

POWER FEED INSTALLATION

Model M-4950 Cross Feed

Clousing Kondia



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-6237	Power Feed Installation
ND-6293	Type 150 Servo Drive
ND-6292	Type 140 Servo Drive
0800-80001	Servo Power Feed Operation

PREPARATION

- Step 1:* Remove the nut, handcrank, dial assembly, and key from the lead screw.
- Step 2:* Remove the bearing retainer from the end bracket and replace with the bearing retainer provided.

POWER FEED INSTALLATION

- Step 1:* Slide the bearing race and adaptor onto the lead screw and secure to the bearing retainer with the 1/4-20 x 1/2" long socket head cap screws. Remove the bearing race.
- Step 2:* Screw the shaft extension onto the lead screw and tighten.
- Step 3:* Using the hole provided as a pilot, drill a 1/8" diameter hole through and pin the shaft extension in place using the 1/8 diameter x 5/8" long roll pin. File smooth.
- Step 4:* Slide the spacer and bearing race onto the lead screw.
- Step 5:* Secure the power feed to the adaptor using the 1/4-20 x 1" long 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:* After proper shimming of the bevel gear and dial, install the woodruff key and the handcrank. Secure with the 1/2-20 lock nut.

LIMIT SWITCH INSTALLATION

Step 1: See the limit switch installation on drawing NB-6237.

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.

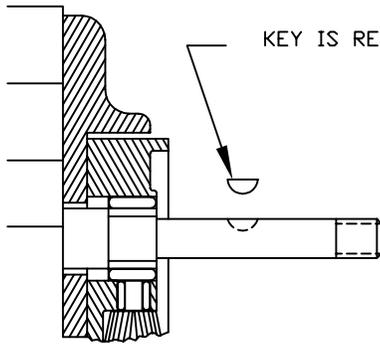
Clearances between the surfaces of the hand crank and the non-moving parts of the equipment on which the hand crank is installed must be at least one-fourth inch (1/4") to prevent injury. Modification of existing hand crank or replacement may be required.

Do not operate without proper clearance!

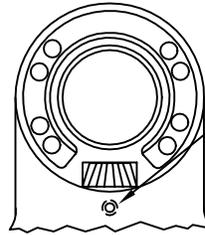
Prevent contact during fast traverses.

SERVO PRODUCTS COMPANY

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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.

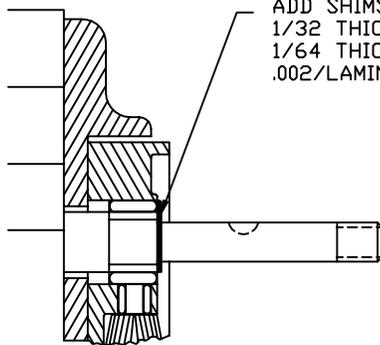


KEY IS REMOVED DURING SHIMMING

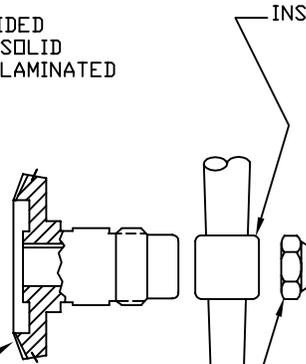


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1
PREPARATION



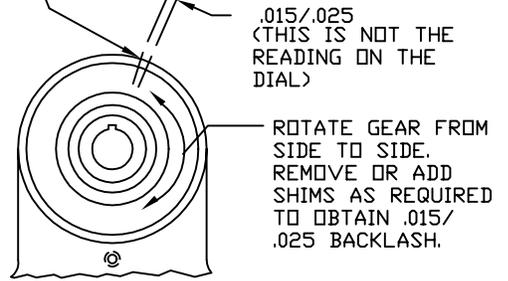
ADD SHIMS PROVIDED
1/32 THICK ARE SOLID
1/64 THICK ARE LAMINATED
.002/LAMINATION



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.

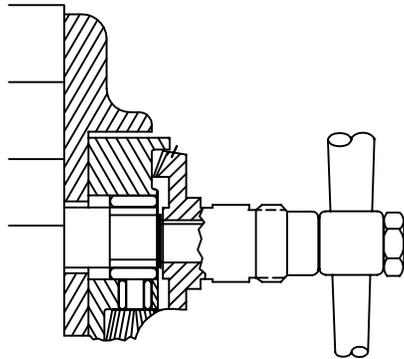
STEP 2
SHIMMING BEVEL GEAR

TIGHTEN NUT.

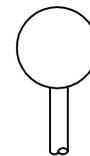
CAUTION: IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

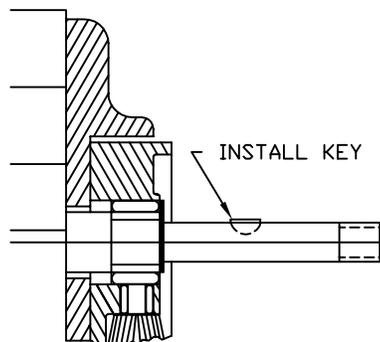


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



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.

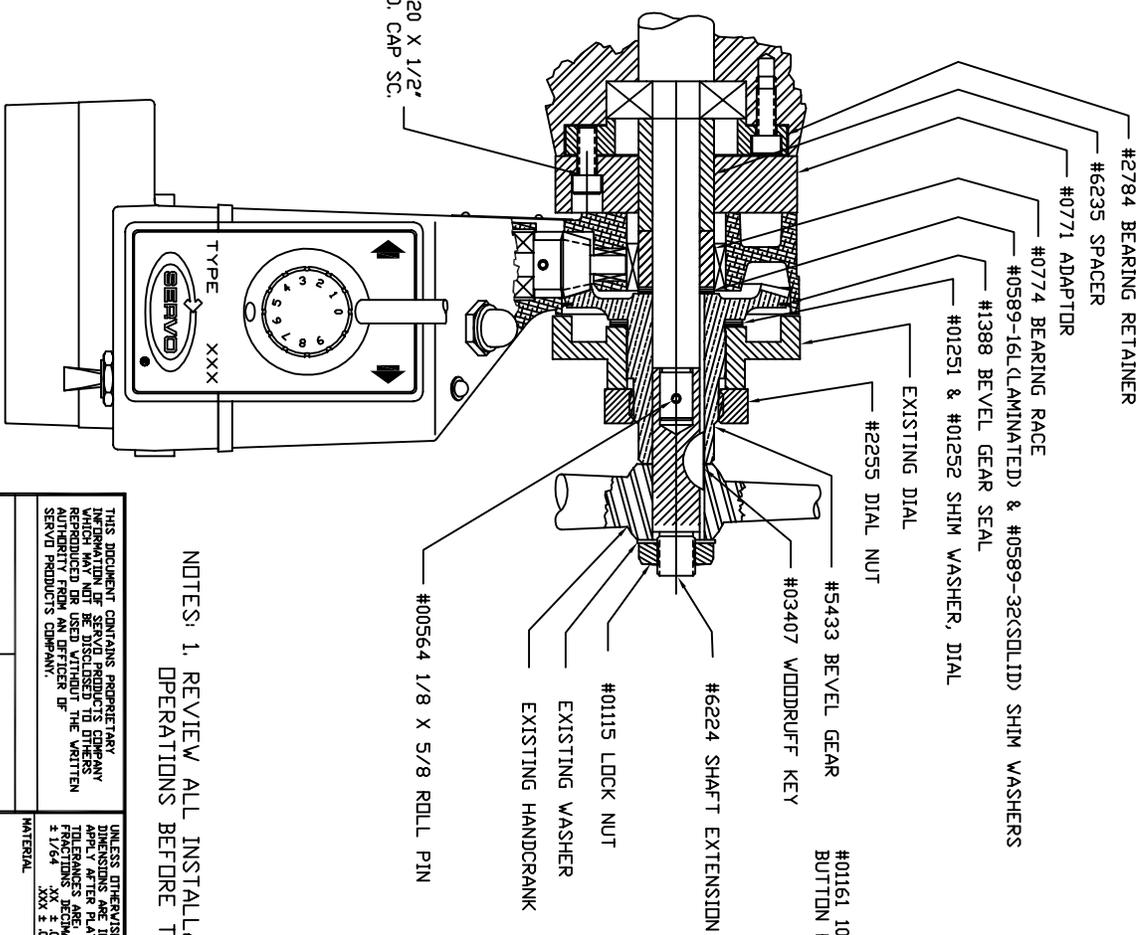
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BEVEL GEAR INSTALLATION

NA-5444 C

STEP 4
LUBRICATION

REVISION		DATE	DRAWN	CHECKED
ECD	LTR	DESCRIPTION		



LIMIT STOP MAY BE MOUNTED ON LEFT SIDE OF KNEE.

NOTES: 1. REVIEW ALL INSTALLATION INSTRUCTIONS AND POWER FEED OPERATIONS BEFORE TURNING ON SERVO POWER FEED.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE WITHIN 0.1 FLATNESS TO BE WITHIN 0.1 CONCENTRICITY TO BE WITHIN 0.1 REMOVE SHARP EDGES AND CORNERS 0.05 MIN. DRAWING STANDARD PER ANSI Y14.5M-1992

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± 1/64 ± .005 ± .005 ± 1/2°

CONTRACT NO.	APPROVALS	DATE
	DRAWN G. BUINN	7/20/95
	CHECKED	

FINISH	DID NOT SCALE DRAWING	COMPUTER NO.	SCALE	SIZE	CODE IDENT NO.	DRAWING NO.	REV.
FINISH		COMPUTER NO.	B	B	0800-80164	NB-6237	B
APPLICATION	USED ON	NB6237B.DWG	SCALE 5/8				

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INSTALLATION DRAWING
CLAUSING-KONDIA
MODEL 4950

