POWER FEED INSTALLATION
Model M-0850 Cross Feed
Ex-Cell-O 602

REFERENCE DRAWINGS ENCLOSED
NA-5444    Bevel Gear Installation
ND-0712    Power Feed Installation
ND-6293    Type 150 Servo Power Feed
ND-6292    Type 140 Servo Power Feed
0800-80001 Servo Power Feed Operation

POWER FEED INSTALLATION

Step 1: Remove the nut, handwheel, and dial assembly from the lead screw.
Step 2: Rework the dial per drawing ND-0712 detail A.
Step 3: Slide the bearing race onto the lead screw. Slide the power feed over the bearing race.
Step 4: Line up the feed so that it sits square to the bearing retainer end cap. Using the power feed as a template, spot two mounting holes.
Step 5: Remove the power feed and the bearing race.
Step 6: Drill and tap 1/4-20 x 3/8" deep into the end cap.
Step 7: Slide the bearing race and the power feed onto the lead screw. Secure using the 1/4-20 x 1" long cap screws provided.

BEVEL GEAR INSTALLATION

Step 1: Follow drawing NA-5444 for installation of the bevel gear.
Step 2: With the bevel gear shimmed and the shaft extension firmly holding the bevel gear in place, check the backlash per NA-5444 step 3.

\[\text{NOTE} \quad \text{Extra care should be taken in NA-5444 step 3 since there is no woodruff key for locking the bevel gear and the shaft extension to the lead screw.}\]

Step 3: Grease the gear as noted in NA-5444 step 4.
Step 4: After obtaining the proper backlash, with the shaft extension holding the bevel gear firmly in place, drill a 1/8 diameter hole through the bevel gear and shaft. Pin with the 1/8 diameter x 1-1/4" long roll pin.

DIAL AND HANDCRANK INSTALLATION

Step 1: Slide the modified dial over the shaft extension and the bevel gear. Shim 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: Install the Ex-Cell-O handwheel and nut.
LIMIT SWITCH INSTALLATION

Step 1: Install the limit switch as shown on installation drawing ND-0712.

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.

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.

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

LOOSEN SETSCREW

**STEP 3**
DOUBLE CHECK OF SHIMMING

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

SEAL

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
1. Review all Installation Instructions and Power Feed.

NOTE:

EX-Cello Thumb Screw

\[ \frac{5}{16} \times 1-1/4 \] Pin

00598 Roll Pin

01082 J8-16 Hex Nut (black)

1/257 Stop Ring

1135 Stop Stud

RIP. HD: Cx 1.7 Pitch

1117 C-Cell Limit Switch

1125 Bracket Limit Switch

\#0171 Shaft Extension

\#0125 1/4-20 to Mount Track

\#0152 1/4-20 X 1/2 Socket HD

\#00673 1/4-20 X 1/2 SOC HD

\#00970 5/16-18 X 3/4 Socket HD: Cap SC

\#00970 5/16-18 X 3/4 Socket HD: Cap SC

\#0152 Trip Ball

\#0152 Trip Ball

1/25 Bar - Limit Switch. 1/2 Trip Ball

20 Dia. 1/29 x .003

20 Dia. 1/29 x .003

115 x .115

1.722