DELTA POWER TOOL DIVISION
ROCKWELL MANUFACTURING COMPANY
PITTSBURGH 8, PENNSYLVANIA

434-01-651-0002
PM–1875
DATED 10-15-59

46–111 HOMECRAFT 14/11" GAP BED LATHE

INSTRUCTION AND MAINTENANCE MANUAL

The Delta Homecraft 14/11" Lathe is a ruggedly designed machine, for turning wood, plastics and non-ferrous metals such as aluminum, brass and copper.

Mount the lathe on the Delta stand Cat. No. 50-146 or a sturdy bench or table 30 to 32 inches high. The arbor pulley must extend beyond the end of the bench. The motor can be mounted on a shelf below the lathe or to the rear of the headstock. Assemble motor pulley, Cat. No. 932 with large step away from motor. Make sure steps on motor pulley are in line with arbor pulley.

The following items are furnished with your No. 46-111 lathe: Drive center, cup center, 3 inch faceplate, 12", 4" and 6" offset tool rest with base, wrenches and the handle for tightening the tailstock ram. The ram clamp for the tailstock is serrated and when it is mounted to the tailstock it can be positioned to suit the operator.

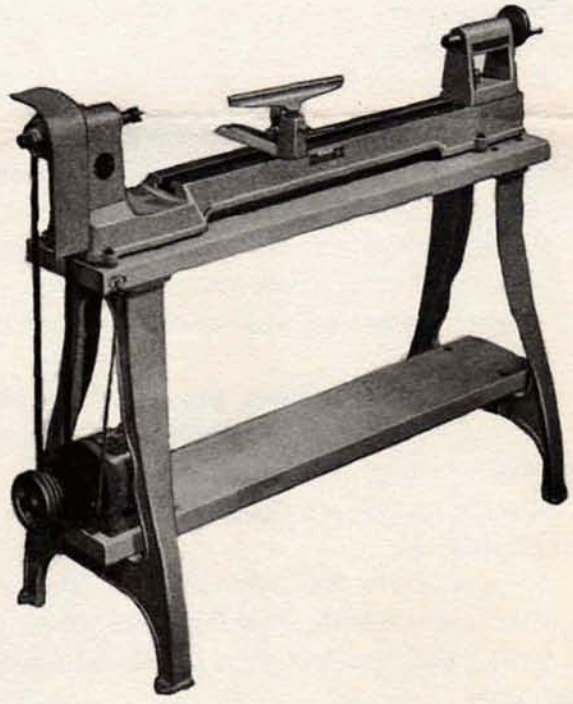

Figure 1

CONSTRUCTION FEATURES

The headstock spindle runs in two greasealed ball bearings and need no further lubrication. The spindle is machined for #2 morse taper shank tools and has a ⅝" hole through it. The spindle is threaded 1"-8 for mounting faceplates or hand wheel. A right-hand thread is on the inner end of the spindle and a left-hand thread on the outer end.

The tailstock ram has a #2 morse taper hole. To remove the cup center or other attachments, turn the handle that operates the tailstock ram, so that the ram is moved in. Keep turning it until the center is pushed out of the ram.

The points of both the drive and cup centers are replaceable. To remove or adjust, loosen set screw SP-253 with wrench provided and push out the point with a piece of stiff wire inserted in the small end of the center.

POWER AND SPEED

A ⅓ H.P., 1725 r.p.m. motor, Cat. No. 62-413 is recommended for normal use. For heavy duty or with countershaft, we recommend a ½ H.P. 1725 r.p.m., Cat. No. 62-653 motor. *A split phase motor is not recommended for this lathe.*

The motor should rotate clockwise when looking at the lathe from the headstock end. If the motor turns in the wrong direction,

see instructions for reversing on the motor name plate.

With a 1725 r.p.m. motor, using a No. 932 four step motor pulley, speeds of 990, 1475, 2200 and 3250 r.p.m. are obtained.

THE INDEXING MECHANISM

Two rows of holes are provided in the pulley rim for use with the index pin, the inner row having 60 holes and the outer row, 8 holes. The tip of the index pin is eccentric, and by turning the pin, the tip can be engaged in the inner or outer row of holes. To engage the index pin, push it in.

THINGS TO REMEMBER

1. Make sure tailstock is securely locked in position and work is properly supported.
2. Always rotate work by hand to make sure it does not strike tool rest or bed.
3. Always keep tool rest as close to work as possible.
4. Do not use the index pin as a lock to hold the pulley stationary while unscrewing faceplates or other attachments.
5. Check and select proper speed before turning lathe on.
6. Do not drive wood into drive center when it is in headstock. Set drive center into wood with a soft mallet prior to installing it in the lathe.
7. Never loosen tailstock ram while work is turning.
8. Never adjust tool rest while work is turning.
9. Never try to move index pin while spindle is turning.
10. Do not wear necktie, loose shirt sleeves or other loose clothing while working on the lathe.
11. Safety glasses should be worn while working on lathe.
12. Always remove tool rest when sanding with the lathe running.
13. For inboard or outboard face plate turning, be sure material is securely fastened to the faceplate.
14. Always remove centers from headstock by using a ½" diameter soft metal or wood rod inserted thru the spindle.
15. Never use the screw center or taper shank sanding drum without securing it with draw bolt.

USE AND CARE OF THE LATHE

Woodworking lathes like all other pieces of machinery will not stand overloading or overworking indefinitely. A person about to operate a machine should first acquaint himself with its capacity; then when operating it, do so safely within its capacity. Ordinarily a woodworking lathe will need only nominal care to keep it in good working order.

SEE YOUR DEALER FOR A LIST OF MOTOR SERVICE STATIONS FOR SERVICING DELTA MOTORS.

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Replacement Parts

Part No.	Description
DDL-104	Cap
DDL-105	#10-32 x 7/16" Fil. Hd. Cap Scr.
DDL-119-R	Spindle
DDL-120	Spindle Nut R. H. Thread
DDL-121-S	Headstock Pulley, Incl;
SP-201	5/16-18 x 5/16" Set Scr.
DDL-155-R	Tailstock Ram, #2 M. T. Hole
DDL-158-S	Ram Adjusting Scr., Incl;
DDL-159	1/2-13" L. H. Nut
SP-2721	1/8 x 7/8" Roll Pin
DDL-161	Washer
DDL-173	7/16-14" Acorn Nut
DDL-174	29/64" x 1" x 1/8" Washer
DDL-176	Coil Spring
DDL-206	Center Point
DDL-253	1/4-28 x 3/16" Set Scr.
DDL-501-R	Bed
DDL-502-R	Headstock, Incl;
CBL-486	Nameplate
DDL-510	Spring
SP-2250	#4 x 3/16" Drive Scr.
* DDL-502-T	Headstock Complete
DDL-503-R	Tailstock, Incl;
DDL-511	Stud
HDP-133	Nameplate
SP-2252	#2 x 3/16" Drive Scr.
SP-2702	1/4 x 5/8" Roll Pin
DDL-504-R	Tool Support Base
DDL-505	Indexing Pin
DDL-506-S	Handwheel, Incl;
SP-208	1/4-20 x 1/4" Set Scr.
HL-614-3	Clamp Plate
HL-635	Support Plate
J-9-S	Lock Bolt
NCS-361	7/16-14" Serrated Nut
SR-217	Handle
SP-253	1/4-28 x 1/4" Set Scr.
SP-611	1/4-20 x 1/2" Hex. Hd. Cap Scr.
SP-838	7/16-14 x 2 1/4" Carriage Bolt
SP-887	7/16-14 x 2 3/4" Carriage Bolt
SP-1603	1/4" Steel Washer
SP-1716	7/16" Lock Washer
SP-3080	7/16-14 x 1 1/4" Hex. Hd. Cap Scr.
SP-5339	Ball Brng.
SP-7356	Loading Spring
#194	5/32" Hex. Wrench
#933	Drive Center
#934	Cup Center
#936	3" Face Plate
#949	1 1/4" Open End Wrench
#1534	1/8" Hex. Wrench
#46-842	3/4" Box Wrench
#46-891	4" Tool Rest
#46-892	6" Offset Tool Rest
#46-893	12" Tool Rest

* DDL-502-T is headstock completely assembled including spindle, bearings, pulley etc.

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