# Instructions to convert Discovery 4 or 2010 on Range Rover Sport Steering wheel switch packs for use on Discovery 3 or pre 2010 Range Rover Sports

#### Version 1.01 (30/05/2014)

You will need a pair of the Discovery 4 or 2010MY on Range Rover Sport steering wheel switch packs. There are a small number of variations available as well as the respective BBS conversion PCB's.



These are for a Range Rover Sport and are Matt Black with polished ends on the buttons and have the heated steering wheel and Adaptive Cruise Control (ACC) buttons.

These part numbers may have been superseded but that is typically a change to the design of the electronics we will not be using.



Choose a side, both are the same process so it does not really matter which, but in this case we have chosen the right side, Give all the buttons a quick press and then lay it face down on a surface that will not damage the front and remove the 5 screws on the rear.

If you have to shake a screw out make sure that you grip it so the front does not come off.



Then with it face down, lift the rear section off the front by a mm or two and give it a little sideways wiggle before fully pulling it away. Along with the button pressing, this gives the best chance of assuring that the little white push rods stay in place in the front and do not stick to the silicone membrane. At worse you just have to put them back in place (bit fiddly) but DO NOT loose any and do not turn it upside down as they will all fall out.

If you have a heated steering wheel switch (right side) or ACC switches (Left side) you will also need to remove the 2 screws on each side of the switch taking the same care about the push rods



Pull off the silicone membrane(s) and if you have a heated or ACC side switchboard you need to prise that from its mounting (couple of plastic barbs) a little way, rotate it endways on and push it back into the hole behind it so it comes free and is also extracted when you lift the main board off its mountings.

This gives you the silicone membrane(s) the old circuit board(s) we will be replacing and the Rear plastic frame.



If you have a side switch board, this gets fitted to the rear plastic frame first. It is quite tight so must be pushed on very firmly until the plastic barbs latch and the Board is fully seated. The Grey ribbon cable needs to threaded through to the front.

Then refit the silicone membrane pushing the four pegs that hold it in place through the PCB and screw on the side cover / buttons ensuring the push rods are in the right place.



Then plug the 10 pin Header on the other end of the ribbon cable onto the matching 10 pins back of the main board as shown. Pin one is indicated on the Main board which should match up with an arrow on the Header and the Red stripe of the ribbon cable and ensure it is properly on all 10 pins Please note in this Picture although correctly oriented the red stripe is on the wrong side. Yours should be at the top



If you have a side switch board, surplus ribbon can be folded in the space behind the side switch board, but in either case the replacement Main PCB is then fitted just as the original Main PCB was, and again is a tight fit. Then refit the silicon membrane, place it on the back of the fascia and refit the 5 screws.

Then of course repeat for the other side.



Receiver	Discovery 3	RRS pre-2010	C2658 PIN No:	Usage
Red	Pink/Green	Orange/Green	7	12V
Black	Black	Black	1	GND
Brown	Brown	Brown	6	STEP-
Yellow	Yellow	Yellow	5	STEP+

There are two yellow cables on the connector (C2658) that plugs into the gearshift mechanism. Pin 5 and Pin 10. The yellow cable you are connecting to is the one from Pin 5.

Use the 3M scotchlock clips provided to tap into the 4 wires required or solder and tape them as preferred.

### Connector: C2658



Part No.: YPC902000 Colour: BLACK Cavities: 18WY Harness: CONSOLE HARNESS P7313

## **Description: Gearshift mechanism**

#### Location: Beneath center console

