VERTICAL TRANSMISSION JACKS

MODELS: **600TR.V2, 1000TR.V2**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions | Wear eye protection | Wear protective gloves | Wear safety footwear | Wear protective clothing | Warning!

1. SAFETY



The user shall work in accordance with the instruction handbook.

❑ **WARNING!** Ensure all preliminary checks are carefully carried out before use of jack. Immediately repair or replace damaged parts (use authorised service agent). Ensure use of genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.

❑ **WARNING!** Use the jack only on firm, level, and non-slip surfaces, preferably concrete. Do not operate on sloped, soft, wet, oily, or unstable ground. Ensure the area is clean and debris-free, and always engage the castor brakes during use.

▲ **DANGER! DO NOT** use on tarmacadam, or any other soft surface as jack may sink or topple. Serious injury may result if ignored.

▲ **DANGER!** If jack tips or leans STOP WHAT YOUR ARE DOING. MOVE QUICKLY TO A SAFE DISTANCE. DO NOT TRY TO HOLD OR STEADY JACK.

✓ Use jack in a suitable work area. Keep the area clean and tidy and free from unrelated materials. Ensure there is adequate lighting.

✓ Before use ensure the gearbox weight and size does not exceed the capacity of the jack.

✓ Ensure the vehicle is raised and stabilised at the correct height before attempting to move the jack under the vehicle.

✓ Ensure the jack saddle is fully lowered and is clean, dry, and oil free before attempting to transport the jack with or without a load.

✓ Keep all unauthorised persons away from the jack during lifting and lowering and when in transit.

✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non slip shoes.

✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery, and contain and/or tie back long hair.

❑ **WARNING!** Ensure that the load is placed level and centrally on the jack saddle and that it is fixed in place before attempting to lift, lower or transport the load.

✓ The lowering speed will vary according to the weight of the load and the release valve setting.

✓ Diligence is required in ensuring that you continually monitor the operation until completed.

✓ Should the jack make any abnormal sounds during use, **STOP IMMEDIATELY** and contact your local service agent.

× **DO NOT** operate the jack if any parts are damaged or missing.

× **DO NOT** exceed the rated capacity of the jack.

× **DO NOT** raise or lower vehicle lifting platform whilst the transmission jack is being used.

× **DO NOT** transport the jack with, or without a load, with the saddle in the raised position.

× **DO NOT** get the jack wet, or use it in damp or wet locations or areas where there is condensation.

× **DO NOT** operate the jack when you are tired or under the influence of alcohol, drugs or intoxicating medication.

× **DO NOT** lift or support vehicles with the jack and **DO NOT** use the jack as a load-sustaining device.

× **DO NOT** use the jack for any purpose other than removal, transportation and the installation of transmissions.

× **DO NOT** make any modifications to the jack.

× **DO NOT** adjust, or tamper with, the safety valve.

× **DO NOT** remove any labels from the jack. If the labels are damaged or unclear, replace them.

× **DO NOT** use brake fluid to top up the hydraulic unit. Use Sealey hydraulic oil only.

✓ Use a qualified person to lubricate and maintain the jack.

✓ Before storing the jack in a safe area, ensure that all parts are clean and free of grease and oil, especially the saddle.

✓ It is necessary that the operator can watch the lifting device and the load during all movements.

❑ **WARNING!** It is not allowed to work under the raised load until it is secured by suitable means.

✓ The operator shall be provided with all necessary information about training and about pumping and translating forces.

✓ If more than 400N of effort is generated in lifting, the efforts shall be lowered by an additional person.

1.1. LIFE TIME OF THE JACK

✓ Average life: 5 to 15 years.

1.2. RESTRICTIONS OF USE WITH THE PRODUCT

✓ Lifting of persons using a transmission jack is strictly prohibited.

✓ This equipment is not designed, approved, or intended for direct or indirect contact with foodstuffs.

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- ✓ Use Beyond Rated Capacity. Rated load: 600kg maximum.
- ✓ Use Beyond Rated Capacity. Rated load: 1,000kg (1 tonne) maximum.
- ✓ Overloading is strictly prohibited, even momentarily, as it can cause structural failure or collapse.

1.3. TYPE OF FIRE-FIGHTING EQUIPMENT TO BE USED

For a transmission jack, which involves hydraulic oil and other flammable fluids, the appropriate fire-fighting equipment includes foam extinguishers and dry powder extinguishers. These types effectively suppress fires involving flammable liquids like hydraulic oil. Water-based extinguishers should be avoided as they can spread the fire or cause electrical hazards. Always ensure a fire extinguisher suitable for flammable liquid fires is readily accessible when working with or around the jack.

1.4. INDICATION OF MEANS FOR FIGHTING THE LEAKAGE OF HAZARDOUS SUBSTANCES

To manage hazardous substance leaks, use absorbent pads and spill kits to contain and clean spills promptly. Wear appropriate PPE, ensure proper ventilation, and follow environmental disposal regulations to minimize risks.

1.5. REASONABLY FORESEEABLE MISUSE

Reasonably foreseeable misuse includes overloading the jack, using it on uneven surfaces, neglecting maintenance, or bypassing safety features, all of which can lead to equipment failure or accidents.

Prevention:

Includes ensuring the load never exceeds the rated capacity, displaying clear load capacity labels and instructions, and regularly checking weight distribution and load balance.

1.6. THE SPACE REQUIRED FOR USE

To operate a vertical transmission jack safely and effectively, sufficient operational space is required. This ensures stability, accessibility, and safe movement around the equipment, especially when manoeuvring under a vehicle or transmission assembly.

1.7. TRANSPORT, HANDLING, AND STORAGE OF THE MACHINE

Transport, handling, and storage of the machine should be done carefully to prevent damage and ensure safety. Use appropriate lifting equipment or team lifts for heavy parts, avoid dropping or striking the machine, and store it in a clean, dry area away from extreme temperatures and moisture. Properly secure the machine during transport to prevent movement or tipping.

1.8. POSITION OF CENTRE OF GRAVITY

The centre of gravity of the transmission jack is typically located near its base, close to the lifting platform, to ensure stability during use. Proper positioning of the load on the platform is essential to maintain balance and prevent tipping or uneven lifting.

1.9. RESTRICTION FOR OPERATION ON SEA SHIPS

This equipment is not designed or approved for use on sea-going vessels or offshore platforms.

1.10. RESTRICTION OF WIND PRESSURE DURING USE AND OUT OF USE

Wind pressure restrictions apply to ensure stability and safety both during use and when the equipment is stored. Strong winds can cause the jack to tip or shift, especially if left unattended or raised. It's important to avoid using or leaving the jack in elevated positions during high winds and to store it in a sheltered area to prevent wind-related damage or accidents.

1.11. CONDITION OF THE MACHINE

The vertical transmission jack must be maintained in a safe, fully functional, and serviceable condition at all times during its lifecycle.

1.12. PUTTING THE MACHINE INTO SERVICE

Before putting the machine into service, conduct a thorough inspection to ensure all components are in good condition and properly assembled. Verify that hydraulic fluid levels are adequate, safety devices are functional, and the jack operates smoothly without leaks. Follow the manufacturer's startup procedures, and ensure operators are trained and aware of safety guidelines before use.

1.13. HANDLING OF LOADS, THE NATURE OF WHICH COULD LEAD TO DANGEROUS SITUATIONS

When handling heavy or awkward loads, such as vehicle transmissions or other automotive components, it is crucial to recognise potential hazards and take precautions to ensure safe operation. Improper handling of such loads could result in personal injury, equipment damage, or instability.

1.14. INFORMATION FOR CONNECTIONS

The vertical transmission jack is a self-contained hydraulic lifting device and does not require external power or electrical connections for operation. However, proper attention must be paid to the mechanical interfaces and hydraulic service connections to ensure safe use and maintenance.

1.15. INTENDED USE AND OPERATION OF THE PRODUCT

The product is intended for safely lifting and supporting heavy loads, such as transmissions or vehicle components, during maintenance or repair. It should be operated on stable, level surfaces, within its rated capacity, and by trained personnel following all safety instructions. Proper use ensures efficient lifting while minimizing the risk of accidents or equipment damage.

1.16. PROTECTIVE MEASURES (INCLUDING PPE)

To ensure the safe and effective use of the vertical transmission jack, operators must implement appropriate protective measures and wear personal protective equipment (PPE). These measures reduce the risk of injury during lifting, positioning, and maintenance activities.

1.17. RESIDUAL RISKS THAT REMAIN

Despite built-in safety features, proper design, and user training, some residual risks remain when operating the vertical transmission jack. These are risks that cannot be entirely eliminated by design or safeguards, and therefore require operator awareness, precautionary measures, and PPE.

1.18. STATIC ELECTRIC PROBLEMS

The vertical transmission jack, being a manually operated, non-electrical device, generally poses a low risk for static electricity accumulation. However, in specific working environments or under certain conditions, static discharge could pose a residual hazard, especially in areas where flammable gases, vapours, or fine dusts may be present.

1.19. THE LIMITATIONS OF OPERATION IN SEVERE CONDITIONS (Extreme climate, freezers, strong magnetic fields)

The machine's operation is limited in severe conditions such as extreme temperatures, where hydraulic fluids may thicken or components become brittle, reducing performance and safety. In freezers or very cold environments, lubrication and material flexibility can be compromised. Strong magnetic fields may interfere with electronic components or sensors if present.

Always consult manufacturer guidelines and take extra precautions or avoid use in such conditions to prevent damage and hazards.

1.20. THE LEVEL OF TRAINING THE USER WILL NEED BEFORE USING THE PRODUCT

Users should receive basic training covering safe operation, load capacity limits, proper positioning, and emergency procedures. Training should include hands-on practice with the equipment, recognition of hazards, routine inspection techniques, and understanding of manufacturer guidelines to ensure safe and effective use.

2. INTRODUCTION

Manufactured to exacting standards, strong construction for durability and suitable for general workshop applications. Spring loaded dead man's safety release control reduces the risk of inadvertent lowering. 2-Way hydraulic unit ensures that the saddle lowers at a controlled speed at all times, even without load. Extra-large castors allow for increased manoeuvrability. Hydraulic unit larger than the economy models for improved performance and durability. Can be fitted with optional Adjustable Gearbox Support: 600TR - ADT3.
1000TR - ADT5

3. SPECIFICATION

Model No's:	**600TR.V2/1000TR.V2**
Applicable Standards:	EN 1494:2000+A1
Base Size:	670 x 608.5/709 x 648.5mm
Capacity:	600/1000kg

Maximum Saddle Height:	1985/2005mm
Minimum Saddle Height:	1175/1195mm
Nett Weight:	32.8/51kg
Ram Extensions:	1

4. WHAT'S IN THE BOX



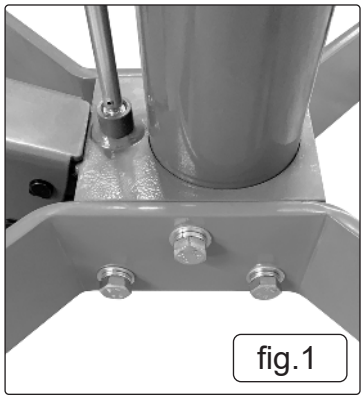
Refer to attached Parts Information to find the parts described below in Assembly section. See 5.1 below.

❑ **WARNING!** Piston core is held under tension by Limited Plate.

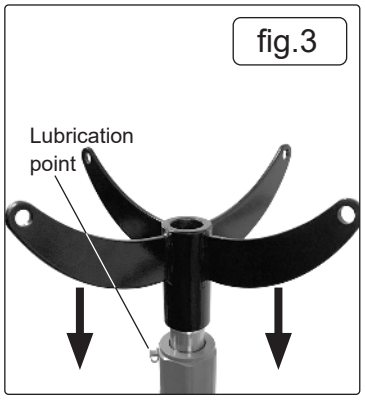
NOTE: Unpack the product and check contents. Should there be any damaged or missing parts contact your supplier immediately.

5. ASSEMBLY

5.1. Remove limited plate which holds piston core down. Hold some weight on piston core whilst removing the two bolts underneath the pump base, which hold limited plate in place, see Fig.A above.
5.2. Fit release pedal with pins and circlips.
5.3. Attach the two legs to the base using the supplied bolts, lock washers, and washers, Fig.1.
5.4. Attach the four castors to the legs using the supplied nuts, washers, and lock washers, Fig.2.
5.5. Attach the saddle to the top of the piston rod, ensuring it is secure. Fig.3.

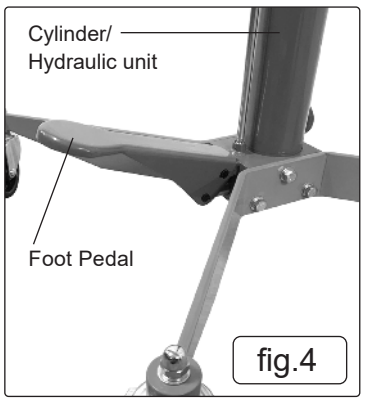






6. PRE USE CHECK LIST

1	Main Assembly
2	Castors
3	Saddle
4	Legs
5	Bolts, Washers, Nuts



❑ **WARNING! DO NOT** use transmission jack if any suspect part is found, or if believed to have been subjected to abnormal load or shock. Immediately remove from service and contact your authorised service agent.

7. OPERATION

❑ **WARNING!** Before use ensure you have read, understood and apply Section 1 safety instructions.
❑ **WARNING!** Ensure you prepare vehicle correctly before attempting to use the transmission jack.

7.1. BEFORE FIRST USE

7.1.1. Eliminate air from the system by opening the release handle to the right and loosening the air vent valve, fig.6. Pump the foot pedal 15–20 times. Keep the air vent screw open during use.

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Test the jack without a load by raising it to full height and then lowering it, controlling the descent by slowly turning the release handle to the right.

7.2. POSITIONING THE JACK BENEATH THE LOAD

NOTE: Before use, ensure that the transmission weight and size does not exceed the capacity of the jack.

7.2.1. Ensure the vehicle from which the gearbox or transmission is to be removed is correctly positioned, raised and locked on an appropriate lift system.

7.2.2. Ensure that there are no other persons around, or under, the vehicle.

7.2.3. Ensure the saddle is in the lowest position. Use the handle to transport and centrally position the jack beneath the vehicle transmission.

7.2.4. Raise the saddle by pumping the jack foot pedal. See fig.4

7.2.5. When the saddle is just beneath the transmission, re-adjust the alignment if necessary to centralise the saddle.

7.3. LOWERING THE LOAD

❑ **WARNING!** Ensure the load is central and stable on the jack saddle and that it is fixed in place before attempting to lift, lower, or transport it.

7.4. Gradually rotate the release handle (fig.5) clockwise to lower the load to its fully retracted position.

NOTE: The lowering speed is regulated by the release handle. Increasing the valve opening results in a faster descent of the jack. Always ensure the load is lowered in a slow and controlled manner to maintain safety and stability.

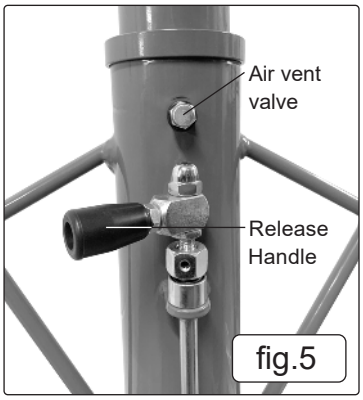
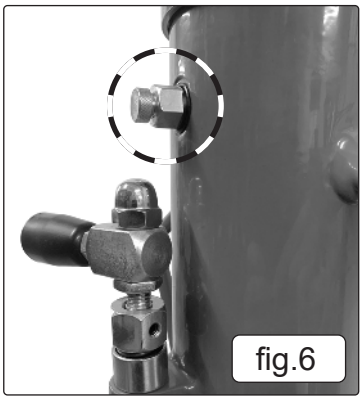


fig.5


fig.6

7.5. TRANSPORTING THE LOAD

❑ **WARNING!** Ensure you have read, understood and apply the safety instructions in Section 1.

7.5.1. Ensure the jack saddle is fully lowered and the load is fixed in place before attempting to lift, lower, or transport the load.

7.5.2. Transport the load over level and solid ground, preferably concrete, and ensure that the floor is swept clean beforehand.

7.5.3. Be diligent in continually monitoring the load in transit.

7.5.4. Keep all other personnel at a safe distance.

▲ **DANGER!** If the jack tips or leans, **STOP WHAT YOUR ARE DOING AND MOVE QUICKLY TO A SAFE DISTANCE. DO NOT TRY TO HOLD OR STEADY THE JACK.** Serious injury or death may result.

7.6. RE-INSTALLING A GEARBOX

To transport, reposition beneath a vehicle, and raise a load up, reverse the procedures outlined above.

8. MAINTENANCE

IMPORTANT! Only fully qualified personnel should attempt maintenance or repair.

8.6.1. When refilling the hydraulic system, the characteristics of the hydraulic fluid used in the jack and the level of hydraulic fluid as it is given by the manufacturer shall be observed.

8.6.2. Jacks shall be maintained and repaired in accordance with the manufacturer instructions. Such maintenance and repair shall be carried out by qualified persons.

8.6.3. No modifications shall be carried out which adversely affect the compliance of the jack with this standard.

8.6.4. When not in use, store the jack in a dry location with the saddle fully lowered.

8.6.5. Periodically inspect the piston rod for signs of rust or corrosion. Clean any exposed surfaces using a clean, oil-treated cloth to prevent oxidation.

❑ **WARNING!** Never use sandpaper or abrasive materials on these surfaces, as they may damage the finish and compromise the integrity of the component.

8.6.6. Apply a light coating of lubricating oil to all pivot points, axles, and hinges to prevent rust and ensure smooth operation of the castors, foot pedal, and pump assemblies. Lubricate these components periodically, or as needed, to maintain optimal performance.

8.6.7. With the jack in its fully lowered position, remove the air vent valve (fig.6) to inspect the hydraulic oil level. If the oil level is insufficient, add high-quality hydraulic jack oil as required. Reinsert and securely tighten the air vent valve. Then purge air from the hydraulic system to ensure proper operation.

❑ **WARNING! DO NOT** use brake fluid or any other incompatible fluids. Only use the recommended hydraulic jack oil. Mixing different types of hydraulic oil can cause damage to the system and impair jack performance.

8.6.8. To maintain optimal performance and extend equipment lifespan, replace the hydraulic oil at least once annually. With the jack fully lowered, remove the air vent screw and carefully lay the jack on its side to drain the oil into a suitable container. Take care to prevent any dirt or contaminants from entering the hydraulic system.

NOTE: Dispose of used hydraulic oil in accordance with local environmental regulations and guidelines.

8.6.9. If a decline in equipment efficiency is observed, purge air from the hydraulic system to restore proper function.

8.1. THE SPACE REQUIRED FOR MAINTENANCE

To ensure safe and effective maintenance of a vertical transmission jack, it is essential to provide adequate working space around the equipment. This allows technicians to perform inspections, fluid changes, and repairs without obstruction or risk.

8.2. NATURE OF INSPECTIONS FOR SAFETY FUNCTIONS/ LIST OF SAFETY CHECKS

Safety inspections for jacks include daily pre-use checks by the operator and periodic inspections by a qualified person. Daily checks focus on visible damage, leaks, proper function of lifting and lowering, wheel condition, and label clarity. Periodic inspections, weekly or monthly, are more detailed, examining structural welds, hydraulic system integrity, fluid levels, seal condition, and performance under load. Lubrication and overload protection testing are also included to ensure continued safe operation.

8.3. CHARACTERISTICS OF THE HYDRAULIC FLUID

Hydraulic fluid must have proper viscosity, provide good lubrication, resist corrosion, foaming, and oxidation, and remain stable under pressure. Using the correct fluid ensures safe and efficient jack operation.

8.4. FAULT IDENTIFICATION

Early fault identification is critical to maintaining safe operation, preventing equipment failure, and protecting users from injury.

8.5. WASTE REMOVAL/DISPOSAL

Proper waste removal during jack disposal is essential for safety and environmental compliance.

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Used hydraulic fluid must be treated as hazardous waste, never poured into drains, and disposed of via authorised collection centres or recycling points, using sealed, labelled containers. Metal components can often be recycled after cleaning, while rubber, plastic, and coated parts must follow local waste rules. When discarding the entire jack, first drain fluids, separate recyclable materials, and handle any contaminated parts as hazardous waste.

8.6. HAZARDS WHEN DECOMMISSIONING

Decommissioning equipment involves several hazards, including residual hydraulic pressure, stored mechanical energy, heavy components, and sharp edges. Risks range from fluid spray and crush injuries to slips, cuts, and fire from flammable fluids. Oil spills and improper disposal can also cause environmental harm. To stay safe, always release pressure gradually, secure moving parts, use proper lifting methods, wear PPE, contain spills, and follow local disposal regulations.

8.7. BEST PRACTICES FOR SAFE DECOMMISSIONING

Before decommissioning equipment, perform a risk assessment and wear proper PPE, including gloves, eye protection, and steel-toe boots. Keep spill kits and fire extinguishers nearby, and ensure the work area is clean and well-lit. Follow the manufacturer's instructions if available, and clearly label equipment as "Out of Service" or "Decommissioned" to avoid accidental use.

9. TROUBLESHOOTING

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

TROUBLE	CAUSE	SOLUTION
Unit fails to extend or extends only partially	Air trapped in the hydraulic system or insufficient hydraulic oil level	1. Check and top up hydraulic oil if necessary. 2. Purge air from the hydraulic system according to the manufacturer's instructions.
Incomplete or spongy cylinder response when foot pedal is pumped.	1. Low fluid level.	1. Check hydraulic oil level and top up with recommended oil if necessary.
	2. Air in system.	2. Purge air from the hydraulic system.
Unit fails to extend when foot pedal is pumped.	1. Air trapped in the hydraulic system	1. Ensure the release valve is fully closed.
	2. Insufficient hydraulic oil.	2. Check and refill hydraulic oil as needed.
	3. Release valve not fully closed	3. Purge air from the hydraulic system.
Cylinder does not retract or retracts slowly when release pedal is activated.	1. Release valve partially blocked or not fully opened.	1. Ensure the release valve is fully opened.
	2. Air in the hydraulic system.	2. Purge air from the hydraulic system.
	3. Internal component wear or contamination.	3. Inspect for internal damage or contamination and service if necessary.

ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

REGISTER YOUR PURCHASE HERE

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.
Important: No Liability is accepted for incorrect use of this product.
Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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