

POWER FEED INSTALLATION

Model M-4200 Table Feed

Microcut, Wells-Index 837



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-5580	Power Feed Installation
ND-6293	Type 150 Servo Drive
ND-6292	Type 140 Servo Drive
0800-80001	Servo Power Feed Installation

PREPARATION

- Step 1:* Move the table to the extreme left.
- Step 2:* Remove the nut, handle, and dial assembly from the right-hand end of the table.
- Step 3:* Remove the four cap screws holding the bearing housing in place.
- Step 4:* Using a soft hammer, tap the bearing housing off. Clean the end surface of the table.

POWER FEED INSTALLATION

- Step 1:* Slide the spacer and then the bearing race onto the lead screw.
 - Step 2:* With the table to the extreme left-hand position, tighten the adaptor with the four cap screws.
- NOTE** *On some machines the drive pin holes do not line up with the adapter. Remove and discard the pins in such cases. The cap screws are all that is necessary.*
- Step 3:* Slide the spacer adaptor and then the power feed onto the bearing race. Secure the feed using the two 1/4-20 x 1-1/2" 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:* In the following sequence, replace the key in the shaft (if removed), dial, and dial locking nut. Slide the handle in place and tighten with the 1/2-20 lock nut.

LIMIT SWITCH INSTALLATION

Step 1: Remove the standard table stop pieces and install the table stop pieces furnished. Put the standard stops back in a position to prevent feed stops from being set beyond extreme table travel.

Step 2: Remove the two cap screws holding the T-shaped table stop. As shown in drawing ND-5580, machine the table stop and replace on the machine.

Step 3: The T-stop is retained to act as a positive stop where required for manual operation.

NOTE *For proper operation, the electrical limit switch should be engaged .4 inch before the mechanical stop to allow for coasting of the table. The T-stops are often not symmetrical and may need to be ground to obtain proper operation.*

Step 4: Put the cable clamp on the cable and secure using the right-hand chip scraper screw.

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

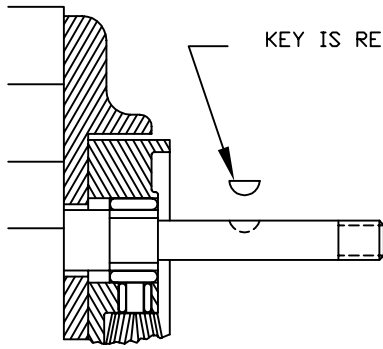
14254 Valley Blvd., Unit A
City of Industry, CA 91746
Ph. 626.961.7800 Fax 626.961.2444

HEADQUARTERS

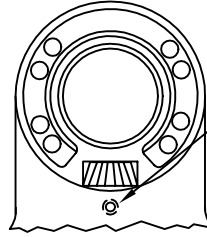
34940 Lakeland Blvd.
Eastlake, OH 44095
Ph. 440.942.9999 Fax 440.942-9100

FLORIDA BRANCH

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

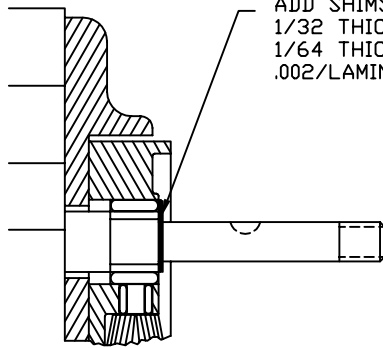


KEY IS REMOVED DURING SHIMMING

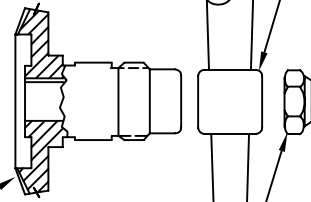


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1
PREPARATION



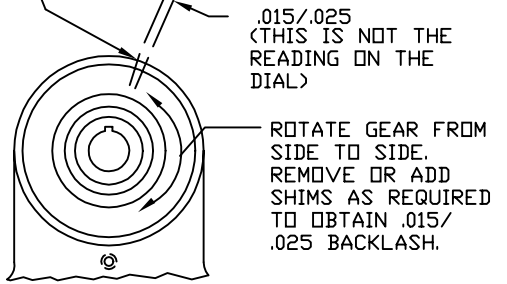
ADD SHIMS PROVIDED
1/32 THICK ARE SOLID
1/64 THICK ARE LAMINATED
.002/LAMINATION



PUSH BEVEL GEAR
AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR
WITH PENCIL TO CHECK BACKLASH.



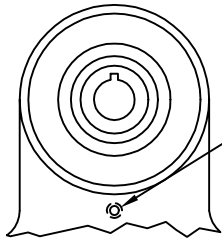
.015/.025
(THIS IS NOT THE
READING ON THE
DIAL)

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

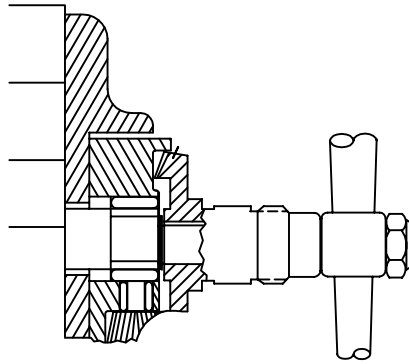
TIGHTEN NUT.

STEP 2
SHIMMING BEVEL
GEAR

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



LOOSEN SETSCREW

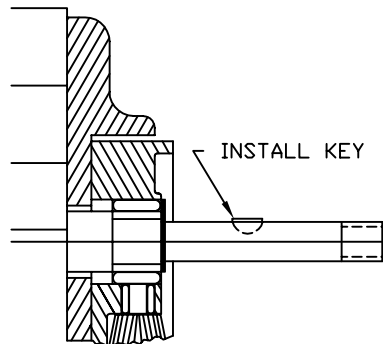


WITH POWER FEED IN
NEUTRAL POSITION, TURN
HANDCRANK. IF EXCESSIVE
GEAR NOISE OR BINDING
OCCURS, SHIMS NEED TO BE
ADDED. WHEN ADDING SHIMS,
REPEAT STEPS 1 AND 2.

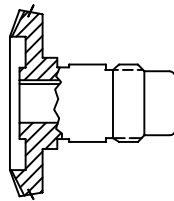


CONTROL HANDLE @
NEUTRAL POSITION

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)

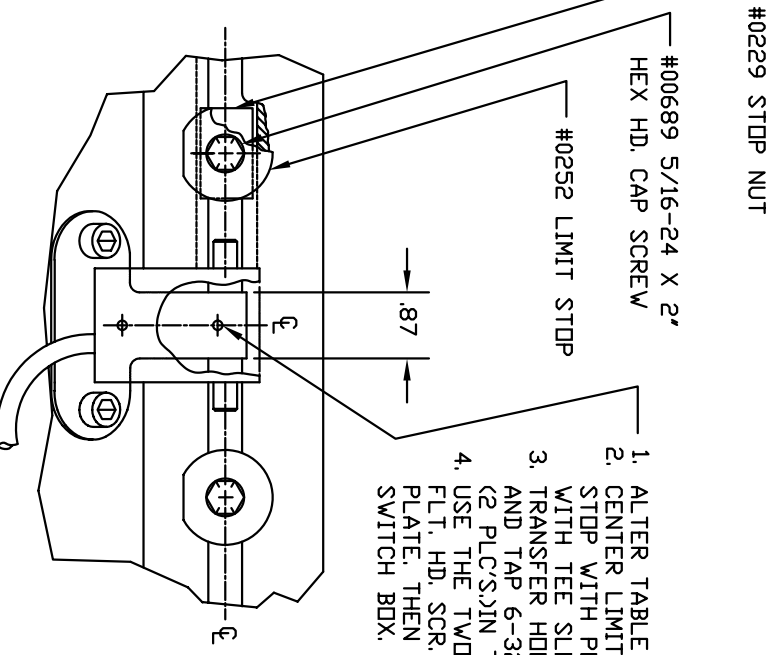
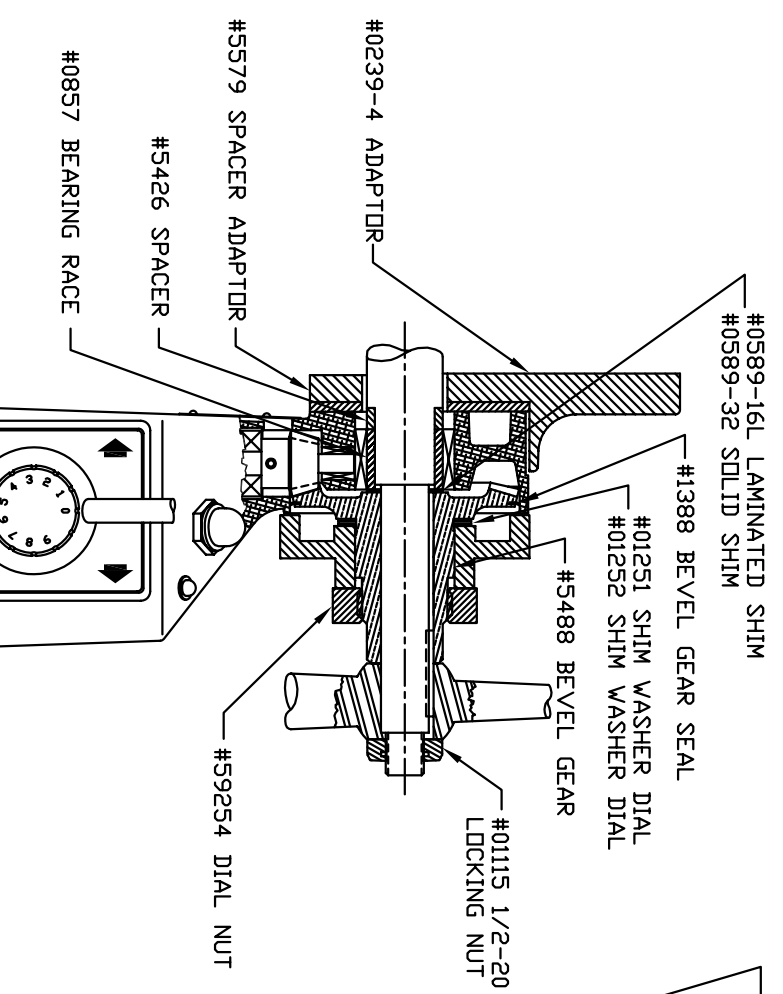
PICTURES IN THIS DRAWING ARE FOR
REFERENCE ONLY. SEE INSTALLATION
DRAWING OF CORRESPONDING MODEL
FOR EXACT PARTS CONFIGURATION.

SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

NA-5444 C

STEP 4
LUBRICATION



1. ALTER TABLE STOP AS DIMENSION.
2. CENTER LIMIT SWITCH ON TABLE STOP WITH PLUNGER CENTERED WITH TEE SLDT.
3. TRANSFER HOLES FROM L/S PLATE AND TAP 6-32 THD. X 5/16 DP. (2 PLC'S) IN TABLE STOP.
4. USE THE TWO 6-32 X 3/8 PHIL. FLT. HD. SCR. TO FASTEN THE L/S PLATE. THEN INSTALL THE LIMIT SWITCH BOX.

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

LIMIT SWITCH INSTALLATION

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

TYPE	XXXX
APPLICATION	USED IN
NEXT ASSY	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & TOLERANCES ARE AS SHOWN	CONTRACT NO.	APPROVALS	DATE
FRACTIONS DECIMALS ANGLES	BROWN J. TUCKER		10/18/96
± 1/64 .001 ± .005	CHECKED		
MATERIAL			
NOTED			
FINISH			
DID NOT SCALE DRAWING	COMPUTER NO.		

SERVO PRODUCTS COMPANY
 34940 LAKELAND BLVD, EASTLAKE, OH 44095

WELLS INDEX M-837
INSTALLATION DRAWING
 MODEL 4200

SIZE	CODE IDENT. NO.	DRAWING NO.	REV.
B	0800-80095	NB-5580	A
SCALE		SHEET	OF