POWER FEED INSTALLATION  
Model M-5051 Cross Feed  
Acra 9x45

REFERENCE DRAWINGS ENCLOSED
NA-5444  Bevel Gear Installation  
NB-6319  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, handle, dial assembly, and key from the lead screw.
Step 2: Slide the bearing race and the adaptor onto the lead screw.
Step 3: Using the adaptor as a template, spot 4 holes. Remove the bearing race and the adaptor. Drill and tap 1/4-20 through four places.
Step 4: Screw the shaft extension onto the lead screw and tighten. Using the hole provided as a pilot, drill 1/8 diameter through and pin the shaft extension in place using the 1/8 x 5/8 roll pin. File smooth.

POWER FEED INSTALLATION
Step 1: Slide the spacer, bearing race, and adaptor onto the lead screw and secure using 1/4-20 x 1" long socket head cap screws.
Step 2: Slide the power feed over the bearing race and secure to the adaptor using two 1/4-20 x 1" long 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. Four washers are provided for this, two solid and two laminated. Shim as required.
Step 2: After proper shimming of the bevel gear and the dial, install the woodruff key and handcrank. Tighten with the 1/2-20 locking nut.
LIMIT SWITCH INSTALLATION

Step 1: See limit switch installation on drawing NB-6319.

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.
STEP 1
PREPARATION

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

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.

0.015/0.025 (THIS IS NOT THE READING ON THE DIAL)

ROTATE GEAR FROM SIDE TO SIDE. REMOVE OR ADD SHIMS AS REQUIRED TO OBTAIN 0.015/.025 BACKLASH.

PUSH BEVEL GEAR AGAINST SHIMS.

TIGHTEN NUT.

STEP 2
SHIMMING BEVEL GEAR

CAUTION: IF BACKLASH IS NOT PROPERLY SET BEFORE TURNG 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.

STEP 3
DOUBLE CHECK OF SHIMMING

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.

STEP 4
LUBRICATION

INSTALL KEY

SEAL

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BEVEL GEAR INSTALLATION

NA-5444 C
WITH CROSS SLIDE:
RILLS SO THAT IT IS PARALLEL
2 BOLT A LINE UP OF PIECES
OF
ON LEFT SIDE OF KNEE.
LIMIT STOP MAY BE MOUNTED.
#01082 3/8-16 HEX NUT blk.
#1372 Stop Ring.
#1366 Stop Stud.
#10105 4-40 x 1.5 Bull. Screw.
017 Cover Limit Switch.
10122 Broken Limit Switch.
ON SAME CENTER LINE.
LIMIT SWITCH RED & STOP
SCC HD CAP SC.
#00670 5/16-18 x 3/4".
#00641 Woodruff Key.
#01854 Roll Pin.
#00564 1/8 X 5/8".
#5556 Shaft.
#6934-3 Roll Rail.
(2 pieces)
#7743 Spacer.
#0343 Bearing Race.
#0589-35 SOLID SHIM.
#0589-16L LAMINATED SHIM.
#05676 1/4-20 X 5/8".
#11156 1/2-20.
LOC KOUNT.
#09564 Roll Pin.
(2 pieces)
ROLL BAR LIMIT SWITCH.
#6071-10 Mount Traxx.
#9564 Tapered (2 pieces)
#00711 Adapter.
#6071 Bevel Gear.
#6075 Shim Washer Dial.
#6078 Bevel Gear Seal.