

POWER FEED INSTALLATION

Model M-3750 Cross Feed

Alliant, Sharp First, and others



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-5489	Power Feed Installation
NB-1538	Limit Switch 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, and key from the lead screw.

POWER FEED INSTALLATION

Step 1: Place the adaptor in the cavity of the bearing carrier.

Step 2: Using the adaptor as a template, spot four holes.

Step 3: Drill and tap 1/4-20 four places.

☐ **NOTE** *Due to the irregularities in a cast surface, take special care to be sure that the adaptor is centered and parallel to the lead screw. Shim as required.*

Step 4: Secure the adaptor using four 1/4-20 x 1" cap screws.

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

Step 6: Using the hole provided as a pilot, drill a 1/8 diameter hole through the shaft extension.

Step 7: Pin the shaft extension to the lead screw with the 1/8 diameter x 5/8" long roll pin. File smooth.

Step 8: Slide the bearing race onto the lead screw.

Step 9: Mount the power feed to the adaptor using two 1/4-20 x 1" cap screws.

BEVEL GEAR INSTALLATION

Step 1: Replace the 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 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. Plastic and metal washers are provided for this. Shim as required.

Step 2: Put on the dial locking nut.

Step 3: Install the modified #7 woodruff key in the shaft extension.

Step 4: Slide the handcrank onto the end of the lead screw and tighten with the 1/2-20 lock nut.

❑ **NOTE** *Due to the cast surface of the cavity in the bearing carrier, the shoulder of the lead screw may stick out past the handcrank. If so, add a washer so that the locking nut is against the handcrank.*

LIMIT SWITCH INSTALLATION

Step 1: See limit switch installation on drawing NB-1538 enclosed.

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

Web: www.servoproductsco.com

CALIFORNIA BRANCH

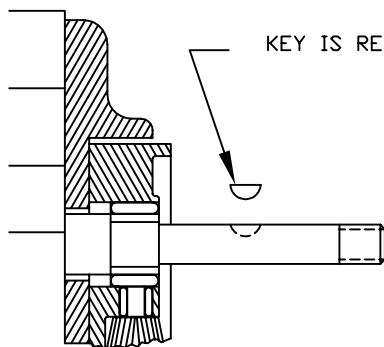
14254 Valley Blvd., Unit A
City of Industry, CA 91746
Ph. 626.961.7800 Fax 626.961.2444

HEADQUARTERS

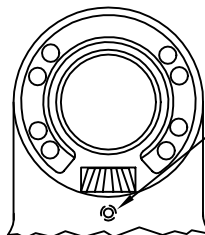
34940 Lakeland Blvd.
Eastlake, OH 44095
Ph. 440.942.9999 Fax 440.942-9100

FLORIDA BRANCH

8950 131st Ave. N.
Largo, FL 33773
Ph. 727.585.8555 Fax 727.585.6555

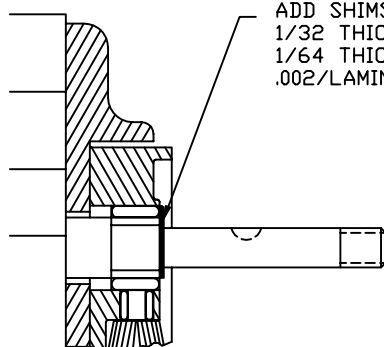


KEY IS REMOVED DURING SHIMMING

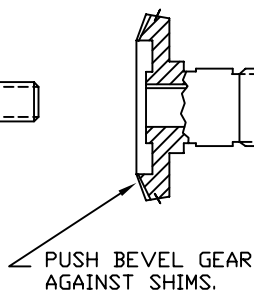


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1 PREPARATION



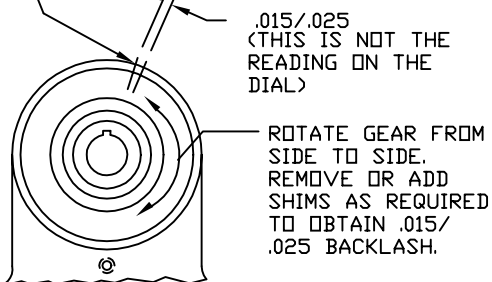
ADD SHIMS PROVIDED
1/32 THICK ARE SOLID
1/64 THICK ARE LAMINATED
.002/LAMINATION



PUSH BEVEL GEAR
AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR
WITH PENCIL TO CHECK BACKLASH.



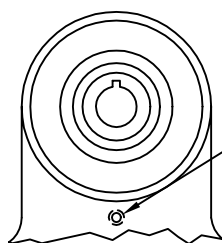
.015/.025
(THIS IS NOT THE
READING ON THE
DIAL)

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

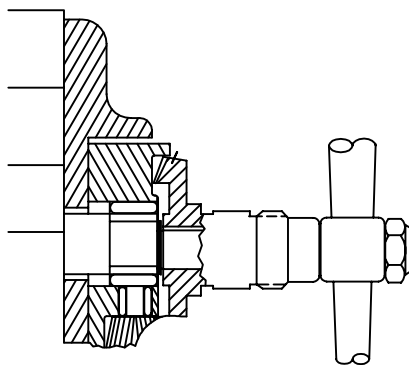
TIGHTEN NUT.

STEP 2 SHIMMING BEVEL GEAR

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



LOOSEN SETSCREW

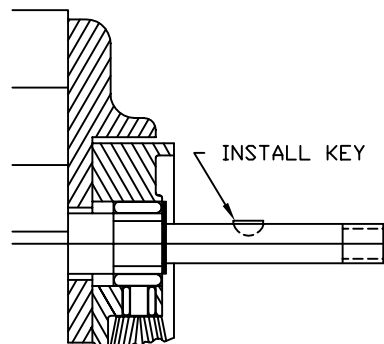


WITH POWER FEED IN
NEUTRAL POSITION, TURN
HANDCRANK. IF EXCESSIVE
GEAR NOISE OR BINDING
OCCURS, SHIMS NEED TO BE
ADDED. WHEN ADDING SHIMS,
REPEAT STEPS 1 AND 2.

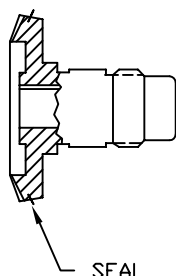


CONTROL HANDLE @
NEUTRAL POSITION

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.

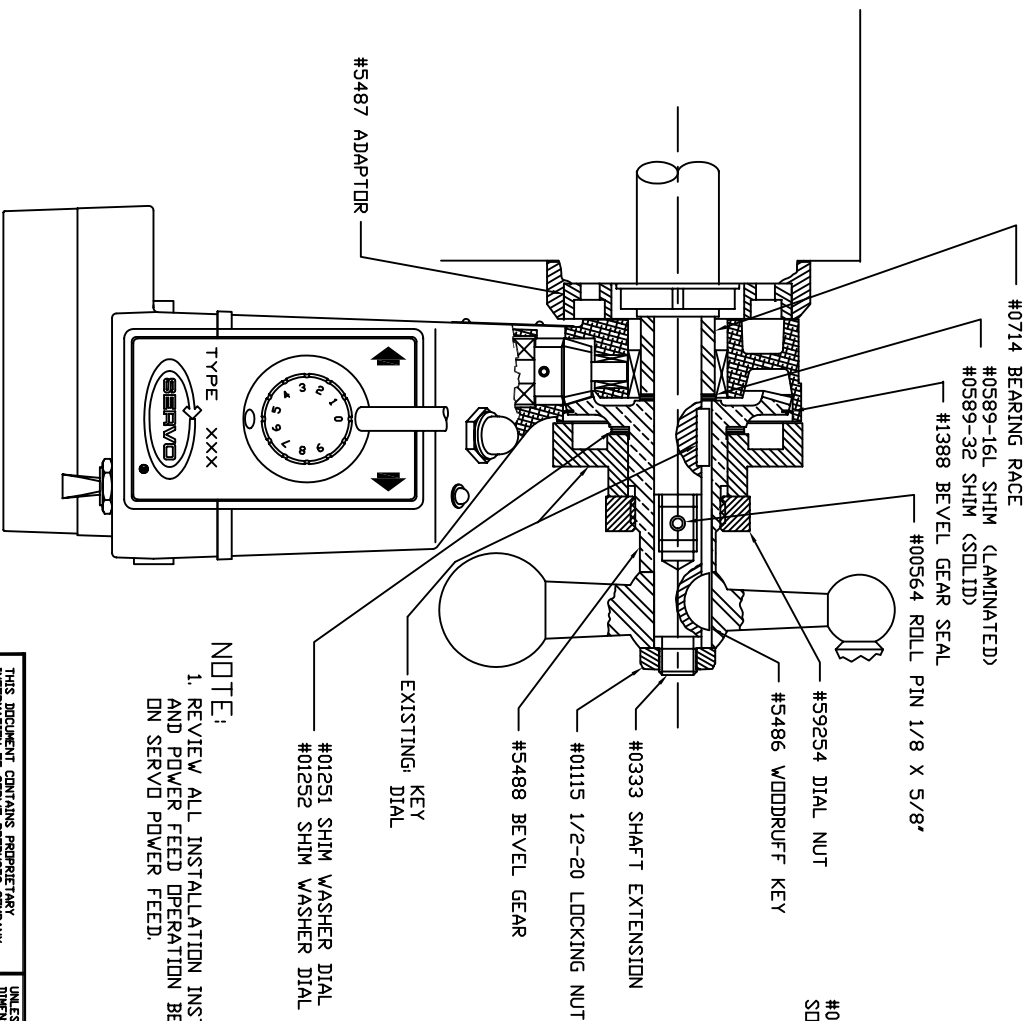
SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

NA-5444 C

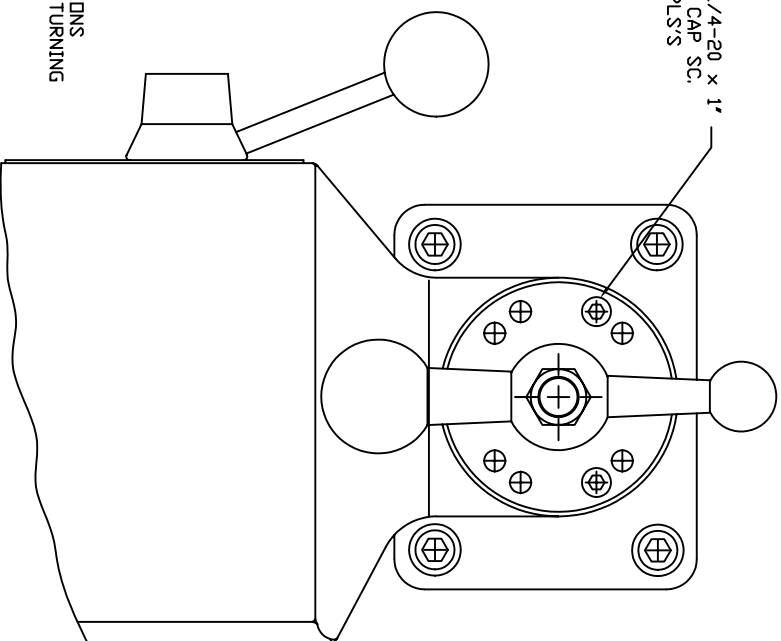
STEP 4 LUBRICATION

REVISION				DATE	DRAWN	CHECKED
ECD	LTR	DESCRIPTION				



NOTE:
1. REVIEW ALL INSTALLATION INSTRUCTIONS
AND POWER FEED OPERATION BEFORE TURNING
ON SERVO POWER FEED.

#00586 1/4-20 x 1'
SDC: HD, CAP: SC.
(2) PLS



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

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APPROVALS
DATE
DRAWN G. BUINN
6/2/95
CHECKED

SERVO PRODUCTS COMPANY
34940 LAKELAND BLVD, EASTLAKE, OH 44095
INSTALLATION DRAWING
SHARP FIRST & ALLIANT
MODEL 3750

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COMPUTER NO.
NB5489A.DWG

SIZE CODE IDENT NO. DRAWING NO.

SCALE 5/8

SHEET

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TOLERANCES ARE IN
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± 1/64 ± .005 ± 1/2°

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SCALE 5/8

SHEET

DF

