

# HYDRAULIC BOTTLE JACK

## INSTRUCTION MANUAL



### MODELS:

RD-JA001-5

RD-JA001-20H

RD-JA001-32H

RD-JA001-50

5 Ton, 20 Ton, 32 Ton & 50 Ton Hydraulic Bottle Jack



**ROAD DIAMOND™**

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## Bottle Jack

# SAFETY AND GENERAL INFORMATION

### Save these instructions.

For your safety, read, understand, and follow the information provided with and on this device before using. The owner and operator shall understand the device, its operating characteristics, and safety instructions before operating the equipment. The owner and operator shall be aware that the use and repair of this product may require special skills and knowledge. Instructions and safety information shall be read to and discussed with the operator in the operator's native language, ensuring that the operator comprehends its contents before using this equipment as authorised. If any doubt exists about the safe and proper use of this device, remove it from service immediately.

### Inspect before each use.

Do not use if abnormal conditions such as cracked welds, damaged, loose or missing parts are noted. Any equipment that appears damaged in any way, is found to be worn, or operates abnormally shall be removed from service until repaired. If the equipment has been or is suspected of having been subjected to an abnormal load or shock, immediately discontinue use until inspected by a professional/authorised repair facility (contact distributor or manufacturer). It is recommended that an authorised repair facility make an annual inspection. Operator's Manuals are available from the manufacturer.

## PRODUCT DESCRIPTION

Road Diamond™ Hydraulic Bottle Jacks are designed to lift, not support, rated capacity loads consisting of one end of a vehicle. Immediately after lifting, the load must be supported by a pair of appropriately rated jack stands.

**WARNING:** Never use the hydraulic jack as a stand-alone device. After lifting, immediately support the lifted load with a pair of appropriately rated jack stands.

## SPECIFICATIONS

PART NUMBER	CAPACITY (Ton)	MIN HEIGHT (mm)	LIFTING HEIGHT (mm)	ADJUSTING HEIGHT (mm)	MAX HEIGHT (mm)	NET WEIGHT (kg)
RD-JA001-5	5 Ton	195	125	60	380	3,5
RD-JA001-20H	20 Ton	235	140	60	435	12
RD-JA001-32H	32 Ton	255	150	60	465	14
RD-JA001-50	50 Ton	255	155	-	405	18,3

# PREPARATION

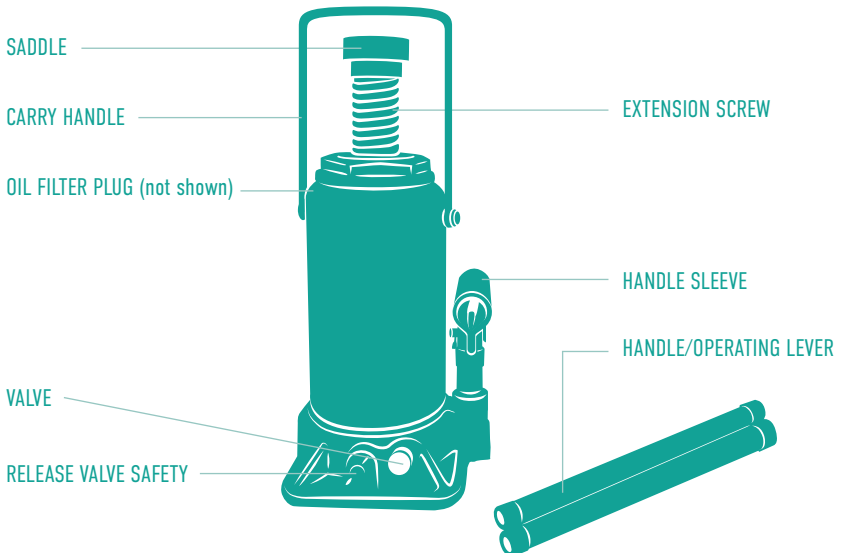
## Before use

1. Before using this product, read the operator's manual completely, familiarise yourself thoroughly with the product and its components, and recognise the hazards associated with its use.
2. Verify that the product and application are compatible.
3. Assemble the Handle/Operating Lever and ensure the spring clips align with the slots.
4. To familiarise yourself with basic operation, use the notched end of the provided Handle/Operating Lever to engage and turn the Release Valve:
  - a. Clockwise until firm resistance is felt to further turning. This is the 'CLOSED' Release Valve position used to raise the ram plunger.
  - b. Counter-clockwise, but no more than 1/2 turn from the closed position. This is the 'OPEN' Release Valve position used to lower the Ram Plunger.
5. Pump the Handle/Operating Lever with the Ram Plunger fully retracted and the release valve closed. If Ram Plunger responds immediately, the jack is ready for use. If the jack does not respond, follow the Bleeding/Venting Trapped Air instructions below.
6. Check that the pump operates smoothly and that the Extension Screw will thread up/down easily before putting into service.

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## Bleeding/Venting trapped air

With the Release Valve in the OPEN position (step 4b above) and with Ram Plunger fully lowered, locate and remove the Oil Filler Plug/Screw. Insert the Handle/Operating Lever into the Handle Sleeve, then pump 6 to 8 full strokes. This will help release any pressurised air trapped within the reservoir. The oil level should be even with the bottom of the oil filler hole. Reinstall the Oil Filler Plug/Screw.



**IMAGE: HYDRAULIC BOTTLE JACK**

## WARNING

- Study, understand, and follow all instructions before operating this device.
- Do not exceed rated capacity.
- Use only on hard, level surfaces.
- This is a lifting device only. Immediately after lifting, support the load with appropriate means.
- Lift only on areas of the vehicle as specified by the vehicle manufacturer.
- No alterations shall be made to this product.

### To avoid crushing and related injuries:

- Never work on, under or around a load supported only by the hydraulic jack.
- Always use adequately rated jack stands/trestles.
- Chock each unlifted tyre in both directions.
- Be alert when using this product.
- Do not operate under the influence of drugs or alcohol.

## OPERATION

### Raising the Ram Plunger

1. Assemble the Handle/Operating Lever and align spring clips with corresponding slots.
2. Place vehicle in park, with emergency brake on and wheels securely chocked to prevent inadvertent vehicle movement.
3. Locate and close the Release Valve by turning the Handle/Operating Lever clockwise until firm resistance is felt.
4. Verify the lift point and centre jack saddle under the lift point.
5. Insert the Handle/Operating Lever into the Handle Sleeve and pump to contact the lift point. To lift, continue pumping until the load reaches the desired height.
6. Transfer the lifted load to a pair of appropriately rated jack stands/trestles.

**NOTICE:** Use the Handle/Operating Lever provided by the jack manufacturer. The handle provided with this jack will safely engage the release valve and operate the Handle Sleeve. If the handle is worn, operates abnormally, or will not positively engage the release valve, STOP and discontinue the use of the jack until a factory replacement handle can be acquired.

### Lowering



**WARNING:** Clear all tools and personnel before lowering the load. Open the release valve slowly. The further the handle is turned counter-clockwise, the faster the load will descend. Maintain control of the load at all times.

1. Raise the load high enough to clear the jack stands, then carefully remove the jack stands.
2. Slowly turn the Handle/Operating Lever counter-clockwise, but no more than 1/2 turn. If the load fails to lower:
  - a. Use another jack to raise the vehicle high enough to reinstall jack stands.
  - b. Use the functioning jack to lower the vehicle.
3. After removing the jack from under the load, push the Ram Plunger and Handle Sleeve down to reduce exposure to rust and contamination.

# MAINTENANCE

## Notice

Use only good quality hydraulic jack oil. Avoid mixing different types of fluids, and NEVER use brake fluid, turbine oil, transmission fluid, motor oil or glycerin. Improper fluids can cause premature failure of the jack and the potential for sudden and immediate loss of load. Premium hydraulic jack oil is recommended.

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## Adding oil

1. With the Ram Plunger fully lowered and the pump piston fully depressed, set the jack in its upright, level position. Remove Oil Filler Plug/Screw.
  2. Fill with oil until just below the rim of the oil filler hole. Reinstall the Oil Filler Plug/Screw.
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## Changing oil

For best performance and longest life, replace the complete fluid supply at least once per year.

1. With Ram Plunger fully lowered and the pump piston fully depressed, remove the Oil Filler Plug / Screw.
  2. Lay the jack on its side and drain the fluid into a suitable container.  
**NOTICE:** Dispose of hydraulic oil per local environmental regulations.
  3. Fill with oil until just below the rim of the oil filler hole.
  4. Perform Bleeding/Venting, Trapped Air procedure (page 3). Reinstall the Oil Filler Plug/Screw.
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## Lubrication

A periodic coating of light lubricating oil to pivot points, axles and hinges will help prevent rust and ensure pump assemblies move freely.

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## Cleaning

Periodically check the pump piston and ram plunger for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

**NOTICE:** Do not use sandpaper or abrasive material on ram or pump piston surfaces..

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## Storage

When not in use, store the jack with the pump piston and ram plunger fully retracted and **IN AN UPRIGHT POSITION.**



**FOR QUALITY  
THAT STANDS UP**  
to wear & tear.

# TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
Jack will not lift load	<ul style="list-style-type: none"><li>• Release Valve not tightly closed</li><li>• Overload condition</li></ul>	<ul style="list-style-type: none"><li>• Ensure Release Valve is tightly closed</li><li>• Remedy overload condition</li></ul>
Jack will lift, but not maintain pressure	<ul style="list-style-type: none"><li>• Release Valve not tightly closed</li><li>• Hydraulic unit malfunction</li></ul>	<ul style="list-style-type: none"><li>• Ensure Release Valve is tightly closed</li></ul>
Jack will not lower after unloading	<ul style="list-style-type: none"><li>• Reservoir overfilled</li></ul>	<ul style="list-style-type: none"><li>• Ensure load is removed, then drain fluid to proper level</li></ul>
Poor lift performance	<ul style="list-style-type: none"><li>• Fluid level low</li><li>• Air trapped in system</li></ul>	<ul style="list-style-type: none"><li>• Ensure proper fluid level</li><li>• Follow Bleeding/Venting Trapped Air Procedure (page 3)</li></ul>
Will not lift to full extension	<ul style="list-style-type: none"><li>• Fluid level low</li></ul>	<ul style="list-style-type: none"><li>• Ensure the proper fluid level</li></ul>



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LOAD  
TESTED



COMPARED TO THE  
HIGHEST STANDARDS