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### THANK YOU & WARRANTY

Thank you for your purchase of a machine from Baileigh Industrial. We hope that you find it productive and useful to you for a long time to come.

**Inspection & Acceptance.** Buyer shall inspect all Goods within ten (10) days after receipt thereof. Buyer's payment shall constitute final acceptance of the Goods and shall act as a waiver of the Buyer's rights to inspect or reject the goods unless otherwise agreed. If Buyer rejects any merchandise, Buyer must first obtain a Returned Goods Authorization ("RGA") number before returning any goods to Seller. Goods returned without a RGA will be refused. Seller will not be responsible for any freight costs, damages to goods, or any other costs or liabilities pertaining to goods returned without a RGA. Seller shall have the right to substitute a conforming tender. Buyer will be responsible for all freight costs to and from Buyer and repackaging costs, if any, if Buyer refuses to accept shipment. If Goods are returned in unsalable condition, Buyer shall be responsible for full value of the Goods. Buyer may not return any special order Goods. Any Goods returned hereunder shall be subject to a restocking fee equal to 30% of the invoice price.

**Specifications.** Seller may, at its option, make changes in the designs, specifications or components of the Goods to improve the safety of such Goods, or if in Seller's judgment, such changes will be beneficial to their operation or use. Buyer may not make any changes in the specifications for the Goods unless Seller approves of such changes in writing, in which event Seller may impose additional charges to implement such changes.

Limited Warranty. Seller warrants to the original end-user that the Goods manufactured or provided by Seller under this Agreement shall be free of defects in material or workmanship for a period of twelve (12) months from the date of purchase, provided that the Goods are installed, used, and maintained in accordance with any instruction manual or technical guidelines provided by the Seller or supplied with the Goods, if applicable. The original end-user must give written notice to Seller of any suspected defect in the Goods prior to the expiration of the warranty period. The original end-user must also obtain a RGA from Seller prior to returning any Goods to Seller for warranty service under this paragraph. Seller will not accept any responsibility for Goods returned without a RGA. The original end-user shall be responsible for all costs and expenses associated with returning the Goods to Seller for warranty service. In the event of a defect, Seller, at its sole option, shall repair or replace the defective Goods or refund to the original end-user the purchase price for such defective Goods. Goods are not eligible for replacement or return after a period of 30 days from date of receipt. The foregoing warranty is Seller's sole obligation, and the original end-user's exclusive remedy, with regard to any defective Goods. This limited warranty does not apply to: (a) die sets, tooling, and saw blades; (b) periodic or routine maintenance and setup, (c) repair or replacement of the Goods due to normal wear and tear, (d) defects or damage to the Goods resulting from misuse, abuse, neglect, or accidents, (f) defects or damage to the Goods resulting from improper or unauthorized alterations, modifications, or changes; and (f) any Goods that has not been installed and/or maintained in accordance with the instruction manual or technical guidelines provided by Seller.

**EXCLUSION OF OTHER WARRANTIES.** THE FOREGOING LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. ANY AND ALL OTHER EXPRESS, STATUTORY OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. NO WARRANTY IS MADE WHICH EXTENDS BEYOND THAT WHICH IS EXPRESSLY CONTAINED HEREIN.

Limitation of Liability. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER OR ANY OTHER PARTY FOR ANY INCIDENTIAL, CONSEQUENTIAL OR SPECIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR DOWN TIME) ARISING FROM OR IN MANNER CONNECTED WITH THE GOODS, ANY BREACH BY SELLER OR ITS AGENTS OF THIS AGREEMENT, OR ANY OTHER CAUSE WHATSOEVER, WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY. BUYER'S REMEDY WITH RESPECT TO ANY CLAIM ARISING UNDER THIS AGREEMENT IS STRICTLY LIMITED TO NO MORE THAN THE AMOUNT PAID BY THE BUYER FOR THE GOODS.



**Force Majuere.** Seller shall not be responsible for any delay in the delivery of, or failure to deliver, Goods due to causes beyond Seller's reasonable control including, without limitation, acts of God, acts of war or terrorism, ensure actions, bestilities, strikes, labor difficulties, embergines, non-delivery or late delivery of material

terrorism, enemy actions, hostilities, strikes, labor difficulties, embargoes, non-delivery or late delivery of materials, parts and equipment or transportation delays not caused by the fault of Seller, delays caused by civil authorities, governmental regulations or orders, fire, lightening, natural disasters or any other cause beyond Seller's reasonable control. In the event of any such delay, performance will be postponed by such length of time as may be reasonably necessary to compensate for the delay.

**Installation.** If Buyer purchases any Goods that require installation, Buyer shall, at its expense, make all arrangements and connections necessary to install and operate the Goods. Buyer shall install the Goods in accordance with any Seller instructions and shall indemnify Seller against any and all damages, demands, suits, causes of action, claims and expenses (including actual attorneys' fees and costs) arising directly or indirectly out of Buyer's failure to properly install the Goods.

**Work By Others; Safety Devices.** Unless agreed to in writing by Seller, Seller has no responsibility for labor or work performed by Buyer or others, of any nature, relating to design, manufacture, fabrication, use, installation or provision of Goods. Buyer is solely responsible for furnishing, and requiring its employees and customers to use all safety devices, guards and safe operating procedures required by law and/or as set forth in manuals and instruction sheets furnished by Seller. Buyer is responsible for consulting all operator's manuals, ANSI or comparable safety standards, OSHA regulations and other sources of safety standards and regulations applicable to the use and operation of the Goods.

**Remedies.** Each of the rights and remedies of Seller under this Agreement is cumulative and in addition to any other or further remedies provided under this Agreement or at law or equity.

Attorney's Fees. In the event legal action is necessary to recover monies due from Buyer or to enforce any provision of this Agreement, Buyer shall be liable to Seller for all costs and expenses associated therewith, including Seller's actual attorneys' fees and costs.

**Governing Law/Venue.** This Agreement shall be construed and governed under the laws of the State of Wisconsin, without application of conflict of law principles. Each party agrees that all actions or proceedings arising out of or in connection with this Agreement shall be commenced, tried, and litigated only in the state courts sitting in Manitowoc County, Wisconsin or the u.s. Federal Court for the Eastern District of Wisconsin. Each party waives any right it may have to assert the doctrine of "forum non conveniens" or to object to venue to the extent that any proceeding is brought in accordance with this section. Each party consents to and waives any objection to the exercise of personal jurisdiction over it by courts described in this section. Each party waives to the fullest extent permitted by applicable law the right to a trial by jury.

#### Summary of Return Policy.

- 10 Day acceptance period from date of delivery. Damage claims and order discrepancies will not be accepted after this time.
- You must obtain a Baileigh issued RGA number PRIOR to returning any materials.
- Returned materials must be received at Baileigh in new condition and in original packaging.
- Altered items are not eligible for return.
- Buyer is responsible for all shipping charges.
- A 30% re-stocking fee applies to all returns.

Baileigh Industrial makes every effort to ensure that our posted specifications, images, pricing and product availability are as correct and timely as possible. We apologize for any discrepancies that may occur. Baileigh Industrial reserves the right to make any and all changes deemed necessary in the course of business including but not limited to pricing, product specifications, quantities, and product availability.

#### For Customer Service & Technical Support:

Please contact one of our knowledgeable Sales and Service team members at: (920) 684-4990 or e-mail us at <u>sales@baileighindustrial.com</u>



### INTRODUCTION

The quality and reliability of the components assembled on a Baileigh Industrial machine guarantee near perfect functioning, free from problems, even under the most demanding working conditions. However if a situation arises, refer to the manual first. If a solution cannot be found, contact the distributor where you purchased our product. Make sure you have the serial number and production year of the machine (stamped on the nameplate). For replacement parts refer to the assembly numbers on the parts list drawings.

Our technical staff will do their best to help you get your machine back in working order.

#### In this manual you will find: (when applicable)

- Safety procedures
- Correct installation guidelines
- Description of the functional parts of the machine
- Capacity charts
- Set-up and start-up instructions
- Machine operation
- Scheduled maintenance
- Parts lists

#### **GENERAL NOTES**

After receiving your equipment remove the protective container. Do a complete visual inspection, and if damage is noted, **photograph it for insurance claims** and contact your carrier at once, requesting inspection. Also contact Baileigh Industrial and inform them of the unexpected occurrence. Temporarily suspend installation.

Take necessary precautions while loading / unloading or moving the machine to avoid any injuries.

Your machine is designed and manufactured to work smoothly and efficiently. Following proper maintenance instructions will help ensure this. Try and use original spare parts, whenever possible, and most importantly; **DO NOT** overload the machine or make any unauthorized modifications.



Note: This symbol refers to useful information throughout the manual.



### IMPORTANT PLEASE READ THIS OPERATORS MANUAL CAREFULLY

It contains important safety information, instructions, and necessary operating procedures. The continual observance of these procedures will help increase your production and extend the life of the equipment.



### **SAFETY INSTRUCTIONS**

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#### LEARN TO RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. When you see this symbol on your machine or in this manual, <u>BE ALERT TO THE</u> **POTENTIAL FOR PERSONAL INJURY!** 

Follow recommended precautions and safe operating practices.

#### UNDERSTAND SIGNAL WORDS

A signal word – **DANGER**, **WARNING**, or **CAUTION** is used with the safety alert symbol. **DANGER** identifies a hazard or unsafe practice that will result in severe <u>Injury</u> <u>or Death</u>.

Safety signs with signal word **DANGER** or **WARNING** are typically near specific hazards.

General precautions are listed on **CAUTION** safety signs. **CAUTION** also calls attention to safety messages in this manual.









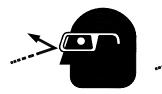


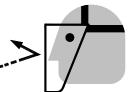
#### SAVE THESE INSTRUCTIONS. Refer to them often and use them to instruct others.



### PROTECT EYES

Wear safety glasses or suitable eye protection when working on or around machinery.







### PROTECT AGAINST NOISE

Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear suitable hearing protective devices such as ear muffs or earplugs to protect against objectionable or uncomfortable loud noises.





### **BEWARE OF PIERCING POINTS**

**<u>NEVER</u>** place Keep hands, fingers, or any part of your body away from rotating tooling bit.



Contain long hair, **DO NOT** wear jewelry or loose fitting clothing.



#### Power Switch with Lock Out

In the event of incorrect operation or dangerous conditions, the machine can be stopped immediately by pressing the Power Switch paddle downward. Remove the yellow lock key to prevent the machine from starting.

**Note:** Resetting the Power Switch WILL start the machine.





### SAFETY PRECAUTIONS

Wood working can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result.

Safety equipment such as guards, push sticks, hold-downs, feather boards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. <u>Always use common sense</u> and exercise <u>caution</u> in the workshop. If a procedure feels dangerous, don't try it. **REMEMBER:** <u>Your personal safety is your responsibility</u>.

### WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

### **Dear Valued Customer:**

- All Baileigh woodworking machines should be used only for their intended use.
- Baileigh does not recommend or endorse making any modifications or alterations to a Baileigh machine. Modifications or alterations to a machine may pose a substantial risk of injury to the operator or others and may do substantial damage to the machine.
- Any modifications or alterations to a Baileigh machine will invalidate the machine's warranty.

#### Please enjoy your Baileigh machine! ....Please enjoy it SAFELY!

- 1. FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE. Learn the machine's application and limitations as well as the specific hazards.
- 2. Only trained and qualified personnel can operate this machine.
- 3. Make sure guards are in place and in proper working order before operating machinery. DO NOT bypass or defeat any safety interlock systems.
- 4. **Remove any adjusting tools.** Before operating the machine, make sure any adjusting tools have been removed.
- 5. Secure Bit. Properly tighten and lock the drill bit in the chuck.
- 6. **Secure Piece Part.** Unsecured objects can become rotating hazards or projectiles if not firmly secured to the table.



- 7. **Drill Operation.** Never start the drill press with the drill bit pressed against the piece part. Feed the drill bit slowly and evenly into the piece part. Position work to avoid drilling into the table.
- 8. **Clearing Chips.** Turn the machine OFF and clear chips and scrap pieces with a brush or with compressed air.
- 9. **Operating Speed.** Always operate the drill press at speeds appropriate for the size drill bit and material you are drilling.
- 10. Know the location of the **ON OFF** switch and the "E"- **STOP** button.
- 11. Keep work area clean. Cluttered areas invite injuries.
- 12. **Overloading machine.** By overloading the machine you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
- 13. **Do not force tool.** Your machine will do a better and safer job if used as intended. **DO NOT** use inappropriate attachments in an attempt to exceed the machines rated capacity.
- 14. Use the right tool for the job. DO NOT attempt to force a small tool or attachment to do the work of a large industrial tool. DO NOT use a tool for a purpose for which it was not intended.
- 15. **Dress appropriate. DO NOT** wear loose fitting clothing or jewelry as they can be caught in moving machine parts. Protective clothing and steel toe shoes are recommended when using machinery. Wear a restrictive hair covering to contain long hair.
- 16. **Use eye and ear protection**. Always wear ISO approved impact safety goggles. Wear a full-face shield if you are producing metal filings.
- 17. **Do not overreach**. Maintain proper footing and balance at all times. **DO NOT** reach over or across a running machine.
- 18. **Stay alert**. Watch what you are doing and use common sense. **DO NOT** operate any tool or machine when you are tired.
- 19. Check for damaged parts. Before using any tool or machine, carefully check any part that appears damaged. Check for alignment and binding of moving parts that may affect proper machine operation.
- 20. **Observe work area conditions**. **DO NOT** use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted. **DO NOT** use electrically powered tools in the presence of flammable gases or liquids.
- 21. **Store idle equipment**. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep them out of reach of children.
- 22. **DO NOT operate machine if under the influence of alcohol or drugs**. Read warning labels on prescriptions. If there is any doubt, **DO NOT** operate the machine.
- 23. Be sure all equipment is properly installed and grounded according to national, state, and local codes.



- 24. Inspect power and control cables periodically. Replace if damaged or bare wires are exposed. **Bare wiring can kill!**
- 25. **Keep children away**. Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords. Keep visitors a safe distance from the work area.
- 26. **Do not stop** the spindle using your hand. Allow the spindle to stop on its own or in the case of an emergency, use the spindle brake.
- 27. **Disconnect power** and make sure all moving parts have come to a complete stop before changing cutting tools, starting any inspection, adjustment, or maintenance procedure.



### **TECHNICAL SPECIFICATIONS**

Туре	Belt Drive
Motor	120V, 1PH, 60Hz, 2HP (1.5kw)
Power Supply	120V, 60hz, 20A
Spindle Speed	12 Position, 220 ~ 3200rpm
Chuck Size	1/32" - 5/8" (0.8 - 16mm) JT3 Key
Spindle Travel	4.75" (120mm)
Spindle Taper	MT4; MT4/JT3
Swing	20" (508mm)
Table Size	16.54" x 18.50" (420 x 470mm)
T-Slots	3@ 5/8" (15.9mm)
Base Size	22.64" x 17.71" (575 x 450mm)
Light Socket Type	120V, Standard Bulb, Maximum 60W
Spindle To Table	26" (660mm) (w/o Chuck)
Spindle To Base	46.85" (1190mm) (w/o Chuck)
Machine Size (L / W / H)	35.4" x 25.6" x 66.7" (900 x 650 x 1695mm)
Net Weight	259lbs. (117.5kgs.)

### **TECHNICAL SUPPORT**

Our technical support department can be reached at 920.684.4990, and asking for the support desk for purchased machines. Tech Support handles questions on machine setup, schematics, warranty issues, and individual parts needs: (other than die sets and blades).

For specific application needs or future machine purchases contact the Sales Department at: <u>sales@baileigh.com</u>, Phone: 920.684.4990, or Fax: 920.684.3944.

**Note**: The photos and illustrations used in this manual are representative only and may not depict the actual color, labeling or accessories and may be intended to illustrate technique only.

**Note:** The specifications and dimensions presented here are subject to change without prior notice due to improvements of our products.



### **UNPACKING AND CHECKING CONTENTS**

Your Baileigh machine is shipped complete. Separate all parts from the packing material and check each item carefully. Make certain all items are accounted for before discarding any packing material.

**WARNING:** SUFFOCATION HAZARD! Immediately discard any plastic bags and packing materials to eliminate choking and suffocation hazards to children and animals.

If any parts are missing, DO NOT place the machine into service until the missing parts are obtained and installed correctly.

After all the parts have been removed from the carton, you should have:

- Headstock
- Table Assembly
- Base
- Column Assembly
- Drill Chuck and Key
- Drift Key
- Hex Bolts, M10 x 25 or 40 (4)





#### <u>Cleaning</u>

**WARNING:** DO NOT USE gasoline or other petroleum products to clean the machine. They have low flash points and can explode or cause fire.

**CAUTION:** When using cleaning solvents work in a well-ventilated area. Many cleaning solvents are toxic if inhaled.

Your machine may be shipped with a rustproof waxy coating and/or grease on the exposed unpainted metal surfaces. Fully and completely remove this protective coating using a degreaser or solvent cleaner. Moving items will need to be moved along their travel path to allow for cleaning the entire surface. For a more thorough cleaning, some parts will occasionally have to be removed. **DO NOT USE** acetone or brake cleaner as they may damage painted surfaces.

Follow manufacturer's label instructions when using any type of cleaning product. After cleaning, wipe unpainted metal surfaces with a light coating of quality oil or grease for protection.

*Important:* This waxy coating is **NOT** a lubricant and will cause the machine to stick and lose performance as the coating continues to dry.







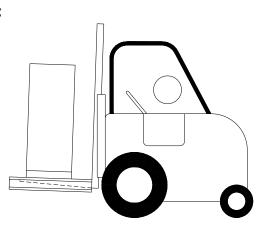


### TRANSPORTING AND LIFTING

**IMPORTANT:** Lifting and carrying operations should be carried out by skilled workers, such as a truck operator, crane operator, etc. If a crane is used to lift the machine, attach the lifting chain carefully, making sure the machine is well balanced.

#### Follow these guidelines when lifting with truck or trolley:

- The lift truck must be able to lift at least 1.5 2 times the machines gross weight.
- Make sure the machine is balanced. While transporting, avoid rough or jerky motion, and maintain a safe clearance zone around the transport area.
- Use a fork lift with sufficient lifting capacity and forks that are long enough to reach the complete width of the machine.
- Remove the securing bolts that attach the machine to the pallet.



- Approaching the machine from the side, lift the machine on the frame taking care that there are no cables or pipes in the area of the forks.
- Move the machine to the required position and lower gently to the floor.
- Level the machine so that all the supporting feet are taking the weight of the machine and no rocking is taking place.

### **INSTALLATION**

#### **IMPORTANT:**

Consider the following when looking for a suitable location to place the machine:

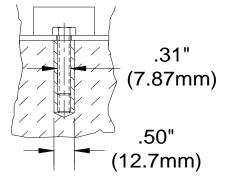
- Overall weight of the machine.
- Weight of material being processed.
- Sizes of material to be processed through the machine.
- Space needed for auxiliary stands, work tables, or other machinery.
- Clearance from walls and other obstacles.
- Maintain an adequate working area around the machine for safety.
- Have the work area well illuminated with proper lighting.
- Keep the floor free of oil and make sure it is not slippery.



- Remove scrap and waste materials regularly, and make sure the work area is free from obstructing objects.
- It is important to maintain free area around the machine, which is required for the working
  place. If any long material is machined, it is necessary to have a sufficient room in front of
  the machine as well behind it in the places of material input and output.
- **LEVELING:** The machine should be sited on a level, concrete floor. Provisions for securing it should be in position prior to placing the machine. The accuracy of any machine depends on the precise placement of it to the mounting surface.
- **FLOOR:** This tool distributes a large amount of weight over a small area. Make certain that the floor is capable of supporting the weight of the machine, work stock, and the operator. The floor should also be a level surface. If the unit wobbles or rocks once in place, be sure to eliminate by using shims.
- **WORKING CLEARANCES:** Take into consideration the size of the material to be processed. Make sure that you allow enough space for you to operate the machine freely.
- **POWER SUPPLY PLACEMENT:** The power supply should be located close enough to the machine so that the power cord is not in an area where it would cause a tripping hazard. Be sure to observe all electrical codes if installing new circuits and/or outlets.

#### Anchoring the Machine

• Once positioned, anchor the machine to the floor, as shown in the diagram, using bolts and expansion plugs or sunken tie rods that connect through holes in the base of the stand.





### ASSEMBLY AND SET UP

**WARNING:** For your own safety, DO NOT connect the machine to the power source until the machine is completely assembled and you read and understand the entire instruction manual.

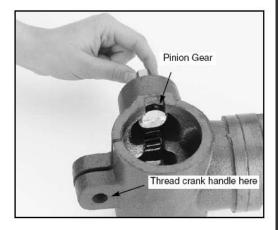
Most of your Drill Press has been assembled at the factory, but some parts must be assembled or installed after delivery.

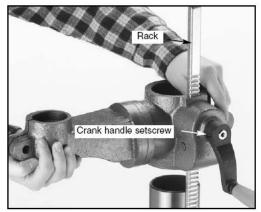
#### Column/Base

- 1. Starting with the base (1), place the column (4) on the base and line up the mounting holes.
- 2. Insert and tighten the M10-1.5 hex head bolts (2) with a wrench.

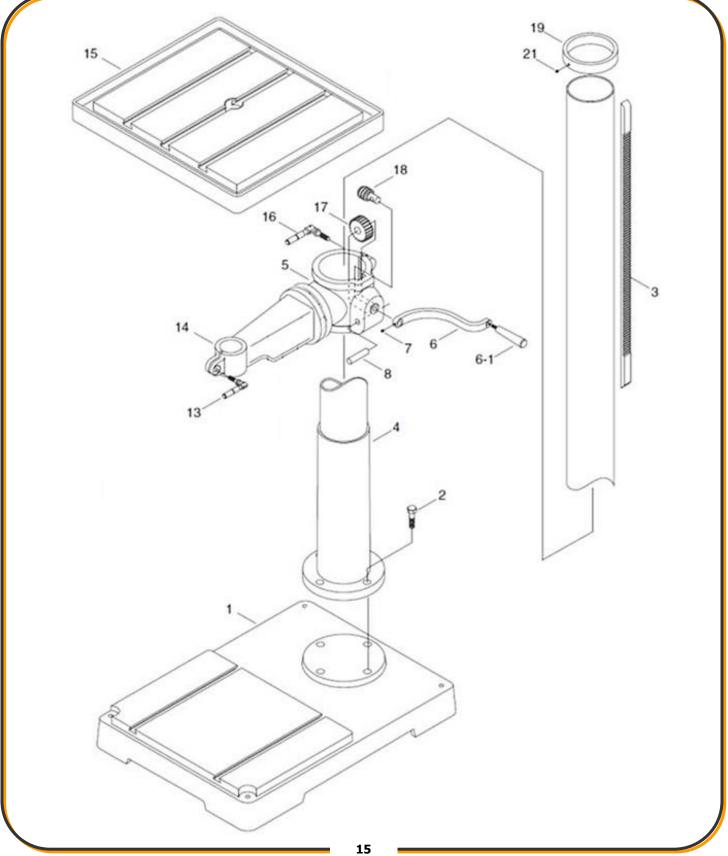
#### Table Support

- 3. Install the 12mm table lock handle (16) 3 turns into the table support bracket (large bore end).
- 4. Working from the inside out, insert the pinion gear (18) into the hole on the side of the table support bracket so that the shaft of the gear is visible to the outside of the support bracket.
- 5. Align setscrew (7) in crank handle (6) with flat on pinion gear shaft and secure the set screw to the shaft.
- 6. Examine the rack and note that the gear teeth extend farther on one end than the other. The end of the rack where the gear teeth are closest to the end should be positioned down.
- Insert the drive gear (17) and the rack (3) into the table support bracket and align it with the pocket as shown. The gear teeth on the rack must also face out.
- 8. Slide the table support bracket and rack assembly onto the column while holding the rack in place.
- 9. Allow the bracket to go down until the bottom of the rack contacts the shoulder on the column support casting.
- 10. Secure the table support arm with the clamping lock handle (16).











- 11. Slide the column ring (19) onto the column with the inside bevel in the down position as shown.
- 12. Adjust the ring until the tip of the rack fits inside the bevel. The rack should now be captured in the bevel groove at the bottom and top.
- 13. Tighten the setscrew (21) on the ring.

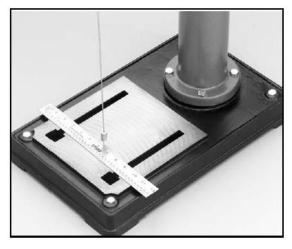




- 14. Install the table (15) onto the support bracket and secure in position with the locking handle (13).
- 15. Loosen the table support arm clamping lock handle (16) and swing the table to the left 70° 90° and tighten the clamping lock handle.

#### Headstock

- 16. Using a lifting device or an assistant, lift the head assembly over the column and insert the column into the pocket on the bottom of the head assembly until the column is fully seated into the head pocket, approximately 4" (100mm).
- 17. Position the headstock directly over the base by using a plumb bob and measuring tape or ruler across the drill press base to find its center.
- 18. Suspend the plumb line from the center of the headstock label and lower the bob until it is near the tape/ruler as shown.





- 19. Rotate the headstock from side to side until the tip is equidistant from both the left and right sides.
- 20. Tighten the two setscrews located on each side of the headstock as shown to secure headstock to the column.

#### **Handles**

21. Install the three handles into the handle hub.



#### Installing Light Bulb (Customer Supplied)

*IMPORTANT:* Use only bulbs that are "safety coated" and shatter resistant. The bulb will be exposed at the bottom of the head casting which helps with illumination. Impacts with a bulb not "safety coated" may shatter, exposing the electrical filaments and creating an electrical shock hazard.

**Note:** A bulb is NOT shipped with this drill press due to the high likelihood of damage to the bulb during shipping.

- 22. Verify that the power is disconnected from the machine.
- 23. Remove the socket plug from the bulb socket.
- 24. Install a maximum 60 watt A19 medium base E26 bulb.



#### Drill Chuck and Arbor

The drill chuck attaches to the drill spindle by means of a drill chuck arbor. Matched tapers on the arbor and chuck bore create solid assembly when properly joined. To assemble the drill chuck and mount it to the spindle, carefully follow the instructions below:

IMPORTANT: The drill chuck, arbor and

spindle socket must be thoroughly cleaned and dried before assembly. It is recommended that mineral spirits be used for this task. Refer to the safety warnings on the container of the mineral spirits. Failure to clean the

mating surfaces may result in separation and an unsafe condition. Separation is usually caused by oil or grease on the taper.

- 1. Use the provided chuck key to adjust the jaws of the chuck until they are well inside the drill chuck body.
- 2. Place the drill chuck on a workbench jaw side down.
- 3. The arbor has a short taper and a long taper. Place the short taper into the socket in the back of the drill chuck and tap with a rubber or wooden mallet as shown. If the chuck fails to remain secure on the arbor repeat the previous steps to clean the surfaces.
- 4. Slide the arbor into the spindle socket while slowly rotating drill chuck. The socket has a rectangular pocket in which the tang (or flat portion of the arbor) fits into. Once the tang is oriented correctly the

drill chuck will not rotate without turning the spindle.

5. Tap upward on the end of the drill chuck with a rubber or wooden mallet to seat the arbor assembly.







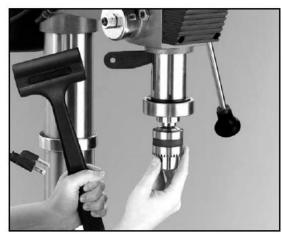


#### Arbor Removal

A drift key is included to aid in the drill chuck arbor removal.

- 1. Extend the spindle downward until the slot is exposed in the side of the quill.
- 2. Rotate the spindle until the inner slot is aligned with the outer as shown. You will see through the spindle when the slot is properly aligned.
- 3. Insert the drift key into the slot with the flat side up and the tapered side down.
- 4. Allow the quill to rise until the flat side of the drift key is against the quill stop.
- 5. Hold the drill chuck with one hand and tap on the drift key with a mallet to release the arbor.







### ELECTRICAL

**CAUTION:** HAVE ELECTRICAL UTILITIES CONNECTED TO MACHINE BY A CERTIFIED ELECTRICIAN!

Check if the available power supply is the same as listed on the machine nameplate.

WARNING: Make sure the grounding wire (green) is properly connected to avoid electric shock. DO NOT switch the position of the green grounding wire if any electrical plug wires are switched during hookup.

#### Motor Specifications

Your tool is wired for 120 volt, 60Hz alternating current. Before connecting the tool to the power source, make sure the machine is cut off from power source.

#### **Considerations**

- Observe local electrical codes when connecting the machine.
- The circuit should be protected with a time delay fuse or circuit breaker with a amperage rating slightly higher than the full load current of machine.
- A separate electrical circuit should be used for your tools. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the tool.
- All line connections should make good contact. Running on low voltage will damage the motor.
- In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

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

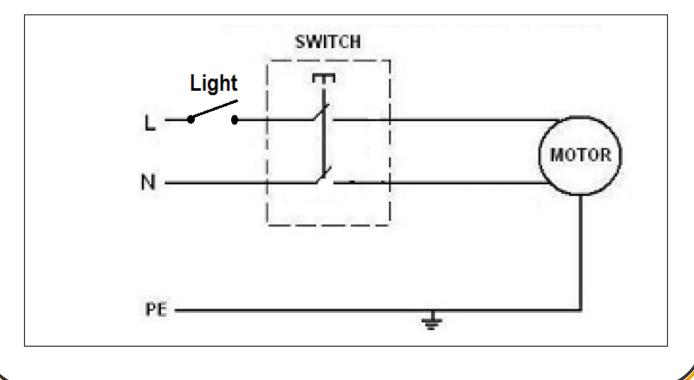


- Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
- Repair or replace damaged or worn cord immediately.

#### Power cord connection:

- 1. Unwrap the power cord and route the cord away from the machine toward the power supply.
  - a. Route the power cord so that it will NOT become entangled in the machine in any way.
  - b. Route the cord to the power supply is a way that does NOT create a trip hazard.
- 2. Connect the power cord to the power supply and check that the power cord has not been damaged during installation.
- 3. When the machine is clear of any obstruction. The main power switch may be turn ON to test the operation. Turn the switch OFF when the machine is not in operation.

#### **ELECTRICAL SCHEMATIC**





### **ADJUSTMENTS**

WARNING: Make sure the power cord is disconnected and power is <u>OFF</u> before working on the machine.

Always follow proper safety precautions when working on or around any machinery.

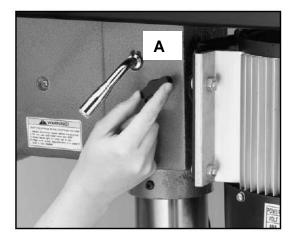
#### Speed Changes

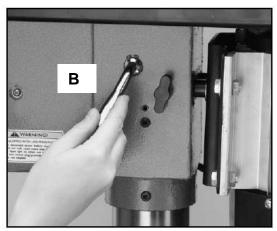
The drill press has 12 speeds. There is a speed chart located on the inside of the upper belt guard. Refer to the chart to align the belts to the correct pulley grooves for the desired speed setting.

- 1. Unplug the drill press before changing speeds.
- 2. Loosen the belt tension lock knobs (A) on both sides of the headstock by turning counterclockwise.
- The motor should be free to move. Rotate the belt tension lever (B) counterclockwise to take tension off the V-belts.
- 4. Locate the desired speed on the chart and move the V-belts to the desired V-grooves on the motor, idler and spindle pulleys.

*Important:* The belts must travel level between the pullies. DO NOT allow the belts to travel up or downward.

- 5. Rotate the belt tension lever until the belts are tight. Tighten both lock knobs.
- 6. Close the cover.



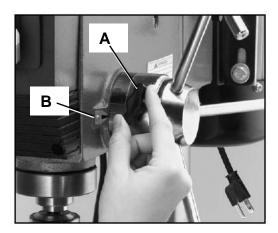


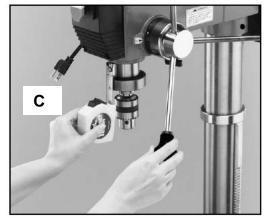


#### Depth Stop

Your drill press comes with a depth stop adjustment for use when drilling.

- 1. Loosen the depth collar lock knob (A).
- 2. Secure the wood stock you will be drilling onto the drill press table.
- 3. With the desired bit installed, lower the spindle until the tip of the bit just touches the wood stock you will be drilling. Hold the spindle in this position.
- 4. Turn the depth collar to the desired depth indicated by the scale on the collar (B).
- 5. Secure the collar by tightening the lock knob (A).
- 6. Remove the wood stock and test the depth stop by measuring how far the spindle travels when the handles are rotated (C).







#### Table Adjustment

The table can be adjusted for height, rotation and angle.

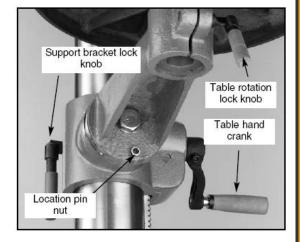
- 1. Loosen the support bracket lock knob. Turn the table hand crank to lift or lower the table.
- 2. Always lock the support bracket in place before operating the machine.

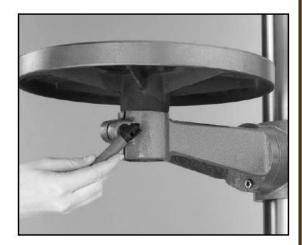
#### Adjust rotation:

- 1. Loosen the lock handle located under the table
- 2. Rotate the table the desired amount.
- 3. Always lock the table rotation in place before operating the machine.

#### Adjust angle:

- Turn the location pin nut in a clockwise direction. This will draw the location pin out of the casting. Once loose, pull the pin and nut out, and set it in a safe place until needed.
- 2. Loosen the large pivot bolt in the center of the support bracket above the location pin.
- 3. Rotate the bracket to the desired angle. Use the scale on the side of the bracket or a protractor to set the angle. Lock in place by tightening the pivot bolt.





- 4. When repositioning the table to 0° position, loosen the large pivot bolt in the center of the support casting.
- 5. Rotate the support casting until the degree scale reads 0°.
- 6. Carefully tap the location pin back into the hole from which it came until it stops.
- 7. Unscrew the nut on the location pin until it is flush with the end of the threads. This will protect the threads when you tap it into place with a hammer.
- 8. Carefully tap the location pin back into the hole from which it came until it stops.
- 9. Turn the nut clockwise until it is snug against the casting and then tighten the large pivot bolt in the center.
- 10. The table is now set to the factory pre-set angle.



### OPERATION

**CAUTION:** Always wear proper eye protection with side shields, safety footwear, and leather gloves to protect from burrs and sharp edges. When handling large heavy material make sure they are properly supported.

#### <u>Test Run</u>

Once assembly is complete and adjustments are done to your satisfaction, you are ready to test run the machine.

- 1. Verify that the arbor is installed correctly and is secure.
- 2. Verify that if a bit is installed, it is tight and secure.
- 3. Verify that the spindle is not in contact with any tools or material.
- 4. Connect the drill press to the power supply.
- 5. Flip the START button up to the on position. Make sure that your finger is poised on the paddle switch, just in case there is a problem. The drill press should run smoothly, with little or no vibration or rubbing noises. Strange or unnatural noises should be investigated and corrected before operating the machine further.

#### **Drill Bit Changes**

Make sure to secure the bit firmly in place. When changing bits, proceed as follows:

- 1. Disconnect the machine from power source.
- 2. Open the chuck wide enough to accept a new bit.
- 3. Install the bit so the chuck jaws will grab as much of the bit shank as it can. Do not allow the chuck to grab the fluted body of the drill bit. Make sure small drill bits do not get trapped between the edges of two jaws.
- 4. Tighten the chuck with the chuck key using any of the three key end locations.
- 5. Remove the chuck key and reconnect power source.
- 6. Reverse steps to remove drill bit.



### LUBRICATION AND MAINTENANCE

**WARNING:** Make sure the electrical disconnect is <u>OFF</u> before working on the machine.

Maintenance should be performed on a regular basis by qualified personnel. Always follow proper safety precautions when working on or around any machinery.

#### Daily Maintenance

- Do a general cleaning by removing dust and chips from the machine.
- Check and tighten any loose mounting bolts.
- Sharpen or replace any worn or damaged tooling.
- Lubricate the quill gearing.
- Inspect the power plug and cord.
- Keep area around machine clear of debris.
- Check for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.

**Note:** When cleaning chips and debris from the machine, use a brush and a shop vacuum. **DO NOT** blow off the machine with compressed air. The force of the compressed air may force chips into critical mechanisms or may inflict injury to yourself or others.

#### Weekly Maintenance

- Lubricate threaded components and sliding devices.
- Apply rust inhibitive lubricant to all non-painted surfaces.
- Clean the machine and the area around it.

**Note:** The non-painted surfaces on the drill press should be protected against rust and pitting. Wiping the machine clean after every use ensures that dust will not trap moisture against bare metal surfaces.

Some woodworkers recommend using automotive paste wax on exposed steel and cast iron surfaces. The wax provides a layer of protection, as well as reducing friction between lumber and the table, making cuts faster and smoother. Avoid waxes that contain silicone or other synthetic ingredients. These materials can find their way into lumber that is being worked, and can make staining and finishing difficult. If you use paste wax, make sure that it is 100% Carnauba wax.



#### Monthly Maintenance

- Check that all screws and bolts are tight and secure.
- Wipe built up grime from with a rag and a mild solvent.
- Check for worn or damaged electrical cables.
- Inspect regularly for tension and wear. Check pulleys to ensure that they are properly aligned. See pulley/V-belt sections for proper tension and pulley alignment procedures.



Note: Proper maintenance can increase the life expectancy of your machine.

#### Greasing the Machine

- 1. Grease the gear rack on the column to keep the table moving smoothly.
- 2. Lubricate the spline of the spindle and the teeth of the rack with a #2 grease.
- 3. Fully extend the spindle and lightly grease the spindle shaft.
- 4. A coat of automotive type paste wax applied to the table and column will help to keep the surfaces clean.

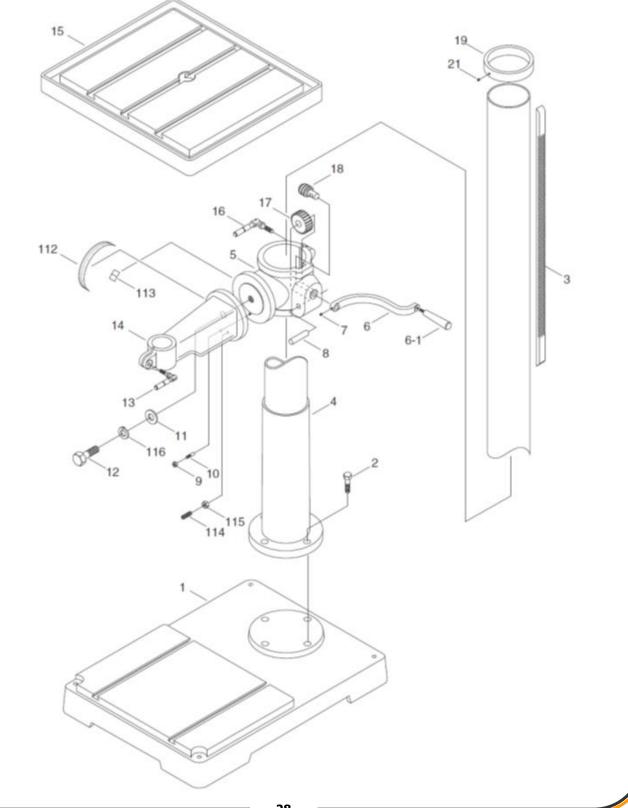
#### Storing Machine for Extended Period of Time

If the Drill Press is to be inactive for a long period of time, prepare the machine as follows:

- Detach the plug from the electrical supply panel.
- Clean and grease the machine.
- Cover the machine.

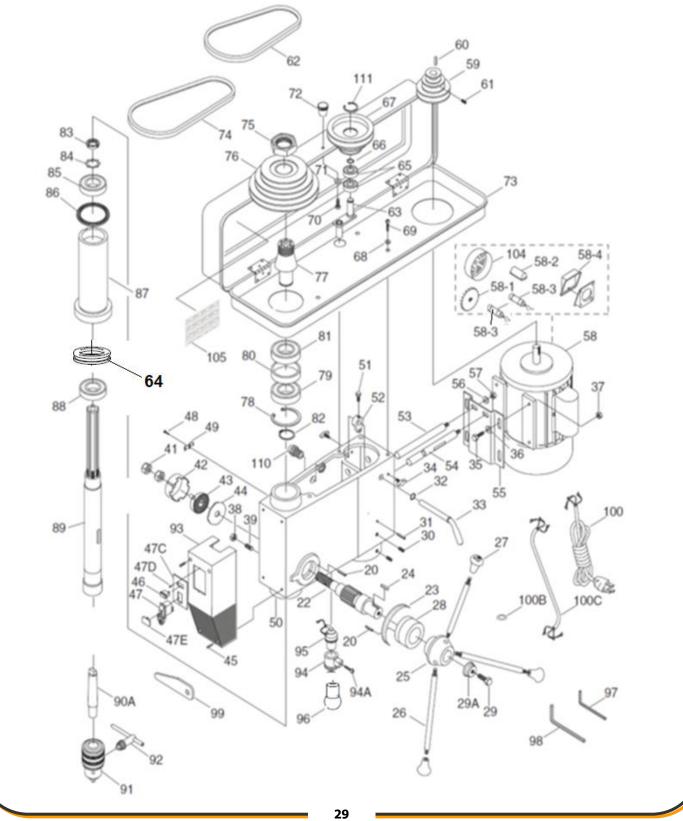


### STAND / TABLE PARTS DIAGRAM





### HEADSTOCK PARTS DIAGRAM





#### Parts List

Item	Part No.		Size	Qty.
1	DP2012FHDV2-001	Base		1
2	DP2012FHDV2-002	Hex Bolt	M12x30	4
3	DP2012FHDV2-003	Rack		1
4	DP2012FHDV2-004	Column		1
5	DP2012FHDV2-005	Table Bracket		1
6	DP2012FHDV2-006	Handle Arm		1
6-1	DP2012FHDV2-006-1	Handle		1
7	DP2012FHDV2-007	Set Screw	M8x12	1
8	DP2012FHDV2-008	Shaft		1
9	DP2012FHDV2-009	Hex. Nut	M6	1
10	DP2012FHDV2-010	Table Pin		1
11	DP2012FHDV2-011	Flat Washer	6	1
12	DP2012FHDV2-012	Hex Bolt	M20x45	1
13	DP2012FHDV2-013	Table Bolt		1
14	DP2012FHDV2-014	Table Arm Bracket		1
15	DP2012FHDV2-015	Table		1
16	DP2012FHDV2-016	Clamp Bolt		1
17	DP2012FHDV2-017	Gear		1
18	DP2012FHDV2-018	Worm Gear		1
19	DP2012FHDV2-019	Rack Ring	4x24	1
20	DP2012FHDV2-020	Roll Pin		1
21	DP2012FHDV2-021	Set Screw	M10x10	1
22	DP2012FHDV2-022	Feed shaft		1
23	DP2012FHDV2-023	Scale Ring		1
24	DP2012FHDV2-024	key	6x6x20	1
25	DP2012FHDV2-025	Handle Body		1
26	DP2012FHDV2-026	Handle		3
27	DP2012FHDV2-027	Knob		3
28	DP2012FHDV2-028	Feed Shaft Connector		1
29	DP2012FHDV2-029	Hex. Bolt	M10X30	1
29A	DP2012FHDV2-029A	Plastic Lock Cap		1
30	DP2012FHDV2-030	Set Screw	M10x10	3
31	DP2012FHDV2-031	Roll Pin		1



ltem	Part No.		Size	Qty.
32	DP2012FHDV2-032	Ext Retaining Ring	15	1
33	DP2012FHDV2-033	Shifter Bar		1
34	DP2012FHDV2-034	Slide Bar Bolt		2
35	DP2012FHDV2-035	Hex. Bolt	M10X25	4
36	DP2012FHDV2-036	Flat Washer	10	4
37	DP2012FHDV2-037	Hex Nut	M10	4
38	DP2012FHDV2-038	Hex. Nut	M10	1
39	DP2012FHDV2-039	Set Screw	M10x12	1
41	DP2012FHDV2-041	Hex Nut	M16	2
42	DP2012FHDV2-042	Spring Cap w/Torsion Spring		1
43	Part of item 42.	Not sold separately		
44	No longer used			
45	DP2012FHDV2-045	Phillip Head Screw	M5x16	4
46	DP2012FHDV2-046	Light Switch		1
47	DP2012FHDV2-047	Switch for Motor		1
47C	DP2012FHDV2-047C	Switch Plate		1
47D	DP2012FHDV2-047D	Tap Screw		1
47E	DP2012FHDV2-047E	Yellow Switch key		1
48	DP2012FHDV2-048	Phillip Head Screw		1
49	DP2012FHDV2-049	Cord Clamp		1
50	DP2012FHDV2-050	Head Casting		1
51	DP2012FHDV2-051	Hex. Bolt	M8X16	1
52	DP2012FHDV2-052	Shifter		1
53	DP2012FHDV2-053	Left Slide Bar		1
54	DP2012FHDV2-054	Right Slide Bar		1
55	DP2012FHDV2-055	Motor Base		1
56	DP2012FHDV2-056	Flat Washer	12	2
57	DP2012FHDV2-057	Hex Nut	M12	2
58	DP2012FHDV2-058	Motor		1
58-1	DP2012FHDV2-058-1	Motor fan		1
58-2	DP2012FHDV2-058-2	Capacitor Cover		1
58-3	DP2012FHDV2-058-3S	Starting Capacitor		1
58-3	DP2012FHDV2-058-3R	Running Capacitor		1
58-4	DP2012FHDV2-058-4	Junction Box		1
59	DP2012FHDV2-059	Motor Pulley		1



tem	Part No.		Size	Qty.
60	DP2012FHDV2-060	Кеу	5x5x25	1
61	DP2012FHDV2-061	Set Screw	M6x10	1
62	DP2012FHDV2-062	V-Belt	A-680	1
63	DP2012FHDV2-063	Center Shaft		1
64	DP2012FHDV2-064	Thrust Ball Bearing	51107	1
65	DP2012FHDV2-065	Ball Bearing	6202-2RZ	1
66	DP2012FHDV2-066	Hex Bo Ext Retaining Ring	14	1
67	DP2012FHDV2-067	Center Pulley		1
68	DP2012FHDV2-068	Flat Washer	6	4
69	DP2012FHDV2-069	Phillip Head Screw	M6x12	4
70	DP2012FHDV2-070	Phillip Head Screw	M5x10	1
71	DP2012FHDV2-071	Flat Washer	5	1
72	DP2012FHDV2-072	Pulley Cover Knob		1
73	DP2012FHDV2-073	Pulley Housing		1
74	DP2012FHDV2-074	V-Belt	A-829E	1
75	DP2012FHDV2-075	Pulley Nut		1
76	DP2012FHDV2-076	Spindle Pulley		1
77	DP2012FHDV2-077	Pulley Insert		1
78	DP2012FHDV2-078	Insert Retaining Ring	52	2
79	DP2012FHDV2-079	Ball Bearing	6207-2RZ	1
80	DP2012FHDV2-080	Spacer		1
81	DP2012FHDV2-081	Ball Bearing	6207-2RZ	1
82	DP2012FHDV2-082	Ext Retaining Ring		1
83	DP2012FHDV2-083	Spanner Nut		1
84	DP2012FHDV2-084	Tab Washer		1
85	DP2012FHDV2-085	Ball Bearing	6206-2RZ	1
86	DP2012FHDV2-086	Rubber Washer		1
87	DP2012FHDV2-087	Quill		1
88	DP2012FHDV2-088	Ball Bearing	6207-2RZ	1
89	DP2012FHDV2-089	Spindle		1
90A	DP2012FHDV2-090A	Arbor	MT4/JT3	1
91	DP2012FHDV2-091	Chuck	JT3 (0.8-16mm)	1
92	DP2012FHDV2-092	Chuck key		1
93	DP2012FHDV2-093	Switch Box		1
94	DP2012FHDV2-094	Light Base		1



Item	Part No.		Size	Qty.
94A	DP2012FHDV2-094A	Phillip Head Screw		1
95	DP2012FHDV2-095	Light Socket		1
96	DP2012FHDV2-096	Light		1
97	DP2012FHDV2-097	Hex Wrench	3mm	1
98	DP2012FHDV2-098	Hex Wrench	4mm	1
99	DP2012FHDV2-099	Drift key		1
100	DP2012FHDV2-100	Power Cord		1
100B	DP2012FHDV2-100B	Wire Gasket		1
100C	DP2012FHDV2-100C	Motor Cord		1
104	DP2012FHDV2-104	Motor Fan Cover		1
105	DP2012FHDV2-105	Speed Chart		1
110	DP2012FHDV2-110	Strain Relief		1
111	DP2012FHDV2-111	Insert Retaining Ring		1
112	DP2012FHDV2-112	Degree Scale		1
113	DP2012FHDV2-113	Indicator		1
114	DP2012FHDV2-114	Set Screw	M8x25	1
115	DP2012FHDV2-115	Hex Nut	M8	1
116	DP2012FHDV2-116	Lock Washer	20	1



### TROUBLESHOOTING

# **WARNING:** Make sure the electrical disconnect is <u>OFF</u> before working on the machine.

FAULT	PROBABLE CAUSE	REMEDY
	1. Incorrect belt tension.	1. Adjust tension.
	2. Dry Spindle.	2. Lubricate spindle.
Naiov Operation	3. Loose spindle pulley.	3. Checking tightness of retaining
Noisy Operation		nut on pulley, and tighten if
		necessary.
	4. Loose motor pulley.	4. Tighten setscrews in pulleys.
	1. Incorrect speed.	1. Change speed.
	2. Chips not coming out of hole.	2. Retract drill bit frequently to
Drill bit burns		clear chips.
	3. Dull drill bit.	3. Sharpen drill bit.
	4. Feeding too slow.	4. Increase feed rate.
	5. Not lubricated.	5. Lubricate drill bit.
	1. Hard grain in wood or lengths of	1. Sharpen drill bit correctly.
	cutting lips and/or angles not	
not round.	equal.	
	2. Bent drill bit.	2. Replace drill bit.
Wood splinters on	1. No "back up material" under	1. Use "back- up material" under
underside.	workpiece.	workpiece.
Workpiece tum loose	1. Not supported or clamped	1. Support workpiece or clamp it
from hand.	properly.	properly using a secure clamp.
Drill bit binds in	1. Workpiece pinching drill bit or	1. Support workpiece or clamp it
workpiece.	excessive feed pressure.	properly using a secure clamp.
	2. Improper belt tension.	2. Adjust belt tension.
	1. Bent drill bit.	1. Use a straight drill bit.
Excessive drill bit	2. Worn spindle bearings.	2. Replace bearings.
runout or wobble.	3. Drill not properly installed in	3. Install drill bit properly.
	chuck.	
	4. Chuck not properly installed.	4. Install chuck properly.
Chuck will not stay	1. Dirty, grease, or oil on the	1. Using a household detergent
attached to spindle it	tapered inside surface of chuck or	clean the tapered surface of the
falls off when trying to	on the spindles tapered surface.	chuck and spindle to remove all
install it.		dirt, grease and oil.



### <u>NOTES</u>



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