

# 10060.001 & 10061.0001 Drill Press

Owner's Manual



#### SAFETY INSTRUCTION READ BEFORE OPERATION

To help ensure safe operation, please take a moment to learn the machine's applications and limitations, as well as potential hazards. Oliver Machinery disclaims any real or implied warranty and holds itself harmless for any injury that may result from the improper use of its equipment.

- 1. Do not operate the drill press when tired, distracted, or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
- 2. The working area should be well lit, clean and free of debris.
- 3. Keep children and visitors at a safe distance when the drill press is in operation; do not permit them to operate the drill press.
- 4. Childproof and tamper proof your shop and all-machinery with locks, master electrical switches and switch keys, to prevent unauthorized or unsupervised use.
- 5. Stay alert! Give your work your undivided attention. Even a momentary distraction can lead to serious injury.
- 6. Fine particulate dust is a carcinogen that can be hazardous to health. Work in a well-ventilated area and whenever possible use a dust collector and wear eye, ear and respiratory protection devices.
- 7. Do not wear loose clothing, gloves, bracelets, necklaces or other jewelry while the drill press is in operation.
- 8. Be sure that adjusting wrenches, tools, drinks and other clutter are removed from the machine and/or the table surface before operating.
- 9. Keep hands well away from the drill bit and all moving parts. Use a hold-down or clamp to secure the stock, and use a brush, not hands, to clear away chips and dust.
- 10. Be sure that the drill bit is securely installed in the chuck before operation.
- 11. Be sure the drill bit has gained full operating speed before beginning to drill.
- 12. Always use a clean, properly sharpened bit. Dirty or dull bits are unsafe and can lead to accidents.
- 13. Use suitable work piece support if the work piece does not have a flat surface.
- 14. Do not push or force the bit into the stock. The drill will perform better and more safely when working at the rate feed for which it was designed.

#### SAFETY INSTRUCTION CONTINUED

- 15. Avoid working from awkward or off-balance positions. Do not overreach and keep both feet on floor.
- 16. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning be sure it is properly re-attached before using the tool again.
- 17. Never leave the machine unattended while it is running or with the power on.
- 18. Use of parts and accessories NOT recommended by Oliver Machinery may result in equipment malfunction or risk of injury.
- 19. Never stand on machinery. Serious injury could result if the tool is tipped over or if the drill bit is unintentionally contacted.
- 20. Always disconnect the tool from the power source before servicing or changing accessories such as bits, or before performing any maintenance, cleaning, or if the machine will be left unattended.
- 21. Make sure that the switch is in the "OFF" position before plugging in the power cord.
- 22. Make sure the tool is properly grounded. If equipped with a 3-prong plug, it should be used with a three-pole receptacle. Never remove the third prong.
- 23. Do not use this drill press for other than its intended use. If used for other purposes, Oliver Machinery disclaims any real implied warranty and holds itself harmless for any injury, which may result from that use.

## **Prop 65 Notice:**

WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically treated lumber.

Your risk from exposure to these chemicals varies, depending on how often you do this type of work. To reduce your exposure, work in a well-ventilated area and with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles. For more information go to www.P65Warnings.ca.gov.

## **ELECTRICAL RERQUIREMENTS**

BEFORE CONNECTING THE MACHINE TO THE POWER SOURCE, VERIFY THAT THE VOLTAGE OF YOUR POWER SUPPLY CORRESPONDS WITH THE VOLTAGE SPECIFIED ON THE MOTOR I.D. NAMEPLATE.

A POWER SOURCE WITH GREATER VOLTAGE THAN NEEDED CAN RESULT IN SERIOUS INJURY TO THE USER AS WELL AS DAMAGE TO THE MACHINE. IF IN DOUBT, CONTACT A QUALIFIED ELECTRICIAN BEFORE CONNECTING TO THE POWER SOURCE.

THIS TOOL IS FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN WET OR DAMP LOCATIONS.

#### **GROUNDING INSTRUCTIONS**

In the event of an electrical malfunction or short circuit, grounding reduces the risk of electric shock. The motor of this machine is wired for 115 Volt Single Phase operation <u>ONLY</u> and is equipped with a 3-conductor cord and a 3-prong grounding plug to fit a grounded type receptacle

Do not remove the 3rd prong (grounding pin) to make it fit into an old 2-hole wall socket or extension cord. If an adaptor plug is used it must be attached to the metal screw of the receptacle

The use of an adaptor plug may be illegal in some areas. Check your local codes. If you have any doubts or if the supplied plug does not correspond to your electrical outlet, consult a qualified electrician before proceeding.

#### **CIRCUIT CAPACITY**

Make sure that the wires in your circuit are capable of handling the amperage draw from your machine, as well as any other machines that could be operating on the same circuit. If you are unsure, consult a qualified electrician.

If the circuit breaker trips or the fuse blows regularly, your machine may be operating on a circuit that is close to its amperage draw capacity. However, if an unusual amperage draw does not exist and a power failure still occurs, contact a qualified technician or our service department.

#### **EXTENSION CORDS**

Oliver Machinery does not recommend the use of an extension cord with your machine. However, if you must use an extension cord, make sure it has an amperage suitable for the rating on the motor ID nameplate. An undersized cord will cause a drop-in line voltage resulting in loss of power and overheating.

Any extension cord used must feature a 3-prong grounding plug as described under grounding instructions. Follow the rules listed.

## Oliver Machinery Models 10060.001 & 10061.001

## **Assembly Instructions**

- Review the parts breakdown and keep it for reference when putting your drill press together. The assembly steps will reference the item numbers from the parts list.
- Remove all parts from the packaging, but do not dispose of until you are finished.
- Lay out the parts in an unobstructed area, some pieces such as the head will need two people to safely move.
- If you have any questions during assembly, please contact Oliver Machinery at 800-559-5065 or email at info@olivermachinery.net.

### **Assembling the Drill Press**

- 1. Bolt the BASE FLANGE (4/4B) and COLUMN (19) to the BASE (1/1B) using four BOLTS (3) and WASHERS (2).
- 2. Remove the RACK COLLAR (21) from the COLUMN (19) by loosening the SCREW (20) and carefully sliding the collar preventing any binding. Set the RACK (18N) to the side.
- 3. Locate the TABLE BRACKET (7) making sure the WORM GEAR (10) and HELICAL GEAR (9) are in their proper location.
- 4. Place the **RACK (18N)** into the table bracket. The tapered end of the rack faces upward, and the squared end faces down.
- 5. Slide both pieces onto the **COLUMN (19)**. Take care to hold in position as it is a tight fit.
- 6. Fit the squared end of the rack in the **FRICTION RING (97)** of the base flange. Secure the top of the rack by installing the rack collar. Do not bind the rack or over tighten the set screw.
- 7. Slide the **TABLE CRANK HANDLE (6)** on to the worm gear shaft aligning the set screw with the flat surface and tighten. Use hex wrench supplied.
- 8. Using two people, lower the **HEAD (26)** on the column and secure in alignment with the base using the two **SET SCREWS (26-1)**. Use hex wrench supplied.
- Place the TABLE (17) on to the TABLE ARM (12) and tighten with CLAMP LEVER (14).
- 10. Tighten the three FEED HANDLES (22N) into the FEED PINION SHAFT (24N).
- 11. Remove the **SCREW (78)** from the **PULLEY COVER (61)** and reverse it through the hole. Tighten **KNOB (70)** on to the screw.
- 12. Keep the **DRIFT KEY (52)** and hex wrenches for future use.
- 13. Remove the protective coating from all surfaces using a rag and environmentally safe cleaner. Do not use any chemical that may damage the painted surfaces.

#### **Installing the Drill Chuck Guard**

- 1. Loosen the clamp screw on the CHUCK GUARD (87).
- 2. Slide the chuck guard onto the shoulder of the SPINDLE (51).
- 3. Make sure it is equally in place and tighten the clamp screw.

#### **Installing the Drill Chuck**

- 1. Remove the protective coating from the **ARBOR (53)**, **DRILL CHUCK (54)** internal tapered surface, and **SPINDLE (51)** internal tapered surface. It is extremely important these are clean.
- 2. Place the drill chuck on the short-tapered end of the arbor.
- 3. Insert the arbor into the spindle and twist until the flat portion mates with the spindle.
- 4. Adjust the drill chuck so all fingers are recessed into the body.
- 5. Place a block of wood on the table and using the feed handles, apply pressure to secure the drill chuck in place.
- 6. To remove the drill chuck, lower the spindle to the full depth, rotate the drill chuck until arbor can be seen, and place the **DRIFT KEY (52)** through the hole. Give a slight tap with a mallet and the drill chuck and arbor will drop out. Be sure to catch the drill chuck to prevent damage. It is much easier to do this with two people.

#### **Drill Press Use Instructions**

#### **Drilling Guidelines**

- Always wear safety glasses.
- Use clean and sharp drill bits intended for a power drill.
- Clamp the workpiece securely. Never hold it by hand.
- Make sure to use the recommended speed for the drill size and workpiece material.

#### **Adjusting the Table Height**

- 1. Loosen the **CLAMP LEVER (11)**.
- 2. Rotate the TABLE CRANK HANDLE (6) to raise or lower.
- 3. Tighten the clamp lever at the desired position.

### **Table Swing Position**

- Loosen the CLAMP LEVER (11).
- 2. Swing **TABLE (17)** to the desired position.
- 3. Tighten the CLAMP LEVER (11).
- 4. Align center hole in table to drill bit position to avoid drilling into the table.
- 5. For large pieces the **BASE (1B)** can be used as the table.

## **Changing Speeds**

- 1. Always disconnect the drill press from the power source before changing speeds.
- 2. Raise the PULLEY COVER (61).
- 3. Refer to the speed chart for the desired speed and belt arrangement.
- 4. Loosen the LOCK SCREW (27) and release the belt tension.
- 5. Relocate the belts to the desired speed arrangement.
- 6. Push the MOTOR (57) away from the head to tension the belts.
- 7. Tighten the lock screw to hold the belt tension.
- 8. Proper tension is less than  $\frac{1}{2}$ " deflection when squeezing the belt together.

#### **Table Rotation Position**

- 1. Loosen the CLAMP LEVER (14).
- 2. Rotate TABLE (17) to the desired position.
- 3. Tighten the clamp lever.

#### **Table Tilt Adjustment**

- 1. Loosen BOLT (16).
- 2. Remove CENTERING SET PIN (13).
- 3. Tilt the table to the desired position.
- 4. Tight the bolt, do not replace the centering set pin.
- 5. When moving back to the normal drilling position, replace the centering set pin and tighten.

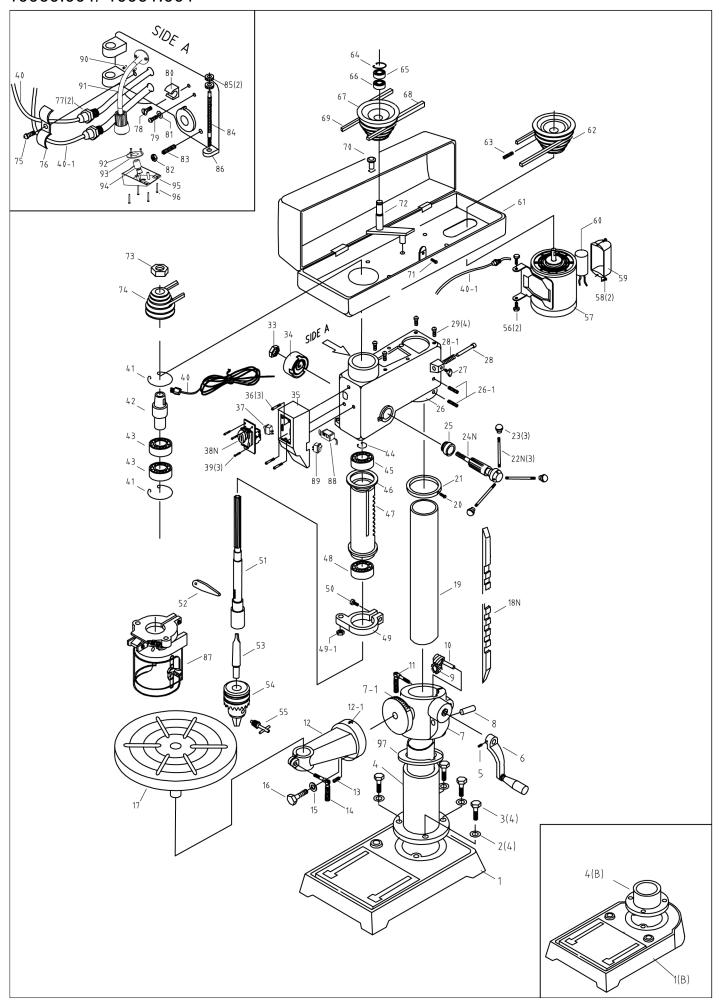
### **Depth Stop Adjustment**

- 1. Set the bottom **DEPTH STOP LOCK NUT (85)** to the desired depth setting.
- 2. Tighten the second lock nut against the first nut to secure it in position.

### **Laser Adjustment**

- 1. Using a small bit (1/16" or less) drill a hole in a scrap piece of wood the same thickness as your workpiece.
- 2. Turn on the laser and move the light so both cross hairs intersect the hole.
- 3. The laser is now adjusted for operation.
- 4. If you change the table height or thickness of your workpiece, start with step 1 and adjust for your next set of holes.

## 10060.001/ 10061.001



## PART LIST FOR 10060.001 and 10061.001

NO.	PART NO.	DESCRIPTION	QTY
1	10061-1	BASE FLOOR MODEL	1
1B	10060-1	BASE BENCH MODEL	1
2	10061-2	WASHER	4
3	10061-3	BOLT FLOOR MODEL	4
3	10060-3	BOLT BENCH MODEL	4
4	10061-4	BASE FLANGE FLOOR MODEL	1
4B	10060-4	BASE FLANGE BENCH MODEL	1
5	10061-5	SCREW	1
6	10061-6	TABLE CRANK HANDLE	1
7	10061-7	TABLE BRACKET w/scale	1
7-1	10061-7-1	TILT SCALE ONLY w/rivets	1
8	10061-8	HELICAL GEAR SHAFT	1
9	10061-9	HELICAL GEAR	1
10	10061-10	ELEVATING WORM GEAR	1
11	10061-11	CLAMP LEVER	1
12	10061-12	TABLE ARM BRACKET Includes 12-1	1
13	10061-13	CENTERING SET PIN	1
14	10061-14	CLAMP LEVER	1
15	10061-15	WASHER	1
16	10061-16	BOLT	1
17	10061-17	TABLE	1
18N	10061-18N	RACK FLOOR MODEL	1
18N	10060-18N	RACK BENCH MODEL	1
19	10061-19	COLUMN FLOOR MODEL	1
19	10060-19	COLUMN BENCH MODEL	1
20	10061-20	SCREW	1
21	10061-21	RACK COLLAR	1
22N	10061-22N	FEED HANDLE	3
23	10061-23	HANDLE KNOB	3
24N	10061-24N	FEED PINION SHAFT	1
25	10061-25	SLEEVE	1
26	10061-26	HEADSTOCK CASTING	1
26-1	10061-26-1	SET SCREW	2
27	10061-27	LOCK SCREW	1
28	10061-28	BELT TENSION ADJUSTING ROD	1
28-1	10061-28-1	SPRING	1
29	10061-29	SCREW	4
33	10061-33	NUT	1
34	10061-34	RETURN SPRING & HOLDER	1
35N	10061-35	SWITCH BOX	1
36	10061-36	SCREW	3
37	10061-37	LIGHT SWITCH	1
38N	10061-38N	ON/OFF SWITCH	1
39	10061-39	SCREW	3

## PART LIST FOR 10060.001 and 10061.001

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NO.	PART NO.	DESCRIPTION	QTY
40	10061-40	POWER CORD w/MOLDED PLUG	1
40-1	10061-40-1	MOTOR TO SWITCH CORD	1
41	10061-41	SNAP RING	2
42	10061-42	DRIVER INSERT	1
43	BB-6203	6203 BALL BEARING	2
44	10061-44	SNAP RING	1
45	BB-6201	6201 BALL BEARING	1
46	10061-46	QUILL GASKET	1
47	10061-47	QUILL	1
48	BB-6204	6204 BALL BEARING	1
49	10061-49	DEPTH STOP BRACKET	1
49-1	10061-49-1	NUT	1
50	10061-50	BOLT	1
51	10061-51	SPINDLE	1
52	10061-52	DRIFT KEY	1
53	10061-53	ARBOR MT-2/JT-3	1
54	10061-54	5/8" CHUCK w/KEY JT-3	1
55	10061-55	CHUCK KEY ONLY	1
56	10061-56	BOLT	2
57	10061-57	1/2HP MOTOR 115V 1Ph	1
58	10061-58	SCREW	2
59	10061-59	CAPACITOR COVER	1
60	10061-60	CAPACITOR	1
61	10061-61	PULLEY COVER	1
62	10061-62	MOTOR PULLEY	1
63	10061-63	SET SCREW	1
64	10061-64	SNAP RING	1
65	10061-65	SNAP RING	1
66	BB-6202	6202 BALL BEARING	1
67	10061-67	IDLER PULLEY	1
68	10061-68	M22 V-BELT	1
69	10061-69	M22 V-BELT	1
70	10061-70	KNOB	1
71	10061-71	SCREW	1
72	10061-72	IDLER PULLEY HOLDER	1
73	10061-73	NUT	1
74	10061-74	SPINDLE PULLEY	1
75	10061-75	SCREW	1
76	10061-76	CORD CLAMP	1
77	10061-77	GROMMET	2
78	10061-78	SCREW	1
79	10061-79	SCREW	1
80	10061-80	KEY HOLDER	1
81	10061-81	WASHER	1
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## PART LIST FOR 10060.001 and 10061.001

NO.	PART NO.	DESCRIPTION	QTY
82	10061-82	NUT	1
83	10061-83	SET SCREW	1
84	10061-84	DEPTH STOP ROD	1
85	10061-85	DEPTH STOP LOCK NUT	2
86	10061-86	DEPTH STOP SUPPORT	1
87	10061-87	CHUCK GUARD	1
88	10061-88	LASER TRANSFORMER	1
89	10061-89	LASER SWITCH	1
90	10061-90	SCREW	2
91	10061-91	LED LIGHT	1
92	10061-92	SCREW	3
93	10061-93	LASER COVER	1
94	10061-94	KNOB	1
95	10061-95	LASER BOX	1
96	10061-96	SCREW	4
97	10061-97	FRICTION RING	1