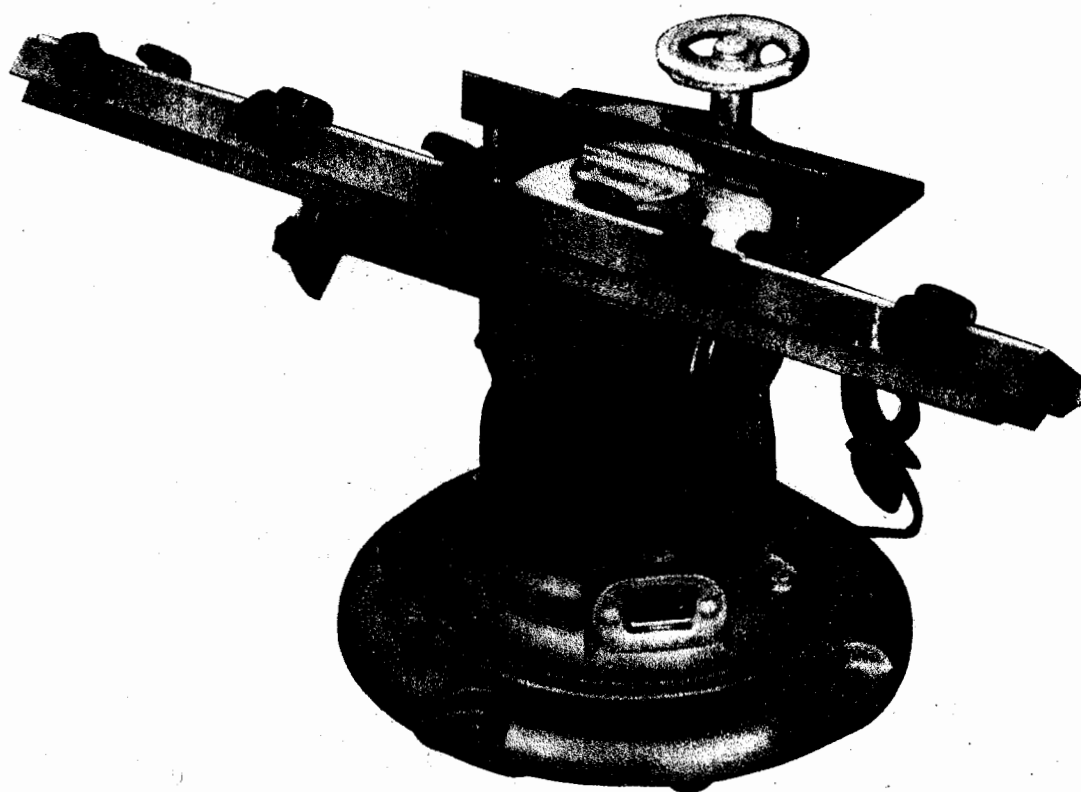


**6" UNIVERSAL
SURFACE GRINDER
OWNERS MANUAL**



MODEL-WT624

SAFETY INSTRUCTIONS

1. Read the owners manual carefully before using.
2. Keep guards in place and keep unnecessary people away.
3. Keep work area clean. Don't use in dangerous environment.
4. Make workshop kid-proof . Use padlocks , master switches or by removing starter keys . Remove adjusting keys and wrenches before turning it on.
5. Don't force a tool or attachment to do a job for which it was not designed.
6. Wear proper apparel and always use safety glasses . Wear protective hair covering to contain long hair.
7. Use clamps or a vise to hold work when practical . It's safer than using your hand and it frees both hands to operate tool. Disconnect tools before servicing.
8. Make sure switch is in off position before plugging in keep tools sharp and clean for best and safe performance. Follow instructions for lubricating and changing accessories. Carefully check damaged parts.
9. Never leave tool running unattended, turn power off.

SPECIFICATIONS

Maximum Knife Length: 24"(609mm)

Grinding wheel Dimensions: Straight cup Wheel $5 \frac{7}{8} \times 1 \frac{1}{2} \times 1 \frac{1}{2}$ "
(150 × 38 × 13mm) Arbor Vitrified Bond

Motor Specifications: 1/2 H.P

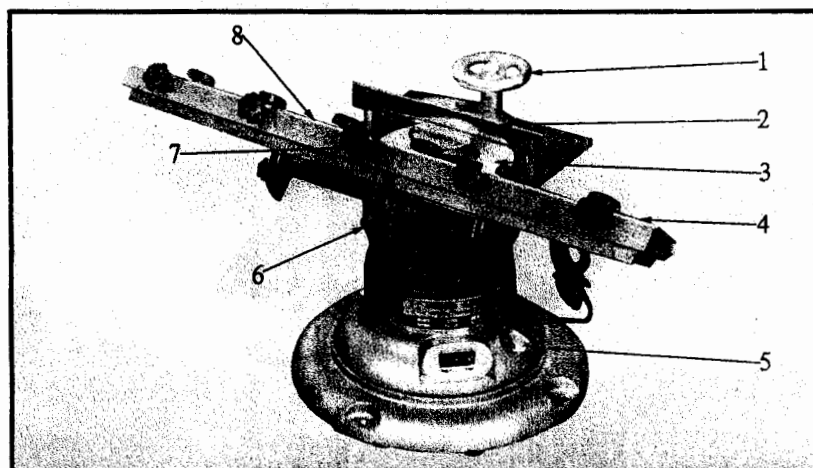
Work Table Adjustment: 15° to 90°

Machine Weight: 80lbs(36kg)

Machine Dimensions: 12High" × 24Long" × 10Deep"(305 × 609 × 254mm)

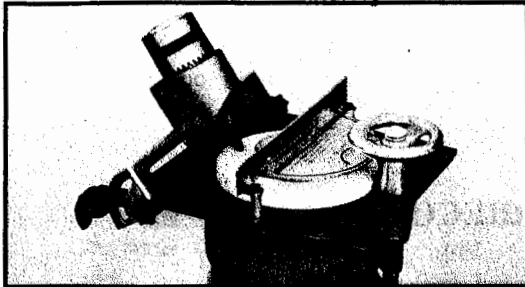
MAIN FEATURES

See Figure 1

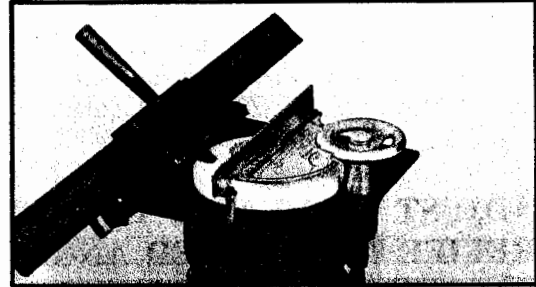


- | | |
|----------------------------------|-----------------------------------|
| 1. Table height adjustment wheel | 2. Wheel Guard/fence |
| 3. Cup grinding wheel | 4. Work Plate-adjustable(15-90°) |
| 5. Rugged 1/2 H.P. motor | 6. Table lock |
| 7. Knife height adjustment knobs | 8. Knife lock plate |

ACCESSORIES



SHARPENING DRILL BITS



SHARPENING CHISELS

BENCH MOUNT GRINDER

Place the grinder on a bench of standard height, 1"-2" (25-50mm) from the front edge of the bench.

MOUNT PIVOT PLATE

Slide the right and left lock bars (# 8 & 9) of the pivot plate assembly (item 8-15) onto the table and tighten the locking knob (#10).

MOUNT WORK PLATE

Firmly mount the work plate (#7) to the pivot plate (#14) using the hardware provided (#15 or 45). Place the knife support assembly (#1-6) onto the work plate. Locate the other remaining loose items (dressing tool and the two each tool clamps) and store in a safe place.

DRESSING THE GRINDING WHEEL

After a period usage, the grinding wheel surface will become loaded and need to be dressed.

To dress the wheel follow the steps outlined below.

1. Loosen the table lock.
2. Turn the table height handwheel counterclockwise and raise the table to its highest point.
3. Mount an optional diamond dresser into the dressing tool guide, so the point of the dresser sticks out of the bottom of the dresser 1/8". Lock the dresser in place using the set screw located on the side of the dresser and a 5/32" (4mm) allen Wrench.
4. Place the dressing tool against the fence and lower the table until the diamond dresser just touches the surface of the grinding wheel.
5. Turn on the grinder and dress all the way across the wheel.

Repeat step 4 and 5 until the wheel is completely dressed.

NOTE: The shank of the dresser will not allow the wheel to be completely dressed across its face. There will be a ridge left on the inside edge of the grinding wheel.

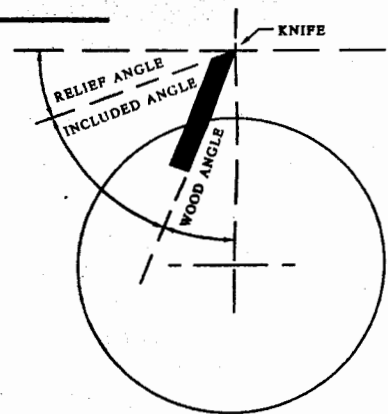
CHANGE GRINDING WHEELS

Loosen and remove the fence using a 5/32"(4mm) allen wrench.
Loosen and remove the grinding wheel flange using a 5/32"(4mm) allen wrench.
Remove grinding wheel, replace with new wheel. Remount flange and socket cap screw and tighten with a 5/32"(4mm) allen wrench.

ADJUST THE KNIFE TO THE CORRECT RELIEF & INCLUDED ANGLE

On most tools it is easy to determine the correct relief and included angle, However on planer and jointer knives there is a wide range of "correct" relief and included angles. The included angle on a planer knife can vary from 30° to 60° The woodworker is faced with hundred of varieties of woods, different moisture content and hundreds of molding and planing applications. All these factors can alter the relief and included angles found on planer and jointer knives.

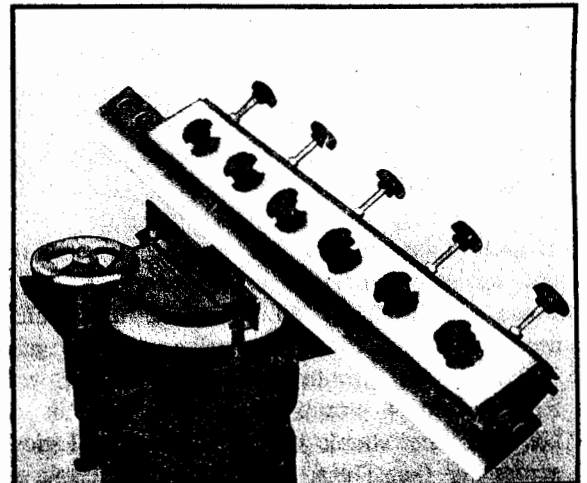
With such a wide variety of accepted angles, it would not be wise to change the included angle to a predetermined setting. The best thing to do is match to the existing included angle already on the knife. Mark the beveled edge of the knife with a red marker. As a starting point rotate the pivot plate knob until the knife is held at a 30° angle, Rotate the grinding wheel handwheel until the wheel just touches the knife. With the motor off turn the grinding wheel by hand against the knife surface adjust the pivot plate until the grinding wheel will leave marks all the way across the knife edge.



MOUNTING JOINTER/PLANER KNIVES

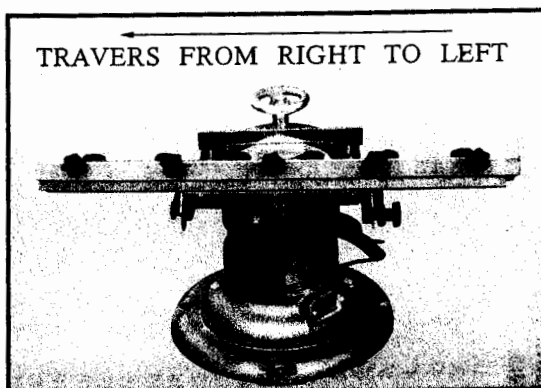
1. Remove the knife lock top plate. place the dressing tool guide along the front edge of the knife support plate.
Adjust the height adjustment knobs until each height adjustment screw just touch the dressing tool guide.
2. Place the knife (beveled edge down) onto the knife support, firmly against the height adjustment screws.
Place the knife lock plate onto the knife support and firmly tighten the locking knobs.

NOTE: The knife must be firmly mounted against the height adjustment screws, double check at this time.



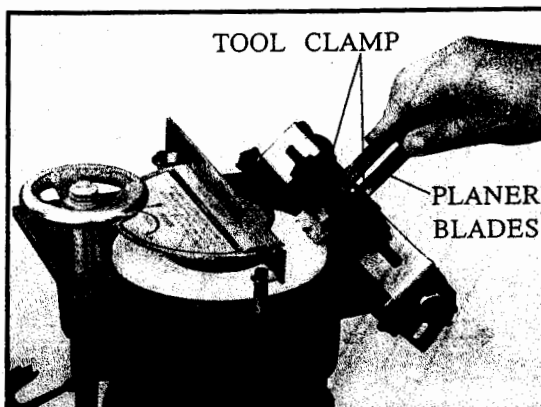
SHARPEN JOINTER/PLANER KNIVES GRINDING THE KNIFE

When facing the machine traver-
ses the knife support assembly
from the right to the left.
Continue to make passes until
until the knife is sharp and
all nicks are removed.



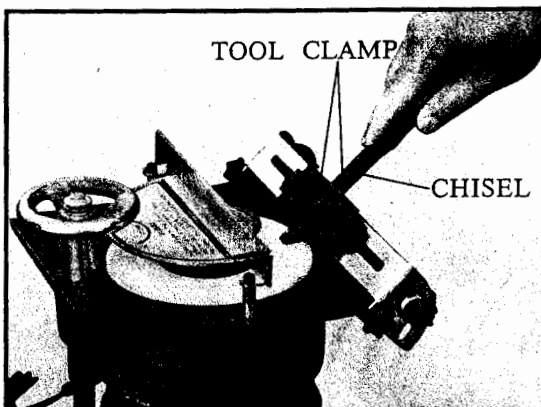
SHARPENING PLANER BLADES

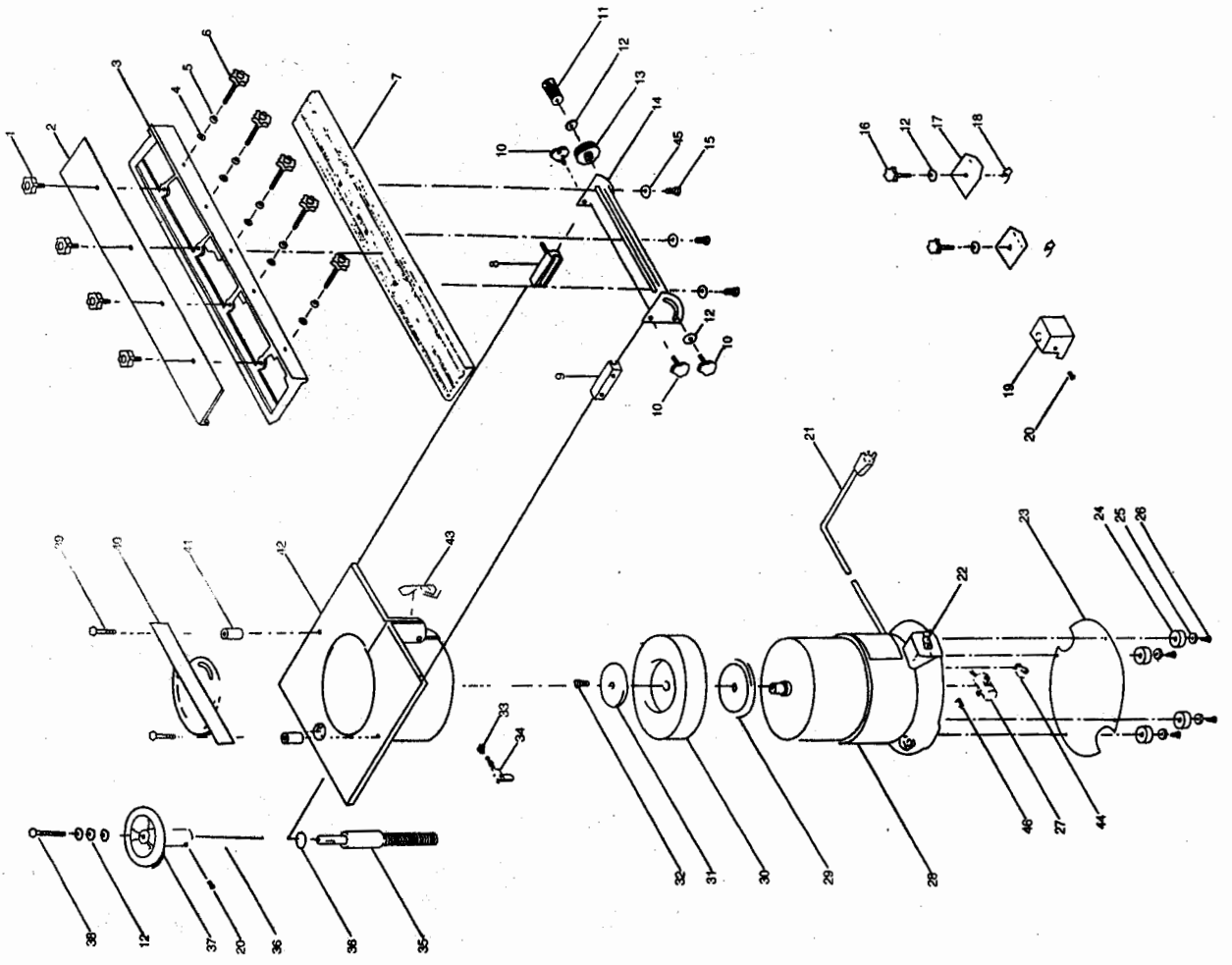
Remove the knife support
assembly and place the 2 each
tool clamps onto the work
plate. The tool clamps have
different angles on each side
of the clamp, adjust and ex-
periment with the tool clamps
until you have the best suppor-
ting angle, then turn on the
motor and slide the planer
blade down between the clamps
and lightly sharpen the edge.
Complete the sharpening in
short light grinding strokes
to keep the edge cool.



SHARPENING CHISELS

Chisels are sharpened in the same
manner as planer blades. Adjust
the tool clamps until you have
the best supporting angle and
sharpen and hone the edge as
described in the preceding pla-
-ne blade paragraphs.





DIA. NO.	PART NAME
1	Knob
2	Knife Lock Plate
3	Knife Support
4	O-Ring
5	Hex Jam Nut 1/4-20 NC
6	Knob
7	Work Plate
8	Right Lock Bar
9	Left Lock Bar
10	Knob
11	Pivot Knob
12	Plain Washer 1/4
13	Pivot Rotate Knob
14	Pivot Plate
15	Hex Cap Screw 5/16-18 NC x 1/2 Long
16	Knob (Tool Clamp)
17	Tool Clamp
18	Lock Nut
19	Dressing Tool Guide
20	Socket Set Screw 5/16-18 NC x 3/8 Long
21	Motor Cord
22	Switch
23	Cover Plate
24	Rubber Support Feet
25	Washer
26	Phillips Round Head 10-24 x 1/2 Long
27	Capacitor
28	Motor Housing Assembly
29	Inner Flange
30	6" Grinding Wheel
31	Outer Flange
32	Socket Cap Screw
33	Hex Nut
34	Table Lock
35	Table Adjust Screw
36	Steel Balls
37	Handwheel
38	Hex Cap Screw
39	Socket Cap Screw
40	Wheel Guard
41	Spacer
42	Motor Housing Table
43	Decal
44	Cord Clip
45	Plain Washer 5/16
46	Wire Nut