Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

# Westward Hydraulic Service Jacks

## Description

Westward hydraulic service jacks are used for lifting part of a total vehicle (i.e., one wheel). Jacks are equipped with a built-in by-pass device to prevent damage to jack from overpumping. An internal safety valve prevents damage to jack from overloading. Applications include automotive, truck, farm, industrial and construction. Air models feature a powerful air motor, for effortless lifts of rated loads, conventional foot pumping and handle pumping. These jacks are designed to meet applicable ASME/ANSI Standards.

## **Specifications**

| Model             | Capacity | Length  | Min.<br>Height | Max.<br>Height |
|-------------------|----------|---------|----------------|----------------|
| 3W927             | 4 Ton    | 50 5/8" | 5"             | 24"            |
| 3ZC66             | 5        | 55 3/4  | 7              | 27             |
| 3W928             | 10       | 54 3/4  | 7              | 27             |
| 5M455 (air model) | 4        | 50 5/8  | 5              | 24             |
| 5M456 (air model) | 5        | 57 3/4  | 7              | 27             |
| 5M457 (air model) | 10       | 54 3/4  | 7              | 27             |

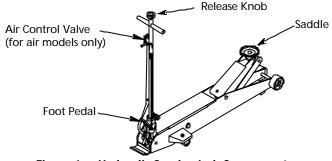


Figure 1 — Hydraulic Service Jack Components

## **General Safety Information**

A WARNING and f

Study, understand, and follow all

instructions before operating this device. Lifting device only. Intended use is for lifting part of a total vehicle, only one wheel or axle at a time. Immediately after lifting, support vehicle with appropriate means. Do not exceed rated capacity. Use only on hard, level surfaces capable of sustaining rated capacity loads. Lift only on those areas of the vehicle as specified by the vehicle manufacturer. Ensure that the lift point is properly centered on the jack saddle. Always wear safety glasses when using this equipment. Inspect jack before each use. Do not use if bent, broken, leaking, or damaged components are

noted. No alteration of this product is allowed. Do not use this device for any purpose other than that for which it was intended. Failure to heed any one or combination of these warnings may result in severe personal injury and/or property damage.

#### **Assembly**

Use figure 1 as reference.

- Assemble the handle to handle socket by inserting the handle piece into the socket; align the handle with jack chassis, then tighten the hexagon nut securely.
- 2. Try to operate the release mechanism by turning the release knob located on top of the handle

- clockwise and counterclockwise to see if release shaft fits together well.
- Occasionally, hydraulic jacks become air bound and will not function properly. To correct this condition, remove oil filler plug. This will allow any pressurized air to escape. Check for proper oil level (see Adding Oil, page 2), adjust as needed. DO NOT OVERFILL! Reinstall oil filler plug.
- 4. Pour a teaspoon of air tool lubricant into air supply inlet of air control valve. Connect to air supply and operate for 3 seconds to evenly distribute lubricant.
- 5. Squirt a small amount of hydraulic jack oil on pistons and thoroughly lubricate all moving parts of jack.

## Operation

A WARNING Off-centered loads and loads lifted

while jack is not level may damage the jack or cause personal injury.

#### IFTING

- Prevent inadvertent vehicle movement by fully engaging emergency brake, putting transmission in park. Use wheel chocks in pairs on the wheel diagonally opposed to the wheel or axle lifted.
- Close release valve by turning the release knob on top of handle clockwise until it is firmly closed.
- Position jack under load and align to the lift point suggested by vehicle manufacturer.
- 4. Operate jack by pumping the handle, foot pedal, or squeezing the lift control valve until saddle contacts load point. Ensure load is centered on saddle. Then operate jack until load reaches desired height.



## Westward Hydraulic Service Jacks

## Operation (Continued)

**NOTE**: Never use foot pedal to raise load.

**A WARNING** 

This is a lifting device only. The

load must be supported immediately by other appropriate means.

LOWERING

**A WARNING** Keep hands, feet, and clutter clear of ground area when lowering the load.

SLOWLY open the release valve by turning the handle knob counterclockwise.

A WARNING AVOID SHOULD CREATED by quickly

opening and closing the release valve as the load is being lowered. Shock loads can create dangerously high operating pressures within the hydraulic system, causing system failure and resulting in personal injury and/or property damage.

### Maintenance

**IMPORTANT:** When adding or replacing oil, always use a good grade

hydraulic jack oil. Do not use hydraulic brake fluid, alcohol, glycerine, detergent motor oil or dirty oil. Improper fluid can cause serious internal damage to the jack rendering it inoperative.

#### **ADDING OIL**

- 1. Position the jack on level ground and fully lower the saddle. Remove oil
- 2. Fill oil to within 3/8" of filler hole. DO NOT OVERFILL! If overfilled, the jack will not lower to published minimum height. If underfilled, the jack will not reach published maximum height. Adjust fluid level as needed. Always reinstall oil filler plug before use.

### REPLACING OIL

- 1. Remove oil filler plug.
- 2. Turn jack over and drain old oil out through oil filler plug hole.
- 3. Refill with new oil through the oil filler plug hole.

**IMPORTANT:** Do not allow dirt or other foreign material to enter the hydraulic system when filling.

4. After refilling, remove air from system by opening release valve and rapidly pumping handle several times. Reinstall oil filler plug when done.

#### LUBRICATION

- 1. For all models, add lubricating oil to all moving parts as needed.
- 2. Models 3ZC66, 3W927, 3W928. Apply grease to grease fittings periodically.
- 3. Models 5M455, 5M456, 5M457. Pour air tool lubricant into the air supply inlet at air control valve periodically.

#### PREVENTING RUST

- 1. Check ram and piston periodically for signs of corrosion. Clean as needed with an oily cloth.
- 2. When not in use, store jack with saddle and piston fully retracted.

## **Troubleshooting Chart**

| Symptom                             | Possible Cause(s)  | Corrective Action   |  |
|-------------------------------------|--|---|--|
| Jack will not lift load             | 1. Release valve not tightly closed                                      | 1. Ensure release valve tightly closed  |  |
|                                     | 2. Overload condition  | 2. Remedy overload condition  |  |
|                                     | <ol><li>Pressure of air supply is too low<br/>(for air models)</li></ol> | 3. Change to a suitable air source  |  |
| Jack bleeds off after lift          | 1. Same as above   | 1. Same as above  |  |
|                                     | 2. Hydraulic unit malfunctioning   | 2. Replace  |  |
| Jack will not lower after unloading | 1. Reservoir overfilled  | 1. Drain fluid to proper level  |  |
|                                     | 2. Linkages binding  | 2. Clean and lubricate moving parts   |  |
| Poor lift performance               | 1. Fluid level low   | 1. Ensure proper fluid level  |  |
|                                     | 2. Air trapped in system   | <ol><li>With ram fully retracted, remove oil<br/>filler plug to let pressurized air<br/>escape, reinstall oil filler plug</li></ol> |  |
| Will not lift to full height        | Fluid level low  | Ensure proper fluid level   |  |

## For Reair Parts, call 1-800-323-0620 24 hours a day - 365 days a year

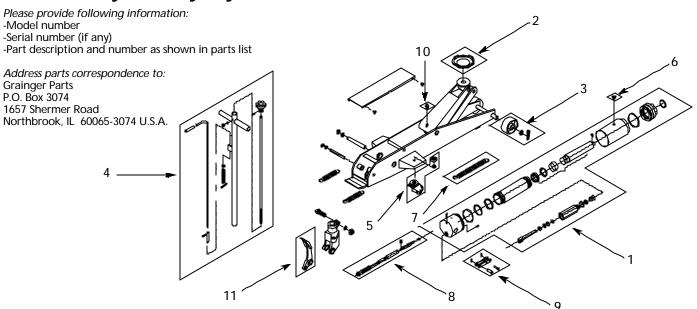


Figure 2 — Repair Parts Illustration for Models 3ZC66, 3W927 and 3W928

## **Repair Parts List**

| Reference                                     |                      | Part Number For Models: |               |                |          |
|---|----------------------|-------------------------|---------------|----------------|----------|
| Number  | Description          | 3W927 (4 Ton)           | 3ZC66 (5 Ton) | 3W928 (10 Ton) | Quantity |
| 1 ,   | * Power Unit         | 42301                   | 42501         | 41001          | 1        |
| 2   | Saddle               | 42302                   | 42502         | 41002          | 1        |
| 3   | Front Wheel Assembly | 42303                   | 42503         | 41003          | 2        |
| 4   | Handle Set           | 42304                   | 42504         | 41004          | 1        |
| 5   | Rear Caster          | 42305                   | 42505         | 41005          | 2        |
| 6   | Oil Filler Plug      | 42306                   | 42506         | 41006          | 1        |
| 7   | Return Spring        | 42307                   | 42507         | 41007          | 1        |
| 8   | Release Valve Cable  | 42308                   | 42508         | 41008          | 1        |
| 9   | Piston Links         | 42309                   | 42509         | 41009          | 1        |
| 10  | Greasing Nipple      | 42310                   | 42510         | N/A            | 1        |
| 11  | Foot Pedal           | 42311                   | 42511         | 41011          | 1        |
| (*) No repair parts available for power unit. |                      |                         |               |                |          |

#### LIMITED WARRANTY

WESTWARD ONE-YEAR LIMITED WARRANTY. Hydraulic Service Jacks, Models covered in this manual, are warranted by Westward to the original user against defects in workmanship or materials under normal use for one year after date of purchase. For limited warranty claim procedures, see PROMPT DISPOSITION below. This limited warranty gives purchasers specific legal rights which vary from jurisdiction to jurisdiction.

LIMITATION OF LIABILITY. To the extent allowable under applicable law, Westward's liability for consequential and incidental damages is expressly disclaimed. Westward's liability in all events is limited to and shall not exceed the purchase price paid.

**WARRANTY DISCLAIMER.** Westward has made a diligent effort to provide product information and illustrate the products in this literature accurately; however, such information and illustrations are for the sole purpose of identification, and do not express or imply a warranty that the products are MERCHANTABLE, or FIT FOR A PARTICULAR PURPOSE, or that the products will necessarily conform to the illustrations or descriptions.

Except as provided below, no warranty or affirmation of fact, expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by Westward.

**PRODUCT SUITABILITY**. Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While Westward attempts to assure that its products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

Certain aspects of disclaimers are not applicable to consumer products; e.g., (a) some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you; (b) also, some jurisdictions do not allow a limitation on how long an implied warranty lasts, consequentially the above limitation may not apply to you; and (c) by law, during the period of this Limited Warranty, any implied warranties of implied merchantability or fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed.

**PROMPT DISPOSITION.** Westward will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to Westward at address below, giving dealer's name, address, date, and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.

Manufactured for Grainger International, 100 Grainger Pkwy., Lake Forest, Illinois 60045 U.S.A.



## For Repair Parts, call 1-800-323-0620 24 hours a day - 365 days a year

Please provide following information: -Model number

-Mode number (if any)
-Part description and number as shown in parts list

Address parts correspondence to:
Grainger Parts Operations
P.O. Box 3074
1657 Shermer Road
Northbrook, IL 60065-3074 U.S.A.

Figure 3 — Repair Parts Illustration for Models 5M455, 5M456 and 5M457

## **Repair Parts List**

| Reference |                      |               | Part Number For Models: |                |          |
|-----------|----------------------|---------------|-------------------------|----------------|----------|
| Number    | Description          | 5M455 (4 Ton) | 5M456 (5 Ton)           | 5M457 (10 Ton) | Quantity |
| 1         | * Power Unit         | 2204101       | 2205101                 | 2210101        | 1        |
| 2         | Oil Filler Plug      | 2204102       | 2205102                 | 2210102        | 1        |
| 3         | Return Spring        | 2204103       | 2205103                 | 2210103        | 1        |
| 4         | Release Valve Cable  | 2204104       | 2205104                 | 2210104        | 1        |
| 5         | Piston Links         | 2204105       | 2205105                 | 2210105        | 1        |
| 6         | * Air Motor          | 24101-G24     | 24101-G24               | 24101-A27      | 1        |
| 7         | Air Hose             | 24102         | 24102                   | 24102          | 1        |
| 8         | Air Control Valve    | 24103         | 24103                   | 24103          | 1        |
| 9         | Handle Set           | 2204109       | 2205109                 | 2210109        | 1        |
| 10        | Hose Clamp           | 2204110       | 2205110                 | 2210110        | 1        |
| 11        | Greasing Nipple      | 2204111       | 2205111                 | N/A            | 1        |
| 12        | Saddle               | 2204112       | 2205112                 | 2210112        | 1        |
| 13        | Front Wheel Assembly | 2204113       | 2205113                 | 2210113        | 2        |
| 14        | Rear Caster          | 2204114       | 2205114                 | 2210114        | 2        |
| 15        | Foot Pedal           | 2204115       | 2205115                 | 2210115        | 1        |
| 16        | Swivel Manifold      | 24104A        | 24104A                  | N/A            | 1        |

 $<sup>^{\</sup>star}$  No repair parts available for power unit or air motor.

