Elite Pro
Lubrication Instructions

BEDT-ZQ-501
BEVT-Z1501CB
BEVT-Z1501CBII
Proper Lubrication will help your machine last a long time and avoid costly repairs.

We’ve removed covers in some of the photographs to help show where to oil. We suggest that you may want to do the same—remove the cover to be sure that you’re oiling the proper place. Then hold the cover in place and see how to point the oiler with the cover on.

### ELITE Pro Lubrication Chart

<table>
<thead>
<tr>
<th>PART ID</th>
<th>LUBRICANT</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Rotating Hook</td>
<td>Barudan machine oil or Clear (mineral) oil for sewing machinery</td>
</tr>
<tr>
<td>B1</td>
<td>Drive Shaft</td>
<td>Barudan machine oil or Clear (mineral) oil for sewing machinery</td>
</tr>
<tr>
<td>B2</td>
<td>Hook Shaft Bushings (3)</td>
<td>Barudan machine oil or Clear (mineral) oil for sewing machinery</td>
</tr>
<tr>
<td>B3</td>
<td>Needle Bars</td>
<td>Wipe lightly with cotton swab saturated in Barudan machine oil or Clear (mineral) oil</td>
</tr>
<tr>
<td>C1</td>
<td>Needle Bar Crank Rod</td>
<td>Bearing oil</td>
</tr>
<tr>
<td>C2</td>
<td>Take-up Drive Lever</td>
<td>Bearing oil</td>
</tr>
<tr>
<td>C3</td>
<td>* Needle Bar Drive Lever (2)</td>
<td>Bearing oil</td>
</tr>
<tr>
<td>C4</td>
<td>Needle Bar Drive Links (3)</td>
<td>* Note page 10</td>
</tr>
<tr>
<td>C5</td>
<td>Needle Bar Driving Shaft</td>
<td>Wheel bearing grease</td>
</tr>
<tr>
<td>E1</td>
<td>Take-Up Lever</td>
<td>Wheel bearing grease</td>
</tr>
<tr>
<td>E2</td>
<td>Take-Up Lever Cam Groove</td>
<td>Wheel bearing grease</td>
</tr>
<tr>
<td>E3</td>
<td>Presser Foot Cams (2)</td>
<td>Wheel bearing grease</td>
</tr>
<tr>
<td>E4</td>
<td>Guide Plate</td>
<td>Wheel bearing grease</td>
</tr>
<tr>
<td>F1</td>
<td>* Lower Connecting Gear</td>
<td>Wheel bearing grease</td>
</tr>
</tbody>
</table>

* Note page 10

* Note page 17
# TYPES OF LUBRICANTS

Barudan America supplies Machine Oil and Bearing Oil with all new machines. White Lithium Grease Spray must be purchased separately.

<table>
<thead>
<tr>
<th><strong>KF720110 BARUDAN MACHINE OIL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>One can of Machine oil is included with each new machine, a good quality clear sewing machine oil may be substituted for this oil.</td>
</tr>
</tbody>
</table>

This oil should be poured into one of the following oilers before using on the machine:

<table>
<thead>
<tr>
<th><strong>Included with each machine is a squeeze oiler.</strong></th>
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<table>
<thead>
<tr>
<th><strong>B12050 Tube Oiler</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>This oiler is included in the NBV Supply kit, or may be purchased directly from Barudan America.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>HB720110 BEARING OIL</strong></th>
</tr>
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<tbody>
<tr>
<td>This oil is specially formulated for Barudan embroidery machines, and is only available from Barudan. It is an opaque creamy beige color.</td>
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<tr>
<th><strong>WHITE LITHIUM SPRAY GREASE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to Federal regulations on shipping of Aerosol cans, Barudan does not supply this lubricant, but it can be purchased at an Auto Parts store, at Walmart, or the K-mart Automotive department.</td>
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</tbody>
</table>

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<tr>
<th><strong>WHEEL BEARING GREASE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The grease already on the machine (for step F1 of the lubrication chart) should last without having to add more. If additional grease is needed, this can be purchased from an Auto Parts Store.</td>
</tr>
</tbody>
</table>
Every 4-6 hours of machine operation, lubricate the Hook (A1) with Machine Oil:

1. Open the cover on the cylinder arm
2. Remove the bobbin & bobbin case
3. Place (1) drop of oil in the Hook raceway

NOTE: this photo shows the Tube Oiler - be sure to use clear Machine Oil
Once a week, lubricate the Drive Shaft (B1) with Machine Oil:

1. Color Change the head to the last needle (#15)
2. Place (3) drops of oil in the shaft at the point where the wick enters the shaft
B2- Hook Shaft Bushings
3 places Machine Oil once/week

Once a week, lubricate the Hook Shaft Bushings (B2) with 2 drops of Machine oil in each hole, shown left to right in the photograph:

1. At the back of the head
2. In the middle of the Cylinder Arm
3. At the end of the Cylinder Arm, right behind the Throat Plate

* Note: BEVT-Z1501CBII machine only has 1 oiling hole for the hook shaft as indicated by the asterisk.

Note: BEDT-ZQ-501 machine pictured here, other models similar.
B3- Needle Bars
Apply Machine Oil once/month

Once a month, lubricate the Needle Bars with a cotton swab saturated with Machine Oil.

1. Position the machine to Needle 1
2. From behind the machine, lightly wipe the needle bars with a cotton swab saturated with machine oil.

Note: Apply just enough oil to leave a thin film on the needle bars. A cotton swab saturated in machine oil gives just the right amount. If you OVER-OIL the needle bars, the excess oil may splash onto the garments being sewn, leaving oil spots. Remove this extra oil with a paper towel or scrap of Topping.
Once a week, lubricate the Needle Bar Crank Rod (C1- on the right in the photo below) and the Takeup Drive Lever (C2- on the left) with 2 drops of Bearing Oil in each hole.

1. Color change the head to the last needle, (#15)
2. Place 2 drops of Bearing Oil in each of the red holes

NOTE: The machine must be stopped when oiling these (2) places
C3- C5 Needle Bar Area Preparation: Remove handwheel cover, Front cover, & Cap cover (behind needles)

The following steps will be easier to perform if you can manually rotate the sewing head, by first removing the cover (Steps 1-2). Some of the following steps will be easier to understand the first time you lubricate the machine, if you remove two other covers (Steps 3-4):

1. Color change the machine to Needle #1
* 2. Remove the cover over the Main Pulley by removing the two screws as shown in the top photograph.

3. Remove the Front Head Cover (middle photograph):
   a) loosen the top (2) screws
   b) remove the (2) screws holding the middle thread guide, and remove the cover

4. Remove the Cap Cover (behind the needles) by removing 2 screws on each side of the sewing head (bottom photograph)

* Note: BEVT-Z1501CBII machine's Main Shaft Pulley Cover is located on the right side of the sewing head (not pictured). Refer to parts book or call tech support for details.
Once a week, lubricate the Needle Bar Drive Lever and Needle Bar Drive Links with 1 drop of Bearing Oil in each hole.

*1. Rotate the handwheel until you can see the 2 oil ports on the Needle Bar Drive Lever (C3) and place one drop of bearing oil in each hole
2. Rotate the handwheel until you can see the 3 oil ports on the Needle Bar Driver Links (C4) and place one drop of oil in each hole

See the photograph on the next page for a better view of the oil holes.

*Note: Serial numbers ending in E07 or newer, Do Not have the (2) oiling holes pictured in the Needle Bar Drive Lever (C3). These bearings are permanently oiled from the factory.
OIL HOLE CLOSEUP:
Additional covers were removed for the photograph below to help show the exact locations of the oil holes:

* Note page 10
C5 Needle Bar Driving Shaft

 diner (1 place) Bearing Oil once/week

Once a week, lubricate the Needle Bar Driver Shaft with 1 drop of Bearing Oil:

1. Color Change to Needle 1
2. Place (1) drop of Bearing Oil above the Needle Bar Driver Fixing Base, at the driving shaft.
Every six months, lubricate the takeup levers with White Lithium Spray Grease:

1. Remove the front head cover
2. Spray a small amount of White Lithium Grease across all of the Take-up Levers.
Every six months, lubricate the Takeup Lever Cam with White Lithium Spray Grease:

1. Color change the machine to Needle #1
2. Guide the spray hose of the Lithium Spray Can up into the head as shown in the photograph on the left. (If the Cap cover is removed, you may have better access)
3. Spray a small amount of grease into the groove in the Take Up Lever Cam, as shown in the photograph on the right.
Every six months, lubricate the Presser Foot Cams with White Lithium Spray Grease:

1. Color change the machine to Needle #1
2. Guide the spray hose of the Lithium Spray Can just into the holes (shown in the photograph on the left).
   You may find that manually rotating the handwheel will help distribute the grease.
3. Spray a small amount of grease into each hole.

*Note: BEVT-Z1501CBII machine doesn't have (2) grease holes as pictured below. This machine only has one roller. Grease the top hole as indicated by the asterisk.

DO NOT DISASSEMBLE THIS!
This photograph shows the areas that need lubrication - the grooves (on the left) that guide the rollers (on the right).

Note: BEDT-ZQ-501 machine pictured here.
Every six months, lubricate the Guide Plate with White Lithium Spray Grease.

1. Color change the machine to Needle #15
2. Guide the spray hose of the Lithium Spray can just into the hole of the Guide Plate, and give a short spray. You may find that manually rotating the handwheel will distribute the grease.
*Every six months, the Lower Connecting Gear lubrication should be checked:
1. Color change the head to needle #15
2. Turn the power off and unplug the machine
3. Remove the right side cover from the sewing head by removing (9) screws as shown in the photograph below. Note that the screw at the top left in the photograph has a hex head, and will need a small wrench to remove.

* Note: BEVT-Z1501CBII does not have gears as pictured on page 18. BEVT-Z1501CBII gears are enclosed in a sealed gear housing assembly, and are permanently oiled from the factory, therefore they need no oiling.
2. Check the lubrication where the two bevel gears meet.

3. Redistribute the grease so that the gear teeth are covered. If there is not enough grease, use more Wheel Bearing Grease.