



BDW-245B-1801 Maintenance Instructions

1. Tires and Wheels

Check tires for wear and proper inflation to 105 psi.

Remove wheels from spindles at 12-month intervals and grease bearings with AeroShell #5 or equivalent commercial grease.

Remove Wheels by disengaging 1/8 cotter pin from spindle. Note when reinstalling wheel tighten nut to very slight drag on wheel rotation and install cotter pin.

Wheel bearings are removed by sliding flat snap rings from wheel groove. Remove spacers, flat washers and felt retaining wheel bearings. Be sure to keep these in proper order for reinstallation.

If tire needs replacement, deflate inner tube first and remove the six bolts to disassemble wheel halves. When reassembling the wheel, torque the 5/16 bolts to 15-18 ft. lbs.

Inspect rims for cracks in casting and physical damage-replace if necessary.

2. Jack

The 8-ton can be inspected and serviced for jack oil via the access hole in the front plate. Be sure to collapse the wheels all the way down to avoid over filling the reservoir.

Service with jack oil Chevron Hydraulic Oil AW 150 32 or its equivalent Unocal Unax AW 150. Our bottle jack seals are made of Buna "N" neoprene and should not be exposed to alcohol, hydraulic brake fluid or transmission oil. Do NOT use MIL-Spec 5606 hydraulic fluid. The use of hydraulic fluid, which is a lighter viscosity than jack oil can result in jack failure due to the swelling of the jack seals.

Should the jack require replacement or overhaul, place in the extended position (pumped up) and remove the 1/4 inch (7/16 wrench) bolt from the top of the frame. Keep bolt, fender washer, lock washer and bushing in proper order for replacement.

When reinstalling torque 1/4" bolt to 6 ft. lbs. Note, when jack pressure is relieved jack ram should be able to float within jack retention hole.

After removal of 1/4" bolt relieve jack pressure and hand retract ram into downward position.

Remove the 2 ea 1/4-20 socket head cap screws from bottom of jack screwed into jack base. Easiest method is to use 1/4" drive extension with socket hex drive. When reinstalling, torque hand tight or 5 ft. lbs.

It will be necessary to tilt and rotate jack bottom up into frame to largest opening to remove jack from frame.

If jack needs overhaul, use a clean room without contaminates. Remove valve stem and ram. Install new seal kit and replace jack oil ISO32. See parts breakdown W-245-22F.

Inspect jack link and housing for damage or cracks- replace if necessary.

3. Spindles

Should spindles be removed or replaced install the offset spindles onto the axle slides with the spindle stamped top in the up position. Spindles should be installed with the short side down. Reinstall with the 3/8-24x1 1/4 bolt and 3/8 split lock washers and torque to 30 ft. lbs. Lightly oil spindles and threads and gently wipe down.

Inspect for damage & cracks- replace if necessary.

4. Slides and Guides

The axle slides and guides are of a square way construction and have roughly a .010 to .015" clearance between them.

To remove the axle slides it is necessary to remove the guides located on each side of the axle slide.

Remove the 5/16 nuts from bolts on the guides and remove axle slide by pulling away from jack base. The wear plates can be removed now.

After this procedure, the jack base can be removed from the frame by rotating it to 90°.

When reinstalling be sure to have the 5/16 bolt heads on the inside of the frame protruding out. Install the wear plates and grease axle slide contact area. Make sure the jack base is installed with side stamped top in up position and ¼-20 holes closest to large open side.

Grease axle slide ways with AeroShell 33ms and install on to jack base into notch in axle slide. Axle slide should have the notch in the down position and widest side against the wear plates.

Install the guides over the axle slide ways with long end of the guide in the down position.

When tightening the bolts check that there is not any binding of the axle slide. Side clearance of guide to axle slide should be .005 to .015 inch tolerance. Torque 5/16 bolts and nuts to 15 ft lbs.

Note: For lubrication maintenance, guides can be greased through side mounted grease fittings.

Inspect for damage & cracks- replace if necessary.

5. Ball Lock Pin

Inspect ball lock pin monthly for bending, corrosion, ball lock and lanyard wear.

The ball lock is ½" dia with 3" grip length. Lightly oil and check ball "spring back".

Note: Lightly greased pinholes in nose block helps installation of ball lock pin.

Replace ball lock pin when damaged.

6. Spring Loaded Pin

Monthly lubricate spring-loaded pin with oil or white grease. Should pin or spring need to be replaced, remove the 10-32x1/2-socket head cap screw from the spring keeper and slide pin out into frame assembly.

Replace when pin is damaged.

7. Bump Block

The jack handle bump block is a wear item and is easily replaced. The PVC bump block is installed on the top opening of the frame to prevent jack handle wear from contact with the metal frame.

To install bump block, remove the 2 ea 10-32x3/4 button head cap screws from the block and frame.

When reinstalling new bump block P/N W-245B-13, coat the 10-32 threads with blue thread lock and hand tighten.

Replace when worn.

8. Inspection

Every 6 months, inspect unit for any damage. Look at welds for cracks or deformities of frame body. Loose or missing paint should be repaired to prevent corrosion. Keep clean for easy inspection during installation of wheels.



OPERATION

- Screw the tote (jack handle) into the nut on the top of the frame. This will allow you to roll the wheel unit into the right position without having to lift it into position.

BE SURE HANDLE IF FACING TOWARDS THE FRONT OF THE AIRCRAFT

- Unscrew the jack release knob to release the jack allowing the unit to collapse over the tow pins.

DO NOT ROTATE JACK RELEASE MORE THE TWO TURNS. DOING SO MAY RESULT IN OIL LEAKING FROM THE HYDRAULIC UNIT.

- Brackett Dual Wheel Units are designed to attach to the aircraft in the same manner as the aircraft manufacturers wheel units.
- Once the unit is attached to the tow pins unscrew the handle and slowly begin to raise the helicopter using the handle to pump the hydraulic unit.

DO NOT KEEP JACKING AFTER JACK REACHES BOTTOM. DOING SO WILL DAMAGE THE UNIT.

- Carefully begin towing the aircraft using the Roberts Rules Of Towing Methods.
- Once you reach your desired location release the jack slowly allowing the unit to collapse and bring the aircraft gently to the ground.

BE SURE THE AREA IS CLEAR OF DEBRIS AND PERSONNEL. FAILURE TO CHECK COULD RESULT IN DAMAGE TO EQUIPMENT OR INJURY