

POWER FEED INSTALLATION

Model M-4900 Table Feed

Clousing Kondia



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-6236	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 right-hand end of the table.
- 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 1/4-20 x 1/2" long socket head cap screws. Remove bearing race.
- Step 2:* Screw the shaft extension onto the lead screw and tighten.
- Step 3:* Using the hole provided as a pilot, drill 1/8" diameter through the shaft and pin 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 1/4-20 x 1" long socket head cap screws.

BEVEL GEAR INSTALLATION

- Step 1:* Use the woodruff key provided 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. Two 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, slide the handle in place, and tighten with the 1/2-20 lock nut.

LIMIT SWITCH INSTALLATION

Step 1: Install the limit switch as shown on the installation drawing ND-6236.

Step 2: 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 3: Secure the cable using the cable clamp provided. Use the screw provided to attach the clamp to the right-hand side of the chip scraper.

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.

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Web: www.servoproductsco.com

CALIFORNIA BRANCH

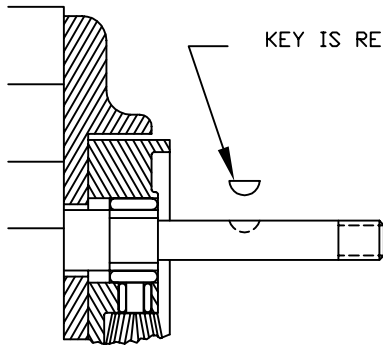
14254 Valley Blvd., Unit A
City of Industry, CA 91746
Ph. 626.961.7800 Fax 626.961.2444

HEADQUARTERS

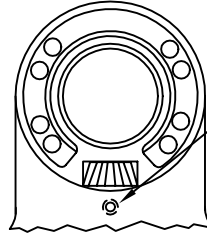
34940 Lakeland Blvd.
Eastlake, OH 44095
Ph. 440.942.9999 Fax 440.942-9100

FLORIDA BRANCH

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

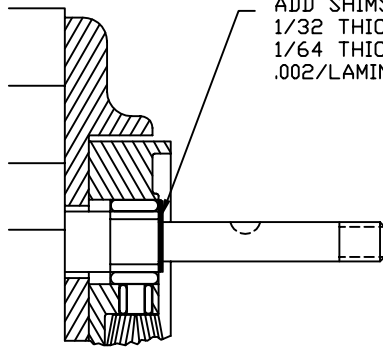


KEY IS REMOVED DURING SHIMMING

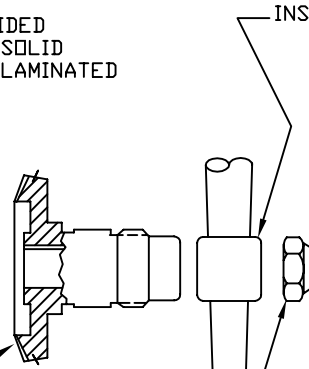


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1
PREPARATION



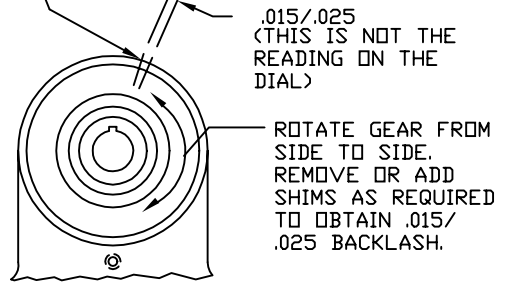
ADD SHIMS PROVIDED
1/32 THICK ARE SOLID
1/64 THICK ARE LAMINATED
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



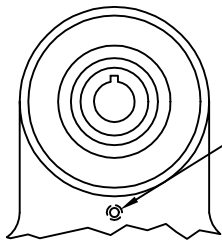
.015/.025
(THIS IS NOT THE READING ON THE DIAL)

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

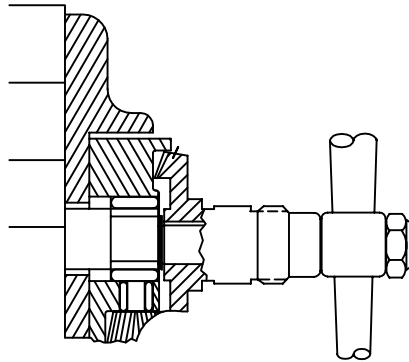
STEP 2
SHIMMING BEVEL GEAR

TIGHTEN NUT.

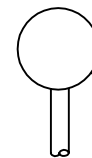
CAUTION: IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

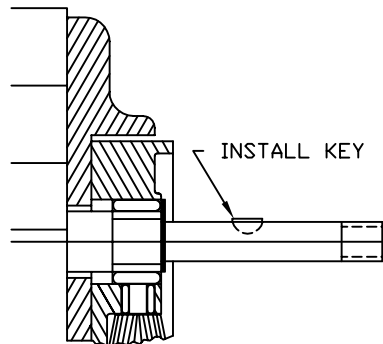


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.

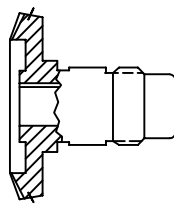


CONTROL HANDLE @ NEUTRAL POSITION

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)

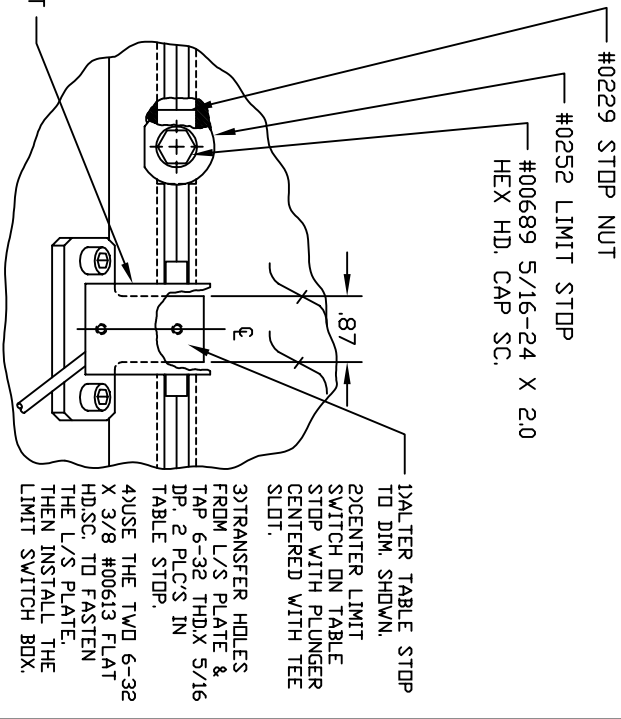
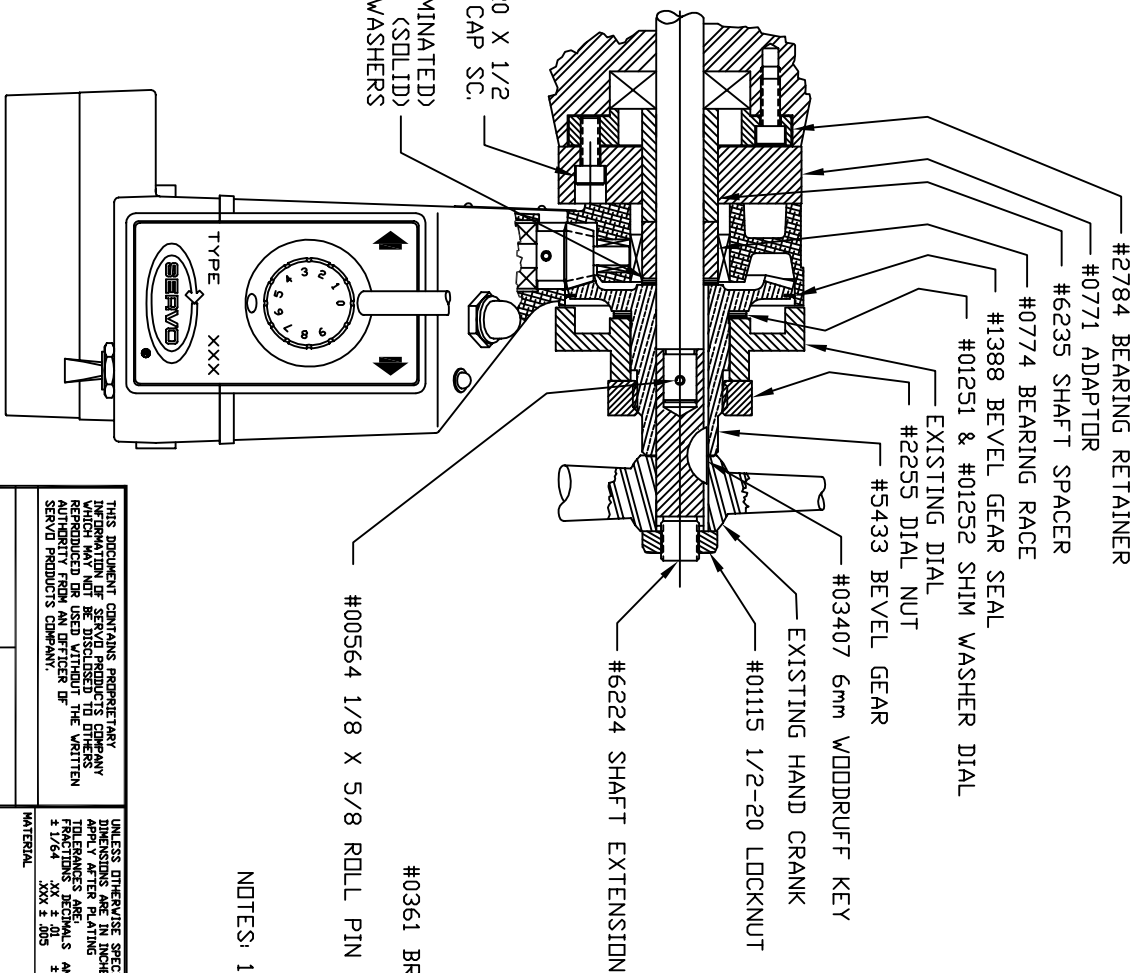
PICTURES IN THIS DRAWING ARE FOR REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

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BEVEL GEAR INSTALLATION

NA-5444 C

REVISION		DATE	DRAWN	CHECKED
ECD	LTR	DESCRIPTION		



LIMIT SWITCH INSTALLATION

1) ALTER TABLE STOP TO DIM. SHOWN.
 2) CENTER LIMIT SWITCH ON TABLE STOP WITH PLUNGER CENTERED WITH TEE SLOT.
 3) TRANSFER HOLES FROM L/S PLATE & TAP 6-32 THDX 5/16 DP. 2 PLCS IN TABLE STOP.
 4) USE THE TWO 6-32 X 3/8 #00613 FLAT HD.SC. TO FASTEN THE L/S PLATE. THEN INSTALL THE LIMIT SWITCH BOX.

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 0.005 MIN. DRAWING STANDARD PER ANSI Y14.5M-1982

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

CONTRACT NO.	APPROVALS	DATE
	DRAWN G. BUNN	7/13/95
	CHECKED	

COMPUTER NO.	SCALE
NB6236B.DWG	5/8

SERVO PRODUCTS COMPANY
 433 N. FAIR OAKS AVE., PASADENA CALIFORNIA 91109

INSTALLATION DRAWING
 CLAUSING-KONDIA
 MODEL 4900

SIZE CODE IDENT. NO. DRAWING NO. REV.
 B 0800-80162 NB-6236 B

SCALE 5/8 SHEET 1 OF 1

A B C D 4 3 2 1