POWER FEED INSTALLATION
Model M-3700 Table Feed
Alliant, Sharp First, and others

REFERENCE DRAWINGS ENCLOSED
NA-5444    Bevel Gear Installation
NB-5495    Power Feed Installation
ND-6293    Type 150 Servo Drive
ND-6292    Type 140 Servo Drive
0800-80001 Servo Power Feed Installation

PREPARATION

Step 1: Move the table to the extreme left.

Step 2: Remove the nut, handle, and dial assembly from the right-hand end of the milling machine.

Step 3: Remove the four cap screws holding the bearing housing in place.

Step 4: Using a soft hammer, tap the bearing housing off. Clean the end surface of the table.

Step 5: Remove the spacer.

POWER FEED INSTALLATION

Step 1: Slide the bearing race in place over the shaft.

Step 2: Slide the power feed onto the shaft and push in place.

⚠️ NOTE On some machines the drive pin holes do not line up with the adapter. Remove and discard the pins in such cases. The cap screws are all that is necessary.

Step 3: With the table in the extreme left-hand position, tighten the four cap screws.

BEVEL GEAR INSTALLATION

Step 1: Follow drawing NA-5444 for installation of the bevel gear. Adjust for proper gear backlash.

DIAL AND HANDCRANK INSTALLATION

Step 1: After getting the proper backlash, the dial should be adjusted to obtain .005” spacing from the face of the power feed. This is important in order to keep chips from entering the gear train. Plastic and metal washers are provided for this. Shim as required.

Step 2: In the following sequence, put on the dial locking nut and slide the handle in place. Add the 1/2-20 lock nut and tighten.
LIMIT SWITCH INSTALLATION

Step 1: Remove the standard table stop pieces and install the table stop pieces furnished. Put the standard stops back in a position to prevent feed stops from being set beyond extreme table travel.

Step 2: Remove the two cap screws holding the T-shaped table stop bracket.

Step 3: Place the short spacers into the counterbored holes in the T-stop. Place the limit switch assembly on the spacers and install using the two 3/8-16 x 1-1/4” or 8 mm x 1.25 x 30 mm long socket head cap screws. The T-stop is retained to act as a positive stop where required for manual operation.

NOTE For proper operation, the electrical limit switch should be engaged .4 inch before the mechanical stop to allow for coasting of the table. The T-stops are often not symmetrical and may need to be ground to obtain proper operation.

Step 4: Put the cable clamp on the cable and secure using the right-hand chip scraper screw.

OPERATION

See separate Servo Power Feed Operation sheet. Plug the unit into a source of 120 volt, 50 or 60 cycle power.

WARNINGS

Check hand crank clearances before operation.

Clearances between the surfaces of the hand crank and the non-moving parts of the equipment on which the hand crank is installed must be at least one-fourth inch (1/4”) to prevent injury. Modification of existing hand crank or replacement may be required.

Do not operate without proper clearance!

Prevent contact during fast traverses.
**STEP 1**
PREPARATION

**STEP 2**
SHIMMING BEVEL GEAR

- ADD SHIMS PROVIDED
  - 1/32 THICK ARE SOLID
  - 1/64 THICK ARE LAMINATED
  - .002/LAMINATION

- INSTALL HANDCRANK.

- MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.
  - 0.015/0.025 (THIS IS NOT THE READING ON THE DIAL)
  - ROTATE GEAR FROM SIDE TO SIDE. REMOVE OR ADD SHIMS AS REQUIRED TO OBTAIN 0.015/0.025 BACKLASH.

- PUSH BEVEL GEAR AGAINST SHIMS.

- TIGHTEN NUT.

**CAUTION:** IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.

**STEP 3**
DOUBLE CHECK OF SHIMMING

- LOOSEN SETSCREW.

- WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.

- CONTROL HANDLE @ NEUTRAL POSITION

**STEP 4**
LUBRICATION

- INSTALL KEY

- SEAL

**SERVCO PRODUCTS COMPANY**

**BEVEL GEAR INSTALLATION**

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