

POWER FEED INSTALLATION

Model M-5600 Table Feed

Johnford MV54



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-6721	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) soft hammer
 - b) 3/4" socket wrench
 - c) set of inch hex wrenches
 - d) grease
 - e) 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:* Remove the four cap screws holding the bearing housing in place.
- Step 5:* Using a soft hammer, tap the bearing housing off. Clean the end surface of the table.

POWER FEED INSTALLATION

- Step 1:* With the table in the extreme left-hand position, install the adaptor #0239 with the four cap screws. (On some mills the drive pin holes do not line up with the adaptor. Remove pins. The four cap screws will suffice.)
- Step 2:* Slide the 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 (2) 1/4-20 x 1.0" 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.

DIAL AND HANDCRANK 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 replace key if removed, dial and dial locking nut. Slide handle in place and tighten with locking nut.

LIMIT SWITCH INSTALLATION

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

Step 2: Remove two cap screws holding the T-shaped table stop. Place limit switch spacers into the tee stop and install the limit switch using 3/8-16 x 1-1/4" cap screws.

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

➔ **NOTE** For proper electrical operation the limit switch should be engaged .40 inch before the mechanical stop to allow for coasting of the table. The T-stop is often not symmetrical and may need to be ground for proper operation.

Step 4: Put the cable clamp on the cable and secure to 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.

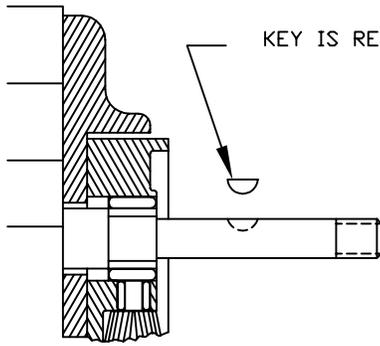
Do not operate without proper clearance!

Prevent contact during fast traverses.

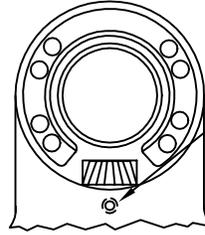
SERVO PRODUCTS COMPANY

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.

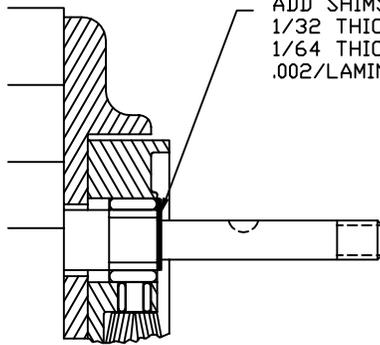


KEY IS REMOVED DURING SHIMMING

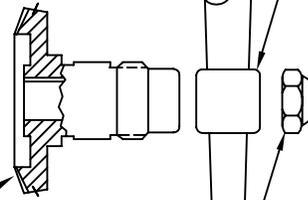


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1
PREPARATION



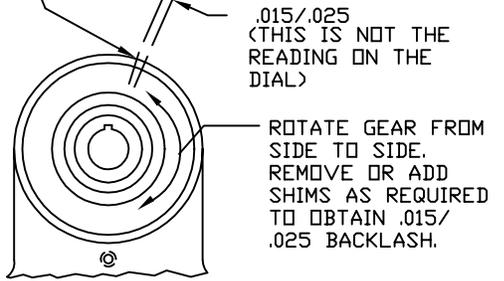
ADD SHIMS PROVIDED
1/32 THICK ARE SOLID
1/64 THICK ARE LAMINATED
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



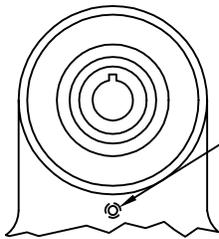
.015/.025
(THIS IS NOT THE READING ON THE DIAL)

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

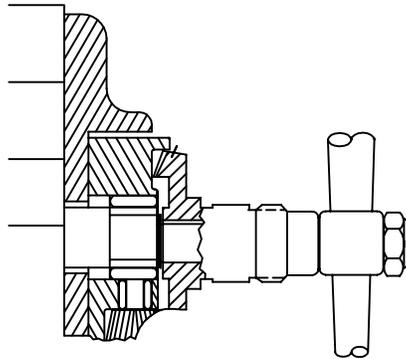
TIGHTEN NUT.

STEP 2
SHIMMING BEVEL GEAR

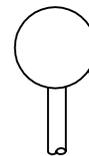
CAUTION: IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

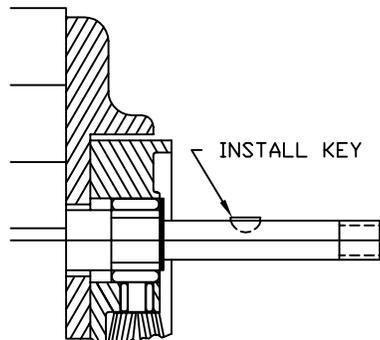


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.

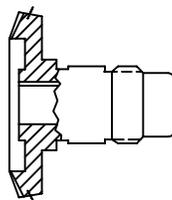


CONTROL HANDLE @ NEUTRAL POSITION

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)

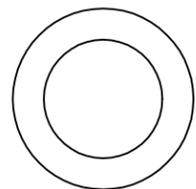
PICTURES IN THIS DRAWING ARE FOR REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

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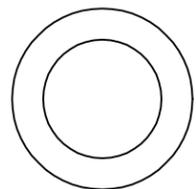
BEVEL GEAR INSTALLATION

NA-5444 C

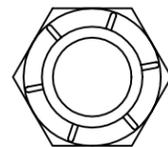
STEP 4
LUBRICATION



0589-32 (2)
SHIM WASHER
SOLID BRASS



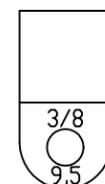
0589-16L (2)
SHIM WASHER
LAMINATED BRASS



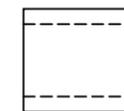
01115 (1)
1/2-20
LOCK NUT



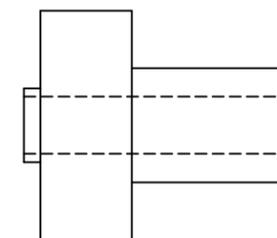
00579 (1)
CLAMP 70



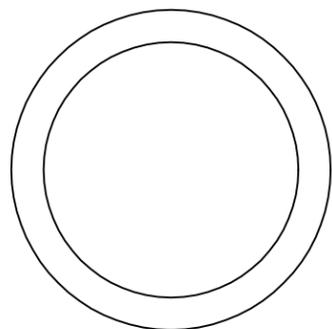
01050 (1)
CLAMP FOR
L/S CORD



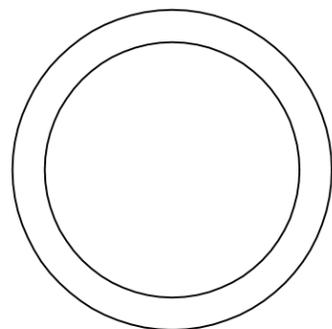
0271 (2)
L/S SPACER



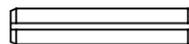
0251 (2)
LIMIT STOP



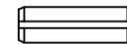
001251 (5)
WASHER
.005 X 1.395 X 1.748
BRASS



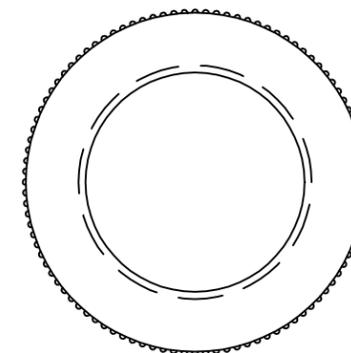
01252 (2)
WASHER
.030 X 1.395 X 1.748
PLASTIC



00595 (2)
ROLL PIN
3/16 X 1.0



00596 (2)
ROLL PIN
3/16 X 5/8
(ALREADY INSTALLED
IN 0239-4 ADAPTOR)



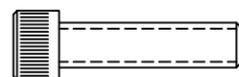
2255 (1)
DIAL NUT



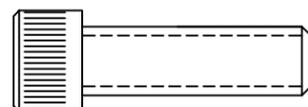
0247 (2)
STOP NUT



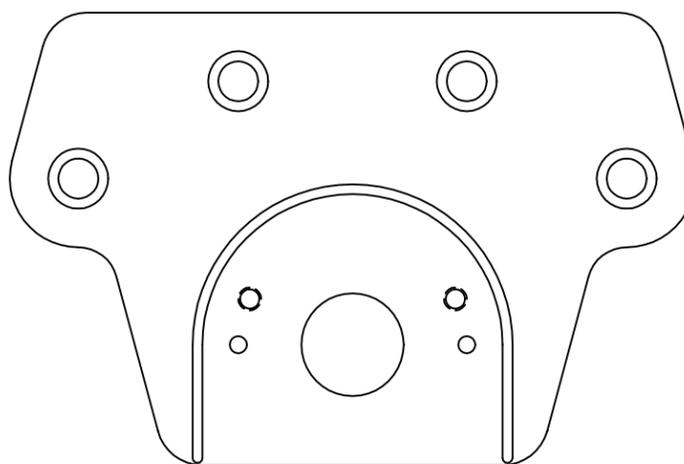
0246 (1)
BEARING RACE



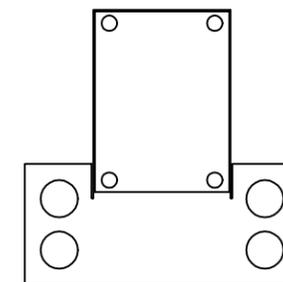
00586 (2)
1/4-20 X 1
SOC. HD. CAP. SC.



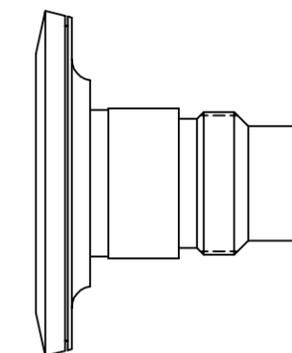
00585 (2)
3/8-16 x 1-1/4
SOC. HD. CAP. SC.



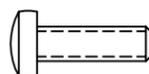
0239-4 (1)
ADAPTOR
1/2 SCALE



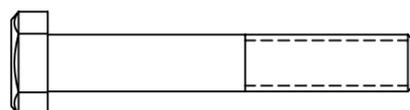
3199 (1) / 0266 (1)
BRACKET L/S / GASKET L/S
1/2 SCALE



5488 (1)
BEVEL GEAR
1/2 SCALE



00688 (1)
10-32 X 5/8
PHIL. PAN HD. SC.



00689 (2)
5/16-24 X 2
HEX. HD. CAP. SC.