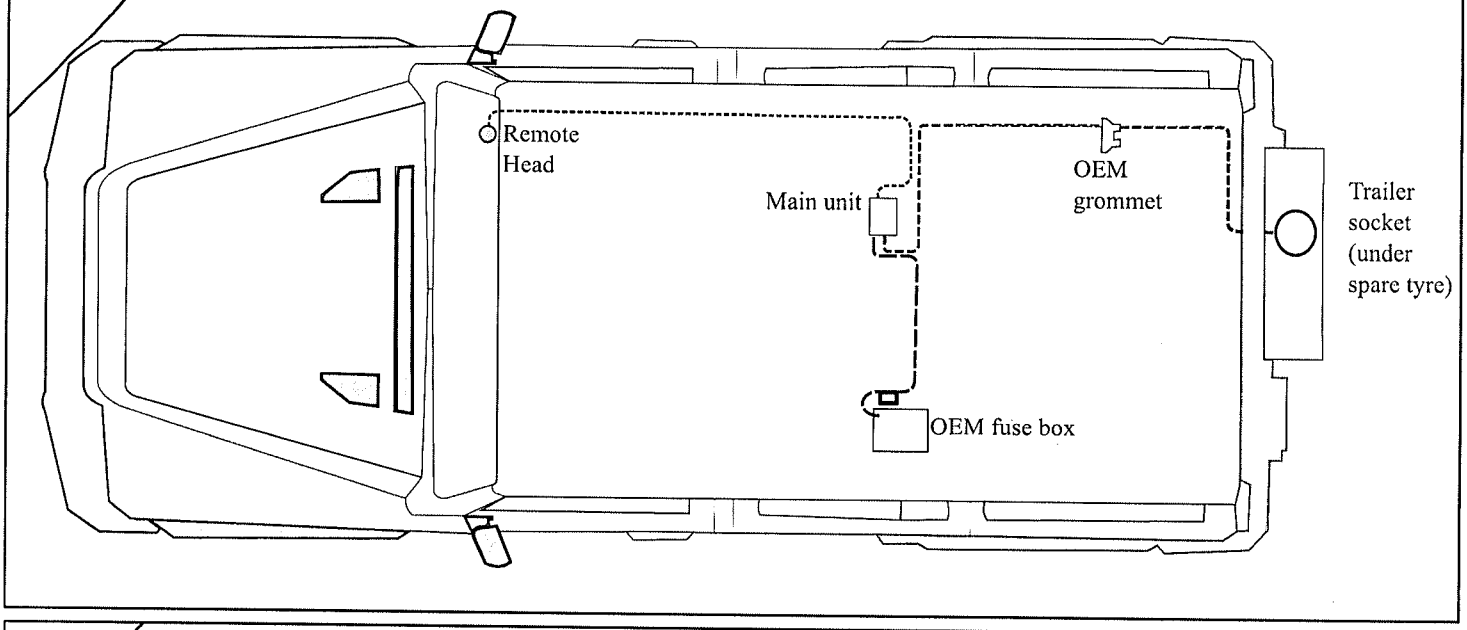
THE POWER OF REDARC®

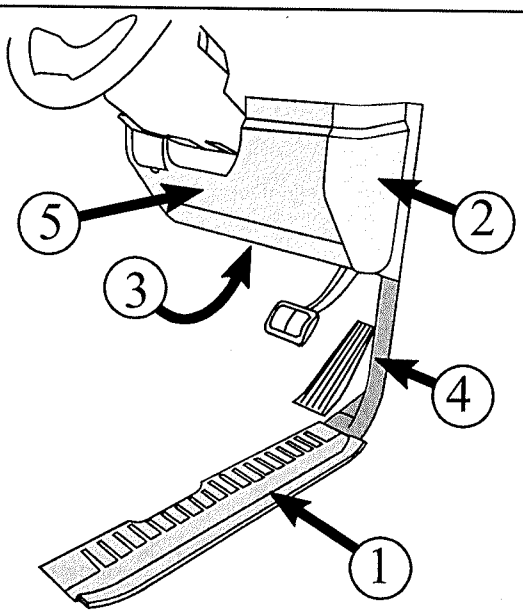
Electric Trailer Brake Controller Kit fitting instructions, suitable for:

INEOS Grenadier

EBDK-030



1



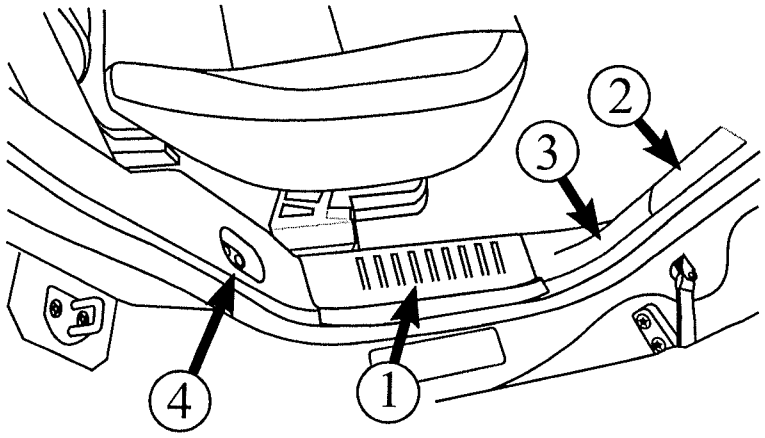
Remove driver's scuff trim (1) and dash end trim (2)

Remove lower under cover (3) including removing 3 fasteners

Remove kick panel (4), higher under cover (5) removing 4 fasteners

Under the scuff trim there is a seperate protective panel - (not pictured), remove 3 nuts and 4 torx bolts and set panel asside.

2



Remove rear scuff trim (1)

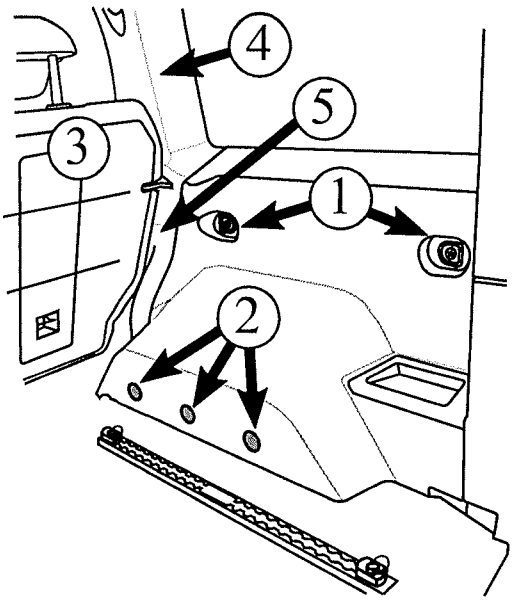
Remove concealed panel under scuff panel to expose vehicle wiring

Remove B-pillar upper panel trim (2)

Remove B-pillar lower panel trim (3) taking note of 4 Torx fasteners (two lower and two upper)

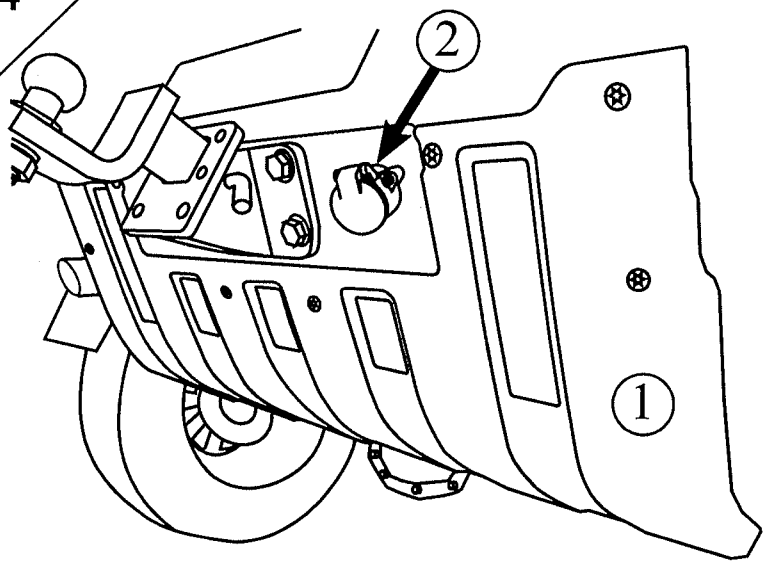
Undo three Torx fasteners in C-panel trim (4) and then seat belt bolt.

3



In the rear cargo area, remove the two tie down fixings (1)
Remove three nuts concealed behind black covers (2)
Remove rear vinyl floor trim (note do not need to remove floor tie down bracket and hoops)
Fold rear seat forward (3)
Remove C-pillar upper (4)
Remove C-pillar lower (5)
Now remove right hand boot trim complete

4

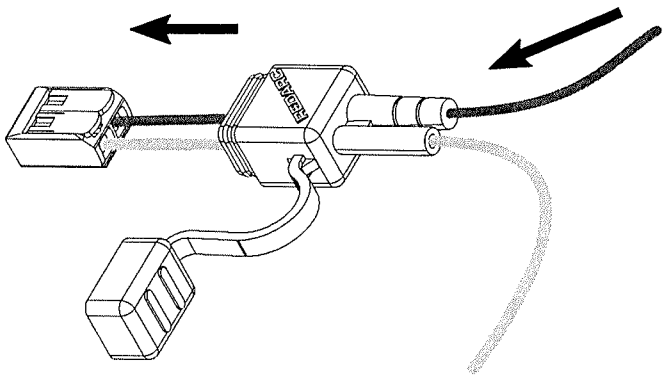


Remove rear stone guard (1)

Remove bolts for the exposed heat shield on the right hand side to give better access to trailer socket harness

Undo trailer socket fixings to pull through wiring (2)

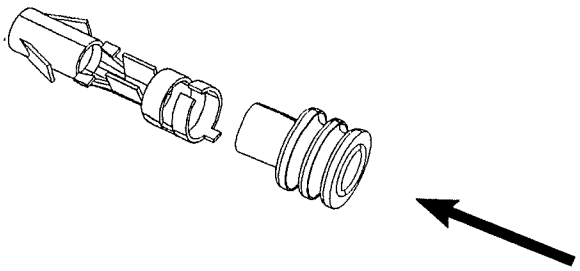
5



Using suitable terminal removal tool (tool with a min internal diameter of 4.15mm) remove PURPLE/ORANGE wire terminal (#6)

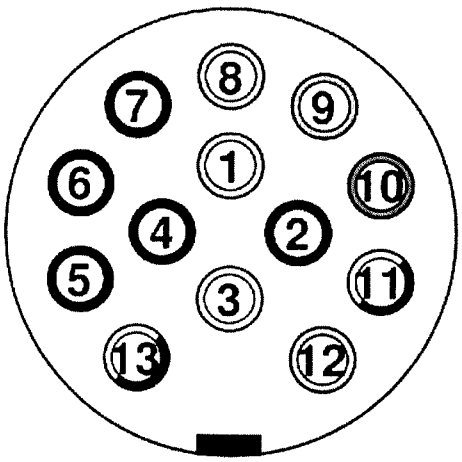
Cut the wire near the terminal and discard the terminal. Feed the wire through supplied WAGO terminal boot (already fitted with ORANGE wire) and strip end 10mm before inserting into WAGO as shown left. This connects the STOP lamp signal to the supplied harness.

6



Using a suitable crimp tool (TE 1901963-1) terminate both the supplied harness RED and BLUE wires, using seal (963292-1) and terminals (925661-1).

7

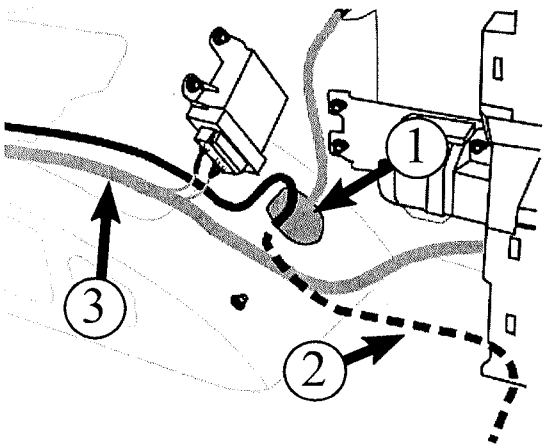


Fit the RED wire into the 13-pin trailer socket terminal #6 (PURPLE/ORANGE removed earlier), and the BLUE wire into location #12.

Re-assemble socket and refit.

Run the new harness forwards along the vehicle lighting harness, securing every 200mm.

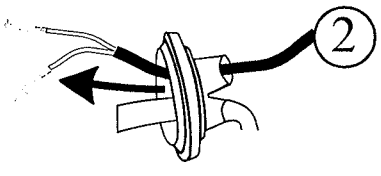
8



Locate vehicle grommet (1) at rear of wheel arch and cut the end of the unused nipple. Feed the twin-core cable (2) through as indicated below.

Continue following vehicle harness (3) forwards, securing with supplied cable ties every 200mm.

Ensure the cable and grommet make a good seal - use electrical tape or sicaflex if required.



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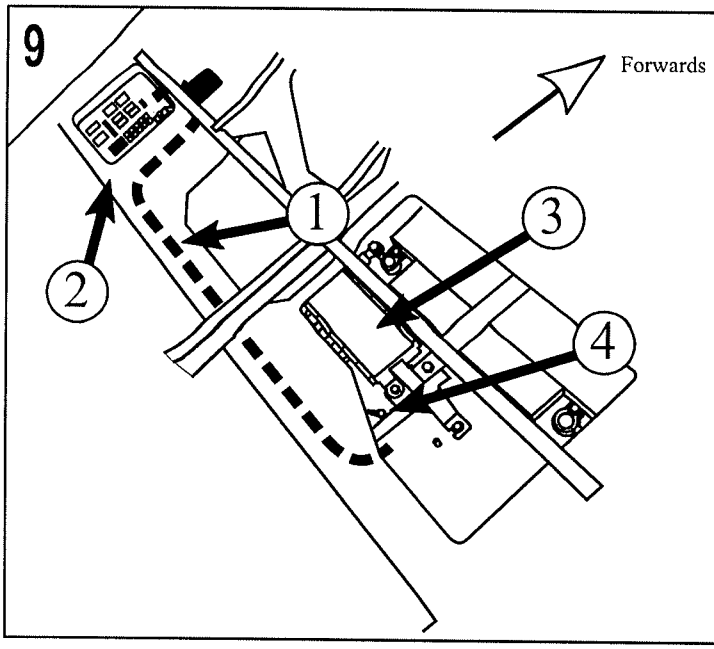
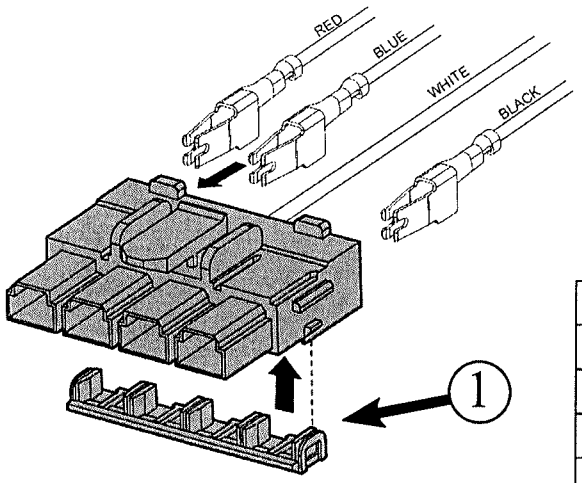


Under rear passenger seat, feed supplied fused BLACK cable (1) from main fuse box (2) under LHS seat, to the right hand side near covered fusebox (3) as indicated left.

NOTE - Do not connect to power until instructed later in step 17

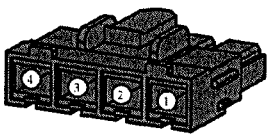
Using the supplied power connector (fitted with WHITE Earth wire), connect the WHITE wire eyelet to the indicated vehicle Earth fixing (4)

10



Insert the black fused cable terminal, and blue and red trailer socket wires into the Main Harness MOLEX connector unused location as indicated left
Snap-off and fit the locking tab (1) as shown left

Terminal	Wire Colour
1	Red
2	Blue
3	White
4	Black



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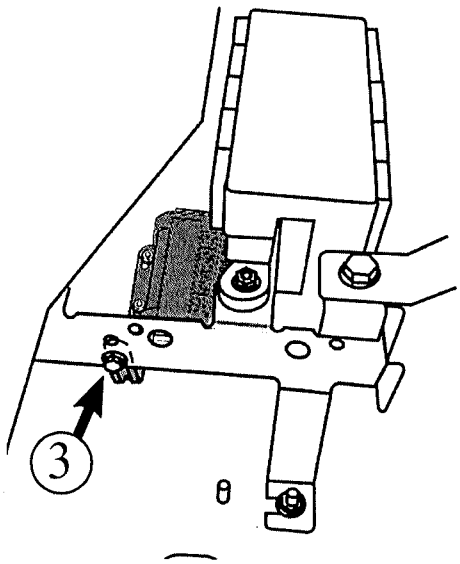
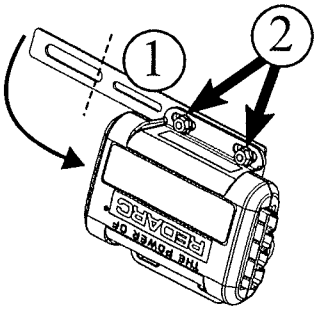


Fit the supplied bracket (1) and M4 fixings (2), attach to the Main Unit as shown below. Bend the top end of the bracket, just past the right angle, around the bottom of the top slot as indicated by the dotted line.

Connect the Remote Head cable and Power connector before fitting to the vehicle (under item 3 in Step 9) as shown left, using supplied M6 fixing (3)



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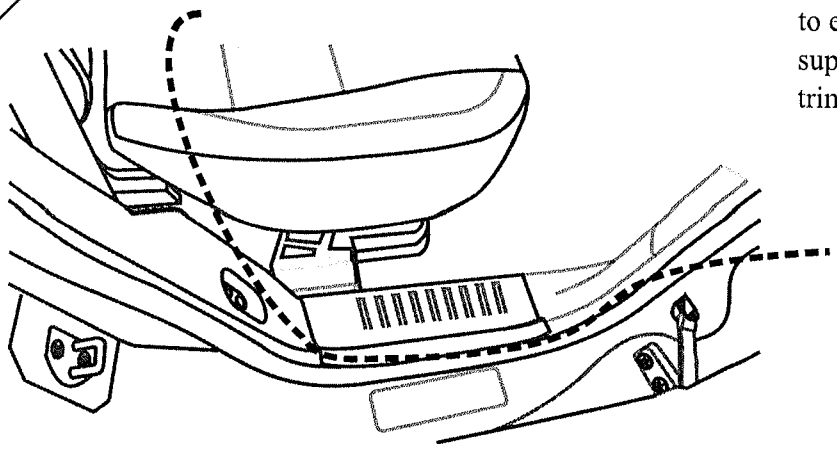
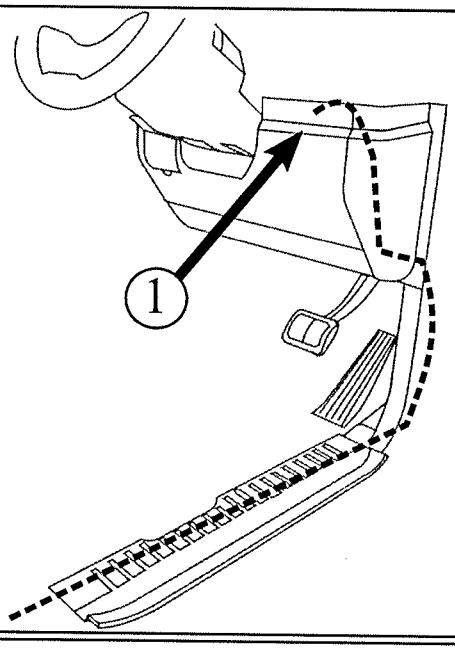


Feed the Remote Head cable (fitted with small MOLEX connectors) forward in vehicle, securing to existing vehicle wiring under the scuff trim using supplied cable ties (image shows path under refitted trim)

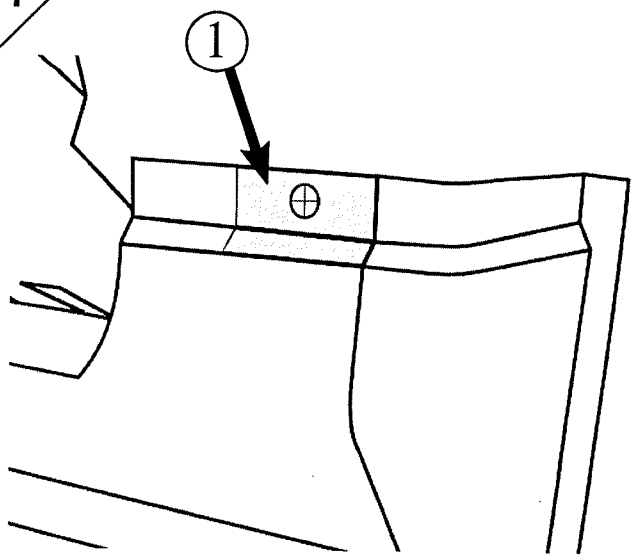
13



Continue forwards to RHS of steering column, securing to existing vehicle wiring every 200mm with supplied cable ties.

Ensure you allow some flexibility in length to connect Remote Head in idicated area (1)

14

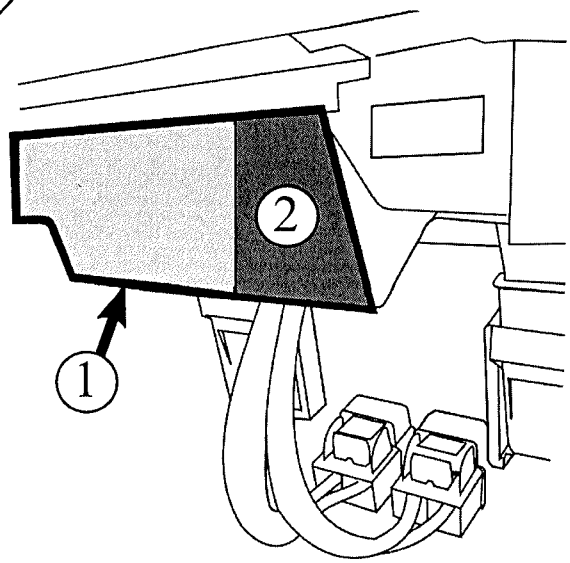


Carefully cut the template from the end of this document (check the scale is correct before using) and secure to RHS of understeering wheel trim as indicated by the highlighted section (1)

Note - trim indicated in location for clarity,

Drill pilot hole (3mm) and finish with a 10mm drill

15

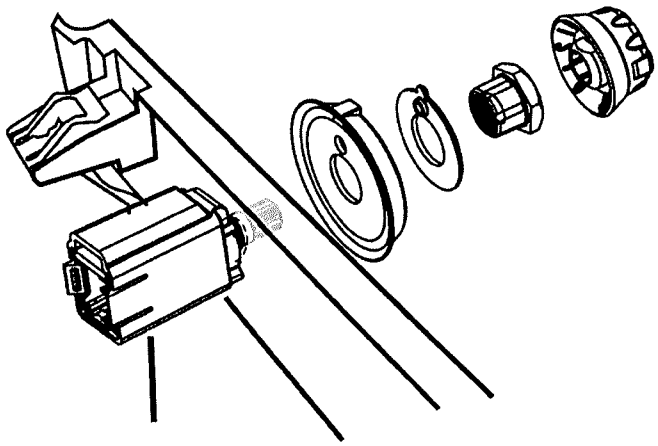


Trim "Template 2" from the end of this document and secure to the indicated section left (1)

Trim away the darker section (2) to allow the Remote Head body to fit when trim is refitted.

Note - confirm scale measure is correct before using

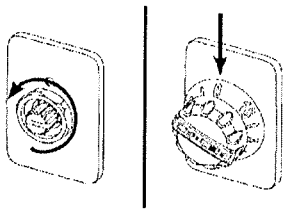
16



Insert the remote head assembly through the hole drilled above.

Apply the round rubber bezel (1) and grey ring (2) before securing with the clear nut (3) and tighten by hand using a 12mm socket.

To fit the knob, rotate the shaft counter-clockwise and fit the knob with '0' uppermost (aligned with the bezel pip)



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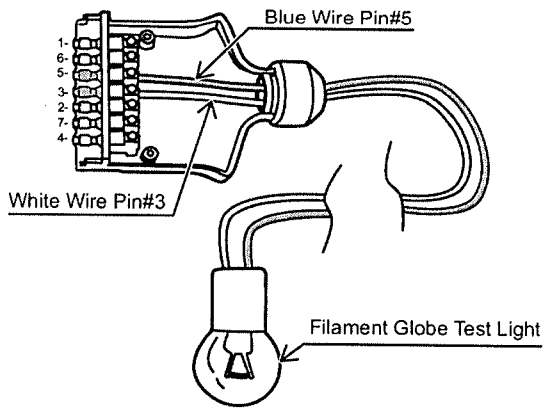

Connect the fused supply (fitted in Step 9) to 12V

Test the connection of the Electric Brake Controller by connecting a test load (5W min - 21W max) between Ground/Chassis and the terminal #12 fitted earlier.

If using an adaptor harness (resulting in 7-way connection), use the test load on the 7-pin socket as shown left.

The Remote Head will illuminate when connected correctly.

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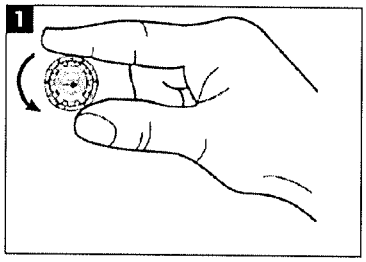
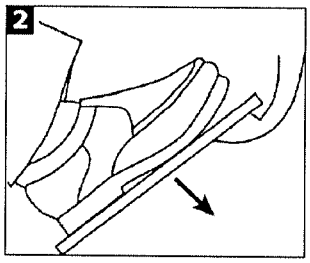
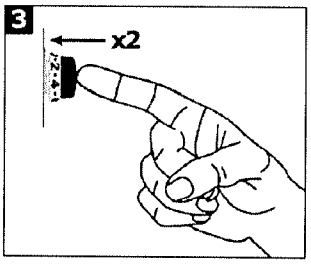
To confirm correct installation, perform a Mode Change - this can only be successful if power and brake sense are connected correctly



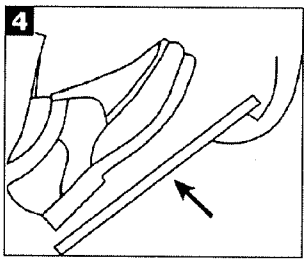
Rotate fully counter-clockwise to '0'



Apply and hold brake



Double-press



Release brake

19

Upon successful mode change, the Remote Head illumination will change from:

GREEN to BLUE (or GREEN/BLUE flashing) indicating Proportional Mode

BLUE (or GREEN/BLUE flashing) to GREEN indicating User Controlled Mode
Ensure the system is in Proportional Mode (BLUE or GREEN/BLUE flashing) at end of test

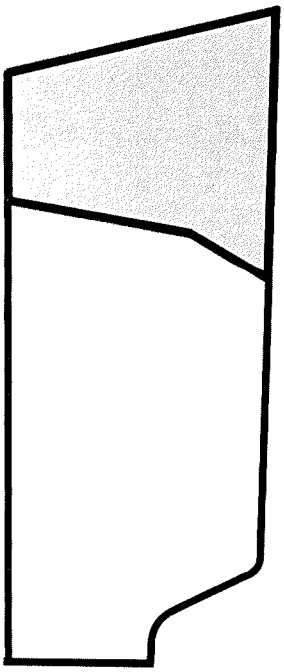
Disconnect dummy load
Refit all trim and check operation of switches
Place Owners Manual in glovebox

50mm

Check scale before using

50mm

Template 1
Remote Head body clearance template



Template 2
Remote Head location template