POWER FEED INSTALLATION
Model M-1840 Table Feed
Wells Index 747, 847, 860, 889

REFERENCE DRAWINGS ENCLOSED
NA-5444 Bevel Gear Installation
NA-2090 Bevel Gear Installation
NA-1427 Dial Sleeve Modification
ND-1840 Power Feed Installation (101-501-101)
ND-6293 Type 150 Servo Drive
0800-80001 Servo Power Feed Operation

PREPARATION

Step 1: Remove the handwheel, dial, and dial sleeve from the right-hand end of the table.

Step 2: If your mill has a key slot in the lead screw, rework the dial sleeve per drawing A-1427.

POWER FEED INSTALLATION

Step 1: As shown in drawing NA-2090, assemble the dial sleeve and the bevel gear using a 1/8 x 1/2 roll pin or follow the alternate bevel gear installation on drawing ND-1840.

Step 2: Install the spacer and bearing race on the shaft.

Step 3: Slide the power feed onto the bearing race and secure using the 1/4-20 x 1-1/2" long socket head cap screws.

NOTE On some mills, you may have to tap the 1/4-20 threads to secure the feed.

Step 4: Screw the shaft extension on the lead screw and tighten.

Step 5: Drill 1/8 diameter through the lead screw, 5/8 from the end of the screw. Insert the 1/8 x 5/8 roll pin. File ends smooth.

IF: If your lead screw does not have a key, this step is eliminated.

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. Four washers are provided for this, two solid and two laminated. Shim as required.
Step 2: In the following sequence, replace the dial nut, tube, spring, and handwheel. Secure with washer and screw.

**NOTE** Some model Wells-Index do not have a safety handwheel. Conversion can be made easily by ordering the required parts from:

A & D Machinery Co., Wells-Index Division
701 West Clay Ave.
Muskegon, MI 49440
Telephone: 231-759-0950, Fax: 231-728-7456
E-mail: wellsindex@aol.com

Part No. 2-111-346-216 Spacer
2-111-438-202 Spring

**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: Install the limit switch per drawing ND-1840.

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 to 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.

SERVO PRODUCTS COMPANY
433 North Fair Oaks Avenue, Pasadena, CA 91103 USA
Phone: 800.521.7359 or 626.796.2460 Fax: 626.796.3845
Web: www.servoproductsco.com
Call for the location of our regional Service Centers.
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
(THESE ARE NOT THE READING ON THE DIAL)

ROTATE GEAR FROM
SIDE TO SIDE.
REMOVE OR ADD
SHIMS AS REQUIRED
TO OBTAIN 0.015/
.025 BACKLASH.

PUSH BEVEL GEAR
AGAINST SHIMS.

TIGHTEN NUT.

STEP 2
SHIMMING BEVEL GEAR

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

LOSEN 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 3
DOUBLE CHECK OF SHIMMING

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

FORM 0800-80002 7/25/95
**MOD. DIAL SLEEV**

**INSTRUCTION**

Ref. Index Part No. 111438201

**NOTE:**

With the bevel gear drawing 2090 for assembling.

If your mill has a key slot.

ONE SIDE ONLY

1/8 Pilot Hole

0.25 ± 0.000

1.5 (REF)
**BEVEL GEAR INSTALLATION**

- **#1425 BEVEL GEAR**
  - #1427 DIAL SLEEVE (FROM 11143820)

- **KEYWAY (REF)**

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**NOTES:**

1. THIS ASSEMBLY IS FOR MILLS WITH LEADSCREW. KEY IN LEADSCREW.

2. MILLS WITHOUT KEY, THE BEVEL GEAR AND DIAL HUB ARE PINNED TO THE BEVEL GEAR SLEEVE AWAY FROM BEVEL GEAR. POSITION PILOT HOLE.

3. SLIDE SLEEVE TO SHOULDER OF BEVEL GEAR. (FILE END SMOOTH.)

- PRESS IN 1/8 X 1/2 ROLL PIN KEYWAY. DRILL 1/8 DIA. THRU.

- REMOVE SHARP CORNERS AND SURFACE ROUGHNESS WITHIN 125.

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- DRAWN: (Name)
- CHECKED: (Name)