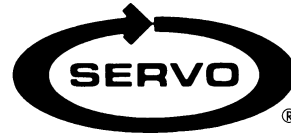


# POWER FEED INSTALLATION

## 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

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#### 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.
- NOTE** *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.**

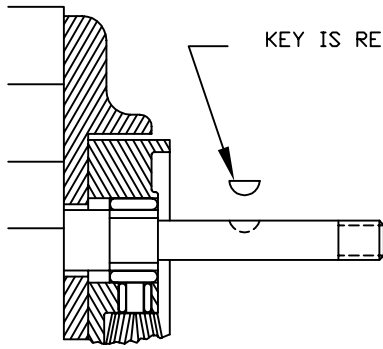
Clearances between the surfaces of the hand crank and the non-moving parts of the equipment on which the hand crank is installed must be at least one-fourth inch (1/4") to prevent injury. Modification of existing hand crank or replacement may be required.

***Do not operate*** without proper clearance!

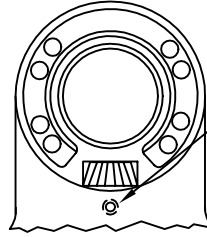
Prevent contact during fast traverses.

### **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](http://www.servoproductsco.com)  
Call for the location of our regional Service Centers.

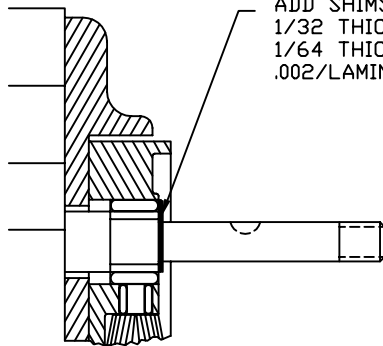


KEY IS REMOVED DURING SHIMMING

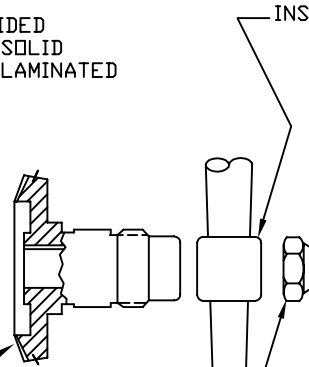


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1  
PREPARATION



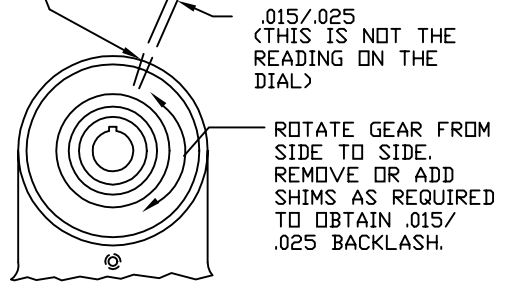
ADD SHIMS PROVIDED  
1/32 THICK ARE SOLID  
1/64 THICK ARE LAMINATED  
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



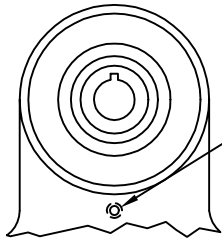
.015/.025  
(THIS IS NOT THE READING ON THE DIAL)

ROTATE GEAR FROM SIDE TO SIDE.  
REMOVE OR ADD SHIMS AS REQUIRED TO OBTAIN .015/.025 BACKLASH.

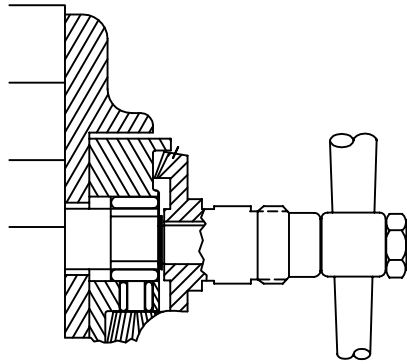
STEP 2  
SHIMMING BEVEL GEAR

TIGHTEN NUT.

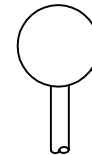
**CAUTION:** IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

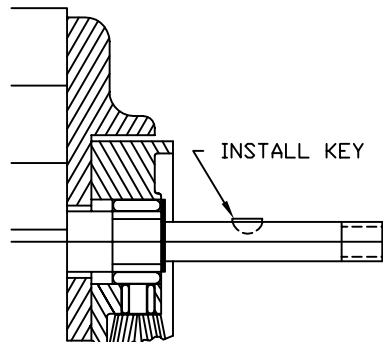


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



CONTROL HANDLE @ NEUTRAL POSITION

STEP 3  
DOUBLE CHECK OF SHIMMING



INSTALL KEY



SEAL

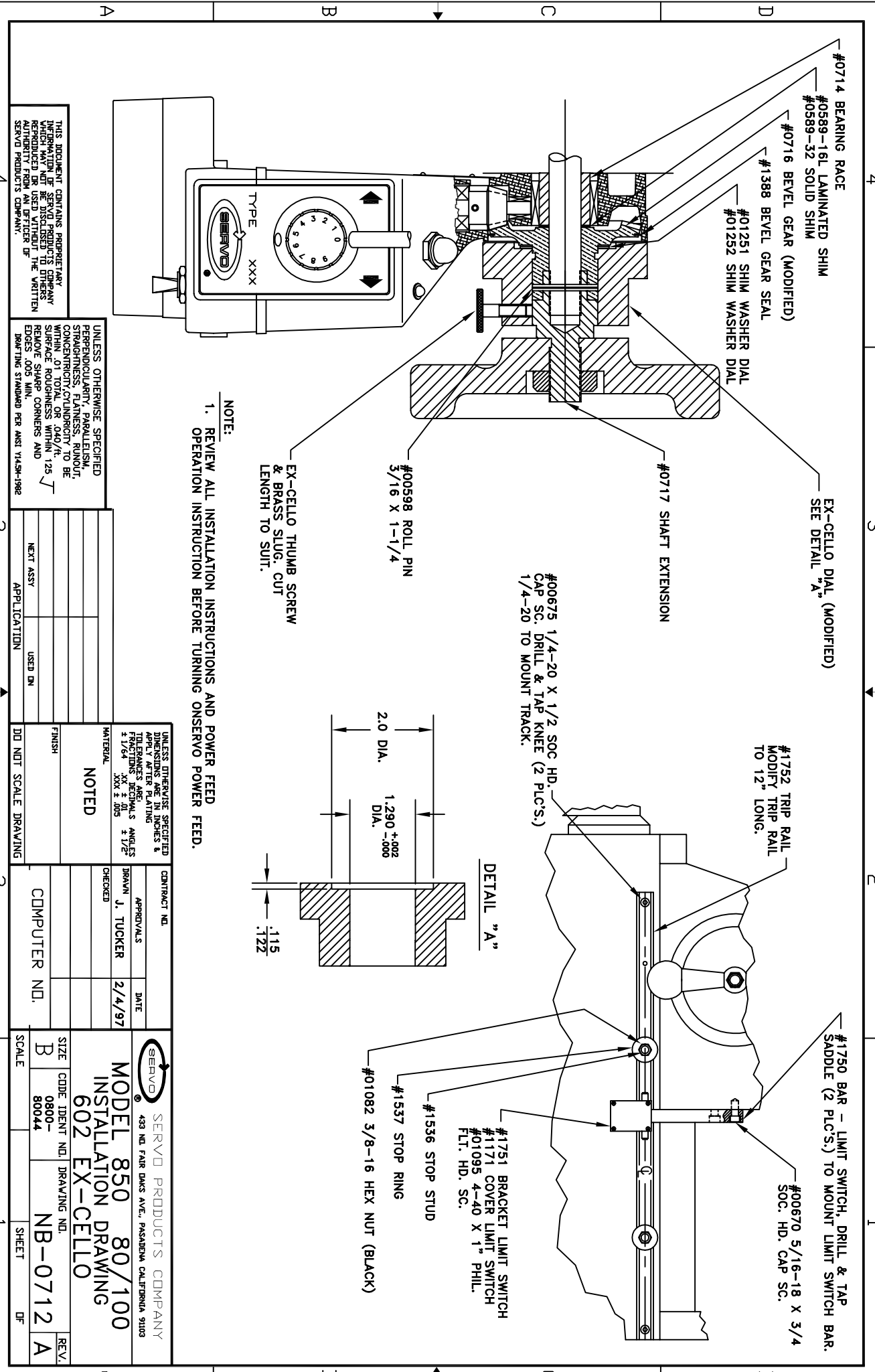
REMOVE GEAR, PACK WITH GREASE. (DO NOT USE SILICONE TYPE GREASE) REPLACE GEAR. (DO NOT LOSE ANY SHIMS)

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



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FINISH	APPLICATION	USED IN

DIMENSIONS ARE IN INCHES & FRACTIONS DECIMALS ± 1/64 ANGLES ± 1/2°	CONTRACT NO.	APPROVALS	DATE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & FRACTIONS DECIMALS ± 1/64 ANGLES ± 1/2°			
MATERIAL			
NOTED			
CHECKED			
DRAWN J. TUCKER			2/4/97

SIZE	CODE IDENT NO.	DRAWING NO.	REV.
B	0800-80044	NB-0712	A
SCALE			

**SERVOPRODUCTS COMPANY**  
 433 N. FAIR BANKS AVE., PASADENA, CALIFORNIA 9103

**MODEL 850 80/100**  
 INSTALLATION DRAWING  
 602 EX-CELLO