POWER FEED INSTALLATION
Model M-2750 Cross Feed
Hartford, Newport, and others

REFERENCE DRAWINGS ENCLOSED
NA-5444    Bevel Gear Installation
NB-3735    Power Feed Installation
ND-1538    Limit Switch Installation
ND-6293    Type 150 Servo Drive
ND-6292    Type 140 Servo Drive
0800-80001 Servo Power Feed Operation

PREPARATION

Step 1: Remove the nut, crank, dial assembly, and key from the lead screw.

Step 2: Slide the bearing race onto the lead screw. Slide the power feed over the bearing race.

Step 3: Line up the feed so that it sits square to the bearing housing. Using the power feed as a template, spot two holes in the bearing retainer plate.

Step 4: Remove the power feed and bearing race.

Step 5: Remove the four screws holding the bearing housing and then remove the bearing housing. (The lead screw can be used to jack the housing off the pins. The lead screw does not have to be removed from the mill.)

Step 6: Drill and tap two holes 1/4-20 x 7/8" deep.

Step 7: Put the bearing housing back onto the knee.

POWER FEED INSTALLATION

Step 1: Screw the shaft extension to the lead screw and tighten.

Step 2: Using the hole provided as a pilot, drill 1/8" diameter through. Pin the extension in place using the 1/8 diameter x 5/8" long roll pin. File smooth.

Step 3: Replace the bearing race onto the lead screw.

Step 4: Slide the power feed over the bearing race and secure using 1/4-20 x 1-1/2" long socket head cap screws provided.

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. Two plastic (.030" thick) and five brass (.005" thick) washers are provided for this. Shim as required.

**Step 2:** In the following sequence, put on the dial locking nut, place the #7 woodruff key in the shaft extension, and slide the handcrank onto the shaft extension. Secure using the 1/2-20 lock nut provided.

**NOTE**  A smaller diameter handcrank is supplied in order to have clearance between the cross feed crank and the knee crank.

LIMIT SWITCH INSTALLATION

**Step 1:** See the limit switch installation drawing NB-1538 enclosed.

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
0.002/LAMINATION

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.

0.015/0.025
(THE READING ON THE DIAL)

ROATE 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.

STEP 4
LUBRICATION

INSTALL KEY

REMOVE GEAR, PACK WITH GREASE. (DO NOT USE SILICONE TYPE GREASE) REPLACE GEAR. (DO NOT LOSE ANY SHIMS)

PICTURES IN THIS DRAWING ARE FOR REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

NA-5444 C
NOTE:

ON SERVO POWER FEED

AND POWER FEED OPERATION BEFORE TURNING

1. READ ALL INSTALLATION INSTRUCTIONS.

#01325 SHIM WASHER DRL
#01321 SHIM WASHER DRL

#0333 SHAFT EXTENSION

#0364 SHAFT SEAL

#1338 ECLIPSE SEAL (SOLD)

#0898-25 SHIM (SOLD)

#0898-16 SHIM (SOLD)

#0348 BEARING RACE