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ITEM: CRJ30

# 1-1/2 TON TRUCK TRANSMISSION JACK

BEFORE USING THIS DEVICE, READ THIS MANUAL COMPLETELY AND THOROUGHLY, UNDERSTAND ITS OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE REQUIREMENTS.

It is the responsibility of the device owner to make sure all personnel read this manual prior to using the device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact Arcan for replacements. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.

# **SPECIFICATIONS**

| Capacity                 | 1-1/2 Ton  |
|--------------------------|------------|
| Low Height               | 8-5/8"     |
| Raised Height            | 36-5/8"    |
| Length                   | 43-1/2"    |
| Chassis Width            | 26"        |
| Saddle Tilt Fore and Aft | 10° by 10° |
| Saddle Tilt Side to Side | +10°, 10°  |
| Shipping Weight          | 350 lbs.   |
|                          |            |

# **▲WARNING**

• Read, study, understand and follow all instructions before operating this device. • Inspect before each use. Do not use jack if damaged, altered, modified, in poor condition, or has loose or missing hardware or components. Take corrective action before using the jack. • Do not use jack beyond its rated capacity. • Use only on a hard, level, clean and dry surface capable of supporting the load. • This jack was designed for lifting transmissions only. • Do not attempt any work until vehicle is supported by jack stands and any tires touching the ground are chocked. • Use this jack only with adapters and load restraints provided. Use of this jack is limited to the removal, installation, and transportation (in the lowered position) of transmissions and transfer cases. • Wear eye protection that meets ANSI Z87.1 and OSHA standards. • Do not lift or support the vehicle with this jack. • Secure the load to the jack. Only attachments and/ or adapters supplied by the manufacturer shall be used. · Always lower the jack slowly and carefully. • Make sure the ground, work area, and clearance under the vehicle are free from obstructions or any hindrances that would prevent easy maneuverability of the jack and transmission under the vehicle. • This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands thoroughly after handling. • Failure to heed these warnings may result in serious or fatal personal injury and/or property damage.

### **OPERATING MANUAL & PARTS LIST FOR CRJ30**

### WARNING INFORMATION



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



#### IMPORTANT: READ THESE INSTRUCTIONS BEFORE OPERATING

BEFORE USING THIS DEVICE, READ THIS MANUAL COMPLETELY AND THOROUGHLY, UNDERSTAND ITS OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE REQUIREMENTS.

It is the responsibility of the owner to make sure all personnel read this manual prior to using the device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact Arcan for replacements. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.

#### THE NATURE OF HAZARDOUS SITUATIONS

# **AWARNING**

The use of portable automotive lifting devices is subject to certain hazards that cannot be prevented by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have owners and personnel involved in the use and operation of the equipment who are careful, competent, trained, and qualified in the safe operation of the equipment and its proper use. Examples of hazards are dropping, tipping or slipping of loads caused primarily by improperly securing loads, overloading, off-centered loads, use on other than hard level surfaces, and using equipment for a purpose for which it was not designed.

#### **METHODS TO AVOID HAZARDOUS SITUATIONS**

# **AWARNING**

- Read, study, understand and follow all instructions before operating this device.
- Inspect before each use. Do not use jack if damaged, altered, modified, in poor condition, or has loose or missing hardware or components. Take corrective action before using the jack.
- Do not use jack beyond its rated capacity.
- Use only on a hard, level, clean and dry surface capable of supporting the load.
- This jack was designed for lifting transmissions only.
- Do not attempt any work until vehicle is supported by jack stands and any tires touching the ground are chocked.
- Use this jack only with adapters and load restraints provided. Use of this jack is limited to the removal, installation, and transportation (in the lowered position) of transmissions and transfer cases.
- Wear eye protection that meets ANSI Z87.1 and OSHA standards.
- Do not lift or support the vehicle with this jack.
- · Secure the load to the jack. Only attachments and/or adapters supplied by the manufacturer shall be used.
- Always lower the jack slowly and carefully.
- Make sure the ground, work area, and clearance under the vehicle are free from obstructions or any hindrances that would prevent easy
  maneuverability of the jack and transmission under the vehicle.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash
  hands thoroughly after handling.
- Failure to heed these warnings may result in serious or fatal personal injury and/or property damage.

#### **CONSEQUENCES OF NOT AVOIDING HAZARDOUS SITUATIONS**

# **▲**WARNING

Failure to read this manual completely and thoroughly, failure to understand its OPERATING INSTRUCTIONS, SAFETY WARNINGS, MAINTENANCE INSTRUCTIONS and comply with them, and failure to comply with the METHODS TO AVOID HAZARDOUS SITUATIONS could cause accidents resulting in serious or fatal personal injury and/or property damage.

### **OPERATING MANUAL & PARTS LIST FOR CRJ30**

#### SETUP INSTRUCTIONS



This is the safety alert symbol used for the SETUP INSTRUCTIONS section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

#### PLEASE REFER TO THE EXPLODED VIEW DRAWING IN THIS MANUAL IN ORDER TO IDENTIFY PARTS.

- 1. Refer to the exploded view drawing on page 5 to identify jack components.
- 2. The #3-7 and 3-13 brackets must be installed in the #3-8 saddle plate with the #3-6 bolts, #3-9 washers and #3-10 wing nuts as shown in the exploded view drawing.
- 3. The #3-4 chains must be attached to the #3-7 brackets as shown in the exploded view drawing and secured to the brackets with the #3-1 bolts, #3-2 washers, #3-3 lock washers and #3-5 nuts provided.
- 4. Assemble the #3-16 chain hooks to the #3-15 adaptor bolts with the #3-14 wing nuts as shown in the drawing.
- 5. Secure the #3-15 adaptor bolts to the two remaining #3-13 brackets using the #3-12 washers and #3-11 nuts.
- 6. Air may get trapped in the hydraulic system during freight and handling.

#### PURGING AIR FROM THE HYDRAULIC SYSTEM:

- Rotate the knob at the top of the hydraulic block in a clockwise direction until tight.
   Now turn it in a counterclockwise direction two full turns.
- b. Activate the hand pump #1-45 about 15 times.
- c. Rotate the knob at the top of the hydraulic block in a clockwise direction until tight.
- d. Activate the hand pump until the lift arm is raised to maximum height. You should experience a full pump stroke with each incremental pump.
- e. If it does not feel your are getting a full incremental pump stroke at anytime during the pumping operation, repeat steps "a" through "d" until all air is purged from the system.

#### **OPERATING INSTRUCTIONS**



This is the safety alert symbol used for the OPERATING INSTRUCTIONS section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

- 1. Lift the vehicle to the desired work height, and support the vehicle in accordance with the lift manufacturer's recommended lifting and support procedures.
- 2. Position the transmission jack directly under the transmission. Turn the release valve knob all the way in a clockwise direction until it stops. Pump the handle, and the saddle assembly will start to rise. Raise the saddle to a height very close to the center of balance point of the transmission, but do not touch the transmission.
- 3. Loosen the four bolts that secure the four brackets to the saddle. The brackets can be adjusted in and out to help position the transmission on the saddle. Now gently raise the saddle so it supports the transmission. Adjust the four brackets in position against the transmission, and tighten the wing nuts that secure the brackets to the saddle. Fore and aft saddle tilt adjustments are sometimes necessary to properly position the transmission on the saddle. Side to side tilt positioning may be necessary for the same reason and can be accomplished by activating the side to side tilt knob.
- 4. The chains should be pulled over the center of balance portion of the transmission and secured on the chain hooks. Rotate the #3-14 wing nuts to take up the slack in the chain and secure the transmission to the saddle.
- 5. Remove the transmission from the engine according to instructions in the vehicle service manual.
- 6. Once the transmission has been disconnected from the engine, very slowly turn the jack's release knob in a counterclockwise direction to make sure the jack's sa ddle and transmission do not hang up on any undertruck components, wiring, fuel lines, etc. Continue to lower the jack all the way down.
- 7. Remember to secure the transmission to the saddle before installing, and follow the vehicle manufacturer's installation instructions.

#### PREVENTATIVE MAINTENANCE



This is the safety alert symbol used for the PREVENTATIVE MAINTENANCE section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

- 1. Always store the jack in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements. The jack must be cleaned of water, snow, sand or grit before using.
- 2. The jack must be lubricated periodically in order to prevent premature wearing of parts. A general purpose grease must be applied to all zerk grease fittings, caster wheels, elevator arm, handle base pivot bolts, release mechanism and all other bearing surfaces.

### **OPERATING MANUAL & PARTS LIST FOR CRJ30**

#### PREVENTATIVE MAINTENANCE (CONT.)

3. It should not be necessary to refill or top off the reservoir with hydraulic fluid unless there is an external leak. An external leak requires immediate repair which must be performed in a dirt-free environment by qualified hydraulic repair personnel who are familiar with this equipment.

**IMPORTANT:** In order to prevent seal damage and jack failure, never use alcohol, hydraulic brake fluid or transmission oil in the jack. Use NAPA hydraulic Jack Oil #765-1541.

- 4. Every jack owner is responsible for keeping the jack labels clean and readable. Use a mild soap solution to wash external surfaces of the jack but not any moving hydraulic components. Contact NAPA for a replacement label if your jack's label is unreadable.
- 5. Inspect the jack before each use. Do not use the jack if any component is cracked, broken, bent, shows sign of damage or leaks hydraulic fluid. Do not use the jack if it has loose or missing hardware or components, or is modified in any way. Take corrective action before using the jack again.
- 6. Do not attempt to make any hydraulic repairs unless you are a qualified hydraulic repair person that is familiar with this equipment. Repairs must be performed by an authorized service center.

#### **TROUBLESHOOTING**

| PROBLEM   | ACTION  |
|---|---|
| 1. Unit will not lift load.                                 | Purge air from hydraulic system by following procedure under SETUP.               |
| 2. Unit will not sustain load or feels "spongy" under load. | Purge air from hydraulic system as above.   |
| 3. Unit will not lift to full height.                       | Purge air from hydraulic system as above.   |
| 4. Handle tends to raise up while the unit is under load.   | Pump the handle rapidly several times to push oil past ball valves in power unit. |
| 5. Unit still does not operate.                             | Contact Parts & Warranty Department listed below.                                 |

## **WARRANTY NOTICE**

### Warranty Policy - 1 Year

This service jack is covered under a 1 year warranty when used as recommended. Many parts are available, as shown in parts breakdown on page 4. For assistance with the operation or the availability of replacement parts, contact our Parts and Warranty Department at 1-800-879-7316. Please have available a copy of your receipt, the model number of the product, and specific details regarding your question.

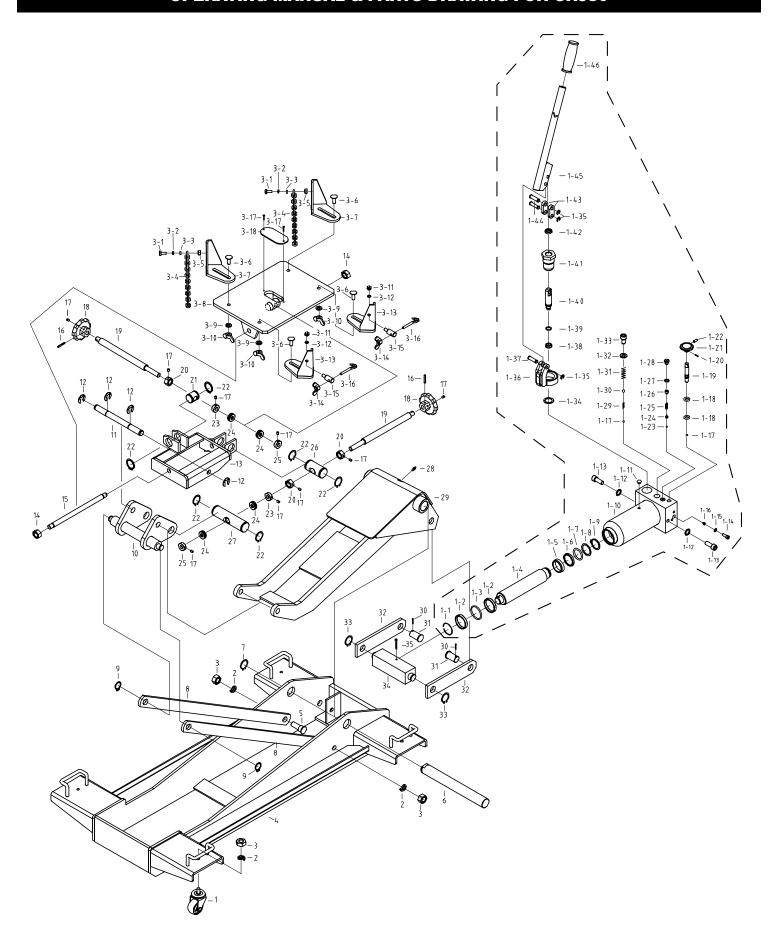
### WARRANTY INFORMATION

We want to know if you have any concerns with our products. If so, please call toll-free for immediate assistance. Please do not call the store where you purchased this product.

# 1-800-879-7316

Monday - Friday 9am to 5pm EST P.O. Box 58, Travelers Rest, SC 29690

# **OPERATING MANUAL & PARTS DRAWING FOR CRJ30**



# **OPERATING MANUAL & PARTS LISTS FOR CRJ30**

| Index<br>No. | Part<br>No. | Description                               | Qty. | Index<br>No.   | Part<br>No.  | Description                                   | Qty. |  |  |
|--------------|-------------|---|------|--|--|---|------|--|--|
| 1            | RS7752D01   | Wheel Assembly/each (incl. #1,2,3)        | 4    | 1-19   | RS7752D119   | Release Valve Assembly (incl. 1-19 to 1-21)   | 1    |  |  |
| 2            |             | Washer                                    | 6    | 1-20   |  | Pin   | 1    |  |  |
| 3            |             | Nut                                       | 6    | 1-21   |  | Release Knob                                  | 1    |  |  |
| 4            |             | Frame Board Assy.                         | 1    | 1-22   |  | Screw   | 1    |  |  |
| 5            |             | Bolt                                      | 2    | 1-23   | *  | Steel ball 4                                  | 1    |  |  |
| 6            |             | Shaft                                     | 1    | 1-24   |  | Ball seat                                     | 1    |  |  |
| 7            |             | Washer                                    | 1    | 1-25   | *  | Spring  | 1    |  |  |
| 8            |             | Rod Link                                  | 2    | 1-26   |  | Screw   | 1    |  |  |
| 9            |             | Washer                                    | 2    | 1-27   |  | Sealing washer                                | 1    |  |  |
| 10           |             | Saddle Seat                               | 1    | 1-28   |  | Screw   | 1    |  |  |
| 11           |             | Shaft                                     | 1    | 1-29   | *  | Spring  | 1    |  |  |
| 12           |             | Washer                                    | 4    | 1-30   | *  | Steel ball 9                                  | 1    |  |  |
| 13           |             | Bracket                                   | 1    | 1-31   | *  | Spring  | 1    |  |  |
| 14           |             | Nut                                       | 2    | 1-32   | *  | Copper washer                                 | 1    |  |  |
| 15           |             | Shaft                                     | 1    | 1-33   |  | Screw   | 1    |  |  |
| 16           |             | Pin                                       | 2    | 1-34   | *  | Copper washer                                 | 1    |  |  |
| 17           | **          | Bolt                                      | 9    | 1-35   |  | Washer  | 3    |  |  |
| 18           |             | Handwheel                                 | 2    | 1-36   |  | Bracket                                       | 1    |  |  |
| 19           | RS7752D19   | Adjustment Rod Assembly/each (incl. #16-1 | 9) 2 | 1-37   |  | Pin   | 1    |  |  |
| 20           | **          | Nut                                       | 3    | 1-38   | *  | Y-ring  | 1    |  |  |
| 21           | RS7752D21   | Shaft                                     | 1    | 1-39   | *  | O-ring  | 1    |  |  |
| 22           | RS7752D22   | Retaining Ring/each                       | 6    | 1-40   |  | Cylinder Pump                                 | 1    |  |  |
| 23           | **          | Nut                                       | 2    | 1-41   |  | Pump cylinder                                 | 1    |  |  |
| 24           | **          | Bearing                                   | 4    | 1-42   | *  | Dustproof plug                                | 1    |  |  |
| 25           | **          | Nut                                       | 2    | 1-43   |  | Washer  | 2    |  |  |
| 26           | RS7752D26   | Shaft                                     | 1    | 1-44   |  | Pin   | 2    |  |  |
| 27           | RS7752D27   | Shaft                                     | 1    | 1-45   |  | Handle  | 1    |  |  |
| 28           |             | Grease Fitting                            | 1    | 1-46   |  | Handle Sleeve                                 | 1    |  |  |
| 29           |             | Lift Arm Assembly                         | 1    | 3-1  | ***  | Bolt  | 2    |  |  |
| 30           |             | Pin                                       | 2    | 3-2  | ***  | Washer  | 2    |  |  |
| 31           |             | Shaft                                     | 2    | 3-3  | ***  | Washer  | 2    |  |  |
| 32           |             | Rod Link                                  | 2    | 3-4  | RS7752D34  | Chain/each                                    | 2    |  |  |
| 33           |             | Washer                                    | 2    | 3-5  | ***  | Nut   | 2    |  |  |
| 34           |             | Rod Link                                  | 1    | 3-6  | ***  | Bolt  | 4    |  |  |
| 35           |             | Pin                                       | 1    | 3-7  | RS7752D37  | Bracket/each                                  | 2    |  |  |
| 1-0          | RS7752DHU   | Complete Hydraulic Unit                   | 1    | 3-8  |  | Bracket                                       | 1    |  |  |
| 1-1          |             | Washer                                    | 1    | 3-9  | ***  | Washer  | 4    |  |  |
| 1-2          |             | Washer                                    | 2    | 3-10   | ***  | Nut   | 4    |  |  |
| 1-3          | *           | 0-ring                                    | 1    | 3-11   | ***  | Nut   | 2    |  |  |
| 1-4          |             | Piston Rod                                | 1    | 3-12   | ***  | Washer  | 2    |  |  |
| 1-5          |             | Piston ring                               | 1    | 3-13   | RS7752D313   | Bracket/each                                  | 2    |  |  |
| 1-6          | *           | Sealing washer                            | 1    | 3-14   | ***  | Nut   | 2    |  |  |
| 1-7          | *           | 0-ring                                    | 1    | 3-15   | ***  | Bolt  | 2    |  |  |
| 1-8          |             | Washer                                    | 1    | 3-16   | ***  | Hook  | 2    |  |  |
| 1-9          |             | Washer                                    | 1    | 3-17   |  | Bolt  | 2    |  |  |
| 1-10         |             | Body                                      | 1    | 3-18   |  | Board   | 1    |  |  |
| 1-11         | *           | Oil filler plug                           | 1    |  | RS7752DLK  | Product Label Kit (not shown)                 | 1    |  |  |
| 1-12         |             | Washer                                    | 2    |  |  |   |      |  |  |
| 1-13         |             | Bolt                                      | 2    | * Available in seal kit, RS7752DSK   |  |   |      |  |  |
| 1-14         |             | Bolt                                      | 1    | ** Available in saddle bearing kit, RS7752DSBK (incl. #17 (7), #20 (3), #23 (2), |  |   |      |  |  |
| 1-15         | *           | Copper washer                             | 1    | #24 (4), #25 (2).  |  |   |      |  |  |
| 1-16         |             | Valve                                     | 1    |  | *** Available in bolt kit, RS7752DBK   |   |      |  |  |
| 1-17         | *           | Steel ball 6                              | 2    | 1  | The state of the s |   |      |  |  |
|              | *           | 0-ring                                    | 2    | 1  |  | fied by part number are available separately. |      |  |  |