

Easy Fit Portable Gantry



Service Manual

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1 Introduction

This manual will explain how to carry out interim servicing and parts replacement on the Mackworth Easy Fit Portable Gantry System safely and effectively. This document is divided into sections to help a Service Engineer find the correct information. Each section will show in a step-by-step fashion the correct way to disassemble and assemble the Gantry. The manual aims to help and assist you so that you can provide a successful service for the end user.

2 Safety Precautions

Read and understand this manual in its entirety before servicing the Mackworth Easy Fit gantry.

- Authorised personnel must complete the full and interim services of the gantry.
- The gantry system must not be in use by the user during any form of servicing.
- Ensure that all servicing procedures are followed correctly as instructed in this manual.
- All listed tools and equipment stated in this manual must be used to safely service the gantry.
- Ensure you have assessed all risks for your environment and any persons within that environment before commencing work.
- Ensure you have all PPE available to carry out the work before commencing.

3 Tools and Equipment List

When carrying out work on the Mackworth Easy Fit, you will require the following:

Tools Required	
3mm Allen Key Flat head screwdriver	Circlip Pliers
Equipment and Lubricants Required	
Step Ladder Test Weights –Up to 1.5 x SWL Documentation (User, Service, Spare Parts, Commissioning Manual, Service Check List)	Cloth Marker Pen Tape Measure Digital Vernier

4 Preventative maintenance

Maintenance should be performed by an approved service engineer every 6 months to ensure the product meets the required standard. The service history of the product should be documented after each service in the service log, located in the back pages of this user manual. When recording the service in the service log, ensure that the serial number of the product matches the serial number in the user manual. Each product is provided with its own user manual.

The sub-sections detail the required inspections and tests for each gantry component during every service. Follow these guidelines to ensure a successful PFS service.

4.1 Frame

- Visual inspection of the exterior of the gantry. Significant damage that may affect the function of the gantry, along with a clear safety hazard, is unacceptable.
- Check the labelling on the gantry to ensure they are all still legible, this includes the serial number and other important markings.
- Clean the gantry at the end of each service. See the user manual for cleaning details.
- Check all main nuts and bolts, and pins to see if they are loose; if so, tighten them accordingly.
- Ensure both ratchet pressure mechanisms are functioning as intended and without damaged gearing.

4.2 Gantry assembly

- Ensure that the installation of the legs, feet, and track is correct and fitted properly.

4.3 Feet

- Inspect the feet for damage, including cracks or bends.
- Ensure that the feet are flat on the floor and ceiling.

4.4 Legs

- Ensure the height adjustment of the legs is moving freely and is not jamming.
- Ensure that the locking pins are secured in place with the clips.
- Ensure that the two legs are set to the same pressure (inside the green zone).
- Ensure that the legs are vertical, within the spirit level tolerance.

4.5 Track and trolley

- Examine the trolley to ensure that it rotates smoothly.
- Examine the trolley to ensure that it can traverse along the track smoothly.
- Ensure that the track can adjust in length smoothly.

4.6 Pressure gauge

- Ensure the pressure gauge indicator is in the green. Indicating pressure of the system is okay and safe to use.

5 Testing

The guidelines below will ensure that the main functional components of the gantry are functioning as intended following a service. Functional testing should be done after each service. The gantry will be installed with a portable lift, the portable lift can be used to perform the function test.

1. Test the adjustment of the gantry's support posts to ensure they move smoothly.
2. Test the pressure gauge by looking to see if the indicator is in the green; this indicates that the pressure of the system is okay and safe to use.
3. Test the adjustment of the track to ensure it moves smoothly.
4. Raise and lower the attached ceiling lift to ensure that the gantry is stable. Inspect the gantry under load to ensure it performs as expected. There should be no visible deflection during use.
5. Traverse the ceiling lift along the track to ensure it moves smoothly.

6 Additional Documentation

See the list of available documents you may or may not need to refer to for a successful service. All documents will be available to view on the Mackworth website: <http://mackworthusa.com>

- Spare Part Manual – 992092
- User Manual -999092
- Commissioning Manual – 996092

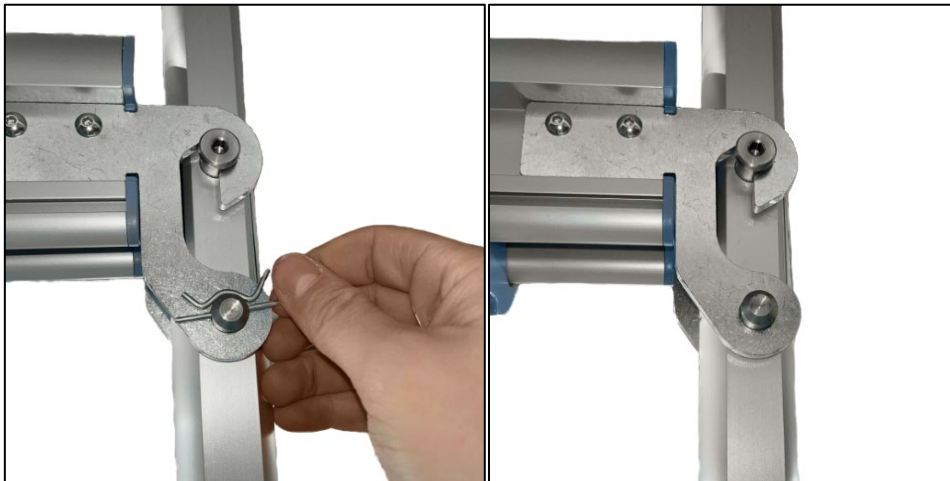
7 Removal and replacement

This section will cover the details of how to remove, refit and replace all serviceable parts of the gantry. The step-by-step process is to be followed in sequence to perform a successful service on the gantry. Unless stated otherwise, all images refer to a Mackworth Easy Fit Gantry.

7.1 – Track Removal

Removal

1. The R-clips must be detached to remove the track pin.



2. Remove the track pin from its fixing point.



3. Repeat steps 1 and 2 to remove the track pin from the other leg post.

4. Raise the track at both ends to unhook the track from the fixed pin as shown. The track can now be removed.



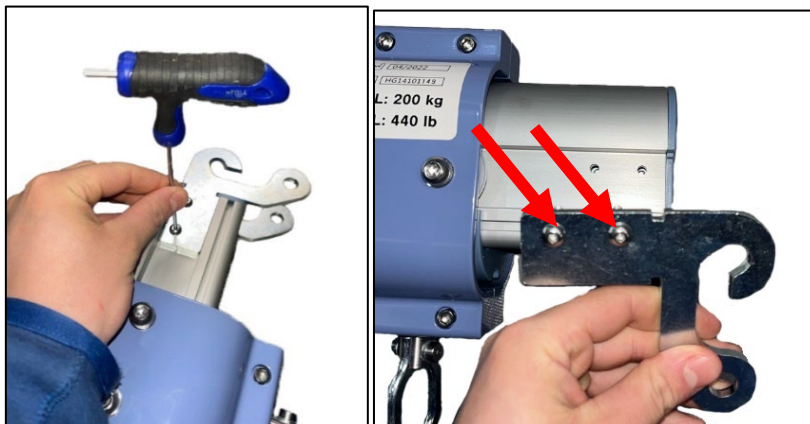
Refitting/replacement

Refitting is a reversal of the removal process.

7.2 – Removal of the Trolley

Removal

1. Remove the two bolts securing the mounting hooks located at the end of the track. Repeat this step on both sides of the track. (Only one end of the track needs disassembling to remove the trolley.)



2. Slide the trolley out of the track as shown.



Refitting/replacement

Refitting is a reversal of the removal process.

7.3 – Removal of the Top Foot Assembly

Removal

1. Remove the top foot by pulling it out of its socket.



Refitting/replacement

Refitting is a reversal of the removal process.

7.4 – Removal of the Bottom Foot Assembly

Removal

1. Remove the bottom foot by pulling it out of its socket.



Refitting/replacement

Refitting is a reversal of the removal process.

Dealer/service contact details:

Contact details:

Mackworth USA
54 West Industrial Drive
O'Fallon, MO 63366 USA
314-889-1000
www.mackworthusa.com

Disclaimer

While every effort has been made to ensure the accuracy of information contained in this manual, no liability can be accepted by Mackworth for any errors or omissions. Mackworth operates a policy of continuous improvement. Specifications and other data are subject to change without notice.

