



OPERATOR'S MANUAL

Wood Working



DRILL PRESS

MODEL: DP-1512B-HD AND DP-1512F-HD

Baileigh Industrial, Inc.
P.O. Box 531
Manitowoc, WI 54221-0531
Phone: 920.684.4990
Fax: 920.684.3944
sales@baileigh.com

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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 INCIDENTAL, 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 Majeure. 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, 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 Manitowish 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 sales@baileighindustrial.com



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.



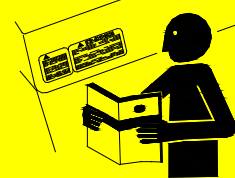
Note: *This symbol refers to useful information throughout the manual.*



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

LEARN TO RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. When you see this symbol on your machine or in this manual, **BE ALERT TO THE 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 **Injury or Death.**

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.



DANGER



WARNING



CAUTION

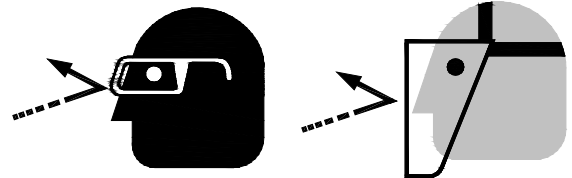


SAVE THESE INSTRUCTIONS.
Refer to them often and use them to instruct others.



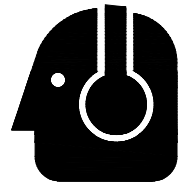
PROTECT EYES

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



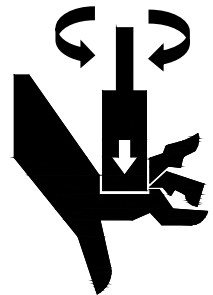
PROTECT AGAINST NOISE

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.



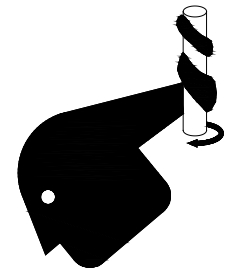
BEWARE OF PIERCING POINTS

NEVER place Keep hands, fingers, or any part of your body away from rotating tooling bit.



ENTANGLEMENT HAZARD – ROTATING SPINDLE

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



EMERGENCY STOP BUTTON

In the event of incorrect operation or dangerous conditions, the machine can be stopped immediately by pressing the **E-STOP** button. Twist the emergency stop button clockwise (cw) to reset.
Note: Resetting the E-Stop will not 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. **Always use common sense** and exercise **caution** in the workshop. If a procedure feels dangerous, don't try it.

REMEMBER: Your personal safety is your responsibility.



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

Description	DP-1512B	DP-1512F
Type	Belt drive	Belt drive
Motor	3/4hp (.55kw) / 60hz / 10A	3/4hp (.55kw) / 60hz / 10A
Power Supply	110VAC 60hz	110VAC 60hz
Spindle Speed**	500 ~ 2550rpm	500 ~ 2550rpm
Spindle Taper	MT2	MT2
Chuck Size	5/8" (16mm)	5/8" (16mm)
Collar Diameter	2.44" (62mm)	2.44" (62mm)
Spindle travel	3.34" (85mm)	3.34" (85mm)
Chuck to table	8.85" (225mm)	26.25" (668mm)
Chuck to base	19.29" (490mm)	45.4" (1154mm)
Table Size	11.81" (300mm)	11.81" (300mm)
Height	39.56" (1005mm)	65.7" (1669mm)
Column Diameter	2.83" (72mm)	2.83" (72mm)
Base Size	9.84" x 16.5" (250 x 420mm)	9.84" x 16.5" (250 x 420mm)
Machine size (L / W / H)	41.9" x 24" x 12" (1065 x 610 x 305mm)	64.37" x 24" x 14.37" (1635 x 610 x 365mm)
Net Weight	135 lbs. (64kgs.)	148 lbs. (67kgs.)

**



Note: Actual rpm will vary but in generally within $\pm 10\%$.

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: sales@baileigh.com, 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.

Cleaning

⚠ 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.

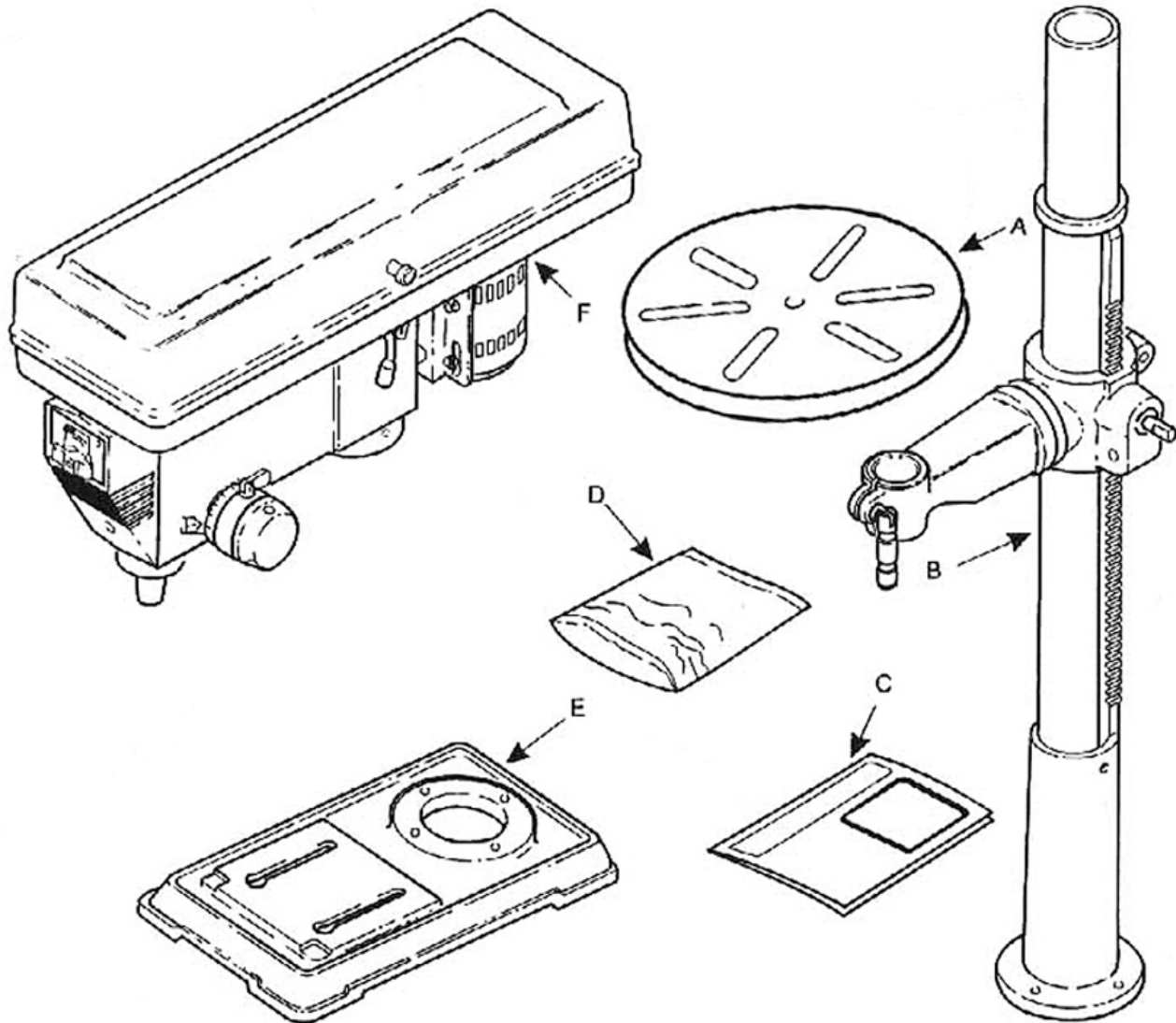


Important: This waxy coating is **NOT** a lubricant and will cause the machine to stick and lose performance as the coating continues to dry.





Separate all parts from packaging materials and check each Item make sure all items are accounted for before discarding any packing material.



Item	Description	Qty.
A	Table	1
B	Column Support Arm	1
C	Owner's Manual	1
D	Bag of Loose Parts	*
E	Base	*
F	Head Assembly	1



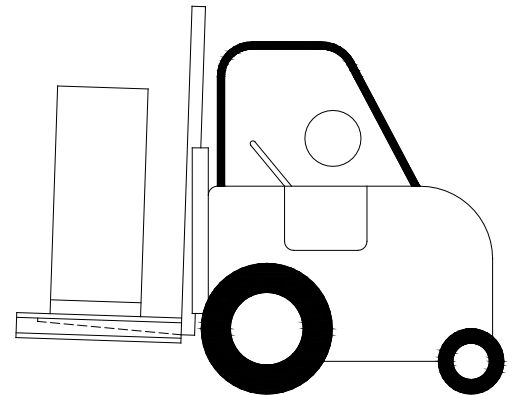
TRANSPORTING AND LIFTING



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.



Follow these guidelines when lifting crane or hoist:

- Always lift and carry the machine with the lifting holes provided at the top of the machine.
- Use lift equipment such as straps, chains, capable of lifting 1.5 to 2 times the weight of the machine.
- Take proper precautions for handling and lifting.
- Check if the load is properly balanced by lifting it an inch or two.
- Lift the machine, avoiding sudden accelerations or quick changes of direction.
- Locate the machine where it is to be installed, and lower slowly until it touches the floor.



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.

Securing the Base

The base of the drill press has two mounting holes. The drill press should be level and rest solidly on the floor. Place shims under the four corners of the base as required for leveling the drill press.

Anchor the base to the mounting surface to prevent tipping of the drill press.

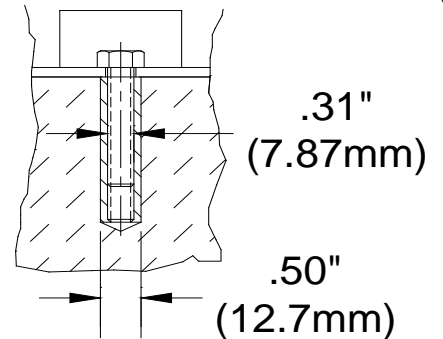


Anchoring the Machine

- 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.

If you intend to mount the Baileigh machine on a workbench be aware of the following:

- Overall weight of the machine.
- Weight of material being processed.
- Make sure the workbench is properly reinforced to support the weight.
- The strongest mounting option is where the holes are drilled all the way through the workbench and the machine is secured with bolts, washers, and nuts.





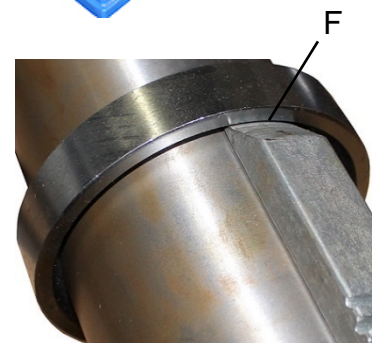
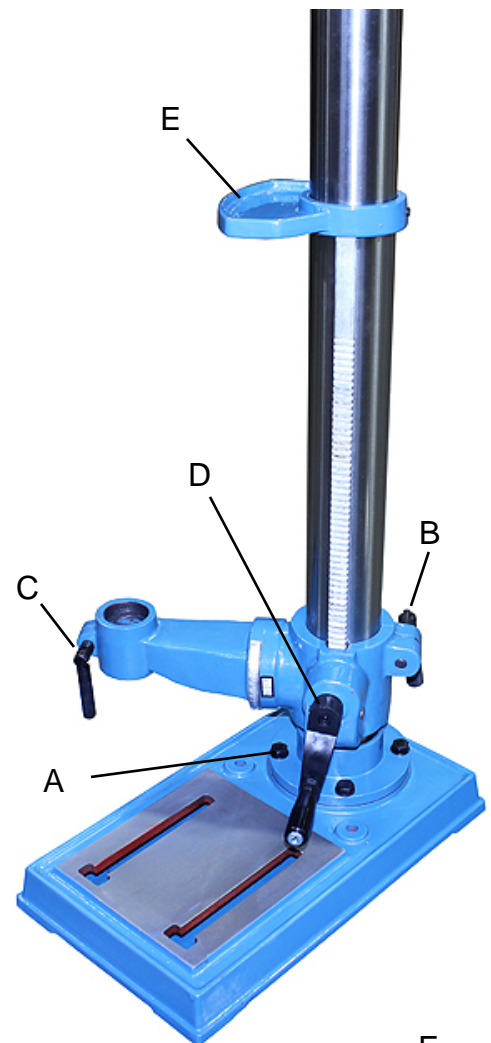
ASSEMBLY AND SET UP



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.

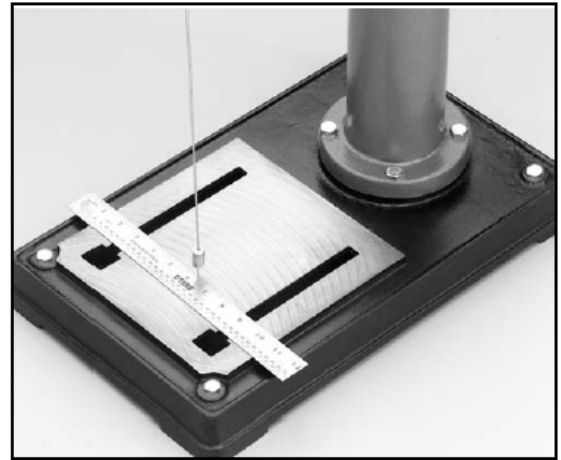
Most of your Drill Press has been assembled at the factory, but some parts must be assembled or installed after delivery.

1. Position the base on a solid stable surface suitable to support the entire drill press when fully assembled.
2. Starting with the base, place the column on the base and line up the mounting holes.
3. Insert and tighten the M10-1.5 hex head bolts (A).
4. Install the 12mm column lock handle (B) 3 turns into the support bracket (large bore end).
5. Install the 10mm table lock handle (C) 3 turns into the support bracket (small bore end).
6. Install the crank handle (D) onto the square shaft and tighten the set screw to secure in place.
7. Locate the column ring/tray (E) and on the beveled edge apply a light coat of general purpose grease. Lightly grease the rack beveled groove at the base as well.
8. Slide the column ring/tray onto the column with the inside bevel in the down position.
9. Adjust the ring until the tip of the rack fits inside the bevel (F). The rack should now be captured in the bevel groove at the bottom and top.
10. Tighten the setscrew on the ring.
11. Loosen the table support arm clamping lock handle and swing the table to the left 70° - 90° and tighten the clamping lock handle.
12. Install the table onto the support bracket and secure in position with the locking handle.

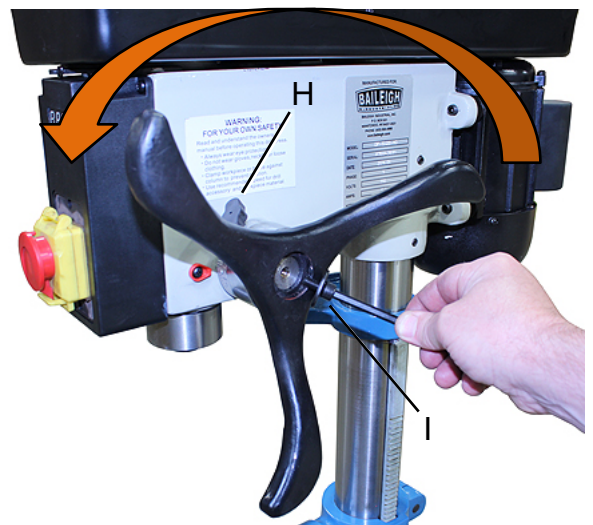




13. Using a lifting device or an assistant, lift the head assembly over the column and insert the column into the pocket on the bottom of the head assembly until the column is fully seated into the head pocket, approximately 4" (100mm).
14. Position the headstock directly over the base by using a plumb bob and measuring tape or ruler across the drill press base to find its center.
15. Suspend the plumb line from the center of the headstock label and lower the bob until it is near the tape/ruler as shown.
16. Rotate the headstock from side to side until the tip is equidistant from both the left and right sides.
17. Tighten the four setscrews (G) located on each side of the headstock as shown to secure headstock to the column.



18. Verify that the depth-stop hub (H) is on the hand wheel hub and able to rotate freely.
19. Install the spindle hand wheel onto the spindle speed shaft and fully tighten. The hand wheel is threaded with left turn threads as shown.
20. When the hand wheel is tight on the shaft, install and tighten the retaining washer and cap screw.





21. Install the chuck guard onto the spindle shaft until the bottom edge of the guard is flush with the bottom edge of the spindle.
22. Firmly tighten the clamping screw but do not over tighten and break the clamping ring.





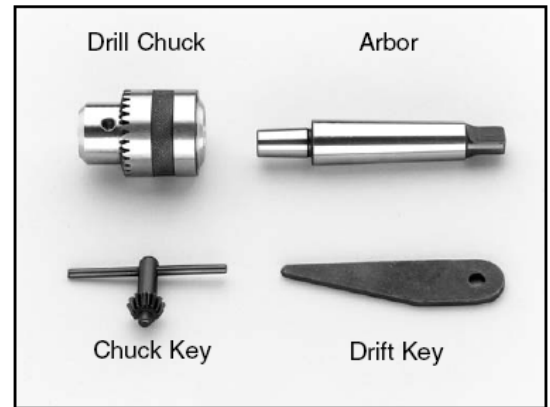
Drill Chuck and Arbor

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.

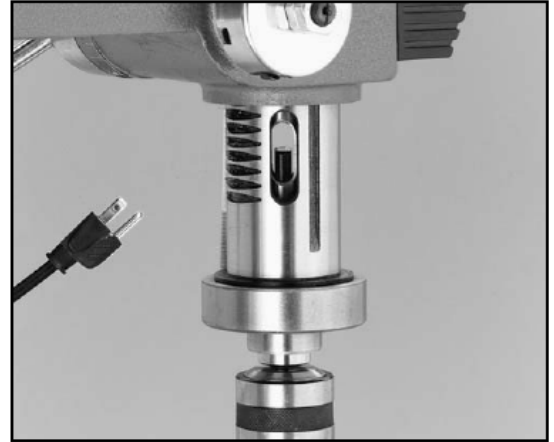




Arbor Removal


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 110 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.

Extension Cord Safety

Extension cord should be in good condition and meet the minimum wire gauge requirements listed below:

AMP RATING	LENGTH		
	25ft	50ft	100ft
1-12	16	16	14
13-16	14	12	12
17-20	12	12	10
21-30	10	10	No
WIRE GAUGE			

An undersized cord decreases line voltage, causing loss of power and overheating. All cords should use a ground wire and plug pin. Replace any damaged cords 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.



OPERATING PRECAUTIONS

The following operating and safety precautions must be observed in order to avoid harm to the operator or damage to the drill press.

1. Safety is the responsibility of the user/purchaser since conditions differ between jobs. Use and enforce safety procedures at each operation location and provide for any changes in conditions to provide maximum safety.
2. The head assembly must be locked to the column so the thrust produced by drilling will not force the head assembly up the column.
3. The work table must be locked to the column so it will not be forced down the column.
4. DO NOT start to drill the workpiece until making certain the workpiece is held down securely. Secure clamping and vises are preferred.
5. Make sure the drill is secured in the spindle or check before attempting to use the drill press.
6. Make sure the spindle taper is clean and free of burrs, scoring, and galling to assure maximum gripping.

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.

1. Secure drill bit in the chuck. Insert the drill into the chuck jaws at least 1" (25.4mm) when possible but do not insert it so far that the jaws touch the flutes of the drill. Verify that the drill is centered in the chuck and tighten securely with the chuck key.
2. Place a piece of wood on the table to use as a backer to prevent tear out and splintering as well as damage to the table when the drill breaks through the wood.
3. Set the table to the desired height and verify it is securely locked. Allow for any clamps or vises. Adjust the safety guard as necessary.
4. Set the depth stop as needed.
5. Load and secure the piece part to the table. If not using a clamping device, position the material against the left side of the column to prevent the material from spinning during the drilling process.
6. Verify that the chuck is clear of any entanglements and start the drill.
7. Check the digital display to verify that the spindle RPM is within an appropriate speed range for the material and the drill being used.



8. Use the adjustment knob on the left side of the drill head to adjust the spindle speed as needed.



IMPORTANT: *Never adjust the spindle speed when the drill is stopped. Only adjust the spindle speed when the drill is running safely at full power. Adjusting the speed when stopped can damage the clutch assemblies.*

9. Use the feed handle to feed the drill into the material. Use a smooth steady motion with enough force to allow the drill to cut. It may be necessary to raise the drill from time to time to allow the flutes to clear the material.
10. At the end of a drilling operation, press the stop button to turn **OFF** the machine.



DRILLING RECOMMENDATIONS

Speeds for Drilling

The speed of a drill is usually measured in terms of the rate at which the outer periphery of the tool moves in relation to the work being drilled. The common term for this is Surface Feet per Minute (SFM). The relationship of SFM is expressed in the following formulas:

$$\text{SFM} = 0.26 \times \text{rpm} \times \text{Drill Diameter (in inches)}$$

$$\text{RPM} = 3.8 \times \{\text{SFM/Drill diameter [in inches]}\}$$

In general, the higher the speed the shorter the drill life. Operating at the low end of the speed range for a particular material will result in longer life. The most efficient speed for operating a drill depends on many variables:

1. Composition and hardness of material.
2. Depth of the hole.
3. Type and condition of the drilling machine.
4. Desired quality of the hole.
5. Difficulty of set-up.



Indication of Extreme Speeds and Feeds

A drill that splits up the web is evidence of too much feed or insufficient tip clearance at the center as a result of improper grinding. The rapid wearing away of the extreme outer corners of the cutting edges indicates that the speed is too high. A drill chipping or braking out at the cutting edges indicates that either the feed is too heavy or the drill has been ground with too much tip clearance.

Drill Speed Guide

SPEED RANGE (RPM)	WOOD	ZINC DIECAST	ALUMINUM & BRASS	PLASTIC
	in (mm)	in (mm)	in (mm)	in (mm)
2600	1/4 (6.4)	3/16 (4.8)	5/32 (4.0)	1/8 (3.2)
1350 - 2100	3/8 (9.5)	1/4 (6.4)	7/32 (5.5)	3/16 (4.8)
1190 - 1350	5/8 (16.0)	3/8 (9.5)	11/32 (8.75)	5/16 (7.9)
720 - 1190	7/8 (22.0)	1/2 (12.5)	15/32 (12.0)	7/16 (11.0)
480 - 720	1-1/4 (31.75)	3/4 (19.0)	11/16 (17.5)	5/8 (16.0)
350 - 480	1-5/8 (41.4)	7/8 (22.0)	3/4 (19.0)	13/16 (20.5)
300 - 350	2 (50.8)	1 (25.4)	--	--



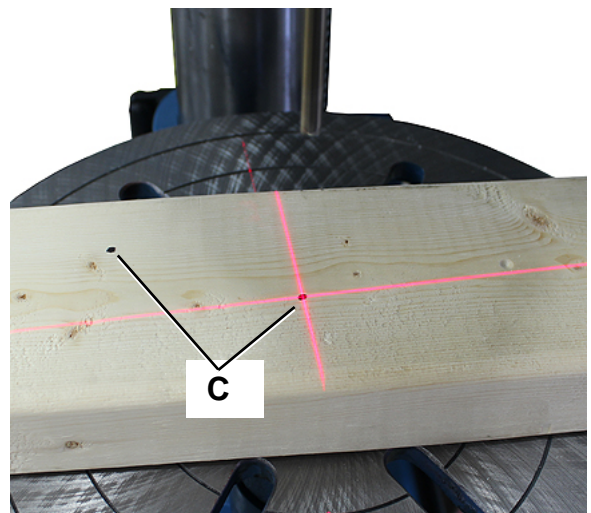
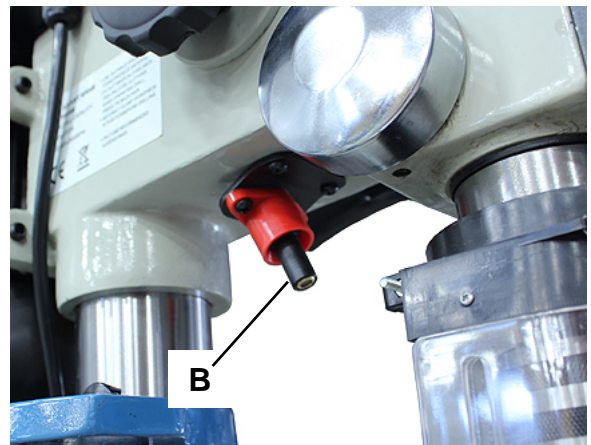
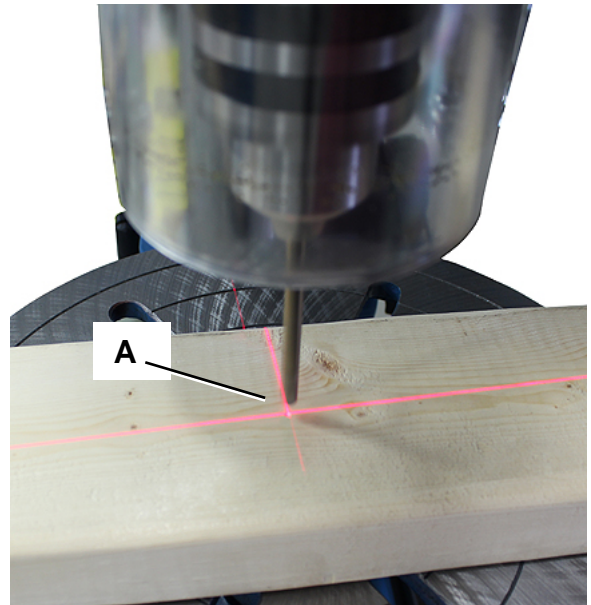
Important: This is a general speed chart. If your specific drill press is not rated for the rpm listed, then do not use this drill press for this operation. Use your drill press within the specifications listed at the front of the manual.



Alignment Pointer Adjustment

This machine is equipped with an alignment pointer. The pointer is used to indicate the point on the material that the tip of the drill (center point of the drilled hole) contact first.

1. Set up the drill with the desired bit, and position the table and material as needed to create the first drill location.
2. Verify that the bit and spindle are clear of any materials and start the drill.
3. Manually position the material under the drill bit and lower the bit until it just lightly touches the material (A). Drill into the material only enough to create a clear center point to use to set the pointer light cross hairs.
4. Raise the bit and stop the drill.
5. Adjust the pointer (B) so that the cross hair line point directly to the center of the drilled mark on the material.
6. When the pointer is aligned as desired, safely start the drill and complete the first drill hole.
7. Now position the material to the next drill location using the pointer cross hairs to align the drill point layout marks with the pointer cross hairs (C).
8. Repeat this for each additional hole required.



Note: The light will need to be realigned each time the surface height of the material changes. The surface height of the material changes when raising or lowering the table or by using different thickness material.



MACHINE ADJUSTMENT

⚠ WARNING: Make sure the power cord is disconnected and power is **OFF** before working on the machine. Always follow proper safety precautions when working on or around any machinery.

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).

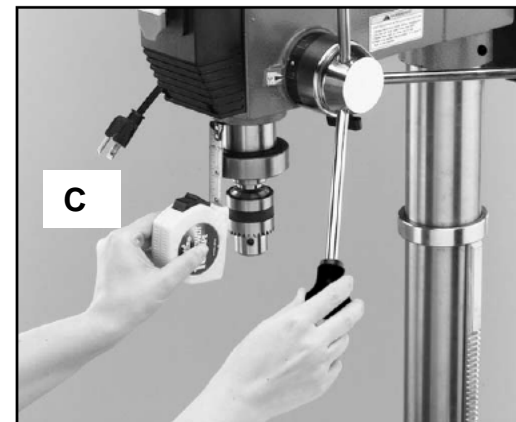
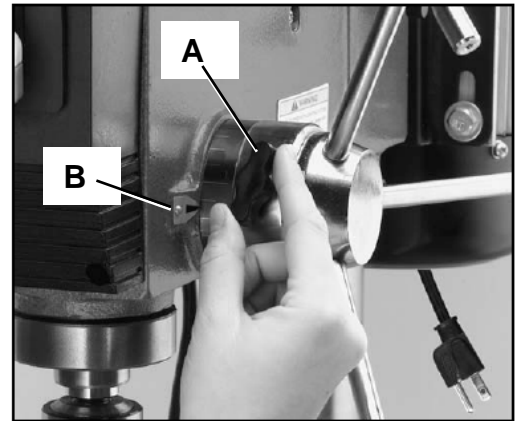




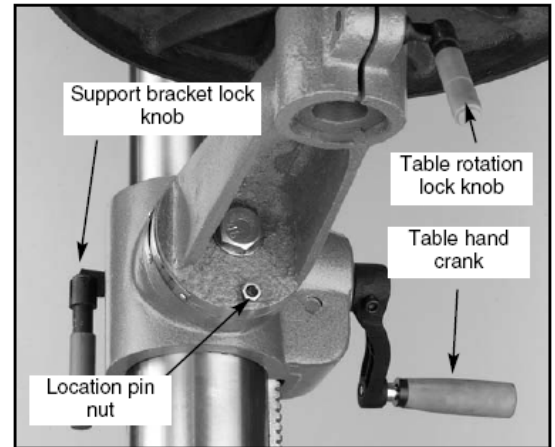
Table Adjustment

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:

1. 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.





LUBRICATION AND MAINTENANCE



WARNING: Make sure the electrical disconnect is OFF 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

- Inspect the power plug and cord.
- Keep area around machine clear of debris.
- Check daily for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.
- Frequently blow out any dust that may accumulate inside the motor.

Weekly Maintenance

- Lubricate threaded components and sliding devices.
- Apply rust inhibitive lubricant to all non-painted surfaces.
- On a weekly basis clean the machine and the area around it.

Monthly Maintenance

- Check that all screws on the motor and the guard are tight and secure.
- Check that the guard is operating properly.
- Grease the gear rack on the column so the table moves up and down smoothly.



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.

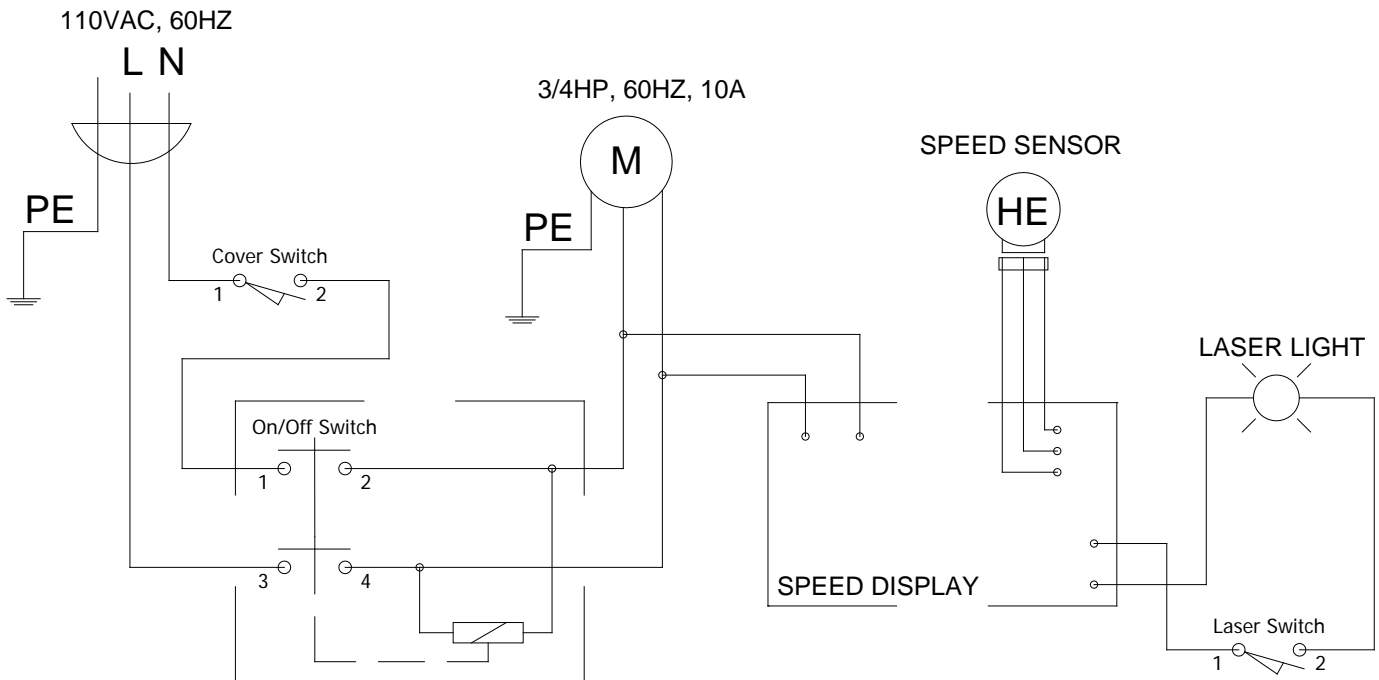


Storing Machine for Extended Period of Time

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

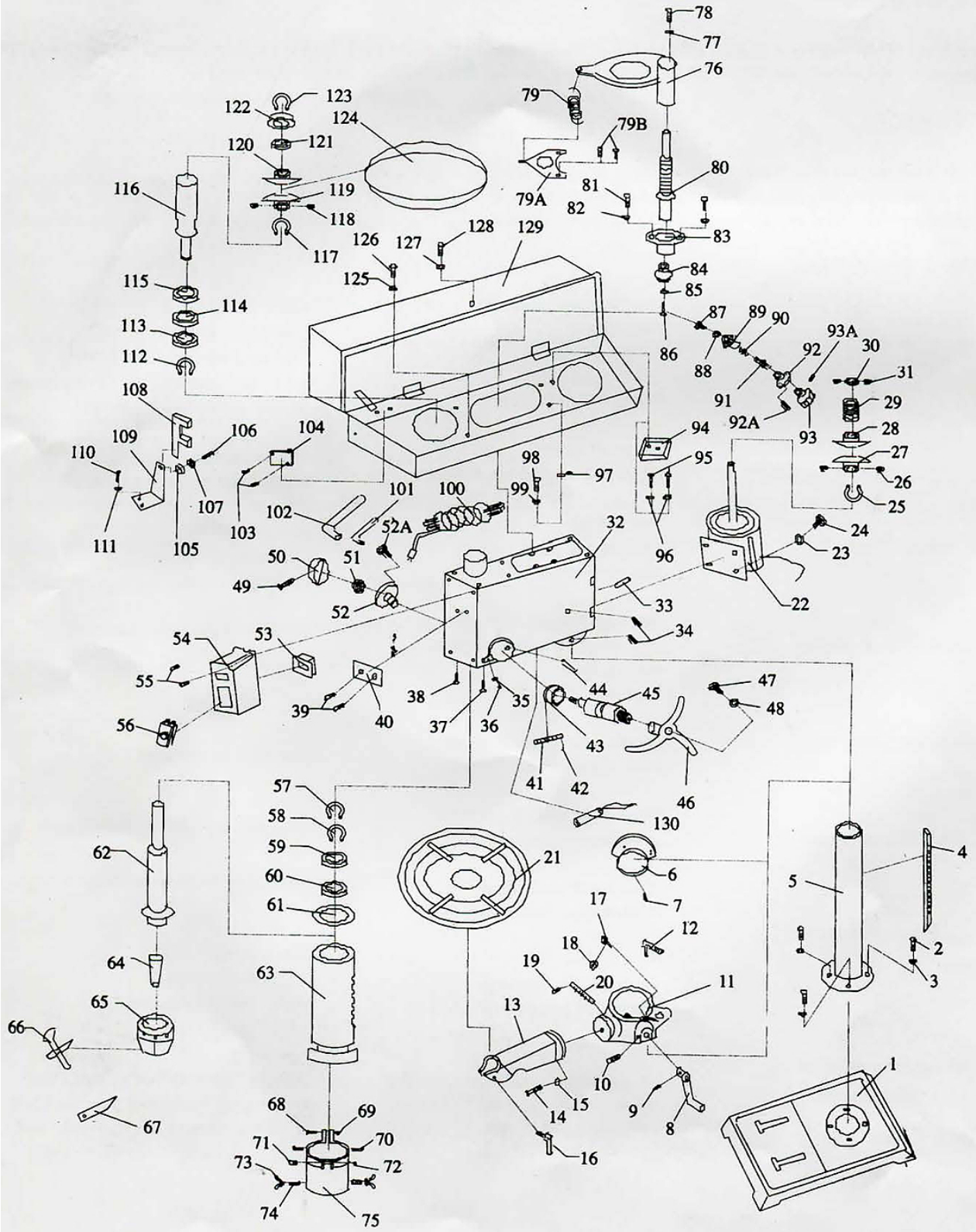
- Detach the plug from the electrical supply panel.
- Clean and grease the machine.
- Cover the machine.

WIRING DIAGRAM





DP-1512B-HD PARTS DIAGRAM





DP-1512B-HD Parts List

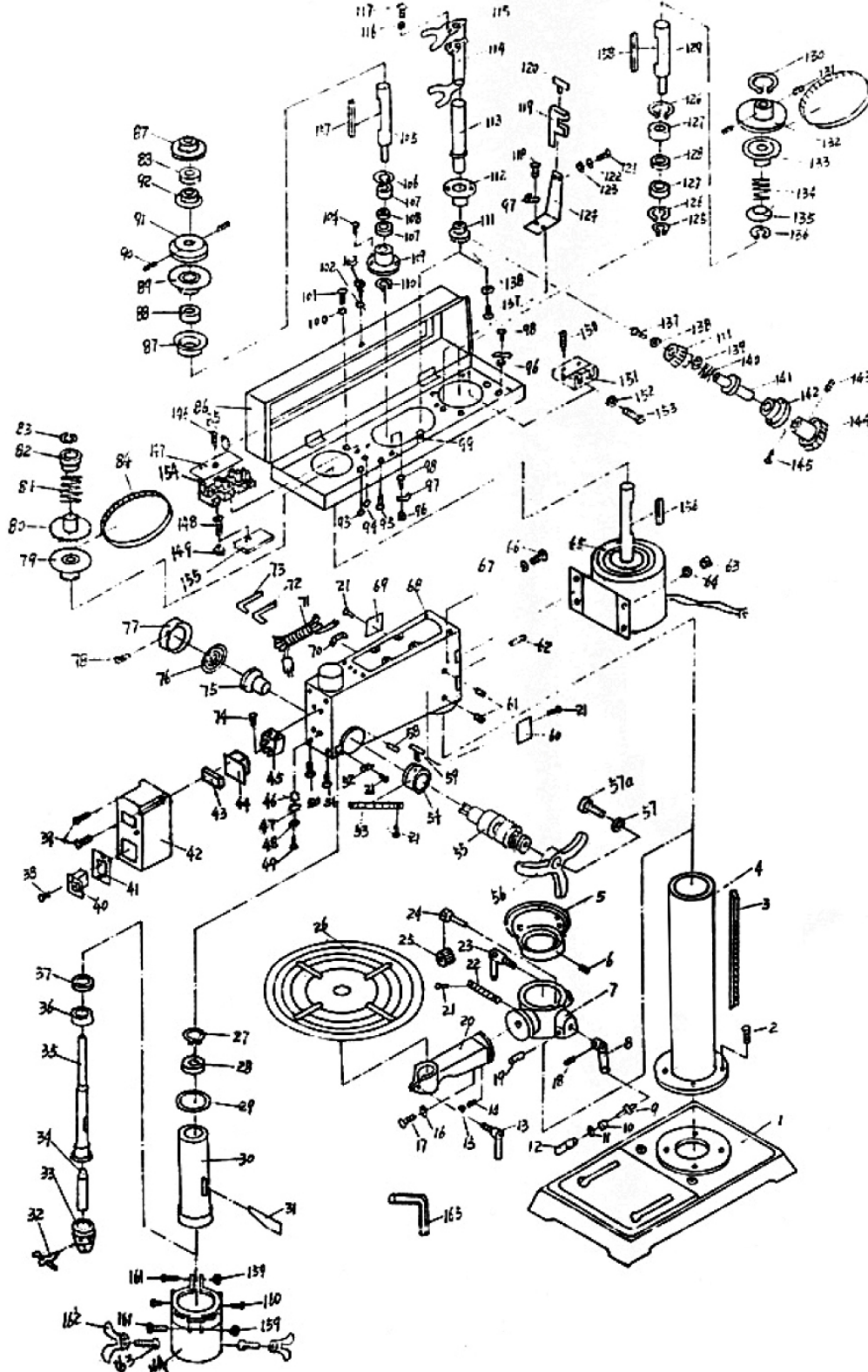
Item	Description	Qty.	Item	Description	Qty.
1	Base	1	67	Wedge	1
2	Screw	4	68	Screw	1
3	Spring Washer	4	69	Nut	1
4	Rack	1	70	Self-Tapping Screw	2
5	Column	1	71	Screw	1
6	Collar	1	72	Nut	1
7	Screw	1	73	Flange Nut	2
8	Crank	1	74	Screw	2
9	Screw	1	75	Protect Mirror	1
10	Pin	1	76	Upper Fork	1
11	Seat	1	77	Washer	1
12	Knob	1	78	Screw	1
13	Arm	1	79	Spring	1
14	Bolt	1	79A	Mat	1
15	Spring Washer	1	79B	Screw	1
16	Knob	1	80	Speed Thread Shaft	1
17	Worm	1	81	Bolt	2
18	Helical Gear	1	82	Spring Washer	2
19	Rivet	1	83	Steel Seat	1
20	Indicator	1	84	Taper Gear Wheel	1
21	Table	1	85	Washer	1
22	Motor	1	86	Screw	1
23	Nut	4	87	Bolt	1
24	Bolt	1	88	Washer	1
25	Retaining Ring	1	89	Taper Gear Shaft	1
26	Screw	1	90	Spring	1
27	Fixed Pulley (Motor)	1	91	Speed Gear Shaft	1
28	Movable Pulley (Motor)	1	92	Speed Flange	1
29	Spring	1	92A	Screw	2
30	Spring Seat	1	93	Speed Wheel	1
31	Screw	2	94	Line Box	1
32	Body	1	95	Screw	2
33	Pin	1	96	Washer	2



Item	Description	Qty.	Item	Description	Qty.
34	Screw	2	97	Line Clip	5
35	Indicator	1	98	Bolt	4
36	Screw	1	99	Washer	1
37	Screw	1	100	Plug	1
38	Screw	1	101	Allen Key	1
39	Screw	2	102	Allen Key	1
40	Insulation Board	1	103	Screw	2
41	Scale	1	104	Nut	2
42	Rivet	2	105	Nut	2
43	Scale	1	106	Screw	2
44	Pin	1	107	Spring Washer	2
45	Gear Shaft	1	108	Digital Display	1
46	Hand Wheel	1	109	Sensor Support	1
47	Bolt	3	110	Screw	2
48	Washer	1	111	Nut	2
49	Screw	1	112	Retaining Ring	1
50	Spring Box	1	113	Bearing	1
51	Spring	1	114	Mat	1
52	Speed Flange	1	115	Bearing	1
52A	Screw	2	116	Middle Shaft	1
53	PCB	1	117	Retaining Ring	1
54	Switch Box	1	118	Screw	2
55	Screw	4	119	Fixed Pulley (Spindle)	1
56	Switch	1	120	Movable Pulley (Spindle)	1
57	Hole Wedge	2	121	Bearing	1
58	Retaining Spring	1	122	Seat	1
59	Bearing	1	123	Hole Wedge	1
60	Bearing	1	124	Belt	1
61	Rubber Mat	1	125	Washer	4
62	Spindle	1	126	Screw	4
63	Spindle Sleeve	1	127	Washer	1
64	Arbor	1	128	Screw	1
65	Chuck	1	129	Belt Box	1
66	Key	1	130	Laser	1



DP-1512F-HD PARTS DIAGRAM





DP-1512F-HD Parts List

Item	Description	Qty.	Item	Description	Qty.
1	Base	1	86	Pulley Cover	1
2	Bolt	4	87	Bearing Seat	2
3	Rack	1	88	Bearing	2
4	Column	1	89	Lower Movable Pulley (middle)	1
5	Collar	1	90	Screw	2
6	Screw	1	91	Fixed Pulley (Middle)	1
7	Table Support Seat	1	92	Upper Movable Pulley (middle)	1
8 – 12	Crank Assembly	1	93	Rubber Washer	2
13	Lock Handle	1	94	Rubber Washer	4
14	Pin	1	95	Strain Relief	1
15	Nut	1	96	Nut	2
16	Flat Washer	1	97	Cable Clamp	1
17	Bolt	1	98	Screw	2
18	Screw	1	99	Latch	1
19	Gear Pin	1	100	Flat Washer	4
20	Table Support	1	101	Screw	4
21	Rivet	14	102	Flat Washer	1
22	Indicator	1	103	Screw	1
23	Lock Handle	1	104	Screw	2
24	Worm	1	105	Middle Shaft	1
25	Helical Gear	1	106	Retaining Ring	1
26	Table	1	107	Bearing	2
27	Retaining Ring	1	108	Bushing	1
28	Ball Bearing	1	109	Bearing Seat	1
29	Rubber Washer	1	110	Retaining Ring	1
30	Spindle Sleeve	1	111	Taper Gear Wheel	2
31	Wedge	1	112	Steel Seat	1
32	Chuck Key	1	113	Screw Thread Shaft	1
33	Chuck	1	114	Lower Fork	1
34	Arbor	1	115	Upper Fork	1
35	Spindle	1	116	Spring Washer	3
36	Bearing	1	117	Pan Head Screw	3
37	Bearing	1	118	Pan Head Screw	2



Item	Description	Qty.	Item	Description	Qty.
38	Screw	2	119	Plastic Seat	1
39	Bolt	2	120	Sensor	1
40	Switch	1	121	Screw	2
41	Plastic Plate	1	122	Flat Washer	2
42	Switch Box	1	123	Nut	2
43, 44, 119, 120	Digital Display Set	1	124	Sensor Support	1
45	Terminal	1	125	Retaining Ring	1
46	Copper	2	126	Retaining Ring	2
47	Grounding Mark	2	127	Bearing	2
48	Start Washer	2	128	Bushing	1
49	Screw	2	129	Shaft	1
50	Screw	1	130	Retaining Spring	1
51	Screw	1	131	Hex Socket Screw	2
52	Indicator	1	132	Fixed Pulley (Spindle)	1
53	Scale	1	133	Movable Pulley (Spindle)	1
54	Depth Stop Collar	1	134	Spring	1
55	Gear Shaft	1	135	Spring Seat	1
56	Feed Handle	3	136	Retaining Ring	1
57	Check Ring	1	137	Screw	2
57A	Hex Socket Head Screw	1	138	Flat Washer	1
58	Stop Pin	1	139	Flat Washer	1
59	Depth Lock Screw	1	140	Spring	1
60	Warning Label	1	141	Shaft	1
61	Screw	2	142	Flange Plate	1
62	Stop Pin	1	143	Hex Socket Screw	1
63	Nut	4	144	Adjusting Wheel	1
64	Spring Washer	4	145	Screw	2
65	Motor	1	146	Self-Tapping Screw	1
66	Bolt	4	147	Cover	1
67	Flat Washer	4	148	Pan Head Screw	2
68	Head	1	149	Nut	2
69	Label	1	150	Self-Tapping Screw	2



Item	Description	Qty.	Item	Description	Qty.
70	Speed Range Label	1	151	Micro-Switch	1
71	Cable	1	152	Nut	2
72	Allen Key	1	153	Pan Head Screw	2
73	Allen Key	1	154	Terminal	1
74	Screw	2	155	Insulator	1
75	Spring Seat	1	156	Plate Key	1
76	Quill Spring	1	157	Plate Key	1
77	Spring Cover	1	158	Plate Key	1
78	Screw	1	159	Nut	2
79	Fixed Pulley (Motor)	1	160	Self-Tapping Screw	3
80	Movable Pulley (Motor)	1	161	Pan Head Screw	2
81	Spring	1	162	Flange Nut	2
82	Steel Seat	1	163	Bolt	2
83	Check Block	2	164	Protect Mirror	1
84	Belt	2	165	Allen Key	1
85	Label	1			



NOTES



BAILEIGH INDUSTRIAL, INC. 1625 DUFEEK DRIVE MANITOWOC, WI 54220

PHONE: 920. 684. 4990 FAX: 920. 684. 3944

WWW.BAILEIGH.COM

BAILEIGH INDUSTRIAL, INC. 1455 S. CAMPUS AVENUE ONTARIO, CA 91761

PHONE: 920. 684. 4990 FAX: 920. 684. 3944

BAILEIGH INDUSTRIAL LTD. UNIT 1 FULLWOOD CLOSE

SWIFT VALLEY INDUSTRIAL ESTATE, RUGBY

WEST MIDLANDS, CV21 1QH UNITED KINGDOM

PHONE: +44 (0)24 7661 9267 FAX: +44 (0)24 7661 9276

WWW.BAILEIGH.CO.UK