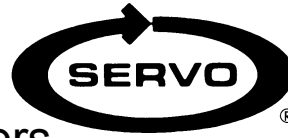


POWER FEED INSTALLATION

Model M-2100/3200 Table Feed

Holke Machinist, Marena 10 & others



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-2265	Power Feed Installation
ND-6293	Type 150 Servo Power Feed
ND-6292	Type 140 Servo Power Feed
0800-80001	Servo Power Feed Operation

PREPARATION

- Step 1:* Gather together the following items that you will need to complete this installation.
- a) 3/8" electric hand drill
 - b) #7 drill, 1/8" drill
 - c) 1/4-20 tap
 - d) 9/32" diameter transfer punch
 - e) flat file
 - f) 3/4" socket wrench
 - g) set of inch hex wrenches
 - h) grease
 - i) clean shop rag
- Step 2:* Move the table to the extreme left.
- Step 3:* Remove the nut, handle and dial assembly from the right-hand end of the table.
- Step 4:* Locate the tapped holes in the bearing retainer end cap by sliding #1178 bearing race onto the lead screw to the shoulder. Slide the adaptor #0771 onto the bearing race against the bearing bracket. Transfer the three counterbored hole locations through the adaptor to the end bracket using a 9/32" diameter transfer punch.
- Step 5:* Remove the adaptor and bearing race from the lead screw and tap 1/4-20 to 3/8" deep minimum thread into the end cap three places.
- Step 6:* Add #2267 shaft extension and tighten.
- Step 7:* Using the hole provided as a pilot, drill 1/8" diameter through and pin in place using the 1/8" x 5/8" long roll pin. File smooth.

POWER FEED INSTALLATION

- Step 1:* With the table in the extreme left-hand position, install the adaptor with the three 1/4-20 x 1/2" socket head cap screws.
- Step 2:* Slide the two spacers and bearing race onto the lead screw.

Step 3: Slide the Power Feed onto the bearing race and push flush to the end of the adaptor. Secure with two 1/4-20 x 1" long socket head cap screws.

BEVEL GEAR INSTALLATION

Step 1: Follow the drawing NA-5444 for installation of the bevel gear. Adjust for proper gear backlash.

Step 2: One spacer may be shortened to allow proper shimming of the bevel gear.

DIAL AND HANDWHEEL INSTALLATION

Step 1: After getting the proper gear 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. Three plastic (.030" thick) and five brass (.005" thick) washers are provided for this. Shim as required.

Step 2: In the following sequence, put on the dial locking nut, place the 5 mm Woodruff key in the shaft extension, slide the handcrank onto shaft extension, followed by 1/2" S.A.E. washer, and secure with the 1/2-20 locking nut.

LIMIT SWITCH INSTALLATION

Refer to drawing NB-2265 for modifications and installation of the limit switch.

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.

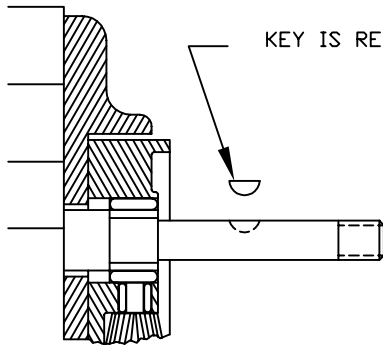
Clearances between the surfaces of the hand crank and the non-moving parts of the equipment on which the hand crank is installed must be at least one-fourth inch (1/4") to prevent injury. Modification of existing hand crank or replacement may be required.

Do not operate without proper clearance!

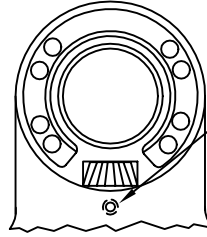
Prevent contact during fast traverses.

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
Call for the location of our regional Service Centers.

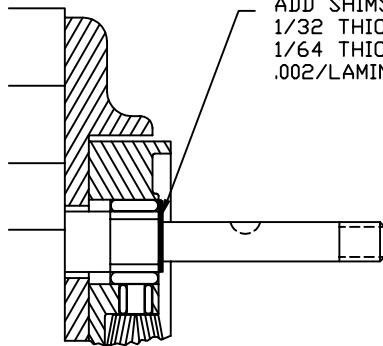


KEY IS REMOVED DURING SHIMMING

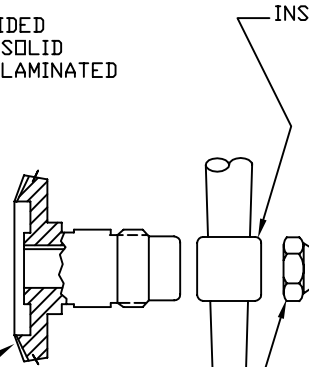


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1
PREPARATION



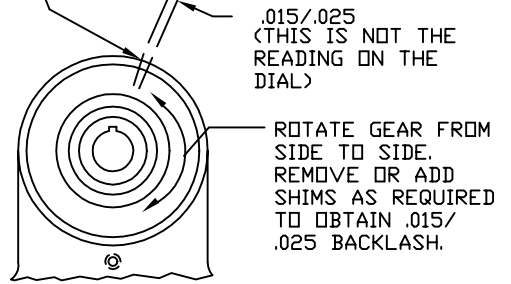
ADD SHIMS PROVIDED
1/32 THICK ARE SOLID
1/64 THICK ARE LAMINATED
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



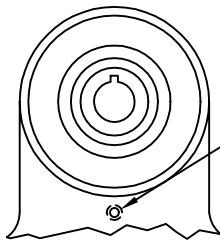
.015/.025
(THIS IS NOT THE READING ON THE DIAL)

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

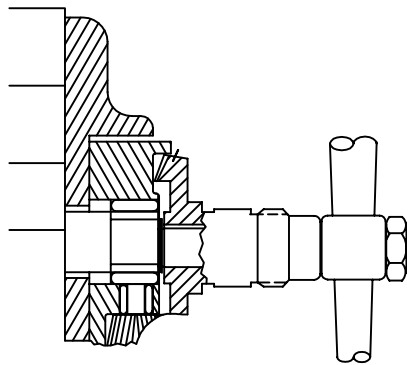
STEP 2
SHIMMING BEVEL GEAR

TIGHTEN NUT.

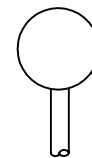
CAUTION: IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

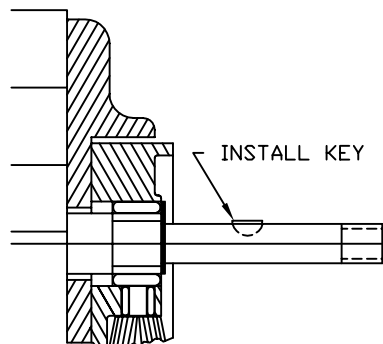


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.

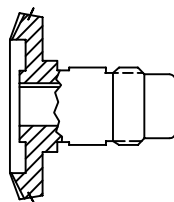


CONTROL HANDLE @ NEUTRAL POSITION

STEP 3
DOUBLE CHECK OF SHIMMING



INSTALL KEY



SEAL

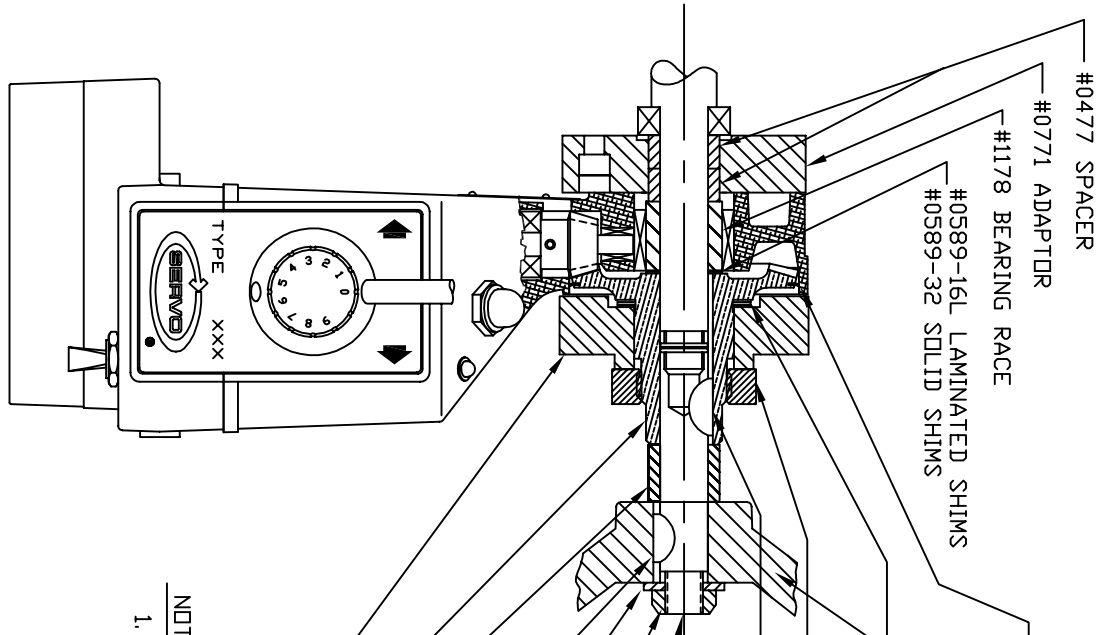
REMOVE GEAR, PACK WITH GREASE. (DO NOT USE SILICONE TYPE GREASE) REPLACE GEAR. (DO NOT LOSE ANY SHIMS)

PICTURES IN THIS DRAWING ARE FOR REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

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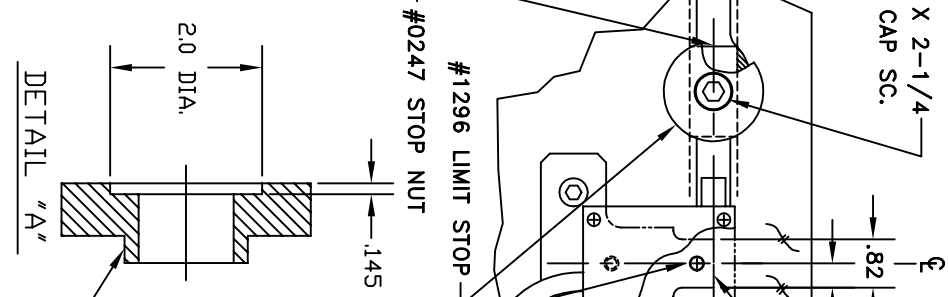
BEVEL GEAR INSTALLATION

NA-5444 C



NOTE:

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



LIMIT SWITCH INSTALLATION

LOCATE LIMIT SWITCH BOX WITH L/S PLUNGER ON CENTER LINE. REMOVE PLATE FROM BOX AND TRANSFER 6-32 SCREW LOCATIONS TO SOLID STOP. TAP 6-32 X 1/4 MIN. THREAD DEPTH. (2 PLACES).

SOME MILL DIALS WILL NEED COUNTER BORE IN ORDER FOR SERVO FEED TO FIT PROPERLY.

UNLESS OTHERWISE SPECIFIED PERPENDICULARITY, PARALLELISM, STRAIGHTNESS, FLATNESS, ROUNDNESS, CONCENTRICITY, CYLINDRICITY TO BE WITHIN .01 TOTAL OR .040/ft. SURFACE ROUGHNESS WITHIN 125 REMOVE SHARP CORNERS AND EDGES .005 MIN. DRAWING STANDARD PER ANSI Y14.5M-1982

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF SERVO PRODUCTS COMPANY WHICH MAY NOT BE DISCLOSED TO OTHERS WITHOUT THE WRITTEN AUTHORITY FROM AN OFFICER OF SERVO PRODUCTS COMPANY.

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

CONTRACT NO. APPROVALS DATE
 DRAWN BY J. TUCKER 12/3/96
 CHECKED

SERVO PRODUCTS COMPANY
 433 N. FAIR BANKS AVE., PASADENA, CALIFORNIA 91103

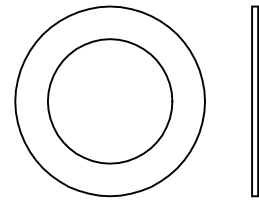
MODEL 2100 & 3200
 INSTALLATION DRAWING
 HOLKE, MACHINISTS, MARENA 10

APPLICATION	USED IN
NEXT ASSY	

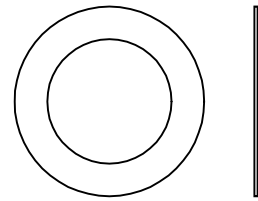
DID NOT SCALE DRAWING	FINISH
	COMPUTER NO.

SCALE	SIZE	CODE IDENT NO.	DRAWING NO.
B	0800-80056		NB-2265

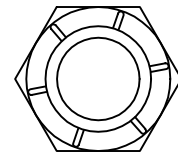
REV.	A
SHEET	DF



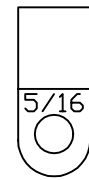
0589-32 (2)
SHIM WASHER
SOLID BRASS



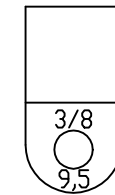
0589-16L (2)
SHIM WASHER
LAMINATED BRASS



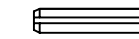
01115 (1)
1/2-20
LOCK NUT



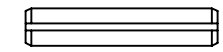
00579 (1)
CLAMP 70



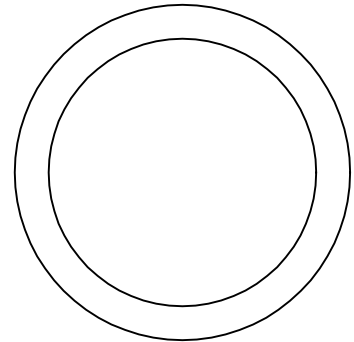
01050 (1)
CLAMP FOR
L/S CORD



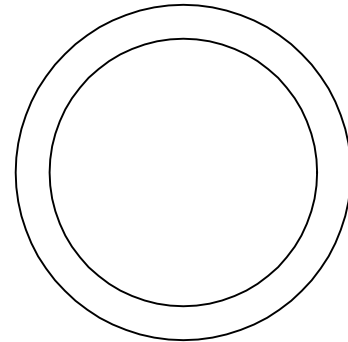
00564 (1)
ROLL PIN
1/8 X 5/8



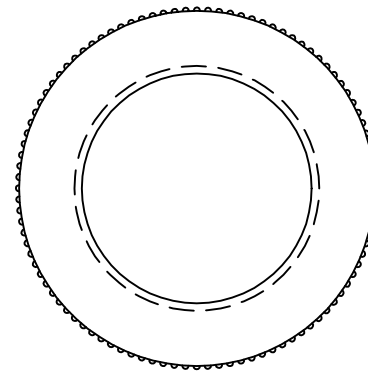
00595 (2)
ROLL PIN
3/16 X 1.0



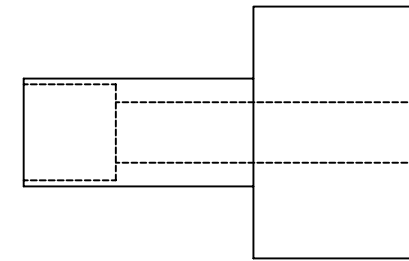
001251 (5)
WASHER
.005 X 1.395 X 1.748
BRASS



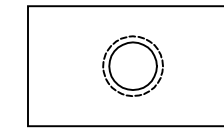
01252 (2)
WASHER
.030 X 1.395 X 1.748
PLASTIC



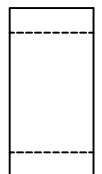
2255 (1)
DIAL NUT



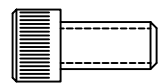
1296 (2)
LIMIT STOP



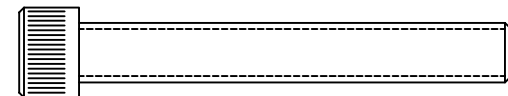
0247 (2)
STOP NUT



0477 (3)
SPACER



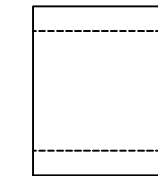
00675 (3)
1/4-20 X 1/2
SOC. HD. CAP. SC.



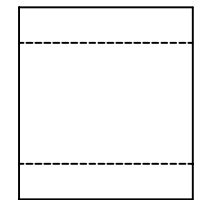
00941 (2)
5/16-24 X 2-1/4
SOC. HD. CAP. SC.



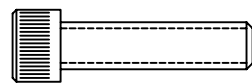
2267 (1)
SHAFT
EXTENSION



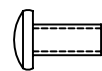
4743 (1)
SPACER
HANDCRANK



1178 (1)
BEARING RACE



00586 (2)
1/4-20 X 1
SOC. HD. CAP. SC.



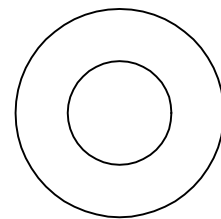
00669 (1)
8-32 X 3/8
PHIL. PAN HD. SC.



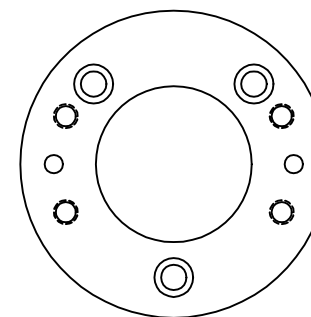
00614 (1)
1/8 X 3/4 #7
WOODRUFF KEY



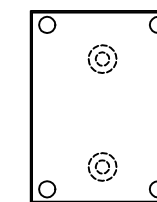
00613 (2)
6-32 X 3/8
PHIL. FLT. HD. SC.



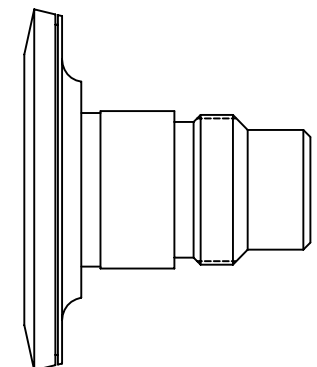
01169 (1)
WASHER
1/2 SAE



0771 (1)
ADAPTOR
1/2 SCALE



0361 (1) / 0266 (1)
BRACKET L/S / GASKET L/S
1/2 SCALE



2266 (1)
BEVEL GEAR
1/2 SCALE