

# ASSEMBLY INSTRUCTIONS

FOR THE

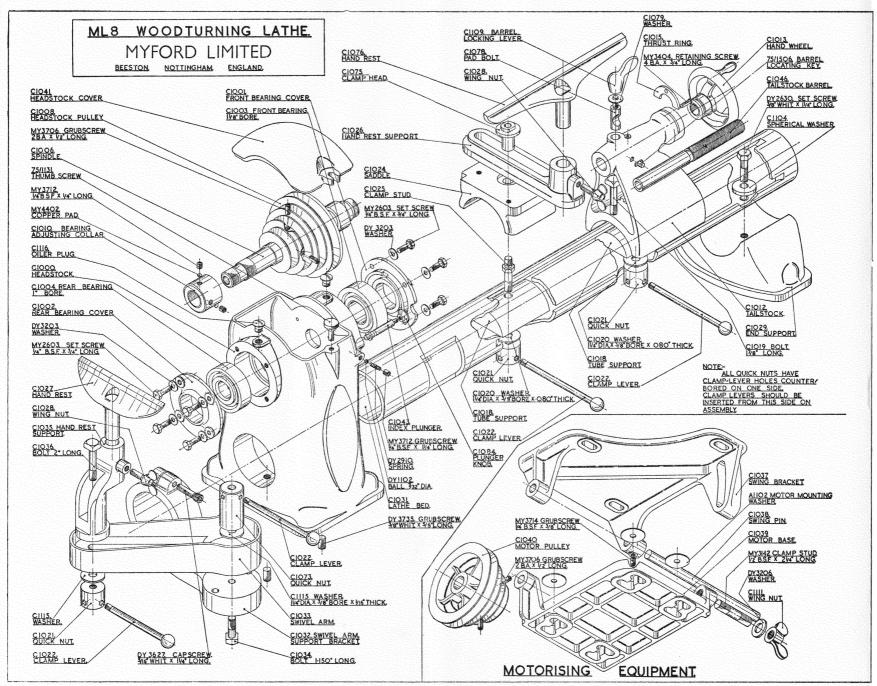
### **ML 8**

WOODWORKING LATHE

## Assembly of M L 8 Woodworking Lathe

Where machines have been stripped for economy packing, the following assembly instructions should be noted:—

- 1. Wipe all parts with a clean rag.
- 2. Run a thin film of oil in headstock tubular bed bore. Ensure that brass pads are fitted in screwed holes for bed locking screws DY. 3735.
- 3. Using end support C. 1029 as tube rest, slide tubular bed through head and vee belt until belt clearance slot is central with headstock pulley.
- 4. Twist tube until end support tube clamping holes are in line. Lightly clamp bed to end support base using spherical washer and set screw DY. 2630.
- 5. Lightly clamp bed to head by socket set screw DY. 3735.
- 6. Mount saddle on extreme bed end passing clamp stud C. 1025 through hexagon hole in saddle and control guide slot in bed.
- 7. Insert tube support together with C. 1020 washer and quick nut. Screw to clamp stud C. 1025 but do not lock saddle to bed. Leave approximately \( \frac{1}{8}'' \) clearance between bed and tube support.
- 8. Mount hand rest support on saddle. Screw clamp head C. 1075 hard down to clamp stud. (The saddle should still be free).
- 9. Lightly clamp saddle with quick nut and insert lever C. 1022. Slide saddle along bed, checking clamping action for convenient lever position. (Position of lever is altered by turning clamp stud to a different position in the hexagon saddle hole).
- 10. Mount tailstock to extreme bed end passing clamp bolt C. 1019 through tailstock body and guide slot in bed. Insert tube support, etc., as in (7). Position of clamping lever is altered by turning clamping bolt as in (9).
- 11. Move tailstock close to headstock and rotate bed in headstock casting to align centre points. Clamp bed tube in headstock by tightening grubscrews DY. 3735. Finally tighten end support.
- 12. Assemble swivel arm C. 1033 to support bracket C. 1032 clamping with quick nut C. 1073.
- 13. Mount swivel arm assembly to bed, resting bracket on bench top. Check lever position.
- 14. Position Lathe on bench allowing sufficient bench length for screwing down swivel arm support bracket.
- 15. Mark out with pencil or scriber the head and end support outline.
- 16. Paste paper templates to bench top. Cut bench for belt clearance and bolt holes.
- Note. Headstock and foot tapped \( \frac{3}{8} \) Whitworth for holding down bolts.



Amendment: MY. 3706 Grubscrew in motor pulley now replaced by MY. 3716  $\frac{1}{4}$  B.S.F.  $\times \frac{1}{2}$  N.B. MY. 3712 grubscrew for index plunger location should be  $\frac{1}{4}$  B.S.F.  $\times \frac{1}{4}$  long.

#### PICTORIAL VIEW SHOWING CONSTRUCTION AND PART NUMBERS

Motor should be  $\frac{3}{4}$  h.p. Full Load Speed 1,400 to 1,500 r.p.m. (50 cycles) 1,750 to 1,800 r.p.m. (60 cycles)

# Assembly of Motorising Equipment

The motorising equipment has been designed to carry the majority of fractional  $\frac{3}{4}$  h.p. motors without the necessity of drilling and tapping positional holes or fitting bridge plates. It may be necessary in some instances to bring the pulley forward on the motor shaft to obtain the alignment from the headstock pulley.

The following instructions will assist in the fitting of the

under slung driving unit:—

1. Assemble motorising unit complete, bringing down the motor base to the extremity of the slot in swing bracket, and lock with wing nut.

2. Mount motor in central position on base and lightly

clamp with motor clamping bolts.

3. Place unit on bench top with motor uppermost.

4. Centralise pulley with gap cut for headstock belt clearance arranging position of motor and swing bracket to give minimum over-hang of motor pulley. (Swing bracket should not overlap limit line shown on headstock template.)

5. With scriber or pencil, mark round square side of swing

bracket.

6. Place swing bracket template to match lines and drill for fixing bolts.

When bolting down Lathe, check for uneven bench surface and pack where necessary.

#### LUBRICATION POINTS

The ML.8 Headstock is fitted with angular contact races, which require lubrication at periodical intervals.

Lubrication is made through the OIL HOLES provided,

which are covered by oiler plug C.1116.

Before machines leave these works, they are thoroughly lubricated for running, and all that is necessary is to maintain

a weekly lubrication.

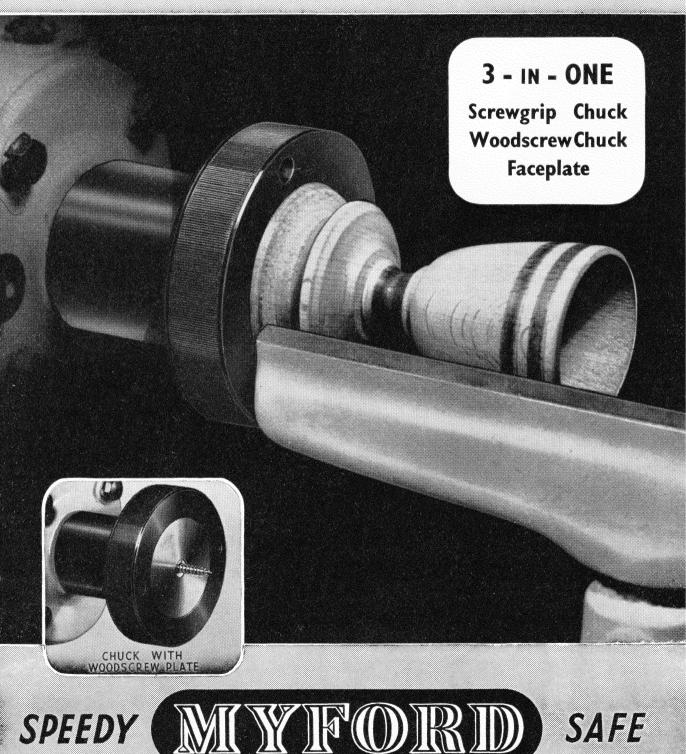
ON NO ACCOUNT IS GREASE TO BE USED for lubricating purposes and we recommend a good quality light machine oil, which can be purchased through your local tool merchant. A lightly oiled rag passed over the bed surface, will assist in the smooth action of the sliding members, such as the Tailstock, Saddle, etc.

#### BEARING ADJUSTMENT

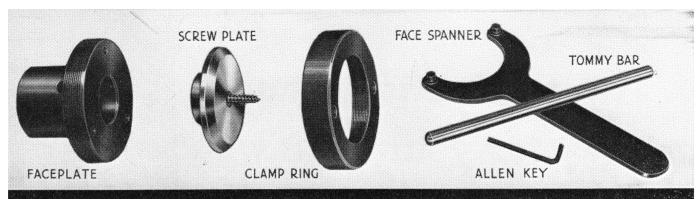
It is seldom necessary to interfere with the bearing adjustment. Should they need attention, care should be taken to avoid over-adjustment of the collar C.1010, as this will cause harshness in running, and destroy the long life of the bearings.

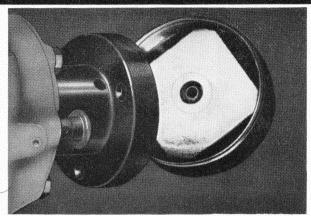
We are always pleased to answer any technical question in connection with our Products: when writing to the Works be sure to state the Serial letter and number of your Lathe; this will be found on the front of the headstock casting near the base.

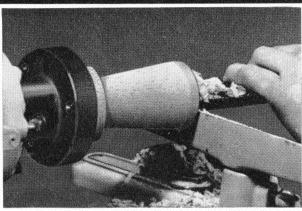
### A Combination Chuck for your ML8 woodworker



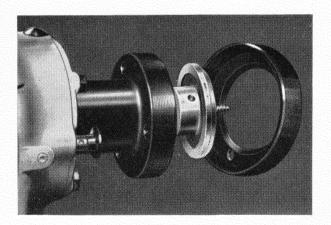
MYFORD





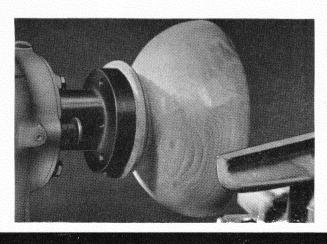


**SCREWGRIP CHUCK** (Cat. No. 32/001/I) The Screwgrip Chuck comprises Faceplate with Screwed Clamp Ring, and admits work up to  $2^{\prime\prime}$  diameter, flanged to  $2^{1\prime\prime}_4$ . The powerful grip is a great help in machining, and increases the safety factor. Left-hand illustration shows method of mounting, right-hand shows wood being turned.



WOODSCREW DRIVE CHUCK The inclusion of the Screwplate provides an assembly in the form of a convenient and very useful Woodscrew Chuck. The central screw is a standard No.12C's'k Woodscrew which is secured to the plate by means of a socket set screw and is therefore quickly replaceable.

**FACEPLATE** This 3" Faceplate is part of the Screwgrip Chuck. The thread is 12 T.P.I. x I" and the 'register' is a correct fit for the ML8 Spindle Nose (Right-hand Side). It is far more convenient than the usual faceplate for holding small bowls, etc., due to its projection from the spindle nose. Three holes are provided for attaching the work-piece.



M. 15M/3/75

#### OBTAINABLE FROM YOUR TOOL MERCHANT

MYFORD LIMITED . BEESTON . NOTTINGHAM . ENGLAND

#### MYFORD ML8 WOODTURNING LATHE

#### SPECIAL FEATURES

The ML8 meets the need for an accurately built, well finished wood turning lathe. This machine is compact and economical of both space and capital outlay. It has proved exceptionally popular and is supplied to education authorities, private woodturners, pattern makers, antique furniture restorers as well as hospitals for therapy treatment, and industrial concerns both small and large. Available in three bed lengths 30" (760 mm), 36" (915 mm) and 42" (1065 mm) between centres. The 30" and 36" models are suitable for either bench or cabinet mounting. The cabinet stand is fabricated from heavy gauge steel, and is specially constructed to make the lathe self contained.

#### HEADSTOCK

The precision ground spindle runs in large diameter angular contact ball bearings having easy adjustment and requiring only minimal lubrication. The spindle is ground not only on the journals for the bearings, but also on the registers to provide an accurate fit for faceplates, chucks etc. A plunger locking mechanism facilitates faceplate and chuck removal, and permits the indexing of the spindle through 24 positions for marking out twists and other dividing work. A robust one piece headstock houses the spindle and bearings, and the complete assembly has a capacity for hard work at high speeds with a long and trouble free life.

#### HANDRESTS AND TAILSTOCK

The handrests and tailstock are locked with quick action clamps so that when working these can be moved quickly without the use of spanners.

#### MOTORISING

Adequate power is provided by  $\frac{1}{2}$  h.p. three phase or  $\frac{3}{4}$  h.p. single phase motor, suitable for running off household supply 13 amp switch plug.

#### SPECIFICATION

Swing over bed	8" 203 mm
Distance between centres (ML8 & ML8A)	30" 760 mm
Distance between centres (ML8B)	36" 915 mm
Distance between centres (ML8C)	42" 1,065 mm
L.H. swing to bench (without tool rest)	16" 405 mm
L.H. swing with tool rest	12" 305 mm
Spindle nose bored	No. 1 M.T.
Hole through spindle	13/32" 10.3 mm
R.H. spindle nose thread	1" dia. x 12 T.P.I.
R.H. spindle nose register	1 <mark>8</mark> " dia.
L.H. spindle nose thread	$\frac{7}{8}$ " dia. x 12 T.P.I.
Tailstock barrel bored	No. 1 M.T.
Hole through tailstock barrel	13/32" 10.3 mm
Spindle speeds (4) (1425 r.p.m. 50 Hz motor) 2,850,	1,780, 1,140, 700 r.p.m.
Overall length (ML8 bench lathe)	47" 1,195 mm
Overall length (ML8A bench lathe)	55" 1,395 mm
Nett weight, ML8A, bench lathe, less motor	78 lbs. 35 kg.
Nett weight, cabinet stand	120 lbs. 54 kg.

#### STANDARD EQUIPMENT

For ML8 lathe: motorising unit for bench or cabinet mounting, less motor; four step motor pulley; ½" link belting; woodprong centre for headstock; cup centre for tailstock; 10" (255 mm) handrest; 6" (150 mm) diameter faceplate.

In addition for ML8A, ML8B and ML8C lathes: rear turning attachment including 6" (150 mm) handrest and 6" (150 mm) diameter faceplate.

For bench mounting a 43" belt is supplied and for cabinet mounting a 41" belt.

#### ADDITIONAL EQUIPMENT

Rear turning attachment (included as standard equipment with ML8A, ML8B and ML8C), stand, motors, starters, chucks, drill chucks, turning tools, woodscrew chucks, screw grip chuck, three point steady, long boring augers with guides support and control centres, compound slide for metal turning.