POWER FEED INSTALLATION
Model M-3950 Cross Feed
Kondia SM2, FV-300, Lepac
and others

REFERENCE DRAWINGS ENCLOSED
NA-5444 Bevel Gear Installation
NB-5514 Power Feed Installation
ND-1481 Safety Handle Model 620
ND-6293 Type 150 Servo Drive
ND-6292 Type 140 Servo Drive
0800-80001 Servo Power Feed Operation

PREPARATION

Step 1: Remove the nut, handwheel, dial, dial hub, key and M6 screws from the bearing retainer.

POWER FEED INSTALLATION

Step 1: Slide the alignment sleeve onto the shaft.

Step 2: Slide the adaptor onto the alignment sleeve and secure to the bearing retainer using four M6 x 30 mm. Remove the alignment sleeve.

Step 3: Slide the bearing race spacer onto the lead screw, followed by the bearing race.

Step 4: Mount the power feed to the adaptor using two 1/4-20 x 1" long socket head cap screws.

Step 5: Screw the shaft extension onto the lead screw and tighten.

Step 6: Drill 1/8 diameter hole through the shaft extension and lead screw. Install the 1/8 x 5/8 roll pin. File smooth.

BEVEL GEAR INSTALLATION

Step 1: Install the 6 x 6 mm x 20 mm square key and slide the bevel gear in place.

Step 2: Follow drawing NA-5444 for installation of the bevel gear. Adjust for proper gear backlash.

DIAL 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: Put on the dial locking nut.
SAFETY HANDLE INSTALLATION

Step 1: Install the key in the shaft extension.

Step 2: Follow drawing ND-1481 for the installation of the safety handle kit.

IF: If the Kondia mill SM2 is supplied without the M-620 safety handle, install a balanced crank handle using the 6 mm x 7.5 mm woodruff key (03407).

LIMIT SWITCH INSTALLATION

Step 1: Install the limit switch as shown on drawing ND-5514.

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
(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.

**STEP 3**
**DOUBLE CHECK OF SHIMMING**

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

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
MODEL 620
INSTALLATION DRAWING
SERVO HANDLE "SH" KIT
NOTE: BRIDGEPORT MILL SHOWN.

END OF MILL TABLE ONLY WITH SERVO POWER FEED RIGHT
SAFETY HANDLE INSTALLATION

NOTE

1459 ASSY SERVO HANDLE
1485 ASSY SERVO HANDLE KIT
1468 ALIGNMENT KIT
1489 SPRING
1468 SPRING
1486 SPRING (REF.)
1485 ASSY SERVO HANDLE RIGHT
01116 MSHR 1/2 ASSY SERVO HANDLE
01115 1/2-20 Lock Nut
01114 MSHR 1/2-20 Lock Nut