



DRAPER[®]

1000kg

TRANSMISSION JACK

19788



These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

1. TITLE PAGE

1.1 INTRODUCTION:

USER MANUAL FOR: 1000kg Transmission Jack

Stock No: 19788

Part No: TJ1000-E

1.2 REVISIONS:

Date first published July 2019.

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: <http://drapertools.com/manuals>

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1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

WARNING! – Information that draws attention to the risk of injury or death.

CAUTION! – Information that draws attention to the risk of damage to the product or surroundings.

1.4 COPYRIGHT © NOTICE:

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DECLARATION OF CONFORMITY	ENCLOSED

3. WARRANTY

3.1 WARRANTY

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact

Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone Sales Desk: (023) 8049 4333 or Product Help Line (023) 8049 4344.

A proof of purchase **must** be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This warranty period covering labour is 12 months from the date of purchase except where tools are hired out when the warranty period is 90 days from the date of purchase. This warranty does not apply to any consumable parts, or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This warranty applies in lieu of any other warranty expressed or implied and variations of its terms are not authorised.

Your Draper warranty is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the warranty period.

Please note that this warranty is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

Ideal for garages or automotive workshops this transmission jack can be comfortably rolled under the vehicle and can be lifted to the required height by using the foot pump, for supporting gearboxes and transmissions. Any other application is considered misuse.

4.2 SPECIFICATION

Stock No.	19788
Part No.	TJ1000-E
Capacity	1 Tonne (1000kg)
Minimum height	940mm (approx.)
Maximum height; Stage 1	1430mm (approx.)
Maximum height; Stage 2.....	1940mm (approx.)
Weight (nett)	67kg

4.3 HANDLING & STORAGE

- Care must be taken when handling this product.
 - Dropping this product could have an effect on its accuracy and could also result in personal injury. This product is not a toy and must be respected.
- Environmental conditions can have a detrimental effect on this product if neglected.
 - Exposure to damp air can gradually corrode components.
 - If the product is unprotected from dust and debris, components will become clogged.
 - If not cleaned and maintained correctly or regularly, the product will not perform at its best.

Store in a dry location out of the reach of children.

5. HEALTH AND SAFETY INFORMATION

5.1 GENERAL SAFETY WARNINGS

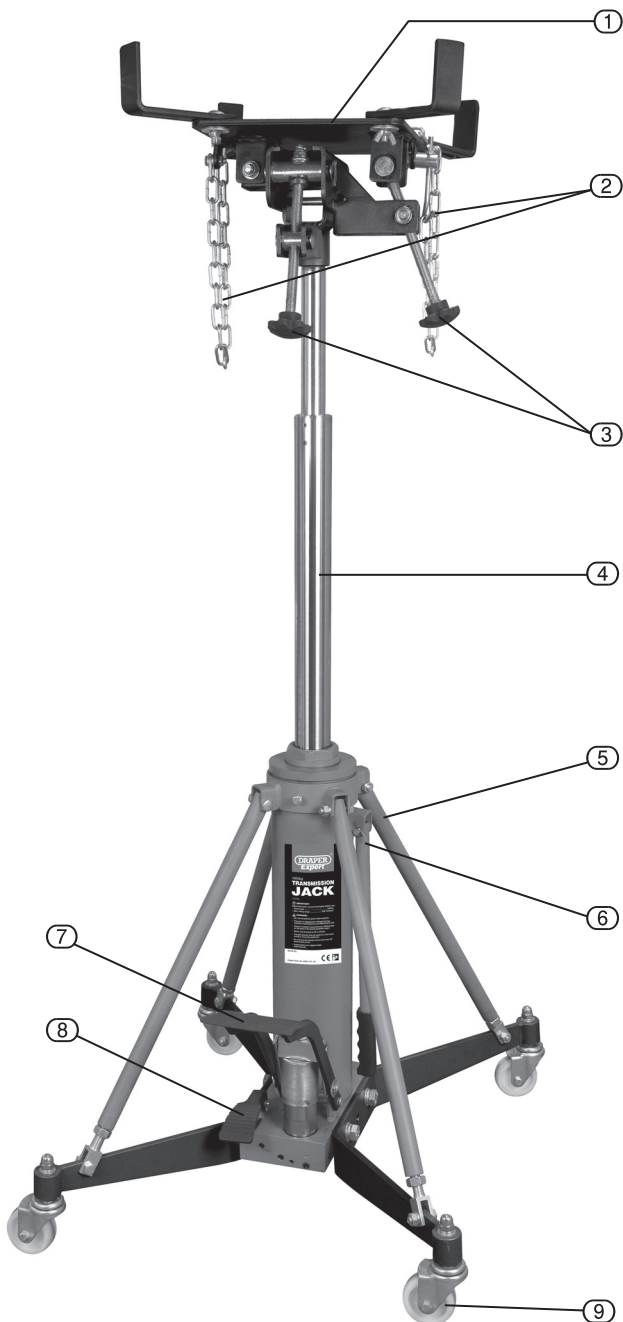
CAUTION:

- The jack may be used for the installation/removal of transmission systems within the weight limitations specified.
- The jack is designed for lifting/lowering vehicle transmissions and differentials only.
- Always transport transmissions/differentials on the jack in its lowest possible height.
- Never use the jack to lift a vehicle.
- Ensure that the vehicle transmission is stable within the saddle of the transmission jack before lifting or lowering it.
- The jack should be supported on a solid, level and horizontal surface which is well illuminated and free of obstructions. Never stand the jack on a surface which may sink, concrete is preferred.
- Inspect and lubricate the jack on a regular basis.
- Failure to comply with these safety warnings may result in personal injury and/ or damage to property and jack.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION

- ① Saddle assembly.
- ② Securing chains.
- ③ Angle adjustments.
- ④ Hydraulic strut.
- ⑤ Support rod.
- ⑥ Manoeuvring arm.
- ⑦ Pump pedal.
- ⑧ Release valve pedal.
- ⑨ Castor.



7. UNPACKING AND CHECKING

7.1 PACKAGING

Carefully remove the machine from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the Title page) and do not attempt to use the machine.

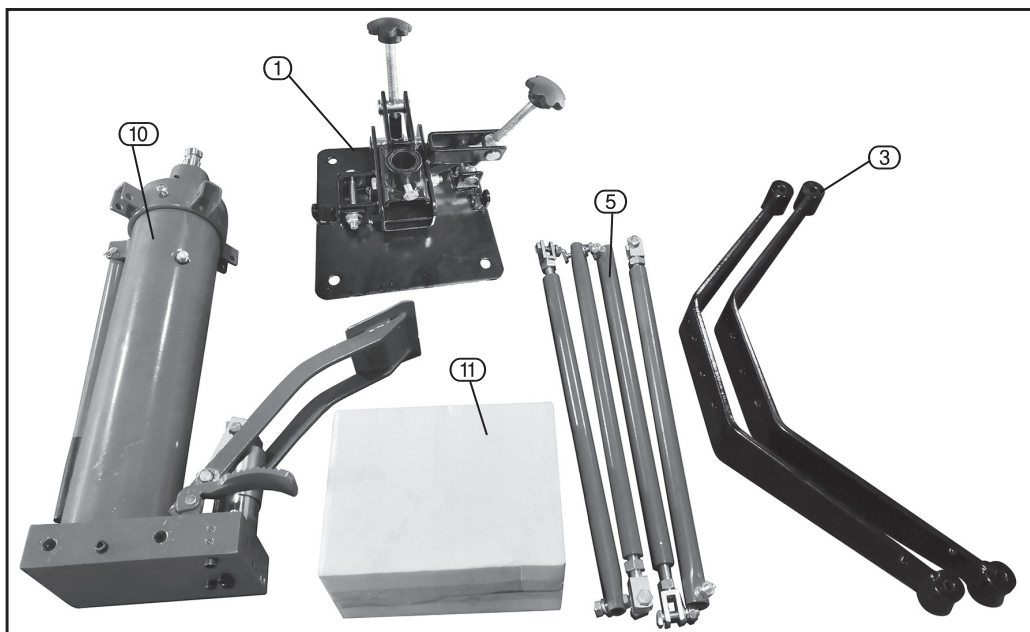
The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

Warning! Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.

If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

7.2 WHAT'S IN THE BOX?

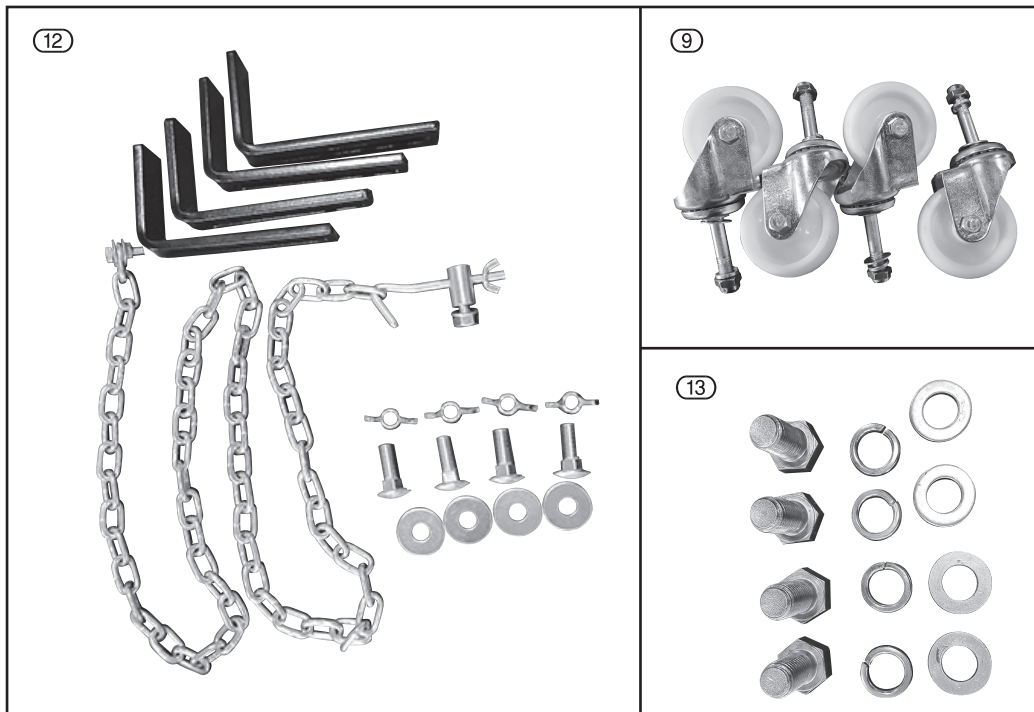
The packaging contains several parts and semi-assembled elements that require final assembly. Lay out the contents and check off the items against those featured below.



- (10) Pump assembly.
- (1) Saddle assembly.
- (3) Leg units x2.

- (5) Support rods x4.
- (11) Hardware kit.

7. UNPACKING AND CHECKING



(12) Saddle hardware kit.

(9) Castors x4

(13) Fastenings for legs to pump assembly.

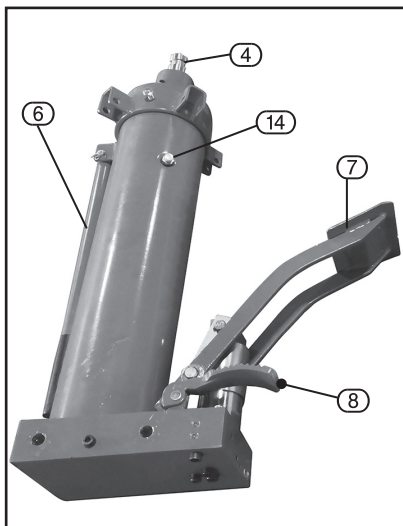
(6) Manoeuvring arm.

(14) Oil plug.

(7) Pump pedal.

(8) Release valve pedal.

(4) Hydraulic strut.



8. ASSEMBLING THE TRANSMISSION JACK

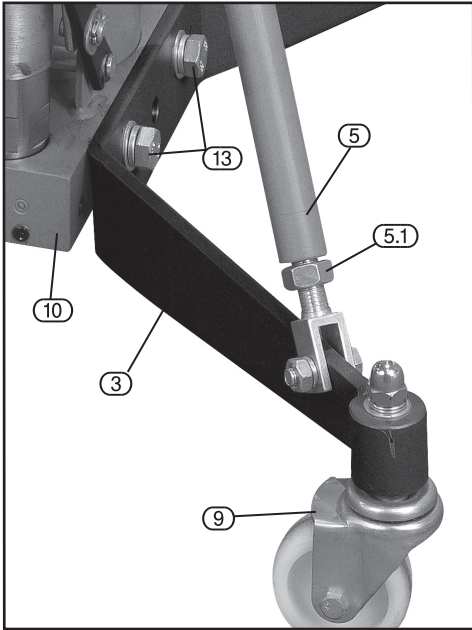


FIG.1

8.1 BASE ASSEMBLY – FIGS.1-2

- Connect the legs (3) to the base of the pump assembly (10) using flat washer, lock washers and bolts (13).
- Connect castors (9) to legs (3).
- Connect the support rod (5) to the legs (3).

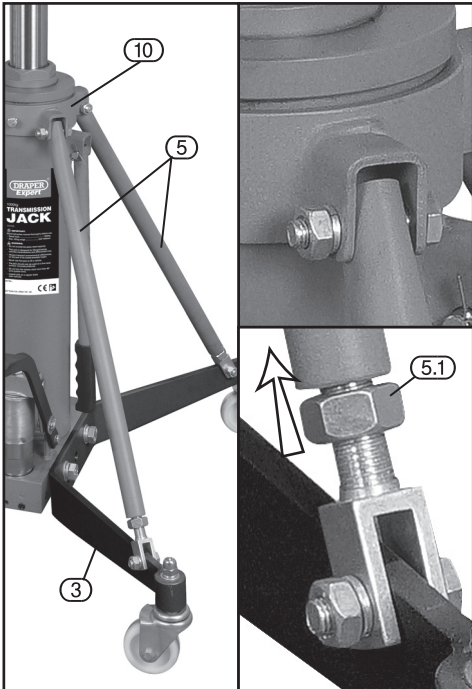


FIG.2

- Connect the support rod (5) to the leg (3) and the top of pump assembly (10).
- Adjust the support rods length using the adjustment nut (5.1) ensuring the ram, when extended, is exactly perpendicular to the floor.
- Fully tighten all the bolts after rods have been connected.

8. ASSEMBLING THE TRANSMISSION JACK

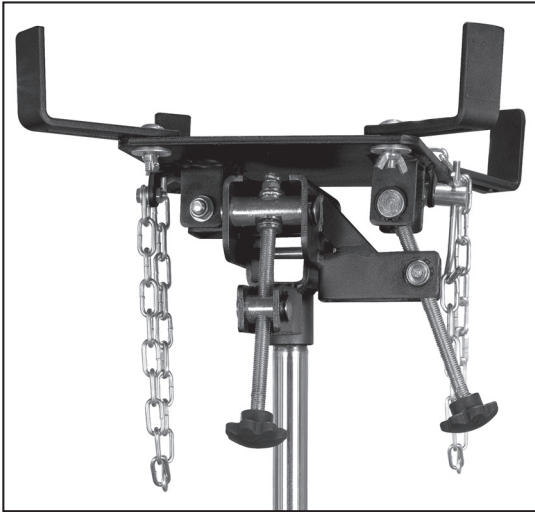


FIG.3

8.2 SADDLE ASSEMBLY

- Connect the brackets and chains to the saddle with bolts, washers and wing nuts as Fig 3.

9. OPERATING INSTRUCTIONS

9.1 BLEEDING INSTRUCTIONS FIG. 4

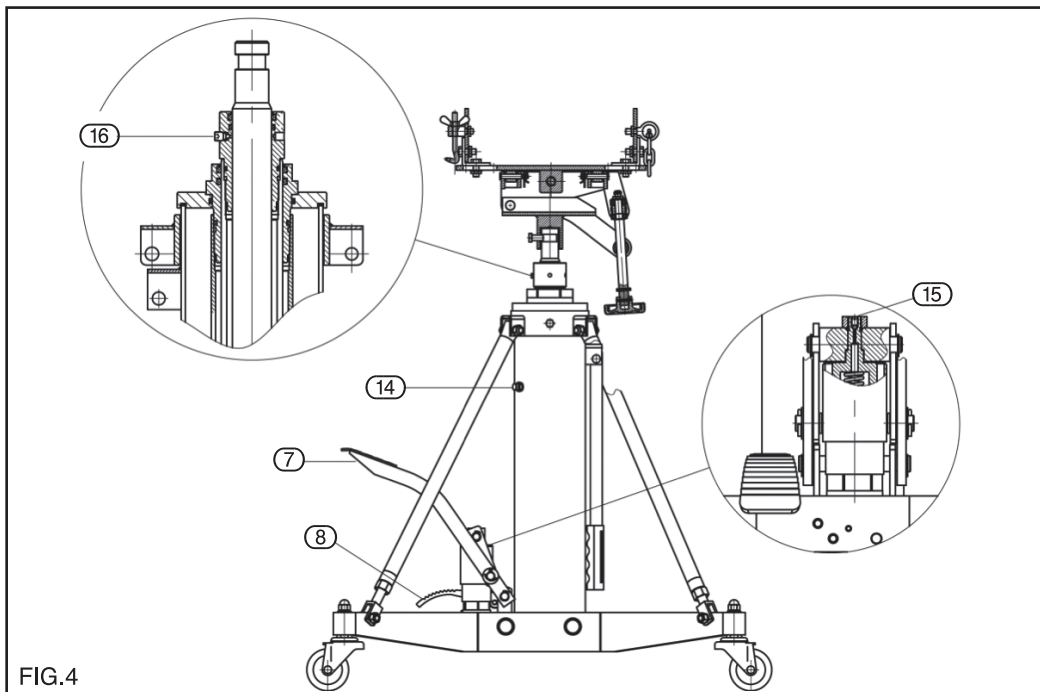


FIG.4

Checking the oil Level

Prior to first use, check the level of the hydraulic oil level in the jack.

Remove the oil plug (14) and ensure the level of the fluid is the same height as the oil plug hole.

If the fluid is low, top up as necessary.

Its recommended to check the oil at periodic service intervals.

Bleeding Instructions

Pump Bleeding

Ensure the saddle is in the lowest position by pressing the release pedal (8).

With the oil plug (14) loosened, release the bleed screw (15) 1-2 turns.

Using full strokes, depress the pump pedal (7) approximately 10 times.

Tighten the bleed screw & oil plug.

Check operation of the pump accordingly.

Ram Bleeding

Loosen the oil plug (14) and raise the saddle to highest point by using the pump pedal (7).

Release the bleed screw (16) 1-2 turns.

Using full strokes, depress the pump pedal (7) approximately 10 times.

Tighten the bleed screw & oil plug.

Lower the saddle to the lowest position by pressing the release pedal (8).

Check operation of the pump accordingly.

9. OPERATING INSTRUCTIONS

9.2 GENERAL OPERATING INSTRUCTIONS



1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Prior to initial use, jack up the saddle and, using the release valve pedal (8), lower it. Doing so will familiarize the use with the control functions and jack, if needed.
3. Once the vehicle is safely and properly secured, position the transmission jack underneath your vehicle.
4. Pump the pump pedal (7) to raise the jack to contact and bear transmission weight. After making contact with the transmission, make sure it is centred on the head plate (1). Adjust the saddle sliders and angle adjustment around the transmission.
5. After contact, lift the jack another inch to transfer the weight of the transmission from the vehicle chassis to the transmission jack.
6. Unscrew transmission. With assistance, remove transmission bolts freeing it from the vehicle. Making sure there is nothing to restrict the movement of the transmission.
7. Back off transmission to free from engine.
8. Check the head plate; make sure it is securely holding the transmission and not showing any signs of stress. Carefully lower it by pressing the release valve pedal (8).
9. Again check the head plate; making sure it is securely holding the transmission and not showing any signs of stress.
10. Secure the chains tightly over the transmission and lower the jack to the lowest possible point.

Warning! The jack is designed to lift loads only for short periods of time. Do not use to suspend a load for more than 30 minutes at a time.

10. MAINTENANCE INSTRUCTIONS

Procedures not specifically explained in this manual must be performed only by a qualified technician.

WARNING

10.1 TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment.

If abnormal noise or vibration occurs, have the problem corrected before further use.

1. Before each use, inspect the general condition of the transmission jack. Check for broken, cracked, or bent parts, loose or missing parts, and any condition that may affect the proper operation of the product. If a problem occurs, have the problem corrected before further use.

Do not use damaged equipment.

2. Before each use, thoroughly test the transmission jack for proper operation prior to its actual use. If the pump appears not to be working properly, follow bleeding instructions.
3. Change the hydraulic oil at least once every year. To change the hydraulic oil:
 - a. With the jack fully lowered, remove the oil plug (6).
 - b. Tip the jack to allow the old hydraulic oil to drain out of the housing completely, and dispose of the old hydraulic oil in accordance with local regulations.
 - c. With the jack upright, completely fill the housing with a fresh hydraulic jack oil (not included) until the oil just begins to run out.
 - d. Perform bleeding procedures under "bleeding instructions."
4. Clean with a clean cloth. Then, store the jack in a safe, dry location out of reach of children and other non-authorized people.

At the end of the useful life of the jack, drain off the oil and hand it over to an authorized agent and dispose of the jack in accordance with local regulations.

11 TROUBLESHOOTING

11.1 TO PREVENT SERIOUS INJURY:

Use caution when troubleshooting a malfunctioning jack.

Completely resolve all problems before use. If the solutions presented in the troubleshooting guide do not solve the problem, have a qualified technician inspect and repair the jack before use.

After the ram and pump are repaired: test it carefully without a load by raising it and lowering it fully, checking for proper operation, **BEFORE RETURNING THE PUMP TO OPERATION.**

Problem	Possible Cause	Solution
Ram does not operate when pedal is pumped.	Air in the pump.	Please follow the steps: 1. Open the oil plug & release screw, pump 10-15 times. 2. Close the oil plug & release screw, pump 5-10 times. 3. Repeat step 1 and 2 for approximately 3 times
	The valve unit is stuck.	
Ram will not hold load.	Malfunction in pump such as dirt inside valve mechanism.	Please follow the steps: 1. Open the oil plug & release screw, pump up the pedal 10-15 times. 2. Close the oil plug & release screw, pump 5-10 times. 3. Repeat the step 1 and 2.
Ram reluctant to lower when load removed.	Oil reservoir overfilled.	Drain oil to correct level.
	Piston binding.	Clean and lubricate moving parts.
	Overextended ram.	Replace ram.
Ram will not extend to full range of stroke.	Low oil level.	Add hydraulic oil to the reservoir.
Ram tries to tilt to one side.	Incorrectly assembled base or loose base fixings.	Stop work and fully check ram and base, ensuring it is correctly assembled and all fixings are correctly tightened and as close to perpendicular to the job as possible.

12. EXPLANATION OF SYMBOLS

12.1 EXPLANATION OF SYMBOLS



Warning!
Wear suitable foot protection.



Warning!
Keep bystanders away.



Warning!
Read the instruction manual.

CONTACTS

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E-mail: sales@drapertools.com

General Enquiries: (023) 8026 6355

Service/Warranty Repair Agent:

For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST

RDMC0718

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