POWER FEED INSTALLATION
Model M-9518 Cross Feed
Alliant RT2-50

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PREPARATION

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

Step 2: Remove the shroud from the power feed.

Step 3: Slide the spacer and bearing race onto the lead screw.

Step 4: Slide the power feed over the bearing race and square to the mill.

Step 5: Transfer the mounting holes from the power feed to the mill.

Step 6: Remove the power feed, spacer, and bearing race from the mill.

Step 7: Drill and tap 1/4-20 x 3/8" deep into the bearing housing.

POWER FEED INSTALLATION

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

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

Step 3: Slide the spacer and bearing race onto the lead screw.

Step 4: Place the shroud onto the power feed and slide the unit onto the lead screw. Secure using 1/4-20 x 1-1/4" long socket head 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. 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 5 mm key in the shaft extension, and slide the handcrank #57903 in place. Secure with the 1/2-20 lock nut.
LIMIT SWITCH INSTALLATION

Step 1: See the limit switch installation on drawing NB-57536.

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.
KEY IS REMOVED DURING SHIMMING

TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING)

STEP 1
PREPARATION

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
(THE READING ON THE DIAL)

ROTATE GEAR FROM SIDE TO SIDE. REMOVE OR ADD SHIMS AS REQUIRED TO OBTAIN 0.15/0.025 BACKLASH.

PUSH BEVEL GEAR AGAINST SHIMS.

STEP 2
SHIMMING BEVEL GEAR

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