Operating Manual:
2/3 Tonne Abco Jacking Beam (JB014-2/JB014-3)

Image Shows 3 Tonne Jacking Beam (JB014)

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Installation of Jacking Beam

1. Inspection on Delivery

1.1. Upon delivery and unpacking, inspect the jacking beam for any damage or missing components.
1.2. Report any damages or shortages immediately to the supplier.
1.3. The jacking beam will be secured to the shipping pallet. Remove the fixing screws to release it.

2. Preparation for Installation:

2.1. The jacking beam is pre-adjusted to the minimum width over the arms, you will need to set the width using the bolts on either side of the frame.
2.2. Using a suitable lifting device, raise the jacking beam using the legs.
2.3. Lower the jacking beam into the pit/lift.

3. Fitting to Pit/Lift Rails:

3.1. Offer the beam to the pit/lift rails.
3.2. The arms may need to be adjusted. This can be done by locating the bolts on either side of the main body and loosening them **(do not remove them)** to reposition the arms.
3.3. Extend the arms to align with the pit/lift rails.
3.4. Lower the beam onto the rails and test by running it along the pit/lift length to ensure proper alignment.
3.5. Tighten the bolts to secure the arms in position.
3.6. Finally, lower and position the beam securely onto the rails.

4. Pre-Operational Checks:

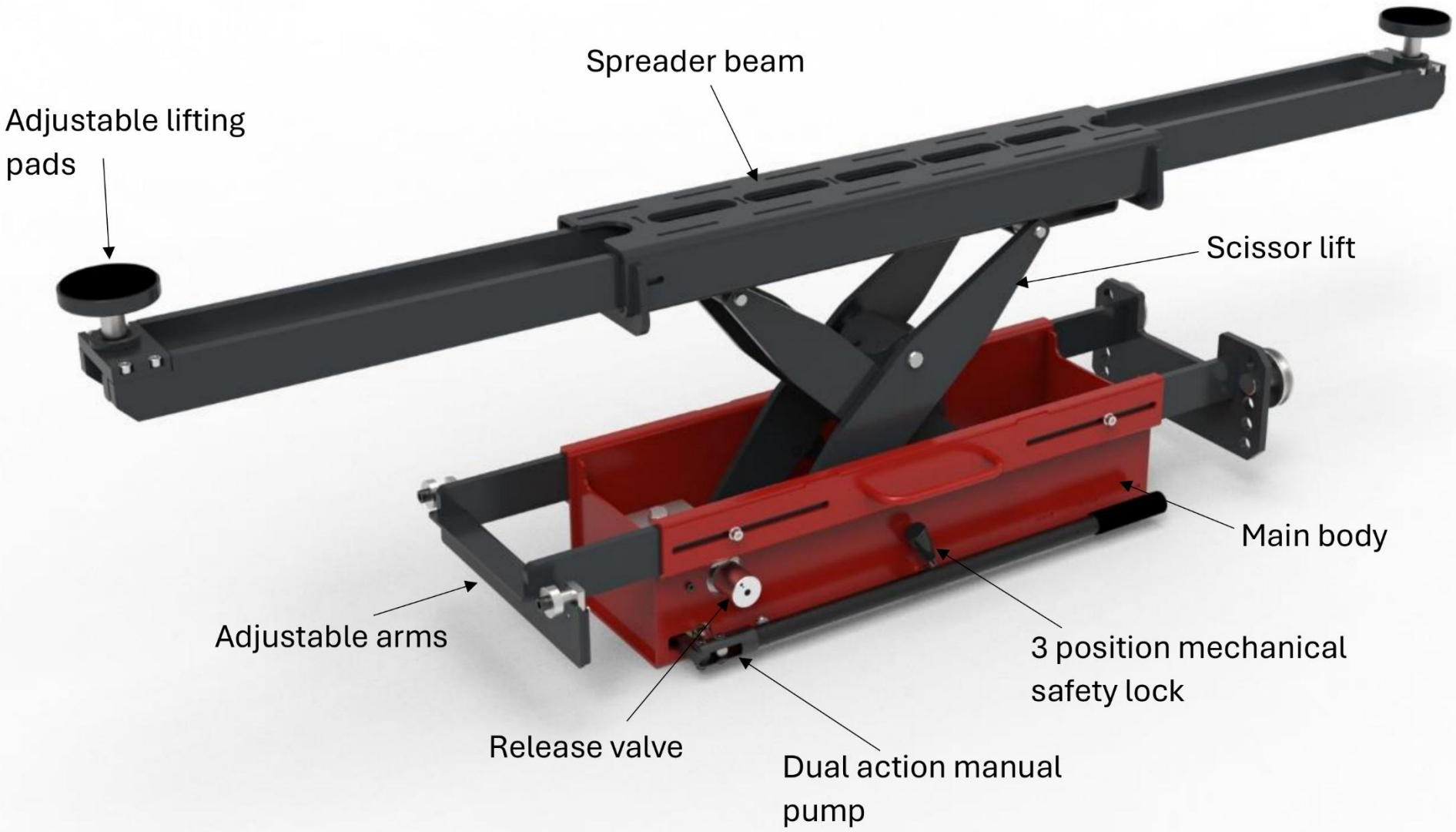
4.1. Move the pit jack to an open space in the pit. **Do not** attempt to lift any load yet.
4.2. Visually check the jacking beam for any oil leaks/damage caused in shipping.

5. Cycling the Jacking Beam:

5.1. Using the handle, lift the jacking beam to its highest point. Once it has reached this point, turn the safety catch to the right, then slowly undo the release valve and allow it to fully retract.
5.2. Repeat this process 3–4 times to ensure proper functioning.
5.3. Check the spreader beam arms slide in and out with ease and do not get stuck on anything.
5.4. Inspect the jacking beam thoroughly for any oil leaks or damage.

The jacking beam is now ready for use. By following these steps carefully, you can ensure proper installation and safe operation of your jacking beam.

Part Reference Diagram



Operating Instructions

1. **Positioning the Jacking Beam**

    1.1. Place the jacking beam at a suitable lifting point within the pit/lift.
    1.2. Adjust the spreader to distribute the load evenly across the beam width.
    1.3. Adjust the pads to the correct height, use optional extension adaptors if needed (do not exceed 2 sets of extensions at one time).

2. **Safety Check**

    2.1. Ensure the work area is clear and verify that no personnel are in danger before operating the jacking beam.
    2.2. **WARNING:** Keep hands, fingers and body parts away from the scissor mechanism at all times to prevent serious injury.

3. **Raising the Vehicle**

    3.1. Pump the handle to start lifting the vehicle to the desired height.
    3.2. You should hear a click sound come from the jacking beam where the safety lock has latched into place.

4. **Lowering the Vehicle**

    4.1. Confirm that the area beneath the vehicle is clear of obstacles.
    4.2. If the mechanical safety lock is engaged, pump the handle to lift the beam to release the safety lock.
    4.3. Open the safety lock by turning the handle clockwise.
    4.4. Slowly open the cylinder isolation valve(s), the vehicle will then start to descend.
    4.5. Gradually turn the release valve on the pump to control the descent rate.
    4.6. Once the vehicle is on the ground, let go of the release valve to let it spring back to place, then let go of the safety lock to let it drop back into place.

5. **Troubleshooting Descent Issues**

If the release valve is opened too quickly, the cylinder may lock due to the hose burst valve.

To resolve this:

    5.1. Slightly raise the vehicle using the hand pump.
    5.2. Open the release valve slowly to resume lowering.

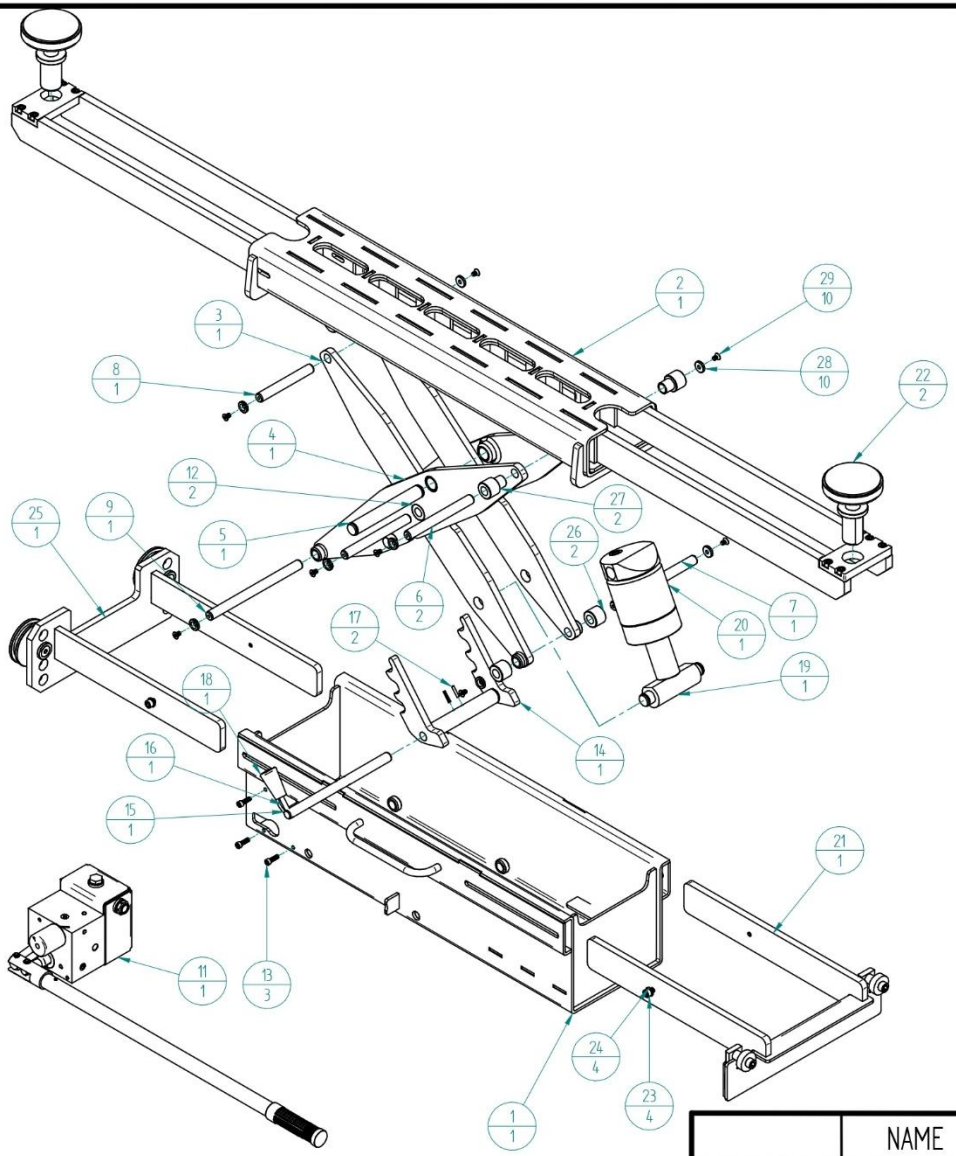
By following these steps, you can safely and effectively operate the JB014 jacking beam. Always prioritise safety and inspect the equipment regularly to ensure proper functioning.

NEVER WORK UNDER AN UNSUPPORTED VEHICLE!

3 Tonne Jacking Beam Assembly Exploded View

DO NOT SCALE IF IN DOUBT ASK REMOVE ALL SHARP EDGES 0.5 X 45°

DWG No 014-30000



Item No.	Part No.	Description	Qty
1	014-10000	Frame	1
2	014-10200	Spreader beam	1
3	565-30000	Scissor arms	1
4	565-30005	Scissor arms	1
5	240-22060	22mm ram pivot pin	1
6	240-16037	16mm pin	2
7	240-16039	16mm pin	1
8	240-16038	16mm pin	1
9	240-16040	16mm pin	1
11	563-20000	Hand pump	1
12	100-30000	Pivot bush	2
13	650-00620	M6 x 20 cap head	3
14	014-10020	Safety catch	1
15	240-16041	16mm pin	1
16	360-00176	8mm shaft	1
17	630-00420	4 x 20 roll pin	2
18	420-00080	Plastic knob	1
19	R04186	Ram	1
20	R04186		1
21	014-00270	Flat roller arm	1
22	014-10025	Adjustable pads	2
23	650-00820	M8 x 20 cap head	4
24	890-00080	M8 washer	4
25	014-00290	Fixed roller arm	1
26	635-00300	Lower rollers	2
27	635-00305	Upper rollers	2
28	890-00065	Washer	10
29	656-00610	M6 x 10 countersunk	10

Circlip sizes are 22mm external

	NAME	DATE
DRAWN	M. Steele-Vaessen	07/04/25

UNSPEC TOL:
LNEAR X :±0.3 X.0 :±0.1 X.00 :0.05
ANGULAR X :±1° X.0 :±0.5°

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ABCO Engineering (Hydraulics)
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SIZE A4 | TITLE 3 TONNE JACKING BEAM ASSEMBLY | ISSUE 1

FILE NAME: 014-30000.dft

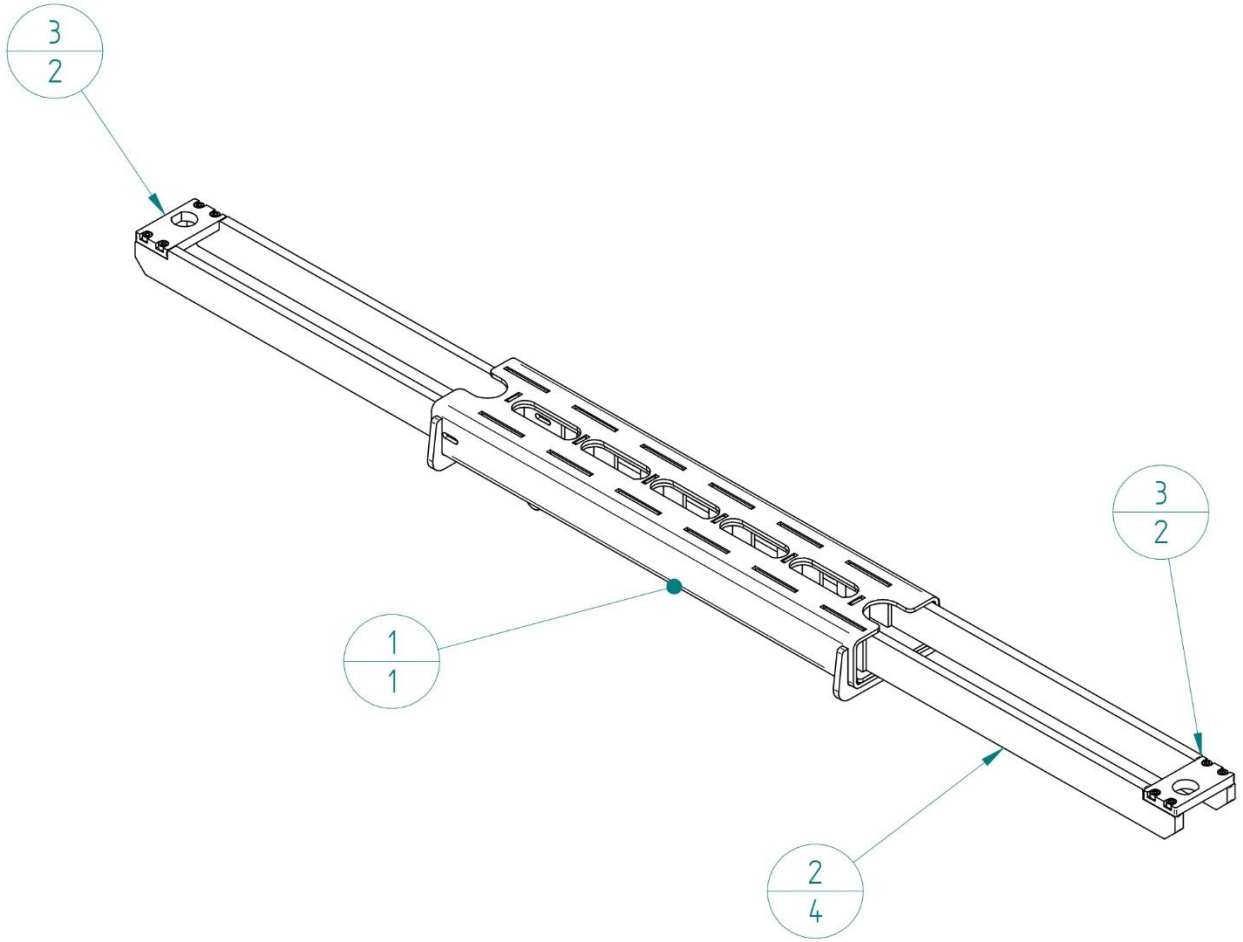
MATL: | SCALE:1:12.5

Spreader Beam Assembly Parts List

DO NOT SCALE IF IN DOUBT ASK REMOVE ALL SHARP EDGES 0.5 X 45°

DWG No 014-10200

Item No.	Part No.	Quantity
1	081-014-10200	1
2	081-014-00231	4
3	014-00246	2
4	650-00830	8



	NAME	DATE
DRAWN	M. Steele-Vaessen	21/01/25

UNSPEC TOL:
LNEAR X :±0.3 X.0 :±0.1 X.00 :0.05
ANGULAR X :±1° X.0 :±0.5°

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SIZE A4 | TITLE | ISSUE 1

FILE NAME: 014-10200.dft

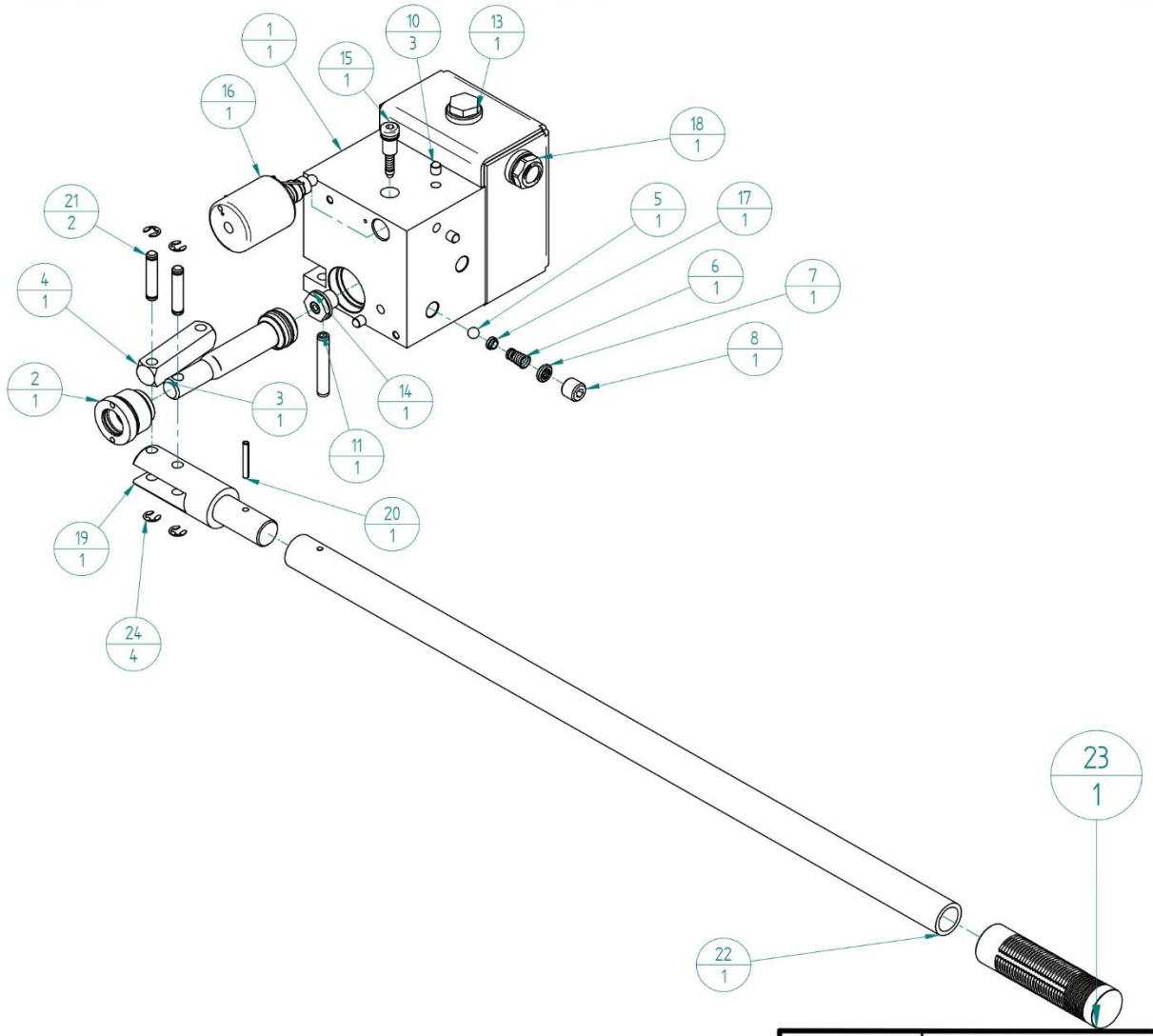
MATL: | SCALE:

Rev 1.0

Jacking Beam Pump Assembly Parts List

DO NOT SCALE IF IN DOUBT ASK REMOVE ALL SHARP EDGES 0.5 X 45°

DWG No 563-20000



Item No.	Part No.	Description	Qty
1	580-00060	Pump block and tank	1
2	565-00048	Gland assy	1
3	565-00660	Plunger assy	1
4	445-00054	Handle link	1
5	110-00079	Ball bearing	1
6	730-00134	Spring	1
7	501-00001	Lock ring	1
8	660-00250	Blanking plug	1
10	270-00070	Expander	3
11	630-07951	Roll pin	1
13	150-00096	Breather	1
14	565-00315	Suction assy	1
15	565-00260	Relief assy	1
16	565-00084	Release assy	1
17	647-00015	Ball carrier	1
18	295-00310	Level guage	1
19	360-00182	Handle socket	1
20	630-00425	Roll pin	1
21	550-00032	Pivot pins	2
22	360-00083	Handle	1
23	340-00002	Grip	1
24	210-00006	C clips	4

	NAME	DATE
DRAWN	M. Steele-Vaessen	13/01/25

UNSPEC TOL:
LNEAR ANGULAR
X :±0.3 X :±1°
X.0 :±0.1 X.0 :±0.5°
X.00 :0.05

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ABCO Engineering (Hydraulics)
Tel: 01636 812674 Fax: 01636815448

SIZE A4 | TITLE Jacking beam pump assy | ISSUE 1

FILE NAME: 563-20000 exploded.dft

MATL: | SCALE:

Weekly Maintenance

NOTE: Disconnect the air supply before performing any maintenance tasks.

1. **Cleaning**

   1.1. Remove all dirt and debris from the jacking beam, check any moving parts for any debris. **Note:** do not put your arms in the scissor mechanism, visually check them pump/scissor arms/ram/hose for any signs of wear or problems.
   1.2. Ensure the spreader beam slides in and out easily.

2. **Roller Inspection:**

   2.1. Ensure the rollers move freely along the rails.
   2.2. Address any obstructions or resistance to ensure smooth operation.

3. **Frame and Bolt Check:**

   3.1. Inspect the jacking beam frame for structural integrity.
   3.2. Ensure all connecting bolts are tight and secure.

Note: Do not use alternative fluids to avoid damage to the pump and cylinder seals.

Use the enclosed maintenance record sheet to document each weekly inspection.

By conducting these weekly checks, you can ensure the pit jack remains in optimal working condition and avoid unnecessary wear or accidents.

Maintenance Record

Part No.
Serial No.
Week Commencing:

Inspections Checks	Week 1	Week 2	Week 3	Week 4	Week 5
Remove all dirt and debris from the jacking beam					
Check the spreader beam arms slide freely					
Check the rollers move freely along the rails					
Check lifting pads for any damage					
Visually check the internals for signs of damage, wear, or aging					
Inspect the jacking beam frame for structural integrity					
Ensure all connecting bolts are tight and secure					
Completed by					
Additional Comments:					

Copy this sheet for your records

Jacking Beam Extended 5 Year Limited Warranty

Year 1 — **Full parts cover**

Any part failing from faulty materials or workmanship within the first 12 months from date of purchase will be replaced/repaired free of charge. Accidental and water damage of any component will not be covered by the warranty and will be fully chargeable (all repairs will be quoted before being carried out) e.g. damaged cylinder rod, internal water damage, damaged release valve etc.

Year 2-5 — **Limited parts cover**

Any part failing from faulty materials or workmanship, between month 13 to 60 from date of purchase will be replaced/repaired free of charge. Excluded from the above statement are consumable wearing parts: seals (cylinder, pump and valve), bearings, lifting adaptors, internal hand pump components, hydraulic hoses, any part suffering from accidental or water damage.

To ensure a long service life and continued warranty support for your jacking beam, it is essential to maintain the equipment in good working order and adhere to all operating parameters. This includes, but is not limited to:

Ensuring the jacking beam remains clean and free from debris.

Detailed instructions for weekly maintenance are provided in the operating manual. **Failure to comply with these operating parameters and maintenance requirements may invalidate your warranty.**

Please see our Terms & Conditions for further information.

CE

DECLARATION OF CONFORMITY

ABCo Engineering Hydraulics
Mill Park
Southwell
Nottinghamshire
NG25 0ET
01636 812674

ABCo Engineering Hydraulics hereby declare that products:

JB014-2 – Abco 2 tonne jacking beam

JB014-3 – Abco 3 tonne jacking beam

Comply with the following Directives:

2006/42/EC MACHINERY DIRECTIVE

The undersigned declares, on the behalf of ABCo Engineering Hydraulics that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The products comply with all the applicable Essential Health and Safety Requirements of the Directive.

Mike Would – Managing Director