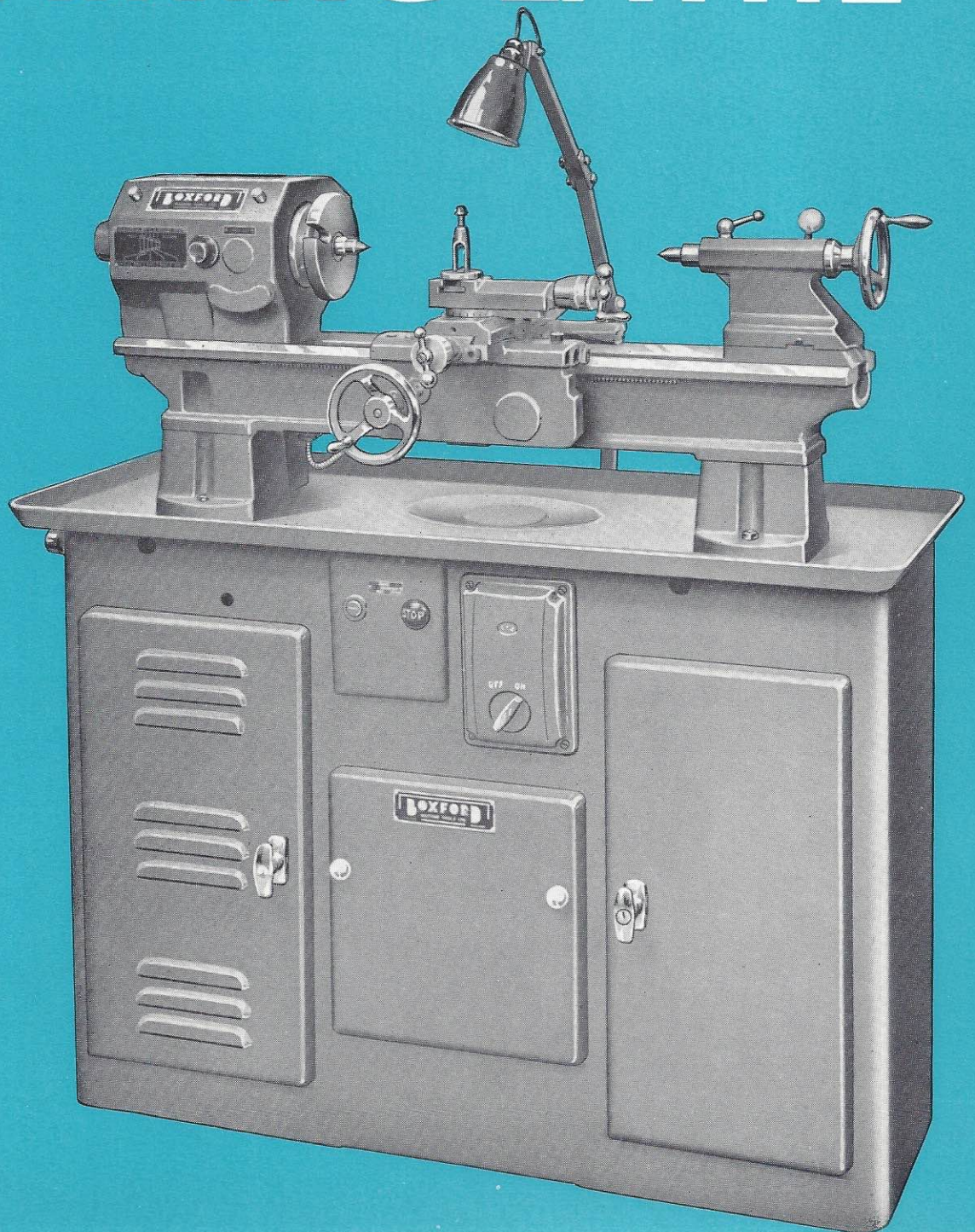
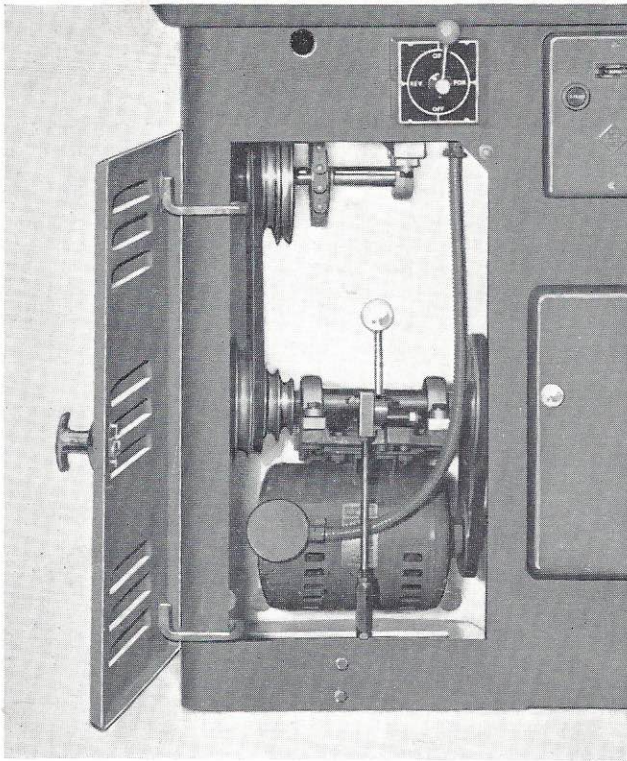


BOXFORD Model TUD

9" swing ($4\frac{1}{2}$ " centres)

TRAINING LATHE





DRIVE UNIT showing position of Reversing Switch (when fitted).

BOXFORD TRAINING LATHE

THE BOXFORD training lathe is designed especially for initial training and although it possesses many features of the more advanced range of **BOXFORD** lathes, the omission of mechanical feeds to the saddle and apron, together with the simplest of speed variation enables students to obtain confidence in the use of power tools and to perform all normal lathe functions manually.

THE BED is of substantial width, having three vee ways and one flat way. The front and rear vees ensure accurate and easy travel of the saddle, whilst the inner vee and flat ways serve as accurate location for the headstock and tailstock.

THE HEADSTOCK is totally enclosed and free from levers. It provides a range of 5 spindle speeds 210-1400 r.p.m. from the direct vee belt drive.

THE MAIN SPINDLE which is bored to pass $\frac{3}{4}$ " dia. is mounted on pre-loaded opposed Timken Taper Roller Bearings. The nose is threaded externally for the fixing of chucks, face plates, etc., and has a No. 3 morse internal taper. A spring loaded plunger is situated on the front of the headstock to lock the spindle to facilitate the removal of chucks, etc.

THE TAILSTOCK is of orthodox design and can be locked in any position on the bed with the quick action lever provided at the rear. The barrel has a No. 2 morse internal taper and is graduated for control of drilling depth, etc. It can, if desired, be locked in any position. The tailstock barrel automatically ejects centres or drills when fully withdrawn. The tailstock body can be "set over" for turning slight tapers.

THE CARRIAGE, which includes the plain apron, saddle, compound rest and toolpost, locates on the two outer vee's of the bed. They are controlled manually, the cross slide by a handle and the saddle by a handwheel. Both cross and compound rest slides have leadscrews which are fitted with ball thrust races. Dull chrome plated micrometer friction dials are fitted for easy resetting to zero.

THE CABINET BASE is of rigid sheet steel construction. It houses the motorised drive unit in a compartment below the headstock. An electric cut-out switch, which stops the motor immediately the door to this compartment is unlatched, is fitted for safety purposes. The centre compartment has a built-in tank suitable for an electric coolant pump. The right hand compartment, which can be locked, has shelves for the storage of equipment together with a rack for collets.

DRIVE UNIT is powered by a $\frac{3}{4}$ H.P. motor mounted on a hinged platform which also carries the countershaft consisting of a single drive pulley from the motor together with a 5 step pulley which drives on to a similar 5 step pulley on the intermediate shaft. The final drive from the intermediate shaft pulley to the headstock pulley is by link belting. Speed variation is by moving the drive belt on the 5 step pulleys from one step to another, which is made easy by the belt tensioning device fixed to the motor platform. All rotating shafts of the drive unit are mounted on sealed grease packed ball bearings which require no further lubrication.

A PUSH BUTTON direct on line flush mounted starter, having overload and no voltage protection, is conveniently fitted to the cabinet base. The lathe is arranged to run in the conventional forward direction, but if rotation in the reverse direction is required, a rotary reversing switch can be fitted as extra equipment at works. (See Drive Unit illustration).

LOW VOLTAGE lighting is available as well as a wide range of **BOXFORD** accessories which are designed to facilitate the best possible use of the machine.

SPECIFICATION

GENERAL

	English Machine	Metric Machine
Centre Height	4 $\frac{3}{8}$ "	117 mm.
Distance between centres	16", 22", 28"	406, 560, 710 mm.
Bed Length	36", 42", 48"	915, 1065, 1220 mm.
Swing over bed	9 $\frac{1}{2}$ "	235 mm.
Swing over saddle wings	9"	228 mm.
Swing over cross slide	5 $\frac{1}{8}$ "	130 mm.
Centre height above tool slide	1"	25 mm.
Cross slide travel	6"	150 mm.
Tool slide travel	2 $\frac{3}{8}$ "	66 mm.
Spindle speeds	210, 340, 540, 850, 1400 r.p.m.	
Spindle bored to pass (dia.)	$\frac{3}{4}$ "	20 mm.
Spindle nose diameter	1 $\frac{1}{2}$ "	38.1 mm.
Spindle nose thread (whit form)	8 T.P.I.	8 T.P.I.
Spindle internal morse taper	No. 3	No. 3
Morse taper of centres	No. 2	No. 2
Draw bar collet capacity (dia.)	$\frac{1}{2}$ "	12.5 mm.
Motor	$\frac{3}{4}$ H.P.	$\frac{3}{4}$ H.P.
Nett weight (standard machine, 36")	525 lbs.	238 kgs.
Shipping case dimensions	49" x 27" x 53"	125 x 69 x 135 cms.
Gross weight (standard machine, 36")	740 lbs.	336 kgs.

TAILSTOCK

Diameter of Barrel	1 $\frac{1}{16}$ "	27 mm.
Travel of Barrel	2 $\frac{1}{2}$ "	54 mm.
Graduations on Barrel	$\frac{1}{16}$ "	2.0 mm.
Barrel internal morse taper	No. 2	No. 2
Set-over for taper turning	$\frac{3}{16}$ "	8 mm.

CROSS SLIDE AND TOOLSLIDE SCREWS

Thread	10 T.P.I. ACME	2.5 mm. Trapezoidal
Diameter of Dial	1.6"	40.6 mm.
Graduations on Dial	.001"	.02 mm.*

* Direct reading cross slide dial (1 div. = .05 mm. on diameter) can be supplied as alternative on metric machines.

The makers reserve the right to alter designs, specifications and prices without notice.

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