

Table of Contents

THANK YOU & WARRANTY	1
INTRODUCTION.....	3
GENERAL NOTES.....	3
SAFETY INSTRUCTIONS	4
SAFETY PRECAUTIONS	6
Dear Valued Customer:.....	6
TECHNICAL SUPPORT	9
TECHNICAL SPECIFICATIONS	10
UNPACKING AND CHECKING CONTENTS.....	11
Cleaning	11
TRANSPORTING AND LIFTING	12
INSTALLATION.....	12
Anchoring the Machine.....	13
GETTING TO KNOW YOUR MACHINE	14
ASSEMBLY AND SET UP	15
ELECTRICAL.....	18
Power cord connection:	19
ELECTRICAL WIRING DIAGRAM	20
Voltage Change.....	20
OPERATING CONTROLS	21
ON/OFF Switch	21
Speed Control Handwheel.....	21
Depth Stop.....	21
OPERATING PRECAUTIONS	22
DRILLING RECOMMENDATIONS	22
Speeds for Drilling	22
Indication of Extreme Speeds and Feeds.....	23
Speeds for High Speed Steel Drills	23
MACHINE ADJUSTMENTS	24
Head Adjustment.....	24
Table Adjustment.....	24
Removing the Tools from Spindle Bore	25
Spindle-Return Spring	25
LUBRICATION AND MAINTENANCE	26
Lubrication	26
Replacement of Drive Belt.....	27
Replacement of Motor	27
EXPLOSION DRAW – BASE / TABLE.....	28
Parts List – Base / Table	29
EXPLOSION DRAW – HEAD	30
Parts List – Head.....	31
EXPLOSION DRAW – CHUCK GUARD.....	34
Parts List – Chuck Guard	35
TROUBLESHOOTING	36



THANK YOU & WARRANTY

Thank you for your purchase of a machine from Baileigh Industrial Holdings LLC. 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 an 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 10 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, (e) 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 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 attorney 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 Holdings LLC 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 Holdings LLC 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 Holdings LLC 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
- Setup 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 Holdings LLC 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.



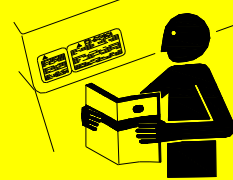
Note: This symbol refers to useful information throughout the manual.



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. **NOTICE**, which is not related to personal injury, is used without a symbol.

DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE: Indicates a situation which, if not avoided, could result in property damage.

DANGER

WARNING

CAUTION

NOTICE

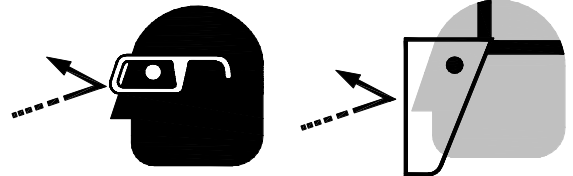


SAVE THESE INSTRUCTIONS.
Refer to them often and use them to instruct others.



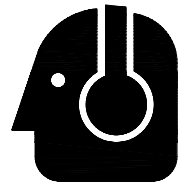
PROTECT EYES

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



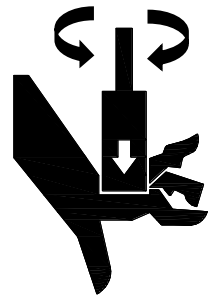
PROTECT AGAINST NOISE

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.



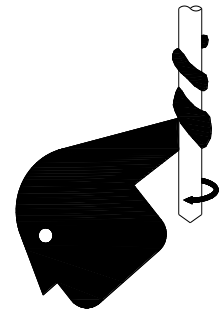
BEWARE OF PIERCING POINTS

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



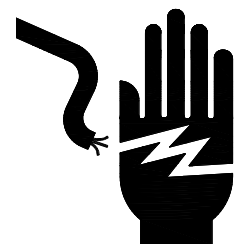
ENTANGLEMENT HAZARD – ROTATING SHAFT

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



HIGH VOLTAGE

USE CAUTION IN HIGH VOLTAGE AREAS. DO NOT assume the power to be off.
FOLLOW PROPER LOCKOUT PROCEDURES.





CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm.
www.P65Warnings.ca.gov



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 will not 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.



WARNING: The dust generated by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.



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.**
4. **Remove any adjusting tools.** Before operating the machine, make sure any adjusting tools have been removed. Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
5. **Keep work area clean.** Cluttered areas invite injuries.
6. **Overloading machine.** By overloading the machine, you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
7. **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.
8. **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.
9. **Dress appropriately. 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.
10. **Use eye protection.** Always wear ISO approved protective eye wear when operating machinery. Wear a full-face shield if you are producing metal filings. Eye wear shall be impact resistant, protective safety glasses with side shields which comply with ANSI Z87.1 specification. Use of eye wear which does not comply with ANSI Z87.1 specification could result in severe injury from breakage of eye protection.
11. **Do not overreach.** Maintain proper footing and balance at all times. **DO NOT** reach over or across a running machine.
12. **Stay alert.** Watch what you are doing and use common sense. **DO NOT** operate any tool or machine when you are tired.
13. **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.
14. **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.
15. **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.



16. **Keep children away.** Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords.
17. Keep visitors a safe distance from the work area.
18. **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.
19. **DO NOT** touch live electrical components or parts.
20. Turn off power before checking, cleaning, or replacing any parts.
21. Be sure all equipment is properly installed and grounded according to national, state, and local codes.
22. Keep all cords dry, free from grease and oil, and protected from sparks and hot metal.
23. Inspect power and control cables periodically. Replace if damaged or bare wires are exposed. **Bare wiring can kill!**
24. **DO NOT** bypass or defeat any safety interlock systems.
25. Know the location of the **ON - OFF** switch and the “E”- **STOP** button.
26. **Machines can eject** workpieces towards the operator. Know and avoid the conditions which cause the workpiece to kickback.
27. **Do not** leave tool running unattended. Turn power off. **Do not** leave tool until it comes to a complete stop.
28. **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.
29. **Do not remove** any warning signs.
30. **Check** safety equipment, such as safety covers, emergency stop buttons, safety mats, railings, light booms, ramps, and warning signs.
31. **Warning:** The dust generated by certain materials can be injurious to your health. Always operate machinery in well-ventilated areas and provide for proper dust removal.
32. **Respiratory Protection.** Wear an approved dust mask or respirator while using this machine. Continued exposure to wood dust can cause allergies or long term respiratory problems.
33. **Material Removal Rate.** Attempting to remove too much material at once can cause the workpiece to fly out of the lathe causing **severe bodily injury.**
34. **Secure Bit.** Properly tighten and lock the drill bit in the chuck.
35. **Secure Piece Part.** Unsecured objects can become rotating hazards or projectiles if not firmly secured to the table.
36. **Give your work undivided attention.** Looking around, carrying on a conversation and “horse- play” are careless acts that can result in serious injury.



37. **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.
38. Clearing **Chips.** Turn the machine OFF and clear chips and scrap pieces with a brush or with compressed air.
39. Operating **Speed.** Always operate the drill press at speeds appropriate for the size drill bit and material you are drilling.
40. **Reduce the risk of unintentional starting.** Make sure switch is in “OFF” position before plugging in power cord.
41. **Never leave machine running unattended. TURN POWER OFF.** Don't leave machine until it comes to a complete stop.

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.*



TECHNICAL SPECIFICATIONS

Description	Floor Drill Press
Type	Belt drive
Drilling Capacity Cast Iron	5/8" (16mm)
Drilling Capacity Steel	1/2" (13mm)
Swing	15" (381mm)
Motor (Pre-Wired 115v)	1hp (.74kw), 115V/220V, 1ph, 60hz, 14/7A, 1730rpm
Voltage	115V/220V, 1ph, 60hz (Pre-Wired 115V)
Work Lamp Power	100V~240V (separate power plug from drill press.)
Work Lamp	12V, 6W
Spindle Speed Variable	400~5000rpm (±5%)
Number of Speeds	Variable
Chuck Size	5/8" (16mm) (optional accessory)
Spindle Taper	MT2#
Spindle Travel	6" (150mm)
Spindle Nose to Table	27" (680mm)
Spindle Nose to Base	46" (1170mm)
Column Diameter	3" (75mm)
Quill Diameter	2.25" (57mm)
Table Travel	16.75" (425mm)
Table Size	14" x 18" (356 x 455mm)
Table Work Surface	11.25" x 14.5" (285 x 368mm)
Table Capacity	90lbs (41kgs)
Table Slot	2 @ 9/16" (14mm)
Table Slot Centers	5.31" (135mm)
Base Size (L x W)	21" x 14" (525 x 360mm)
Machine Size (L x W x H)	30" x 20" x 71" (760 x 580 x 1803mm)
Includes	LED Readout
Net Weight	394lbs (170kgs)
Gross Weight	450lbs (205kgs)
Shipping Dimensions	60" x 44" x 77" (1524 x 1118 x 1956mm)



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.



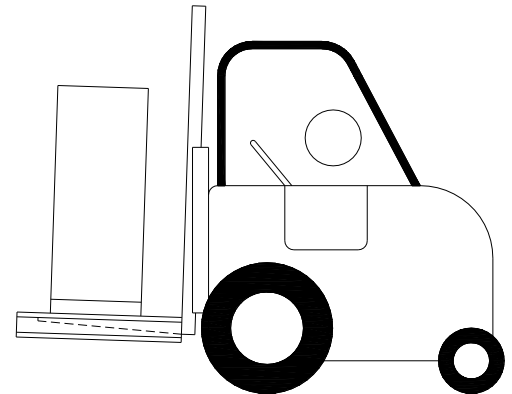


TRANSPORTING AND LIFTING

NOTICE: *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.

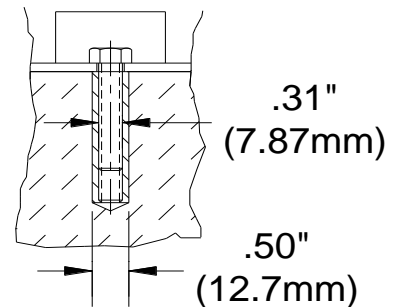


- Remove scrap and waste materials regularly, and make sure the work area is free from obstructing objects.
- It is important to maintain free area around the machine, which is required for the working place. If any long material is machined, it is necessary to have a sufficient room in front of the 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 machine 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

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

- Once positioned, anchor the machine to the floor, as shown in the diagram. Use bolts and expansion plugs or sunken tie rods that connect through and are sized for the holes in the base of the stand.
- This machine requires a solid floor such as concrete at a minimum of 4" (102mm) thick. 6" (153mm) minimum is preferred.

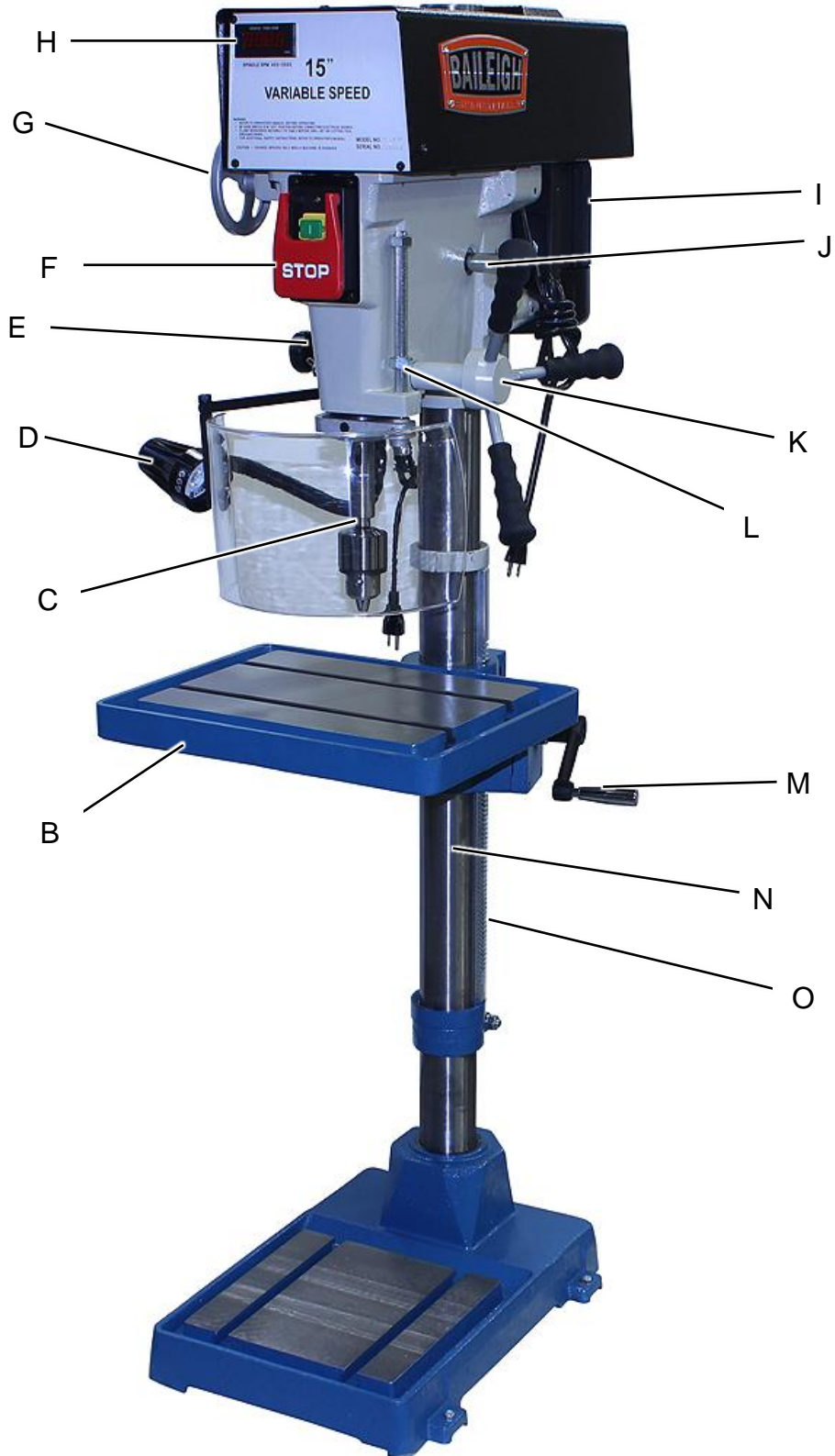


Included Items

Leveling Bolts	4
Drift Key	1
Crank Lever	1
Crank Handle	1
Drill Chuck with Key	1
Drill Chuck Arbor	1



GETTING TO KNOW YOUR MACHINE





A	Base
B	Work Table
C	Spindle
D	Work Lamp
E	Chuck Guard Interlock Switch (Not Visible)
F	On/Off Switch
G	Speed Setting Handle Wheel
H	LED Speed Display
I	Motor
J	Head Locking Handle
K	Quill Feed Handle
L	Depth Stop
M	Table Height Adjustment
N	Column
O	Table Height Adjustment Rack

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.

Arbor and Chuck

1. Clean and dry the full length of the arbor shaft, the spindle bore, and the chuck bore.
2. Adjust the chuck so that the jaws are retracted into the chuck body.
3. Using a soft mallet, tap the chuck firmly onto the straight end of the arbor.
4. Then insert the chuck and arbor assembly into the spindle shaft and align the arbor tang to the internal tang slot.
5. Tap the chuck and arbor assembly up onto the spindle shaft.





Head Positioning

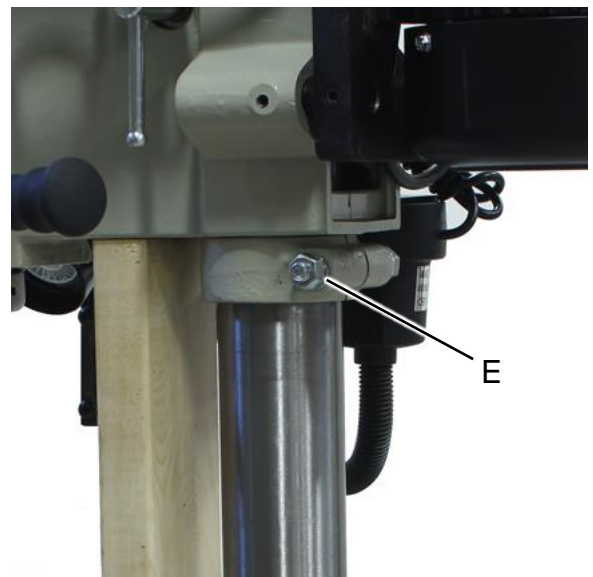
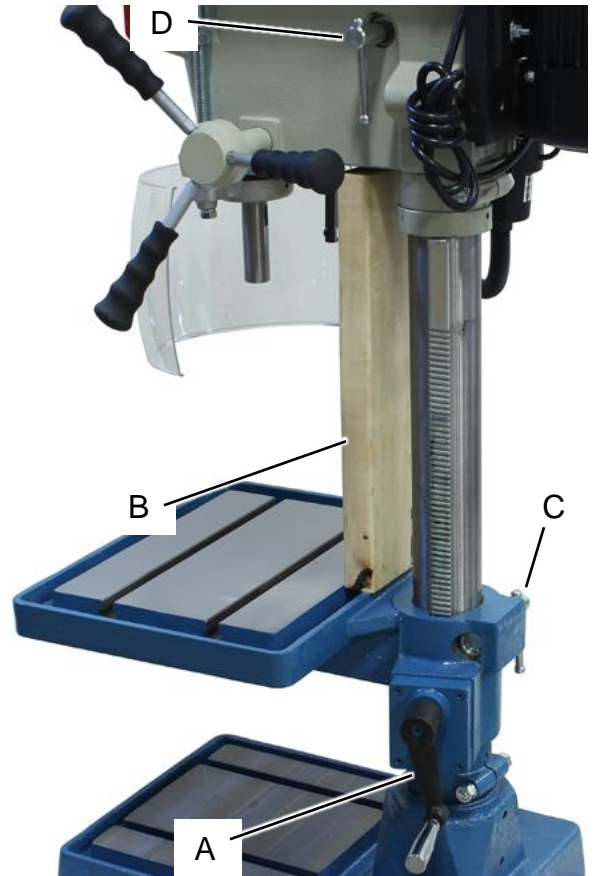
The Drill Press is shipped with the head in lowered position.

1. Position the drill press in the desired location and level and secure the drill press to prevent movement and tip over.
2. Install and secure the crank lever and the crank handle (A) onto the elevation shaft.
3. Cut a piece of 2x4 - 18" long (B) to use to lift the head assembly using the table elevation crank.
4. Loosen the table clamping bolt (C).
5. Place the 2x4 on the table and under the drill head. Verify that 2x4 is setting firmly on the table and under the drill head
6. Hold the board in position and carefully raise the table until the board is tight between the table and the drill head.
7. Loosen locking handle (D) on head and using the table crank handle, raise the drill head until the top of the column is flush (or even) with the top of the drill head belt guard cover.



Note: DO NOT raise the drill head enough to allow the column to be below the top of the head.

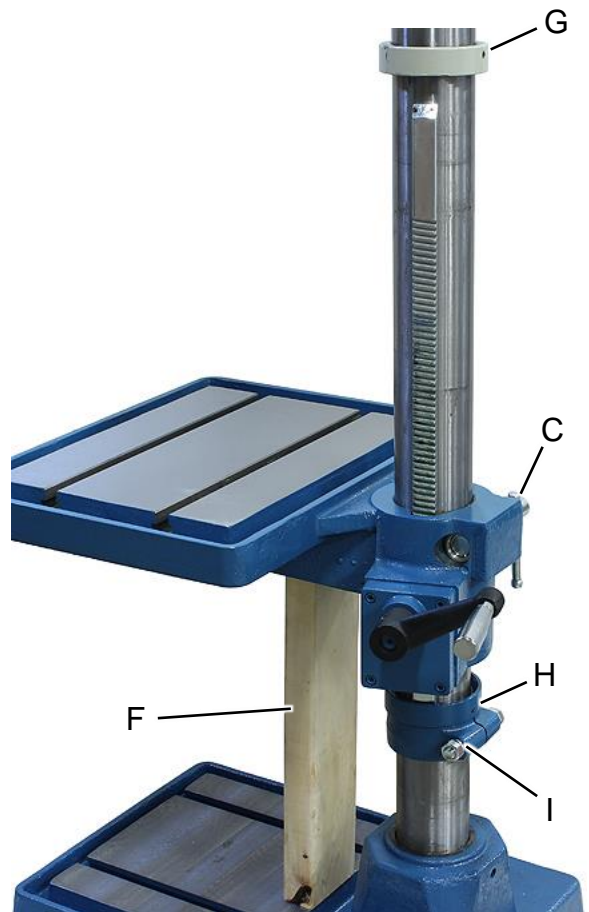
8. Tighten the drill head locking bolt (D) to hold the head in position.
9. Use a wrench to loosen the hex screw on the head collar (E) and raise the head collar until it is firmly contacting the head. Firmly tighten the screw on the head collar.
10. Lower the table and remove the 2x4.






Raise the Rack


1. Position the 2x4 on the base and under the table (F) as shown and lower the table onto the 2x4.
2. Loosen the set screw (G) on the upper rack ring and raise rack ring 5" – 6" to allow clearance for the rack to raise. Tighten the set screw.
3. Turn the table crank handle counter-clockwise as if lowering the table. This will cause the rack to raise. Raise the rack until it is just in contact with the upper rack ring (G).
4. Loosen the set screw (H) on the lower rack ring and raise rack ring until it is in contact with the rack. Tighten the set screw.
5. Use a wrench to loosen the hex screw on the rack collar (I) and raise the rack collar until it is firmly contacting the lower rack ring. Firmly tighten the screw on the head collar.
6. Raise the table enough to remove the 2x4.
7. Set the table to the desired height and tighten the table clamp bolt (C).





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.


Power Specifications

Your machine is Pre-wired for 115 volts, 60hz alternating current. Before connecting the machine to the power source, make sure the power source is OFF.

Before switching on the power, you must check the voltage and frequency of the power to see if they meet with the requirement, the allowed range for the voltage is $\pm 5\%$, and for the frequency is $\pm 1\%$.

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 machine. 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 machine.
- 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 machine 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 machine 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			

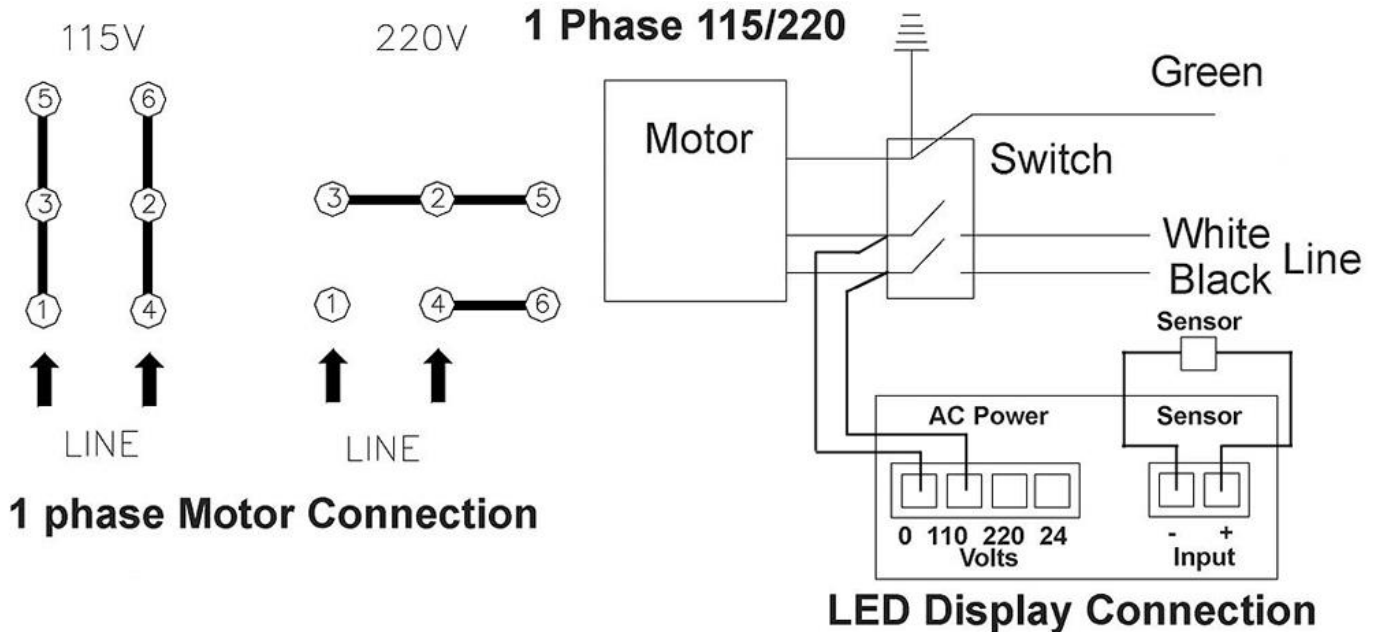
An undersized cord decreases line voltage, causing loss of power and overheating. All cords should use a ground wire and plug pin. Replace any damaged cords immediately.

Power cord connection:

1. Turn the main disconnect switch on the control panel to the OFF position.
2. 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.
3. Connect the power cord to the power supply and check that the power cord has not been damaged during installation.
4. 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 WIRING DIAGRAM



Voltage Change

This drill press is prewired for 115 volt input power, but can be converted to 220 volt input. This change requires that the motor and the DRO wiring be changed from 110V to 220V.

1. Verify that the drill press is disconnected from any power supply.
2. Open the terminal box cover on the side of the electrical motor.
1. Using the wiring diagram, change the lead connections to match the pattern and terminal connections shown in the diagram above. DO NOT change the Green (ground) connection.
2. Apply the black tape to the wire nut connections to secure the connections. Replace and secure the cover.
3. Remove existing plug from power cable and attach a UL/CSA listed plug designed for 230V power; or "hardwire" the machine directly to a panel. If hardwiring, make sure a disconnect is provided for the operator.
4. At the front of the drill press, remove the four screws securing the face panel.
5. Carefully pull the panel forward and rotate downward to access the DRO wire connections.
6. Follow the terminal markings to change to the wire in the 110V terminal to the 220V terminal.
7. Watch that the DRO wires do not entangle in the pulleys and install and secure the front panel.



OPERATING CONTROLS

⚠ 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.

ON/OFF Switch

The ON/OFF switch (A) is located at the front of the drill head. Press the Green button to start and run the drill. Press the Red paddle to stop the drill. This is used for normal and emergency stopping of the drill motor.

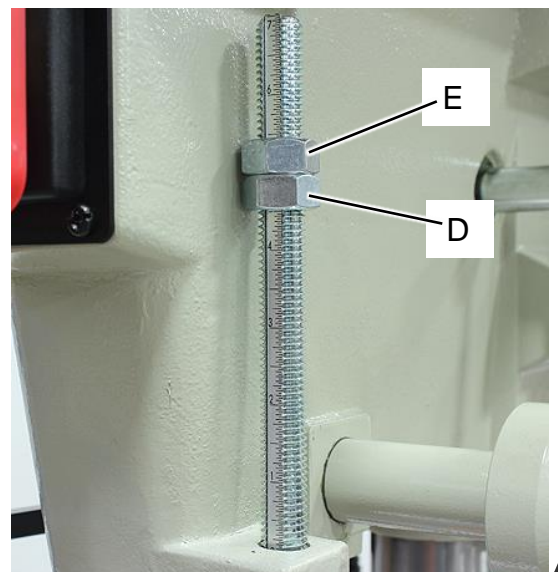
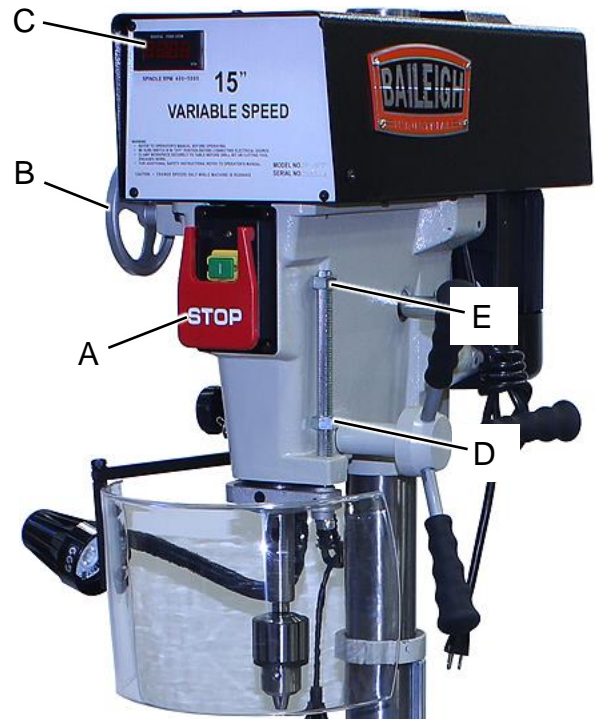
Speed Control Handwheel

⚠ CAUTION: To avoid damage to the speed adjustment mechanism, the motor must be operating before attempting to adjust the speed setting.

The speed control handwheel (B) is located on the left side of the drill head. An LED speed indicator (C) is provided on the face plate on the drill head. When the drill is running, turn the speed control handwheel until the desired RPM is displayed on the LED screen.

Depth Stop

A drilling depth stop is provided on the right side of the drill head. The depth stop consists of a threaded rod with a depth setting nut (D) and a jam nut (E). The front side of the threaded rod has a depth scale. The jam nuts are loosened and moved to the desired depth on the scale. The upper jam nut is then tightened against the lower nut. The depth setting is measured from the bottom of the setting nut. In this picture it is at 4.5"





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. The head assembly must be locked to the column so the thrust produced by drilling will not force the head assembly up the column.
2. The work table must be locked to the column so it will not be forced down the column.
3. Be sure the belt is tightened to the proper tension.
4. DO NOT start to drill the workpiece until making certain the workpiece is held down securely.
5. MAKE SURE THE DRIVE MOTOR IS RUNNING BEFORE turning the speed control handwheel in either direction.
6. Point of operation protection is required for maximum safety. This remains the responsibility of the user/purchaser since conditions differ between jobs.
7. Make sure the drill is secured in the spindle or check before attempting to use the drill press.
8. Make sure the spindle taper is clean and free of burrs, scoring, and galling to assure maximum gripping.

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. Efficiency of the cutting fluid.
4. Type and condition of the drilling machine.
5. Desired quality of the hole.
6. 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.

Speeds for High Speed Steel Drills

Material	Speed In SFM
Alloy Steel - 300 to 400 Brinell	20 - 30
Stainless Steel	30 - 40
Automotive Steel Forgings	40- 50
Tool Steel, 1.2C	50 - 60
Steel, .4C to .5C	70 - 80
Mild Machinery Steel, .2C to .3C	80-110
Hard Chilled Cast Iron	30 - 40
Medium Hard Cast Iron	70- 100
Soft Cast Iron	100-150
Malleable Iron	80- 90
High Nickel Steel or Monel	40 - 50
High Tensile Bronze	70 -150
Ordinary Brass and Bronze	200 - 300
Aluminum and its Alloys	200-300
Magnesium and its Alloys	250 - 400
Slate, Marble, and Stone	15 -25
Plastics and similar material (Bakelite)	100-150
Wood	300 -400
Titanium Alloys	10 - 25
Titanium Alloy Sheet	50 - 60

In cases where carbon steel drills are applicable, the drill should be run at speeds of from 40 to 50 percent of those given above.



MACHINE ADJUSTMENTS

Head Adjustment

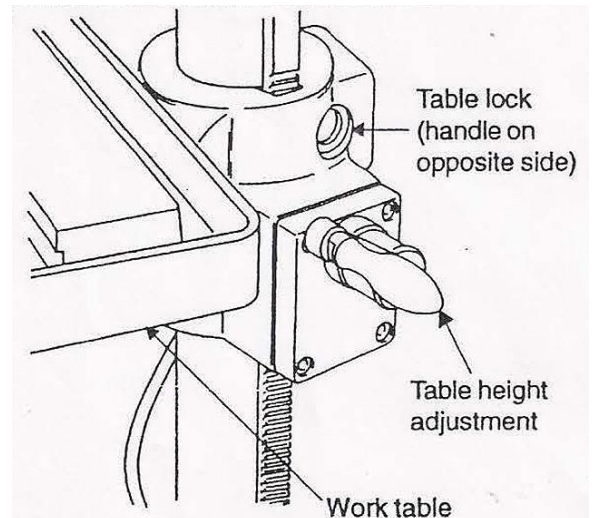
⚠ WARNING: Change the radial position of the drill head only if the drill press base is secured to the floor. Swinging the drill head without the base being secured to the floor will cause the drill press to become unstable and tip over resulting in injury and/or damage to the machine.

The radial position of the drill head can be changed to accommodate the drilling of a hole that may be offset from the center of the table. Reposition the drill head by loosening the locking handles and swinging the drill head to the desired position. Then retighten the locking handles.

Table Adjustment

The table can be raised or lowered to accommodate the height of the component being drilled.

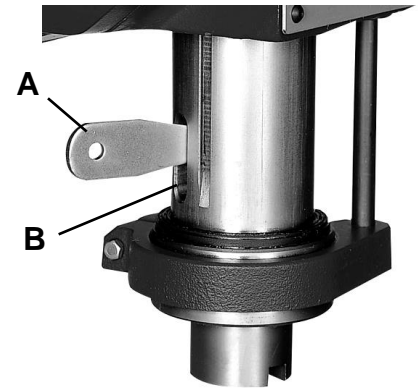
- To raise or lower the table, loosen the lock handle.
- Then use the hand crank to move the table to the desired height.
- Then retighten the lock handle.





Removing the Tools from Spindle Bore

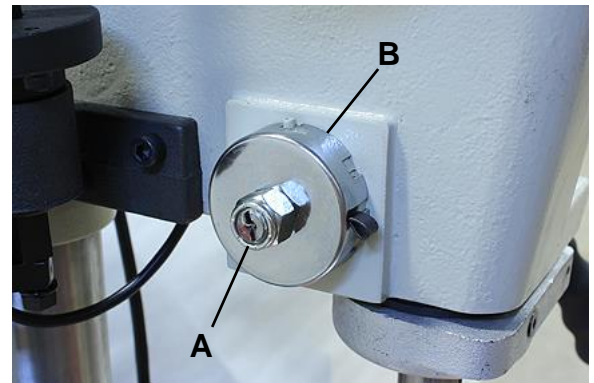
1. Disconnect machine from power supply.
2. Place a thin wood plank on the worktable to protect the surface of the worktable.
3. Raise the worktable to about 10" (250mm) under the bit.
4. Lower the spindle about 6" (150mm).
5. Place the drift key (**A**) into the aperture (**B**) of the quill and tap the end of the drift key with a hammer until the bit or chuck arbor falls down.



Spindle-Return Spring

The spindle-return spring is the retraction mechanism for the spindle. The spindle cap has slots along the side. Over time, the spindle return may become slow or lethargic. Adjust the spindle return mechanism so that the spindle retracts smoothly with the bit installed, without slamming back to the up position.

1. First, clean and lubricate the spindle and test for operation. If the retraction remains slow, proceed to the next steps.
2. Loosen the nut (**A**) by turning it counter-clockwise.
3. Rotate the spring casing (**B**) one slot at a time to increase the spring tension. Counter-clockwise will increase the tension.
4. Tighten the nut by turning it clockwise.
5. Test the spindle return and repeat the process if needed.





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

- 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.
- 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.

Monthly Maintenance

- Check that all screws and bolts are tight and secure.
- Check for worn or damaged electrical cables.



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.



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

Lubrication

Following are lubrication recommendations for drill press components.

- Spindle pulley drive: Lubricate spindle splines occasionally with light grease.
- Quill, Table, and Column: Lubricate with light film of oil.
- Table lift rack: Lubricate regularly with SAE20 oil (clean rack with solvent first.)
- Variable speed drive fork: Lubricate contact points occasionally with grease.



Replacement of Drive Belt

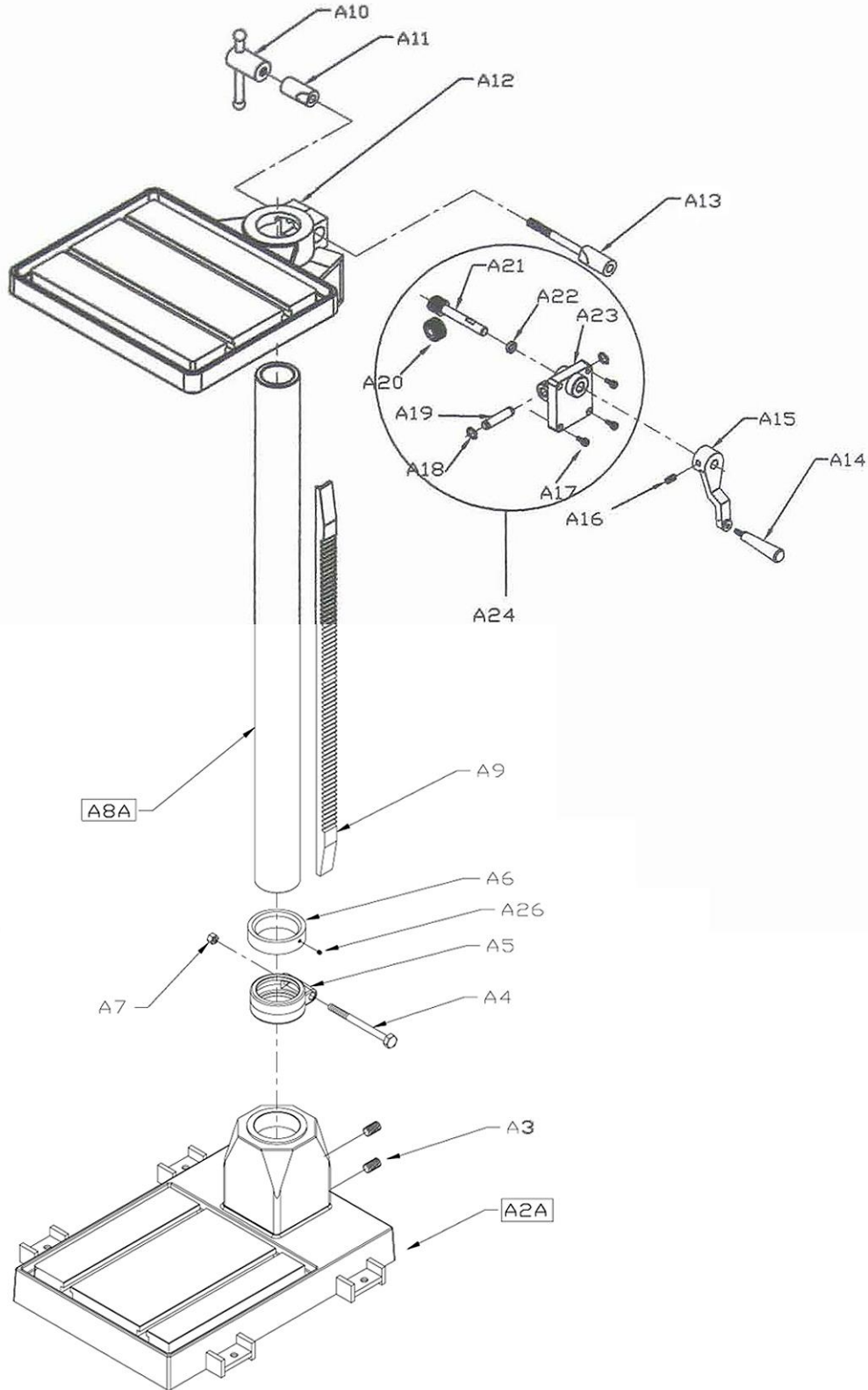
1. Start drill press. Set speed control to highest speed. Stop drill press.
2. Disconnect electrical power to drill press.
3. Remove head cover.
4. Remove belt. (With speed control setting at the highest speed, the belt should be loose enough to remove.)
5. Install the replacement belt. Install the head cover.
6. Connect electrical power to the drill press.
7. Operate the drill press to verify correct operation.

Replacement of Motor

1. Disconnect electrical power to drill press.
2. Remove drive belt (refer to Replacement of Drive Belt).
3. Disconnect electrical wiring from motor junction box.
4. Remove nuts and washers from bolts securing motor to drill head. Remove motor.
5. Remove pulleys and related components from motor shaft.
6. Install pulleys and related components on replacement motor shaft.
7. Install motor on mounting bolts and secure with nuts and washers.
8. Connect electrical wiring (refer to Wiring Diagram section for wiring details).
9. Install drive belt (refer to Replacement of Drive Belt).
10. Operate drill press to verify proper operation.



EXPLOSION DRAW - BASE / TABLE



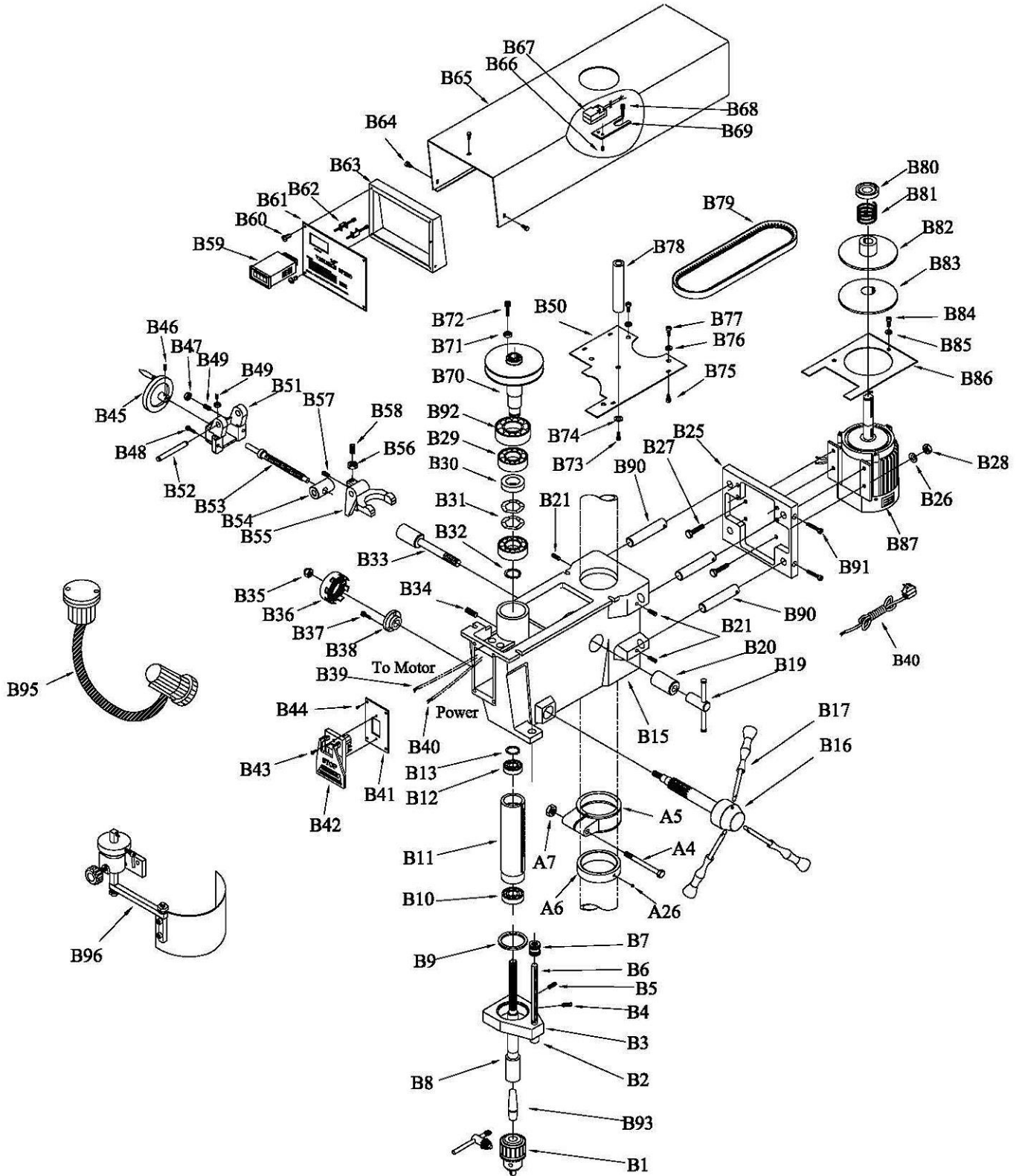


Parts List – Base / Table

Item	Part No.	Description	Qty.
A2A	DP15VSF-A2A	Base	1
A3	DP15VSF-A3	Set Screw 1/4"	2
A4	DP15VSF-A4	Hex Head Cap Screw 1/2"-12x4"	2
A5	DP15VSF-A5	Collar	2
A6	DP15VSF-A6	Rack Ring	2
A7	DP15VSF-A7	Hex Nut 7/16-14	2
A8A	DP15VSF-A8A	Column	1
A9	DP15VSF-A9	Rack	1
A10	DP15VSF-A10	Lock handle	1
A11	DP15VSF-A11	Table Wedge Lock (Plain Side)	1
A12	DP15VSF-A12	Table	1
A13	DP15VSF-A13	Wedge Head Screw 1/2" x 4"	1
A14	DP15VSF-A14	Grip, Table Raiser	1
A15	DP15VSF-A15	Handle, Table Raiser	1
A16	DP15VSF-A16	Socket Head Set Screw 5/16-18x3/8	1
A17	DP15VSF-A17	Hex Head Cap Screw 1/4x1	4
A18	DP15VSF-A18	C-Ring, Table Raiser	2
A19	DP15VSF-A19	Shaft Table Raiser	1
A20	DP15VSF-A20	Gear Table Raiser	1
A21	DP15VSF-A21	Worm Shaft Table Raiser	1
A22	DP15VSF-A22	Bushing / Brass Ring	1
A23	DP15VSF-A23	Raise Bracket	1
A24	DP15VSF-A24	Table Raiser Assembly	1
A26	DP15VSF-A26	Set Screw M6x6	2



EXPLOSION DRAW - HEAD





Parts List – Head

Item	Part No.	Description	Qty.
B1	DP1512-B8	Chuck with Key	1
B2	DP15VSF-B2	Nut M10 x P1.5/Spring Washer 10	1
B3	DP15VSF-B3	Quill Band	1
B4	DP15VSF-B4	Flat Head Screw M6x16	1
B5	DP15VSF-B5	Set Screw M6x1	1
B6	DP15VSF-B6	Rod, Graduated	1
B7	DP15VSF-B7	Jam Nut 5/8-11	2
B8	DP15VSF-B8	Spindle (MT2# / JT3#)	1
B9	DP15VSF-B9	O-Ring	1
B10	DP15VSF-B10	Bearing 6204ZZ	1
B11	DP15VSF-B11	Quill	1
B12	DP15VSF-B12	Bearing 6203ZZ	1
B13	DP15VSF-B13	Truarc Retainer	1
B15	DP15VSF-B15	Head Casting	1
B16	DP15VSF-B16	Feed Shaft	1
B17	DP15VSF-B17	Spoke with Grip	3
B19	DP15VSF-B19	Lock Handle	1
B20	DP15VSF-B20	Head Wedge Lock (Plain Side)	3
B21	DP15VSF-B21	Set Screw 5/16-18 x 3/8	4
B25	DP15VSF-B25	Motor Mounting Bracket	1
B26	DP15VSF-B26	Washer 5/16	8
B27	DP15VSF-B27	Screw 5/16-18x2	4
B28	DP15VSF-B28	Nut 5/16	4
B29	DP15VSF-B29	Bearing 6205ZZ	2
B30	DP15VSF-B30	Bearing Spacer	1
B31	DP15VSF-B31	Spring Washer	2
B32	DP15VSF-B32	Retainer	1
B33	DP15VSF-B33	Hex Head Cap Screw 1/2-12x4	1
B34	DP15VSF-B34	Set Screw 5/16-18 x 5/16	1
B35	DP15VSF-B35	Nylon Nut 1/2"	1
B36	DP15VSF-B36	Return Spring	1
B37	DP15VSF-B37	Socket Head Cap Screw 1/4"-1"	3
B38	DP15VSF-B38	Return Spring Bracket	1



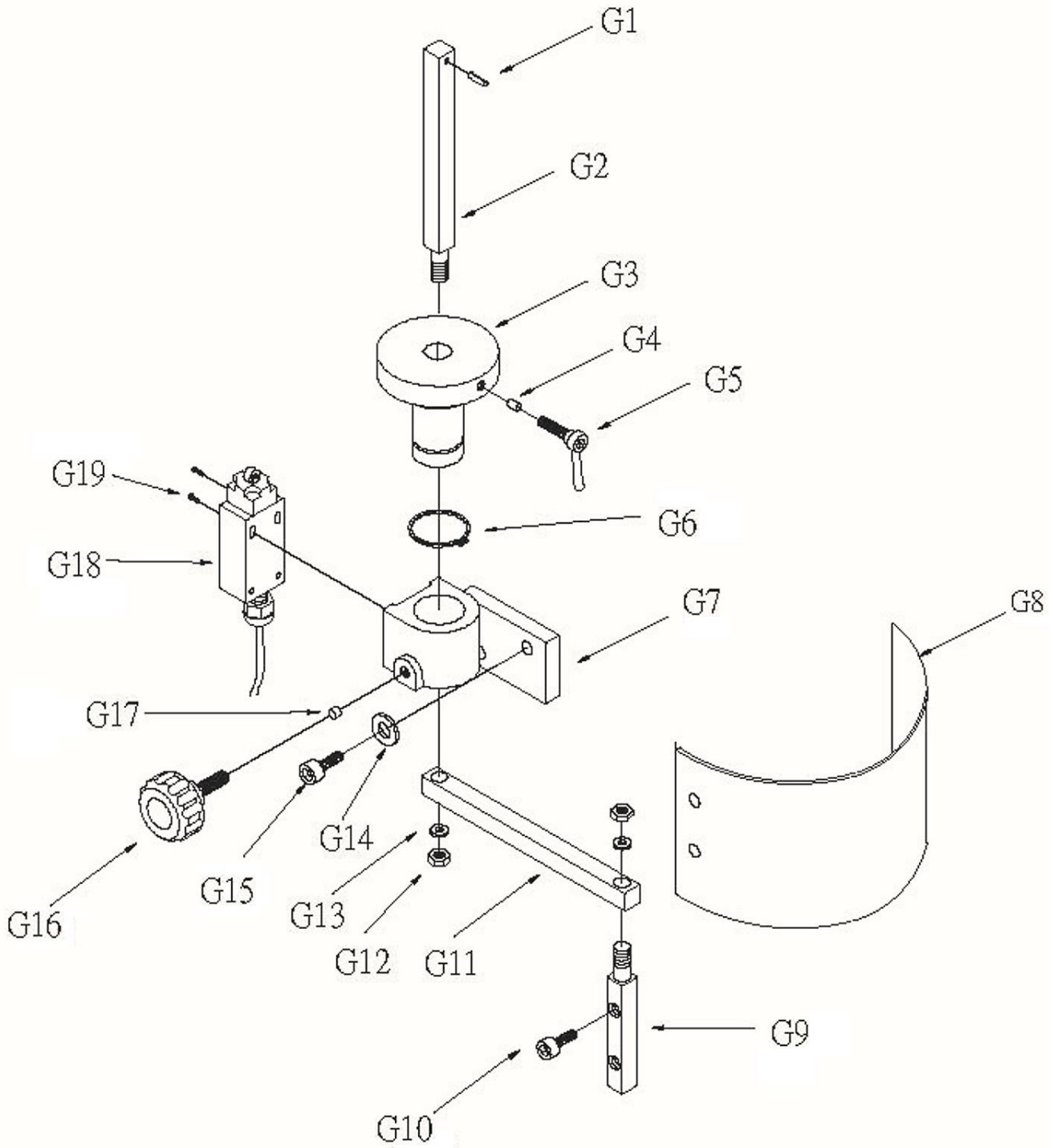
Item	Part No.	Description	Qty.
B39	DP15VSF-B39	Wiring Harness	1
B40	DP15VSF-B40	Wiring Harness	1
B41	DP15VSF-B41	Switch Mounting Plate	1
B42	DP15VSF-B42	Switch, On/Off 4 Pole	1
B43	DP15VSF-B43	Cap Screw	2
B44	DP15VSF-B44	Round Head Screw 1/4"-20x1/4"	4
B45	DP15VSF-B45	Hand Wheel	1
B46	DP15VSF-B46	Set Screw 5/16-18x5/16"	1
B47	DP15VSF-B47	Nut 1/4-20	2
B48	DP15VSF-B48	Cap Screw 1/4-20	2
B49	DP15VSF-B49	Set Screw 1/4-20x1-1/4"	2
B50	DP15VSF-B50	Plate	1
B51	DP15VSF-B51	Speed Change Housing	1
B52	DP15VSF-B52	Shaft Speed Change Lever	1
B53	DP15VSF-B53	Speed Change Shaft	1
B54	DP15VSF-B54	Speed Change Nut	1
B55	DP15VSF-B55	Speed Change Lever	1
B56	DP15VSF-B56	Nut 3/8-16	1
B57	DP15VSF-B57	Set Screw 1/4-20x1/2	1
B58	DP15VSF-B58	Set Screw 3/8-16x1	1
B59	DP15VSF-B59	LED Display	1
B60	DP15VSF-B60	Screw 3/16-24x3/8	4
B61	DP15VSF-B61	Plate Face	1
B62	DP15VSF-B62	Screw Locking	2
B63	DP15VSF-B63	Bracket, Face Plate	1
B64	DP15VSF-B64	Screw 3/16-24x3/8"	3
B65	DP15VSF-B65	Cover, Pulley	1
B66	DP15VSF-B66	Screw	2
B67	DP15VSF-B67	Sensor	1
B68	DP15VSF-B68	Cap Screw M8x12	1
B69	DP15VSF-B69	Plate, Bracket	1
B70	DP15VSF-B70	Variable Speed Pulley (Spindle)	1
B71	DP15VSF-B71	Hex Nut 3/16"	1
B72	DP15VSF-B72	Cap Screw	1
B73	DP15VSF-B73	Cap Screw M8x12	1



Item	Part No.	Description	Qty.
B74	DP15VSF-B74	Washer 5/16"	1
B75	DP15VSF-B75	Screw 3/16"	4
B76	DP15VSF-B76	Washer 1/4"	4
B77	DP15VSF-B77	Cap Screw 1/4"	4
B78	DP15VSF-B78	Supporter	1
B79	DP15VSF-B79	Belt	1
B80	DP15VSF-B80	Spring Cover	1
B81	DP15VSF-B81	Spring	1
B82	DP15VSF-B82	Variable Speed Pulley-A (Motor)	1
B83	DP15VSF-B83	Variable Speed Pulley-B (Motor)	1
B84	DP15VSF-B84	Screw 1/4"	3
B85	DP15VSF-B85	Spring Washer 1/4"	3
B86	DP15VSF-B86	Motor Plate	1
B87	DP15VSF-B87	M1 Motor 1HP/115V/230V/60HZ/1PH	1
B90	DP15VSF-B90	Bar/ Motor Mounting Plate	4
B91	DP15VSF-B91	Hex Head Screw 1/4" x 1"	4
B92	DP15VSF-B92	Bearing 6009ZZ	1
B93	DP15VSF-B93	Chuck Arbor, MT2 - JT3	1
B95	DP15VSF-GTK-E	LED Work Lamp, 110/12V	1
	DP15VSF-GTK-E-1	LED Work Lamp Bulb, 12VAC/DC MR16 GU5.3	1
B96	DP15VSF-B96	Safety Guard Assembly (with shut off micro switch)	1



EXPLOSION DRAW - CHUCK GUARD





Parts List – Chuck Guard

Item	Part No.	Description	Qty.
G1	DP15VSF-G1	Spring Pin, 3x16mm	1
G2	DP15VSF-G2	Support Bracket Bar	1
G3	DP15VSF-G3	Bushing	1
G4	DP15VSF-G4	Spacer	1
G5	DP15VSF-G5	Lock Handle M6x20	1
G6	DP15VSF-G6	C-Clip S30	1
G7	DP15VSF-G7	Bracket	1
G8	DP15VSF-G8	Safety Shield, Lexan 410x210mm	1
G9	DP15VSF-G9	Lower Bracket Bar	1
G10	DP15VSF-G10	Hex Socket Head Cap Screw M8x12	1
G11	DP15VSF-G11	Support Arm	1
G12	DP15VSF-G12	Hex Nut 3/8"	1
G13	DP15VSF-G13	Spring Washer 3/8	1
G14	DP15VSF-G14	Spacer	1
G15	DP15VSF-G15	Lock Bolt with Knob M8x20	1
G16	DP15VSF-G16	Lock Bolt with Knob M8x18	1
G17	DP15VSF-G17	Spacer	1
G18	DP15VSF-G18	Micro Switch	1
G19	DP15VSF-G19	Screw M4x20	1



TROUBLESHOOTING



WARNING: Make sure the electrical disconnect is OFF before working on the machine.

Problem	Possible Cause	Remedy
Spindle does not turn.	<ol style="list-style-type: none"> 1. Circuit breaker tripped. 2. Branch circuit breaker tripped, or fuse blown. 3. Open wire in switch circuit. 4. Defective switch. 5. Broken drive belt. 	<ol style="list-style-type: none"> 1. Reset circuit breaker. 2. Reset branch circuit breaker/replace fuse. 3. Repair, open circuit. 4. Repair switch. 5. Replace drive belt.
Spindle noisy.	<ol style="list-style-type: none"> 1. Damaged spindle bearings. 2. Worn spline. 	<ol style="list-style-type: none"> 1. Replace bearings. 2. Replace spline.
Drill stalls.	<ol style="list-style-type: none"> 1. Worn drive belt. 2. Excessive feed rate for size of drill and material being drilled. 3. No cutting fluid or improper cutting fluid. 	<ol style="list-style-type: none"> 1. Check condition of belt. Replace if glazed or slipping on pulleys. 2. Reduce feed pressure or use cutting fluid. 3. Use correct cutting fluid.
Poorly drilled holes.	<ol style="list-style-type: none"> 1. Drill dull. 2. Lack of rigidity in hold-down method. 3. Speed too fast for material and drill size. 4. Feed too fast for material and drill size. 5. No or improper cutting fluid or coolant being used. 6. Improperly ground drill bit. 	<ol style="list-style-type: none"> 1. Sharpen drill. 2. Check that all T-slot hold-downs are tight, and that table-lock and drill head bolts are tight. 3. Check spindle speed recommendations. Reduce speed if necessary. 4. Reduce feed rate. 5. Use cutting fluid or change to proper fluid or coolant for material being drilled. 6. Check for proper angles and reliefs. Regrind to proper geometry.
Table cannot be raised.	<ol style="list-style-type: none"> 1. Lack of lubrication. 2. Column or table clamp dirty or damaged. 	<ol style="list-style-type: none"> 1. Lubricate. 2. Clean or repair/replace as needed.
Motor overheating.	<ol style="list-style-type: none"> 1. Electrical circuit fault. 2. Oversize drill. 3. Excessive feed. 4. No cutting fluid or wrong fluid. 	<ol style="list-style-type: none"> 1. Check current draw in circuit. Make sure current draw is the same as rating on motor plate. 2. Reduce drill size. 3. Reduce feed rate. 4. Use correct cutting fluid for the material and drill.



Problem	Possible Cause	Remedy
No speed readout.	1. Speed pickup out of adjustment or failed.	1. Adjust gap between speed pickup and post spindle pulley. If there is no readout on the speed indicator, replace the speed pickup.



BAILEIGH INDUSTRIAL HOLDINGS LLC
1625 DUFEEK DRIVE MANITOWOC, WI 54220
PHONE: 920. 684. 4990 FAX: 920. 684. 3944
www.baileigh.com

BAILEIGH INDUSTRIAL HOLDINGS LTD. UNIT D SWIFT POINT
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