POWER FEED INSTALLATION
Model M-4200 Table Feed
Microcut, Wells-Index 837

REFERENCE DRAWINGS ENCLOSED
NA-5444    Bevel Gear Installation
NB-5580    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 table.
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.

POWER FEED INSTALLATION
Step 1: Slide the spacer and then the bearing race onto the lead screw.
Step 2: With the table to the extreme left-hand position, tighten the adaptor with the four cap screws.

■ 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: Slide the spacer adaptor and then the power feed onto the bearing race. Secure the feed using the two 1/4-20 x 1-1/2” 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, replace the key in the shaft (if removed), dial, and dial locking nut. Slide the handle in place and tighten with the 1/2-20 lock nut.
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. As shown in drawing ND-5580, machine the table stop and replace on the machine.

Step 3: 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.
  
  .015/.025 (This is not the reading on the dial.)

- Rotate gear from side to side. Remove or add shims as required to obtain .015/.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.

**STEP 4**  
LUBRICATION

- Install key.
- Seal

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**BEVEL GEAR INSTALLATION**

NA-5444  C
**NOTE 1**

**LIMIT SWITCH INSTALLATION**

- Place the LIMIT SWITCH in the switch box.
- Fasten the L/S plate using the two 6-32 x 3/8" P/H (S) P/CS.10; TABLE STOP.
- Transfer holes from L/S plate to the L/S plate.
- Center LIMIT SWITCH on table with the L/S plate.
- Center LIMIT SWITCH on table with the L/S plate.
- Center LIMIT SWITCH on table with the L/S plate.

**OPERATION:** Before turning on SERVO POWER FEED:

1. Review ALL INSTALLATION INSTRUCTIONS AND POWER FEED.