

# PLEASE READ BEFORE INSTALLING

# **ELEVATING BED SYSTEM – ELECTRIC**

# PLEASE NOTE:

Our beds can only be slept on in the lowest position. They cannot be used to elevate occupants. They cannot carry the weight of people in any other position than at the bottom of travel.

It is advised when the vehicle is being driven that the bed is in the lowest position. This helps with lowering the centre of gravity, stabilising the vehicle in case of an urgent evasive manoeuvre.

We advise to only use 4-6in Memory Foam mattresses. Domestic metal spring mattresses should not be used with our bed systems.

# **ELECTRICAL INSTALLATION**

The electrical installation has been designed to be very easy. By simply connecting an incoming 12V power source and connecting the output to the actuators, the system can be activated very quickly.

The controller is wired as below. If the cable run from the leisure batteries is long, the main 12Vdc should come via reasonably large cables to allow for voltage drops in the cable.



The output cables are sleeved in red and black. They correspond to the red and black of the actuators flying leads. The actuators flying leads will need to be extended to your exact needs.

Depending on the weight of the bed, the current consumption should be between 1A and 4A for all 4 actuators. The unit is fused with a 5A fuse. If the bed is very heavy, causing the fuse to blow, a 7.5A fuse can be used, but no bigger. If you get regular fuse blows, either reduce the bed frame weight or consult with us to discuss an upgraded system.

A 12V MN21/23 battery will need to be installed in the remote controller (not-included

#### **INSTALLING THE ACTUATORS**

Secure the lower mounting brackets to the floor, ideally in

Rivnuts or welded to frame. The top mountain brackets need to be as secure as possible, depending on how the bed frame is made this may vary.

Use the pins provided to secure the mounting brackets to the actuators, making use of the split pins to secure.

When in raised position, the bed should be "stabilised" to ensure no lateral movement whilst travelling.

In the sleeping, lower position, in some cases the bed may also need lateral support to avoid movement.

#### **NOTES ON RUNNERS**

Clearances of the runners to the securing wall is designed to be only a few millimeters. WE SUGGEST MOUNTING ON FLAT WOODEN UPRIGHTS, end of shower and kitchen walls are ideal. If the runners need to be repositioned for any reason, spacers should be inserted between the bearing case and the bed frame mount. Attention should be paid to ensuring the surfaces the runners are mounted on are absolutely vertical and parallel with one and other. Failure to do so can cause damage to the runners, the actuators or even the wooden verticals.

Also ensure the gaps where the proposed runners are to be mounted is consistent over the entire length. The runners have very tight tolerances and will jam if too tight.

Allen screw adjusters on the bearing block can be used to give some play.

Before attaching runners, the bed has to be checked to rise and fall evenly, so not to put stress on any parts. Everything should be loosely fitted during assembly but tightened prior to testing.

N.B.

EXTREME CARE SHOULD BE TAKEN DURING INITIAL TESTING AFTER INSTALLATION. THE ACTUATOR SYSTEM IS VERY POWERFUL. IF THE BED OR RUNNERS HAVEN'T BEEN INSTALLED COMPLETELY TRUE, SIGNIFICANT DAMAGE CAN RESULT TO BOTH THE SYSTEM OR THE VEHICLE.

## **OPERATION**

The installation should allow for full travel of the actuators. The bed system is not designed to be halted part way for sleeping on. The only safe place for sleeping is at it's lowest point. Putting body weight on the actuators at any other level and break the internal gearbox.

When in either fully up or down position, whilst there are microswitch limiters, it is good practice to press the middle square key on the remote to deactivate the controller and save power.

## IF YOU ORDERED A CUSTOM BED FRAME FROM US

A 15-18mm ply board should be placed over the bed frame to support the mattress.

The build procedure of bed frame is reasonably straight forward and self-explanatory. Note the horizontal braces are biased to have a larger gap above than below. Holes have NOT been drilled for the mounting of the actuators to the bed frame, as each vehicles geometry is different.



Ensure actuators are securely mounted, ideally to the steel of the vehicle, or can be mounted on blocks of metal if need be.

