



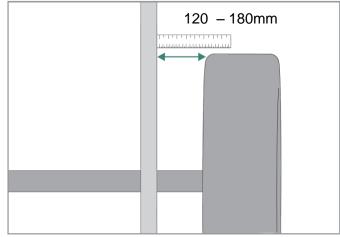
# PRECONDITIONS FOR FITTING THE MAMMUT SYSTEM

#### A.

Dimension between the inside of the tyre and outside of the chassis must be between 120mm & 180mm.

If this distance is more than 140mm then you will need to purchase spacers.

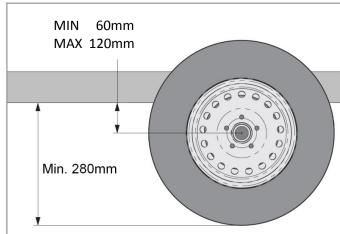
If this distance is greater than 160mm you will also need to purchase longer mounting bolts.



## В.

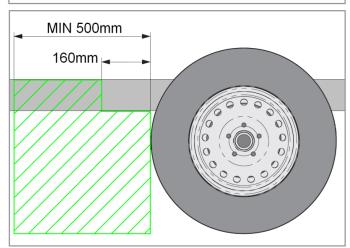
The bottom of the chassis to the wheel centre must be between 60mm & 120mm.

The chassis height above the ground must be greater than 280mm.



#### C.

The area ahead of the wheel, shown as the green shaded area in the diagram on the right, must be free of cables, hoses and other components.



These conditions must be met or the Mammut system must not be fitted.

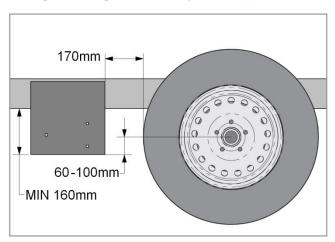




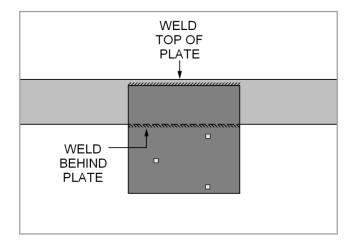
#### INSTALLATION

- 1. Position the 8mm thick mounting plate on the chassis with the rear edge 170mm from the front of the tyre and clamp in position. The end with two holes must be nearest the wheel.
- 2. Adjust the height so that the bottom of the mounting plate is 80mm below the centre of the wheel or as close as possible. Trim the top of the plate if necessary.
- **3.** Check that the bottom of the mounting plate is at least 160mm below the chassis. Move the plate down to achieve this if necessary.

Complete all measurements with the caravan sitting on the ground, not jacked up!



**4.** Weld the mounting plate to the chassis.

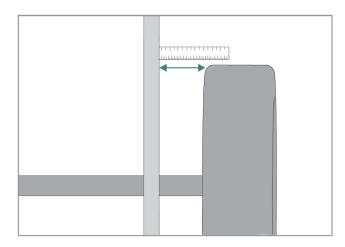


**5.** Measure the distance between the inside of the tyre tread and the outside of the chassis.

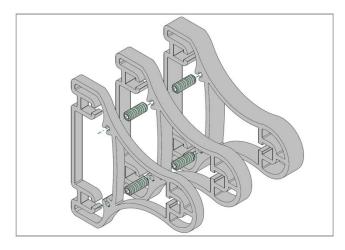
If this measurement is greater than 160mm you will need to use longer mounting bolts.

If this measurement is greater than 140mm you will need to use spacers between the mounting

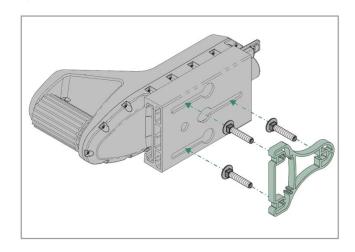
plate and the Mammut drive. Spacers are available in 10, 15 & 20mm thickness.



**6.** If more than one spacer is required on each side, join them together using the plastic setscrews.



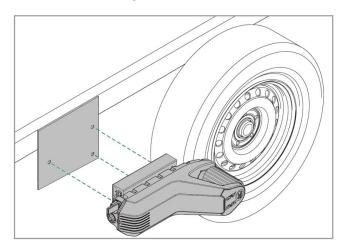
7. Insert three M12 x 50 mounting bolts in the back of the Mammut drive and slide into position. NOTE: Longer bolts will be required when using spacers thicker than 35mm.







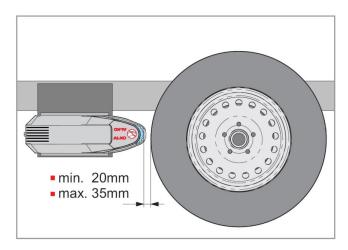
**8.** Insert the bolts into the mounting bracket, fit the washers & hand tighten the nuts.



9. Position the Mammut drive wheel at the correct distance from the caravan wheel (20 – 35mm) then tighten the nuts to 86Nm with a torque wrench.

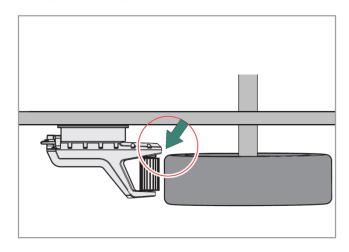
Use the supplied 20mm x 20mm x 30mm wooden block to check the spacing.

Check the spacing with the caravan sitting on the ground, not jacked up!



 Check that there is clearance between the inside of the Mammut drive roller and the wheel.

If there is not enough clearance a thinner spacer is required – Step 5.



#### NOTE:

The installation steps here must be carried out on both sides of the caravan.

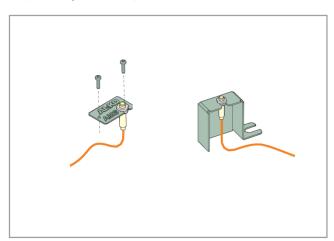
Each side is a mirror image of the opposite side.



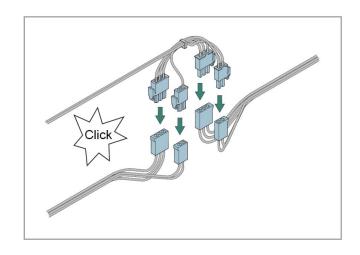


### **ELECTRICAL INSTALLATION**

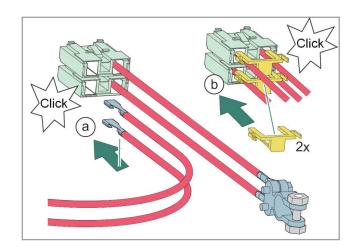
- 1. If your caravan does not have a battery, a suitable location for a battery must be determined and the battery installed.
- 2. Make a hole in the floor near the battery for the cable. Check that there are no electrical cables, chassis cross members or components under the floor near the hole before drilling!
- 3. Route the cables under the floor from the Mammut drives on each side along the chassis cross members to the hole. Ensure that the cables can not chafe then fasten the cables with cable ties or suitable fasteners.
- 4. Mount the "enabling sensor" somewhere accessible on the drawbar. Use the supplied plate to mount on a flat surface or use the bracket to mount directly on the drawbar depending on the space available.



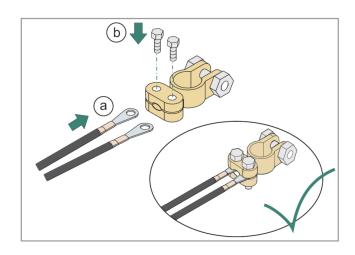
- **5.** Route the cable from the enabling sensor to the hole. Fasten the cables with cable ties or suitable fasteners.
- **6.** If the cables are excessively long, you may shorten them. Make sure the red & black cables are cut to the same length on both drives (each side).
  - Fit the supplied terminals to each cable and crimp firmly.
- **7.** With the cables feed up through the hole into the caravan, connect the cables as shown below.



- **8.** Plug the red positive cable connectors into the fuse holder until they click in place.
- **9.** Push the retainers into the fuse holder until they click in place.



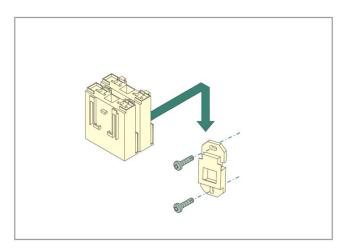
**10.** Connect the black negative earth cables to the battery connector and tighten the bolts.





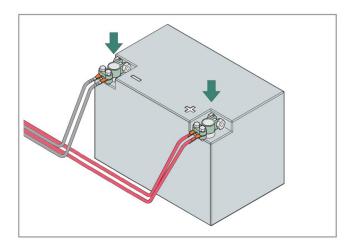


**11.** Screw the plastic mounting bracket to a surface near the battery (not on the battery!) and fit the fuse holder.



- **14.** Seal the cable hole near the battery with a suitable sealant.
- **15.** Read the operating instructions before attempting to use the Mammut system.

- **12.** Connect the cables to the battery:
  - Red cables to the positive terminal.
  - Black cables to the negative terminal.



**13.** Plug the flat 60AMP fuses into the fuse holder.

