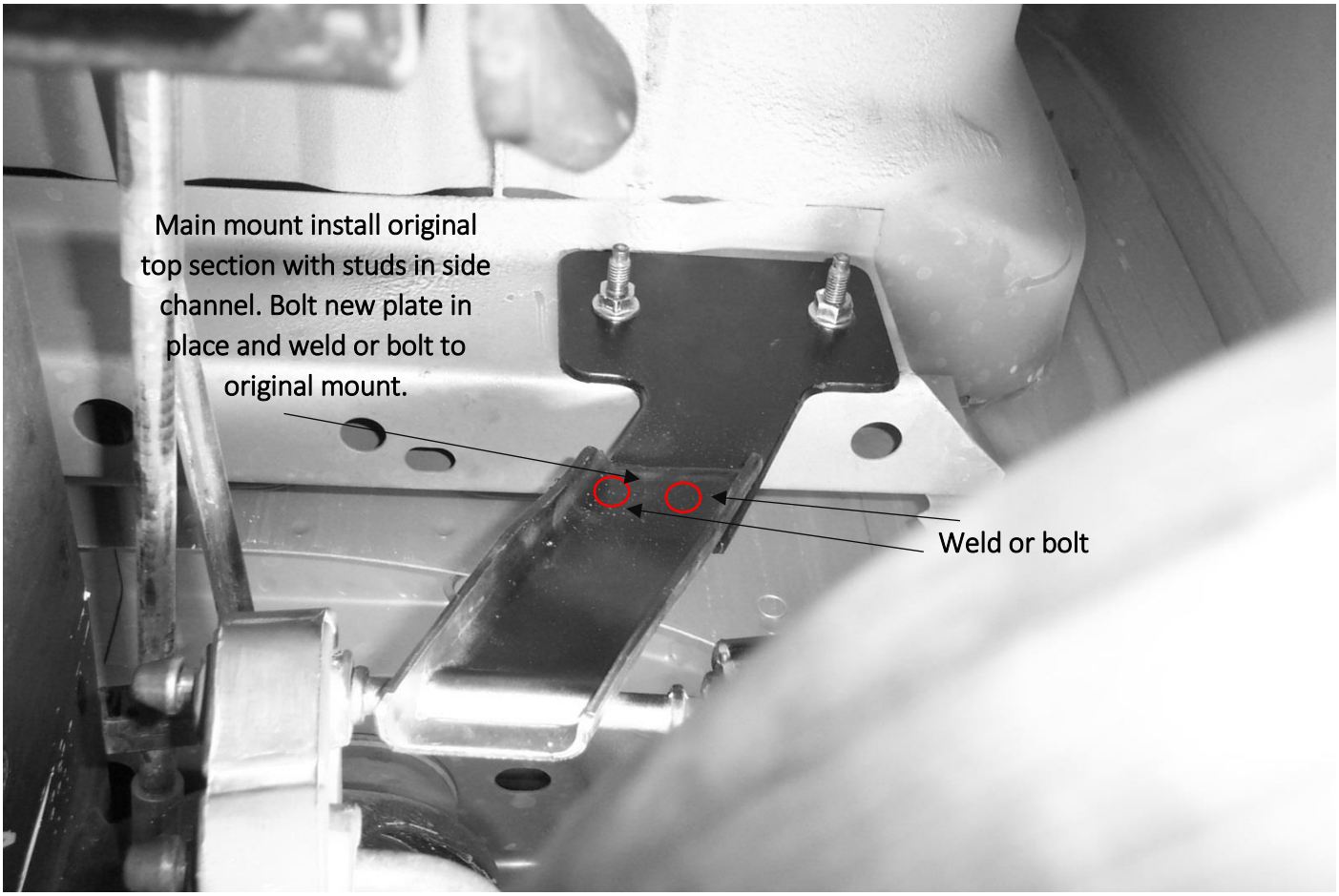


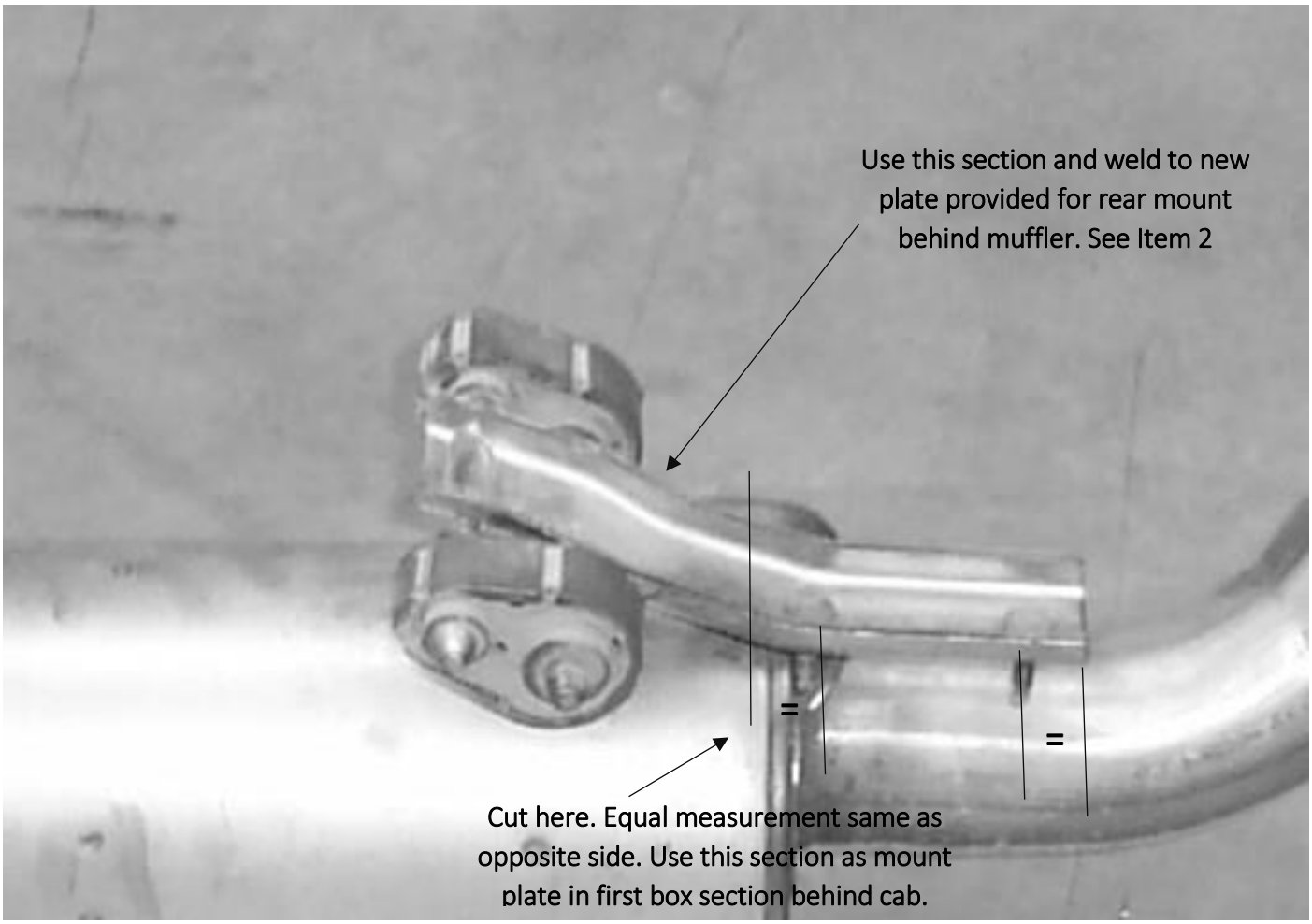
Third exhaust mount.

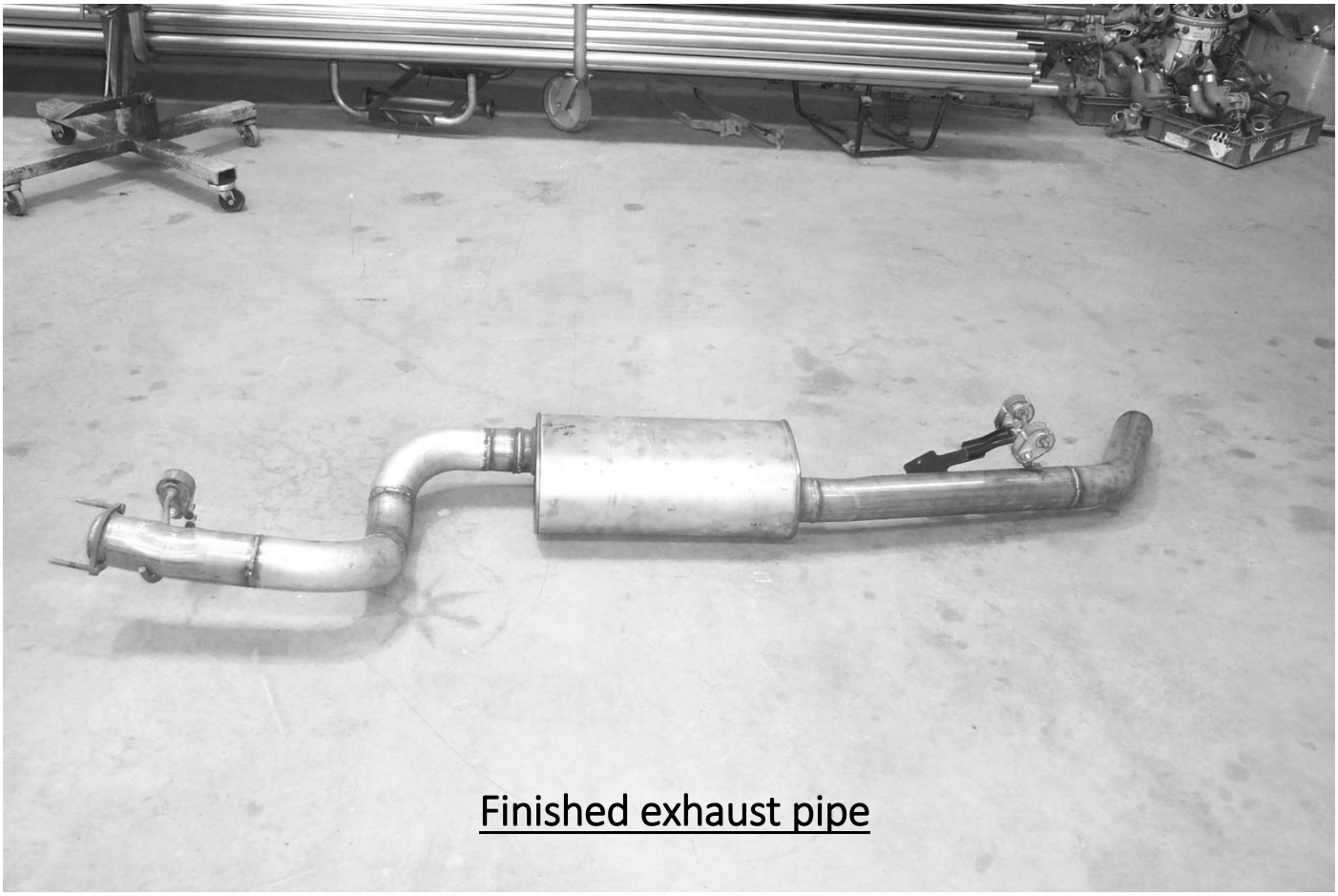
Install once pipe is in place.



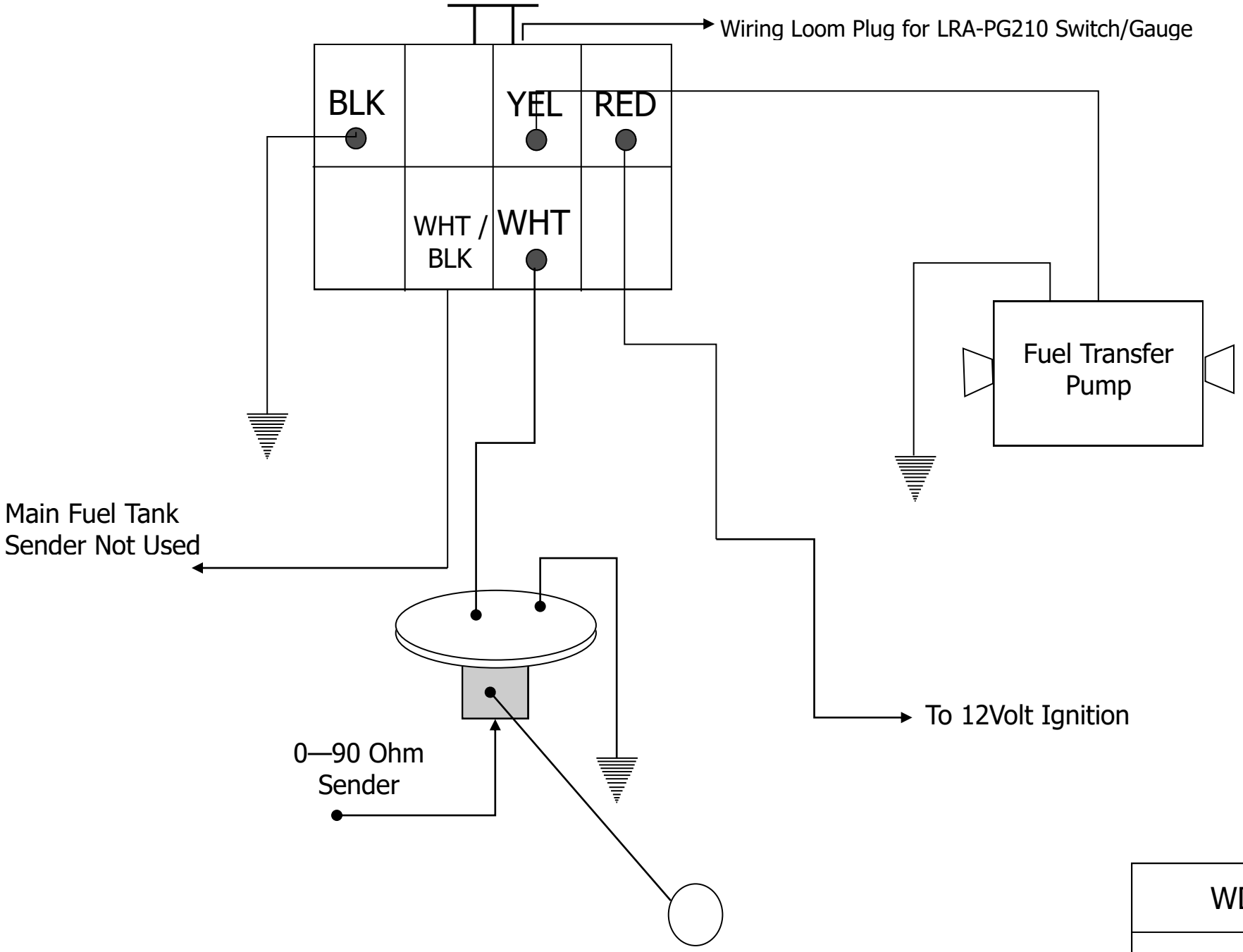
ITEM 3


Main mount install original top section with studs in side channel. Bolt new plate in place and weld or bolt to original mount.
Weld or bolt


Use this section and weld to new plate provided for rear mount behind muffler. See Item 2
=
=
Cut here. Equal measurement same as opposite side. Use this section as mount plate in first box section behind cab.



Finished exhaust pipe


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