

## **HYDRAULIC BOTTLE JACK**

## ITEM: 50502 12T, 50503 20T, 50504 20T, 50510 32T, 50511 50T



## **OWNER'S MANUAL AND SAFETY INSTRUCTIONS**

SAVE THIS MANUAL: KEEP THIS MANUAL FOR SAFETY WARNINGS, PRECAUTIONS, ASSEMBLY, OPERATING, INSPECTION, MAINTENANCE AND CLEANING PROCEDURES. WRITE THE PRODUCT'S SERIAL NUMBER ON THE BACK OF THE MANUAL NEAR THE ASSEMBLY DIAGRAM (OR MONTH AND YEAR OF PURCHASE IF PRODUCT HAS NO NUMBER).

### SAFETY

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator. Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

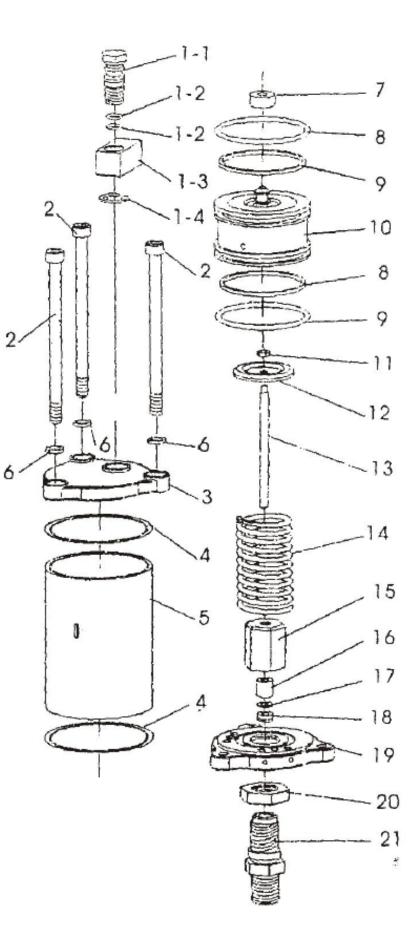
- The owner and operator of this equipment shall have an understanding of this jack and safe operating procedures before attempting to use. The owner and operator shall be aware that use and repair of this product may require special skills and knowledge.
- Inspect before each use. DO NOT use if broken, bent, cracked, or damaged parts (including labels) are noted. Any jack that appears damaged in any way, operates abnormally or is missing parts, shall be removed from service immediately. If the jack has been or suspected to have been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until jack has been checked by a qualified technician.
- DO NOT exceed rated capacity.
- This is a lifting device only. After lifting, immediately transfer the load to appropriately rated vehicle stands.
- Use only on hard, level surface.
- Lift only on areas of the vehicle as specified by the vehicle manufacturer.
- No alterations shall be made to this device.
- Only attachments and/or adapters supplied by the manufacturer shall be used.

## **To Avoid Crushing and Related Injuries:**

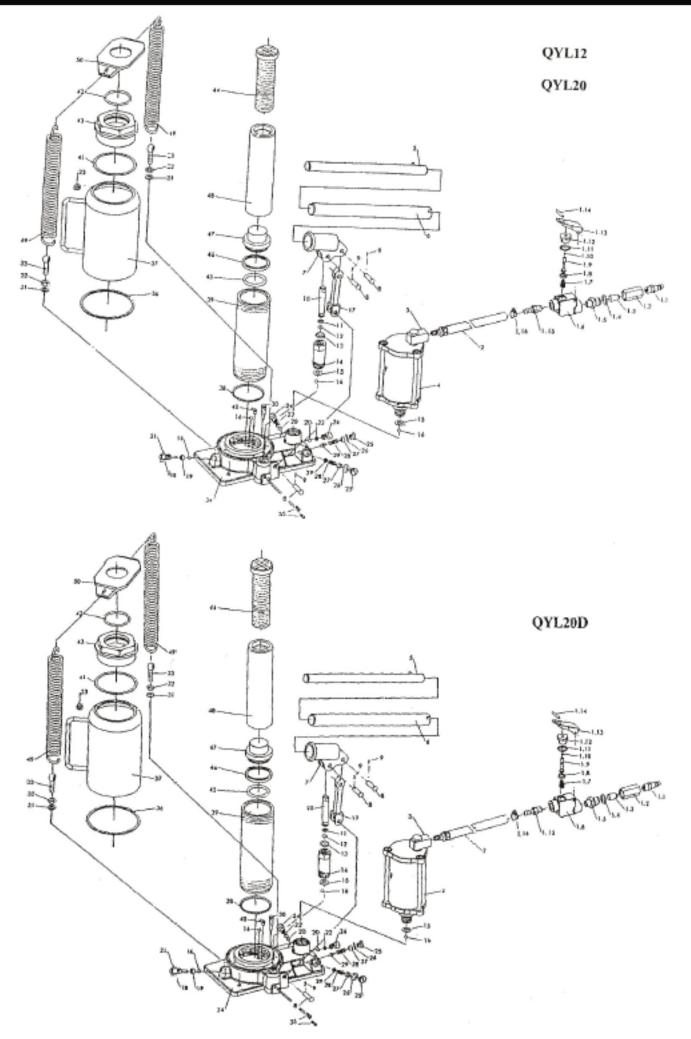
- **NEVER** work on, under, or around a load supported only by a hydraulic jack.
- Read, understand and follow all printed materials provided with and on this jack.
- Immediately support the lifted load with appropriately rated jack stands.
- Use **ONLY** on vehicles whose lift points are compatible with the saddle of this jack. Incompatibility may result in structural damage to the vehicle and/or jack.
- Chock each unlifted tire in both directions.
- Be alert and sober when servicing a vehicle! **NEVER** operate this equipment when under the influence of drugs or alcohol.
- **DO NOT** use this device to lift, level, lower, support, adjust or otherwise move a house, mobile home, travel trailer, camper, or building structure of any type, size, or configuration.
- WARNING: This is a lifting device only. It is designed to lift part of the total vehicle, one wheel or axle.
- ALWAYS wear safety glasses when using this equipment.
- Center load on the saddle before lifting. **NEVER** work under or around the load until it is properly supported.
- Transfer the load immediately to an appropriate gyrated jack stands.

# **G** SAVE THESE WARNINGS

| NO. | DESCRIPTION      | QTY |
|-----|------------------|-----|
| 1.1 | Tube Connector   | 1   |
| 1.2 | O-Ring 10x1.8    | 2   |
| 1.3 | B Removable Base |     |
| 1.4 | 4 Split Washer   |     |
| 2   | Hex Socket Screw | 3   |
| 3   | Cover            | 1   |
| 4   | Washer           | 2   |
| 5   | Air Pump Body    | 1   |
| 6   | Spring Washer    | 3   |
| 7   | Seal             | 2   |
| 8   | O-Ring 63.5x3.55 | 2   |
| 9   | Square Ring      | 1   |
| 10  | Piston           | 1   |
| 11  | Nut M5           | 1   |
| 12  | Block            | 1   |
| 13  | Plunger          | 1   |
| 14  | Spring           | 1   |
| 15  | Nut M5           | 1   |
| 16  | Packing Guide    | 1   |
| 17  | NL Retainer      | 1   |
| 18  | Y Seal           | 1   |
| 19  | Cover            | 1   |
| 20  | Adjusting Nut    | 1   |
| 21  | Plunger Cover    | 1   |



## PARTS DIAGRAM



## PARTS LIST

|      |                        | QTY              |       |     |                         | QTY              |       |
|------|------------------------|------------------|-------|-----|-------------------------|------------------|-------|
| NO.  | DESCRIPTION            | QYL12D<br>QYL20D | QL20W | NO. | DESCRIPTION             | QYL12D<br>QYL20D | QL20W |
| 1.1  | Hose connector         | 1                | 1     | 19  | Release Valve Seal      | 1                | 1     |
| 1.2  | Connecting nut         | 1                | 1     | 20  | Steel Ball 6.35         | 1                | 1     |
| 1.3  | Air Filter             | 1                | 1     | 21  | Pin                     | 1                | 1     |
| 1.4  | O-ring 18x24           | 1                | 1     | 22  | Valve Spring            | 2                | 2     |
| 1.5  | Connector              | 1                | 1     | 23  | Filler Plug             | 1                | 1     |
| 1.6  | Valve body             | 1                | 1     | 24  | Screw                   | 2                | 2     |
| 1.7  | Spring                 | 1                | 1     | 25  | Plug Screw              | 1                | 2     |
| 1.8  | Packing                | 1                | 1     | 26  | Plung Washer            | 1                | 2     |
| 1.9  | Throttle               | 1                | 1     | 27  | Overload Valve Screw    | 1                | 2     |
| 1.10 | O-Ring 3x1.6           | 1                | 1     | 28  | Safety Valve Spring     | 1                | 2     |
| 1.11 | O-Ring 18x2.4          | 1                | 1     | 29  | Overload Tapering Valve | 1                | 2     |
| 1.12 | Nut                    | 1                | 1     | 30  | Filter Net              | 2                | 2     |
| 1.13 | Lever                  | 1                | 1     | 31  | Spring Washer 8         | 2                | 2     |
| 1.14 | Lever Ring             | 1                | 1     | 32  | Nut 8                   | 2                | 2     |
| 1.15 | Hose connector         | 1                | 1     | 33  | Bolt M8x35              | 2                | 2     |
| 1.16 | Hose band              | 2                | 2     | 34  | Base                    | 1                | 1     |
| 2    | Air Hose               | 1                | 1     | 35  | Plug Screw              | 4                | 4     |
| 3    | Connector              | 1                | 1     | 36  | Cylinder Bottom Seal    | 1                | 1     |
| 4    | Air Pump               | 1                | 1     | 37  | Reservoir               | 1                | 1     |
| 5    | Upper Handle           | 1                | 1     | 38  | Packing                 | 1                | 1     |
| 6    | Lower Handle           | 1                | 1     | 39  | Cylinder                | 1                | 1     |
| 7    | Plunger                | 1                | 1     | 40  | Steel Ball Retainer     | 2                | 2     |
| 8    | Shaft Pin              | 3                | 3     | 41  | Cylinder Top Seal       | 1                | 1     |
| 9    | Cotter Pin             | 3                | 3     | 42  | O-Ring                  | 1                | 1     |
| 10   | Pump Plunger           | 1                | 1     | 43  | Top Nut                 | 1                | 1     |
| 11   | Pump Plunger retainer  | 1                | 1     | 44  | Extension Screw         | 1                | 1     |
| 12   | O-Ring                 | 1                | 1     | 45  | O-Ring                  | 1                | 1     |
| 13   | Dust Proof Ring        | 1                | 1     | 46  | O-Ring returner         | 1                | 1     |
| 14   | Pump reservoir         | 1                | 1     | 47  | Ram Header              | 1                | 1     |
| 15   | Copper Washer          | 1                | 1     | 48  | Ram                     | 1                | 1     |
| 16   | Steel Ball 6           | 6                | 6     | 49  | Spring                  | 2                | 2     |
| 17   | Plunger Connecting Rod | 1                | 1     | 50  | Spring Plate            | 2                | 2     |
| 18   | Release Valve Screw    | 1                | 1     |     |                         |                  |       |

## **Specifications:**

| LIFTING<br>CAPACITY | MIN.<br>ALTITUDE<br>(mm) | LIFTING<br>ALTITUDE<br>(mm) | REGULATING<br>ALTITUDE<br>(mm) | AIR<br>PRESSURE<br>RANGE<br>(MPA) | NET<br>WEIGHT<br>(kg) |
|---------------------|--------------------------|-----------------------------|--------------------------------|-----------------------------------|-----------------------|
| 50T                 | 270+25                   | 160                         | ~                              | 0.8-1                             | 34                    |

## Lifting:

- **1.** Assemble the handle, ensure that spring clips align with the slots.
- 2. Secure the load to prevent inadvertant shifting and movement.
- **3.** Position the jack near the desired lift point.
- 4. Close the release valve by turning it clockwise until it is firmly closed.

**CAUTION:** Use the handle provided with this product to ensure proper release valve operation. **DO NOT** use an extender on the air hose nor the operating handle. When using to lift a vehicle, lift only on the manufacturers recommended lift point and in accordance with the published guidelines on your vehicle owners manual. **ALWAYS** use jack stands to support the load immediately after lifting.

**5.** Insert and secure the handle into the handle sleeve. Pump handle or squeeze the lift the control valve until the saddle contacts load. To end air operation, simply release the grip on the lift control valve.

#### NEVER WIRE, CLAMP OR OTHERWISE DISABLE THE LIFT CONTROL VALVE TO FUNCTION BY ANY MEANS OTHER THAN BY USING THE OPERATOR'S HAND.

**6.** Raise the load to the desired height, then immediately transfer the load to appropriately rated support devices such as jack stands.

## Lowering:

1. Raise the load enough to carefully remove the jack stands.

**2.** Insert the handle onto the release valve and slowly turn the handle counter-clockwise, but no more than 1/2 a turn. If the load fails tou lower, carefully transfer the load to another lifting device and jack stands. Carefully remove affected jack and then the jack stands. Lower the load, again by slowly turning the release valve no more than a 1/2 turn.

#### BE SURE ALL TOOLS AND PERSONNEL ARE CLEAR BEFORE LOWERING THE LOAD. DANGEROUS DYNAMIC SHOCK LOADS ARE CREATED BY QUICKY OPENING AND CLOSING. THE RELEASE VALVE AS THE LOAD US BEING LOWERED. THE RESULTING OVERLOAD MAY CAUSE HYDRAULIC SYSTEM FAILURE WHICH COULD CAUSE SEVERE PERSONAL INJURY AND/OR PROPERTY DAMAGE.

**3.** After removing the lack from under the load, push the ram and handle sleeve down to reduce exposure to rust and contamination.

## Lubrication:

**1.** A coating of light lubricating oil to pivot points, axles and hinges. This will help to prevent rust and assure and that the wheels, casters and pump assemblies move freely.

**2.** Peridically check the pump piston for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

### NEVER USE SANDPAPER OR ABRASIVE MATERIAL ON THESE SURFACES.

3. When not in use, store the jack with pump piston and the ram fully retracted.

## **TROUBLESHOOTING and MAINTENANCE**

| PROBLEM                            | POSSIBLE CAUSE   | POSSIBLE SOLUTION   |  |
|------------------------------------|--|---|--|
| Jack will not lift load            | Release valve not tightly closed.<br>Overload condition. Air supply<br>inadequate      | Esure release valve tightly<br>closed. Remedy overload<br>condition. Ensure adequate<br>air supply  |  |
| Jack bleeds off after lift         | Release valve not tightly closed.<br>Overload condition. Hydraulic<br>unit malfunction | Ensure relase valve is tightly<br>closed. Remedy overload<br>condition  |  |
| Jack will not lower after          | Reservoir overlifted. Linkages   | Drain fluid to proper level.  |  |
| unloading                          | binding  | Clean and moving parts  |  |
| Poor lift performance              | Fluid level low. Air trapped in system   | Ensure proper fluid level.<br>With ram fully retracted,<br>remove the oil filter, plug to<br>let pressurized air escape,<br>reinstall oil filler plug |  |
| Will not lift to full<br>extension | Fluid level low  | Ensure proper fluid levels  |  |

## MAINTENANCE

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

## Adding Oil:

**1.** With the saddle fully lowered and the pump piston fully depressed, set the jack in its upright, level position and remove the oil filter plug.

**2.** Fill until the oil level with the filter plug hole, reinstall the oil filler plug.

## **Changing the Oil:**

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

**1.** With the saddle fully lowered and the pump piston fully depressed, remove the oil filler plug.

**2.** Lay the jack on its side and drain the fluid into a suitable container. Dispose of hydraulic fluid in accordance with local regulations.

3. Fill with good quality jack oil. Reinstall the oil filter plug. We recommend Mobil DTE13 or an equivalent.

## PLEASE READ THE FOLLOWING CAREFULLY

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#### Record Product's Serial Number Here:\_

**Note**: If product has no serial number, record month and year of purchase instead.

**Note**: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

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### **PRODUCT MADE IN CHINA**