

OPERATION & MAINTENANCE INSTRUCTIONS

MASTER TOOL CARRIER

OPERATOR INSTRUCTIONS – GENERAL INFORMATION

These were designed for use with the Master 35 Petrol/Gas Impact Wrench but they can also be used with other power tools including Pneumatic Rusty Clip Remover.

There are two optional accessories to allow the Master Impact Wrench to be used in a vertical (Chair/Lagscrews) and horizontal (Fishplate/Jointbar fasteners) position.

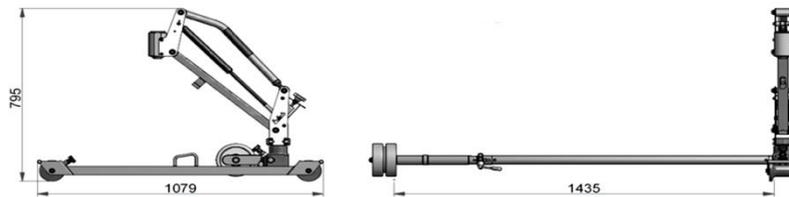
Using the Master Impact Wrench Accessories and Tool Carrier reduces manual handling, makes it easier and quicker for the operator to use, improves operator comfort and increases productivity.

Master Tool Carriers can be used on Narrow, Standard and Broad Gauge track.

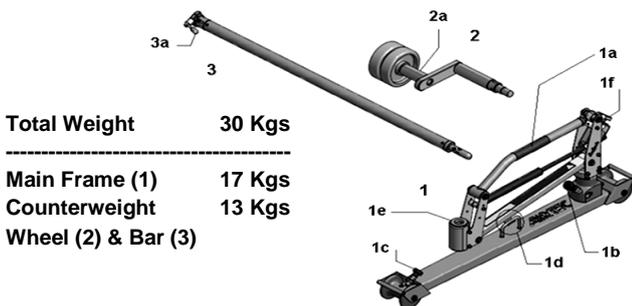
- 1750.0090 Narrow 1000 and 1067mm by reversing the wheel position
- 1750.0100 Standard 1435mm
- 2801.7525 Bar only to convert Standard to 1600mm and 1676mm Broad Gauge

Suggested max. load - Impact Wrench & Accessories 25 Kgs (55 lbs)

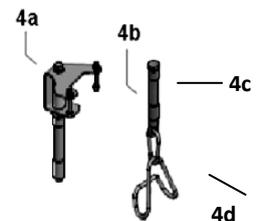
DIMENSIONS mm



MAIN COMPONENTS



Total Weight	30 Kgs
Main Frame (1)	17 Kgs
Counterweight	13 Kgs
Wheel (2) & Bar (3)	



ACCESSORIES

- 4a) 2801.8550 Bracket for vertical use
- 4b) 2801.7560 Kit for horizontal use

COMPONENT DESCRIPTION

- | | | | | | | | | | | |
|--|--|--------------|-------------------|-----------|----------------|---------|-----------|-------------|-------------------|-----------|
| <p>1. Main Frame</p> <ul style="list-style-type: none"> a) Rubber grip for carrying b) Bar locking knob c) Wheel safety brake d) Arm locking hook e) Tool holder slot f) Load lifting adjustment <p>2. Counterweight Wheel</p> <ul style="list-style-type: none"> a) Counterweight handle | <p>3. Main Bar</p> <table border="0"> <tr> <td>Narrow Gauge</td> <td>1,000 and 1,067mm</td> <td>2801.7515</td> </tr> <tr> <td>Standard Gauge</td> <td>1,435mm</td> <td>2801.7520</td> </tr> <tr> <td>Broad Gauge</td> <td>1,600 and 1,676mm</td> <td>2801.7525</td> </tr> </table> <ul style="list-style-type: none"> a) Tightening lever <p>4. Accessories</p> <ul style="list-style-type: none"> a) Bracket for vertical use b) Kit for horizontal use c) Link d) Wrench hook | Narrow Gauge | 1,000 and 1,067mm | 2801.7515 | Standard Gauge | 1,435mm | 2801.7520 | Broad Gauge | 1,600 and 1,676mm | 2801.7525 |
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OPERATION & MAINTENANCE INSTRUCTIONS

INSTRUCTIONS FOR USE



Check permission has been given for track possession

Make sure the Master Impact Wrench is fitted with the correct accessory depending on the job to be done.

Lay the main body (1) on rail, insert the parking brake (1c), fit the main bar (3) onto the main frame (1) and lock with knob (1b), place the counterweight wheel (2) on the opposite rail and tighten it by hand with the fixing lever (3a).



Risk of sudden movement

Pay attention when hooking/unhooking the main frame (1) from arm locking hook (1d). The arm is fitted with a medium load gas spring. Before using it, take a firm stance and check the trolley for stability, hold the handle (1a) with two hands and press down to release or insert the locking hook (1d). Hold the handle until the spring completes its travel.

For vertical use:

Release locking hook (1d). Insert bracket pin (4a) into the tool holder slot (1e), start the engine and release wheel safety brake (1c) only when the operator has full control of the machine.

For horizontal use:

Release locking hook (1d), unhook link (4c) and Wrench hook (4d), insert pin into the tool holder slot (1e) and re-connect link (4c) and Wrench hook (4d). Hook the Impact Wrench to it using front part of handle. Release wheel safety brake (1c) only when the operator has full control of the machine.

BRAKING SYSTEM

STANDARD VERSION

The Tool Carrier is prevented from moving along the track by twisting and releasing the Red coloured Knob on the Wheel Safety Brake (1c) so the plunger is located inside one of the two locating holes on the Wheel.

To release Brake when moving to a new work site lift the plunger using the Red coloured Knob and twist it into the retained unlocked position. The Wheel should now turn freely.

Always lock the Brake before starting to work and keep the Wheel clear of soil, leaves etc. which could prevent the Plunger from being fully engaged.

AUTOMATIC DEADMAN BRAKING VERSION

This is fitted with a braking system which keeps the wheel permanently locked.

The brake is released by depressing the Red Lever fitted to the Main Frame Handle (1) and moving the Tool Carrier manually along the track to the next work site.

This version also has two Lighting Brackets fitted to the front and rear of the Main Frame.

LOAD ADJUSTMENT

The Load Adjustment Control Knob (1f) is used to adjust the spring resistance applied to the Main Frame. Turn this clockwise to reduce resistance and anti-clockwise to increase resistance.

A correct setting will allow the operator to work in a comfortable manner.

OPERATION & MAINTENANCE INSTRUCTIONS

SAFETY RULES TO IMPROVE PERSONAL SAFETY



Be sure the operator has read the manual and fully understands how to use the equipment.



Ensure operators and service personnel are competent to assemble and use the Tool Carrier correctly.



Do not modify the Impact Wrench, Tool Carrier or accessories in any way



Always follow instructions and safety rules for the Master Impact Wrench when it is in use.



Only use the Master Impact Wrench and Tool Carrier for the applications they were designed for.

GAS SPRING SAFETY

Safe and effective use comes from the smooth surface of the piston and the rubber seals which keep the inside gas pressure. To protect the rubber seals, the spring must not be subject to external forces. Any damage caused by mechanical treatment, contamination or paint on the piston can cause a malfunction of the spring. Avoid modifications, impact, stress, heat or painting. Any adhesive tape should be avoided because it can damage the spring. Non-complying devices should not be used.

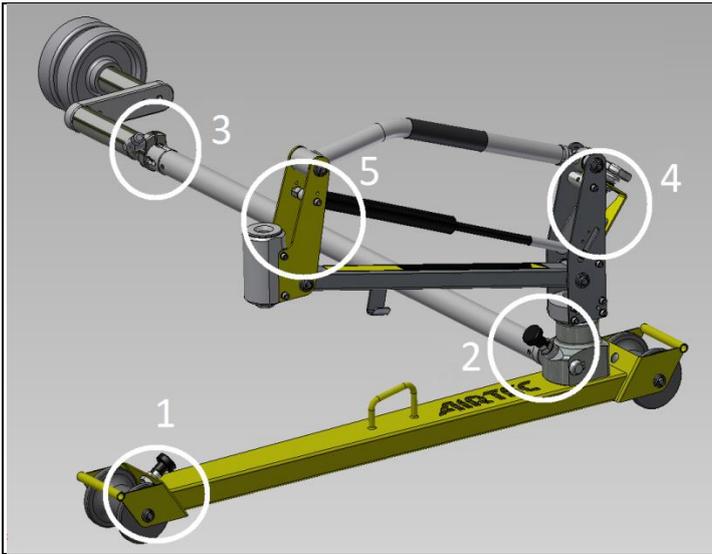
DISPOSAL

When replaced, the old springs must be disposed of according to the current regulation in the country of use.

OPERATION & MAINTENANCE INSTRUCTIONS

The Master Tool Carrier has been designed to work for a long period of time without any need for maintenance but to ensure operator safety it is necessary to carry out the following periodic maintenance checks.

At regular intervals, or at least once a year, check the correct operation and efficiency of the trolley. The regularity will depend on how often the trolley is used

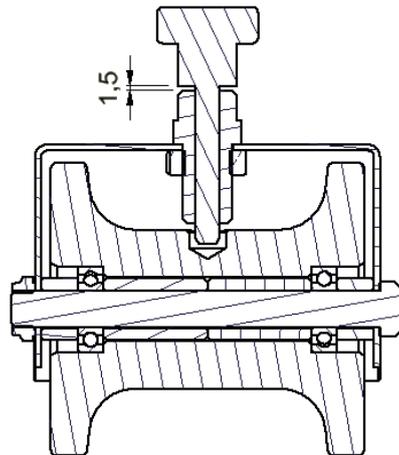
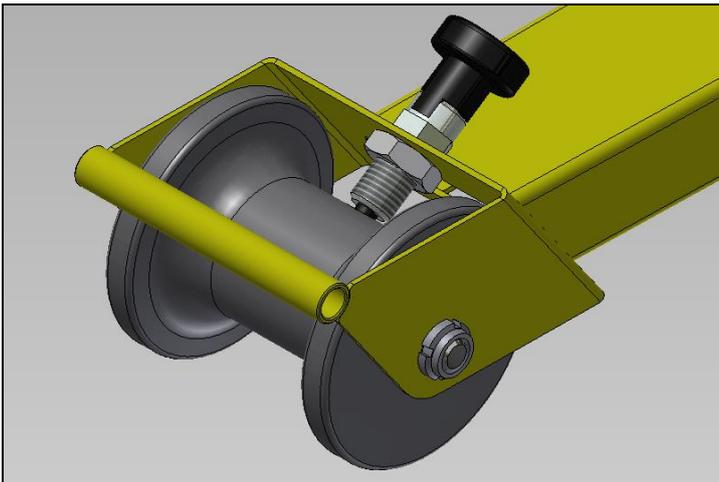


Inspection points:

1. Brake efficiency
2. Bar coupling
3. Outrigger bar
4. Lubrication
5. Gas spring, Pantograph Arm and bracket assembly and bearings

1 Checking the brake efficiency:- Standard version

The brake plunger Ref. 6 Lock Pin must slide smoothly and be in perfect condition. When in the brake position it must fit perfectly into the hole on the wheel. Replace if damaged or not sliding smoothly.



IMPORTANT !

Always check the wheel is not worn

How to do it:

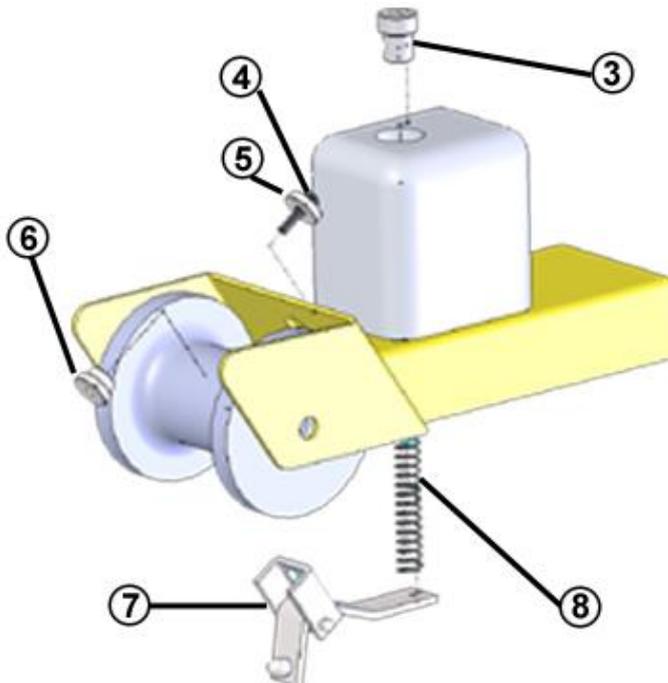
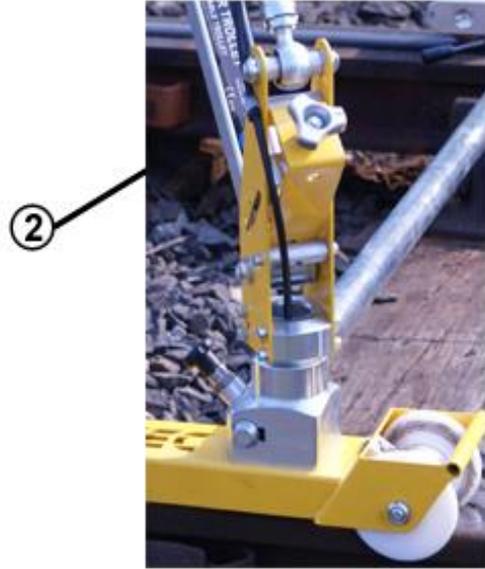
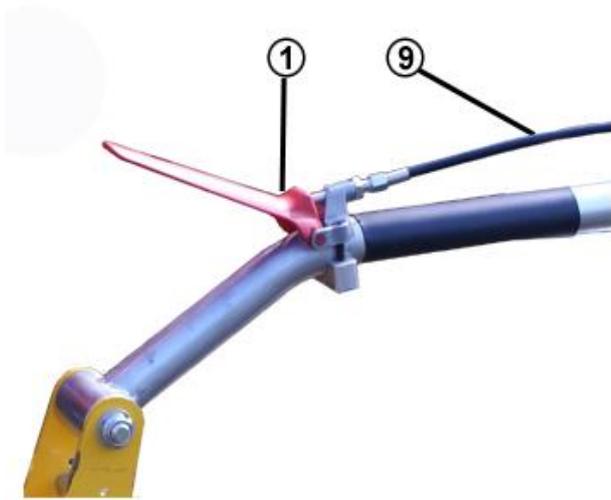
- Fit a 1.5 mm spacer between the knob and the brake stop body
- Turn the wheel by hand in both directions to check it is fully locked in position.

If the pin on the brake stop pushes out of the hole replace the wheel and check if the bearings are worn.

OPERATION & MAINTENANCE INSTRUCTIONS

1b Automatic Deadman brake – Network Rail Specification

In place of the Brake stop Ref. 6 there is a spring loaded brake controlled by Cable and lever. Inspect all components for damage, and ensure free and full movement of the lever cable and brake pin assembly.



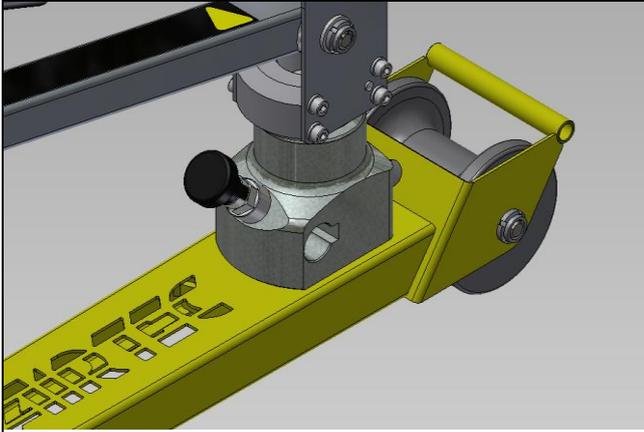
Item	Part No.	Description
1	C26527101	Brake Lever
2	C26527102	Cable Clip
3	C26527103	Cable Support Bush
4	C26527104	Screw M5
5	C26527105	Top Plate
6	C26527106	Retaining Nut
7	C26527107	Brake Shoe
8	C26527108	Brake Spring
9	C26527109	Actuator Cable

Ensure the wheel is undamaged, and the brake pin fully engages in the hole locking the wheel securely. Try turning the wheel by hand in both directions to check it is fully locked

If any components including the wheel bearings are worn or do not correctly function replace with new parts.

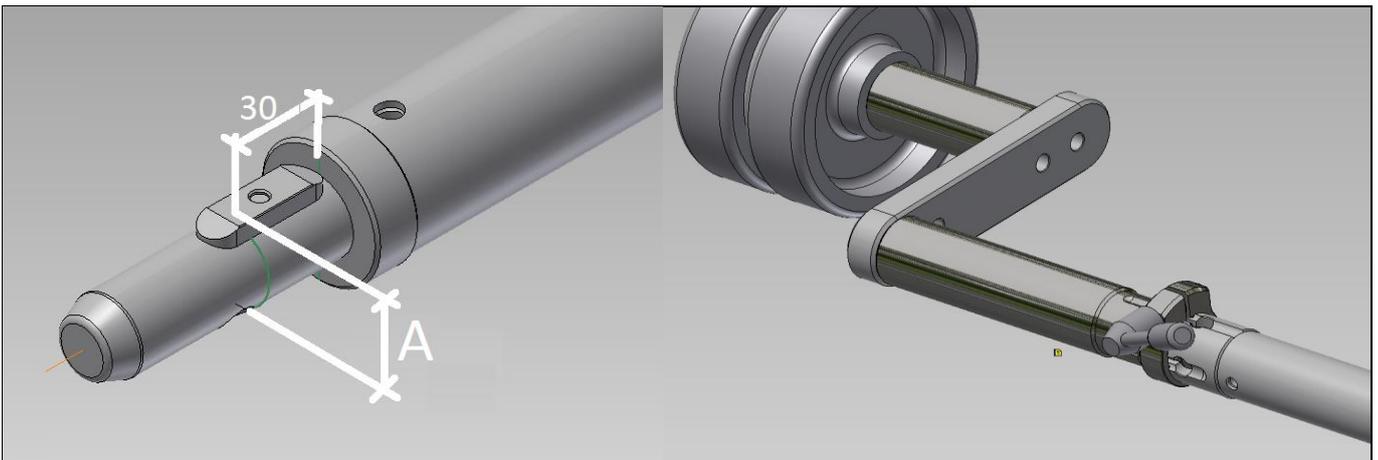
OPERATION & MAINTENANCE INSTRUCTIONS

2 Bar coupling



How to do it:
The locking plunger Ref. 2 must slide smoothly and engage positively in the cross bar retaining it.
Replace if damaged or stiff/seized.

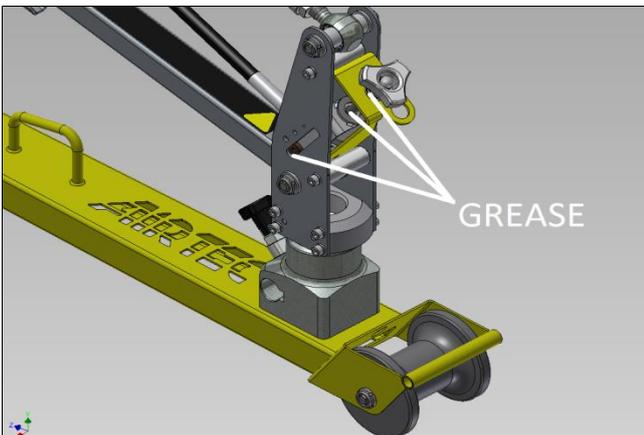
3 Outrigger bar



Replace or turn Ref. 42 if A size should become less than 28 mm

If the cross bar does not secure the jockey wheel securely replace the clamp ring Ref. 39

4 Lubrication



Lubricate the points as shown in the picture with a suitable lightweight bearing grease

OPERATION & MAINTENANCE INSTRUCTIONS

5 Gas spring and pantograph bearings:

Gas Spring Ref. 53 must be replaced when, with regulator set in the maximum load position, it is unable to lift the tool weight (max. 25 kgs)

If the pantograph assembly is not free and smooth replace bearings.



IMPORTANT !

Ensure all maintenance work is carried out with the pantograph open (free and raised)

Replacing the Gas Spring:

Remove the screws Ref. 8 and disengage the pin Ref. 33

Gas spring. Ref. 53 can be unscrewed from Ref. 54

Replacing pantograph bearings:

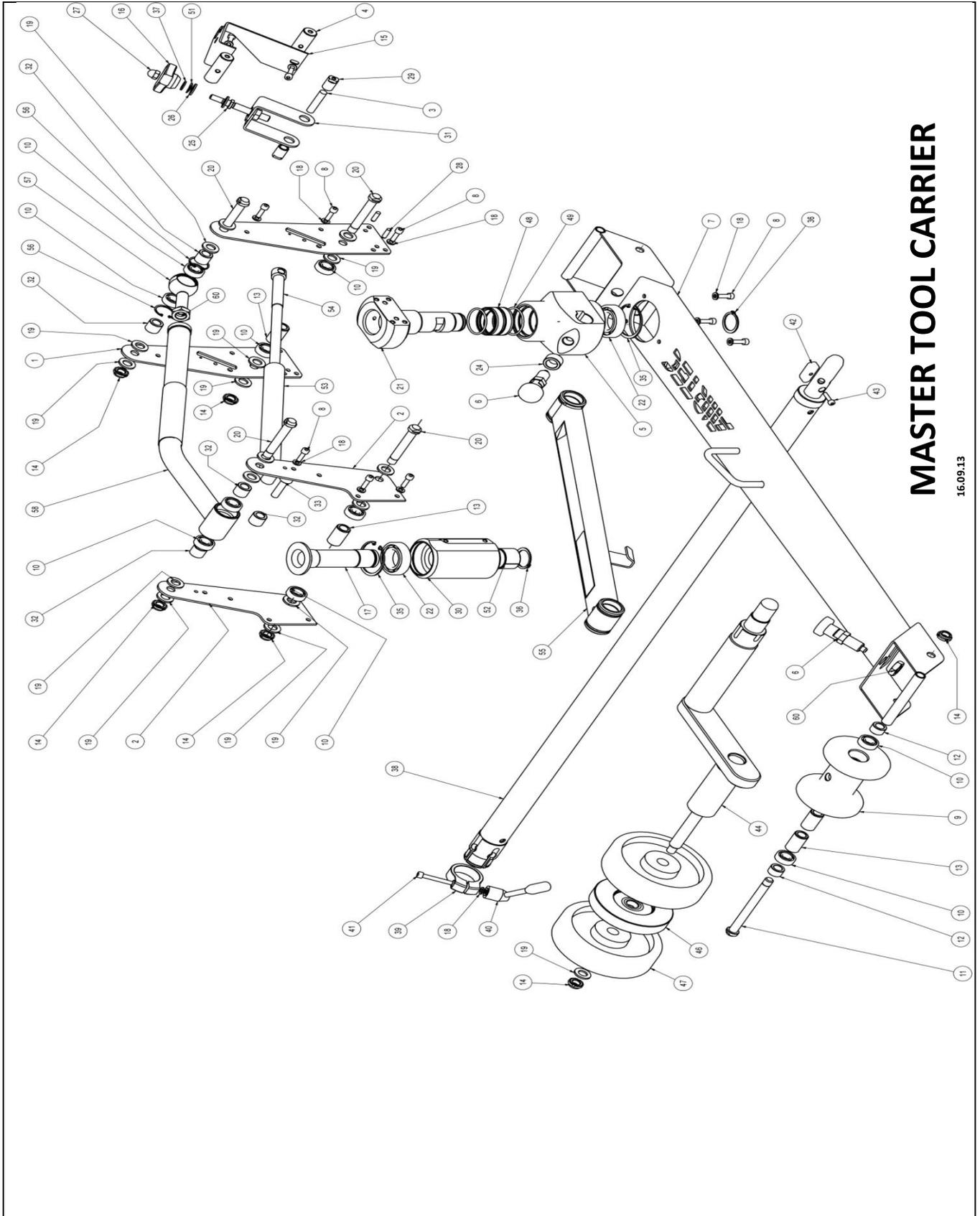
Place the pantograph assembly on a work bench with the nut side Ref.14 upwards.

Loosen the three screws Ref.8 and the two nuts Ref.14 on the upper bracket Ref.2.

Release the bracket Ref.2 and extract the pivot pins Ref.20. Check or replace the bearings and re-assemble in reverse order.

Repeat the process for the bearings under bracket Ref.1.

OPERATION & MAINTENANCE INSTRUCTIONS



MASTER TOOL CARRIER

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MASTER TOOL CARRIER PARTS LIST

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
1	2	2652.7100	Main Support Pillar Bracket	30	1	2540.6700	Tool Support Casing
2	2	2652.2000	Tool Holder Support Bracket	31	1	2650.5400	Slider Bracket
3	1	2370.1045	Pin – Gas Spring Main Support End	32	5	2540.2240	Distance Piece – Top Handle
4	2	2540.2230	Weight Adjuster Bracket Mount Bush	33	1	2580.5500	Pivot – Gas Spring Tool Holder End
5	1	2601.7500	Central Support	35	2	2322.0550	Circlip – Main Pivot Lower Bearing
6	2	2380.0150	Brake Stop	36	2	2321.0300	Circlip – Main Pivot Retaining
7	1	2621.7520	Main Frame	37	1	2400.2080	Washer – Weight Adjuster Central
8	23	2300.0620	Screw Cap Head M6	38	1	2621.7500	Outrigger Bar
9	2	2420.0960	Profiled Wheel	39	1	2540.3800	Clamp - Outrigger
10	12	2332.0121	Ball Bearing Small	40	1	2410.9270	Lever - Outrigger
11	2	2580.1210	Axle – Profiled Wheel	41	1	2300.0645	Lever Pin - Outrigger
12	4	2540.2220	Profiled Wheel Bearing outer Support Bush	42	1	2580.1230	Limit Control Key
13	6	2540.2210	Centre Spacer Bush	43	1	2300.0520	Screw – Limit Control Key Retaining
14	7	2310.2121	C Nut – M12	44	1	2801.7532	Wheel Arm
15	1	2651.2400	Weight Adjuster Bracket	46	1	2701.2000	Spacer Disc
16	1	2670.2010	Weight Adjustment Tool	47	2	2420.1500	Balance Wheel
17	1	2540.3000	Tool Support Bush	48	1	2540.0470	Central Column Bush
18	26	2400.2060	Washer – M6	49	3	2353.1560	O Ring – Central Column
19	17	2400.2120	Washer – M12	51	1	2400.4100	Washer – Weight Adjuster Central
20	4	2580.1200	Retaining Pin – Top Handle Main Pillar End	52	1	2333.0300	Tool Holder Support Bottom Bush
21	1	2581.4600	Central Pivot	53	1	2510.5280	Gas Spring Assembly
22	2	2332.0301	Ball Bearing Large	54	1	2580.1020	Gas Spring Extension
24	1	2540.2400	Lock Plunger Bush	55	1	2625.3010	Transport Secure Bar
25	1	2580.1000	Weight Adjusting Screw	56	6	2322.0280	Circlip – Small Bearing Retaining
26	2	2400.2100	Washer – Weight Adjuster Lower	57	1	2580.4300	Rod End – Top Handle to Main Pillar
27	1	2310.2081	Hexagonal Nut – Weight adjuster	58	1	2625.2900	Top Handle
28	4	2371.0620	Dowel Pin – Central Support	60	2	2310.2160	Hexagonal Nut – Brake Stop Retaining
29	2	2540.7150	Weight Adjuster Sliding Shoe				