



DRAPER[®]
Expert

600kg

TRANSMISSION JACK

70668



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: 600kg Transmission Jack

Stock No: 70668

Part No: TJ600

1.2 REVISIONS:

Date first published November 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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2. CONTENTS

1	TITLE PAGE	
1.1	INTRODUCTION.....	2
1.2	REVISION HISTORY.....	2
1.3	UNDERSTANDING THIS MANUAL	2
1.4	COPYRIGHT NOTICE.....	2
2	CONTENTS	
2.1	CONTENTS.....	3
3	WARRANTY	
3.1	WARRANTY.....	4
4	INTRODUCTION	
4.1	SCOPE.....	5
4.2	SPECIFICATION	5
4.3	HANDLING AND STORAGE.....	5
5	HEALTH AND SAFETY INFORMATION	
5.1	GENERAL SAFETY WARNINGS.....	6
6	TECHNICAL DESCRIPTION	
6.1	IDENTIFICATION	7
7	UNPACKING AND CHECKING	
7.1	PACKAGING	8
7.2	WHAT'S IN THE BOX.....	8
8	ASSEMBLING THE TRANSMISSION JACK	
8.1	BASE SUPPORT	9
8.2	ATTACHING THE CASTORS.....	9
8.3	ATTACHING THE CRADLE.....	9
9	OPERATING INSTRUCTIONS	
9.1	BLEEDING INSTRUCTIONS	10
9.2	GENERAL OPERATING INSTRUCTIONS.....	10
9.3	PREVENTING SERIOUS INJURY FROM TOOL FAILURE	11
10	TROUBLESHOOTING	
10.1	TROUBLESHOOTING	12
11	DISPOSAL	
11.1	DISPOSAL.....	13
12	EXPLANATION OF SYMBOLS	
12.1	EXPLANATION OF SYMBOLS	14
	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 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 warranty period covering parts and 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, any type of battery 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.

For full terms and conditions visit: drapertools.com/corporate-policies

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.....	70668
Part No.	TJ600
Capacity	0.6 Tonne (600kg)
Minimum height	1175mm (approx.)
Maximum height	1985mm (approx.)
Weight (nett)	29kg

4.3 HANDLING AND STORAGE

Care must still be taken when handling and lifting. Dropping this machine may 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

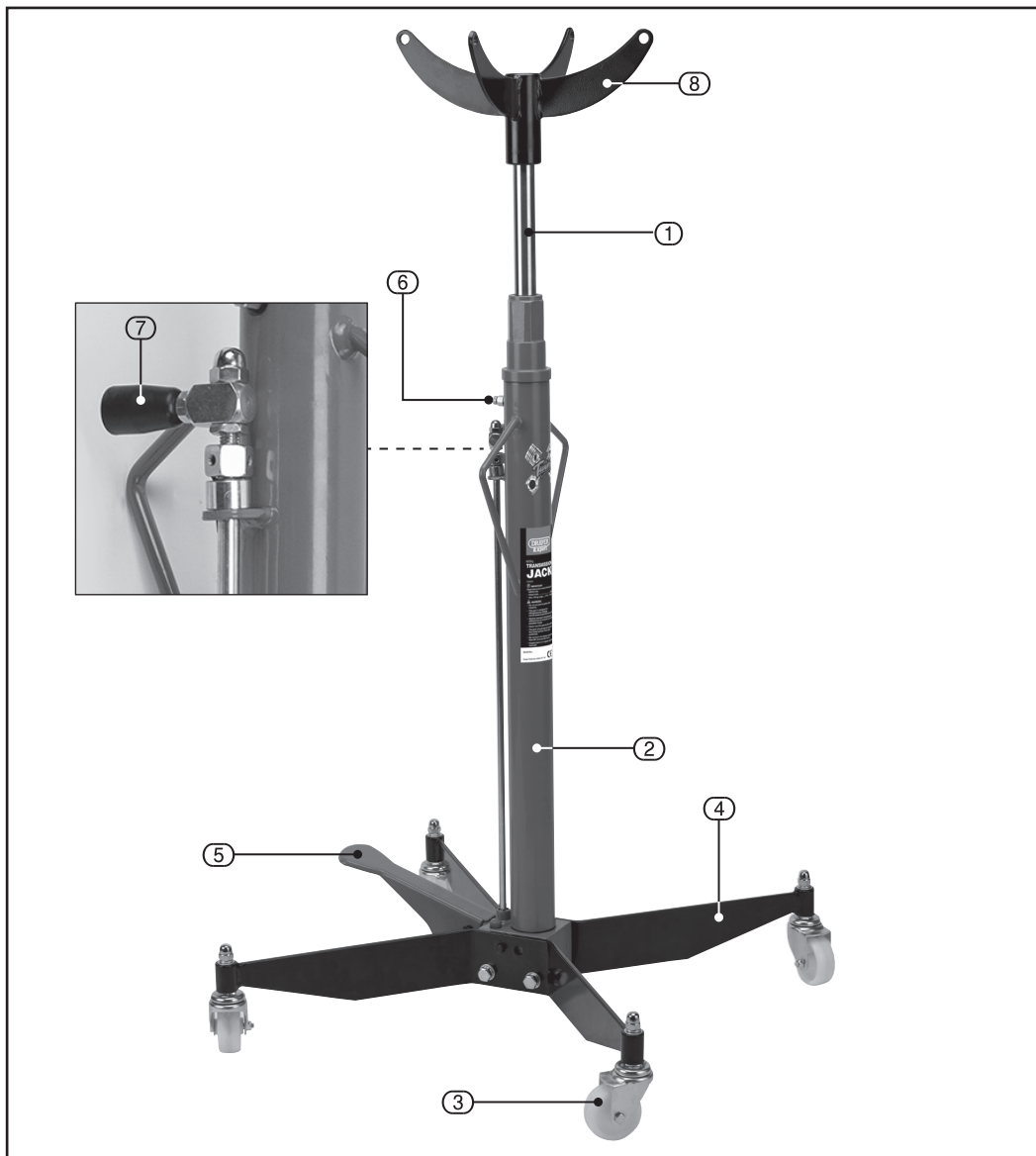
5.1 GENERAL SAFETY WARNINGS

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 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 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 Piston.
- ② Hydraulic unit.
- ③ Castors.
- ④ Base support.
- ⑤ Pump pedal.

- ⑥ Oil plug.
- ⑦ Release valve.
- ⑧ Reversible saddle.

7. UNPACKING AND CHECKING

7.1 PACKAGING

Carefully remove the product 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 Help Line (the telephone number appears on the Title page) and do not attempt to use the product.

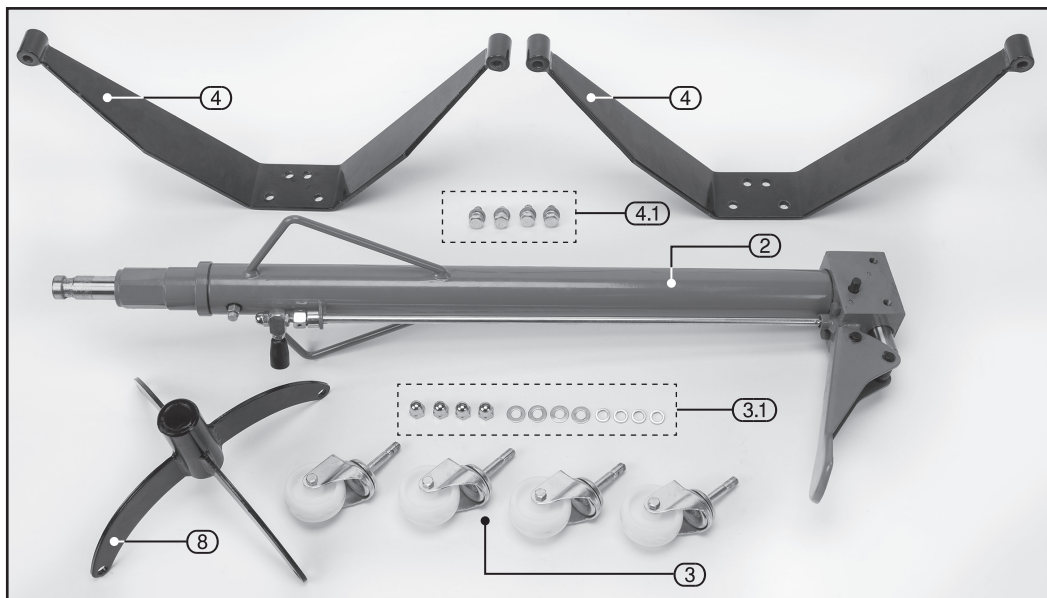
The packaging material should be retained at least during the warranty period, in case the machine needs to be returned for repair.

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.



- ② Hydraulic unit.
- ③ Castors.
- ③.1 Castor fastenings.
- ④ Base support.
- ④.1 Base support fastenings.
- ⑧ Reversible saddle.

8. ASSEMBLING THE TRANSMISSION JACK

8.1 BASE SUPPORT – FIGS. 1 – 2

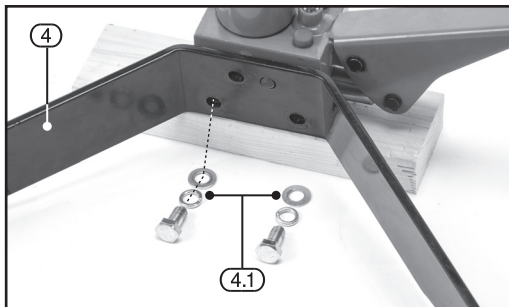


FIG.1

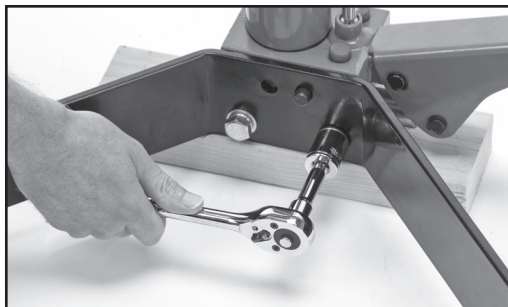


FIG.2

8.1 ATTACHING THE CASTORS – FIGS. 3 – 4

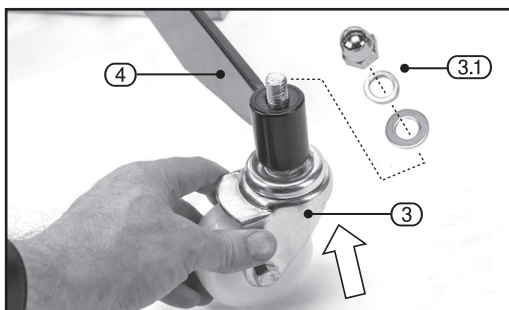


FIG.3

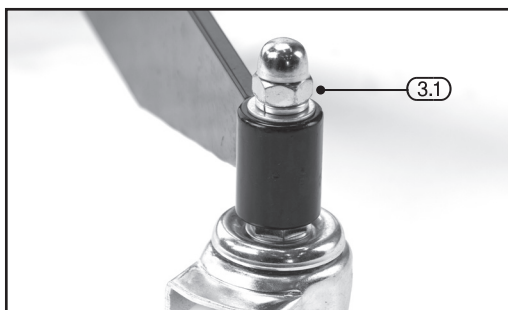


FIG.4

8.3 ATTACHING THE CRADLE – FIG. 5

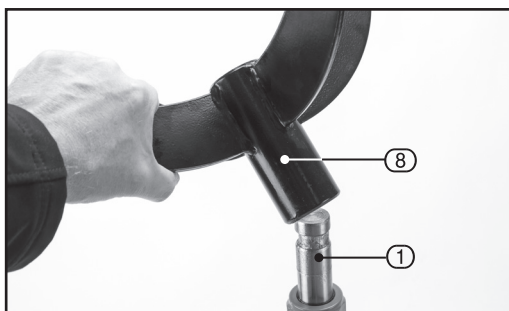


FIG.5

NOTE: The metal bracket which holds the hydraulic piston in place can only be removed once the pedal has been fitted.

9. OPERATING INSTRUCTIONS

9.1 BLEEDING INSTRUCTIONS

Important:

Before first use, check hydraulic oil level in the jack. Then thoroughly test the jacks operation prior to its actual use. If the jack operation feels spongy, or the ram lowers while the release valve is closed, there may be air in the hydraulic system, and would require bleeding as described follows:

- Turn the spring-loaded release valve (7) until fully opened.
- Pump the pump pedal (5) at least ten times to bleed all air from the system.
- Top up with clean hydraulic fluid if required.
- Replace and tighten the oil plug.
- Close the release valve and test the unit.

9.2 GENERAL OPERATING INSTRUCTIONS

- 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.
- Prior to initial use, jack up the saddle and, using the release valve (7), attempt to lower it. Doing so will familiarize the use with the control functions and jack, if needed.
- Once the vehicle is safely and properly secured on a car lift (not included), position the transmission jack underneath your vehicle.
- Pump the pedal (5) to raise the jack to contact and bear transmission weight. After making contact with the transmission, make sure it is centered within the four brackets on the saddle (8).
- After contact, carefully pump up the jack to transfer the weight of the transmission from the vehicle chassis to the transmission jack.
- With assistance, remove transmission unit bolts freeing it from the vehicle. Making sure there is nothing to restrict the movement of the transmission unit.
- Check the saddle; make sure it is securely holding the transmission and not showing any signs of stress. Carefully lower it by turning the release valve (7).
- Again, check the saddle; making sure it is securely holding the transmission and not showing any signs of stress.
- If required secure with a chain (not included) tightly over the transmission unit and jack cradle and safely move the transmission jack.
- After removal, 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.

- To re-mount the transmission unit, reverse this procedure.

9. OPERATING INSTRUCTIONS

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

Warning!

9.3 PREVENTING SERIOUS INJURY FROM TOOL FAILURE

Do not use damaged equipment.

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

- 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.
- Check for leaks.

Do not use damaged equipment.

- 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.
- 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) on the reservoir.
 - 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 of the oil fill hole.
 - d. Perform bleeding procedures under “bleeding instructions”.
- 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.

Important: Mind your fingers when operating this jack.

10 TROUBLESHOOTING

10.1 TROUBLESHOOTING:

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 handle is pumped.	Release valve not tightly closed.	Firmly close the release valve.
	Air in the pump.	Please follow the steps: <ul style="list-style-type: none">– Open the release valve by turning it anti-clockwise, pump 10 – 15 times.– Close the release valve by turning it clockwise, pump 5 – 10 times.– Repeat step 1 and 2 for approximately 3 times.
	The valve unit is stuck.	
Ram will not hold load.	Release valve not fully closed.	Firmly close the release valve.
	Malfunction in pump such as dirt inside valve mechanism.	Please follow the steps: <ul style="list-style-type: none">– Open the release valve by turning it anti-clockwise, pump up the handle 10 – 15 times.– Close the release valve by turning it clockwise, pump 5 – 10 times.– 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.

11. DISPOSAL

11.1 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.

11. EXPLANATION OF SYMBOLS

11.1 EXPLANATION OF SYMBOLS



Warning!



Important



Warning! Keep bystanders away.



Wear suitable foot protection.



Read the instruction manual.



Do not abandon into the environment.



Twin piston.

NOTES

CONTACTS

Draper Tools Limited, Hursley Road,
Chandler's Ford, Eastleigh, Hampshire. SO53 1YF. U.K.

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Sales Desk: (023) 8049 4333

Internet: drapertools.com

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 Help Line for details of an agent in your local area.

YOUR DRAPER STOCKIST

MSCH1119

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