POWER FEED INSTALLATION
Model M-9501 Cross Feed
Willis Micro Cut

REFERENCE DRAWINGS ENCLOSED
NA-5444  Bevel Gear Installation
NB-57120  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, crank, dial assembly, and key from the lead screw.
Step 2: Remove the bearing retainer from the bearing housing.

POWER FEED INSTALLATION

Step 1: Screw the shaft extension onto the lead screw.
Step 2: Using the hole provided as a pilot, drill 1/8 diameter hole and pin the extension in place using the 1/8 x 5/8 roll pin. File smooth.
Step 3: Install the adaptor using three 1/4-20 x 1-1/4” socket head cap screws.
Step 4: Slide the spacers #2253 and #0477 onto the lead screw.
Step 5: Slide the bearing race onto the lead screw.
Step 6: Slide the power feed over the bearing race. Secure 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: Put on the dial locking nut.
Step 3: Install the square key in the shaft extension. Cut length to fit.
Step 4: Install the crank and secure using the locking nut.
LIMIT SWITCH INSTALLATION

Step 1: See limit switch installation on drawing NB-57120.

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.
KEY IS REMOVED DURING SHIMMING

STEP 1
PREPARATION

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

INSTALL HANDCRANK.

STEP 2
SHIMMING BEVEL
GEAR

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/
0.025 BACKLASH.

PUSH BEVEL GEAR
AGAINST SHIMS.

TIGHTEN NUT.

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

LOosen SETSCREW

STEP 3
DOUBLE CHECK OF SHIMMING

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

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
NOTES:

1. Review ALL Installation Instructions and Power Feed Operation BEFORE turning on Servo Power Feed.