



450KG

20129

ENGINE STAND



1. Preface

These are the original product instructions. This document is part of the product; retain it for the life of the product, passing it on to subsequent holders. Read this manual in full before attempting to assemble, operate, or maintain this product.

This Draper Tools manual describes the purpose of the product and contains all the necessary information to ensure its correct and safe use. Following all the instructions and guidance in this manual will ensure the safety of both the product and the operator and increase the lifespan of the product.

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

Every effort has been made to ensure the information contained in this manual is accurate. However, Draper Tools reserves the right to amend this document without prior warning. Always use the latest version of the product manual.

1.1 Product Reference

User Manual for: 450kg Engine Stand

Stock No: 20129 Part No: FS450B

1.2 Revisions

Version 1: March 2022 First release

As our manuals are continually updated, always ensure that the latest version is used.

Download the latest version from: drapertools.com/manuals

1.3 Understanding the Safety Content

WARNING! - Situations or actions that may result in personal injury or death.

CAUTION! – Situations or actions that may result in damage to the product or surroundings.

Important: - Information or instructions of particular importance.

1.4 Copyright © Notice

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In all cases, this copyright notice must remain intact.

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Draper Tools products are carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, return the complete tool to your nearest distributor or contact Draper Tools directly. Contact information can be found at the back of this manual.

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 covers parts and labour for 12 months from the date of purchase. Where tools have been hired out, the warranty period covers 90 days from the date of purchase.

This warranty does not apply to any consumable parts, batteries 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 Tools repair agent.

In all cases, to make a claim for faulty workmanship or materials within the standard warranty period, please contact or return the product to the place of purchase. Proof of purchase may be required. If the place of purchase is no longer trading or if you experience any difficulties with your warranty, please contact Customer Services with the product details and your proof of purchase. Contact details can be found at the back of this manual.

If the tool is not covered by the terms of this warranty, repairs and carriage charges will be quoted and charged accordingly.

This warranty supersedes any other guarantees expressed or implied and variations of its terms are not authorised.

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

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

Draper Tools Limited



4.1 Scope

This engine stand is designed to support a variety of engines and transmissions during maintenance and repair and is intended for domestic and light-duty trade use. Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

WARNING! This product is not a toy and must be respected.

Read this manual in full before attempting to assemble, operate or maintain the product, and retain it for later use.

4.2 Specification

Stock No.	20129
Part No.	ES450B
Max. load	450kg
Dimensions (stand only)	W 685 x H 850 x D 850mm
Net weight	20kg

5. Health and Safety Information



Important: Read all Health and Safety instructions before attempting to operate, maintain or repair this product. Non-compliance with these instructions may result in injury or damage to the user, the product or the load.

- Observe all standard safety precautions and good practices when working in a workshop environment.
- Keep your work environment clear and well-lit, with bystanders at a safe distance.
- · Assemble this product only in the manner depicted.
- Before every use, inspect the stand for broken or cracked parts, loose fixtures and binding wheels

WARNING! DO NOT use this product if its structural integrity is compromised. Tighten, replace or repair all affected parts before use.

- Only use this product on firm, level surfaces capable of supporting both the stand and its load.
 - DO NOT use this product on sloping or slippery surfaces.
- DO NOT modify this product in any way.
- DO NOT climb on, ride on or allow others to ride on this product.
- DO NOT attempt to move the stand under load over cracked or uneven flooring.
 - ALWAYS plan the route in advance and check it for obstructions.
- **NEVER** exceed the rated capacity of this product.
- ALWAYS ensure that the load is mounted centrally on the mounting plate.
 - Off-centre loads may cause the load to rotate when the locking pin is released.
- ALWAYS lock the mounting plate in place before transferring the load to the stand.
- NEVER work directly above or below the load; rotate the load using the mounting plate handle and carry out operations from the side.
- Take care when removing the locking pin and observe the load at all times.

6. Identification and Unpacking



6.1 Product Overview



- (1) Mounting plate
- (2) Mounting arms
- (3) Mounting plate handle
- (4) Locking pin
- (5) Support column

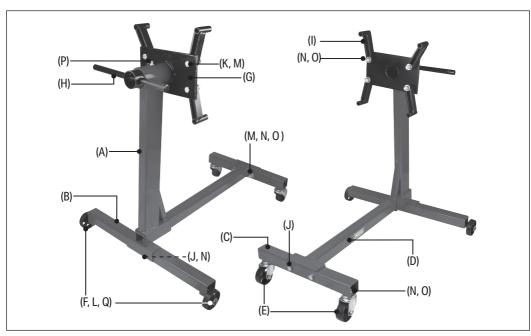
- (6) Rear crossbar
- (7) Front crossbar
- (8) Central arm
- (9) Front castors
- (10) Rear wheels



6.2 What's in The Box?

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment.

Before assembling the product, lay the contents out and check them against the parts listed below. If any part is damaged or missing, do not attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.



- (A) 1 x Support column assembly
- (B) 1 x Rear crossbar
- (C) 1 x Front crossbar
- (D) 1 x Central arm
- (E) 2 x Front castors
- (F) 2 x Rear wheels
- (G) 1 x Mounting plate
- (H) 1 x Mounting plate handle
- (I) 4 x Mounting arms

- (J) 3 x M12 x 80mm hex bolts
- (K) 4 x M12 x 40mm hex bolts
- (L) 2 x M14 washers
- (M) 6 x M12 washers
- (N) 9 x M12 spring washers
- (0) 8 x M12 nuts
- (P) 1 x Locking pin
- (Q) 2 x Split pins

6.3 Packaging

Keep the product packaging for the duration of the warranty period in case the product needs to be returned for repair.

WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit drapertools.com for our full range of accessories and consumables.

7. Assembly Instructions



Important: Read all the safety instructions before attempting to assemble this product. Loosely secure all fixings during assembly and tighten once complete. Do not overtighten joints and fixings.

WARNING! The parts of this product are heavy. Seek assistance when assembling the stand and do not over-exert yourself.

- Attach the rear crossbar (B) to the support column assembly (A) and central arm (D):
 - a. Position the central arm so that the horizontal part of the bracket is level with the top edge and feed the square end into the square socket of the central support arm.
 - Position the rear crossbar with the axles on the lower edge and align it with the central support column.
 - c. Pass an M12 x 80mm bolt (J) through an M12 spring washer (N), up through the base of the rear crossbar and into the support column assembly, tightening it to secure.
- 2. Attach the front crossbar (C) to the central arm:
 - a. Pass two M12 x 80mm bolts (J) through the front crossbar and the central arm bracket.
 - b. Add an M12 washer (M) and an M12 spring washer (N) to each bolt and tighten with an M12 nut (O).
- Attach the front casters (E):
 - a. Pass the front caster bolts up through the base of the front crossbar.
 - b. Add an M12 spring washer (N) to each bolt and tighten with an M12 nut (O).
- Place a rear wheel (F) onto each axle of the rear crossbar and secure in place with an M14 washer (L) and split pin (Q).

Important: The rear wheels should be positioned so that the deeper wheel hub is facing inwards.

- 5. Attach the mounting plate (G):
 - a. Slide the mounting plate through the support column socket so that the plate is positioned above the central arm.
 - b. Pass the mounting plate handle (H) through the opening in the mounting plate stem.
 - c. Insert the locking pin (P) to secure the mounting plate in position.
 - d. Pass four M12 x 50mm bolts (K) through the back of the mounting plate and attach a mounting arm (I) to each.
 - e. Secure each mounting arm in place with an M12 washer (M), an M12 spring washer (N) and an M12 nut (O).
- Check that the stand frame is not twisted and that all four wheels are touching the ground, then tighten all attachments.

8. Mounting an Engine onto the Stand



Important: Before attaching any load, read and understand all the safety instructions listed in this manual. ALWAYS ensure that the fixing bolts used to attach the load are of an appropriate length and grade.

- 1. Raise the load with an appropriate hoist and position the engine stand nearby.
- Remove the mounting plate handle (H) and locking pin (P) and slide the mounting plate (G) away from the stand.
- Pass the fixing bolts through the back of the mounting arms and screw them into the mounting sockets on the load.
 - **Important:** Bolt the bottom two arms low on the load and the top two arms as high as possible. The bolts must be long enough to be wound at least 25mm into the load when mounted. Draper Tools recommends metric grade 8.8 bolts for mounting engines.
- Adjust the mounting arms so that the centre of the mounting plate is aligned with the centre of the engine crankshaft and tighten all bolts securely.

- Lower the load until the mounting plate stem aligns with the socket on the support column assembly (A) and slide it into place.
- 6. Insert the mounting plate handle and locking pin to secure the mounting plate in place.
- 7. Use the hoist to lower the load and carefully transfer the weight to the engine stand.
- 8. Check that all attachments are secure and that the stand can support the load without intervention, then disengage the hoist.
- 9. To rotate the load:
 - a. Remove the locking pin and use the mounting plate handle to turn the load into the correct position.
 - b. Reinsert the locking pin when the load is in the required position; four positions are available.

9. Maintenance



Important: Maintenance and repairs should **ONLY** be carried out by authorised and suitably qualified personnel.

- Regularly check the product for damage, corrosion and loose fixings, and keep fixings securely fastened.
- Periodically lubricate all wheel attachments to ensure smooth movement.
- Store the engine stand in a dry and clean location, out of reach of children.



At the end of its working life, or when it can no longer be repaired, dispose of the product according to local regulations.

Contact your local authority for details of collection schemes in your area.

In all circumstances:

- DO NOT incinerate
- . DO NOT abandon in the environment









Read the instruction manual



Warning!



Do not incinerate or throw onto fire



Do not abandon in the environment



Product weight (bare)

Contact Details

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Service / Warranty Repair Agents

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