

POWER FEED INSTALLATION

Model M-3700 Table Feed

Alliant, Sharp First, and others



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-5495	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 milling machine.
- 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.
- Step 5:* Remove the spacer.

POWER FEED INSTALLATION

- Step 1:* Slide the bearing race in place over the shaft.
- Step 2:* Slide the power feed onto the shaft and push in place.

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:* With the table in the extreme left-hand position, tighten the four 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. Plastic and metal washers are provided for this. Shim as required.
- Step 2:* In the following sequence, put on the dial locking nut and slide the handle in place. Add the 1/2-20 lock nut and tighten.

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 bracket.

Step 3: Place the short spacers into the counterbored holes in the T-stop. Place the limit switch assembly on the spacers and install using the two 3/8-16 x 1-1/4" or 8 mm x 1.25 x 30 mm long socket head cap screws.

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

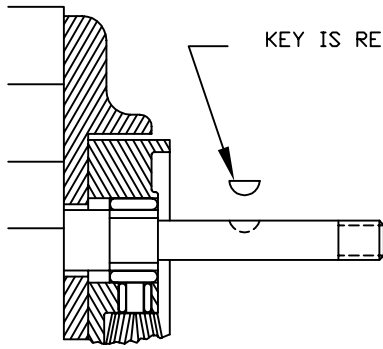
14254 Valley Blvd., Unit A
City of Industry, CA 91746
Ph. 626.961.7800 Fax 626.961.2444

HEADQUARTERS

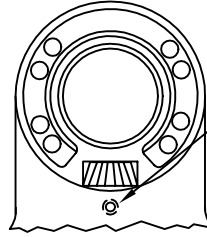
34940 Lakeland Blvd.
Eastlake, OH 44095
Ph. 440.942.9999 Fax 440.942-9100

FLORIDA BRANCH

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

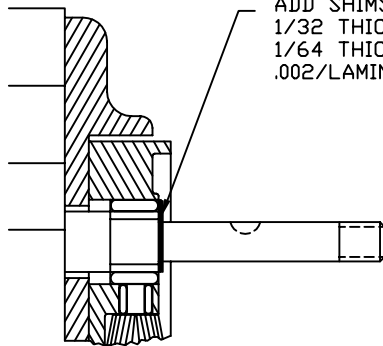


KEY IS REMOVED DURING SHIMMING

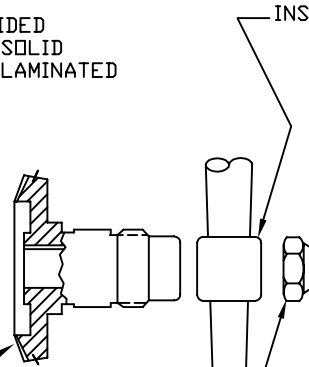


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1
PREPARATION



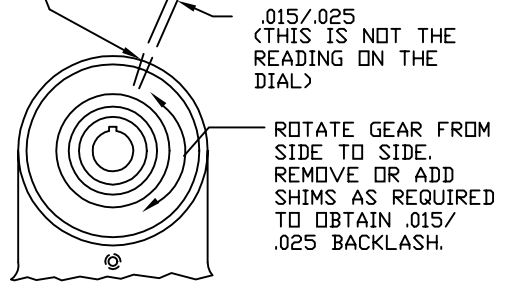
ADD SHIMS PROVIDED
1/32 THICK ARE SOLID
1/64 THICK ARE LAMINATED
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



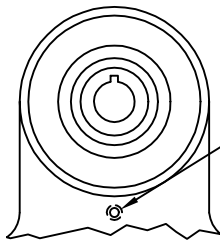
.015/.025
(THIS IS NOT THE READING ON THE DIAL)

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

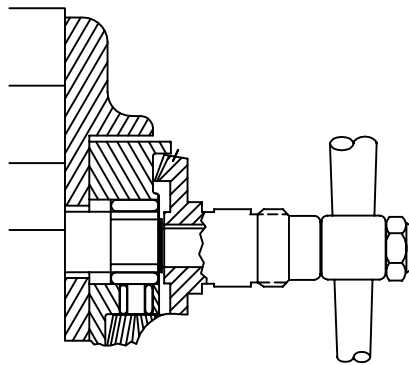
STEP 2
SHIMMING BEVEL GEAR

TIGHTEN NUT.

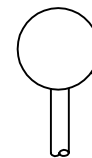
CAUTION: IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

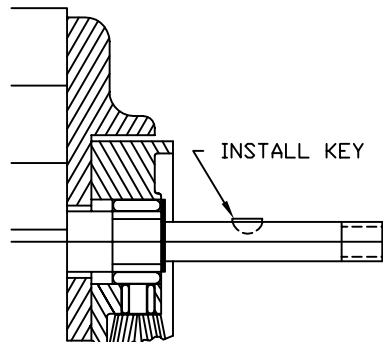


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



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.

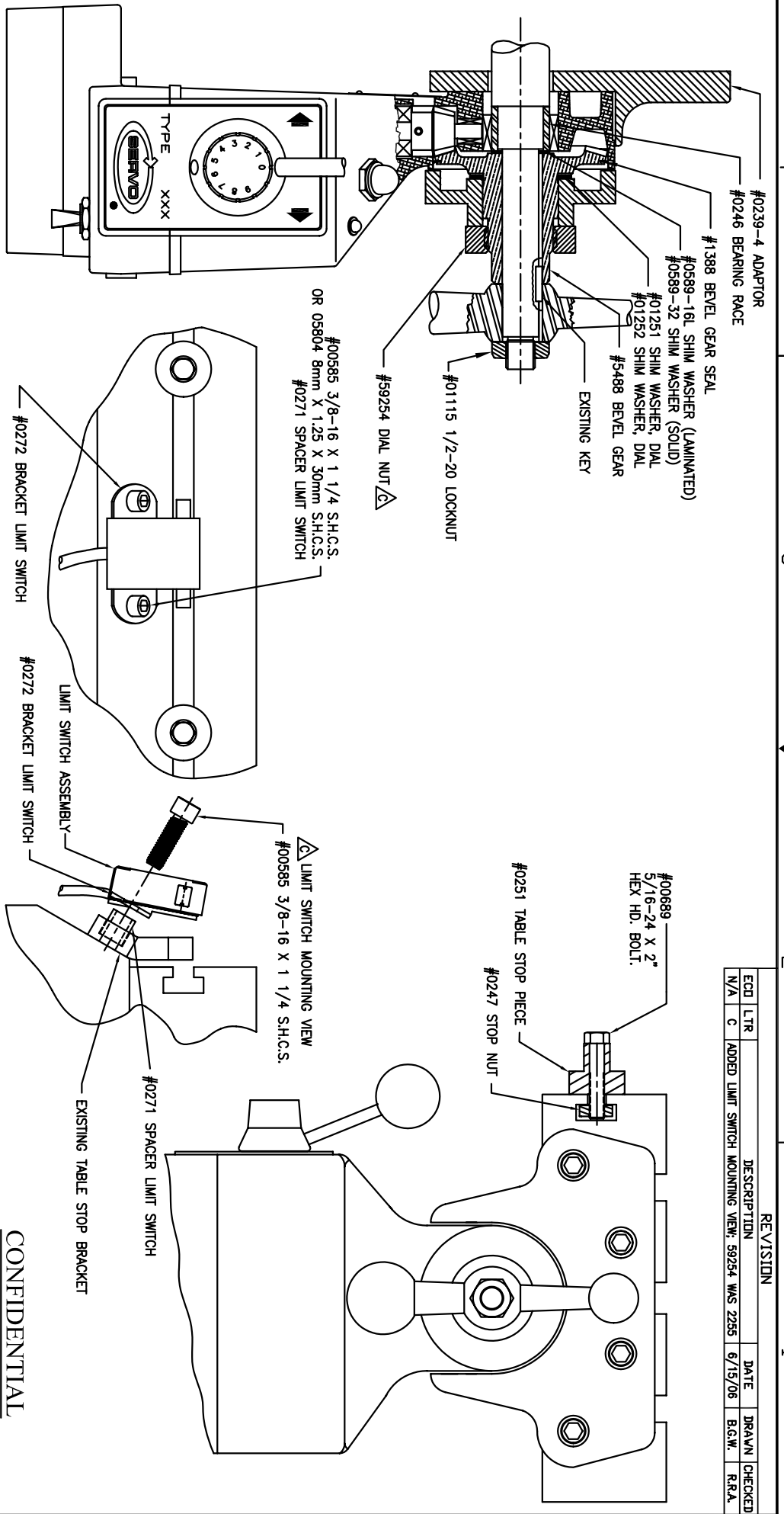
SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

NA-5444 C

REVISION		DATE	DRAWN	CHECKED
1		6/15/06	B.G.W.	R.R.A.

ECD	LTR	DESCRIPTION	VIEW	DATE
N/A	C	ADDED LIMIT SWITCH MOUNTING VIEW	59254 WAS 2255	6/15/06



CONFIDENTIAL

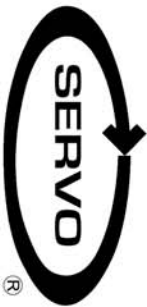
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES & DECIMALS ARE IN THOUSANDS. ANGLES ARE IN DEGREES. FINISH IS UNLESS OTHERWISE SPECIFIED. REMOVE SHARP EDGES AND CORNERS PER ANSI Y43M-1982.

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APPROVALS	DATE
G. BUNN	3/13/95
CHECKED	
CONTRACT NO.	
COMPUTER NO.	NBS495_C.dwg
FINISH	NOTED
APPLICATION	USED IN
NEXT ASSY	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & DECIMALS ARE IN THOUSANDS. ANGLES ARE IN DEGREES. FINISH IS UNLESS OTHERWISE SPECIFIED. REMOVE SHARP EDGES AND CORNERS PER ANSI Y43M-1982.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & DECIMALS ARE IN THOUSANDS. ANGLES ARE IN DEGREES. FINISH IS UNLESS OTHERWISE SPECIFIED. REMOVE SHARP EDGES AND CORNERS PER ANSI Y43M-1982.
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SERVVO PRODUCTS COMPANY 34940 LABELAND BLVD, EASTLAC, OHIO 44095	
INSTALLATION DRAWING MODEL 3700 SHARP FIRST & ALLIANT	
SIZE	CODE IDENT NO.
B	0800-80030
SCALE	DRAWING NO.
5/8	NB-5495
SHEET	REV.
1	C



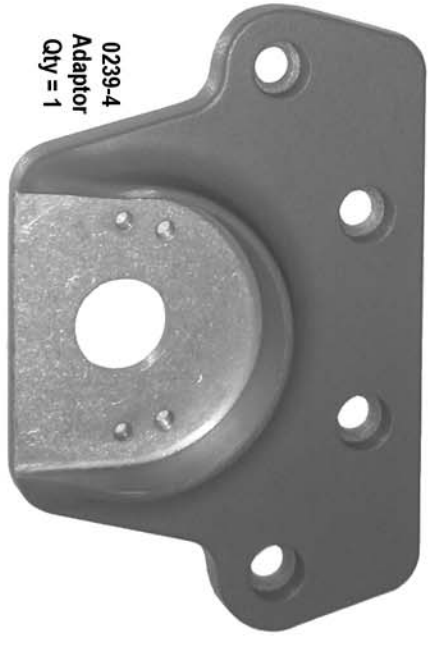
M-3700 TABLE FEED PARTS IDENTIFICATION LIST

- 00579 Clamp Qty = 1
- 01050 Clamp Qty = 1
- 00688 Phil Pan Hd Screw Qty = 1
- 0266 Limit Switch Gasket Qty = 1
- 0272 Limit Switch Bracket Qty = 1
- 06928 Phil Pan Hd Screw Qty = 4
- 0271 Limit Switch Spacer Qty = 2
- 00585 3/8-16 Soc Head Cap Screw Qty = 2
- 05804 M8 Soc Head Cap Screw Qty = 2

- 00689 Hex Hd Bolt Qty = 2
- 0247 Stop Nut Qty = 2
- 0251 Limit Stop Qty = 2
- 01115 Lock Nut Qty = 1
- 59254 Dial Nut Qty = 1
- 01251 Brass Shim Qty = 5
- 01252 Plastic Shim Qty = 2
- 5488 Bevel Gear Qty = 1

- 0589-32 .032 Shim Qty = 2
- 0589-16L .016 Shim Qty = 2
- 0246 Bearing Race Qty = 1
- 00586 Soc Hd Cap Screw Qty = 2

- 00595 Roll Pin Qty = 2
- 00596 Roll Pin Qty = 2



0239-4 Adaptor Qty = 1