

# Section 3: Main Drive

## Table of Contents

Description	Page
<a href="#">Main Drive</a> .....	3-1
<a href="#">Removing the DRIVE SHAFT and the WORM GEARS</a> .....	3-2
<a href="#">Adjusting the Tension on the DRIVE CHAIN</a> .....	3-5
<a href="#">Removing the DRIVE CHAIN</a> .....	3-6
<a href="#">Removing the DRIVE MOTOR</a> .....	3-7
<a href="#">Removing the BEARING from the FEED END of the DRIVE SHAFT</a> .....	3-8
<a href="#">Removing the BEARING from the DRYER END of the DRIVE SHAFT</a> .....	3-9

## Removing the DRIVE SHAFT and the WORM GEARS

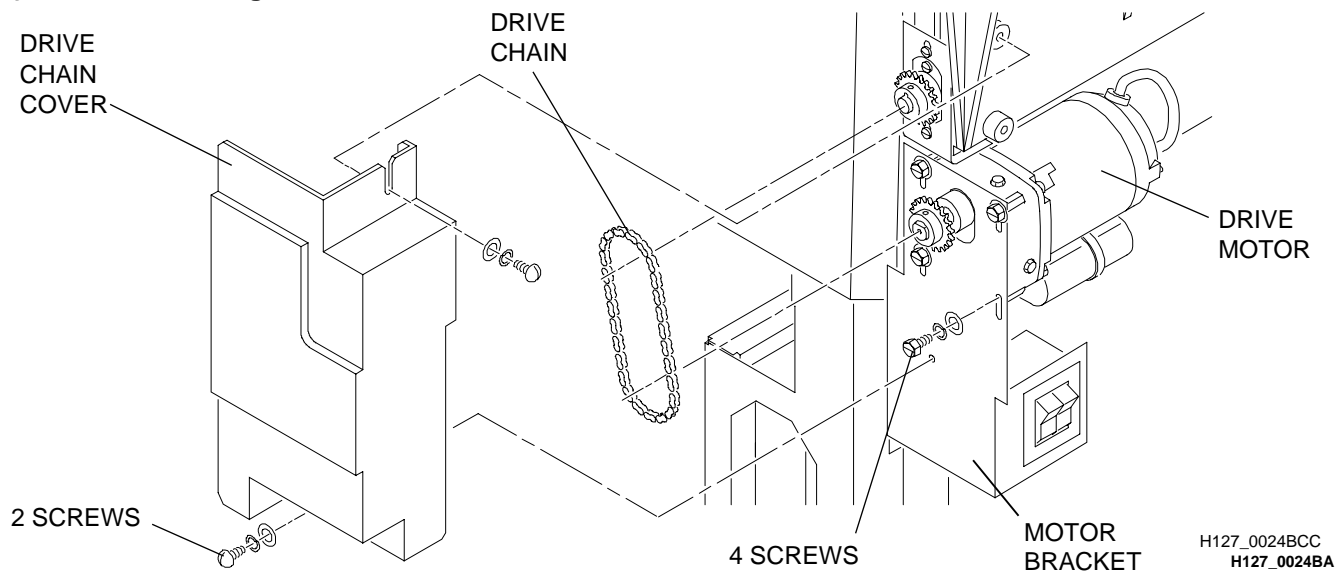


### Warning

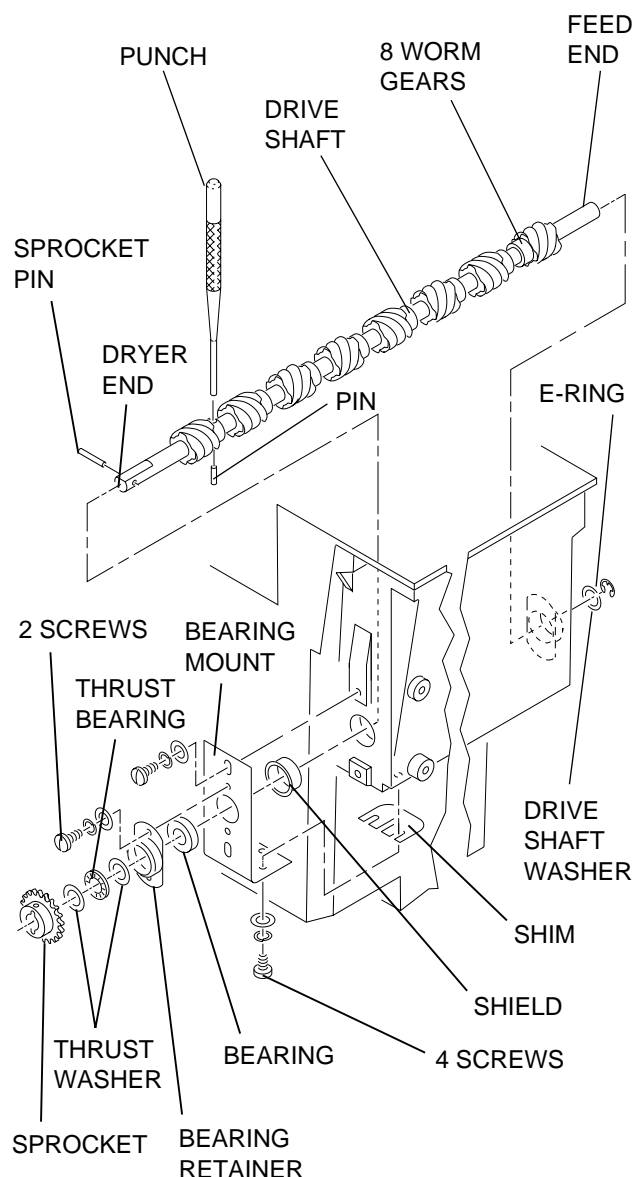
The MAIN DRIVE MOTOR incorporates automatic resetting thermal protection. If the MAIN DRIVE MOTOR overheats, the internal thermal protection de-energizes the MOTOR. When the MOTOR cools, the thermal protection automatically resets allowing the MOTOR to start without warning possibly causing injury.

- [1] Move the main wall CIRCUIT BREAKER to “OFF” and CB1 on the PROCESSOR to the “O” position.
- [2] Lift the TOP COVER.
- [3] Remove the:
  - DRIVE SIDE PANEL
  - DRYER SIDE PANEL
  - WET SECTION COVER
  - All CROSSOVERS and RACKS
- [4] Loosen the 2 SCREWS and remove the DRIVE CHAIN COVER.
- [5] Loosen the 4 SCREWS from the MOTOR BRACKET.
- [6] Lift the DRIVE MOTOR and remove the DRIVE CHAIN.

Figure 3-1 Loosening the SCREWS that Hold the DRIVE MOTOR



### Figure 3-2 Removing the DRIVE SHAFT



H127\_0131CCA  
H127 0131CA

- [7]** Remove the E-RING and DRIVE SHAFT WASHER from the FEED END of the DRIVE SHAFT.
- [8]** For access to the SPROCKET PIN, move the DRIVE SHAFT from the FEED END of the PROCESSOR toward the DRYER END of the PROCESSOR.
- [9]** Remove the:
  - SPROCKET PIN and the SPROCKET
  - 2 THRUST WASHERS and 1 THRUST BEARING from the DRIVE SHAFT
  - 2 SCREWS from the BEARING RETAINER on the DRYER END
  - BEARING RETAINER and the BEARING
  - 4 SCREWS the BEARING MOUNT



## Important

Before removing the BEARING MOUNT, observe the quantity of SHIMS on the DRYER END of the PROCESSOR and the FEED END of the PROCESSOR. When assembling the DRIVE SHAFT, install the same quantity of SHIMS. See Page 3–4.

- BEARING MOUNT and SHIMS, if any
  - SHIELD
  - DRIVE SHAFT by slowly pulling it toward the DRYER END of the PROCESSOR.
- [10]** If necessary, remove any worn WORM GEARS from the DRIVE SHAFT by using a PUNCH to remove the PIN from the WORM GEAR.

**Important**

The direction of the WORM GEARS is important. See the illustration for correct installation on the DRIVE SHAFT.

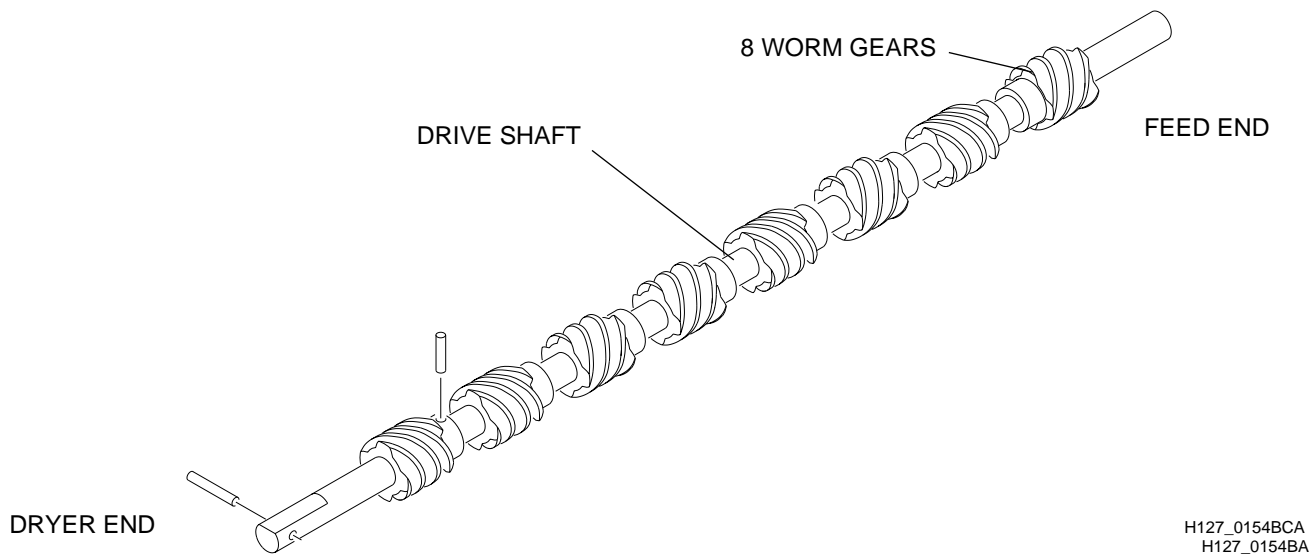
**[11]** Reverse the above procedure to install new WORM GEARS and a new DRIVE SHAFT.

**[12]** Adjust tension on the DRIVE CHAIN. See Page [3-5](#).

**Note**

- When installing the DRIVE SHAFT, install enough DRIVE SHAFT WASHERS so that the DRIVE SHAFT has minimum side-to-side movement.
- When installing the BEARING MOUNT, install the same quantity of SHIMS removed in Step [9](#) on Page [3-3](#).

Figure 3-3 **Checking the Direction of the WORM GEARS**



## Adjusting the Tension on the DRIVE CHAIN

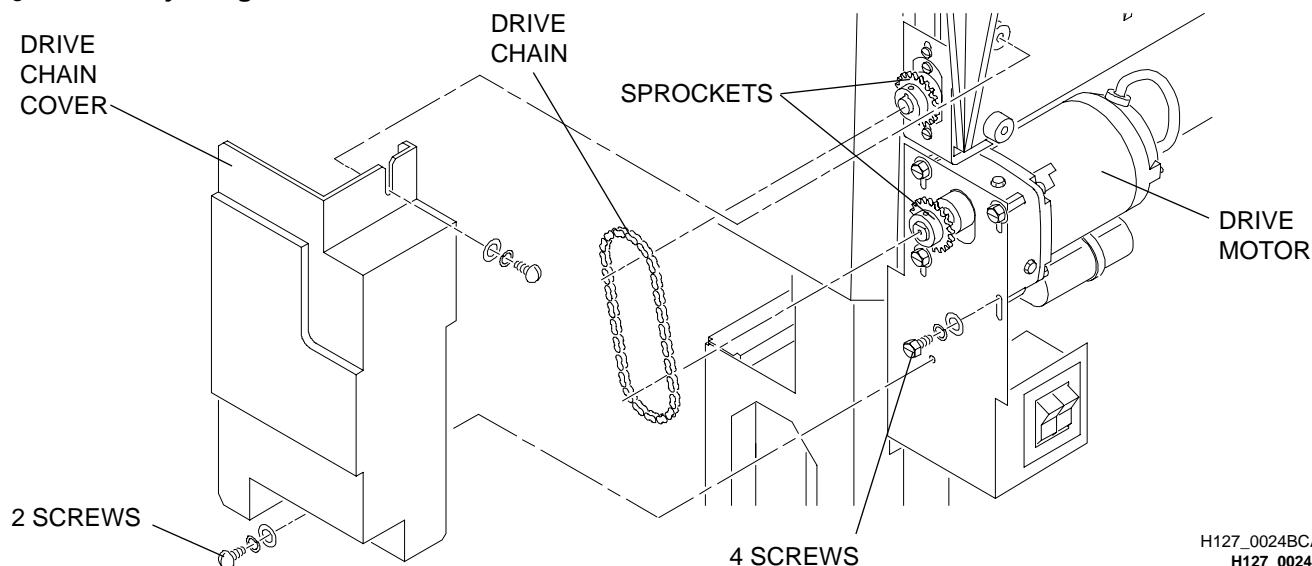


### Warning

The MAIN DRIVE MOTOR incorporates automatic resetting thermal protection. If the MAIN DRIVE MOTOR overheats, the internal thermal protection de-energizes the MOTOR. When the MOTOR cools, the thermal protection automatically resets allowing the MOTOR to start without warning possibly causing injury.

- [1] Move the main wall CIRCUIT BREAKER to “OFF” and CB1 on the PROCESSOR to the “O” position.
- [2] Lift the TOP COVER.
- [3] Remove the:
  - DRIVE SIDE PANEL
  - DRYER SIDE PANEL
- [4] Loosen the 2 SCREWS and remove the DRIVE CHAIN COVER.
- [5] Loosen the 4 SCREWS from the MOTOR BRACKET.
- [6] Check the alignment of the SPROCKETS.
- [7] Press down on the DRIVE MOTOR to tighten the DRIVE CHAIN. Allow 5 mm (1/4 in.) deflection of the DRIVE CHAIN at the midpoint of the DRIVE CHAIN.
- [8] Tighten the 4 SCREWS to the MOTOR BRACKET.
- [9] Install the DRIVE CHAIN COVER.

Figure 3–4 **Adjusting the Tension on the DRIVE CHAIN**

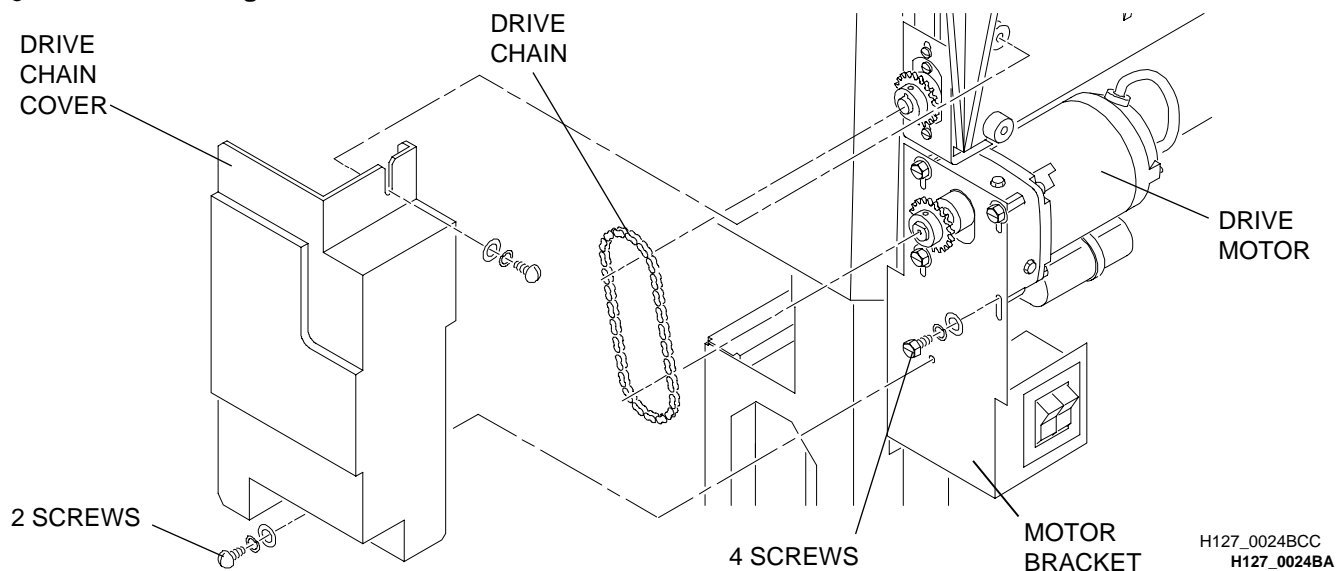


H127\_0024BCA  
H127\_0024BA

## Removing the DRIVE CHAIN

- [1] Move the main wall CIRCUIT BREAKER to “OFF” and CB1 on the PROCESSOR to the “O” position.
- [2] Lift the TOP COVER.
- [3] Remove:
  - DRYER SIDE PANEL
  - DRIVE SIDE PANEL
- [4] Loosen the 2 SCREWS and remove the DRIVE CHAIN COVER.
- [5] Loosen the 4 SCREWS from the MOTOR BRACKET.
- [6] Lift the DRIVE MOTOR and remove the DRIVE CHAIN.
- [7] Install the new DRIVE CHAIN.
- [8] Adjust tension on the DRIVE CHAIN. See Page [3-5](#).
- [9] Install the DRIVE CHAIN COVER.
- [10] Tighten the 6 SCREWS.
- [11] Install:
  - DRYER SIDE PANEL
  - DRIVE SIDE PANEL

Figure 3-5 Removing the DRIVE CHAIN



## Removing the DRIVE MOTOR

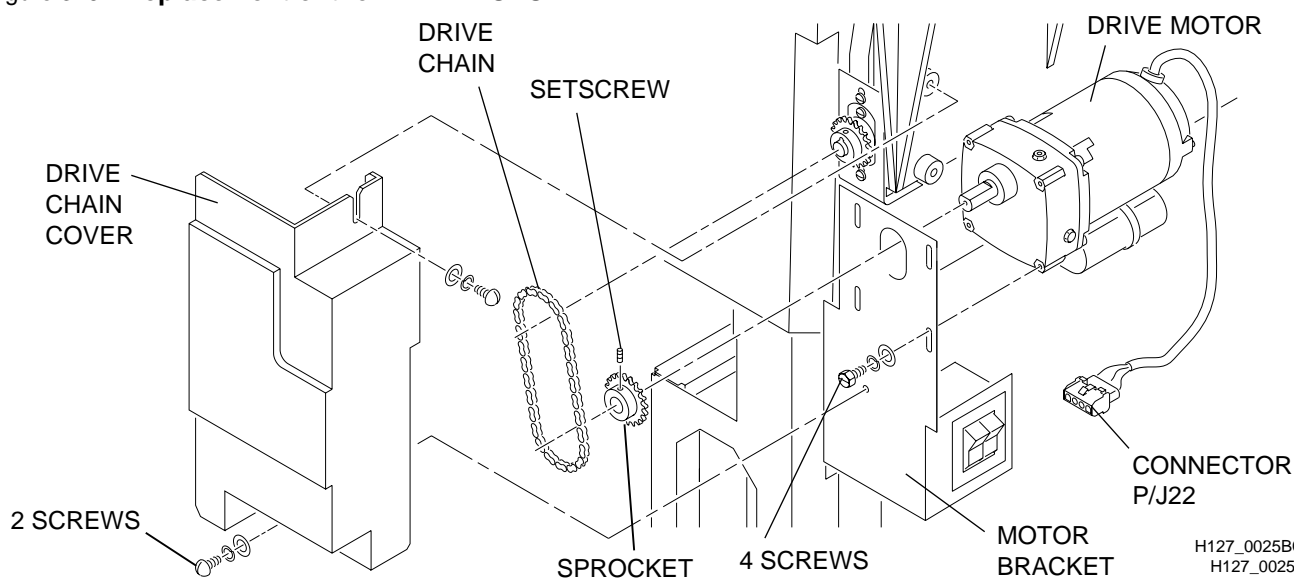


### Warning

The MAIN DRIVE MOTOR incorporates automatic resetting thermal protection. If the MAIN DRIVE MOTOR overheats, the internal thermal protection de-energizes the MOTOR. When the MOTOR cools, the thermal protection automatically resets allowing the MOTOR to start without warning possibly causing injury.

- [1] Move the main wall CIRCUIT BREAKER to “OFF” and CB1 on the PROCESSOR to the “O” position.
- [2] Lift the TOP COVER.
- [3] Remove the DRYER SIDE PANEL and the DRIVE SIDE PANEL.
- [4] Loosen the 2 SCREWS and remove the DRIVE CHAIN COVER.
- [5] Loosen the 4 SCREWS from the MOTOR BRACKET.
- [6] Lift the DRIVE MOTOR and remove the DRIVE CHAIN.
- [7] Loosen the SETSCREW and remove the SPROCKET from the MOTOR BRACKET.
- [8] Disconnect CONNECTOR P/J22.
- [9] Remove the:
  - 4 SCREWS from the DRIVE MOTOR
  - DRIVE MOTOR
- [10] Install:
  - DRIVE MOTOR
  - 4 SCREWS, but do not tighten
  - SPROCKET and tighten the SETSCREW
  - DRIVE CHAIN
- [11] Adjust the tension on the DRIVE CHAIN. See Page [3-5](#).
- [12] Install the DRIVE CHAIN COVER.
- [13] Tighten the 6 SCREWS.
- [14] Install:
  - DRYER SIDE PANEL
  - DRIVE SIDE PANEL

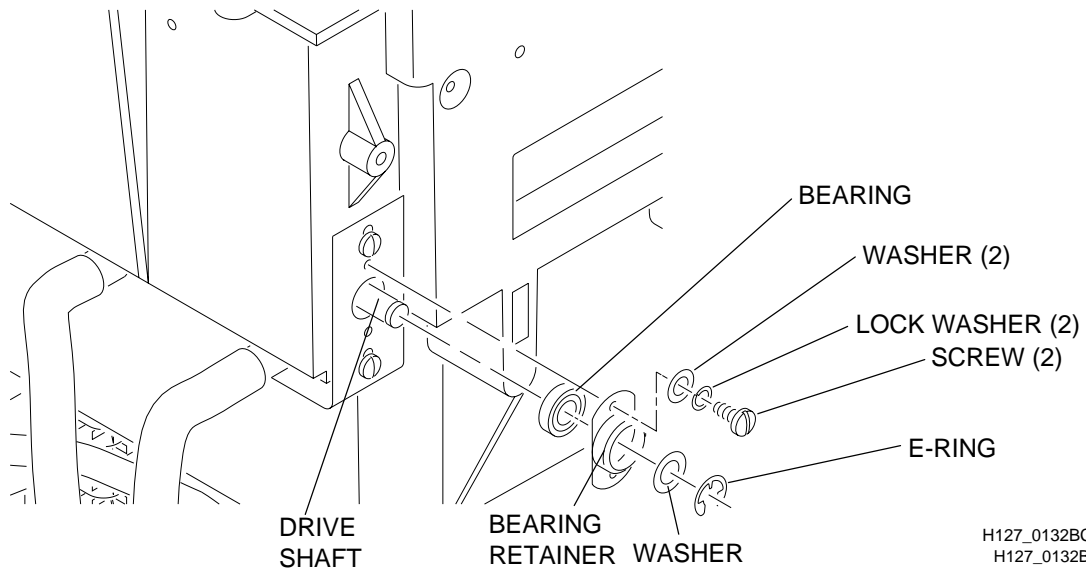
Figure 3-6 Replacement of the DRIVE MOTOR



## Removing the BEARING from the FEED END of the DRIVE SHAFT

- [1] Move the main wall CIRCUIT BREAKER to “OFF” and CB1 on the PROCESSOR to the “O” position.
- [2] Remove the PRINTER from the PROCESSOR for this procedure.
- [3] Remove the:
  - FEED SIDE PANEL
  - E-RING from the DRIVE SHAFT
  - 2 SCREWS, 2 LOCK WASHERS, and 2 WASHERS from the BEARING RETAINER
  - BEARING RETAINER
- [4] Slide the DRIVE SHAFT WASHER and BEARING off the DRIVE SHAFT from the FEED END of the PROCESSOR.
- [5] Reverse the procedure to assemble.

Figure 3–7 Replacement of the BEARING on the FEED END of the DRIVE SHAFT





## Removing the BEARING from the DRYER END of the DRIVE SHAFT

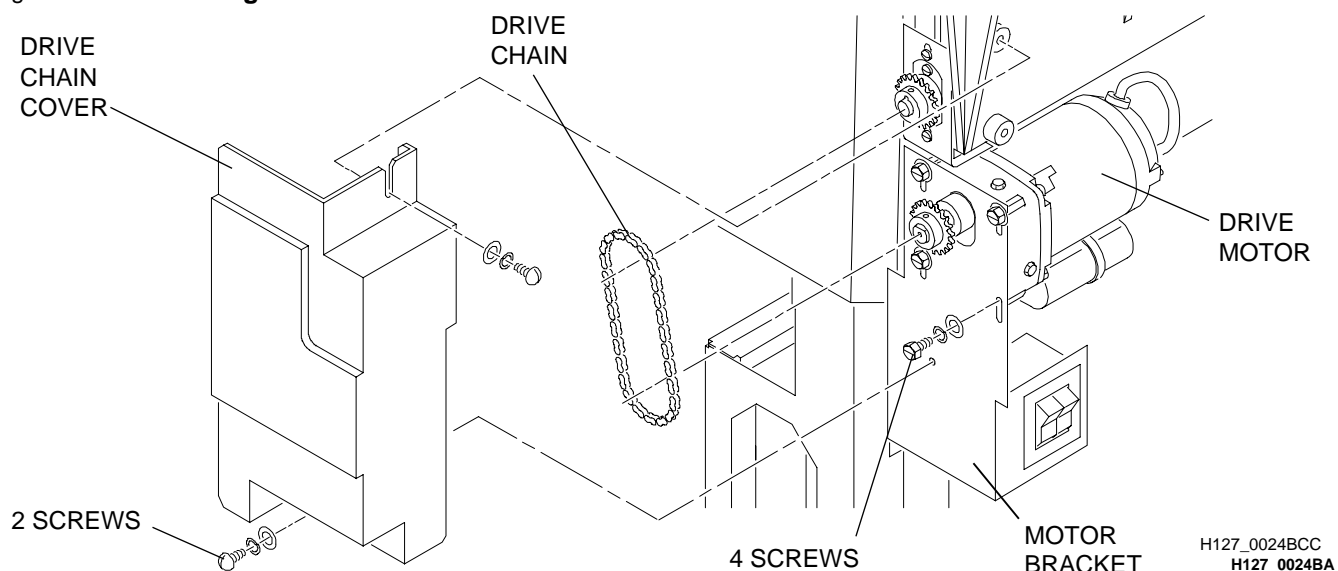


### Warning

The MAIN DRIVE MOTOR incorporates automatic resetting thermal protection. If the MAIN DRIVE MOTOR overheats, the internal thermal protection de-energizes the MOTOR. When the MOTOR cools, the thermal protection automatically resets allowing the MOTOR to start without warning possibly causing injury.

- [1] Move the main wall CIRCUIT BREAKER to “OFF” and CB1 on the PROCESSOR to the “O” position.
- [2] Lift the TOP COVER.
- [3] Remove:
  - DRYER SIDE PANEL
  - DRIVE SIDE PANEL
- [4] Loosen the 2 SCREWS and remove the DRIVE CHAIN COVER.
- [5] Loosen the 4 SCREWS from the MOTOR BRACKET.
- [6] Lift the DRIVE MOTOR and remove the DRIVE CHAIN.

Figure 3–8 Removing the SCREWS that Hold the DRIVE MOTOR



H127\_0024BCC  
H127\_0024BA

- [7] Remove the E-RING and the DRIVE SHAFT WASHER from the FEED END of the DRIVE SHAFT.
- [8] For access to the SPROCKET PIN, move the FEED END of the DRIVE SHAFT toward the DRYER END.
- [9] Remove:
- SPROCKET PIN and the SPROCKET
  - 2 SCREWS from the BEARING RETAINER
  - BEARING RETAINER
  - 2 THRUST WASHERS and the THRUST BEARING from the DRIVE SHAFT
  - BEARING
- [10] To assemble, reverse Steps [9](#) - [6](#).
- [11] Before you tighten the 6 SCREWS, adjust the tension on the DRIVE CHAIN. See Page [3-5](#).
- [12] Tighten the 6 SCREWS.
- [13] Install:
- DRYER SIDE PANEL
  - DRIVE SIDE PANEL

Figure 3-9 Replacement of the BEARING on the DRYER END of the DRIVE SHAFT

