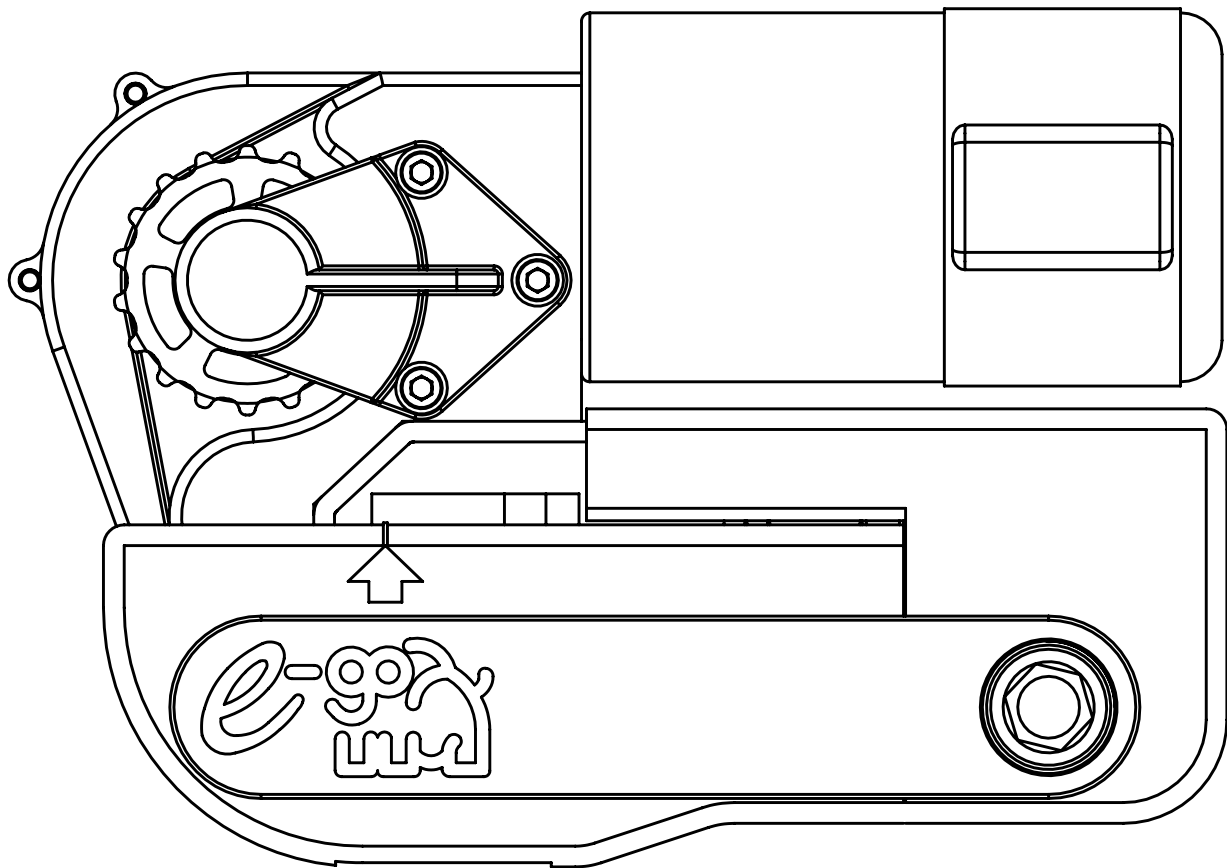




purpleline®

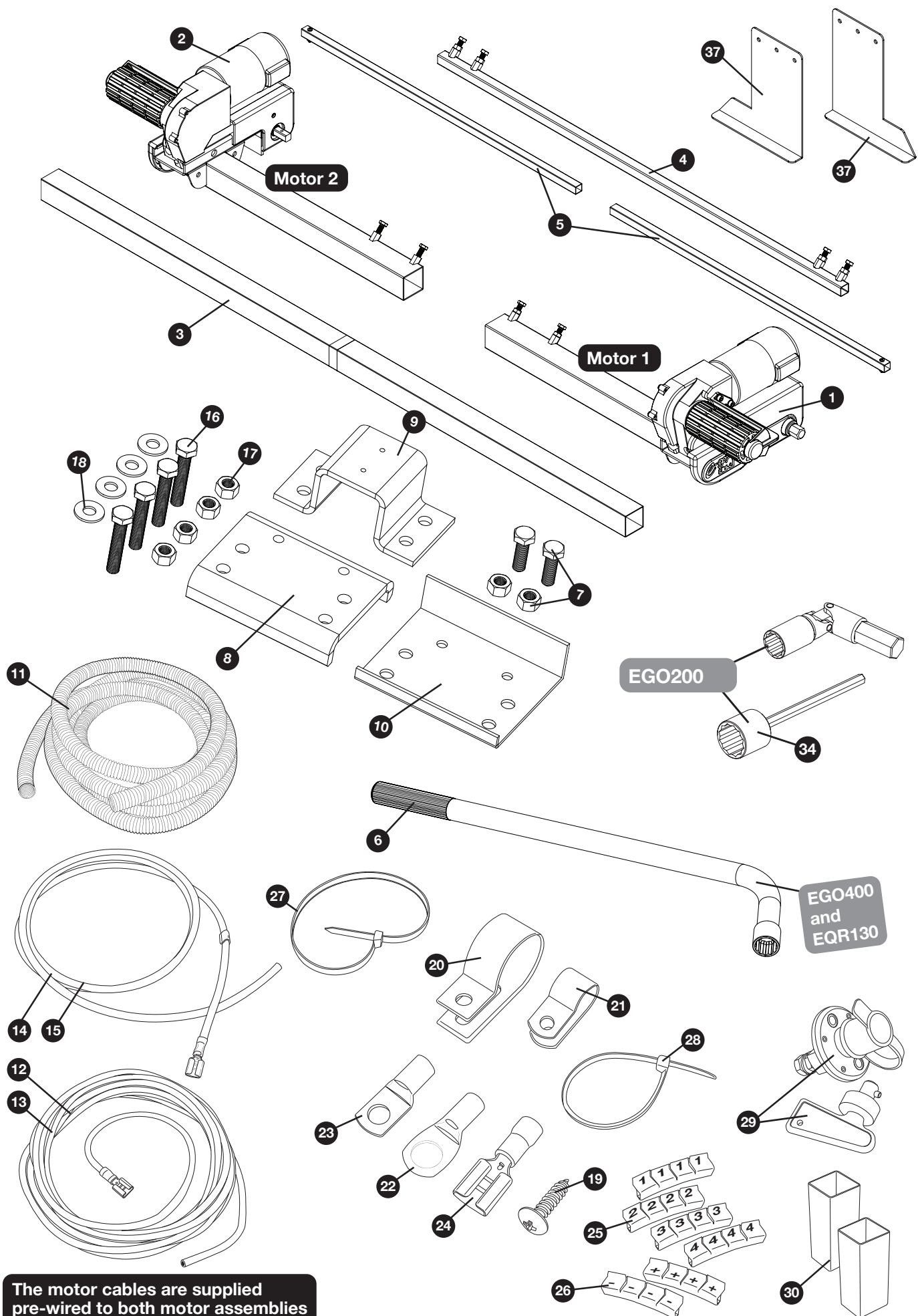
EGO200, 400 and EQR130 CARAVAN MOVERS



Mechanical Installation Guide and User Manual

Ref: CM-UM-0321-Rev.A AUS

Package Contents (Fig.A)



The motor cables are supplied pre-wired to both motor assemblies

Parts Identification & Fitting Diagrams

Fig.1

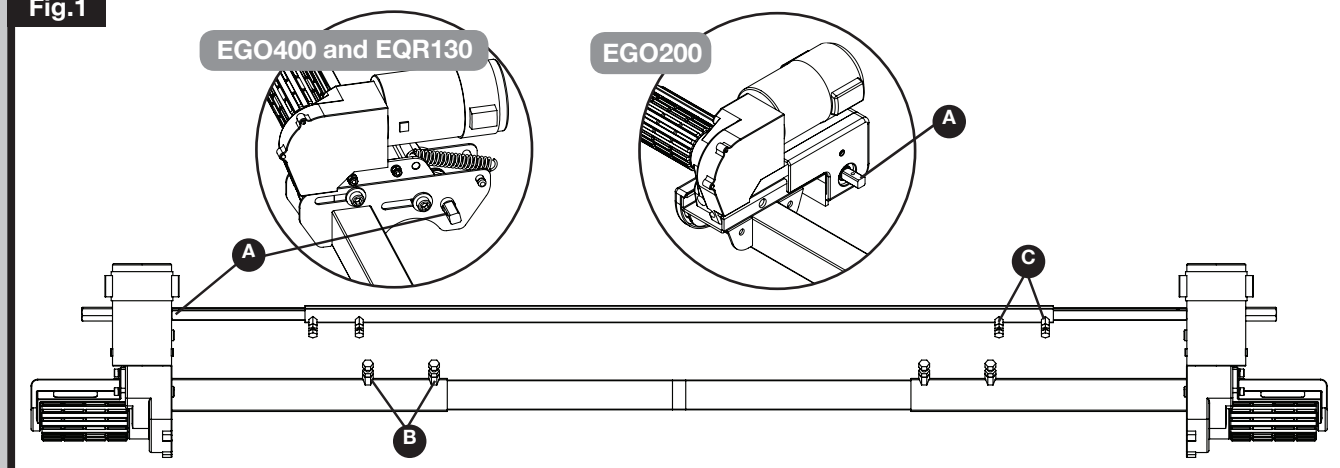


Fig.2

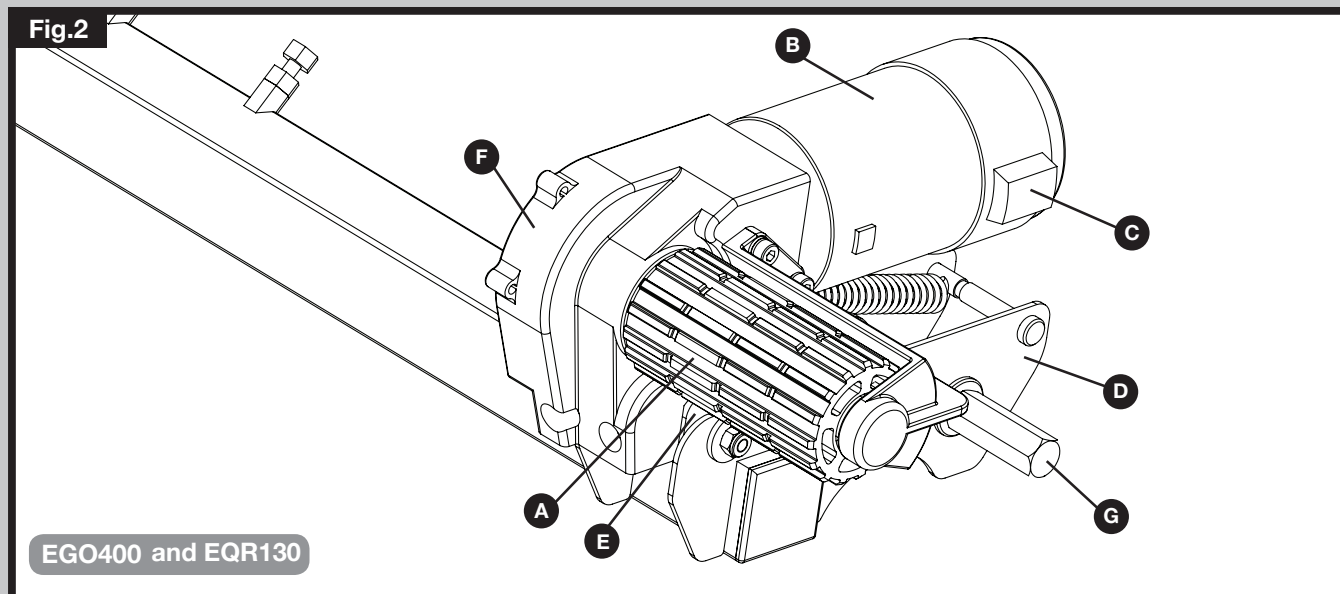
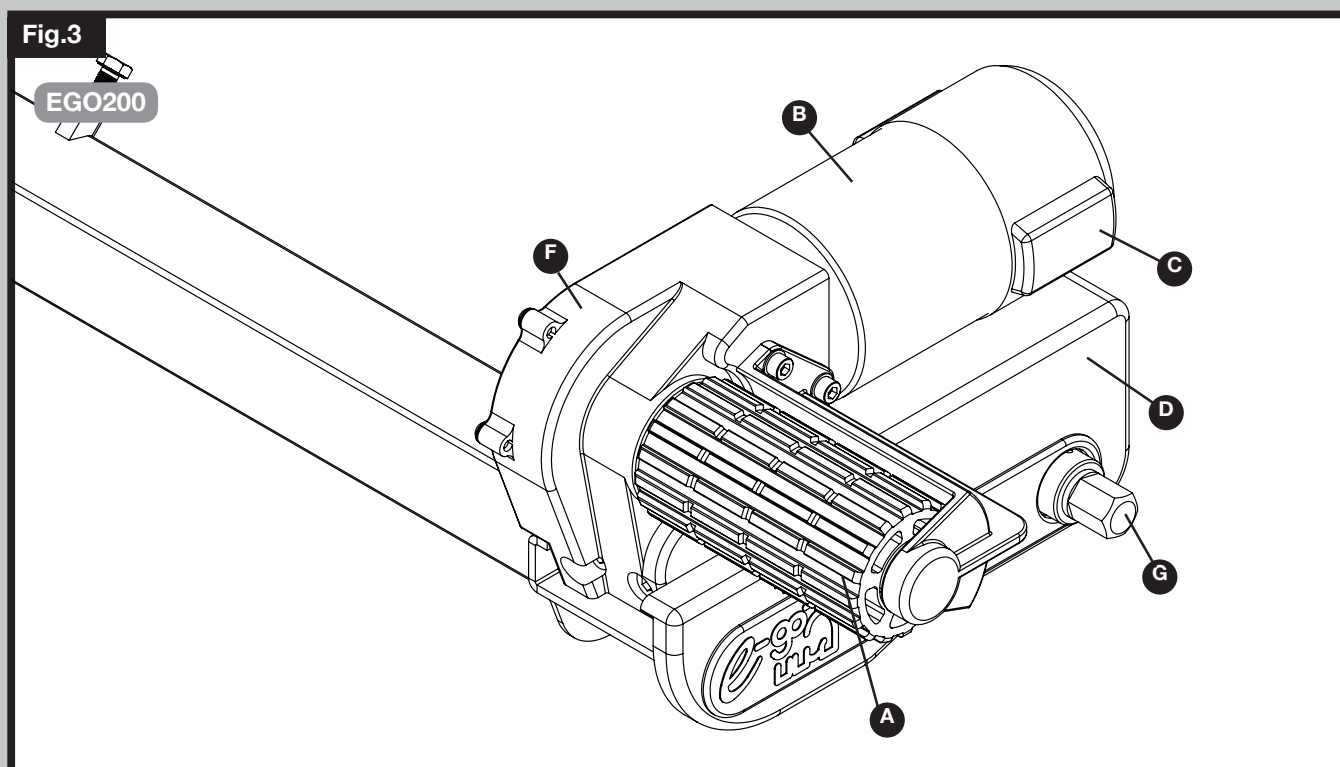
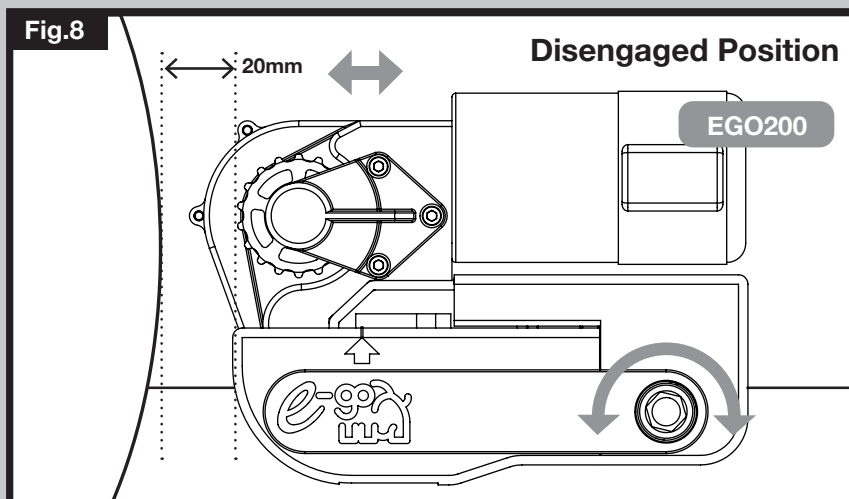
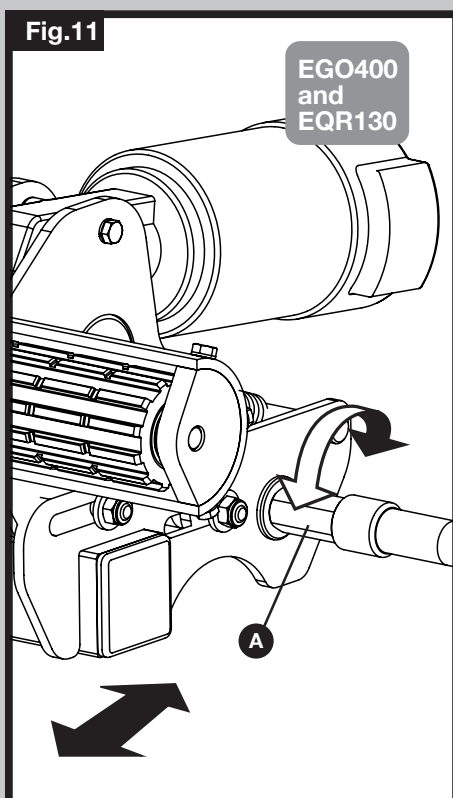
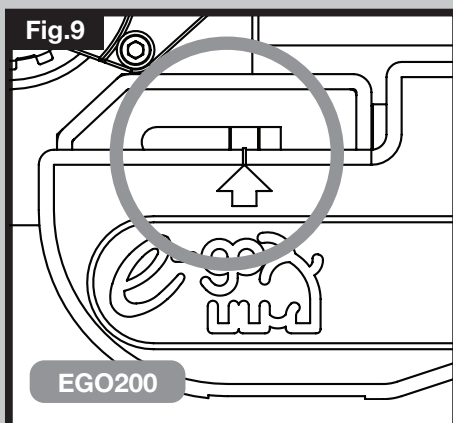
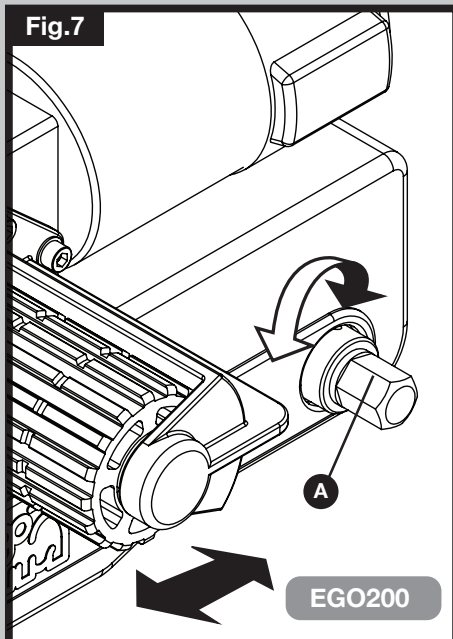


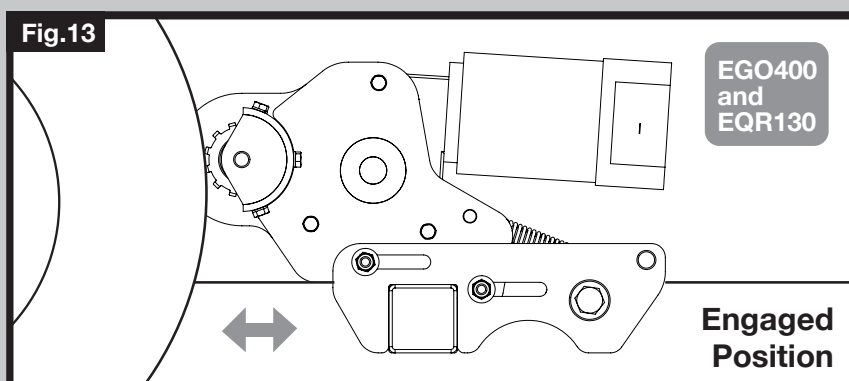
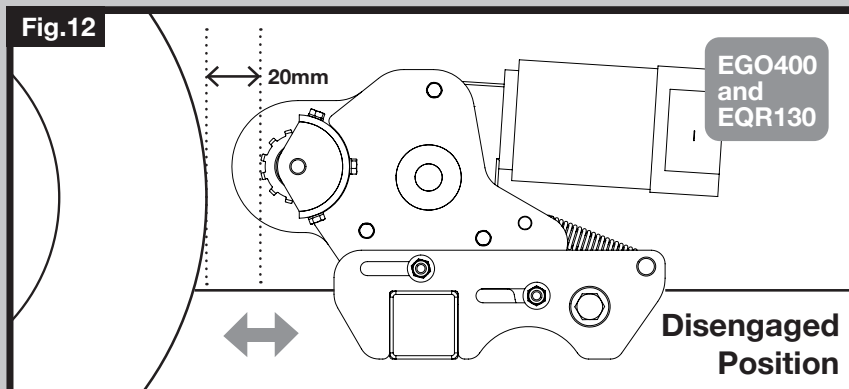
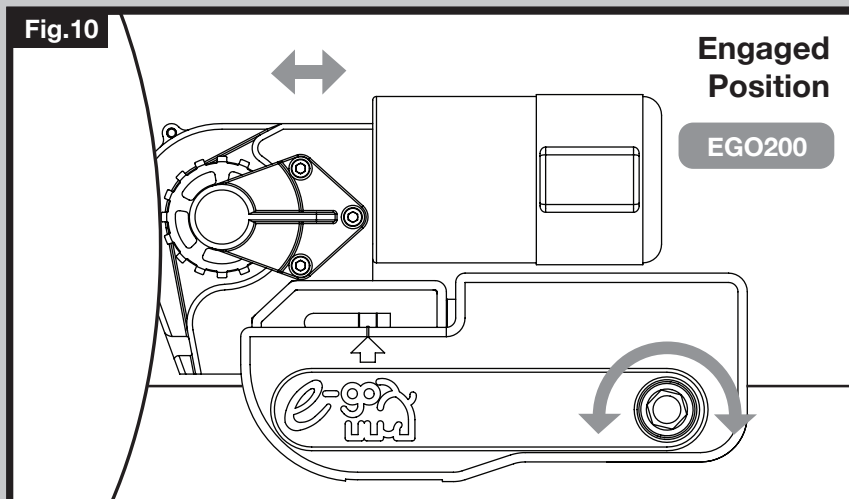
Fig.3



Parts Identification & Fitting Diagrams



CAUTION. Do not exert undue pressure on winding spindle when rollers are fully disengaged. When resistance is met – STOP WINDING. Failure to do this may result in mechanical damage.



Parts Identification & Fitting Diagrams

Fig.14

EGO400
and
EQR130

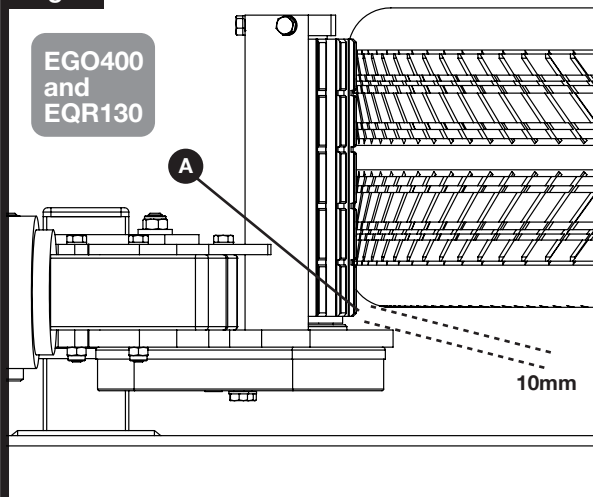


Fig.15

EGO200

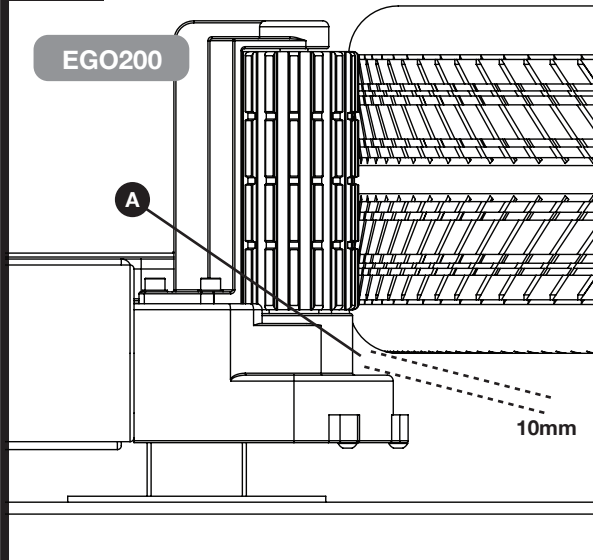


Fig.16

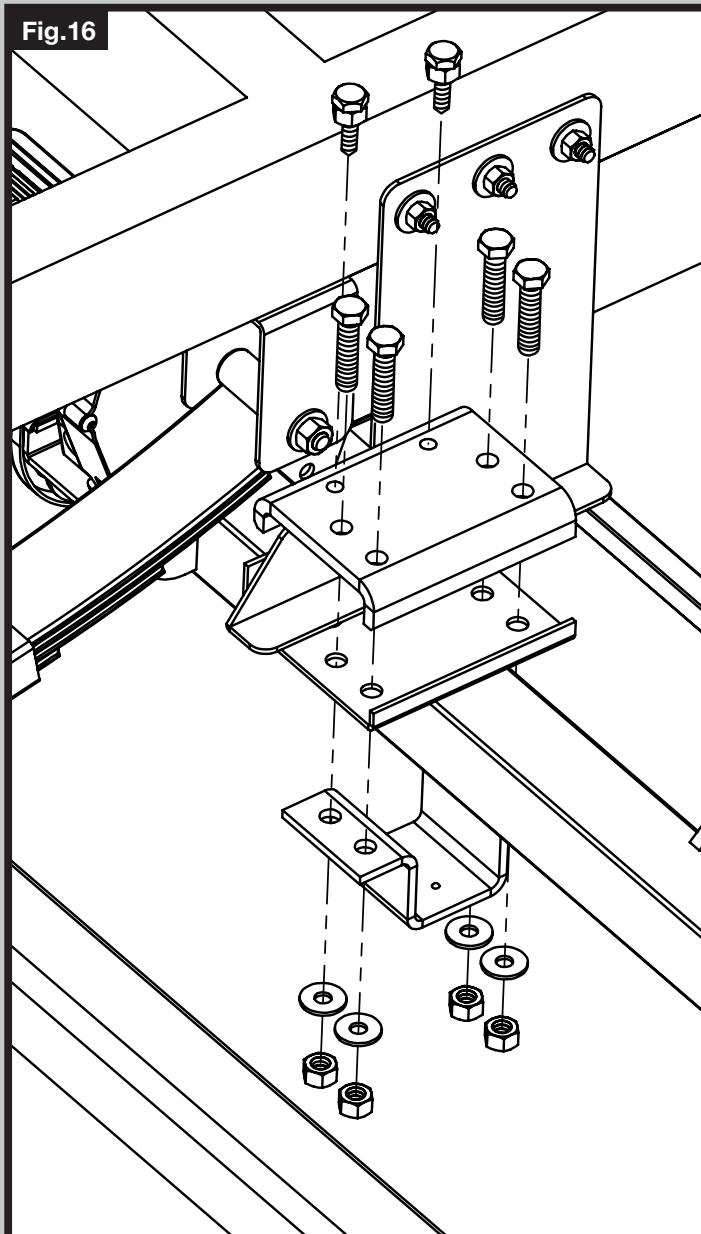


Fig.18

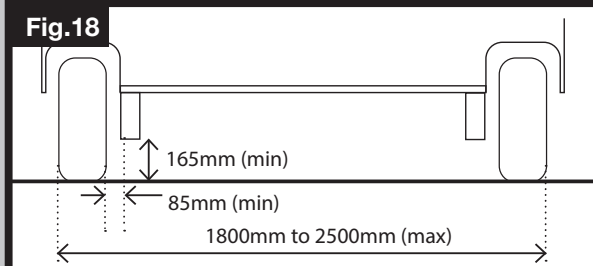


Fig.18A

European Type Chassis

Caravan Floor

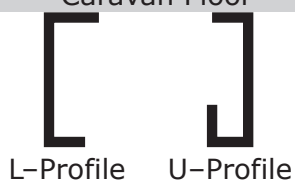


Fig.16A

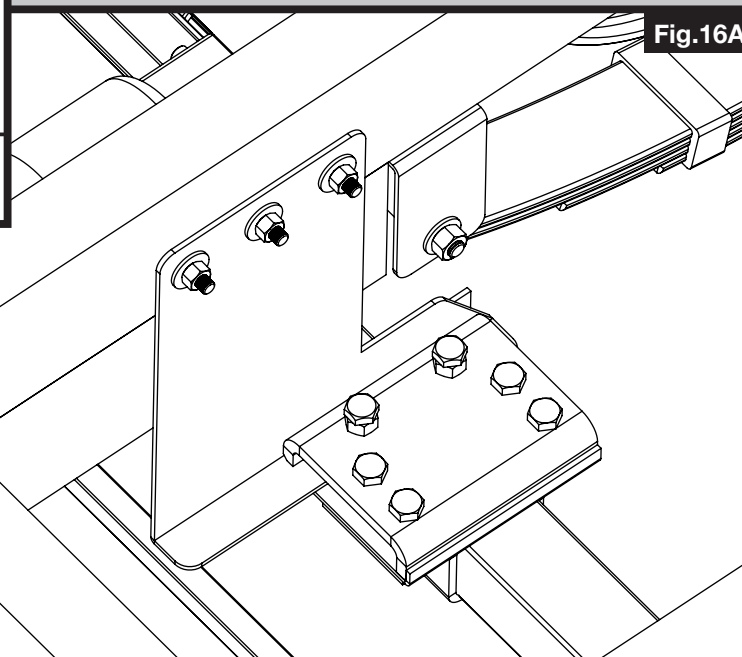


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Package Contents (Fig.A)

Ref	Qty	Description
1	1	Motor Unit (1) + (3) (four motor system)
2	1	Motor Unit (2) + (4) (four motor system)
3	1	Main Cross Bar
4	1	Cross Actuation Centre Bar
5	2	Cross Actuation Insert Bars
6	1	Engagement Tool (<i>Model No. EGO400 and EQR130</i>)
7	2	Chassis Stop Bolts & Nuts (2 pairs)
8	2	Upper Chassis Clamp Plate
9	2	Chassis U Plate
10	2	Lower Chassis Clamp Plate
11	1	Convoluted Cable Trunking
12	2	Positive (+) Red Motor Cable 5m
13	2	Negative (-) Black Motor Cable 5m
14	1	Positive (+) Red Battery Cable 1.8m
15	1	Negative (-) Black Battery Cable 1.6m
16	8	Chassis Clamp Bolts - M10x55
17	8	Chassis Clamp Nylock Nuts M10
18	8	Chassis Clamp Washers 10mmØ

Ref	Qty	Description
19	20	P-Clip Screws - M4x15
20	10	Cable Trunking P-Clips 19.2mm
21	10	Cable P-Clips 10.4mm
22	4	Battery Terminal Connector 8mmØ
23	2	Battery Terminal Connector 6mmØ
24	6	Cable Spade Connectors
25	3	Cable Number Markers (1,2,3,4)
26	3	Cable Polarity Markers (+,-)
27	4	Motor Unit Cable Ties 8x400
28	10	Cable Ties 2x70
29	1	Power Isolation Switch + Key + Fixings
30	2	Roller Distance 20mm Spacers
31	1	Engagement Adapter (<i>Model No. EGO200</i>)
32	1	Drill Attachment (<i>Model No. EGO200</i>)
33	1	User Manual (not illustrated)
34	2	AAA type 1.5V Batteries (not illustrated)
35	3	Chassis Clamp Plates (pair)
36		Anderson Plug and Socket (not illustrated) (<i>Model No. EQR130 only</i>)

Introduction

Thank you for choosing a Purple Line® caravan mover. This has been produced according to very high standards and has undergone careful quality control procedures. Simply by using the remote control you can move your caravan effortlessly into any position required within operating guidelines.

Before proceeding with installation and starting to use the mover, please read this manual very carefully and be aware of all the safety instructions! The owner of the caravan will always be responsible for correct use. Keep this manual inside your caravan for future reference.

This user manual covers three models of Purple Line caravan mover: Model No. EGO400, Model No. EGO200 and Model No. EQR130; any installation or operational differences between the two models are detailed where appropriate. The caravan mover consists of two 12V motor-powered rollers, a 12V electronic control box and a remote control. To function, the motorpowered rollers must be engaged against the tyres of your caravan. The supplied cross actuation device enables you to engage both rollers at the same time from one side of your caravan. Once this is done the mover is ready for operation. The remote control will allow you to move your caravan in any direction.

Fitting Guidelines

The chassis clamps and chassis plates provided are suitable for fitment onto most standard caravan chassis. Please refer to Fig.18 for reference on dimensions and clearances BEFORE you proceed any further with installation. The fixings provided are also suitable for most European type chassis and will not normally require the use of the chassis plates (37) and will, instead, fit straight onto the lip of an 'L' profile or 'U' profile chassis (please refer to Fig.18A for reference).

Specifications

Model Number	EGO400 & EQR130	EGO200
Operational Voltage	12 Volt DC	12 Volt DC
Average Current Consumption*	19 Ampere (approx)	25 Ampere (approx)
Maximum Current Consumption*	84 Ampere (approx)	76 Ampere (approx)
Speed	11cm per sec. (approx)	12cm per sec. (approx)
Approx. Net Weight (inc. all fixings & accessories)	40 Kg	37 Kg
Safe Working Load (SWL) Twin Motor/Quad Motor	2250Kg/3500Kg	2250Kg/3500Kg
Minimum Width (caravan/trailer)	1800mm	1800mm
Maximum Width (caravan/trailer)	2500mm	2500mm
Power Source (caravan leisure battery)	12V	12V

* Average Current Consumption readings when using an approx. 1100Kg single axle caravan on a hard, level surface.

* Maximum Current Consumption readings when using an approx. 1100Kg single axle caravan ascending a 1:4 (25%) gradient.

Installation Safety Guidelines



CAUTION!

Important Safety Instructions

Read this User Manual carefully before installation and use. Failure to comply with these rules could result in serious injury or damage to property.



CAUTION!

These symbols identify important safety precautions.

They mean CAUTION! WARNING! SAFETY FIRST! IMPORTANT INFORMATION!



Before starting installation under the caravan:

DO check that the caravan is disconnected from the battery supply and the mains electrical supply.

DO only use adapters and accessories that are supplied or recommended by the manufacturer.

DO check that the tyres are not over worn (fitting to new or nearly new tyres is the best option).

DO make sure that the tyre-pressures are correct to the manufacturer's recommendation.

DO make sure the chassis is in good condition without any damage and is free from rust, dirt etc.

DO stop work immediately if you are in doubt about the assembly or any procedures and consult one of our engineers

DO locate the battery isolation switch to be accessible at all times when parking and moving the caravan.

DO NOT remove, change or alter any parts of the chassis, axle, suspension or brake mechanism.

DO NOT operate the unit if you are under the influence of drugs, alcohol or medication that could impair your ability to use the equipment safely.

Installation - Mechanical Components



These instructions are for general guidance. Installation procedures may vary depending on caravan type.



Use appropriate support! Working under a vehicle without appropriate support is extremely dangerous. If you are fitting the mover system yourself, it is advisable that the installation is conducted by two people, as the mover will need to be raised up to the bottom of the caravan's chassis before the clamps can be installed.

Place the caravan on a hard, level surface. The use of a lifting ramp or an assembly pit is ideal for access and personal safety.

Clean the area of your chassis where you need to mount all components to ensure a good fitting.

Unpack all the components and check for the presence of all parts (see Package Contents List). Note: Write down, on the guarantee section of this manual, the two sequential serial numbers (these are located on the rear of the motors (EGO400) or on the inside face of the gearboxes (EGO200)).

Make sure the caravan is prepared for installation. Check before installation that important areas, such as drains/spare tyre etc. do not cause any obstruction to the function of the mover.

Ensure both rollers are in the DISENGAGED position (Fig.8 or Fig.12), as the unit will not fit correctly otherwise

Loosely assemble motor unit (1), motor unit (2) and main cross bar (3) (see Fig.1). The nuts (Fig.1B), on the cross bar (3) to secure both motor units, must be no more than finger-tight at this stage.

Place the assembly (Fig.1) loosely under the caravan and then carefully position the assembly at the correct height against the tyres - use blocks of wood or something similar.

Ensure that the roller of each motor assembly is in line with the centre of the tyre - not below or above.

Position one of the chassis plates (37) (these are left and right handed; please refer to Fig.16 and Fig 16A. for guidance) on the inside of the chassis at the correct height to attach the mover cross bar to. Ensure the lip on the plate faces inwards towards the centre of the caravan. Mark the holes, drill and bolt to the chassis using the three 70mm bolts per plate. Measure the hole position for the other side ensuring that the position is identical for both plates in relation to the chassis and tyres.

Loosely fit the two clamping assemblies to the chassis plate (see Fig.16/Fig.16A)) and attach using the bolts, nuts and washers (16,17,18) provided in the installation kit. Nuts must be no more than finger-tight.

Assemble the parts of the cross actuation bar (4 & 5) and connect them to the motor units (1 & 2) with the nylock nut and bolt (factory fitted) onto the cross actuation bar-connectors (see Fig.1A). Nuts must be no more than finger-tight at this stage.

Make sure that the Main Cross Bar (3) and the Cross Actuation Centre Bar (4) are positioned in the middle of the caravan/mover (the centre of the bar is marked).

With the main assembly loosely fitted onto the chassis, slide the whole assembly along the chassis until the rollers (Fig.2A or Fig.4A) are 20mm away from the surface of the centre each tyre (Fig.8 or Fig.12). Two 20mm spacers (30) are provided.



Ensure that the motors will not be struck by the wheels as the suspension operates on the caravan as it is being towed.



It is vitally important that each roller is at exactly the same distance away from the tyre. The whole assembly must be parallel to the caravan/trailer axle.

Slide the motor units in or out of the cross bar (3) accordingly to ensure the roller will have the maximum possible contact with the tread of the tyre. Ensure that the position of each motor unit does not obstruct shock absorbers or any other potential obstacle and that the gear housing (Fig.2F or Fig.4F) has a minimum distance of 10mm to the inner surface of the tyre when the mover is engaged (Fig.14A or Fig.15A).

Fully tighten the four nylock nuts (17) on both clamping assemblies (Fig.16) to a torque setting of 40 ft lbs/55Nm, then the four bolts (Fig.1B) on the Main Cross Bar (3) and the four bolts (Fig.1C) on Cross Actuation assembly (4 & 5) to a torque setting of 9ft lbs/12Nm. Re-check the distance of 20 mm from the rollers to the tyres and if necessary, loosen the bolts and re-adjust the position of the assembly.

Once satisfied with the position of the assembly, fit and tighten the Chassis Stop Nuts & Bolts (7) , one pair in each of the Upper Chassis Clamp Plates (see Fig.16). Tighten to a torque setting of 40 ft lbs/55Nm. The Stop Bolts grip the lip of the chassis and help prevent the mover from sliding along the chassis. The main mechanical components have now been installed.

Operation - Safety Guidelines



Before use, always check the mover for any damage.



To maintain signal strength, always make sure that, during manoeuvring, the distance between the remote control and the caravan does not exceed 5 metres.



DO be aware that the mover increases your caravan or trailer weight. So this reduces the payload of the caravan.



DO always make sure that the rollers are fully disengaged from the tyres when the mover is not in use. This is better for the tyres and for the mover.



DO always make sure that the rollers are fully disengaged before towing/moving the caravan by vehicle or manpower. This can damage the tyres, mover and the towing vehicle.



DO always make sure that after you have finished using the Mover, the Battery Power Isolation Switch (29) is switched off and the key is removed and stored in a safe place (out of reach of children or other unauthorised people).



DO always make sure that the remote control is stored in a safe place (out of reach of children or other unauthorised people).



DO always apply the handbrake after manoeuvring, before disengaging the drive rollers from the tyres.



DO always ensure that children and pets are kept well out of the way during operation.



DO NOT rely on the mover to act as a brake.



DO NOT exceed the total Safe Working Load (SWL).



DO NOT make any modifications on the caravan mover (mechanical or electronically). This can be very dangerous! No warranty claim will be accepted and we cannot guarantee the function of the mover if any modifications are made. We will not be liable for any damage whatsoever caused as a result of incorrect installation, operation or modification.

Operation - Motor Units



Always ensure that you are close enough to engage the caravan's handbrake when manoeuvring on uneven terrain and gradients/slopes in case of mechanical failure. Do not use the mover as a brake, when you have finished manoeuvring always engage the caravan's handbrake.



SAFETY FIRST! Ensure that there are no persons or obstructions in the vicinity of the caravan prior to testing.

Model Nos. EGO400 and EQR130 - Engaging the Rollers

In order to engage the rollers, fit the end socket of the Engagement Tool (6) on the spindle (Fig.2G & Fig.11A) on the right or left drive unit.

Position the engagement tool parallel to the ground, then rotate the tool through approximately 180° degrees.

Note: to engage the rollers you always rotate the tool towards the tyre, irrespective of which side you are operating the engagement from.

The engagement mechanism utilises a simple over-centre cam that pushes the rollers onto the tyres and then locks into place automatically. If the mover has been installed correctly, at exactly 20mm away from the tyres when disengaged, the amount of force provided onto the tyre by the roller will be sufficient for most circumstances of use (Fig.13).

To disengage the rollers, simply refit the tool onto one of the spindles and rotate away from the tyre. Please note that you will feel a small amount of resistance initially as you disengage the cam from its locked position; the spring will then do the rest of the work and pull the roller away from the tyre and into the fully disengaged position (Fig.12).

Model No. EGO200 - Engaging the Rollers

To engage the rollers onto the caravan's tyres use either an appropriate power drill with the included Engagement Drill Adapter (34) or the included Universal joint Adapter (33) and the caravan's corner steady tool.

Fit the engagement tool onto the Engagement Spindle (refer to Fig.7A) on either side of the mover. Depending on which side you are connected, you need to turn the spindle clockwise or anti-clockwise so that the roller moves towards the caravan's wheels (refer to Fig.8 + Fig.10).

There is an indicator (Refer to Fig.9) on the side of each motor unit which has two vertical lines. The marker on the plastic side cover needs to point within the two lines, which should provide adequate grip and traction for most situations of use.

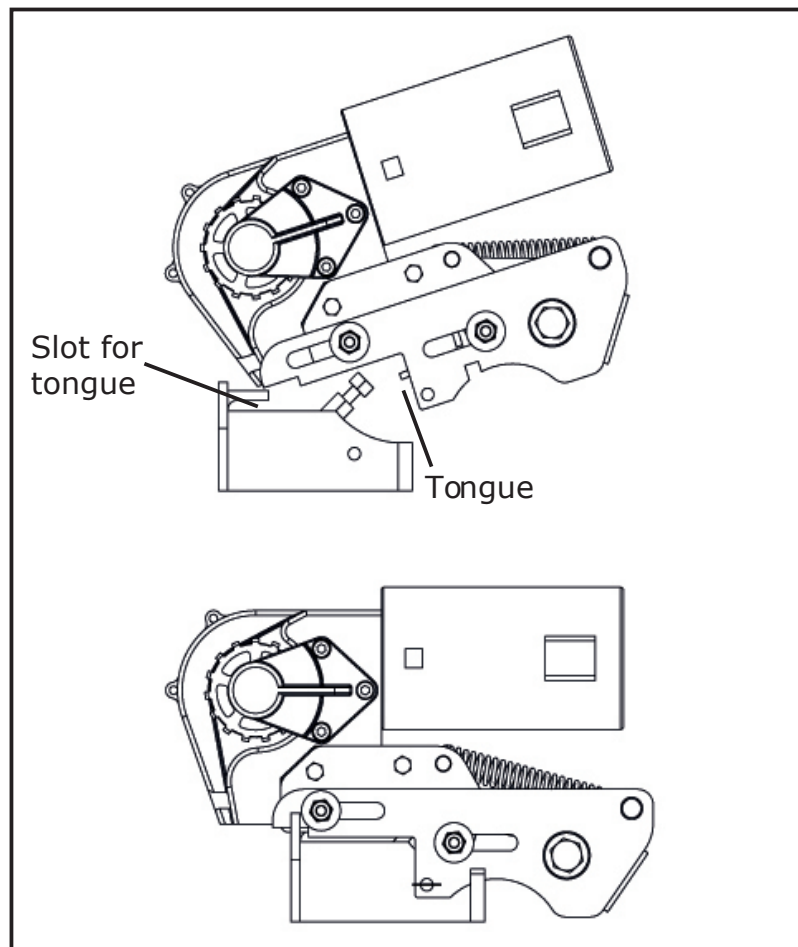
Once the marker points within the two line zone, you can release the caravan's handbrake.



Under some circumstances, such as difficult terrain, it is acceptable to engage the rollers further onto the tyre, which will make the marker point beyond the two line zone. However, if the marker points beyond the two line zone when operating in normal, undemanding terrain, please refer to the troubleshooting section.




Do not over-engage the rollers – this could cause undue stress on the unit and could result in personal injury.



Once the caravan has been manoeuvred into position, turn off the remote control, turn off the isolation switch on the caravan and apply the handbrake on the caravan

Next, disconnect the Anderson plug on the motor unit and secure the loose cable away on the caravan chassis. Once the cables have been disconnected, disengage the rollers, using the engagement tool to turn the spindle 180 degrees locking the motor units into the disengaged position. You are now ready to remove the motor units from the brackets.

Remove the retaining pin from the motor unit and tilt the rear end of the motor unit up. finally you can lift the motor unit clear of the bracket and stow away safely.

 Ensure that you remove the motor units if you are going to do a river crossing or are going to drive through terrain where the motor unit may become fully submerged in water.

Guarantee

EGO caravan mover systems are provided with an Australian parts only warranty. Any warranty claims must be directed through the place of purchase with a proof of purchase provided. Warranty cover is limited to products within Australia mainland only. Within the warranty period, the manufacturer will, at their sole discretion, replace or repair any parts that have failed if deemed to be due to a manufacturing defect.

The manufacturer does not take responsibility for any consequential loss whatsoever.

Upon inspection, components that are missing when checked against the packing contents list must be reported to the place of purchase within 5 working days.

This warranty cover is available only to the original purchaser of the product and is non-transferable.

Product Registration

Please register your Purple Line® caravan mover online within 14 days of purchase. Registration is quick and simple, go to www.purpleline.com.au/product-registration. Please retain your original purchase receipt.

Please fill-in the Serial Numbers + additional information and retain this manual for future reference. There are two serial numbers that are sequential and they are stamped onto inside faces of the gearbox (EGO200 - 8-digit number) or the rear of each motor unit (EGO400 - 9-digit number).

Serial No. EGO200/ EGO200/ EGO400	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> + <table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>																								
Date of Purchase																									
Name of Dealer																									

Contact Information

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Photographs & diagrams for illustration purposes only. Actual product may differ slightly. All weights & dimensions are approximate. The manufacturer reserves the right to change specifications without prior notice. E & OE.