

Northfield Foundry & Machine Co., Inc.

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MODEL 240 FACER-PLANER "TECH TIPS" #2

March 1997

TO ALL NORTHFIELD #240 FACER-PLANER OPERATORS:

Here are some more helpful hints and changes that have come up since the last Tech Tips sent in 1993. If you don't have a copy of Tech Tips #1, contact us and we will send you a copy.

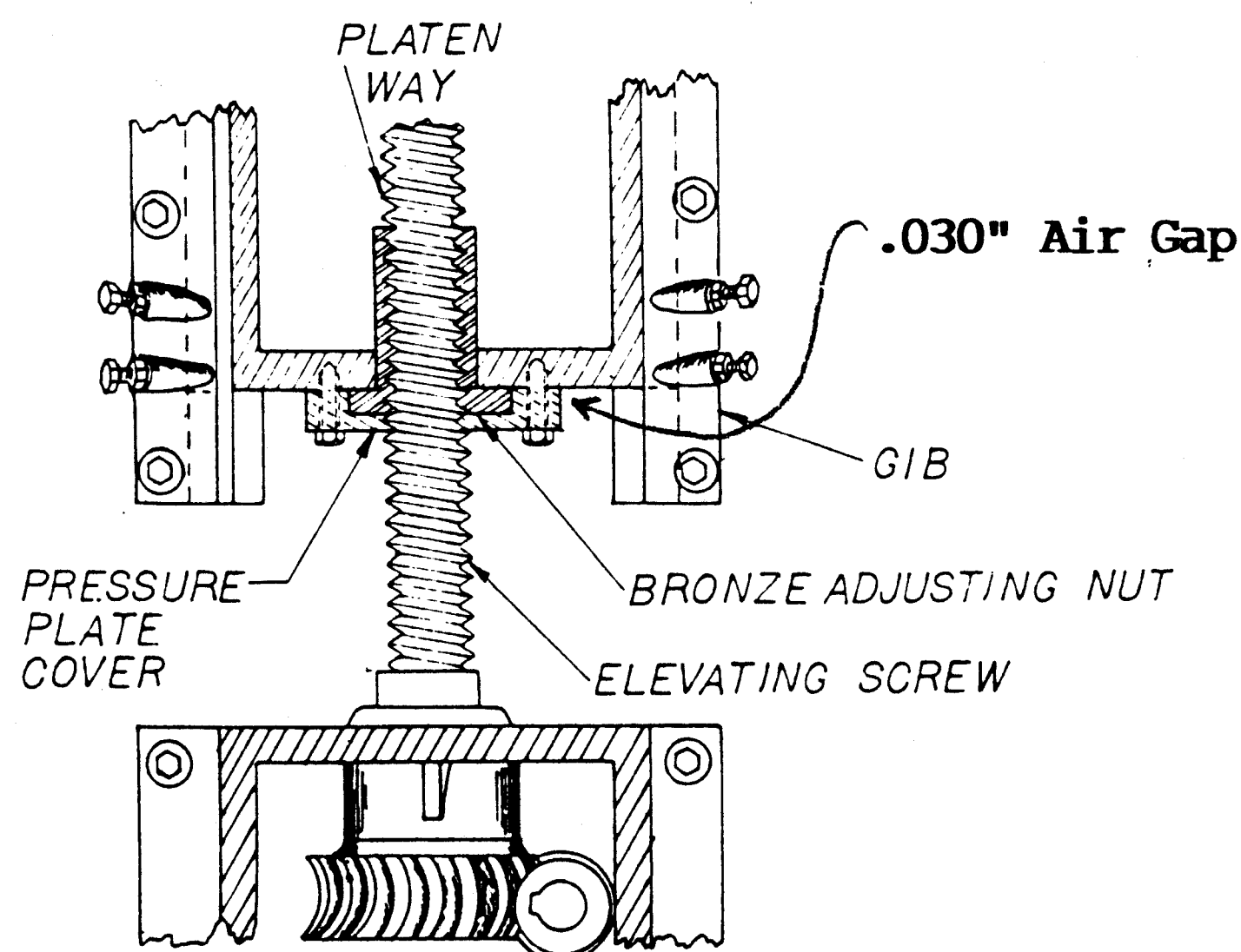
BRASS ELEVATING NUT

If you have been replacing Part No. 240-354, Brass Elevating Nut, frequently, the problem may be with the 240-355 Pressure Plate Covers.

The pressure plate covers are the steel cups that clamp the brass elevating nuts to the bottoms of the cast-iron leg columns after the upper platen has been leveled.

When the steel cups are drawn up tight against the brass nut flange, there should be at least a .030" (1/32") air gap between the steel cup and the leg column. If the cup draws up tight to the bottom of the leg, the brass nut can spin inside the steel cup, losing all your platen alignments. This eventually results in so much pressure building up that the threads tear out of the brass nut.

To correct this, you can check for air gap with a feeler gauge, and the cups that are not clamping properly can be taken to a lathe to machine the top of the cup to provide proper air gap clearance.



TOP PLATEN ALIGNMENT
PLATEN ELEVATING SCREW and NUT

REMOVING OVAL POINT CUTTERBIT SET SCREWS

If you have frozen or cracked 3/8-16 oval point set screws in your cutterheads, try this procedure to remove them:

Take a 6" section of fine-toothed hacksaw blade and wrap the end with masking tape to form a handle. Use this small saw to cut the oval point set screw between the cutterhead body and the cutterbit.

When you cut through the set screw, the cutterbit can be removed, which relieves the pressure on the screw threads. Penetrating oil will now be more effective.

If you still can't turn the screw OUT or IN, put a 1/4" drill bit in a hand drill, block the head so it can't rotate with some wood wedges, and attempt to drill the screw out. Normally, what happens is that the drill bit catches, and the sawed-off screw spins free into the cutterbit slot.

UNDER NO CIRCUMSTANCES SHOULD YOU USE A CUTTING TORCH TO ATTEMPT TO BLOW THE SCREW OUT OF THE THREADED HOLE! We have never seen it work yet. All that happens is that you wind up buying a new cutterhead.

If you have a screw that is really stuck, and you can't get it out, consider sending the head back to Northfield, where we have an EDM (Electro-Discharge Machine) that can disintegrate the stuck screw without harming the screw threads. Also, re-tap the hole before putting a new screw in place.

RE-TAPPING CUTTERHEAD SET SCREW HOLES

To minimize oval point set screws becoming stuck and to get more accurate torque readings when installing new cutterbits, we recommend that the 3/8-16 threaded holes in the cutterhead be cleaned out with a sharp tap when new cutterbits are installed.

The old set screws should be removed and left to soak in a can of lacquer thinner to remove pitch and any other build-up from normal operation. When clean, inspect each of them and replace any that are cracked in the Allen wrench hole or show other damage.

USE ONLY OVAL POINT SET SCREWS. Use of any other type of point will not allow the cutterbit to self-center and will allow the bit to loosen during use.

We use UNBRAKO screws made in Ireland. These are the only ones we have found that will take the 25 ft/lb installation torque without splitting.

NOTE: Penetrating oil applied the night before changing bits can help tremendously in breaking the oval point set screws loose. We highly recommend it.

“HYDROSLIDE” TABLE COATING

We have found a water-based table coating that works better and lasts much longer than paste wax, silicone or some of the aerosol table dressings that have been used for years.

HYDROSLIDE is an approach finish for bowling alleys. It is non-flammable, low odor, extremely durable and applies easily.

Use thinner to strip off all the old wax and other build-up from the bed of the planer. Use a foam brush to apply Hydroslide to the bed and let dry overnight. There is no need to buff it, the wood running over it will polish it up. You may want to apply a second coat if you see areas that did not cover completely.

HYDROSLIDE fills all the small voids and provides a real anti-friction bed surface that really reduces bed heating and stock sticking at elevated feed rates.

We have HYDROSLIDE available in quarts for \$60.00. Try to avoid ordering it in the winter months, as it can freeze.

CUTTERHEAD VIBRATION

If you are experiencing vibration in either of the cutterheads and you are sure it's not bearings or missing bits, check to see if the bores in the head pulleys have been pounded out. When this happens the pulleys run out of round, and at 5000 rpm, can cause terrific vibration. If caught early, the cutterhead normally sustains no damage and a new pulley and key will correct the problem.

LINE-BORING LOWER CUTTERHEAD YOKE

We now have the tooling to provide 2 day turn-around service when line-boring your lower head yoke becomes necessary.

If you have spun bearings, or had other damage done to the yoke bores, we can mill the yoke bearing caps and re-bore the head yoke to new machines tolerances.

Contact the factory in Northfield to schedule this procedure.

HEAVIER UPPER ROLL SPRING

We now have heavier upper roller springs that improve feeding on the outfeed end of the machine.

UPPER OUTFEED ROLL

We have found that raising the upper outfeed roll to .002" - .003" below the cutting circle reduces leading and trailing edge dubbing when running wide panels. You may have to run the heavier upper roll springs to do this.

ERRORS IN PARTS MANUAL

Carpet Bars - there are 66 pair of Carpet Bars, not 69

Carpet Pins & Springs - There are 1320 each, pins & springs, not 1380.

Carpet Pins no longer have snap rings and washers. They have an annular ring turned on to them.

Carpet Bar Spacers - there are 660 spacers, not 690

Carpet Bar Bolts & Nuts - There are 660 each bolts & nuts, not 690.

Carpet Chains are 66 pitches long, including a master link, not 69 pitches.

Carpet chains are not re-buildable. They are riveted together at the factory, making the rollers non-replaceable.

The following phone numbers can be used to reach Northfield Technical Personnel from 7:00 a.m. to 4:30 p.m. , Monday through Friday, CST.

Phone: (507) 645-5641

24 hour FAX: (507) 645-4005

UPS Parts Shipments leave our facility at approximately 3:30 p.m. CST, Mon. - Fri.