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# Hydraulic Transmission Jack, Telescopic

## Operating Instructions & Parts Manual

| Model | Capacity |
|---|---|
| BH7000 | 700 lb. |

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.

### ⚠ ADVERTENCIA

- Leer, comprender, y seguir las instrucciónes antes de utilizar el aparato.
- El manual de instrucciónes y la información de seguridad deben estar comunicado en lengua del operador antes del uso.
- No seguir estas indicaciónes puede causar daños personales o materiales.

### ⚠ WARNING

To avoid **crushing and related injuries**:

**NEVER** work on, under or around a load supported only by a hydraulic jack. **Immediately** transfer the load to an appropriate work station.

⚠ **WARNING:** Cancer and Reproductive Harm.
⚠ **AVERTISSEMENT:** Cancer et dommages au système reproducteur.
⚠ **ADVERTENCIA:** Cáncer y daño reproductivo.
**www.P65Warnings.ca.gov**

SFA Companies
10939 N. Pomona Ave. Kansas City, MO 64153
sales@blackhawk-automotive.com

**Read this manual and follow all the Safety Rules and Operating Instructions before using this product.**

Made in PRC
BH7000-M0_082018

## SAFETY and GENERAL INFORMATION

**Save these instructions.** For your safety, read, understand, and follow the information provided with and on this jack before using. 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. Instructions and safety information shall be conveyed in the operator's native language before use of this jack is authorized. If any doubt exists as to the safe and proper use of this jack, remove from service immediately.

**Inspect before each use.** Do not use if broken, bent, cracked or damaged parts are noted. Any jack that appears damaged in any way, or operates abnormally 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 factory authorized service center (contact distributor or manufacturer for list of authorized service centers). It is recommended that an annual inspection be done by qualified personnel. Labels and Operator's Manuals are available from manufacturer.

## PRODUCT DESCRIPTION

Hydraulic Transmission Jack is designed to be used as an aid in the removal and installation of automotive and light truck transmissions, transfer cases and transaxles. This telescopic style transmission jack is for use under an overhead lift or in a garage pit.

***NEVER** use for any purpose other than those uses outlined above!*

## SPECIFICATIONS

| Model | Capacity | Min. Height | Max. Height | Saddle Base | Extended Saddle Area | Jack Size | Volume of Hyd. Oil |
|---|---|---|---|---|---|---|---|
| BH7000 | 700 lb. | 57 1/4" | 76 3/8" | 9 7/8" x 9 7/8" | 18 7/8" x 18 7/8" | 36 1/8" x 32 5/8" | 695 mL |

# PREPARATION

**Assembly** *(refer to Figure 1)*

Tools required: M16 & M18 wrench.

1. Four major parts should be included in the package:
   (a) Hydraulic unit; (b) Upright Post; (c) Saddle Assembly; (d) 2 pieces of base half with hardware.
2. Attach the base halves to the upright post, then secure using threaded pins, washers and M12 nuts.
3. Attach the casters onto the base halves using M12 nuts and washers.
4. Place hydraulic unit on top of the upright post and secure with M10x25 bolts and washers.
5. Attach saddle assembly above the ram of hydraulic unit and secure using pin and spring pin provided.
6. Attach all four bracket supports onto saddle plate with bolts and wing nuts.
7. Attach saddle brackets to bracket support with provided nuts.
8. Finally, attach chains with bolts, washers, and nuts to saddle bracket.

**Before Use**

1. Verify that the product and application are compatible, if in doubt call Blackhawk Tech. Service (816) 891-6390.
2. Before using this product, read the operator's manual completely and familiarize yourself thoroughly with the product, its components and recognize the hazards associated with its use.
3. With ram plunger fully retracted, remove the oil filler plug. Insert the handle into the handle sleeve, then pump 6 to 8 strokes. This will help release any pressurized air, which may be trapped within the reservoir. Ensure the oil level is just below the oil filler hole. Reinstall the oil filler plug.
4. To familiarize yourself with basic operation, turn the release valve lever:
   a. Clockwise until firm resistance is felt to further turning. This is the 'CLOSED' release valve position used to raise the ram/saddle.
   b. Counter-clockwise, but no more than 2 turns from the closed position. This is the 'OPEN' release valve position used to lower the ram/saddle.
5. Ensure that jack rolls freely. Raise and lower the unloaded jack throughout the lifting range before putting into service to ensure the pump operates smoothly. Replace worn or damaged parts and assemblies with Blackhawk authorized replacement parts only.

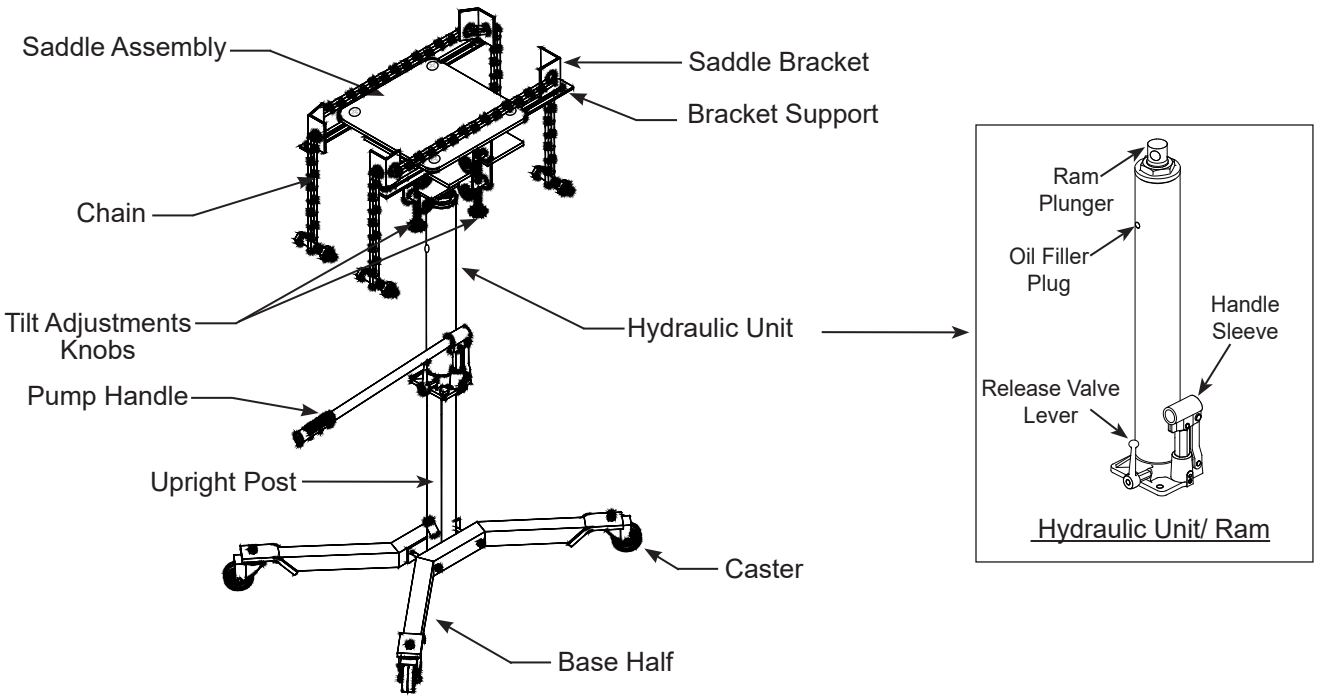
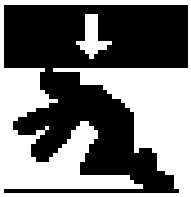



Figure 1- Transmission Jack Components

## ⚠ WARNING

- **Read, understand, and follow** all printed material provided with and on this product **before use**.
- **Do not** exceed rated capacity.
- Use **only** on hard, level surfaces.
- **Adequately support the vehicle before starting repairs.**
- If loaded jack must be moved, make certain that load is secured by appropriate means, is stable, is in the **lowest possible position**, is moved over a smooth, hard level surface and that the l**ifting platform is level**.
- Use of this product is **limited to removal, installation, and transportatio**n of **automotive and light truck transmissions, transfer cases and transaxles**.
- Use only adapters / accessories provided by the manufacturer of this transmission jack.
- Use only adapters / accessories whose **rated capacity is greater** than the rated capacity of this jack.
- Ensure the center of gravity is **center loaded** on the saddle.
- Never use this device as a work/repair station. **Transfer** the **load immediately** to a suitable work station.
- No alteration shall be made to this product.
- **Failure to heed** these markings may **result** in **personal injury and/or property damage**.

## ⚠ WARNING



To avoid **crushing and related injuries**:

- **Never** work on, under or around a load supported only by hydraulic jack.
- **Be alert** and **sober** when using this product. Do not operate under the influence of drugs or alcohol.

## OPERATION

Follow the instruction for removal and installation of transmission, transfer case or transaxle according to the vehicle manufacturer's service manual.

**Raise saddle assembly:**

1. Close release valve by turning the release valve level clockwise until firm. Pump handle until saddle reaches desired height.
2. Secure the load using the provided chains.

⚠ *Ensure center gravity of load is centered on the saddle and load is stable before moving jack. An off-center transmission could cause the jack to tip or flip over .*

**Lower saddle assembly:**

⚠ *Be sure all tools and personnel are clear before lowering load.* ***Slowly engage release valve!*** ***Maintain control*** *of the rate of speed at which the load lowers at all times!*

Open release valve by turning lever counter-clockwise, but never more than 2 full turns. Control the rate of descent at all times. The more you open the release valve, the faster the load descends.

⚠ ***Never*** *use this jack as a work station!*

## MAINTENANCE

Important: Use only good grade 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 load. Hein-Werner HW93291 or equivalent is recommended.

**Adding oil**

1. With saddle fully lowered, set jack in its upright, level position. Remove oil filler plug.
2. Fill until oil is level with the oil filler hole, reinstall oil filler plug.

**Changing oil**

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

1. With saddle fully lowered, remove oil filler plug.
2. Lay the jack on its side and drain the fluid into a suitable container.

   **Note.** Dispose of hydraulic fluid in accordance with local regulations.
3. Set jack in its level position. Fill until oil is level with the oil filler hole, reinstall oil filler plug.

**Lubrication**

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

**Cleaning**

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

**Note:** Never use sandpaper or abrasive material on these surfaces!

**Storage**

When not in use, store the jack with saddle fully lowered.

## TROUBLESHOOTING

| Symptom | Possible Causes | Corrective Action |
|---|---|---|
| Jack will not lift load | • Release valve not tightly closed<br>• Load is too heavy | • Ensure release valve tightly closed<br>• Consider higher capacity jack |
| Jack will lift, but not maintain pressure | • Release valve not tightly closed<br>• Hydraulic unit malfunction | • Ensure release valve tightly closed<br>• Discontinue use, Contact Blackhawk Tech. Service |
| Jack will not lower after unloading | • Reservoir overfilled<br>• Linkage binding | • Ensure load is removed, then drain fluid to proper level<br>• Clean and lubricate moving parts |
| Poor lift performance | • Fluid level low<br>• Air trapped in system | • Ensure proper fluid level<br>• With ram fully retracted, remove oil filler plug to let pressurized air escape, then reinstall oil filler plug |
| Jack will not lift to full extension | • Fluid level low | • Ensure proper fluid level |

## REPLACEMENT PARTS *(page 6 & 7)*

Not all components of the jack are replacement items, but are illustrated as a convenient reference of location and position in the assembly sequence. When ordering parts, give Model number, serial number and parts description. Call or write for current pricing: SFA Companies, 10939 N. Pomona Ave. Kansas City, MO 64153, U.S.A.
Tel: (816) 891-6390  Fax: (816) 891-6599  E-Mail: sales@blackhawk-automotive.com

**Replacement Parts Illustration for Models BH7000:**

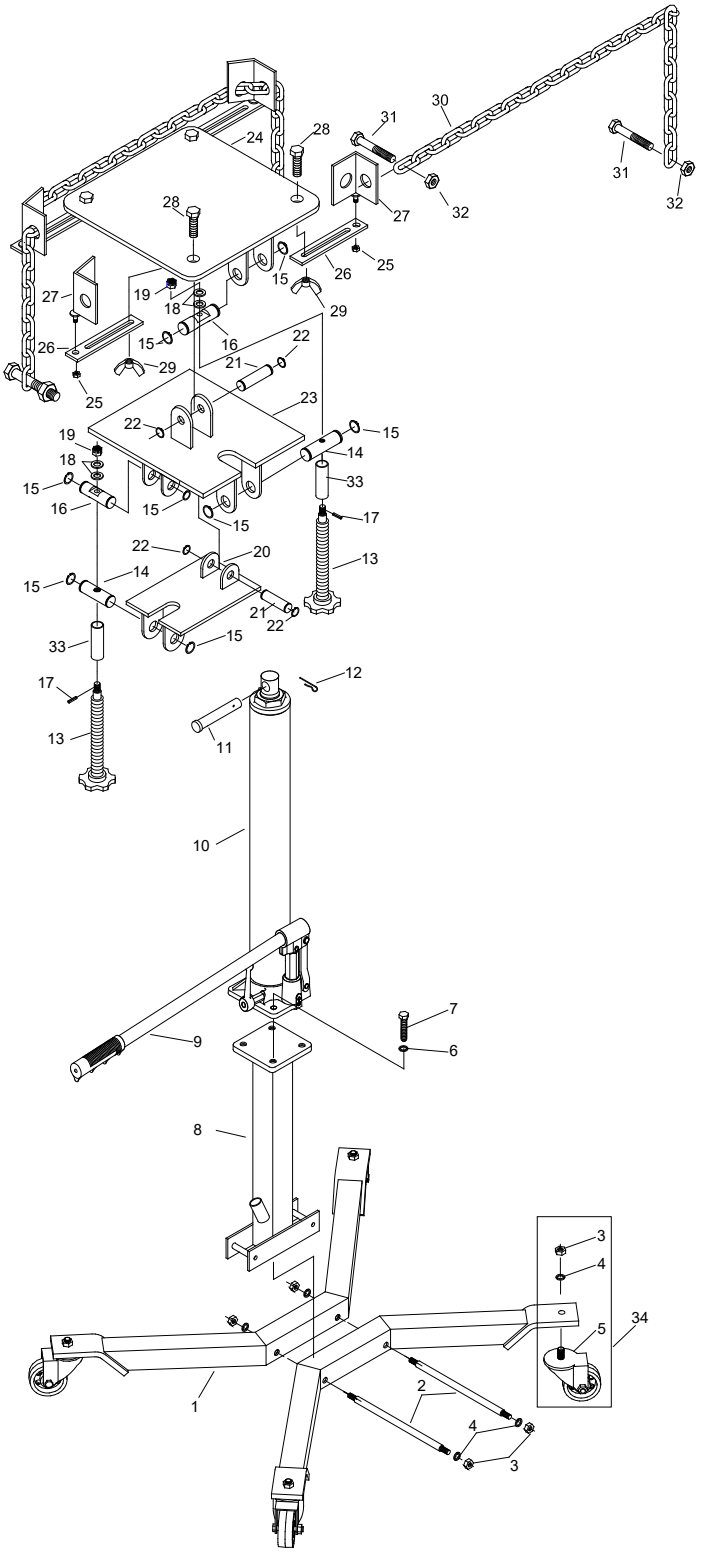



Figure 2 - Replacement Parts Illustration for Models BH7000

**Replacement Parts List for Models BH7000:**

| Item | Part Number | Description | Qty |
|---|---|---|---|
| 1 | T250-01000-000 | Base Half/Leg | 2 |
| 2 | T250-00005-000 | Steel Rod | 2 |
| 3* | *see item#35 or hardware kit* | Nut M12 | 8 |
| 4* | *see item#35 or hardware kit* | Lock Washer | 8 |
| 5 | *see item# 34* | 3” Caster | 4 |
| 6* | *see item#36 or hardware kit* | Lock Washer | 2 |
| 7* | *see item#36 or hardware kit* | Bolt M10x25 | 2 |
| 8 | T250-02000-000 | Post Assy. | 1 |
| 9 | BL80-20000-000 | Handle Assy. | 1 |
| 10 | BL8A-10000-000 | Hydraulic Unit | 1 |
| 11 | T250-00001-000 | Pin | 1 |
| 12 | T474-00007-000 | Retaining Pin | 1 |
| 13 | T250-08000-000 | Tilt Adjustment Knob | 2 |
| 14 | T250-00002-000 | Pin | 2 |
| 15* | 5304-00025-000 | Washer | 8 |
| 16 | T250-00003-000 | Pin | 2 |
| 17* | 5402-02018-000 | Spring pin | 1 |
| 18* | 5307-00010-000 | Washer | 4 |
| 19* | 5205-00010-000 | Nut M10 | 2 |
| 20 | T250-06000-000 | Support Plate | 1 |
| 21 | T250-00004-000 | Pin | 2 |
| 22* | 5304-00018-000 | Washer | 4 |
| 23 | T250-07000-000 | Adjustable Plate | 1 |
| 24 | T250-03000-000 | Saddle Plate | 1 |
| 25* | 5202-00010-000 | Nut M10 | 4 |
| 26 | T250-00006-000 | Extension Bracket | 4 |
| 27 | T250-04000-000 | Chain Bracket | 4 |
| 28* | 5103-12040-000 | Bolt | 4 |
| 29* | *see item#37 or hardware kit* | Nut M12 | 4 |
| 30 | *see item#37 or hardware kit* | Chain Assy. | 2 |
| 31* | *see item#38 or hardware kit* | Bolt | 4 |
| 32* | *see item#38 or hardware kit* | Nut M6 | 4 |
| 33 | T250-00007-000 | Tube | 2 |
| 34 | T250-90037-001 | Caster Assy. | 1 |
| 35 | T250-90037-002 | Kit (includes #3 & 4) | - |
| 36 | T250-90037-003 | Bolt Kit (includes #6 & 7) | - |
| 37 | T250-90037-004 | Bolt Kit (includes #28 & 29) | - |
| 38 | T250-90037-005 | Bolt Kit (includes #31 & 32) | - |
| (*) | T250-90009-K01 | Hardware Kit | - |
| - | BL800S-034 | Seal Kit for Hydraulic Unit | - |
| (*) Items included in Hardware Kit | | | |

# ONE YEAR LIMITED WARRANTY

For a period of one (1) year from date of purchase, SFA Companies will repair or replace, at its option, without charge, any of its products which fails due to a defect in material or workmanship under normal usage. This limited warranty is a consumer's exclusive remedy.

Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, to SFA Companies Warranty Service Department, 10939 N. Pomona Ave., Kansas City, MO 64153.

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