

INSTRUCTION MANUAL USER GUIDE ADDITIONAL CONTROLLER SYSTEM UNIT FOR SOSPENSION

Mod. MUDTECH LIFT PRO

MUDTECH ITALIA

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1 – PACKAGE CONTENT:

• N. 1 electronic control unit:

• N. 1 controller:

• Controller cable

• N. 1 Y-cable with connectors:

• N. 1 By-pass:



4











2 - INSTALLATION:

WARNING: It's strongly recommended the installation by a professional electrician.

Installation:

Part One: cable installation (common for Discovery 3 and 4)

- Disconnect the positive cable from the battery. (Please note, before detaching the battery cable, please shift the gear lever in "N" position, which can be done only when the car is on, thus to facilitate operations later).
- Remove the panel placed below the steering wheels column, by pulling the upper part outwards.
- Remove the two cross-head screws on front of the panel placed directly above the pedals, remove the panel, making sure to detach the right side of it from the central tunnel, with a slight traction. Please note that the panel is attached by means of two plastic pins inserted in two holes located on the pedals compartment floor.
- In this way we have free access to the steering column area.
- On the left bulkhead, in the upper part of the steering column, there are a series of 4 connectors placed side by side.
- Remove the first and last connector and insert them in the corresponding female connectors of the Y-cable. Insert the male connectors of the Y-cable in the corresponding female sockets attached to the bulkhead of the car.

Part two: controller installation

Discovery 3

- Remove any rubber storage unit which are located under the cigarette lighter, the ashtray and the 12 V plug.
- Remove the cross head screw in front of the handbrake command
- Remove the plastic cover located behind the handbrake
- Put the gear lever in "N" position and remove the gear lever top knob by pulling it upward
- Remove the entire centre console cover by simultaneously pulling the two outer sides and rear. ATTENTION TO THE CABLES UNDERNEATH. IT IS NOT NECESSARY TO DISCONNECT THEM, AS THEY ARE LONG ENOUGH TO MOVE THE COVER AND MAKE THE NECESSARY SPACE TO WIRINGTHE CONTROLLER.
- Route the controller cable starting point up to underneath the pedals compartment, until you reach the Y-cable, staying on the left side of the centre tunnel and trying to hide it as much as possible.
- Plug in the wire of the controller into the socket at the bottom of the it.
- Place the controller in his housing behind the handbrake
- Refit the centre console cover by simultaneously pressing the two outer sides and rear
- Tighten the locking cross-head screw of the tunnel in front of the handbrake.
- Replace the gear lever top knob by pushing it downward

Discovery 4

- Remove the two bottle holders placed in the centre tunnel.
- Remove the housing for the bottle holder by pulling it upwards.
- Lift the lid of the glove compartment of the centre console.
- Remove the small plastic bulkhead in the front outer part of the glove compartment.
- Unscrew the two cross head screws placed under the bottle holder housing, which hold the centre console cover
- Place the gear lever in "N" position and remove the gear lever top knob by pulling it upwards.
- Remove the entire centre console cover by simultaneously pulling the two outer sides and rear. ATTENTION TO THE CABLES UNDERNEATH. IT IS NOT NECESSARY TO DISCONNECT THEM, AS THEY ARE LONG ENOUGH TO MOVE THE COVER AND MAKE THE NECESSARY SPACE TO WIRINGTHE CONTROLLER.
- Route the controller cable starting point up to underneath the pedals compartment, until you reach the Y-cable, staying on the left side of the centre tunnel and trying to hide it as much as possible.
- The controller must now be positioned in the cavity opposite to the handbrake control as in the picture
- To do this, remove the plastic container from the upper support to pass the cable inside it (alternatively, you can drill the bottom of the container)



- Pass one end of the controller wiring into the cavity
- Plug in the wire of the controller into the socket at the bottom of the controller.
- Refit the centre console cover, being careful not to crush all the wiring underneath (just a bit of attention is needed) and insert the pin of the gear lever in its cover.
- Fix the centre console cover with the two screws placed under the bottle holder.
- Refit the gear lever top knob with a slight pressure downward
- Refit the outer front bulkhead of the glove compartment and close the lid.
- Replace the bottle holder housing, making sure it's in the correct position, by pressing slightly down
- Reposition the bottle holder.

Some images that can help:



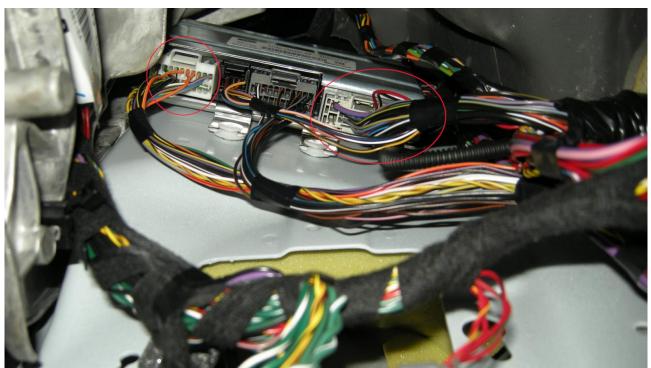












Part three: installing the control unit

- Plug the Y-cable and controller connectors into the appropriate sockets on the control unit in the pedals compartment.
- Before you put it back together, you should attach the positive cable to the battery, proceed with test the correct operation of the vehicle functions.
- Install the panel above the pedals and push the two pins into the two holes at the bottom of the pedals compartment, attach it to the right side of the centre tunnel with a slight pressure and tighten the two cross-head screws.
- Replace the steering column panel, by inserting the bottom in the provided holes and applying a slight pressure on the upper part.
- Attach the positive cable from the battery.

3 – OPERATION OF THE CONTROLLER

Command button:

The button is the main control of the MUDTECH LIGHT LIFT control unit controller. Pressing the button changes the height of the vehicle from a minimum of - 3.0 cm to a maximum of + 7.5 cm. All variations are NOT limited by speed.

The positions are:

- - 3,0 cm Use highway
- - 2,0 cm Use on the road/highway
- + 0,0 cm No variation compared to the standard height
- + 2,5 cm Use for light off-road or for space for large tires
- + 5,0 cm Use for continuous off-road
- + 7,5 cm Use for occasional off-road

The simple push of the button allows the passage from one height to the next and then go back.

Side switch for "Special"

In position "**UP**" the controller works in Programs mode and allows normal operation of the system with height variations.

In position "**DOWN**" the controller works in Special mode and allows you to operate the three methods described below:

- **Service**: allows you to keep the machine at a locked height during the tyre change and preventing the car from unrequired alignment and balancing changes.
- **Recovery:** Allows you to correctly balance the car and to drive it at a speed exceeding 50 km / h, in the event of suspension failure due to abnormality in receiving data from the Land Rover control unit.

WARNING: in case of failure due to lack of air suspension or mechanical failure, this mode cannot be used.

• **Extra Low**: Allows you to bring the car to pads height which remains the minimum height reached. Allows small movements of the car for entry and exit from the garage at reduced height or load cargo on the roof.

Monitor OLED 0,96":

The OLED monitor allows you to view the selected heights even under direct sunlight. The monitor is always on, even when the car is turn off.

In the + 0.0 cm position the monitor switches off after 10 seconds of inactivity

To make the monitor turn on again, simply pressing the button, at the second pressure, the heights are changed.

4 – By-Pass

The bypass is used in the event of a malfunction of the suspension system. If the suspension system detects an error:

- turn off the car
- open the door under the steering wheel
- remove the Mudtech unit
- insert the by-pass on the "Y" cable (photo)

In this way the system returns in original conditions but with the "Y" cable installed

Discovery 3 or RRS (2005-2009)

• If the error disappears: the malfunction is due to the Mudtech unit, contact the service center at: info@mudtech4x4.com

- If the error persists:
- 1. remove completely the "Y" cable
 - if the error remains:

the malfunction is due to the Lan Rover suspension system

• if the error disappears:

the malfunction is due to the Mudtech unit, contact the service center at: info@mudtech4x4.com

Discovery 4 or RRS (2010-2011)

turn on the car (error persist) turn off the car and then turn on car again

• if the error disappears:

the malfunction is due to the Mudtech unit, contact the service center at: info@mudtech4x4.com

- If the error persists:
- 1. remove completely the "Y" cable
 - if the error remains:

the malfunction is due to the Lan Rover suspension system

• if the error disappears:

the malfunction is due to the Mudtech unit, contact the service center at: info@mudtech4x4.com



Some images that can help:



5 - Warnings

The control unit Mudtech Lift Kit was especially designed for off-road use. Mudtech Italia disclaims any liability for improper use of the product and for driving the car outside specific environments, specially used for the circulation of custom made vehicles.

All products and services offered by Mudtech Italia are for amateur-sports use only.

For more information and advice please contact us at info@mudtech4x4.com

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