# Installation Instructions for HCMA
# Holden Crewman VY/VZ
# 110L Auxiliary Tank

This auxiliary tank fits behind the rear axle and takes the place of the spare wheel. Fuel is transferred via an electric pump that will pump fuel from the auxiliary tank into the OEM tank. A combination switch/gauge unit will be located in a suitable position on 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 the fuel level. All GREEN lights showing FULL, one RED light showing EMPTY. When the pump is in operation and the tank is empty, the red light will flash. The pump will then run for 2 minutes and automatically shut off.

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

1. Remove the dash instrument facia and carefully mark out and neatly cut the hole for the switch/gauge unit. Continue to complete the wiring as per wiring diagram WDGSPG210. Run the twin core sheathed cable to the rear of the vehicle.

2. Remove the spare wheel and unbolt wheel winch. Fit the fuel transfer pump using the mounting bracket supplied to the top of the crossmember directly behind the standard fuel tank, leaving enough room for the auxiliary tank fill pipe.

3. Remove the standard filler neck and cut the standard fill hose @ 140mm from the tank end. This piece will be reused. Screw the P6 8mm elbow into the main tank fill pipe on the twin filler pointing the same direction as the fill pipe. Screw the P6 12mm elbow into the remaining socket in the filler neck box pointing down. Refit the new twin filler to vehicle including filler neck earth strap. Connect standard fast fill vent and main tank fill hose. The auxiliary tank fill pipe can now be positioned by feeding it in through the gap in between the chassis rail and the body. You must push the pipe partly on top of the standard tank to get it through the gap, then pull it back into position. This pipe can now be connected to the twin filler with the 140mm piece of 38mm hose. Use one of the short pieces of split hose to insulate the fill pipe from the shocker mount.

4. Using the tank for reference, locate the two factory holes in the rear rail and the one hole on the LHS and feed the appropriate M10 x 30mm bolts, with straps, into these holes, through the large holes in the rails. (The RHS mount hole needs to be drilled once tank is in position). Screw the P6 12mm elbow into the socket on the LHS of the tank and point it forward. The P3 8mm straight fitting goes into the socket in the front of the tank. This is the fuel pick up. (The remaining P3 12mm straight needs to be fitted after the tank is installed). Lift the tank into position and secure with nyloc nuts and washers.

5. Run 1100mm length 12mm hose through the cavity on top of the tank and connect to the P6 12 elbow on the LHS of the tank. Screw the P3 12mm straight into the socket on the RHS, top of the tank. Using the remaining 12mm hose and 'T' piece, connect the two fast fill vents from the tank and link up to the P6 12mm elbow on the twin filler. Connect the filler neck on the tank to the fill pipe with the 350mm piece of 38mm hose. Using 8mm fuel hose, fit the Z14 filter in line, between the P3 8mm straight fuel pick up and the inlet side of the transfer pump. The outlet side of the pump is connected to the P6 8mm elbow, in the main tank filler pipe of the twin filler.

6. Complete connection of wiring to the sender unit and fuel transfer pump. Neatly cable tie all hoses and wiring.

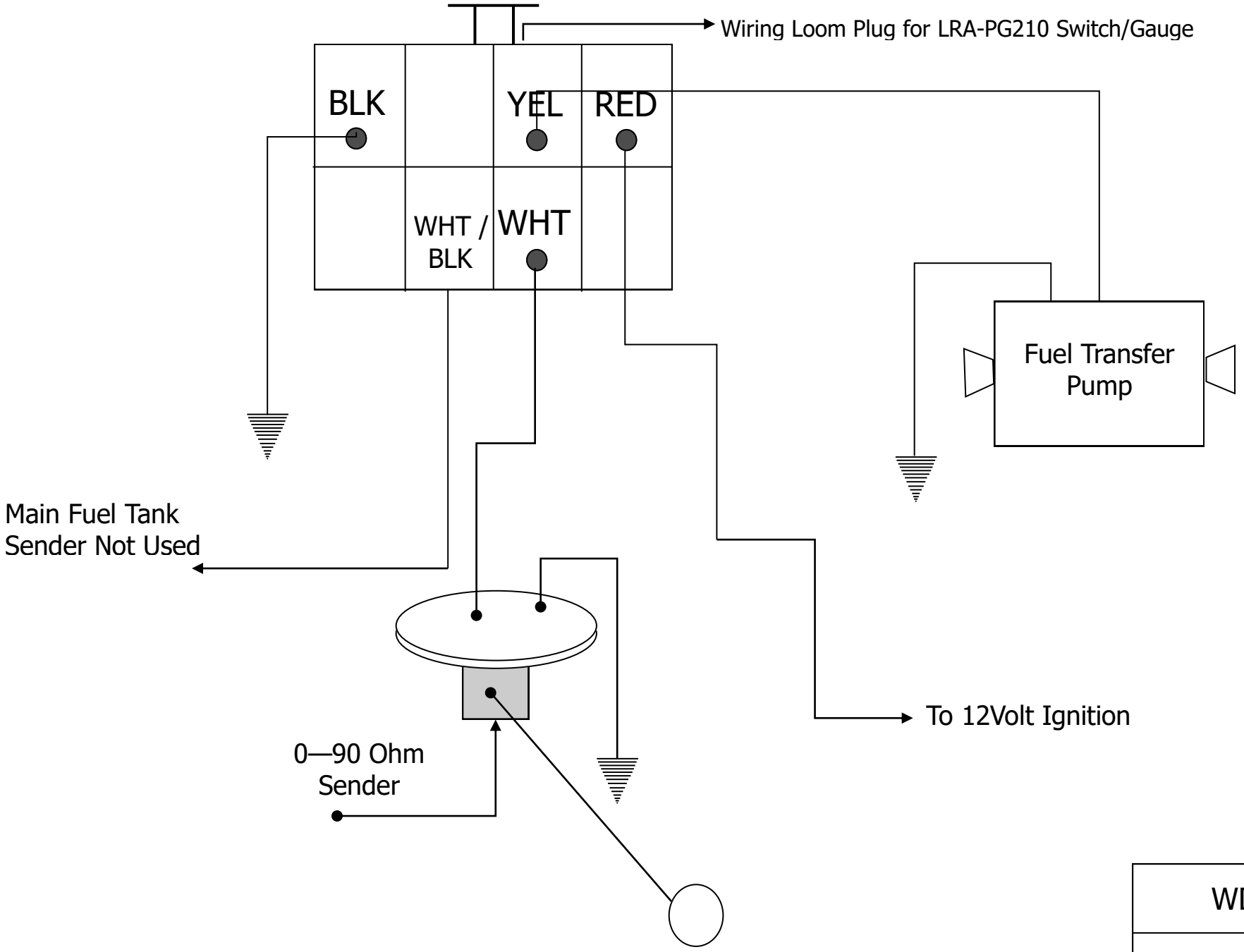
# FITTING KIT CONTENTS HCMA

Updated 2/22 TL

| Brass: | Electrical: |
|---|---|
| ○ 1 x P3 5/16 x 1/4 Straight<br>○ 1 x P6 5/16 x 1/4 Elbow<br>○ 1 x P3 1/2 x 1/4 Straight<br>○ 2 x P6 1/2 x 1/4 Elbow<br>○ 1 x 12mm T Piece<br>○ 1 x P3 5/16 x 1/8 Straight (for fuel pump) | ○ 1 x LRA-PG201 Switch Gauge Unit<br>○ 1 x 3mm Two Core @ 5000mm<br>○ 1 x Red Insulated Terminal<br>○ 2 x Red Eye Terminal<br>○ 1 x Blue Eye Terminal<br>○ 1 x Red Male Terminal<br>○ 4 x Heat Shrink @ 30mm<br>○ 1 x 4mm Blue Wire @ 300mm<br>○ 1 x 5 AMP Fuse<br>○ 1 x Fuse Holder<br>○ 2 x Fuse Holder Terminals |
| **Bolts / Nuts:** | **Misc Parts:** |
| ○ 1 x M8 x 25 Flat Washer<br>○ 4 x M10 x 30 Flat Washers<br>○ 1 x M8 Nyloc Nut<br>○ 4 x M10 Nyloc Nuts<br>○ 2 x M5 Washers<br>○ 1 x M5 Nut (For Earth on Filler)<br>○ 1 x TEK Screw (For Sender ) | ○ 1 x Twin Filler - TFHCMA With Back Flow Valve fitted<br>○ 1 x Steel Fill Pipe - FPHCMA<br>○ 3 x M10 x 30 Bolt 200 Strap<br>○ 1 x M10 x 30 Bolt 300 Strap (with 23mm Flange)<br>○ 1 x Fuel Pump Bracket weld M8 x 20<br>○ 4 x M10 Washer x 25<br>○ 3 x 38mm Hose Cut Down 1 Side @ 40mm |
| **Hose Clamps:** | **Cable Ties:** |
| ○ 6 x 1/4 Hose Clamps<br>○ 6 x 1/2 Hose Clamps<br>○ 1 x 1 1/2" Hose Clamp<br>○ 4 x 1 1/4" Hose Clamps | ○ 10 x 7" Cable Ties<br>○ 5 x 11" Cable Ties<br>○ 1 x 14" Cable Tie |
| **Sender:** | **Pumps & Filters:** |
| ○ 1 x 0-90 OHM Sender Set Up in Tank with 400mm Earth Wire | ○ 1 x Z14 Filter<br>○ 1 x Fuel Pump |

| Hose: | 5 Pages of Fitting Instructions Consisting of: |
|---|---|
| ○ 1 x 8mm Hose @ 1100mm<br>○ 1 x 38mm Hose @ 140mm<br>○ 1 x 38mm Hose @ 350mm<br>○ 1 x 12mm NTP Hose @ 1100mm<br>○ 1 x 12mm NTP Hose @ 1300mm | ○ 2 x Pages Fitting Instructions<br>○ 2 x Page Fitting Kit Contents<br>○ 1 x WDSGPG210 Wiring Diagram |

Kit Packed By_____ Checked By _____


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