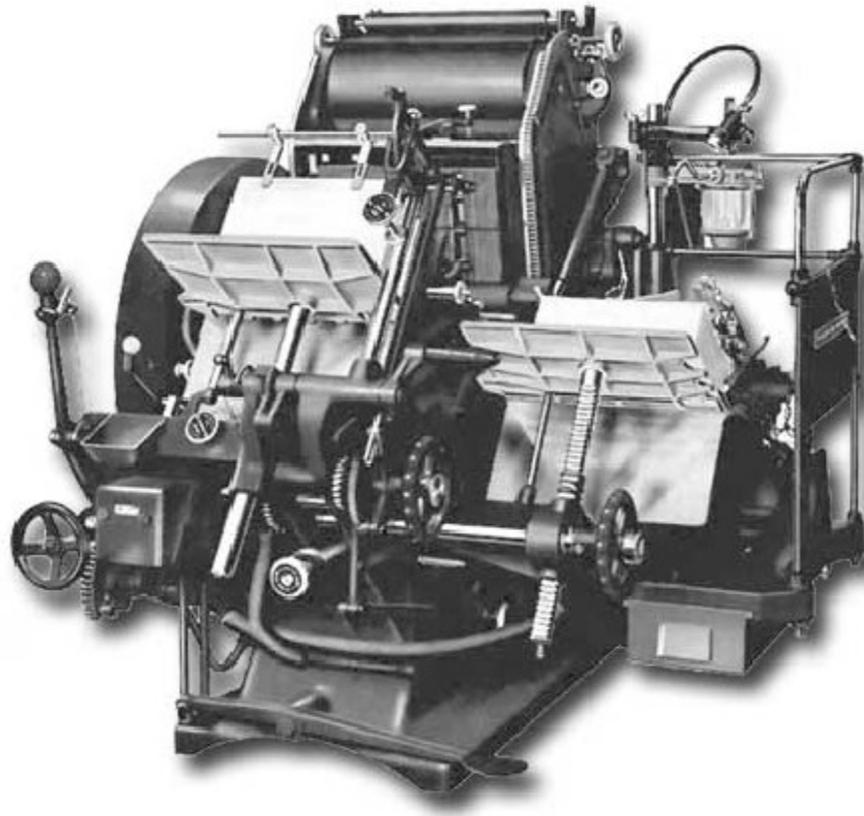


**INSTALLATION AND MAINTENANCE OF THE  
"THOMPSON-BRITISH" AUTOMATIC PLATEN**





## Installation and Maintenance of The "Thompson-British" Auto Platen

**Lifting Bolt.**

The machine is usually shipped with a 1 in. Whitworth Eye Bolt screwed into the top of the Body near the chase clip for lifting the fully erected machine.

Tackle used should be capable of handling 1 1/2 tons.

The eye bolt must be removed and the hole filled in with the hexagon screw provided.

**Motor.**

A 1 1/2 H.P variable speed Motor running at 1400/1500 r.p.m with a 7 1/4 in. dia pulley should be provided and fitted to the Swivelling Motor Bracket, which can be adjusted to tighten the 1 3/4 in. wide, preferably endless, belt and locked.

Note the direction of rotation (towards the operator) as indicated by the arrow.

**Direction of rotation.**

The Flywheel must not run the wrong way. This is important even when turning the machine by hand.

**Oiling.**

The main parts are oiled by chamois leather Wicks which should be pushed into the oil tubes by means of the attached pins, with the loose ends lying in contact with the oil in the well. It should be noted that oil will feed, even when the machine is not running and it is better therefore to oil before a long run and only sparingly during short runs. The toggle mechanism is oiled through the back cover plate.

**Oil the Slides.**

Do not forget to drop a little oil on the slides for feed and delivery and to oil the top Reciprocating Dissor Roller.

**Grease the Ball Bearings.**

Grease is required in three places very occasionally, for the delivery by means of the Stauffer lubricator behind the main Delivery Bracket; for the Flywheel by removing the small set screw in the boss and for the Ball bearing at the end of the Flywheel Shaft.

**Delivery Oil Sump.**

The delivery runs in an oil bath and about one pint of fairly heavy oil should be poured in through the filling aperture after removing the Plug and the level should be maintained. A drain hole fitted with a plug screw will be found underneath. There is also a draining hole to the main body below the Shear Collar at the back. It is not intended to maintain an oil bath in the well of the Body and any casual accumulation should be drained off occasionally.

**Clutch Adjustment.**

From time to time the Clutch will require slight adjustment. It is convenient to hold the locking nut with a spanner held in one hand and to adjust the screw with a screw-driver held in the other hand, screwing clockwise to tighten. Adjustment may be made from either or both sides of the clutch and an exact balance between the two adjustments is not required. It is important that when released the Flywheel should run **absolutely freely**.

**Diameter of Composition Rollers**

The two Inking Rollers working in the Saddles should be cast 2 in. diameter, with the Compo 15 1/2 in. long on the face. The Vibrator Roller and the Dissor Roller should be cast 1 3/4 in. diameter and 15 in. long on the face. Use a good quality Composition for high speed running on the Inkers and vibrator and Rubber on Dissor Roller.

**Setting the Rollers**

When fitting newly cast rollers or after the machine has been standing, special care should be taken to check the roller contacts. The Vibrator Roller must make even contact throughout its length with the reciprocating Dissor Roller and may be set by loosening the split boss of the R.H. Vibrator Crank. Similarly the whole duct may be swivelled by loosening the two hexagon bolting down screws and set to engage the Vibrator Roller evenly. The movement of the Vibrator is limited by two set screws placed at right angles in the cross stay and these, while not impeding a full contact between the rollers should be set to prevent undue pressure. The movement is actuated by a friction clutch and failure to operate correctly may be due to excessive oil on the clutch faces (though this clutch must not operate quite dry) or alternatively the spring pressure may be inadequate and may be increased by loosening the screw and forcing the pressure Collar nearer to the clutch.

**Vibrator Clutch**

**Adjust the bearers.**

With the tool kit, is supplied a Type High Roller with handle and this should be used between the faces of the platen and the Inking Rollers to check the setting of the Roller bearers. To alter, release

the two hexagon clamping screws on each bearer and adjust with the two screws projecting at the back. See that these screws are pushed back against their supports before locking in position.

**Fitting the Rider Roller.**

The reciprocating Inking Rider will be found of great service in preventing repeats and is fitted between the two Inking Rollers. It should be noted that the Inking Roller itself together with the L.H. End Plate, the Bobbin and the Rider Lever Spindle and Cap are kept as a complete assembly and removed or fitted together. This is done by removing the R.H. End Plate and its retaining nut from the R.H. Roller Saddle and the retaining nut from the projecting stud on the L.H. Roller Saddle. It will then be possible to slide the Rider Lever Spindle in or out of the Rider Lever mounted on the Roller Arm.

The R.H. and L.H. End Plates fit loosely on the studs projecting from the Roller Saddles and before finally tightening the lock nuts the reciprocating Inking Roller Rider must be pressed into even contact with both Inking Rollers throughout their length.

**Geared Inking.**

The Inking Rollers are best fitted when the Roller Arms are near the top when the stretch on the Roller Arm Springs is at its least. The sprockets on the R.H. Runners must engage with the chain and drive the Inking Rollers through a clutch which should be kept free from oil. When near the top a Clutch Plate on the Roller Bearer engages a flange on the Runner to separate the clutch faces and allow the Inking Rollers to run freely on the Ink Drum

**Cleaning the Ink Duct**

For the purpose of cleaning up the Ink Dcut, the Ink Knife together with the Knife Holder casting, Ink Knife Screws and Lid can be removed in one piece by loosening the hexagon finger Retaining Screws under the Duct Support Bracket from their locating recesses and sliding through the slots provided. The setting of the Ink Knife is thus maintained.

**Swivel Union to Suction Tube**

The Swivel Union mounted on the Auto Stop Plunger Bracket contains an adjustable cone which should be maintained as a free-moving air-tight joint. To tighten, hold the outer hexagon with a spanner and screw the inner lock nut against the Swivel Union afterwards locking the whole back against the Bracket. A little oil on the cone is advisable.

**Auto Stop.**

The Auto Stop is operated by the suction created when a sheet is lifted correctly (or when the tube is blocked by the Suction Plunger) drawing the air chamber Plunger inwards to miss the Pin on the revolving Auto Stop Crank. Failure may be due to leakage in the tubes or Swivel Union.

**Adjustment is provided.**

The spring on the Plunger is adjustable by means of the screw-driver Slot inside the locking nut in front of the air chamber. If the Plunger sucks back too readily, screw inwards. If it fails to draw back screw outwards.

**INSTRUCTIONS FOR OPERATING THE**  
**"THOMPSON-BRITISH" AUTOMATIC PLATEN**

## Instructions for operating the "Thompson-British" Auto Platen.

### (I) FIX. NEW BLANKET.

**Remove Blanket Rods  
and Register Bar Slides.**

Slide the bottom brass Register Bar Slides off the bar. Remove the top and bottom Blanket Rods, also the right hand Blanket Plate.

**Top Sheets 16 1/4 x  
11 1/2 in. L.P. 18 lb.  
Retain with bottom  
Blanket Rods.**

Place two sheets 16 1/4 x 11 1/2 in. approx. (L.P. 18 lb.) on the Platen so as to overhang top and bottom and on the right hand side, but level with the Platen edge on the left. Replace the bottom Blanket Rod, pushing it well down to clip the sheets firmly.

**Packing Sheets 15 1/2 x  
10 in. L.P. 18 lb.**

Between the top sheets and the Platen face, insert further sheets 15 1/2 x 10 in. For light formes about 4 sheets and for heavy formes 7 or 8 sheets (L.P.) 18 lb.).

**Tympan Thickness 1/32 in.  
Extend to Left Hand Side.**

The complete tympan and packing should not as a rule exceed 1/32 in. It is important to maintain the full thickness of the tympan to the left hand edge of the Platen in order to allow the type high rest on the chase to equalize the pressure.

**Smooth over and secure.**

Pull the top sheets tightly over the Platen and press the top Blanket Rod into position, then smoothing across the Platen from left to

**Position of Blanket Plate.**

right, insert the right hand Blanket Plate, which must be fitted with the slots upwards and the pegs located on either side of the Spring Clips.

**Blanket Rods must not project.**

See that the top and bottom Blanket Rods do not project either into the path of the Sucker Slide or into the recess left to accommodate the right hand Blanket Plate. The Blanket must be flat and tight.

**Trim Edges.**

Remove all superfluous edges of paper round the Platen.

## **(2) RUN UP THE INK**

**Fit Rollers and check Contacts.**

Place all rollers in position. Check the line up of the Vibrator Roller and Duct; check the Roller Bearers to the Type High Roller, and if required, fit the Inking Roller Rider to the Inking Rollers.

**Roller Contacts to be light and even.**

All roller contacts should be even throughout the whole length and not too heavy.  
Rollers should not be left in stationary contact for any length of time or flats will form.

**Fill the Duct and set the Ink Knife.**

Fill the duct and set the Ink Knife, which is very sensitive, to give the desired flow of ink.

**Start the Machine.**

First see that the Starting Handle is in the "off" position (to the left, away from the machine) then start the motor. Engage the Clutch by lifting the Catch to release the lock and moving the Handle gradually from left to right.

**Stop the Suction and Run up the Ink.**

Push the Suction Plunger Lever to the left to prevent the machine continually knocking off (or feeding sheets) and run up the ink.

### (3) POSITION THE JOB

**Imposition of Type in the Chase.**

When imposing the type in the Chase, allow between the inside of Chase and the type, approximately 6 pt. less at the bottom and 12 pt. less at the right hand side than the margin required on the printed sheet. This is due to the sheet extending beyond the Platen face in the printing position and the exact amount varies slightly according to the setting of the lays.

**Avoid Projecting Leads.**

Do not leave projecting leads along the bottom edge which might foul the Register Bar Slide Pins.

**Insert the Chase.**

When inserting the Chase into the machine with the rollers in position see that these are right at the bottom to prevent rules from cutting the composition rollers.

**Dead Register Adjustment.**

Every sheet is registered on the "Thompson-British." Fine adjustment is provided without disturbing the forme. The Register Bar and Slides may be moved up or down or tilted by means of the hexagon Lock Nuts at either side under the Platen. The Side Lay is positioned by the small projecting screw and lock nut.

**Register Bar Slides.**

The Register Bar Slides are provided with Pins which can be used with the loop or the point upwards. These Pins must not foul the type matter and should be lowered until a safe working height can be determined from an actual impression.

**Thin Curly Papers.**

Sheet Guides are provided to prevent the bottom edge of the sheets curling under the Register Bar Slides. These are clipped on to the square Sheet Guide bar which must be twisted to bring the Sheet Guides exactly level with the Platen face. Allow for the sideways movement of the Register Bar Slides.

**Check and Reduce Impression.**

See that the impression is "off" (with the Check Handle to the front of the machine) and reduce impression before printing, by means of the Adjustment Sleeve Handwheel, under the Front Bracket. (Lock with the Adjustment Locking Wheel.)

**Level the Impression.**

Should the impression be light at the top, take out packing sheets and increase impression. If light at the bottom, add packing sheets and reduce impression.

**Make Ready.**

When adding a new top sheet over the make ready, do not forget to remove a packing sheet from underneath. It may be found that the make ready sheet is best at the bottom with all the packing sheets on top of it.

**(4) SET THE FEEDER.**

**Adjust the Hopper to the Sheet Size.**

Place the stock to be printed on the Feed Table, against the right hand Upright Bracket Plate and bring the left hand Feed Pile Guide and Sheet Steadiers to it.

**Turn off Unwanted Suckers.**

Turn the machine to bring the Suckers over the stock and twist to the "off" position those not required.

**Tilt Suckers to Indicator.**

Set the Feed Back Plate Bracket on the left of the Feed Back Plate to tilt the Sucker Tube to the given stock according to the indicator.

**Fit Sheet Separators according to Stock.**

Fit the Sheet Separators to the holes in the Feed Back Plate. For thin paper, a long one at each corner and a short one in the centre, if required for thick paper and card, a short one at each corner only.

**Rubber Suckers.**

For heavy card or uneven stock, the Rubber Suckers will be required and may be fitted in the recess provided on the Suckers.

**Set the Feed Blower Tube.**

Start the machine and adjust the Feed Blower Tube, behind the Feed Back Plate, which should be set higher and have a reduced volume of blowing air for thin paper, than for heavier stock.

**Adjustment of Pile Height.**

Keep the pile as low as possible. The adjustment is on the front upright Pillar, and when set, the top of the pile will remain a constant level.

**Failure of the Feeder.**

Should the Suckers fail to take a sheet or feed several together, check the following points:-

**Points to watch.**

Is the Suction Plunger Lever to the Right?  
Are all the Suckers not touching the sheet turned "off"?

**Points to watch**

Have you sufficient or too much air blowing through the sheets?  
Are the Suckers tilted correctly?  
Is the Feed Blower Tube too high or too low?  
Is the Feed Table too high or too low?  
Have you the correct Sheet Separators fitted?  
Is the filter choked?

**Arrangement of the Blower.**

**(5) DELIVERY AND INTERLEAVING.**

The Vertical Blower Pillar behind the delivery hopper, carries a Horizontal Arm, on the end of which is mounted the Blower Nozzle, through which air is directed on to the sheets during delivery to the hopper.

**Angle of Swing.**

The Horizontal Arm is arranged to swing through about 45 deg. And it should be set well forward for long sheets and further back for shorter sheets.

**Angle of Tilt.**

The Horizontal Arm is also arranged to rotate through a small angle in its housing. It should be set with the Blower Nozzle tilted upwards for long sheets and downwards for short sheets.

**Setting of Blower Nozzle Holder.**

The Holder for the Blower Nozzle is secured to the Horizontal Arm by means of a set screw. It's normal position is indicated by setting marks and it should not be necessary to vary this position.

**Setting of Blower Nozzle.**

The Blower Nozzle is clamped to the Holder by a knurled ring and if this is loosened the Nozzle will rotate. The spread of air is rather

greater along a line at right angles to the two lugs. Normally it should be set with the part marked "FRONT" facing the operator.

**Volume of Air.**

A tap placed on top of the Blower Nozzle Holder controls the volume of blowing air. Use as little as possible as an excess will cause eddies.

**Points to watch.**

It will be noted that the air blast is directed towards the loose tail end of the sheet. It is also directed slightly towards the Back Plate in order to assist the sheet to get under the Straighteners.

**Quick Fall of Delivery Table for Interleaving.**

An alternative set of gears is provided between the Feed and Delivery Tables to allow the Delivery Table to fall faster in proportion to the lift of the Feed table when interleaving and so accommodate the extra sheets. To engage these gears, pull outwards the Knurled Shaft under the Feed Bracket on the left hand side of the machine. The Delivery Table should be lowered whilst this is done.

**Foot Stop Treadle.**

While standing at the Interleaving Table position, the machine may be stopped by the Foot Stop Treadle.

**(6) SAFETY COLLAR.**

**To prevent Damage from Overloading.**

An easily replaceable Shear Collar is provided at the back of the machine, of sufficient strength to withstand all the printing pressures, but arranged to give way before overloading can damage the machine.

**Remove the Thrust Bearing Plate.**

If the Shear Collar gives way, the round Thrust Bearing Plate below the Cover Plate must be removed and a new Shear Collar fitted.

**How to Replace the Shear Collar.**

Remove all broken pieces and then replace first the Shear Punch with the reduced punch diameter facing the back of the machine, then fit the new flat Shear Collar to lie against the Shear Punch, and finally insert the Shear Die Ring and replace the Thrust Bearing Plate and lock up. The outer screws should be tightly locked but the centre screw requires only sufficient pressure to ensure that the parts are in firm contact with each other. A Gap Washer is provided to keep the centre screw from working loose.

**Do not overtighten the Centre Screw.**

#### **(7) CLEANING THE FILTER.**

**How to Remove the Filter.**

Paper dust sucked up from the pile is prevented from entering the pipes by a filter which is housed inside the Filter Cap on the end of the Sucker Tube. Disconnect the rubber tube from the Filter Cap; unscrew the Filter Cap; clean the filter and replace.

#### **(8) FRISKETS**

**Friskets must clear Register Bar Slides and Type.**

The Friskets are not generally required as the Delivery Grippers will peel the majority of jobs from the type. If used they must be kept clear of the Register Bar Slides, as well as the type matter. See they lie flat on the Platen. A Cross Frisket is provided.

