



DRAPER[®]

1 TONNE

TRANSMISSION JACK

78611



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: 1 Tonne Transmission Jack

Stock No: 78611

Part No: TJ1/T

1.2 REVISIONS:

Date first published March 2018.

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
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3. GUARANTEE

3.1 GUARANTEE

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 Helpline (023) 8049 4344.

A proof of purchase must be provided.

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 guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is 90 days from the date of purchase. The guarantee is extended to 24 months for parts only. This guarantee does not apply to 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 guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

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

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

Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

Low positional transmission jack supplied with chain for safe loading. Precision valve allows delicate adjustment when taking out gearboxes and realigning during replacement. Four castors for extra manoeuvrability in confined spaces. Fully adjustable saddle with forward, backward and sideways tilt.

4.2 SPECIFICATION

Stock No.	78611
Part No.	TJ1/1
Rated load	1000kg
Maximum saddle range	205 - 660mm
Saddle tilt	
forward.....	45° Approx.
Dimensions.....	850 x 490 x 305mm
Weight (nett)	54kg

EXTREMELY IMPORTANT: Read these safety instructions carefully in addition to the instructions for use, operation and maintenance. Keep this instructions sheet in an easy to find place as you may need to use it again.

This vehicle lift has been designed for use in the elevation of vehicles.

Any other application, beyond the conditions established for use of this vehicle lift will be considered inappropriate.

Handle the vehicle lift correctly and ensure that all parts are in good condition prior to its use.

Only authorised persons should operate the vehicle lift having read carefully and understood the contents of this manual.

Do not modify the vehicle lift in any way.

Non-compliance with these rules may result in injury or damage to the user, the vehicle lift or the vehicle to be lifted.

The manufacturer accepts no responsibility for the improper use of the vehicle lift.

4.3 HANDLING AND STORAGE

Care must still be taken when handling and lifting. Dropping this machine will have an effect on the accuracy and may also result in personal injury. This machine is not a toy and must be respected.

The environment will have a negative result on its operation if you are not careful. If the air is damp, components will rust. If the machine is unprotected from dust and debris; components will become clogged: And if not cleaned and maintained correctly or regularly the machine will not perform at its best.

5. HEALTH AND SAFETY INFORMATION

5.1 GENERAL SAFETY WARNINGS

- The jack may be used for the installation/removal of transmission systems within the weight limitations specified.
- The jack is designed for lifting/lowering vehicles 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 only be used on a firm level surface. Never use on soft uneven surfaces.
- Do not turn the release valve more that 90° (one quarter turn).
- 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.

Caution:

- Use only on a firm level surface.
- Do not exceed the rated capacity of this jack.
- Ensure that the transmission or differential being lifted is stable and correctly centred on the jack cradle.
- Familiarise yourself thoroughly with this manual before operating to prevent damage to the jack and property or personal injury.
- Only use this jack for lifting and lowering transmissions and differentials.
- Only move a jack carrying a transmission or differential in the lowest position.

5. HEALTH AND SAFETY INFORMATION

5.2 SAFETY PRECAUTIONS

1. The vehicle to be lifted should never exceed the rated capacity of the jack.
2. The maximum stroke of the jack indicated on the label should never be exceeded.
3. 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.
4. Ensure that there are no persons inside the vehicle to be lifted. Switch off the engine and apply the brake. Ensure the vehicle or element to be lifted against any type of sliding. Use chocks if appropriate (1). Do not enter the vehicle or start the engine whilst it is supported on the jack or appropriate stands. The jack is a lifting device only and should never be used to move the vehicle.
5. During raising and lowering of the load, all precautions should be taken to avoid movement of the vehicle load. Traffic may cause the raised vehicle to rock during roadside use of the jack.
6. The jack should be positioned so as to avoid the need for the user to introduce any part of his/her body underneath the vehicle. Never work under a raised vehicle without supporting it with axle stands (5) or other appropriate methods. Never position any part of your body near the movable elements of the jack.
7. It is necessary for the operator to be able to observe the lifting device and the load during all movements. In the presence of dangerous conditions, such as movement of the vehicle, etc, the lifting process must be interrupted.
8. Ensure that there are no persons or obstructions underneath the vehicle prior to lowering.
9. As an additional safety measure against overload, the jack is fitted with an overload valve set at the factory and which should not be adjusted under any circumstances. If the capacity of the jack is exceeded, the overload valve will stop the lifting operation.

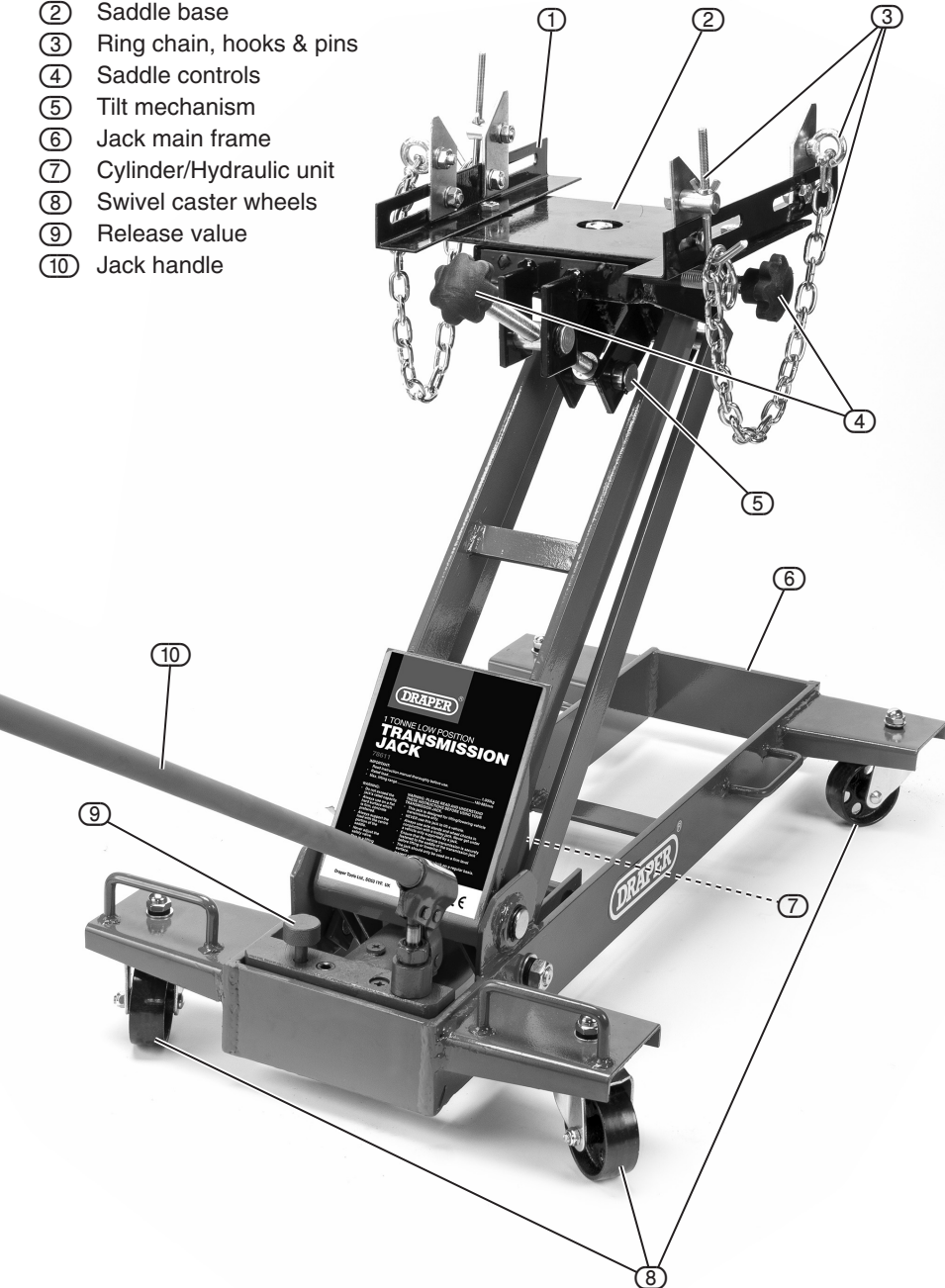
Caution:

- Use only on a firm, level surface, concrete is preferred.
- Do not exceed the rated capacity of this jack.
- This is a lifting device only ... do not work under the vehicle without proper support devices, such as axle stands.
- Make sure that the lifting point is stable and correctly centred on the jack saddle.
- Familiarize yourself thoroughly with this manual before operating to prevent damage to the jack, property, or personal injury.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION

- ① Saddle attachments
- ② Saddle base
- ③ Ring chain, hooks & pins
- ④ Saddle controls
- ⑤ Tilt mechanism
- ⑥ Jack main frame
- ⑦ Cylinder/Hydraulic unit
- ⑧ Swivel caster wheels
- ⑨ Release valve
- ⑩ Jack handle



7. UNPACKING AND CHECKING

7.1 PACKAGING

Carefully remove the jack 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.

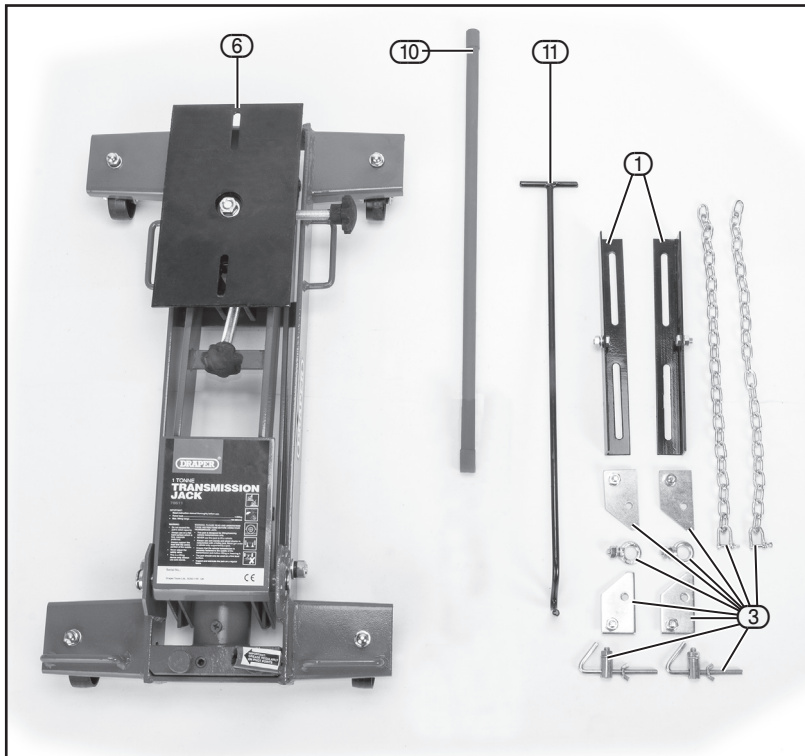
The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

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.



- ① Saddle attachments
- ③ Ring chain, hooks & pins
- ⑥ Jack main frame
- ⑩ Jack handle
- ⑪ Positioning rod

8. ASSEMBLING THE TRANSMISSION JACK

8.1 BEFORE USING

Important: Before using the jack for the first time, purge the hydraulic circuit in order to eliminate any air that may have accumulated in the system during transit, as follows:

1. Open the release valve by turning the knob anti-clockwise.
2. Pump the jack handle up and down 15 to 20 times.
3. Turn the release valve clockwise to close it.

9. TRANSMISSION JACK INSTRUCTION



9.1 SADDLE TILT MECHANISM.

Adjusting the pitch and tilt of the saddle will assist in safely supporting and transporting the gearbox. The saddle base (2) may be tilted forwards and backwards, left or right by turning saddle tilt controls (4).

Warning: Ensure that the vehicle is prepared correctly before attempting to use the Transmission Jack. ALWAYS REFER TO THE VEHICLE MANUFACTURE.

9.2 POSITIONING THE JACK BENEATH LOAD.

Before use, check to ensure that the transmission's weight and size do not exceed the capacities of the jack.

1. Ensure that the vehicle from which the transmission is to be removed is correctly positioned, raised and locked on an appropriate lift system.
2. Ensure that there are no other persons around or under the vehicle.
3. Ensure saddle is in it's lowest position, and use the handle to transport and centralise the jack beneath the vehicle's transmission.
4. Close the jack release valve by turning the knob (9) clockwise.
5. Pump the jack handle up and down repeatedly to raise the saddle.
6. When the saddle base is just beneath the transmission, re-adjust the alignment if necessary, to centralise the saddle base.
7. Adjust the saddle tilt controls (4) if required for final positioning of the saddle base.
8. Position and attach the safety chains correctly for further security.
9. Raise the saddle further to support the transmission. Remove the transmission from the vehicle - Refer to vehicle manufacture.
10. Ensure that the load is secure before proceeding to lower it.

9.3 LOWERING THE LOAD

Warning: Ensure the load is central and stable on the jack saddle before attempting to lower the load. SLOWLY turn the release valve knob (9) is anti-clockwise to GENTLY lower the saddle to the minimum height before attempting to transport the load.

Important: Speed of lowering is controlled by the release valve. The further the valve knob is turned, the more rapid the jack's descent. Ensure the jack's descent is slow and controlled to avoid the risk of sudden dropping which could be very dangerous.

9. TRANSMISSION JACK INSTRUCTION

9.4 TRANSPORTING THE LOAD

1. Ensure that the jack saddle is fully lowered, if required, use another support chain to secure the load, ensuring that they are all pulled taut and engaged into the slots on the saddle. Tighten all the nuts.
2. Transport the load over level and solid ground, preferably concrete, and ensure the floor is swept clean beforehand.
3. Be diligent by continually monitoring the load in transit. Keep all other persons at a safe distance.

Danger: DO NOT use on tarmacadam, or any soft surface as the jack may sink or topple. Serious personal or fatal injury may result.

Danger: If the jack tips or leans, Stop what you are doing. MOVE QUICKLY TO A SAFE DISTANCE. DO NOT TRY TO HOLD OR STEADY THE JACK. Serious personal or fatal injury may result.

9.5 RE-INSTALLING A GEARBOX

1. Manoeuvre the jack and load to reposition beneath the vehicle, raise the load up, reversing the procedures outlined above.

10. MAINTENANCE & TROUBLESHOOTING

10.1 MAINTENANCE

Important: Only fully qualified personnel should attempt any maintenance or repair.

1. When the jack is not in use, the saddle must be at its lowest position - to minimise ram and piston corrosion. Remove the handle for safe storage.
2. Keep the jack clean and wipe off any excess oil or grease, lubricate all moving parts with oil, and grease the tilt mechanism regularly.
3. The oil tank is a sealed unit and must not be accessed. For a service, contact your authorised dealer.

Warning: Only use a good quality jack oil, DO NOT use brake fluid.

4. Periodically check the pump piston and piston rod for signs of corrosion. Clean exposed areas with a clean oiled cloth.

IMPORTANT: NO RESPONSIBILITY IS ACCEPTED FOR INCORRECT USE OF THE MACHINE.

Hydraulic products are only repaired by local service agents. We have service/repair agents in all parts of the UK.

10.2 TROUBLESHOOTING

Important: Although the following may identify a problem, in most cases the problem must be resolved by your authorised service agent.

PROBLEM	CAUSE	SOLUTION
Jack will not lift	1. No hydraulic oil or defective suction valve or delivery valve. 2. Release valve is open.	1. Contact authorised service agent. 2. Close release valve.
Jack will only lift halfway	1. Hydraulic oil level is low or excessive of hydraulic oil.	1. Contact authorised service agent.
Raised load will not hold	1. Defective valves or defective piston packing.	1. Contact authorised service agent.
Poor lifting	1. Defective plunger packing.	1. Contact authorised service agent.
Saddle tilt knob too tight	1. Nuts and bolts may be bent or rusted.	1. Check, clean, oil or replace items.

11. EXPLANATION OF SYMBOLS

11.1 EXPLANATION OF SYMBOLS



**Do not dispose of WEEE*
unsorted municipal waste.**



Class II construction
(Double insulated).



Warning!
Wear suitable foot protection.



Warning!
Wear suitable eye/face protection.



Warning!
Read the instruction manual.



Warning!
Keep bystanders away.

12. DISPOSAL

12.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE* as unsorted municipal waste.



* Waste Electrical & Electronic Equipment.

CONTACTS

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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

DBKC0318

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