

POWER FEED INSTALLATION

Model M-3900 Table Feed

Clausing Kondia FV-300, Kondia SM1 & 2, Hurco SM2



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-5513	Power Feed Installation
ND-1481	Safety Handle Model 620
ND-6293	Type 150 Servo Drive
0800-80001	Servo Power Feed Installation

PREPARATION

- Step 1:* Remove the nut, handwheel, dial, dial hub, key and M6 screws from the bearing retainer.
- Step 2:* Screw the shaft extension to the lead screw and tighten.
- Step 3:* Using the hole provided as a pilot, drill 1/8 diameter hole through and pin the shaft extension in place using 1/8 x 5/8 long roll pin. File smooth.

POWER FEED INSTALLATION

- Step 1:* Attach the adaptor to the bearing retainer using four M6 x 30 mm screws.
- Step 2:* Slide the bearing race spacer and the bearing race onto the lead screw.
- Step 3:* Mount the power feed to the adaptor using two 1/4-20 x 1" 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 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 to keep chips from entering the gear train. Four washers are provided for this, two solid and two laminated. Shim as required.
- Step 2:* Put on the dial locking nut.

SAFETY HANDLE INSTALLATION

- Step 1:* Follow drawing ND-1481 for the installation of the safety handle kit.
- IF:* If the Kondia mill SM1 is supplied without the M-620 safety handle, install a balanced crankhandle using the 6 mm x 7.5 mm woodruff key.

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: Install the limit switch as shown on drawing ND-5513.

Step 4: 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 5: 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

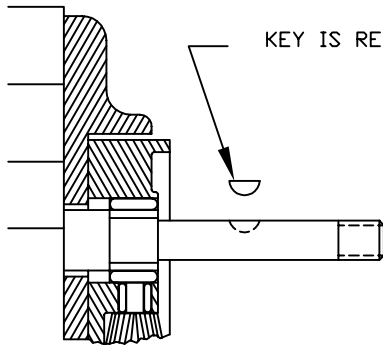
14254 Valley Blvd., Unit A
City of Industry, CA 91746
Ph. 626.961.7800 Fax 626.961.2444

HEADQUARTERS

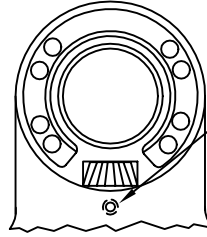
34940 Lakeland Blvd.
Eastlake, OH 44095
Ph. 440.942.9999 Fax 440.942-9100

FLORIDA BRANCH

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

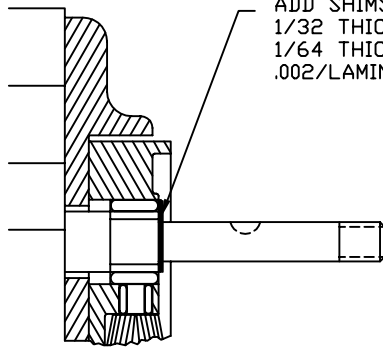


KEY IS REMOVED DURING SHIMMING

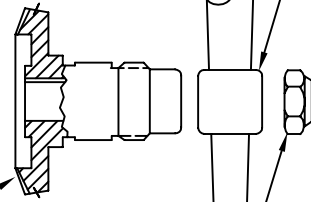


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1
PREPARATION



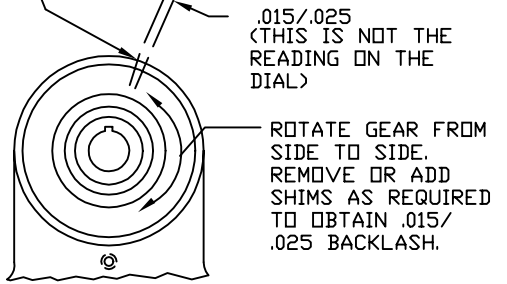
ADD SHIMS PROVIDED
1/32 THICK ARE SOLID
1/64 THICK ARE LAMINATED
.002/LAMINATION



PUSH BEVEL GEAR
AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR
WITH PENCIL TO CHECK BACKLASH.



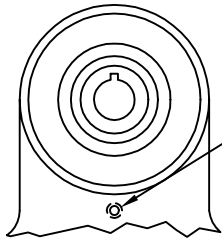
.015/.025
(THIS IS NOT THE
READING ON THE
DIAL)

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

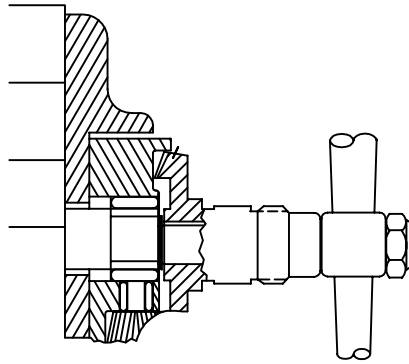
TIGHTEN NUT.

STEP 2
SHIMMING BEVEL
GEAR

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



LOOSEN SETSCREW

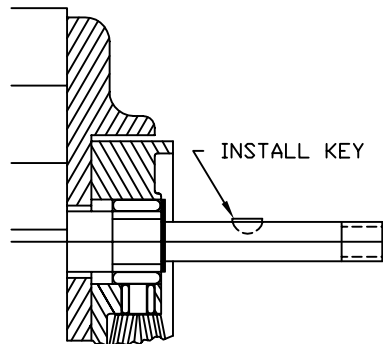


WITH POWER FEED IN
NEUTRAL POSITION, TURN
HANDCRANK. IF EXCESSIVE
GEAR NOISE OR BINDING
OCCURS, SHIMS NEED TO BE
ADDED. WHEN ADDING SHIMS,
REPEAT STEPS 1 AND 2.

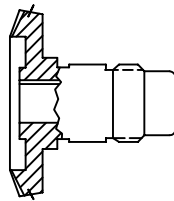


CONTROL HANDLE @
NEUTRAL POSITION

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.

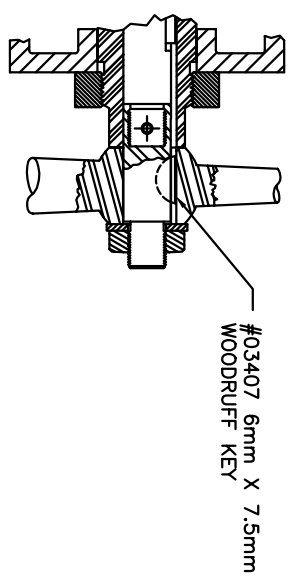
SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

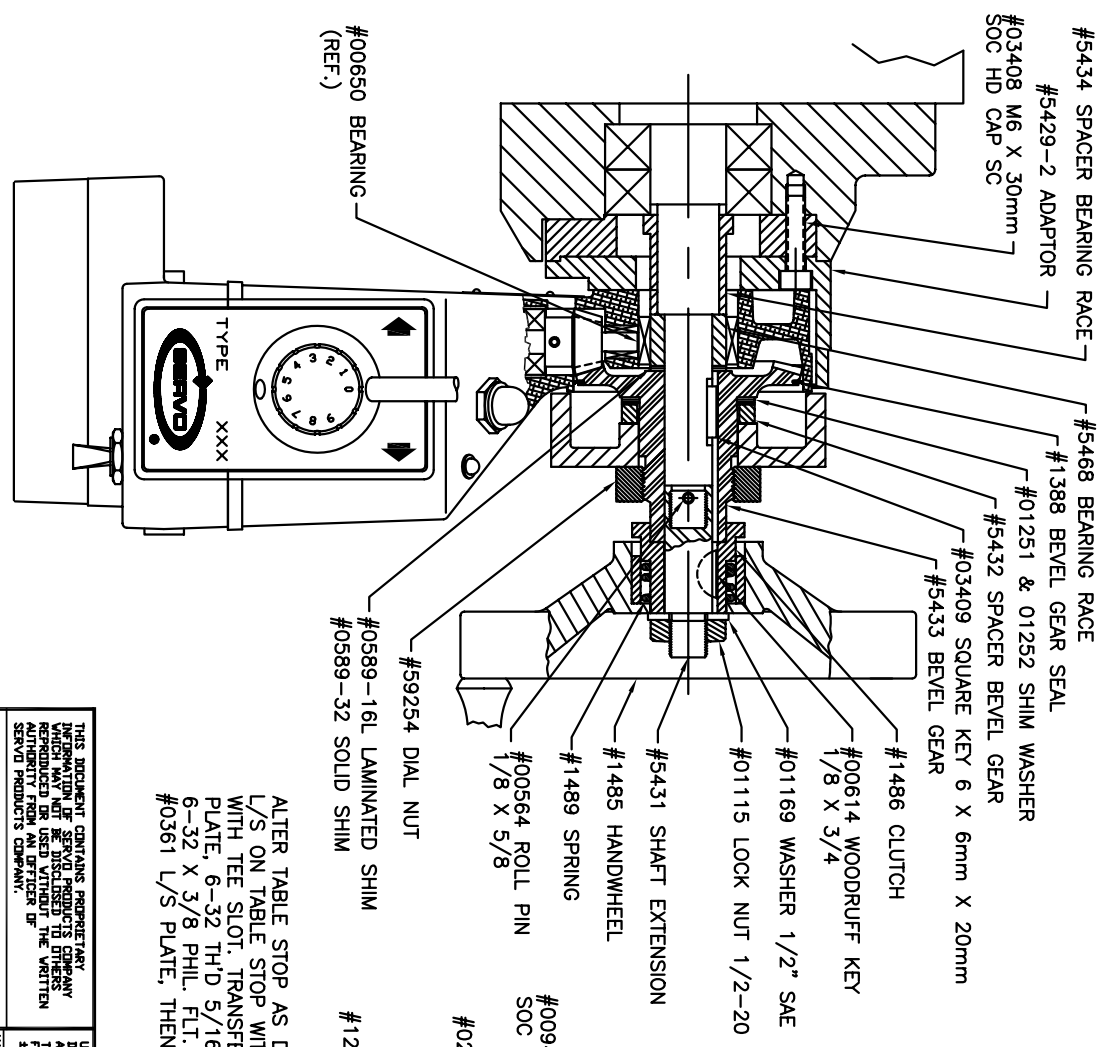
NA-5444 C

STEP 4
LUBRICATION

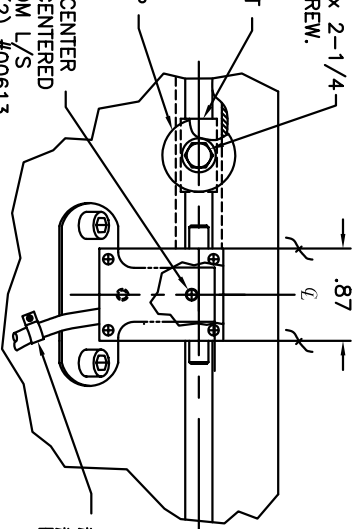
REVISION		DATE	DRAWN	CHECKED
ECD	LTR			
DESCRIPTION				



IF KONDA SM2 OR FV300 LEPAC MILL SUPPLIED WITHOUT M-620 SAFETY HANDLE, USE 6mm X 7.5mm WOODRUFF KEY AND BALANCED CRANK HANDLE.



ALTER TABLE STOP AS DIMENSIONED. CENTER L/S ON TABLE STOP WITH PLUNGER CENTERED WITH TEE SLOT. TRANSFER HOLES FROM L/S PLATE, 6-32 THD 5/16 DEEP. USE (2) #00613 6-32 X 3/8 PHIL. FLT. HD. SC. TO FASTEN #0361 L/S PLATE, THEN INSTALL THE L/S BOX.



LIMIT SWITCH INSTALLATION

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

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 SIMULATED PER ANSI Y46M-1982

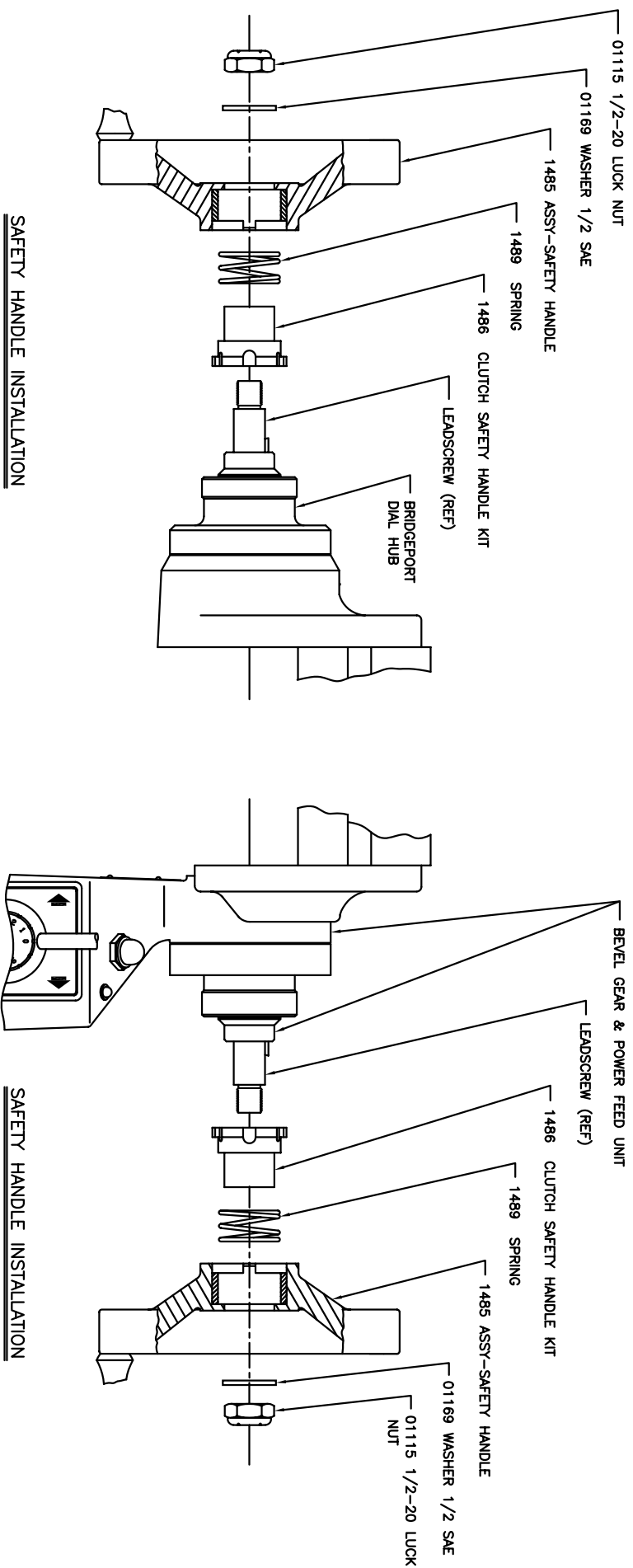
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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & TOLERANCES ARE:	FINISH	DID NOT SCALE DRAWING	APPLICATION
FRACTIONS: DECIMALS: ANGLES: ± 1/64 ± .005 ± .015	NOTED		
MATERIAL	NONE		
NEAT ASSY			

CONTRACT NO.	APPROVALS	DATE	SCALE
	M.W.	1/2/02	5/8

SERVO PRODUCTS COMPANY
 34940 LAKELAND BLVD., EASTLAKE, OH 44095
INSTALLATION DRAWING
TABLE FEED 3900
KONDA SM1
 SIZE CODE IDENT. NO. DRAWING NO. REV.
 B 0800-80112 NB-5513 A
 SCALE 5/8 SHEET DF

REVISION		DATE	DRAWN	CHECKED
ECD	LTR			
DESCRIPTION				



SAFETY HANDLE INSTALLATION
 TYPICAL FOR EITHER END OF
 TABLE WITHOUT POWER FEED

SAFETY HANDLE INSTALLATION
 WITH SERVO POWER FEED RIGHT
 END OF MILL TABLE ONLY

NOTE: BRIDGEPORT MILL SHOWN.

UNLESS OTHERWISE SPECIFIED,
 DIMENSIONS ARE IN INCHES &
 DECIMALS THEREOF. ANGLES
 ARE IN DEGREES. TOLERANCES ARE
 FRACTIONS. DECIMALS ARE
 ± 1/64". ANGLES ARE
 ± 1/2°.

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CONTRACT NO.	APPROVALS	DATE
	M. WU	12/28/01

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**SAFETY HANDLE, "SH" KIT
 INSTALLATION DRAWING
 MODEL 620**

SIZE: B
 CODE IDENT NO.: 0800-80086
 DRAWING NO.: NB-1481

SCALE: 1/2
 SHEET: DF

UNLESS OTHERWISE SPECIFIED,
 DIMENSIONS ARE IN INCHES &
 DECIMALS THEREOF. ANGLES
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