

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 safety footwear

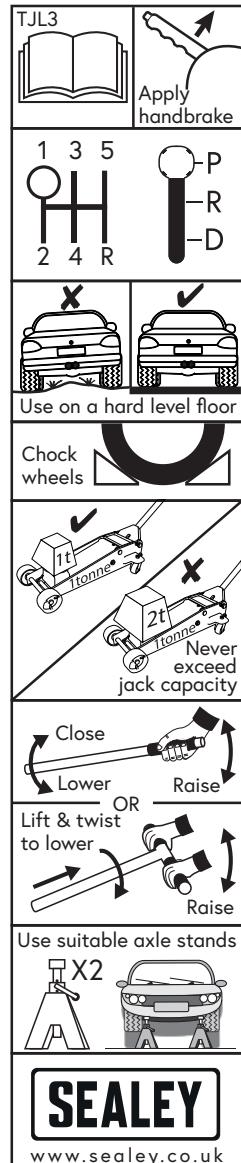


1. SAFETY

- WARNING! ALWAYS USE AXLE STANDS**
- WARNING!** Please note that the handle socket of this jack is retained under tension and must be released before use. Caution should be taken when releasing, as the handle socket will suddenly raise to its upright position if not controlled.
- ✓ The user shall work only in accordance with this instruction manual.
- ✓ The operator shall be provided with all necessary information about training and about pumping and translating forces.
- ✓ Ensure the jack is in sound condition and good working order. Take action for immediate repair or replacement of damaged parts. Use genuine parts only. **DO NOT** modify the jack. The use of non-genuine parts may be dangerous and will invalidate the warranty.
- ✓ Locate the jack in a suitable, well lit working area.
- ✓ Keep working area clean and tidy and free from unrelated materials. Use jack on level and solid ground, preferably concrete. Avoid tarmacadam as jack may sink in.
- ✓ Chock wheels of vehicle.
- ✓ Ensure the vehicle handbrake is engaged, engine is switched off and transmission is in gear (or "PARK" if automatic).
- ✓ Ensure minimum distance of 0.5m between vehicle and static objects such as doors, walls, etc. to allow for vehicle tilting.
- ✓ Ensure all non-essential persons keep a safe distance whilst the jack is in use.
- ✓ Ensure there are no passengers in the vehicle.
- ✓ It is necessary that the operator can watch the lifting device and the load during all movements.
- ✓ Place jack under only those lifting points recommended by vehicle manufacturer (see vehicle handbook).
- ✓ Check that the lifting point is stable and centred on the jack saddle.
- ✓ Ensure the jack wheels are free to move and that there are no obstructions.
- ▲ **DANGER:** Use the jack for lifting only, NOT for supporting the lifted load.
- ✓ Ensure there are no persons or obstructions beneath the vehicle before lowering.
- ✓ It is not allowed to work under the raised load until it is secured by suitable means. Use suitable axle stands under the vehicle before proceeding with any task.
- ✓ Use a qualified person to lubricate and maintain the jack.
- ✓ Ensure that only hydraulic jack oil is used in the jack.
- ✗ **DO NOT** operate the jack if damaged.
- ✗ **DO NOT** allow untrained persons to operate the jack.
- ✗ **DO NOT** operate the jack when tired or under the influence of drugs, alcohol or intoxicating medication.
- ✗ **DO NOT** exceed the rated capacity of the jack.
- ✗ **DO NOT** allow the vehicle to move during lifting or lowering, or use the jack to move the vehicle.
- ✗ **DO NOT** jack vehicle if there is a risk of spillage of fuel, battery acid, or other dangerous substances.
- ✗ **DO NOT** work under the vehicle until appropriately rated axle stands have been correctly positioned.
- ✗ **DO NOT** use the jack for purposes other than that for which it is intended.
- ✗ **DO NOT** top up hydraulic system with brake fluid. Use hydraulic jack oil only. (Sealey Part No: HJO500MLS or HJO5LS)
- ✗ **DO NOT** adjust the safety overload valve.
- ✓ When not in use store jack, fully lowered, in a safe, dry, childproof area.
- ✓ If more than 400N of effort is generated in lifting, the efforts shall be lowered by an additional person.
- ✓ Jacks shall be maintained and repaired in accordance with the manufacturer's instructions. Such maintenance and repair shall be carried out by qualified persons.
- ✓ No modifications shall be carried out which adversely affect the compliance of the jack with the standard.
- ✓ Check the state of the markings and that the markings remain as the initial one.

1.1. RESTRICTION FOR DIRECT CONTACT WITH FOODSTUFFS

Ensure the jack is used exclusively for its intended purpose, and avoid contamination by keeping it away from areas where food is processed, handled, or stored.



1.2. RESTRICTIONS FOR OPERATION ON SEA SHIPS

1. Stability and Safety:

- The movement of a ship at sea can cause instability. A trolley jack should not be used on a moving or unstable surface.
- Secure the vehicle and ensure the jack is on a flat, stable, and non-slip surface.

2. Corrosion Protection:

- Sea air and salt water can accelerate corrosion. Ensure the jack is well-maintained, lubricated, and protected with appropriate anti-corrosion measures.

3. Load Securing:

- Ships may experience sudden movements. Ensure the vehicle being lifted is properly secured to prevent shifting.

4. Environmental Considerations:

- Avoid using the jack in areas exposed to water spray or extreme humidity.

- Keep the jack dry and clean after use.

5. Weight Limitations:

- Check the ship's weight restrictions and ensure the jack and lifted load comply with safe working limits.

Personnel Safety:

- Only trained personnel should operate the jack on a ship. Emergency procedures should be in place in case of equipment failure.

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

1. Avoid Using in Strong Winds:

- **DO NOT** operate the trolley jack in open or exposed areas during high wind conditions. Wind pressure can destabilize the jack and the vehicle being lifted.

2. Ensure Stability:

- Strong gusts can shift or topple the jack. Always use the jack on a flat, stable surface and ensure the vehicle is properly chocked.

3. Sheltered Use:

- When possible, operate the jack in sheltered environments to minimize the impact of wind.

4. Monitoring Weather Conditions:

- Continuously monitor wind speeds if working outdoors. Stop operations if wind speeds become hazardous (e.g., above 20-30 km/h depending on equipment and load).

1.4. STORAGE AND TRANSPORTATION

1. Store in a Protected Area:

- Store the jack indoors or in a covered location to prevent exposure to wind, dust, and debris.

2. Secure the Jack:

- If storage in an open area is unavoidable, ensure the jack is anchored or placed on a stable surface to prevent it from being overturned.

3. Avoid Exposure to Extreme Conditions:

- Prolonged exposure to wind-driven rain, sand, or debris can cause corrosion or damage to moving parts.

1.5. 1. PROTECTIVE MEASURES (Including PPE)

1. Engineering and Operational Safety Measures:

- **Stable Surface:** Ensure the jack is placed on a flat, solid surface to prevent shifting or sinking.

- **Wheel Chocks:** Use wheel chocks to prevent vehicle movement.

- **Load Capacity:** **DO NOT** exceed the jack's rated load capacity.

- **Vehicle Support Stands:** Never rely solely on the jack for holding a vehicle. After lifting, support the vehicle with appropriate stands.

- **Inspection:** Perform a visual check of the jack before each use to ensure it is free from defects or leaks.

- **Environmental Conditions:** Avoid using the jack in wet, windy, or unstable conditions.

1.6. 2. PERSONAL PROTECTIVE EQUIPMENT (PPE):

To minimize the risk of injury, operators should wear the following PPE:

- Safety Footwear:

- Wear steel-toe safety boots to protect feet from falling objects or accidental drops.

- Protective Gloves:

- Use gloves to protect hands from sharp edges, pinching hazards, or exposure to hydraulic fluids.

- Eye Protection:

- Safety glasses or goggles should be worn to protect against debris, especially if inspecting or working near hydraulic components.

- Protective Clothing:

- Wear durable, fitted clothing to reduce the risk of snagging on the jack or vehicle components.

- Hearing Protection:

- If operating in a noisy workshop environment, consider using ear protection.

1.7. RESIDUAL RISKS THAT REMAIN

1. Crushing or Pinching Hazards:

- Risk of hands, feet, or body parts being pinched or crushed during the lifting or lowering process.

- Always maintain a safe distance and ensure hands are clear of pinch points.

2. Jack Failure or Malfunction:

- Even with regular maintenance, hydraulic or mechanical failure could occur.

- Always inspect the jack before use and never exceed its rated capacity.

3. Vehicle Instability:

- The vehicle may become unstable if not properly chocked or if the jack is not positioned correctly.

- Use vehicle stands and wheel chocks to reduce the risk of tipping.

4. Slipping or Falling Load:

- Poor surface conditions, uneven floors, or oil spills can lead to jack instability.

- Ensure a level, dry, and non-slip surface before operation.

5. Sudden Release of Pressure:

- Hydraulic failure or accidental release of the control valve can cause sudden lowering.

- Operate the jack slowly and cautiously, ensuring clear communication with co-workers.

6. Environmental Factors:

- Wind, rain, or debris may increase the risk of jack instability when used outdoors.
- Avoid using the jack in adverse weather conditions.

7. Improper Use or Human Error:

- Lack of training, poor judgment, or fatigue can lead to accidents.
- Ensure only trained personnel operate the jack and follow all safety procedures.

8 Exposure to Hazardous Fluids:

- Hydraulic fluid leaks can cause skin irritation or environmental contamination. Refer to MSDS.
- Wear protective gloves and clean spills immediately using absorbent materials.

9. Trip and Fall Hazards:

- Tools, jack handles, or hoses left around the worksite can lead to trips and falls.
- Maintain a clean and organized workspace.

1.8. STATIC ELECTRIC PROBLEMS

1. Friction:

- Movement of the jack's wheels on certain flooring materials (like epoxy-coated floors or vinyl) can generate static electricity.

2. Material Composition:

- Some trolley jacks have plastic or rubber components that may generate or retain static charges.

3. Environmental Factors:

- Low humidity environments increase the likelihood of static buildup.

4. Proximity to Flammable Materials:

- In areas with flammable liquids or vapours, static discharge could ignite fumes, causing a fire or explosion.

1.9. TRANSPORT, HANDLING, AND STORAGE OF THE MACHINE

1.10. TRANSPORT

1. Securing During Transport:

- Ensure the jack is securely fastened to prevent movement during transport.
- Use straps, chains, or other restraints to secure the jack on trucks, trailers, or pallets.

2. Protective Measures:

- Protect the hydraulic components from impacts or exposure to the elements.
- Cover the jack with a protective sheet if transported in an open vehicle.

3. Manual Lifting and Carrying:

- Trolley jacks are heavy; use appropriate lifting techniques or mechanical lifting aids.
- Follow ergonomic practices to prevent injury. If available, use a hoist or forklift.

4. Positioning:

- Transport the jack in a horizontal position to prevent hydraulic fluid leakage.

1.11. HANDLING

1. Personal Safety:

- Wear appropriate PPE (e.g., gloves and safety shoes) when handling the jack.

2. Inspection Before Use:

- Perform a visual inspection for any signs of damage that may have occurred during transport.

3. Avoid Dropping:

- Never drop or drag the jack, as this may damage its hydraulic system or structural components.

4. Use of Lifting Equipment:

- For larger or heavier jacks, use forklifts, pallet jacks, or cranes to move the equipment safely.

1.12. POSITION OF CENTRE OF GRAVITY

✓ Understanding the Center of Gravity (COG)

- The center of gravity is the point where the jack's mass is evenly distributed in all directions.
- For most trolley jacks, the COG is typically located near the hydraulic cylinder and base frame since these components are the heaviest.
- The COG will vary depending on the design, size, and materials used in the jack.

✓ Factors Affecting the Center of Gravity

1. Design and Construction:

- A low-profile jack will have a lower COG, providing more stability.
- Larger jacks with extended lifting arms may shift the COG forward.

2. Position of the Lifting Arm:

- When the arm is fully lowered, the COG is closer to the base.
- As the arm lifts, the COG may shift upward and slightly forward.

3. Load Placement:

- If a load is improperly balanced, the COG can shift, increasing the risk of tipping.

✓ Safety Considerations for COG Management

- **Stability:** Always ensure the jack is used on a flat, stable surface to maintain a low and stable COG.
- **Load Management:** Confirm that the load is centered on the jack's lifting pad to prevent shifting the COG too far to one side.
- **Avoid Overextension:** Do not extend the lifting arm beyond the recommended height to prevent loss of stability.
- **Transporting:** When moving the jack, keep the lifting arm fully lowered to maintain a low COG.
- **Storage:** Store the jack in a lowered position to reduce the risk of tipping.

2. INTRODUCTION

High lift jack arm with incredibly low access height of just 85mm. Fitted with quick lift foot pedal and dead man's control. Heavy-duty long steel chassis with wide wheelbase provides inherent stability and easy-access to deep set jacking points. Fitted with one-piece hydraulic unit with built-in safety overload protection.

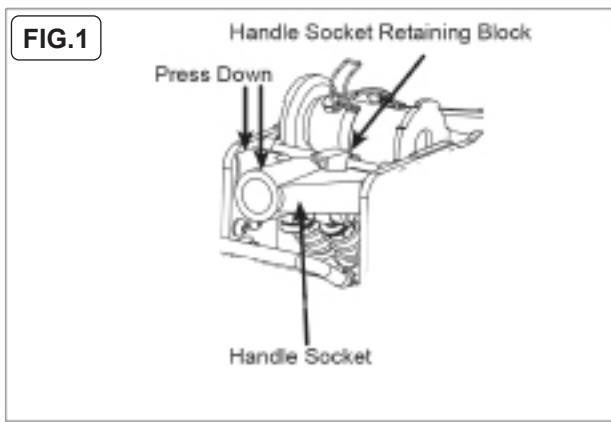
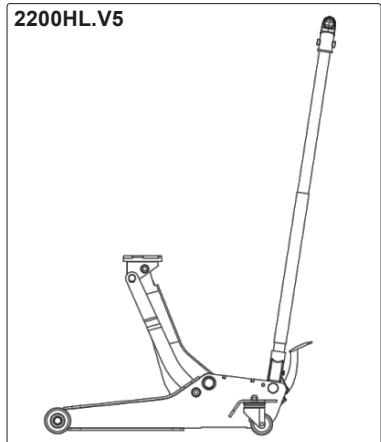
3. SPECIFICATION

Model No:	2200HL.V5
Capacity:	2.0 Tonne
Length:	1010mm
Maximum Chassis Height:	180mm

Maximum Saddle Height:	780mm
Minimum Saddle Height:	85mm
Nett Weight:	51kg
Applicable Standards:	EN 1494:2000+A1:2008

4. ASSEMBLY

- **WARNING!** Before use ensure you have read, understood and applied Section 1 safety precautions.



IMPORTANT: Before use, the operator is to visually inspect the jack for cracked welds, damaged or missing parts or hydraulic leaks.

4.1. HANDLE SOCKET RETAINING BLOCK REMOVAL (FIG.1)

Your jack has been shipped with a retaining block to hold the handle socket in the downward position. This must be removed.

CAUTION: RETAINING BLOCK UNDER LOAD AND COULD POP OUT AND CAUSE PERSONAL OR PROPERTY DAMAGE. WEAR EYE PROTECTION AND GLOVES

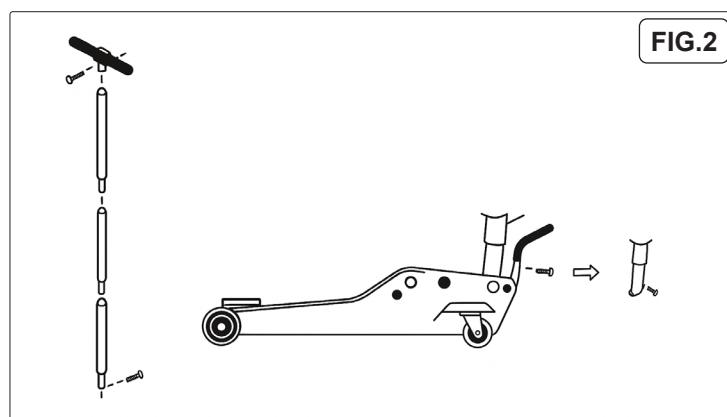
4.1.1. TO REMOVE. Push down on the handle socket until the block can be removed from between handle socket and pull rod. A second person may be needed to hold the front of the jack down while applying downward force to the handle socket. Remove the block and allow the handle socket to raise to its upper resting position.

4.1.2. ATTACHING THE HANDLE (FIG.2)

4.1.3. Assemble the two piece with bolt and fixed T shape handle with screw supplied.

4.1.4. Insert handle into the handle socket. Tighten the bolt on handle socket to prevent accidental removal of handle while in use.

5. OPERATION



□ SPACE NEEDED TO BE USED

- **Flat, Stable Surface:** Ensure the vehicle is parked on a flat, level, and stable surface like concrete or asphalt.

- **Clearance Around the Vehicle:** Leave at least 0.91 to 1.22 meters of space around the vehicle to allow easy access for positioning the jack and operating the handle.

- **Under-Vehicle Clearance:** Most trolley jacks require 12.7 to 15.24 centimeters of clearance for the saddle to fit under the vehicle. Low-profile jacks may need less.

- **Overhead Clearance:** If working in a garage, ensure sufficient overhead clearance to raise the vehicle safely.

- **Jack Handle Space:** Allow enough room to operate the jack handle freely, typically requiring 0.61 to 0.91 meters of space on the side of the jack.

5.1. MANUAL CONTROLS

5.2. LIFTING (FIG.3)

Prior to operating the jack, remove any accumulated air from the system below:

-Pull the handle and turn it counterclockwise whilst held in this position, pump the jack several times to ensure internal lubrication and bleed the accumulated air from the system.

5.2.1. Refer to the vehicle manufacturer's own manual to locate approved lifting points on the vehicle. Centre jack saddle under lift point.

5.3. This jack is fitted with a foot pedal that gives a faster approach to the load.

5.4. Pump handle full stroke until load reaches desired height.

5.5. Transfer the load to appropriately rated jack stands.

5.6. After removing the jack from under the vehicle, lower the lifting arm completely to reduce ram exposure to rust and contamination.

FIG.3

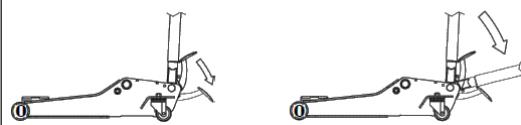
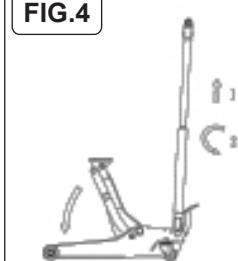


FIG.4



5.7. LOWERING (FIG.4)

WARNING! Ensure all tools and personnel are clear before lowering the load.

- Maintain control of the load at all times.

1. Raise the load high enough to clear the jack stands.

2. Remove the jack stands.

3. Pull up the handle then turn the handle counter-clockwise. The handle is self-return (Dead-man principle), you need to hold the handle until the jack back to the initial position.

SPECIFIC SAFEGUARDS NECESSARY

During Use

- **Chock the Wheels:** Place wheel chocks on both sides of the wheels that are not being lifted. This prevents the vehicle from rolling.

- **Use Jack Stands:** Never rely solely on the jack to support the vehicle. After lifting, secure the vehicle with appropriately rated jack stands.

- **Lift from Approved Points:** Only use the manufacturer-recommended lifting points to avoid damaging the vehicle or causing instability.

- **Avoid Overloading:** Never exceed the jack's weight capacity.

After Use

- **Lower Slowly:** Turn the release valve carefully to lower the vehicle in a controlled manner.

- **Store Properly:** After use, store the jack in a dry place and ensure the lifting arm is fully lowered to prevent rust or contamination.

Additional Precautions

- **Stay Clear:** Never work under a vehicle supported only by a jack.

- **Stay Sober and Alert:** Do not operate the jack under the influence of alcohol, drugs, or when fatigued.

- **Wear Protective Gear:** Safety gloves and goggles are recommended when working with jacks.

- **Check for Stability:** Confirm the vehicle is secure on jack stands before performing any maintenance.

5.8. REASONABLY FORESEEABLE MISUSE

When using a trolley jack, reasonably foreseeable misuse refers to improper or unintended use that could lead to accidents or damage.

1. Using the Jack on an Unstable Surface

- Attempting to lift a vehicle on grass, gravel, or uneven ground can cause the jack to sink, tilt, or topple over.

- **Solution:** Always use the jack on a flat, stable surface like concrete.

2. Overloading the Jack

- Exceeding the jack's maximum weight capacity can lead to equipment failure.

- **Solution:** Verify the vehicle's weight and ensure the jack is rated to handle it.

3. Relying Solely on the Jack

- Working under a vehicle supported only by a jack instead of using jack stands can lead to injury if the jack fails.

- **Solution:** Always use jack stands to secure the load.

4. Incorrect Placement

- Positioning the jack under non-designated lift points, such as the engine, fuel tank, or body panels, can cause vehicle damage or jack instability.

- **Solution:** Refer to the vehicle's owner's manual to identify approved lift points.

5. Rapid or Uncontrolled Lowering

- Turning the release valve too quickly can cause the load to drop abruptly, leading to vehicle damage or injury.

- **Solution:** Slowly and carefully turn the release valve to control the descent.

6. Using a Damaged or Poorly Maintained Jack

Using a jack with leaking hydraulic fluid, damaged seals, or worn components can lead to failure.

- **Solution:** Inspect the jack before each use and perform regular maintenance.

7. Using the Jack for Unsupported Tasks

- Using a trolley jack to lift or move heavy objects other than vehicles, or attempting to level or support a structure, can result in failure or injury.

- **Solution:** Only use the jack for its intended purpose — lifting vehicles for maintenance or repair.

8. Lack of Proper Safety Measures

- Not using wheel chocks, failing to engage the parking brake, or working in unsafe conditions can lead to the vehicle rolling or slipping.

- **Solution:** Always follow safety procedures and use chocks when lifting a vehicle.

5.9. PROHIBITED APPLICATIONS

A trolley jack is designed specifically for lifting vehicles temporarily for maintenance or repairs. Using it for unintended purposes can lead to severe injury, equipment damage, or property damage.

5.10. HANDLING OF LOADS THAT COULD LEAD TO DANGEROUS SITUATIONS

When using a trolley jack, certain types of loads or conditions can pose a heightened risk of accidents. Understanding these risks and taking proper precautions is essential to ensure safety.

1. Unstable or Unbalanced Loads

- **Risk:** Lifting a vehicle that is not properly balanced on the jack can cause it to shift or tip over.

- **Solution:**

- Always lift from the vehicle's manufacturer-approved lifting points.
- Ensure the jack saddle is centered beneath the load.
- Confirm the load remains stable during lifting.

2. Overloaded Jack

- **Risk:** Exceeding the jack's rated capacity may result in hydraulic failure or structural damage.

- **Solution:**

- Verify the vehicle's weight and ensure the jack's capacity is sufficient.
- Never attempt to lift loads beyond the jack's maximum limit.

3. Soft or Sloped Surfaces

- **Risk:** Using a jack on uneven, soft, or sloped ground can lead to jack instability and tipping.

Solution:

- Only operate the jack on a solid, level surface like concrete or asphalt.
- Avoid using it on dirt, gravel, or inclines.
- If necessary, use a flat, stable base plate under the jack for additional support.

4. Loads with a High Center of Gravity

- **Risk:** Vehicles or objects with a high center of gravity are more prone to tipping when lifted.

- **Solution:**

- Ensure the load is balanced before lifting.
- Use additional safety measures such as jack stands for added stability.

5. Lifting Vehicles with Severe Damage

- **Risk:** Vehicles with structural damage may have weakened lifting points, leading to collapse.

- **Solution:**

- Inspect the vehicle for structural integrity before lifting.
- Avoid using a jack on compromised or corroded areas.

6. Inadequate Use of Jack Stands

- **Risk:** Failing to transfer the load to jack stands after lifting increases the risk of jack failure.

- **Solution:**

- Always place jack stands under the vehicle at designated support points.
- Confirm the jack stands are rated for the vehicle's weight.

7. Rapid or Uncontrolled Lowering

- **Risk:** Opening the release valve too quickly can cause the load to drop suddenly, leading to injury or damage.

- **Solution:**

- Slowly and carefully turn the release valve to control the descent.
- Ensure all personnel and tools are clear before lowering the vehicle.

5.11. RESIDUAL RISKS

Even with proper precautions, some residual risks may remain when using a trolley jack. Residual risks are those that cannot be entirely eliminated despite following safety guidelines. Understanding these risks can help mitigate them further.

1. Jack Failure

- **Risk:** Hydraulic or mechanical failure can occur unexpectedly, especially with wear and tear.

- **Mitigation:**

- Perform regular inspections and maintenance.
- Never exceed the jack's weight capacity.
- Use jack stands as a secondary support.

2. Vehicle Movement

- **Risk:** The vehicle may shift unexpectedly during lifting or lowering, especially on uneven ground.

- **Mitigation:**

- Engage the parking brake and chock all unlifted wheels.
- Lift on a level, stable surface.
- Ensure the jack saddle is positioned correctly under the lift point.

3. Load Instability

- **Risk:** Vehicles with a high center of gravity or uneven weight distribution may tip or fall.

- **Mitigation:**

- Ensure the load is balanced before lifting.
- Use jack stands to stabilize the vehicle.

4. Sudden Load Drop

- **Risk:** The load may fall if the release valve is opened too quickly or if the jack malfunctions.

- **Mitigation:**

- Lower the load slowly and in a controlled manner.
- Stand clear of the vehicle during lowering.

5. Operator Error

- **Risk:** Misuse of the jack, such as improper positioning or over-tightening the release valve, may lead to accidents.

- **Mitigation:**

- Provide adequate training for operators.
- Follow the manufacturer's instructions carefully.

6. Environmental Factors

- Risk: Wind, rain, or debris may affect jack stability and operator control.

- Mitigation:

- Avoid using the jack in adverse weather conditions.

- Clear the work area of obstacles.

6. MAINTENANCE

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

Jacks shall be maintained and repaired in accordance with the manufacturer's instructions. Such maintenance and repair shall be carried out by qualified persons. No modifications shall be carried out which adversely affect the compliance of the jack with the standard. Check the state of the markings and that the markings remain as the initial one.

6.1. Only original spare parts should be used.

6.2. When the jack is not in use, the ram should be in its lowest position to minimise corrosion. Remove the handle to inactivate jack.

6.3. Keep the jack clean and lubricate all moving parts with oil on a regular basis.

6.4. Before each use check for broken, cracked, bent, or loose parts, or any visible damage to ram, pump, saddle, lifting arm, frame and all parts including nuts, bolts, pins and other fasteners. If any suspect item is found remove jack from service and take necessary action to remedy the problem.

x **DO NOT** use the jack if believed to have been subjected to abnormal load or shock load.

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

6.6. ADDING OIL (FIG.5)

NOTE: Too much oil will prevent saddle from lowering completely. If not enough oil, the saddle will not be able to rise to full height.

1. **Lower the Saddle Completely:** Ensure the saddle is fully lowered and the jack is in its upright, level position.

2. **Remove the Vent Screw:** Unscrew and remove the vent screw to allow air to escape during the filling process.

3. **Fill with Hydraulic Oil:** Pour the hydraulic oil into the filler hole until the oil level reaches approximately 3/16" above the inner cylinder (this can be seen from the oil filler hole). If the oil level needs to be checked or refilled, please move the filler plug and drain its contents into a container. Make sure that no dirt enters with the new oil.

4. **Reinstall the Vent Screw:** Once the oil has been added, securely reinstall the vent screw to seal the system.

6.8. CHANGING OIL

For optimal performance and longevity, replace the hydraulic fluid at least once per year.

1. **Lower the Saddle Fully:** Ensure the saddle is fully lowered, and place the jack in its upright, level position.

2. **Remove the Vent Screw:** Unscrew and remove the vent screw to allow the fluid to drain properly.

3. **Drain the Fluid:** Lay the jack on its side and allow the hydraulic fluid to drain into a suitable container.

NOTE: Dispose of the used hydraulic fluid in accordance with local environmental regulations.

NOTE: Use Sealey quality hydraulic jack oil, Model No.s HJO500MLS / HJO5LS to top up or replace the hydraulic fluid.

□ **WARNING:** **DO NOT** use brake fluid, or any fluid other than hydraulic jack oil as this may cause serious damage to the jack and will invalidate the warranty.

4. **Fill with New Hydraulic Oil:** Refill the jack with fresh hydraulic oil until the oil level is approximately 3/16" above the inner cylinder, which can be seen through the oil filler hole.

5. **Reinstall the Vent Screw:** Once the oil has been added, securely reinstall the vent screw to seal the system.

6.9. LUBRICATION

To ensure smooth operation and prevent rust, periodically apply a light lubricating oil to the following components:

1. **Pivot Points, Axles, and Hinges:** Apply oil to these areas to prevent rust and ensure smooth movement.

2. **Wheels and Castors:** Lubricate the wheels and castors to maintain free movement.

3. **Pump Assembly:** Lubricate the pump assembly to ensure efficient operation.

4. **Lift Arm:** Apply grease to the lift arm through the grease fittings.

Regular lubrication helps extend the lifespan of the trolley jack and ensures it functions smoothly.

□ **WARNING!** 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.

6.10. FAULT IDENTIFICATION AND LOCATION FOR REPAIR

If your trolley jack is malfunctioning, it's essential to identify the issue and locate the faulty component for repair.

1. Jack Will Not Lift the Load

Possible Causes:

- **Low Hydraulic Fluid:** Insufficient oil can prevent the jack from lifting the load.

- **Air in Hydraulic System:** Trapped air may cause a loss of pressure.

- **Faulty Hydraulic Pump:** The pump might be damaged or worn.

- **Release Valve Not Sealing:** If the release valve isn't sealing correctly, the jack won't hold pressure.

- **Location for Repair:**

- **Hydraulic Reservoir:** Check the fluid level and top up if necessary.

- **Hydraulic Pump:** Inspect the pump for any visible damage or wear.

- **Release Valve:** Ensure it is sealing correctly and not leaking.

2. Jack Will Not Lower Properly

Possible Causes:

- **Sticking Release Valve:** A valve that is stuck or blocked may prevent the load from lowering.

- **Air Trapped in the Hydraulic System:** Air pockets can prevent smooth lowering of the load.

Location for Repair:

- **Release Valve:** Clean or replace the valve if it's stuck or damaged.

- **Hydraulic System:** Bleed the system to release any trapped air.

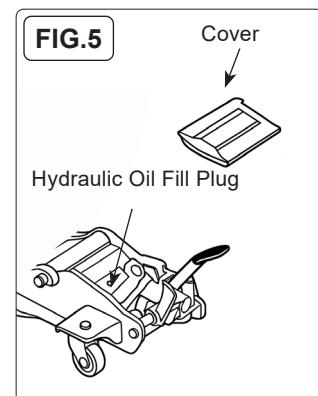
3. Leaking Hydraulic Fluid

Possible Causes:

- **Worn Seals:** Over time, seals may wear out, leading to fluid leakage.

- **Damaged Hydraulic Lines:** Cracked or loose connections can result in leaks.

- **Cracked Pump Housing:** Physical damage to the pump or reservoir housing can cause leaks.



Location for Repair:

- **Seals and O-rings:** Inspect and replace any damaged seals in the hydraulic system.
- **Hydraulic Fittings:** Check for loose or damaged fittings and tighten or replace them as needed.
- **Pump and Reservoir Housing:** Inspect for cracks or damage and repair or replace the damaged parts.

4. Jack Handle Is Stiff or Difficult to Operate

Possible Causes:

- **Worn Hydraulic Components:** The hydraulic components inside the jack may be worn, making the handle harder to operate.
- **Low Hydraulic Fluid:** Insufficient oil can cause the system to operate inefficiently.
- **Contaminated Fluid:** Dirt or debris in the hydraulic fluid can clog the system.

Location for Repair:

- **Hydraulic Pump and Piston:** Inspect for wear and replace any damaged components.
- **Hydraulic Fluid:** Check the fluid level and replace the fluid if it's contaminated.
- **Hydraulic Lines:** Inspect for blockages or contamination.

5. Jack Won't Hold the Load

Possible Causes:

- **Faulty Check Valve:** If the check valve is malfunctioning, the jack won't hold the load.
- **Internal Leak:** A leak inside the hydraulic system can lead to a loss of pressure.
- **Worn Piston or Cylinder:** A worn piston or cylinder may not generate enough pressure to keep the load raised.

Location for Repair:

- **Check Valve:** Inspect the check valve for damage or wear and replace it if necessary.
- **Hydraulic Cylinder:** Check for leaks or damage around the piston and cylinder.
- **Hydraulic System:** Look for leaks in the system and replace any damaged components.

6. Noisy Operation

Possible Causes:

- **Air in the Hydraulic System:** Trapped air can cause unusual noises during operation.
- **Lack of Lubrication:** Dry or poorly lubricated moving parts may generate noise.
- **Worn Hydraulic Components:** Damaged or worn parts may cause unusual sounds.

Location for Repair:

- **Hydraulic Pump and Piston:** Inspect for wear or damage and replace as needed.
- **Hydraulic Fluid:** Bleed the system to release trapped air and ensure fluid is clean.
- **Lubrication Points:** Ensure that all moving parts are well-lubricated.

6.11. RESTARTING THE TROLLEY JACK AFTER AN INTERVENTION

After performing an intervention or maintenance on the trolley jack, it's important to restart the jack properly to ensure it is functioning safely and effectively.

1. Inspect the Jack for Proper Assembly:

- Ensure that all components are correctly reassembled after any repair or intervention.
- Check that all seals, fittings, and parts are securely tightened and in place.

2. Check Hydraulic Fluid Levels:

- Verify that the hydraulic fluid is filled to the correct level (typically 3/16" above the inner cylinder, as seen from the oil filler hole).
- If necessary, top up the hydraulic fluid.
- Bleed the Hydraulic System (If Necessary):
 - If air was introduced into the hydraulic system during the repair (e.g., from draining or replacing fluid), bleed the system by following the bleeding/venting procedure.
 - Open the release valve slowly.
 - Pump the handle several times to allow air to escape.
 - Close the release valve once the air is vented.

3. Check for Leaks:

- Inspect all hydraulic lines, seals, and fittings for any potential leaks.
- If any leaks are detected, tighten the connections or replace faulty seals.

4. Ensure Proper Operation of the Release Valve:

- Check the release valve for proper function (both opening and closing).
- Turn the handle clockwise until firm resistance is felt to close the valve.
- Open the valve counter-clockwise to ensure smooth lowering when needed.

5. Test the Jack Before Use:

- With the saddle fully lowered, pump the handle several times to check the lifting function.
- Ensure the jack operates smoothly and raises the load as expected without any unusual sounds or resistance.

6. Check the Stability of the Load:

- If you plan to use the jack for lifting, ensure that the vehicle or object is stable.
- Engage the parking brake and chock the unlifted wheels to prevent any unintended movement.

7. Ensure Safe Operating Conditions:

- Place the jack on a level and stable surface.
- Make sure the lifting points are correctly aligned under the vehicle or load.

6.12. ENVIRONMENTAL CONDITIONS THE PRODUCT CAN BE USED IN

To ensure safe and effective use of a trolley jack, it should only be used in appropriate environmental conditions.

1. Surface and Location

- Flat, Level Surface: Always operate the jack on a solid, stable, and level surface. Avoid using it on soft, uneven, or sloped surfaces, as this may lead to instability.
- Concrete or Asphalt: Ideal surfaces include concrete floors in garages or workshops. Using the jack on loose gravel, dirt, or grass can cause it to sink or tip over.

2. Temperature

- **Optimal Range:** Trolley jacks are typically designed to operate in temperatures ranging from -5°C to 50°C (23°F to 122°F).
- **Cold Weather Use:** In extremely cold environments, hydraulic oil may thicken, leading to reduced efficiency. Consider using a low-temperature hydraulic oil if needed.

6.14. - **Hot Weather Use:** Prolonged exposure to high temperatures may cause hydraulic fluid to expand, leading to possible leaks or system failure.

3. Moisture and Humidity

- **Dry Conditions Preferred:** Avoid using the jack in excessively wet or humid conditions, as moisture can cause rust, corrosion, or slippage.

- **Limited Outdoor Use:** While brief outdoor use is acceptable, prolonged exposure to rain or snow can damage components.

- **Corrosion Prevention:** After exposure to moisture, dry and lubricate the jack to prevent rust.

4. Cleanliness

- **Dust and Debris-Free Environment:** Avoid using the jack in areas with excessive dirt, dust, or debris. Particles may clog hydraulic components and reduce functionality.

- **Regular Maintenance:** Clean the jack after use in dirty environments to prevent buildup and corrosion.

5. Ventilation

- **Well-Ventilated Areas:** When used in workshops, ensure proper ventilation to prevent the accumulation of fumes from hydraulic fluid or other chemicals.

6.15. INTENDED USE AND OPERATION OF THE PRODUCT

A trolley jack is a hydraulic lifting device designed to raise vehicles for maintenance, inspection, or repairs. It is primarily used in automotive workshops, garages, or for personal use to lift cars, trucks, or other vehicles for tasks like tire changes, brake repairs, or suspension work.

6.16. DECOMMISSIONING A TROLLEY JACK: HAZARDS AND POTENTIAL RISKS

When a trolley jack reaches the end of its service life, it must be decommissioned properly to prevent accidents and environmental harm. Decommissioning involves safely removing the jack from use, disassembling it if necessary, and disposing of its components according to regulations.

6.17. NATURE OF INSPECTIONS FOR SAFETY FUNCTIONS

Regular inspections of a trolley jack are essential to ensure it functions safely and effectively. Safety inspections help identify potential issues before they lead to malfunctions or accidents. These inspections should be performed before each use, during routine maintenance, and periodically as part of a preventive maintenance schedule.

6.18. LIST OF NECESSARY SAFETY CHECKS

1. Pre-Use Safety Checks (Before Each Use)

- Visual Inspection:

- Check for cracks, dents, or deformations on the frame, saddle, and lifting arm.
- Inspect wheels, axles, and casters for damage or misalignment.

- Hydraulic Fluid:

- Verify the fluid level is adequate (approximately 3/16" above the inner cylinder).
- Check for any visible hydraulic fluid leaks.

- Release Valve:

Ensure the valve opens and closes smoothly with no signs of sticking or resistance.

- Pump Operation:

- Test the handle for smooth and consistent movement.

- Load Rating Label:

- Confirm the label is legible and indicates the jack's maximum load capacity.

- General Cleanliness:

- Remove dirt, grease, or debris that could interfere with operation.

2. Operational Safety Checks (During Use)

- Lifting Test:

- Confirm the jack raises the load smoothly without jerking or slipping.
- Ensure the saddle remains firmly seated under the lifting point.

- Stability Check:

- Confirm the jack remains stable without tipping or shifting.

- Release Valve Test:

- Ensure the load lowers gradually when the release valve is opened.

- Unusual Noises or Leaks:

- Stop using the jack if there are any abnormal sounds, fluid leaks, or visible damage.

3. Periodic Safety Checks (Monthly or After Heavy Use)

- Hydraulic Fluid Level and Condition:

- Check and top up or replace hydraulic fluid if necessary.

- Air Bleeding:

- Perform the bleeding procedure to remove trapped air in the hydraulic system.

- Lubrication:

- Apply light oil to pivot points, axles, and hinges.

- Grease the lift arm through grease fittings.

- Corrosion and Rust:

- Inspect metal components for rust and apply protective coatings if needed.

- Seal and Gasket Integrity:

- Check for worn or damaged seals that may cause leaks.

- Wheels and Casters:

- Ensure all wheels and casters roll freely and are securely attached.

4. Annual Safety Checks

- Structural Integrity:

- Perform a comprehensive inspection for weld cracks, frame damage, or deformations.

- **Load Test:**
 - Conduct a load test (if applicable) to ensure the jack can lift its rated capacity.
- **Hydraulic System Service:**
 - Change the hydraulic fluid and inspect the internal components for wear.
- **Release Valve Maintenance:**
 - Clean or replace the release valve if it shows signs of malfunction.

6.19. FREQUENCY OF INSPECTIONS FOR SAFETY FUNCTIONS

To ensure the trolley jack remains in safe working condition, inspections should be performed at regular intervals.

6.20. CHARACTERISTICS OF THE HYDRAULIC FLUID

1. Viscosity

- Hydraulic fluid should have a viscosity typically within the ISO VG 32 to 46 range.
- Viscosity affects how easily the fluid flows through the hydraulic system, especially in different temperatures.
- For general-use trolley jacks, ISO VG 32 hydraulic oil is often recommended.

2. Temperature Stability

- Must maintain its properties over a wide temperature range.
- Suitable hydraulic fluid should resist thickening in cold temperatures and thinning in high heat.

3. Lubrication Properties

- Provides effective lubrication to minimize wear and tear on hydraulic components.
- Reduces friction and prevents corrosion within the jack's hydraulic system.

4. Anti-Foaming

- Quality hydraulic fluids are formulated to prevent air bubbles (foaming) that could reduce performance and cause system failure.

5. Oxidation Resistance

- Should resist oxidation to prevent sludge and deposit formation, extending the fluid's service life.

6. Water Tolerance

- Hydraulic fluid should be capable of separating from water to prevent contamination and corrosion.

7. Non-Compressibility

- Hydraulic fluid is designed to be nearly incompressible, ensuring efficient force transmission.

8. Corrosion Protection

- Contains additives to protect internal metal components from rust and corrosion.

6.21. HYDRAULIC FLUID LEVEL

Maintaining the correct hydraulic fluid level is essential for the proper functioning of a trolley jack. Insufficient or excessive fluid can lead to malfunctions, reduced lifting capacity, or damage to the hydraulic system.

6.22. INFORMATION ABOUT HOSES AND THEIR MAINTENANCE

Although most trolley jacks typically do not use external hoses, some models — particularly larger or industrial-grade hydraulic jacks — may have hydraulic hoses that connect components like remote pumps or hydraulic reservoirs. Proper maintenance of these hoses is essential for safety and optimal performance.

6.23. WHAT TO DO IN THE EVENT OF AN OIL SPILLAGE

If hydraulic oil from a trolley jack spills, it can pose environmental, health, and safety risks. Acting quickly and following proper cleanup procedures is essential.

1. Ensure Safety First

- Ventilate the Area: If the spill is indoors, ensure proper ventilation to disperse fumes.

2. Wear Personal Protective Equipment (PPE):

- Safety gloves.
- Safety goggles.
- Oil-resistant shoes or boots.
- Prevent Slips and Falls: Place warning signs around the spill area to alert others.

3. Contain the Spill

- Stop the Source: Identify and stop the source of the leak by closing valves or sealing the jack.

4. Contain the Spill:

- Use oil-absorbent socks, mats, or sand to create a barrier around the spill.
- Prevent oil from reaching drains, water sources, or soil.

5. Absorb the Oil

6. Use absorbent materials such as:

- Oil-absorbent pads or granules.
- Cat litter or sand for smaller spills.
- Commercial oil absorbent products for larger spills.
- Apply the material generously to cover the entire spill.

7. Clean the Area

8. Collect the Absorbed Oil:

- Use a brush and dustpan or shovel to gather the used absorbent material.
- Place the waste into a sealable, leak-proof container.

9. Clean Residual Oil:

- Use an oil degreaser or detergent with warm water.
- Scrub the area and rinse thoroughly, ensuring all residues are removed.

10. Dispose of Waste Properly

- **Follow Local Regulations:** Hydraulic oil is hazardous waste and must be disposed of according to local environmental laws.
- Contact a licensed waste disposal service for proper handling.

6.24. THE NEED TO CHECK THE STATE OF MARKING AND ENSURE IT REMAINS THE SAME AS THE INITIAL ONE

Markings on a trolley jack, such as labels, warnings, and load capacity information, are crucial for safe operation. Regular checks are necessary to ensure these markings remain intact and legible to prevent misuse, accidents, or damage.

6.25. MAINTENANCE ON THE TROLLEY JACK AND ITS FITTINGS (Servicing and Emergency Repair)

Proper maintenance of your trolley jack and its fittings is essential to ensure safe and reliable performance. Regular servicing can help prevent breakdowns, and knowing how to handle emergency repairs is vital in ensuring the jack remains functional.

A. Basic Emergency Repair Procedure

- **Stop Operation Immediately:** If the jack malfunctions or you notice unusual behavior, stop using it immediately to prevent further damage or injury.
- **Assess the Issue:** Determine whether it's a hydraulic, mechanical, or structural issue (e.g., leak, pump failure, valve issue).
- **Address the Problem (As per the issues outlined above):**
 - If fluid is low, add oil.
 - If there is air in the system, bleed it.
 - If parts are damaged, replace them (e.g., seals, valves, or fittings).
- **Test the Jack:** After repairs, test the jack by lifting a light load to ensure it operates properly.
- **Document Repairs:** If a significant repair was performed, document the issue and action taken for future reference.

6.26. ADJUSTMENTS AND MAINTENANCE OPERATIONS

Regular adjustments and maintenance are critical for ensuring the trolley jack operates safely and efficiently. These operations extend the service life of the jack, prevent malfunction, and ensure its reliability.

6.27. PREVENTATIVE MAINTENANCE MEASURES TO BE OBSERVED

Preventative maintenance is critical in ensuring that your trolley jack remains safe, effective, and reliable over time. Regularly performing maintenance tasks will help extend the lifespan of the jack, reduce the risk of unexpected failures, and keep it operating efficiently.

6.28. REPAIR OF THE MACHINE

Repairing a trolley jack involves identifying any issues, locating the source of the problem, and replacing or fixing the faulty components. Regular maintenance can prevent many issues, but repairs may still be needed over time.

6.29. WARNING: POSSIBLE EMISSION OR LEAKAGE OF HAZARDOUS SUBSTANCES

When using, maintaining, or repairing a trolley jack, there is a risk of exposure to hazardous substances due to potential leakage of hydraulic fluid or other contaminants.

1. Potential Sources of Hazardous Substances

- **Hydraulic Fluid Leaks:** Hydraulic fluid can leak from damaged seals, hoses, or fittings.
- **Oil Spills During Maintenance:** Oil may spill when changing, refilling, or bleeding the hydraulic fluid.
- **Contaminated Parts:** Components exposed to hydraulic fluid can remain hazardous.
- **Improper Disposal:** Inadequate disposal of used hydraulic fluid can pose environmental risks.

2. Hazards of Hydraulic Fluid Exposure

- **Skin Contact:** Prolonged contact with hydraulic fluid can cause skin irritation or dermatitis.
- **Eye Contact:** Hydraulic fluid can cause severe eye irritation and damage.
- **Inhalation:** Fumes from heated or burning fluid can be toxic.
- **Environmental Contamination:** Spilled hydraulic fluid can contaminate soil, water, and groundwater.

3. Safety Precautions

- Personal Protective Equipment (PPE):

- Wear chemical-resistant gloves and safety goggles when handling hydraulic fluid.
- Use a face shield if there is a risk of splashes.
- Wear long-sleeved protective clothing to prevent skin contact.

- Spill Management:

- Keep absorbent materials (such as oil-absorbent pads) on hand for cleaning spills.
- Use an appropriate drip tray when draining hydraulic fluid.
- Never wash hydraulic fluid into drains or sewers.

- Ventilation:

- Perform all maintenance in a well-ventilated area to avoid inhaling vapours.

- Labelling and Storage:

- Store hydraulic fluid in labelled, sealed containers away from heat, sparks, or open flames.
- Follow the Material Safety Data Sheet (MSDS) guidelines for storage and handling.

- Environmental Protection:

- Dispose of used hydraulic fluid at an authorized hazardous waste collection center.
- Immediately contain and clean any spills using appropriate absorbent material.

4. Emergency Actions in Case of Leakage

- For Small Spills:

- Use oil-absorbent pads, sand, or other absorbent material to contain and clean the spill.
- Dispose of contaminated materials according to local regulations.

- For Large Spills:

- Evacuate the area if necessary.
- Contact appropriate emergency response personnel.
- Prevent the spill from reaching water sources or drains.

- For Skin or Eye Contact:

- **Skin Contact:** Wash the affected area thoroughly with soap and water.
- **Eye Contact:** Rinse eyes immediately with plenty of water for at least 15 minutes and seek medical attention.
- **Inhalation:** Move to fresh air and seek medical assistance if experiencing difficulty breathing.

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

In the event of a hydraulic fluid leak from a trolley jack, it's crucial to act quickly and appropriately to contain and manage the spill. Hydraulic fluid is hazardous to both people and the environment.

CLEANING

1. Inspect the Pump Piston and Ram: Check for any signs of rust or corrosion on the pump piston and ram.

2. Clean the Affected Areas: If rust or corrosion is found, clean the surfaces carefully using a cloth. Wipe the areas with an oily cloth to prevent further rusting or damage.

NOTE: DO NOT use sandpaper or abrasive materials on the ram and pump piston surfaces, as they can cause damage to the components.

7. TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	REMEDY
Jack will not lift the load	1) Overloaded 2) Oil level low 3) Release valve not correctly closed 4) Air in system 5) Piston rod not functioning	1) Be sure to use jack with adequate capacity 2) Top up oil level 3) Check and close release valve 4) Open release valve and pump the handle a few times. Close valve and re-try 5) Clean and replace oil
Jack does not lift high enough Or feels "spongy"	1) Oil level too high or too low 2) Worn seals 3) Air in system 4) Release valve not closed	1) Fill or remove excess oil 2) Return jack to local service agent 3) Open release valve and pump the handle a few times. Close valve and re-try 4) Check and close release valve
Jack lifts poorly	1) Pump packing or valves malfunctioning 2) Oil is dirty 3) Air in the system	1) Replace packing and/or clean valves 2) Replace oil 3) Open release valve and pump the handle a few times. Close valve and re-try
Jack lifts but will not hold load	1) Release valve partially open 2) Dirt on valve seats 3) Air in system 4) Faulty seals 5) Packing worn or defective	1) Check and close release valve 2) Lower jack, close release valve. Place foot on front wheel and pull up lifting arm to its full height by hand. Open the release valve to lower arm 3) Open release valve and pump the handle a few times. Close valve and re-try 4) Replace packing or contact local service agent 5) Replace packing
Jack will not lower completely	1) Unit requires lubrication 2) Piston rod bent or damaged 3) Jack frame/link system distorted due to overloading/poor positioning 4) Air in system 5) Release valve partially closed 6) Jack spring damaged or unhooked.	1) Oil all external moving parts 2) Replace rod or contact local service agent 3) Replace damaged parts or contact local service agent 4) Open release valve and pump the handle a few times. Close valve and re-try 5) Check and fully open release valve 6) Replace spring or contact local service agent
Jack does not lower at all	1) Release valve closed	1) Check and fully open release valve



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.



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