

## Oiling your Highland 1201Echo, 1501C, 1501C5, and 1502C5 Embroidery Machine

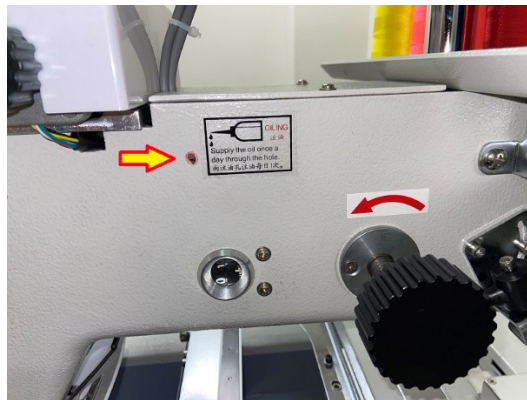
**Note to Operator:** Failure to oil your machine properly will result in unwanted damage to your machine. Please follow these instructions carefully. If you need assistance, please call MESA Support at 800-330-3867, Option 2.

### Tools/Supplies Needed:

- Sewing Machine Oil (either a Zoom Spout or Oiling Pen)
  - <https://www.mesasupplies.com/store/p/43-Zoom-Spout-Machine-Oiler.aspx>
  - <https://www.mesasupplies.com/store/p/39-Precision-Pocket-Pen-Oiler.aspx>
- Alba-5 Lubricant Spray (optional)
  - <https://www.mesasupplies.com/albachem-alba-5-lubricant-spray.aspx>
- Compressed Air
  - <https://www.mesasupplies.com/dust-off-duster.aspx>
- Off-set Flat Head Screwdriver

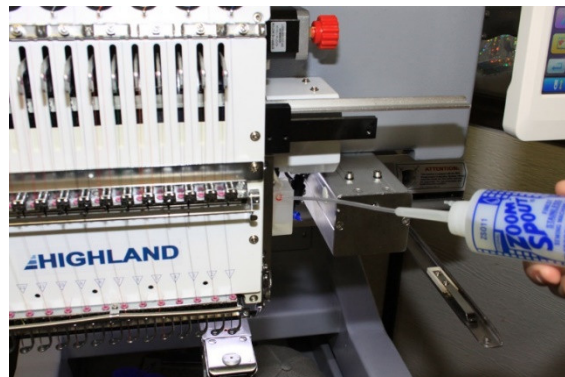
### Step-by-Step Instructions

1. Red hole next to the large black knob on the right side of your machine: 3-4 drops daily

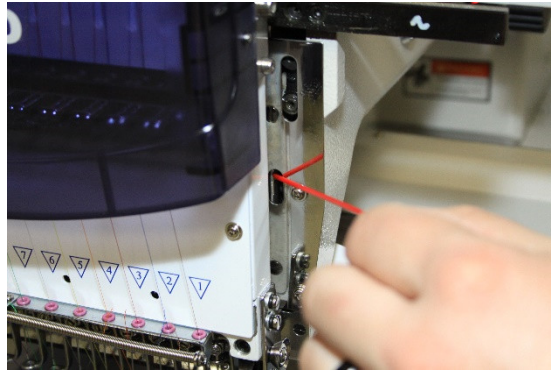
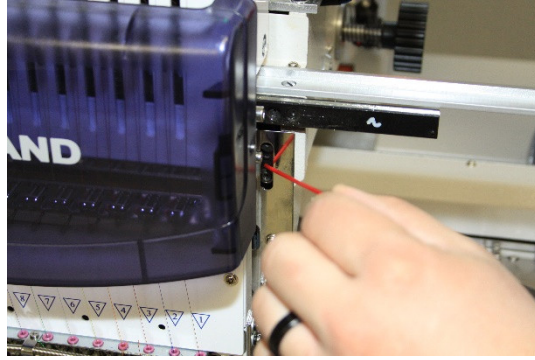


OR

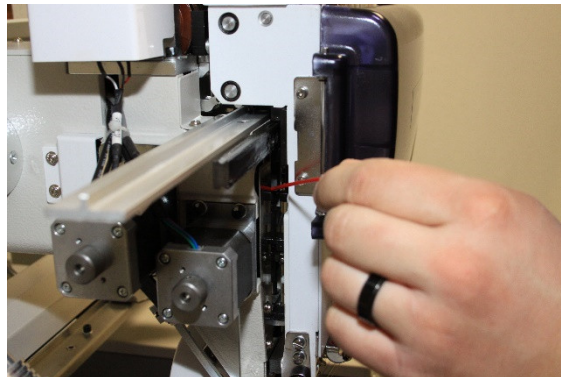
2. Oil Reservoir-Move to needle #1 and maintain the oil reservoir at 1/3 of the way filled



3. Inner portion of sewing head (Shafts and Connecting Rods)-One drop daily
  - a. Move over to needle #1 and oil inside the both holes on the silver plate



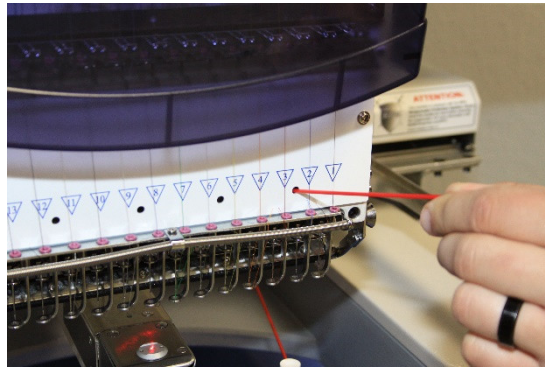
- b. Move to needle #15 and oil the top of the reciprocator shaft



4. Needle Bars (springs behind take up levers)-1 drop on each needle bar spring weekly



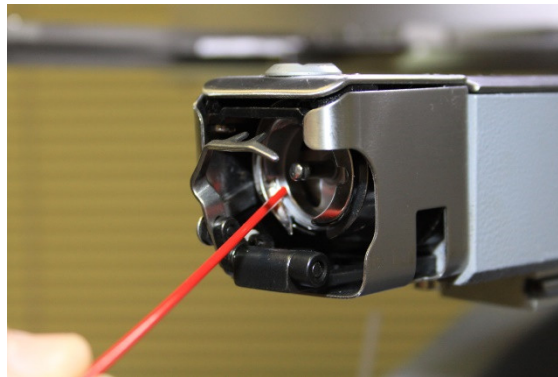
5. Felt pad behind white plate-1 drop in each hole once per week



6. Hole on bed arm (small hole located behind the needle plate)- 2 drops, once daily

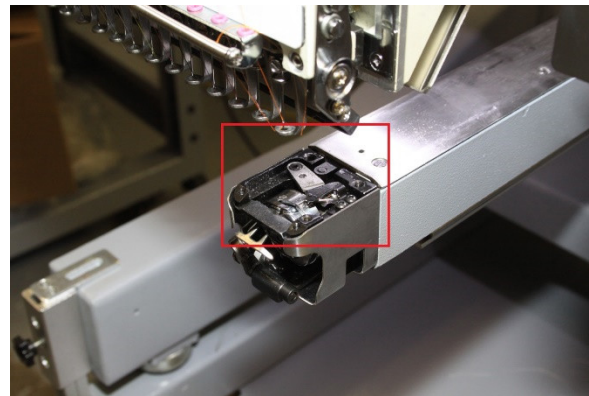


7. Rotary Hook-2 drops, twice daily (once every four hours)



### Other Maintenance Procedures:

1. Remove the needle plate at least once every other day and blow out the area under it (highlighted below) with compressed air. This will remove lint build up and dust from effecting your ability to embroider properly.



2. Replace your bobbin case every 3-6 months, or after dropping it on the ground as this will damage the metal on the bobbin case.
3. Replace the needles on your machine roughly every 25-40 hours of use. In addition, if you are having excessive thread breaks on a particular needle, you should replace the needle as part of your troubleshooting methods.