

## testing and commissioning

ensure all parts are correctly installed and tightened to recommended tensions.  
ensure batteries are installed correctly and polarity is correct as per the supplied diagram.  
turn power on at the handle control and select forward motion.  
turn speed dial to centre position and press green button.  
check correct direction for forward and reverse switch.  
swap motor leads over if direction is wrong and apply heat shrink to motor leads.  
connect supplied battery charger to charger socket.  
check battery charging system is operational and leave system charging for client.  
return all draws to their original positions and wipe over trolley to clean any marks.  
fill out, sign and ensure compliance with PDS assessment sheet  
provide customer with operation manual, warranty sheet, and a copy of the PDS assessment sheet.  
ensure customer has sales agent contact details and card.

## tools required for assembly

- cordless drill and driver with phillips head driver bit
- 20mm steel hole saw bit
- 8 to 22mm spanner set
- pop rivet gun
- small clamp for handle bracket
- hacksaw and file
- 4, 6 and 10mm drill bits
- crimp connector tool and connectors
- silver touch up spray can

these tools are required for assembly of the above kits to most makes and models of medicine trollies.

variance in the trolley design might require extra bracing or parts not included in this kit.

Phantom Power Products manufactures alternate brackets and support to suit a wide range of different trollies.

please contact your sales agent or the 1300 667 224 tech support number if you require alternative kits or brackets.



55 West Thebarton Road  
Thebarton, SA 5031  
08 8234 1183 ph  
08 8234 1184 fax  
[www.phantompower.com.au](http://www.phantompower.com.au)

your local representative



## components included in kit

- 2 x TrolleE drive hub motor
- 1 x control handle assembly
- 1 x control handle bracket
- 2 x motor mount bracket
- 2 x battery support straps
- 1 x battery box including fuses
- 1 x freewheel control box
- 1 x 36V 2.0Amp battery charger
- 20 x tek screws
- 1 x 30cm length heat shrink
- 6 x 150mm cable ties
- 450mm length cable wrap
- 1 x 25mm cable gland
- 1 x instruction manual
- 1 x operators manual
- 1 x PDS assessment sheet

# TrolleE Power Drive Systems

Stop workplace injuries instantly with these easy to fit trolley motorised systems



## installation instructions - double drive unit

- workcover claim prevention
- workplace rehabilitation
- fatigue reduction
- staff retention

for assistance please call us on

# 1300 667 224



important information before assembly

please refer to the operational manual for the correct use and operation of this product.  
installers must be competent tradesman with skills associated with the procedures outlined in the instructions  
operators must be trained in the use of this system and confident of their skills before using this equipment.

Phantom Power Products accepts no liability for incorrect installation or operation.

please call our 1300 tech support number or your local sales agent for assistance if you are unsure.

suggested tools required and a kit component list are on the back page. before installation, please check all items and tools required are included and available.

the motor mount bracket included in this kit is height adjustable for different trolley wheel sizes and also retractable for manual operation. it is important that the motor mount bracket is installed properly to allow correct operation. please refer to the attached drawings for correct assembly procedures.

warranty for this motor drive system may be voided if the kit is not installed properly. If you have any queries, please call the 1300 tech support number or your local sales agent for assistance.

assembly - motor mount bracket

determine which end of the trolley will have the control handle. turn trolley over and mark remove castors from the opposite end to the control handle end. measure the height of the castor from the base of the trolley.

unpack supplied motor brackets and place onto trolley in place of the original castor, checking that the brackets are orientated the correct way around. please see drawing below for correct orientation.

most trollies will have suitable area to affix the supplied motor brackets with the supplied fittings. If the trolley is unique or non standard, alternative brackets or methods may be required. please call the sales agent or the 1300 tech support number if you require additional help or brackets.

unpack supplied motor assemblies and place into bracket assemblies. the motor shaft has two different shaft sizes and must be fastened into the bracket correctly. the larger shaft with the two flat sides fits the D shaped bracket slot only.

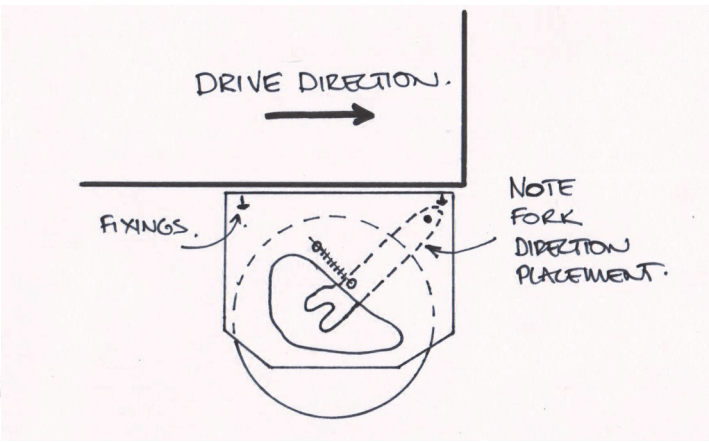
with bracket and motor in place, measure and compare the height of the assembly compared to the height measurement for the original castor. the height of the new assembly should be the original castor height plus 10mm. adjust the height of the bracket assembly by using the 4 x corners bolts to get the bracket to the correct height for the trolley setup.

remove loctite and replace the 2 x hex bolts on the side of the bracket once the correct height of the motor bracket is achieved .

once the bracket height is adjusted, locate the brackets with the supplied tek screw fixings. check to make sure the brackets are parallel. this is extremely important to reduce wear and tear on the motors.

install motor to bracket with supplied nuts and tighten nyloc nuts to 45Nm. the motor must be fixed into the bracket tightly to allow correct operation.

turn trolley back onto its wheel and check that each bracket suspension system works. rock the trolley to see the suspension moving. tighten all bolts and check motors and brackets don't protrude from trolley base.



assembly - battery bracket

determine a suitable location for battery box under trolley between front and rear castors, see picture below.

bend up 2 x battery brackets to suit battery location using supplied straps, see picture below.

fix the straps as close to the edge of the battery box as practical and use tek screws to fasten

carefully fasten 2 x tek screws into the battery box exactly in the centre of the side as per the picture.

assembly - control handle

mark the centre position of the existing handle and mock up the handle bracket as shown in the picture below.

mark the holes with a marker and centre punch for drilling. drill 4 x holes with a 6mm drill

assemble bracket onto handle, tighten supplied fixings and attach handle controller to handle bracket

assembly - wiring

drill a 20mm grommet hole on the side of the trolley facing the handle and install supplied grommet, see picture adjacent.

locate the hole so the wires can pass behind the trolley doors when closed. check inside the trolley before drilling.

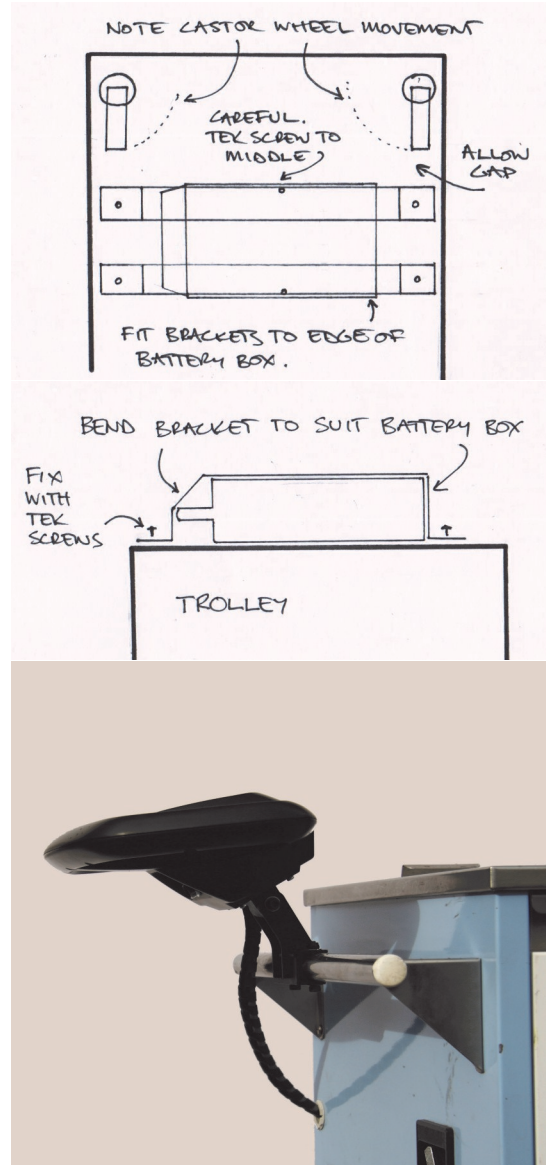
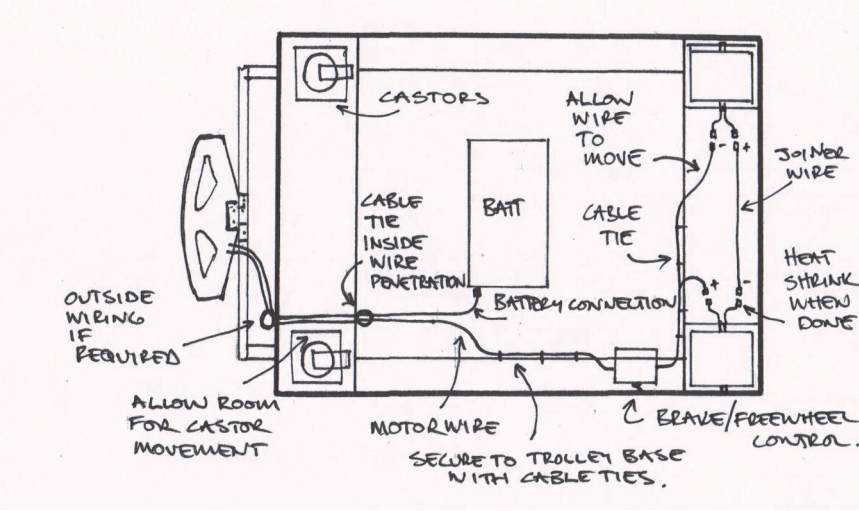
heat shrink the connections and attach the supplied cable wrap to the exposed cable from the control handle to the grommet hole location.

allow sufficient cable length from the control handle to the grommet to allow movement of the control handle height as required.

if the wiring cannot be installed inside the trolley, use 20mm electrical tubing down the outside of the trolley to protect the wiring from the grommet location, down to the bottom edge of the trolley.

cable tie the wires inside the trolley so that they are held and will not interfere with the draw operation, castors or any other sharp objects.

connect the battery and motor leads and secure any remaining wiring with cable ties. ensure the wires under the trolley cannot be interfered by castors or other objects.



allow sufficient length of the motor lead cable to the motor to allow motor mount retraction as required. operate the motor bracket up and down a few times to check the wiring doesn't jam.

seal every wiring connection with supplied heat shrink.

please see adjacent drawing for wiring connection for typical installations.

electric brakes and freewheel controls are optional extras with the single drive system