12” DRILL PRESS WITH LASER GUIDE

Model # DP12LW
Item #52759

CAUTION – FOR YOUR OWN SAFETY

READ YOUR OWNER’S MANUAL THROUGH COMPLETELY AND CAREFULLY BEFORE ATTEMPTING TO SET-UP OR OPERATE YOUR NEW POWER TOOL.
ALL OPERATORS OF THIS EQUIPMENT SHOULD READ AND UNDERSTAND ALL SAFETY RULES PRINTED ON THE MACHINE AND THIS OWNERS MANUAL BEFORE USE.

Your new Power Tool is a well built, carefully inspected versatile machine, capable of giving you many years of dependable service. Your power tool comes complete in one carton with a minimum of first assembly and setup required by you. When unpacking , be sure to check all packages and packing material for loose parts before discarding.

NOTICE: On the nameplate of your machine you will find the serial number and MFG date code of your unit. Please record these numbers on this manual cover for future service reference.

SERIAL # _______ MFG. DATE # _______ PURCHASE DATE: _______.

POWER TOOL SPECIALISTS, INC E.WINDSOR,CT 06088 PRINTED IN CHINA
www.tradesman-rexon.com
1-800-243-5114
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Specifications</td>
<td>2</td>
<td>Know Your Drill Press</td>
<td>8</td>
</tr>
<tr>
<td>Power Tool Safety</td>
<td>3</td>
<td>Drill Press Glossary</td>
<td>9</td>
</tr>
<tr>
<td>Drill Press Safety</td>
<td>4</td>
<td>Assembly</td>
<td>10</td>
</tr>
<tr>
<td>Electrical Requirements and Safety</td>
<td>5</td>
<td>Adjustments</td>
<td>13</td>
</tr>
<tr>
<td>Accessories and Attachments</td>
<td>6</td>
<td>Operation</td>
<td>16</td>
</tr>
<tr>
<td>Tools Required For Assembly</td>
<td>6</td>
<td>Maintenance</td>
<td>20</td>
</tr>
<tr>
<td>Carton Contents</td>
<td>7</td>
<td>Troubleshooting Guide</td>
<td>21</td>
</tr>
</tbody>
</table>

## PRODUCT SPECIFICATIONS

- Chuck Size: 1/2”
- Speed: 12 (250 ~ 3,100 RPM)
- Motor: 120V, 60 Hz, 6 Amps
- Horsepower: 2/3 HP (Max. Developed)
- Table Size: 10-5/16” x 8-21/32”
- Table Tilt: 45° Right or Left
- Spindle Travel: 2-3/8”
- Throat: 6”
- Base Size: 14-3/8” x 8-1/4”
- Height: 37-5/16”

## WARRANTY

Refer to the Warranty Card included for your power tool warranty information.

## 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, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead based paints
- Crystalline silica from bricks, cement and other masonry products
- Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment such as those dust masks that are specially designed to filter out microscopic particles.
POWER TOOL SAFETY

BEFORE USING THIS DRILL PRESS
Safety is a combination of common sense, staying alert and knowing how to use your drill press.

CAUTION!
To avoid mistakes that could cause serious injury, do not plug the drill press in until you have read and understood the following.

1. READ and become familiar with the entire instruction manual. LEARN the tool’s application, limitations and possible hazards.

2. KEEP GUARDS IN PLACE and in working order.

3. DON’T USE IN DANGEROUS ENVIRONMENTS. Don’t use power tools in damp and wet locations, or expose them to rain. Keep work area well lighted.

4. DO NOT use power tools in the presence of flammable liquids or gases.

5. KEEP WORK AREA CLEAN. Cluttered areas and benches invited accidents.

6. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.

7. DON’T FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.

8. USE THE RIGHT TOOL. Do not force a tool or an attachment to do a job for which it was not designed.

9. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.

10. WEAR A FACE MASK OR DUST MASK where a drilling operation produces dust.

11. DISCONNECT TOOLS before servicing; when changing accessories such as blades, bits, cutters, and the like.

12. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure the switch is in the off position before plugging in.

13. USE RECOMMENDED ACCESSORIES. Consult the owner’s manual for recommend accessories. The use of improper accessories may cause risk of injury to persons.

14. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it ON.

15. NEVER LEAVE A TOOL RUNNING UNATTEND. TURN THE POWER “OFF”. Don’t leave the tool until it comes to a complete stop.

16. NEVER STAND ON THE TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.

17. DON’T OVERREACH. Keep proper footing and balance at all times.

18. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

19. CHECK FOR DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

20. MAKE WORKSHOP CHILD PROOF with padlocks, master switches, or by removing starter keys.

21. DO NOT operate the tool if you are under the influence of any drugs, alcohol or medication that could affect your ability to use the tool properly.

22. DUST generated from certain material can be hazardous to your health. Always operate the drill press in a well-ventilated area and provide for proper dust removal. Use a dust collection system whenever possible.

23. ALWAYS WEAR EYE PROTECTION. Any drill press can throw foreign objects into the eyes and could cause permanent eye damage. ALWAYS wear Safety Goggles (not glasses) that comply with ANSI Safety standard Z87.1 Everyday eyeglasses have only impact–resistance lenses. They ARE NOT safety glasses. NOTE: Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.
DRILL PRESS SAFETY

CAUTION!
For your own safety, do not try to use your drill press or plug it in until it is completely assembled and installed according to the instructions, and until you have read and understood this instruction manual:

1. YOUR DRILL PRESS MUST BE BOLTED securely to a workbench. In addition, if there is any tendency for your drill press to move during certain operations, bolt the workbench to the floor.

2. THIS DRILL PRESS is intended for use in dry conditions, indoor only.

3. WEAR EYE PROTECTION. USE A face or dust mask along with safety goggles if drilling operation is dusty. USE ear protectors, especially during extended periods of operation.

4. DO NOT wear gloves, neckties, or loose clothing.

5. DO NOT try to drill material too small to be securely held.

6. ALWAYS keep hands out of the path of a drill bit. Avoid awkward hand positions where a sudden slip could cause your hand to move into the drill bit.

7. DO NOT install or use any drill bit that exceeds 175 mm (7") in length or extends 150 mm (6") below the chuck jaws. They can suddenly bend outward or break.

8. DO NOT USE wire wheels, router bits, shaper cutters, circle (fly) cutters, or rotary planers on this drill press.

9. WHEN cutting a large piece of material, make sure it is fully supported at the table height.

10. DO NOT perform any operation freehand. ALWAYS use clamps or a vise.

11. MAKE SURE there are no nails or foreign objects in the part of the workpiece to be drilled.

12. CLAMP THE WORKPIECE OR BRACE IT against the left side of the column to prevent rotation. If it is too short or the table is tilted, clamp it solidly to the table.

13. IF THE WORKPIECE overhangs the table such that it will fall or tip if not held, clamp it to the table or provide auxiliary support.

14. SECURE THE WORK. Use clamps or a vise to hold the work when practical. It’s safer than using your hand and it frees both hands to operate tool.

15. WHEN using a drill press vise, always fasten to the table.

16. MAKE SURE all clamps and locks are firmly tightened before drilling.

17. SECURELY LOCK THE HEAD and table support to the column, and the table to the table support before operating the drill press.

18. NEVER turn your drill press on before clearing the table of all objects (tools, scraps of wood, etc.)

19. BEFORE STARTING the operation, jog the motor switch to make sure the drill bit does not wobble or vibrate.

20. LET THE SPINDLE REACH FULL SPEED before starting to drill. If your drill press makes an unfamiliar noise or if it vibrates excessively, stop immediately, turn the drill press off and unplug. If do not restart the unit until the problem is corrected.

21. DO NOT perform layout assembly or set up work on the table while the drill press is in operation.

22. USE THE RECOMMENDED SPEED for any drill press accessory and for different workpiece material. READ THE INSTRUCTIONS that come with the accessory.

23. WHEN DRILLING large diameter holes, clamp the workpiece firmly to the table. Otherwise, the bit may grasp and spin the workpiece at high speeds. DO NOT USE fly cutters or multiple-part hole cutters, as they can come apart or become unbalanced in use.

24. MAKE SURE the spindle has come to a complete stop before touching the workpiece.

25. TO AVOID INJURY from accidental starting, always turn the switch “OFF” and unplug the drill press before installing or removing any accessory or attachment or making any adjustment.

26. KEEP GUARDS IN PLACE and in working order.

27. USE ONLY THE SELF-EJECTING TYPE CHUCK KEY as provided with the drill press.
ELECTRICAL REQUIREMENTS AND SAFETY

GROUNDING INSTRUCTIONS
IN THE EVENT OF A MALFUNCTION OR BREAKDOWN, grounding provides a path of least resistance for electric current and reduces the risk of shock. This tool is equipped with an electric cord that has an equipment grounding conductor and grounding plug. The plug MUST be plugged into a matching receptacle that is properly installed and grounded in accordance with ALL local codes and ordinances.

DO NOT MODIFY THE PLUG PROVIDED. If it will not fit the receptacle, have the proper receptacle installed by a qualified electrician.

IMPROPER CONNECTION of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. If repair or replacement of the electric cord or plug is necessary, DO NOT connect the equipment grounding conductor to a live terminal.

CHECK with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

USE ONLY 3-WIRE EXTENSION CORDS THAT HAVE 3-PRONG GROUNDING PLUGS AND 3-POLE RECEPTACLE THAT ACCEPT THE TOOL’S PLUG. REPAIR OR REPLACE DAMAGED OR WORN CORD IMMEDIATELY.

GUIDELINES FOR EXTENSION CORDS

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The table below shows the correct size to use according to cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Use a separate electrical circuit for your tools. This circuit must not be less than #12 wire and should be protected with a 15 Amp time lag fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

This tool is intended for use on a circuit that has a receptacle like the one illustrated in FIGURE A. FIGURE A shows a 3-prong electrical plug and receptacle that has a grounding conductor. If a properly grounded receptacle is not available, an adapter (FIGURE B) can be used to temporarily connect this plug to a 2-contact ungrounded receptacle. The adapter (FIGURE B) has a rigid lug extending from it that MUST be connected to a permanent earth ground, such as a properly grounded receptacle box. THE TEMPORARY ADAPTER SHOULD BE USED ONLY UNTIL A PROPER GROUNDED OUTLET CAN BE INSTALLED BY A QUALIFIED ELECTRICIAN. The Canadian Electrical Code prohibits the use of adapters.

CAUTION: In all cases, make certain the receptacle in question is properly grounded. If you are not sure have a certified electrician check the receptacle.

CAUTION!
This drill press is for indoor use only. Do not expose to rain or use in damp locations.

<table>
<thead>
<tr>
<th>MINIMUM GAUGE FOR EXTENSION CORDS (AWG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(When using 120 volts only)</td>
</tr>
<tr>
<td>Ampere</td>
</tr>
<tr>
<td>more than</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>12</td>
</tr>
</tbody>
</table>
PRE ASSEMBLY

ACCESSORIES AND ATTACHMENTS
Use only the recommended accessories with this drill press. Follow the instructions that are supplied with these accessories.

CAUTION!
Use of improper accessories may cause hazards.

Visit the tool department for the following accessories:
- Drill bits
- Hold-Down Clamps
- Drill press Vises

CAUTION!
Use only accessories designed for this drill press to avoid injury from thrown broken parts or workpieces.

Do not use any accessory unless you have completely read the instruction or owner’s manual for that accessory.

TOOLS REQUIRED FOR ASSEMBLY

Slotted screwdriver
Combination wrench
Framing square
8’&10’Adjustable wrench
Combination square
Socket wrench with 23mm socket

CARTON CONTENTS
UNPACKING AND CHECKING CONTENTS
CAUTION!
If any part is missing or damaged, do not plug the drill press in until the missing or damaged part is replaced, and assembly is complete.

Carefully unpack the drill press and all its parts, and compare against the list.

To protect the drill press from moisture, a protective coating has been applied to the machined surfaces. Remove this coating with a soft cloth moistened with kerosene or WD-40.

CAUTION!
To avoid fire or toxic reaction, never use gasoline, naphtha, acetone, lacquer thinner or similar highly volatile solvents to clean the drill press.

TABLE OF LOOSE PARTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Head assembly</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>Base</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>Table</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>Column assembly</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>Collar</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Rack</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>Feed handles</td>
<td>3</td>
</tr>
<tr>
<td>H</td>
<td>Worm gear</td>
<td>1</td>
</tr>
<tr>
<td>I</td>
<td>Crank handle</td>
<td>1</td>
</tr>
<tr>
<td>J</td>
<td>Lock handle</td>
<td>1</td>
</tr>
<tr>
<td>K</td>
<td>Hex bolts</td>
<td>4</td>
</tr>
<tr>
<td>L</td>
<td>Hex keys</td>
<td>2</td>
</tr>
<tr>
<td>M</td>
<td>Chuck key</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>Chuck</td>
<td>1</td>
</tr>
<tr>
<td>O</td>
<td>Batteries</td>
<td>2</td>
</tr>
</tbody>
</table>
CARTON CONTENTS

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O
BASE – Supports drill press. For additional stability, holes are provided in base to bolt drill press to floor. (See “Specific Safety Instructions for Drill Presses”)

BACKUP MATERIAL – A piece of scrap wood placed between the workpiece and table. The backup board prevents wood in the workpiece from splintering when the drill passes through the backside of the workpiece. It also prevents drilling into the table top.

BELT GUARD ASSEMBLY – Covers the pulleys and belt during operation of the drill press.

BELT TENSION – Refer to the “Assembly” Section, “Installing and Tensioning Belt.”

BELT TENSION LOCK KNOB – Tightening the knobs locks the motor bracket support maintaining correct belt distance and tension.

BEVEL SCALE – Shows degree of table tilt for bevel operations. Scale is mounted on the side of arm.

CHUCK – Holds a drill bit or other recommended accessory to perform desired operations.

CHUCK KEY – A self-ejecting chuck key which will pop out of the chuck when you let go of it. This action is designed to help prevent throwing of the chuck key from the chuck when the power is turned ON. Do not use any other key as a substitute; order a new one if damaged or lost.

COLUMN – Connects the head, table, and base on a one piece tube for easy alignment and movement.

COLUMN COLLAR – Holds the rack to the column. Rack remains movable in the collar to permit table support movements.

COLUMN SUPPORT – Supports the column, and provides mounting holes for the column to base.

DEPTH SCALE – Indicates depth of hole being drilled.

DRILL SCALE POINTER – Indicates the drilling depth by pointing to the depth scale.

DEPTH SCALE STOP NUTS – Locks the depth scale to selected depth.

DRILL BIT – The cutting tool used in the drill press to make holes in a workpiece.

DRILL ON/OFF SWITCH – Has a locking feature. This feature is intended to help prevent unauthorized and possible hazardous use by children and others. Insert the key into the switch to turn the drill press on.

DRILLING SPEED – Changed by placing the belt in any of the steps (grooves) in the pulleys. See the Spindle Speed inside belt guard.

FEED HANDLE – Moves the chuck up or down. One or two of the handles may be removed if necessary whenever the workpiece is of such unusual shape that it interferes with the handles.

HEAD LOCKING SCREW – Lock the head to the column. ALWAYS lock head in place while operating the drill press.

RACK – Combines with gear mechanism to provide easy elevation of the table by the hand operated table crank.

REVOLUTIONS PER MINUTE (R.P.M) – The number of turns completed by a spinning object in one minute.

SPINDLE SPEED – The R.P.M. of the spindle.

SPRING CAP – Adjusts the quill spring tension.

TABLE – Provides a working surface to support the workpiece.

TABLE BEVEL LOCK – Locks the table in any position from 0° - 45°.

TABLE CRANK HANDLE – Elevates and lowers table. Turn clockwise to elevate table. Support lock must be released before operating crank.

TABLE SUPPORT LOCK – Tightening locks the table support to the column. Always have it locked in place while operating the drill press.

TABLE SUPPORT – Rides on the column to support the table.

WORKPIECE – Material being drilled.
Estimated Assembly Time 20~40 minutes

CAUTION!
The drill Press is very heavy and must be lifted with the help of 2 PEOPLE OR MORE, to safely assemble it.

COLUMN SUPPORT TO BASE (FIG. 1)
1. Position the base (1) on the floor.
2. Place the column (2) on the base, aligning the holes in the column support with the holes in the base.
3. Locate the four long hex bolts (3) from the loose parts bag.
4. Place a bolt in each hole through the column support and the base. Tighten with an adjustable wrench.

TABLE TO COLUMN ASSEMBLY (FIG. 2 THROUGH 6)
1. Locate the worm gear (1), table crank and table support lock handle from the loose parts bag.
2. Insert the worm gear (1) into the table crank handle hole (2) from inside the table support (3). Make sure the worm gear (1) meshes with the inside gear.
3. Install the table support lock handle(4) into the hole at the rear of the table support. Tighten.

NOTE: Table removed from support in illustration for clarity.

4. Place the rack (5 – Fig. 3) in position inside the table support (3), making sure the worm gear (1) on the inside of the table support is engaged with the teeth of the rack.

5. Slide the table support assembly with the rack (1,3,5) together onto the column (Fig. 3).
6. Engage the bottom of the rack (5) with the lip of the column support (6). Tighten the support lock handle (4) to lock the table support assembly to the column.

7. Install the collar (7) to the top end of the rack (5) on the column (Fig. 5).

IMPORTANT: The bottom of the collar MUST NOT be pushed all the way down onto the top of the rack. MAKE SURE the top of the rack is under the bottom of the collar and that there is enough clearance to allow the rack to freely rotate around the column. Tighten the set screw (8).

CAUTION: To avoid column or collar damage, DO NOT OVERTIGHTEN the set screw.
ASSEMBLY

**Fig. 5**

8. Install the table crank handle (9) to the worm gear shaft (1) on the side of the table support (3 – Fig. 6).
9. Line up the flat side of the shaft with the set screw (10) in the crank handle and tighten the screw with a hex wrench.

**Fig. 6**

**INSTALLING THE HEAD (FIG. 7)**

**CAUTION!**
The Drill Press head is very heavy and must be lifted with the help of 2 PEOPLE, to safely assemble the Drill Press head on the column.

1. Carefully lift the head (1) above the column (2) and slide it into the column. Make sure the head slides down over the column as far as possible. Align the head with the base.
2. Using the hex wrench, tighten the two head locking set screws (3) on the right side of the head.

**Fig. 7**

**INSTALLING FEED HANDLES (FIG. 8)**

1. Locate three feed handles in the loose parts bag.
2. Screw the feed handles (1) into the threaded holes (2) in the hub (3). Tighten.

**Fig. 8**

**INSTALLING THE CHUCK (FIG. 9, 10, 11)**

1. Clean out the tapered hole in the chuck (1) with a clean cloth.
2. Clean tapered surfaces on the spindle (2).

**CAUTION:** Make sure there are no foreign particles sticking to the surfaces or oily residue. Clean mating parts (hole in chuck, tapered spindle) with a non-petroleum based product such as denatured alcohol, etc. Failure to do this can result in serious injury to the operator. If tapered hole is extremely dirty, use a cleaning solvent.

**Fig. 9**

3. Lower the spindle (2) by turning the feed handles (3) counterclockwise.
4. Push the chuck up onto the spindle (2). Tap gently to ensure seat.
5. Open the jaws of the chuck (1) by rotating the chuck sleeve clockwise. To prevent damage, make sure the jaws are completely receded into the chuck.

**Fig. 10**
6. Unlock the table support lock (4 – Fig. 4) and swing the table away from the bottom of the chuck. Lock the table support lock.

7. Using a mallet or a hammer and a block of wood, tap the chuck up firmly (Fig. 11).

**Fig. 11**

![Diagram of a drill press](image)

**MOUNTING DRILL PRESS TO WORK SURFACE (FIG. 12)**

1. If mounting the drill press to a workbench, a solid wood bench is preferred over a plywood board, to reduce noise and vibration.

2. Holes should be pre-drilled through the supporting surface.

3. The hardware to mount this drill press is NOT supplied with the tool. The hardware as shown in the illustration should be used:

**Fig. 12**

1. Drill press base
2. Bolt
3. Flat washer
4. Rubber washer
5. Worksurface
6. Flatwasher
7. Lockwasher
8. Hex nut
9. Jam nut
ADJUSTMENTS

SPINDLE / QUILL (FIG. 13)
Rotate the feed handles counterclockwise to lower spindle to its lowest position. Hand support the spindle securely and move it back and forth around the axis. If there is too much play, do the following:
1. Loosen the lock nut (1).
2. Turn the screw (2) clockwise to eliminate the play, but without obstructing the upward movement of the spindle. (A little play in the spindle is normal.)
3. Tighten the lock nut (1).

Fig. 13

QUILL RETURN SPRING (FIG. 14)
If the quill return spring needs adjustment because the tension causes the quill to return too rapidly or too slowly.
1. Lower the table for additional clearance.
2. Place a screwdriver in the lower front notch (1) of the spring cap (2). Hold it in place while loosening and removing only the outer jam nut (3).
3. With the screwdriver still engaged in the notch, loosen the inner nut (4) just until the notch (5) disengages from the boss (6) on the drill press head.
CAUTION: DO NOT REMOVE THIS INNER NUT, because the spring will forcibly unwind.
4. Carefully turn the spring cap (2) counterclockwise with the screwdriver, engaging the next notch.
5. Lower the quill to the lowest position by rotating the feed handle in a counterclockwise direction while holding the spring cap (2) in position.
6. If the quill moves up and down as easily as you desire, tighten the standard nut (4) with the adjustable wrench. If too loose, repeat steps 2 through 5 to tighten. If too tight, reverse steps 4 and 5.
DO NOT OVERTIGHTEN and restrict quill movement.
7. Place the jam nut (3) and tighten against the standard nut (4) to prevent the standard nut from reversing.

Fig. 14

CAUTION!
To avoid injury from an accidental start, ALWAYS make sure the switch is in the “OFF” position, the switch key is removed, and the plug is not connected to the power source outlet before making belt adjustment.

BELT TENSION (FIG. 15)
1. To unlock the belt tension, turn the belt tension lock knobs (1) on both sides of the drill press head counterclockwise.
2. Move the motor (2) toward the front of the drill press to loosen the belt tension.
3. Position the belt on the correct pulley steps for the desired speed.
4. Pull the motor away from the drill press head until the belts are properly tensioned.

NOTE: Belt tension is correct if the belt deflects approximately 1/2 inch when pressed at its center.
5. Tighten the belt tension lock knobs (1) on both sides of the drill press head.

Fig. 15
ADJUSTMENTS

THE LASERGUIDE
Your tool is equipped a battery powered Laser Guide using Class II laser beams. The laser beams will enable you to preview the drill bit path on the workpiece to be drilled before you begin your operation.

CAUTION!

AVOID DIRECT EYE CONTACT
A Laser light is radiated when the laser guide is turned on. Avoid direct eye contact. Always un-plug the drill press from the power source before making any adjustments.

- A laser pointer is not a toy and should not come into hands of children. Misuse of this appliance can lead to irreparable eye injuries.
- Any adjustment to increase the laser power is forbidden.
- When using the laser pointer, do not point the laser beam towards people and/or reflecting surfaces. Even a laser beam of lower intensity may cause eye damage. Therefore, do not look directly into the laser beam.
- If the laser pointer is stored for more than three months without use, please remove the batteries to avoid damage from possibly leaking batteries.
- The laser pointer includes no servicing components. Never open the housing for repair or adjustments.
- On units equipped with the laser attachment, repairs shall only be carried out by the laser manufacturer or an authorized agent.
- Laser Warning label: Max output <1mW DIODE LASER:630-670nm, Complies with 21CFR 1040.10 and 1040.11.

ADJUSTING THE LASER LINES (Fig. 16)
The Laser beam must always be correctly aligned with the bit.

A. How to check the Laser-beam Alignment?
1. Adjust the table height so it is 5 inches below the bottom of the chuck
2. Scribe a round circle (approx. 1/8") on a piece of scrap wood.
3. Insert a drill bit into the chuck and tighten.
4. Lower the quill and align the scribed circle with the drill bit & fasten the wood to the table.
5. Turn on the laser and verify the laser lines (x) are centered onto the scribed circle.

B. ALIGNING THE LASER-BEAM (Fig. 16)
To adjust the laser lines:
NOTE: Lower the chuck quill and lock it in place by spinning the lower depth stop nut.
1. Lower the drill press quill One inch and lock into place by spinning the depth stop.
2. Adjust the screws (1) and bolts (2) in or out until the laser lines (x) are centered onto the scribed circle.
3. To turn the laser on or off, press rocker switch (3). Caution: Laser light is radiated when laser guide is turned on.

Fig. 16
SPEEDS AND BELT PLACEMENT (FIG. 17)
This drill press has 12 speeds, as listed below:

- 250 RPM
- 340 RPM
- 390 RPM
- 510 RPM
- 600 RPM
- 650 RPM
- 990 RPM
- 1550 RPM
- 1620 RPM
- 1900 RPM
- 2620 RPM
- 3100 RPM

See inside of the pulley guard for specific placement of the belts on the pulleys to change speeds.

CAUTION!
To avoid possible injury, keep guard closed, in place, and in proper working order while tool is in operation.

Fig. 17

ON/OFF SWITCH (FIG. 18)
The ON / OFF switch has a removable plastic safety switch key. With the key removed from the switch, unauthorized and hazardous use by children and other is minimized.

1. To turn the drill press "ON", insert key (1) into the slot of the switch (2). Move the switch upward to the “ON” position.
2. To turn the drill press “OFF”, move the switch downward.
3. To lock the switch in the OFF position, grasp the end of the safety switch (end of the toggle switch), and pull it out.
4. With the switch key removed, the switch will not operate.
5. If the switch key is removed while the drill press is running, it can be turned “OFF” but cannot be restarted without inserting the switch key.

CAUTION!
ALWAYS lock the switch “OFF” when the drill press is not in use. Remove the key and keep it in a safe place. In the event of a power failure, blown fuse, or tripped circuit breaker, turn the switch “OFF” and remove the key, preventing an accidental startup when power comes on.

Fig. 18

INSTALLING DRILL BIT IN CHUCK (FIG. 19)
1. With the switch “OFF” and the yellow switch key removed, open the chuck jaws (1) using the chuck key (2). Turn the chuck key counterclockwise to open the chuck jaws (1).
2. Insert the drill bit (3) into the chuck far enough to obtain maximum gripping by the jaws, but not far enough to touch the spiral grooves (flutes) of the drill bit when the jaws are tightened.
3. Make sure that the drill is centered in the chuck.
4. Turn the chuck key clockwise to tighten the jaws.

CAUTION!
To avoid injury or accident by the chuck key ejecting forcibly from the chuck when the power is turned “ON”, use only the self-ejecting chuck key supplied with this drill press. ALWAYS recheck and remove the chuck key before turning the power “ON”.

Fig. 19
OPERATION

CAUTION!
To prevent the workpiece or backup material from being torn from your hands while drilling, you MUST position the workpiece against the LEFT side of the column. If the workpiece or the backup material is not long enough to reach the column, clamp them to the table, or use a vise to brace the workpiece. Failure to secure the workpiece could result in personal injury.

Use caution and slow feed rate down when drill bit is coming out bottom side of workpiece. The drill bit can corkscREW the workpiece up and cause serious injury to the operator. Therefore, work should be clamped down or held in a vice.

DRILLING TO A SPECIFIC DEPTH
Drilling a blind hole (not all the way through workpiece) to a given depth can be done two ways:

Workpiece method (FIG. 20, 21)
1. Mark the depth (1) of the hole on the side of the workpiece.
2. With the switch “OFF”, bring the drill bit (2) down until the tip is even with the mark.
3. Hold the feed handle at this position.
4. Spin the lower nut (3) down to contact the depth stop lug (6) on the head.
5. Spin the upper nut (5) down and tighten against the lower stop nut (3).
6. The drill bit will now stop after traveling the distance marked on the workpiece.

Fig. 20

Depth scale method (Fig. 21)
Note: With the chuck at the uppermost position, the tip of the drill bit must be just slightly above the top of the workpiece.

1. With the switch “OFF”, turn the feed handle until the pointer (7) points to the desired depth on the depth scale (4) and hold the feed handle in that position.
2. Spin the lower nut (3) down to contact the depth stop lug (6).
3. Spin the upper nut (5) against against the lower stop nut and tighten.

Fig. 21

REMOVING CHUCK (FIG. 22)
1. With the switch “OFF”, open the jaws of the chuck as wide as possible by turning the chuck counterclockwise.
2. Tap the chuck (1) lightly with a plastic tipped hammer at the top of chuck, until the chuck releases.

NOTE: Place one hand below the chuck to catch it when it falls out.

Fig. 22

CAUTION!
To avoid injury from an accidental start, ALWAYS make sure the switch is in the “OFF” position, the switch key is removed, and the plug is not connected to the power source outlet before removing or installing the chuck.
OPERATION

BASIC OPERATION INSTRUCTIONS
To get the best results and minimize the likelihood of personal injury, follow these instructions for operating your drill press.

CAUTION!
For your own safety, always observe the SAFETY INSTRUCTIONS within the instruction manual.

CAUTION!
To avoid being pulled into the power tool, do not wear loose clothing, gloves, neckties, or jewelry. Always tie back long hair.

1. If any part of your drill press is missing, malfunctioning, damaged or broken, stop operation immediately until that part is properly repaired or replaced.

2. Never place your fingers in a position where they could contact the drill bit or other cutting tool. The workpiece may unexpectedly shift, or your hand could slip.

3. To avoid injury from parts thrown by the spring tension of the quill and to prevent the workpiece from being torn from your hands, thrown, spun by the tool, or shattered, always properly support your workpiece as follows:
   a. Always position BACKUP MATERIAL (used beneath workpiece) so that it contacts the left side of the column, or use a vise or clamp to brace all workpieces.
   b. Whenever possible, position the WORKPIECE to contact the left side of the column. If it is too short or the table is tilted, use a vise or clamp to secure workpiece.
   c. When using a drill press vise, always fasten it to the table.
   d. Never do any work freehand (hand-holding the workpiece rather than supporting it on the table), except when polishing.
   e. Securely lock the head and support to the column, the table arm to the support, and the table to the table arm, before operating the drill press.
   f. Never move the head or the table while the tool is running.
   g. Before starting an operation, jog the motor switch to make sure the drill or other cutting tool does not wobble or cause vibration.
   h. If a workpiece overhangs the table so it will fall or tip if not held, clamp it to the table or provide auxiliary support.

i. Use fixtures for unusual operations to adequately hold, guide, and position workpiece.

j. Use the Drilling Speed Table for the specific operation of workpiece material. Check the panel on the inside pulley cover or the chart below for drilling speed information. For accessories, refer to the instructions provided with each accessory.

4. Never climb on the drill press table, it could break or pull the entire drill press down on you.

5. Turn the motor switch “OFF”, and put away the switch key when leaving the drill press.

6. To avoid injury from thrown work or tool contact, do not perform layout, assembly, or set up work on the table while the cutting tool is rotating.

7. Always use approved eye protection.

<table>
<thead>
<tr>
<th>Drill Dim.</th>
<th>Wood</th>
<th>Alum.</th>
<th>Plastic</th>
<th>Mild Steel</th>
<th>Stainless</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17
POSITIONING THE TABLE AND WORKPIECE
(FIG. 23, 24)
1. Lock the table (1) to the column (2) at a position so the tip of the drill bit (3) is just above the top of the workpiece (4).

CAUTION!
To prevent the workpiece or backup material from being torn from your hands while drilling, you MUST position the workpiece against the LEFT side of the column. If the workpiece or the backup material is not long enough to reach the column, clamp them to the table, or use a vise to brace the workpiece. Failure to secure the workpiece could result in personal injury.

Fig. 23

CAUTION!
The drill press vise MUST be clamped or bolted to the table to avoid injury from a spinning workpiece. Remove the drill press fence when it interferes with other drill press accessories.

Fig. 24

CAUTION!
The drill press fence MUST be clamped or bolted to the table to avoid injury from a spinning workpiece. Remove the drill press fence when it interferes with other drill press accessories.

Fig. 24

HOLDING A DRILLING LOCATION IN METAL
1. Using a centerpunch, make an indentation in the workpiece where you want the hole.
2. To turn the laser “ON”, press the rocker switch. Using the feed handles, bring the drill down to align with the indentation before turning the drill ON.

TILTING THE TABLE (FIG. 25)
NOTE: The table arm and support (1) has a predrilled hole with a locking set screw inserted for locking the table into a predetermined 0° horizontal position.
1. To use the table in a bevel (tilted) position, turn the locking set screw (2) with the hex key counterclockwise to release it from the table support.
2. Loosen the large hex head bevel locking bolt (3).

CAUTION!
To prevent injury, be sure to hold the table & table arm assembly, so it will not swivel or tilt.

Fig. 25

3. Tilt the table, aligning the desired angle measurement to the zero line opposite the scale (4). Tighten the bevel locking bolt.
4. To return the table to its original position, loosen the bevel locking bolt (3). Realign the bevel scale (4) to the 0° position.
5. Using the hex key, turn the locking set screw (2) clockwise to seat into the hole.

CAUTION!
To avoid injury from spinning work or possible tool breakage, always clamp workpiece and backup material securely to the table before operating the drill press with the table tilted.

FEEDING
1. Pull down the feed handles with only enough effort to allow the drill bit to cut.
2. Feeding too slowly might cause the drill bit to burn. Feeding too rapidly might stop the motor, cause the belt or drill to slip, or tear the workpiece loose and break the drill bit.
3. When drilling metal, it may be necessary to lubricate the drill bit tip with motor oil, to prevent burning the tip.
MAINTENANCE

CAUTION!
For your own safety, turn the switch OFF and remove the plug from the power source outlet before maintaining or lubricating your drill press.

Frequently blow out, using an air compressor or dust vacuum, any dust that accumulates inside the motor.

A coat of automotive paste wax applied to the table and column will help to keep the surface clean.

CAUTION!
To avoid shock or fire hazard, if the power cord is worn or cut in any way, have it replaced immediately by a licensed electrician.

LUBRICATION
All of the drill press ball bearings are packed with grease at the factory. They require no further lubrication.

Periodically lubricate the gear and rack, table elevation mechanism of the spindle the rack (teeth) of the quill.

CHANGING THE LASER GUIDE BATTERIES (FIG. 26)
● Unplug your drill press.

CAUTION!
Failure to unplug your tool could result in accidental starting causing possible serious personal injury.
1. Pull on the lip of the cover (1) and remove the battery cover.
2. Remove and replace the two batteries.
3. Replace the battery cover.

NOTE: Replace the batteries with batteries that have a rating of 1.5 volts (Number 4 series and AAA size or equivalent). When replacing the batteries, the battery terminals should be thoroughly cleaned. Use a soft paintbrush or similar device, to remove all sawdust and debris.

Fig. 26
# TROUBLESHOOTING

## TROUBLESHOOTING GUIDE

**CAUTION!**
To avoid injury from an accidental start, turn the switch “OFF” and always remove the plug from the power source before making any adjustment. Consult your local Service Center if for any reason the motor will not run.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSES</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noisy operation</td>
<td>1. Incorrect belt tension.</td>
<td>1. Adjust tension. See section “ASSEMBLY-TENSIONING BELT”</td>
</tr>
<tr>
<td></td>
<td>2. Dry spindle.</td>
<td>2. Lubricate spindle. See Section “LUBRICATION”.</td>
</tr>
<tr>
<td></td>
<td>3. Loose spindle pulley.</td>
<td>3. Check tightness of retaining nut on pulley, and tighten if necessary.</td>
</tr>
<tr>
<td></td>
<td>4. Loose motor pulley.</td>
<td>4. Tighten set screw in motor pulley.</td>
</tr>
<tr>
<td>Drill bit burn.</td>
<td>1. Incorrect speed.</td>
<td>1. Change speed. See Section “BASIC DRILL PRESS OPERATION-SPINDLE SPEEDS”</td>
</tr>
<tr>
<td></td>
<td>2. Chip not coming out of hole.</td>
<td>2. Restract drill frequently to clear chips.</td>
</tr>
<tr>
<td></td>
<td>4. Feeding too slowly.</td>
<td>4. Feed fast enough – allow drill to cut.</td>
</tr>
<tr>
<td></td>
<td>5. Not lubricated.</td>
<td>5. Lubricate drill. See Section “BASIC DRILL PRESS OPERATION-FEEDING”</td>
</tr>
<tr>
<td>Run out of drill bit point-</td>
<td>1. Hand grain in wood or lengths of cutting flutes</td>
<td>1. Resharpen drill bit correctly.</td>
</tr>
<tr>
<td>drilled hole not round.</td>
<td>and/or angles not equal.</td>
<td>2. Replace drill bit.</td>
</tr>
<tr>
<td>Wood splinters on underside.</td>
<td>1. No backup material under workpiece.</td>
<td>1. Use backup material. See Section “BASIC DRILL PRESS OPERATION”.</td>
</tr>
<tr>
<td>Workpiece torn loose from</td>
<td>1. Not supported or clamped properly.</td>
<td>1. Support workpiece or clamp it. See Section “BASIC DRILL PRESS OPERATION”.</td>
</tr>
<tr>
<td>hand.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drill bit binds in workpiece.</td>
<td>1. Workpiece pinching drill bit, or excessive feed</td>
<td>1. Support workpiece or clamp it. See Section “BASIC DRILL PRESS OPERATION”.</td>
</tr>
<tr>
<td></td>
<td>pressure.</td>
<td>2. Adjust tension. See Section “ASSEMBLY – TENSIONING BELT”.</td>
</tr>
<tr>
<td>Excessive drill bit runout or</td>
<td>1. Bent drill bit.</td>
<td>1. Use a straight drill bit.</td>
</tr>
<tr>
<td>wobble.</td>
<td>2. Worn bearings.</td>
<td>2. Replace bearings.</td>
</tr>
<tr>
<td></td>
<td>3. Drill bit not properly installed in chuck.</td>
<td>3. Install drill properly. See Section “BASIC DRILL PRESS OPERATION” and “ASSEMBLY”.</td>
</tr>
<tr>
<td></td>
<td>4. Chuck not properly installed.</td>
<td>4. Install chuck properly. See Section “ASSEMBLY – INSTALLING THE CHUCK”.</td>
</tr>
<tr>
<td>Quill returns too slow or too</td>
<td>1. Spring has improper tension.</td>
<td>1. Adjust spring tension. See Section “ASSEMBLY – ADJUSTMENTS – QUIL RETURN SPRING”.</td>
</tr>
<tr>
<td>fast.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chuck will not stay attached</td>
<td>1. Dirt, grease, or oil on the tapered inside surface</td>
<td>1. Using a non-petroleum cleaning solvent, clean the tapered surface of the spindle and chuck</td>
</tr>
<tr>
<td>to spindle.</td>
<td>of chuck or on the spindle’s tapered surface.</td>
<td>hole to remove all dirt, grease and oil. See Section “ASSEMBLY – INSTALLING THE CHUCK”.</td>
</tr>
<tr>
<td>The laser guide will not turn</td>
<td>1. The batteries are dead.</td>
<td>1. Replace with new AAA batteries.</td>
</tr>
<tr>
<td>on.</td>
<td>2. The battery contacts need adjustment.</td>
<td>2. Tap outside the bottom and side of the laser housing lightly with the but end of a screwdriver.</td>
</tr>
</tbody>
</table>
## PART LIST

<table>
<thead>
<tr>
<th>I.D.</th>
<th>Description</th>
<th>Size</th>
<th>Qty</th>
<th>I.D.</th>
<th>Description</th>
<th>Size</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>2935</td>
<td>WARNING LABEL</td>
<td></td>
<td>1</td>
<td>0JTA</td>
<td>HEX. HD. BOLT</td>
<td>1/2&quot;*12UNC-7/8</td>
<td>1</td>
</tr>
<tr>
<td>2937</td>
<td>WARNING LABEL</td>
<td></td>
<td>1</td>
<td>0JXE</td>
<td>HEX. SOC. SET SCREW</td>
<td>M8*1.25-8</td>
<td>1</td>
</tr>
<tr>
<td>2938</td>
<td>LABEL</td>
<td></td>
<td>1</td>
<td>0JXE</td>
<td>HEX. SOC. SET SCREW</td>
<td>M8*1.25-8</td>
<td>2</td>
</tr>
<tr>
<td>2939</td>
<td>TRADE-MARK LABEL</td>
<td></td>
<td>1</td>
<td>0K7K</td>
<td>CR. RE. ROUND WASHER</td>
<td>M6*1.0-12</td>
<td>1</td>
</tr>
<tr>
<td>04X7</td>
<td>POINTER</td>
<td></td>
<td>1</td>
<td>0K7D</td>
<td>CR. RE. ROUND WASHER</td>
<td>M6*1.0-12</td>
<td>4</td>
</tr>
<tr>
<td>04A5</td>
<td>CLAMP-CORD</td>
<td></td>
<td>3</td>
<td>0K9X</td>
<td>DRIVE SCREW</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>04Q4</td>
<td>STICKER</td>
<td></td>
<td>1</td>
<td>0K9X</td>
<td>DRIVE SCREW</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>04VG</td>
<td>BASE</td>
<td>#06</td>
<td>1</td>
<td>0K6C</td>
<td>CR. RE. TRUSS HD. TAPPING SCREW</td>
<td>M4*16-12</td>
<td>2</td>
</tr>
<tr>
<td>04VQ</td>
<td>TABLE BRACKET ASS’Y</td>
<td></td>
<td>1</td>
<td>0KDH</td>
<td>CR. RE. PAN HD. SCREW</td>
<td>M5*0.8-8</td>
<td>3</td>
</tr>
<tr>
<td>04VT</td>
<td>WORM</td>
<td></td>
<td>1</td>
<td>0KDJ</td>
<td>CR. RE. PAN HD. SCREW</td>
<td>M5*0.8-12</td>
<td>1</td>
</tr>
<tr>
<td>04W0</td>
<td>TILTING SCALE</td>
<td></td>
<td>2</td>
<td>0KDJ</td>
<td>CR. RE. PAN HD. SCREW</td>
<td>M5*0.8-12</td>
<td>3</td>
</tr>
<tr>
<td>04WH</td>
<td>MOTOR ROD</td>
<td></td>
<td>2</td>
<td>0KDJ</td>
<td>CR. RE. PAN HD. SCREW</td>
<td>M5*0.8-8</td>
<td>2</td>
</tr>
<tr>
<td>04WK</td>
<td>MOTOR BASE</td>
<td>#06</td>
<td>1</td>
<td>0KMS</td>
<td>HEX. NUT</td>
<td>M6*1.0 T=5</td>
<td>1</td>
</tr>
<tr>
<td>04WR</td>
<td>HUB ASS’Y</td>
<td></td>
<td>1</td>
<td>0KMV</td>
<td>HEX. NUT</td>
<td>M10*1.5 T=8</td>
<td>2</td>
</tr>
<tr>
<td>04WW</td>
<td>HANDLE BAR ASS’Y</td>
<td></td>
<td>1</td>
<td>0KMY</td>
<td>HEX. NUT</td>
<td>M8*1.25 T=6.5</td>
<td>1</td>
</tr>
<tr>
<td>04X2</td>
<td>SCALE RING</td>
<td></td>
<td>1</td>
<td>0KMY</td>
<td>HEX. NUT</td>
<td>M8*1.25 T=6.5</td>
<td>4</td>
</tr>
<tr>
<td>04X9</td>
<td>SPRING CAP ASS’Y</td>
<td></td>
<td>1</td>
<td>0KNZ</td>
<td>HEX. NUT</td>
<td>1/4*20UNC T=4.7</td>
<td>1</td>
</tr>
<tr>
<td>04XC</td>
<td>QUIL SET SCREW</td>
<td></td>
<td>1</td>
<td>0KMS</td>
<td>HEX. NUT</td>
<td>1/2*20UNF T=8</td>
<td>2</td>
</tr>
<tr>
<td>04XV</td>
<td>PULLEY SET NUT</td>
<td></td>
<td>1</td>
<td>0K7Q</td>
<td>STRAIN RELIEF</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>04XY</td>
<td>SWITCH COVER</td>
<td>#06</td>
<td>1</td>
<td>0K7X</td>
<td>SWITCH BOX</td>
<td>#06</td>
<td>1</td>
</tr>
<tr>
<td>05BG</td>
<td>SPINDLE PULLEY</td>
<td>#06</td>
<td>1</td>
<td>0L6D</td>
<td>POWER CABLE</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>05BP</td>
<td>MOTOR PULLEY ASS’Y</td>
<td></td>
<td>1</td>
<td>0UGH</td>
<td>DRIVING SLEEVE ASS’Y</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>05SZ</td>
<td>CHUCK KEY HOLDER</td>
<td>#06</td>
<td>1</td>
<td>0VBX</td>
<td>RACK RING ASS’Y</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>05TW</td>
<td>NUT</td>
<td></td>
<td>2</td>
<td>0VBY</td>
<td>SET BOLT</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>05V7</td>
<td>LOCATION PIN</td>
<td></td>
<td>1</td>
<td>0VC4</td>
<td>SWITCH BOX</td>
<td>#06</td>
<td>1</td>
</tr>
<tr>
<td>05VD</td>
<td>TABLE LOCK HANDLE</td>
<td>#23</td>
<td>1</td>
<td>0VMH</td>
<td>CENTER PULLEY ASS’Y</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>05X8</td>
<td>SHIFTER BOLT</td>
<td></td>
<td>2</td>
<td>0X5E</td>
<td>MOTOR</td>
<td>#06</td>
<td>1</td>
</tr>
<tr>
<td>06SV</td>
<td>CLAMP-CORD</td>
<td></td>
<td>1</td>
<td>0X7F</td>
<td>COLUMNM HOLDER ASS’Y</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>01J2</td>
<td>CHUCK &amp; KEY</td>
<td></td>
<td>1</td>
<td>0X3F</td>
<td>CRANK HANDLE ASS’Y</td>
<td>#06</td>
<td>1</td>
</tr>
<tr>
<td>01J3</td>
<td>WRENCH HEX.</td>
<td></td>
<td>1</td>
<td>0X6F</td>
<td>TABLE</td>
<td>#AW</td>
<td>1</td>
</tr>
<tr>
<td>01JP</td>
<td>WRENCH HEX.</td>
<td></td>
<td>1</td>
<td>0X7F</td>
<td>RACK</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>01JF</td>
<td>FLAT WASHER</td>
<td>8X16-2.5</td>
<td>8</td>
<td>0SA2</td>
<td>CAUTION LABEL</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>01BF</td>
<td>FLAT WASHER</td>
<td>1/4*3/4-3/16</td>
<td>4</td>
<td>0SKA</td>
<td>LASER STICKER</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>01J9</td>
<td>SPRING WASHER</td>
<td>10</td>
<td>2</td>
<td>0SNH</td>
<td>LASER ASS’Y</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>01AF</td>
<td>EXTERNAL TOOTH LOCK WASHER</td>
<td>5</td>
<td>2</td>
<td>0SCC</td>
<td>HEAD</td>
<td>#23</td>
<td>1</td>
</tr>
<tr>
<td>01CS</td>
<td>SPRING PIN</td>
<td>6-16</td>
<td>2</td>
<td>0S8S</td>
<td>PULLEY COVER ASS’Y</td>
<td>#AW</td>
<td>1</td>
</tr>
<tr>
<td>01J4</td>
<td>PARALLEL KEY</td>
<td>5*5-20</td>
<td>1</td>
<td>0SNL</td>
<td>ROCKER COVER ASS’Y</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>01K8</td>
<td>V-BELT</td>
<td></td>
<td>1</td>
<td>0SLT</td>
<td>SPINDLE ASS’Y</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>01KC</td>
<td>V-BELT</td>
<td></td>
<td>1</td>
<td>0K3A</td>
<td>SCALE</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>01P4</td>
<td>HEX. HD. BOLT</td>
<td>M8*1.25-16</td>
<td>4</td>
<td>0K1B</td>
<td>SPEED DIAGRAM</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>01Q7</td>
<td>HEX. HD. BOLT</td>
<td>M8*1.25-25</td>
<td>4</td>
<td>0K8A</td>
<td>BATTERY ASSEMBLY</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>