ASSEMBLING THE FEEDROLLER SHAFT IN THE 90AD EXTRUDER
SAFETY

J.C. Steele and Sons equipment is designed to process large amounts of heavy products. To accomplish many of the required operations of our customers, high horsepower and heavy components are required. A great deal of time and effort has been invested into our equipment to make them as safe as practically possible. The safety features are no substitute of caution and common sense. A careless moment is all that is needed to cause a serious accident. Please refer to the machine’s Owner’s Manual for a detailed list of safety precautions.

GENERAL DESCRIPTION

This bulletin outlines the procedure to assemble the feedroller shaft in the 90AD Extruder. This procedure applies for either a field rebuild or a new factory installation.

MANPOWER ESTIMATE

This procedure will require 2 men for 1 hour, depending on ease of access.
PROCEDURE

1. Install the **front bearing (38)** onto the front of the **vacuum chamber**.

2. Attach the **bearing cap (40LX2)** using the **three ½” NC hex screws**, but leave the hex screws loose.

3. Install the **inner bearing cover (40LX3)** from the inside of the **vacuum chamber** using the **three ½” NC hex screws**.
   - Tighten these hex screws, but leave some wiggle room for the feed roller shaft.

4. Insert the **two garlock seals** into the **inner front bearing cover (40LX3)** (see seal orientation in Figure 3).
5. Install the **rear inner bearing cover (40LX4)** on the inside of the **vacuum chamber** and tighten the **four ½” NC hex screws**.

6. Insert the **garlock seal** into the **rear inner bearing cover (40LX4)**.

7. Begin to push the **feed roll shaft** into place, through the rear seals.
   - The **front bearing (38)** will guide the shaft through the **front garlock seals**.

8. Insert the **rear bearing (38)** into the rear wall of the vacuum chamber, against the **rear inner bearing cover (40LX4)**.
   - Tap the **bearing** into the hole to ensure that it’s in place.
9. Attach the rear outer bearing cover (56) to the outer vacuum chamber wall using the four ½” NC hex screws.
   - Do not tighten completely until the shaft is in place.

10. Attach the front and rear spacer sleeves (34C) to the shaft against the bearing covers.
    - These are split so that they can be installed while the shaft is in place.
    - These halves are fastened together by two socket head cap screws.
    - Leave the spacer sleeves slightly loose for shaft adjustment.

11. Ensure that the feed roll shaft is sticking out 8.750" (222.3 mm) from the rear outer bearing cover (56).

12. Tighten all screws in the bearing covers (40LX2, 40LX3, 40LX4, 56) to the appropriate torque and tighten the spacer sleeves (34C).

13. Tighten the set screw next to the grease fitting.

14. Install one round of ½” x ½” 333 garlock packing cut on angle.

15. Install the lantern ring (56A) and then one round of ¼” x ½” 333 garlock packing.

16. Insert pull-up gland (56B) and lightly tighten the pull-up nuts.

17. Grease the gland until grease purges around the shaft.

18. Grease the front and rear bearings (38) until grease purges around the seals inside the vacuum chamber.
19. Tighten the pull-up gland (56B) as much as possible by hand.
20. Assemble the ten feed roller swipes (34A) on the shaft.
21. Bolt the feed roller shoes onto the swipes.
22. Place the **middle feed roller shaft** and **couplings** into place.

- Ensure that the **keys** in the shaft are lines up with the **keyways** in the **couplings** and that the **shear pin** is in line with the **shear pin holes** in the **coupling** and **shaft**.

- Consult TSB DXX 0007 for further instruction on assembling the feed roller middle shaft and couplings.

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**FIG 9:** Middle shaft and couplings of feed roller (red)