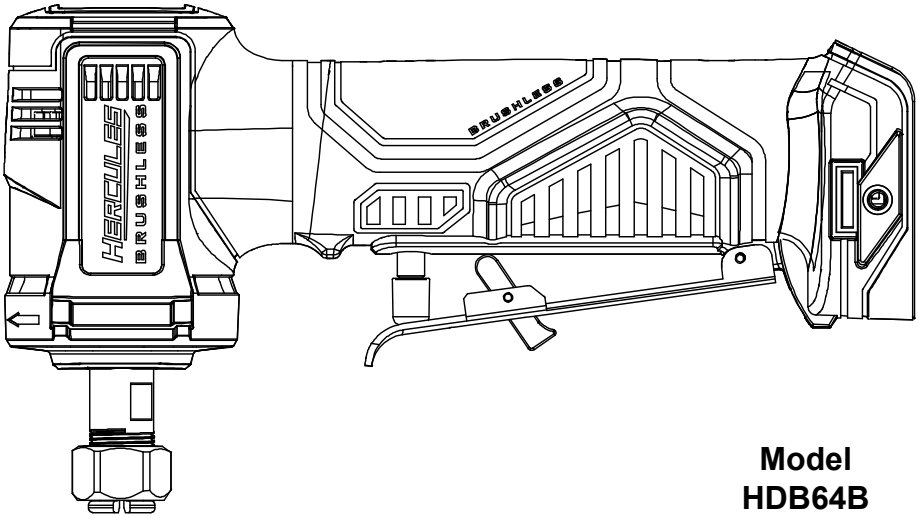
HERCULES®

Owner's Manual & Safety Instructions

23j



Model
HDB64B

Battery and Charger Sold Separately

12V Brushless 1/4" Right Angle Die Grinder

⚠WARNING: To prevent serious injury, User must read and understand Owner's Manual. SAVE THIS MANUAL.

When unpacking, make sure that the product is intact and undamaged.
If any parts are missing or broken, please call 1-888-866-5797
as soon as possible. Reference 59610.

IMPORTANT SAFETY INFORMATION

GENERAL POWER TOOL SAFETY WARNINGS

⚠WARNING

Read all safety warnings and all instructions. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.* **Save all warnings and instructions for future reference.** *The term "power tool" in the warnings refers to your battery-operated (cordless) power tool.*

Work Area Safety

a. **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*

b. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*

c. **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

Electrical Safety

a. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*

b. **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*

c. **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*

d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*

e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*

f. **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** *Use of a GFCI reduces the risk of electric shock.*

Personal Safety

a. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*

b. **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*

c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.*

d. **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*

e. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*

f. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*

g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*

h. **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** *A careless action can cause severe injury within a fraction of a second.*

i. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.

j. Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.

k. When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.

l. Do not leave the tool unattended when the Battery Pack is connected. Turn off the tool, and remove the Battery Pack before leaving.

m. This product is not a toy.
Keep it out of reach of children.

n. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.

o. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Power Tool Use and Care

a. **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*

b. **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*

c. **Disconnect the plug from the power source and/ or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*

d. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*

e. **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*

f. **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

g. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

h. **Keep handles and grasping surfaces dry, clean and free from oil and grease.** *Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.*

Battery Tool Use and Care

a. **Prevent unintentional starting.** *Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the power tool. Carrying the power tool with your finger on the switch or energizing power tool that have the switch on invites accidents.*

b. **Disconnect the battery pack from the power tool before making any adjustments, changing accessories, or storing power tool.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*

c. **Recharge only with the charger specified by the manufacturer.** *A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.*

d. **Use power tools only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*

e. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** *Shorting the battery terminals together may cause burns or a fire.*

f. **Under abusive conditions, liquid may be ejected from the battery; avoid contact.** *If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.*

g. **Do not use a battery pack or power tool that is damaged or modified.** *Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.*

h. **Do not expose a battery pack or power tool to fire or excessive temperature.** *Exposure to fire or temperature above 140°F may cause explosion.*

i. **Follow all charging instructions and do not charge the battery pack or power tool outside of the temperature range specified in the instructions.** *Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.*

j. **Have servicing performed by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the product is maintained.*

k. **Do not modify or attempt to repair the power tool or the battery pack except as indicated in the instructions for use and care.**

l.  The battery Charger gets hot during use. The Charger's heat can build up to unsafe levels and create a fire hazard if it does not receive adequate ventilation, due to an electrical fault, or if it is used in a hot environment. Do not place the Charger on a flammable surface. Do not obstruct any vents on the Charger. **Especially avoid placing the Charger on carpets and rugs; they are not only flammable, but they also obstruct vents under the Charger.** Place the Charger on a stable, solid, nonflammable surface (such as a stable metal workbench or concrete floor) at least 1 foot away from all flammable objects, such as drapes or walls. Keep a fire extinguisher and a smoke detector in the area. Frequently monitor the Charger and Battery Pack while charging.

Service

a. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

b. **Never service damaged BATTERY packs.** *Service of BATTERY packs should only be performed by the manufacturer or authorized service providers.*

c. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

Safety Warnings Common For Grinding, Sanding, Wire Brushing, Or Polishing Operations:

a. **This power tool is intended to function as a grinder, sander, wire brush, or polisher.** *Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.*

b. **Operations such as cutting-off are not recommended to be performed with this power tool.** *Operations for which the power tool was not designed may create a hazard and cause personal injury.*

c. **Do not use accessories which are not specifically designed and recommended by the tool manufacturer.** *Just because the accessory can be attached to your power tool, it does not assure safe operation.*

d. **The RATED SPEED of the accessories must be at least equal to the operating speed setting marked on the power tool.** *Accessories running faster than their RATED SPEED can break and fly apart.*

e. **The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool.** *Incorrectly sized accessories cannot be adequately controlled.*

f. **The arbour size of wheels, sanding drums or any other accessory must properly fit the spindle or collet of the power tool.** *Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.*

g. **Mandrel MOUNTED WHEELS, sanding drums, cutters or other accessories must be fully inserted into the collet or chuck.** *If the mandrel is insufficiently held and/or the overhang of the wheel is too long, the MOUNTED WHEEL may become loose and be ejected at high velocity.*

h. **Do not use a damaged accessory.** *Before each use inspect the accessory such as abrasive wheels for chips and cracks, sanding drum for cracks, tear or excess wear, wire brush for loose or cracked wires. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.*

i. **Wear personal protective equipment.** *Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.*

j. **Keep bystanders a safe distance away from work area.** *Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.*

k. **Hold power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** *Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*

l. **Always hold the tool firmly in your hand(s) during the start-up.** *The reaction torque of the motor, as it accelerates to full speed, can cause the tool to twist.*

m. **Use clamps to support workpiece whenever practical.** *Never hold a small workpiece in one hand and the tool in the other hand while in use. Clamping a small workpiece allows you to use your hand(s) to control the tool. Round material such as dowel rods, pipes or tubing have a tendency to roll while being cut, and may cause the bit to bind or jump toward you.*

n. **Never lay the power tool down until the accessory has come to a complete stop.** *The spinning accessory may grab the surface and pull the power tool out of your control.*

o. **After changing the bits or making any adjustments, make sure the collet nut, chuck or any other adjustment devices are securely tightened.** *Loose adjustment devices can unexpectedly shift, causing loss of control, loose rotating components will be violently thrown.*

p. **Do not run the power tool while carrying it at your side.** *Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.*

q. **Regularly clean the power tool's air vents.** *The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.*

r. **Do not operate the power tool near flammable materials.** *Sparks could ignite these materials.*

s. **Do not use accessories that require liquid coolants.** *Using water or other liquid coolants may result in electrocution or shock.*

t. Avoid unintentional starting. Prepare to begin work before turning on the tool.

u. Do not leave the tool unattended when the Battery Pack is connected. Turn off the tool, and remove the Battery Pack before leaving.

v. Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control and personal injury.

w. This product is not a toy. Keep it out of reach of children.

x. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Kickback and Related Warnings

Kickback is a sudden reaction to a pinched or snagged rotating accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding.

For example, if an accessory is snagged or pinched by the workpiece, the edge of the accessory that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the accessory's movement at the point of pinching.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

a. **Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces.** *The operator can control torque reactions or kickback forces, if proper precautions are taken.*

b. **Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory.** *Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.*

c. **Do not attach a toothed saw blade.** *Such blades create frequent kickback and loss of control.*

d. Always feed the bit into the material in the same direction as the cutting edge is exiting from the material (which is the same direction as the chips are thrown). Feeding the tool in the wrong direction causes the cutting edge of the bit to climb out of the work and pull the tool in the direction of this feed.

e. **When using rotary files, always have the work securely clamped.** These accessories will grab if they become slightly canted in the groove, and can kickback. When a rotary file grabs, it may jump from the groove and you could lose control of the tool. Feeding the tool in the wrong direction causes the cutting edge of the bit to climb out of the work and pull the tool in the direction of this feed.

Safety Warnings Specific For Wire Brushing Operations:

a. **Be aware that wire bristles are thrown by the brush even during ordinary operation.** *Do not overstress the wires by applying excessive load to the brush. The wire bristles can easily penetrate light clothing and/or skin.*

b. **Allow brushes to run at operating speed for at least one minute before using them.** *During this time no one is to stand in front or in line with the brush. Loose bristles or wires will be discharged during the run-in time.*

c. **Direct the discharge of the spinning wire brush away from you.** *Small particles and tiny wire fragments may be discharged at high velocity during the use of these brushes and may become imbedded in your skin.*

Lithium Battery Safety Warnings



LITHIUM BATTERIES STORE A LARGE AMOUNT OF ENERGY AND WILL VENT FIRE OR EXPLODE IF MISTREATED:

a. **Keep Battery Pack dry.**

b. **DO NOT DO ANY OF THE FOLLOWING TO THE BATTERY PACK:**

- **Open,**
- **Drop,**
- **Short-circuit,**
- **Puncture,**
- **Incinerate, or**
- **Expose to temperatures greater than 140°F.**

c. Charge Battery Pack only according to instructions.

d. Inspect Battery Pack before every use; do not use or charge if damaged.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

a. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.

b. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.

c. Wear suitable gloves to reduce the vibration effects on the user.

d. Use tools with the lowest vibration when there is a choice between different processes.

e. Include vibration-free periods each day of work.

f. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.

g. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

SAVE THESE INSTRUCTIONS.

GROUNDING

⚠WARNING

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING: Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the charger. Never remove the grounding prong from the plug. Do not use the charger if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

Extension Cords

Note: Extension cords must not be used with this item's Charger.

Warning Symbols and Definitions

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠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 **Addresses practices not related to personal injury.**

Symbology

V	Volts
⎓	Direct Current
A	Amperes
n_0 xxxx/min.	No Load Revolutions per Minute (RPM)
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved safety goggles with side shields.
	WARNING marking concerning Risk of Respiratory Injury. Wear NIOSH-approved breathing protection rated for the hazards in your work area.
	Read the manual before set-up and/or use.
	WARNING marking concerning Risk of Fire. Do not cover Charger ventilation ducts. Charge on fireproof surface only.
	WARNING marking concerning Risk of Electric Shock. Properly connect Charger's power cord to appropriate outlet.
	WARNING marking concerning Risk of Explosion. Do not puncture, short, or open battery packs and do not charge damaged battery packs.

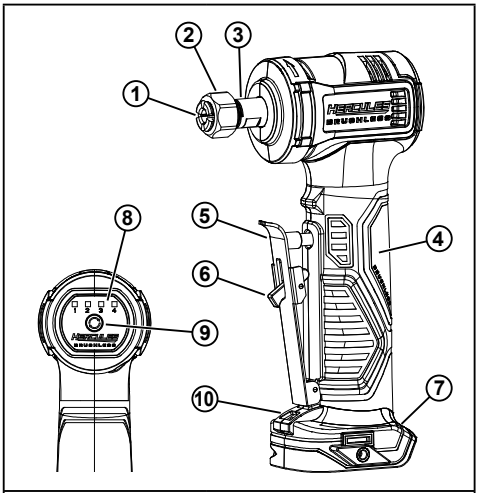
SPECIFICATIONS

Battery Type	Hercules 12V Li-ion: 57367 (sold separately)
Charger Type	Hercules 12V Li-ion Charger: 56559 (sold separately)
No Load Speed	n: 10,000-25,000/min
Collet Size	1/4" (6.35mm)
Max Accessory Diameter	2" (55mm)

SET UP - BEFORE USE

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Functions



1. Collet
2. Collet Nut
3. Spindle
4. Handle
5. Paddle Switch
6. Lock-Off Switch
7. Battery Receptacle
8. Speed Indicator Lights
9. Speed Control
10. LED Work Light

OPERATION

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up

⚠WARNING

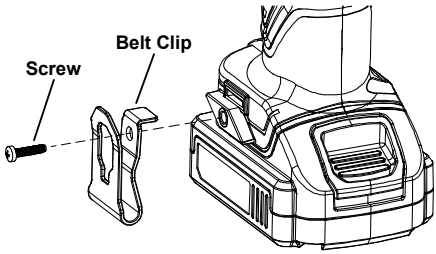
TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Make sure that the Paddle Switch is in the OFF position and remove the Battery Pack before performing any procedure in this section.

Charging Battery Pack

Charge battery pack before using this tool.
Follow instructions included with battery charger.
Battery Pack and Charger sold separately.

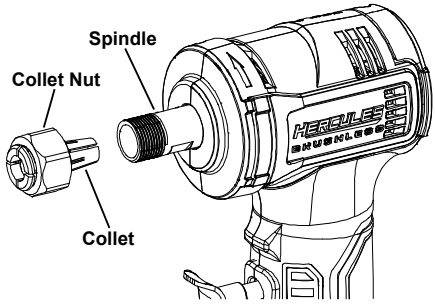
Attaching Belt Clip

Attach Belt Clip to either side of handle using supplied Screw.

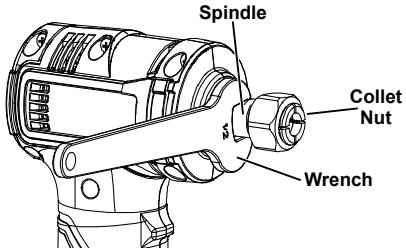


Installing Collet

1. Insert the Collet into the opening on the Spindle.



2. Using the included wrench, hold the Spindle in place and hand tighten the Collet Nut.



Installing Accessories

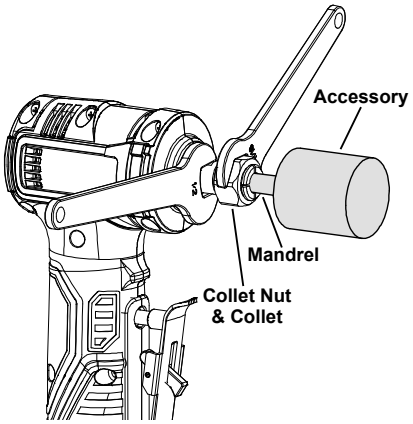
⚠WARNING

TO PREVENT SERIOUS INJURY: Do not use with cutoff wheels, saws or any attachment that requires a safety guard. This tool does not have a safety guard.

⚠CAUTION

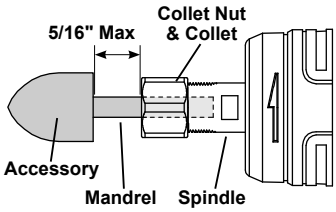
TO PREVENT INJURY: Wear heavy-duty work gloves when handling wire wheels and brushes. These accessories are sharp and can cause injury.

1. The accessory MUST be:
   - Rated to at least 25,000 RPM.
   - No larger than 2" (55mm) in diameter.
   - Fitted with a 1/4" mandrel.
   - Undamaged.
   - An abrasive point, cone, plug, flap disc, rotary burr, wire brush or grinding wheel (accessories not included).
2. Using the included wrenches, hold the Spindle in place and loosen the Collet Nut.
3. Clean dust, chips and debris from the Collet and accessory mandrel before installing accessory.
4. With the Collet Nut loosened, insert the accessory's mandrel into the Collet at least 7/16".



5. Using the wrenches, hold the Spindle in place and tighten the Collet Nut securely.

NOTICE: To prevent vibration or a broken Spindle, do not install the accessory more than 5/16" from the Collet Nut.



Workpiece and Work Area Set Up

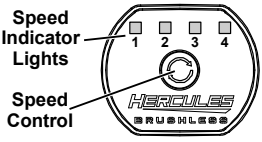
1. Designate a work area that is clean and well lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. There must not be hazardous objects, such as utility lines or foreign objects, nearby that will present a hazard while working.
3. Secure loose workpieces using a vise or clamps (not included) to prevent movement while working.
4. You must use personal safety equipment including, but not limited to, ANSI-approved eye and hearing protection, as well as heavy-duty work gloves.

General Operation

⚠WARNING

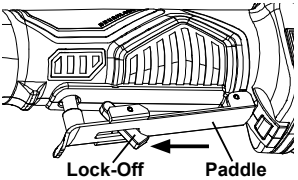
TO PREVENT SERIOUS INJURY: Grip the tool firmly in both hands.

1. Make sure the Paddle Switch is released in the off position, then insert a fully charged Battery into the Battery Receptacle, making sure it clicks in place securely.
2. The Grinder has four speed settings. Press the Speed Control button to select desired speed. Speed Indicator Lights display selected speed from 1 to 4. Refer to chart for approximate speed of each numbered setting.



Number	RPM
1	10,000
2	15,000
3	20,000
4	25,000

3. Slide the Lock-Off Switch forward and depress the Paddle Switch to start the Grinder. The LED Work Light will turn on when the Paddle Switch is pressed and turn off a few seconds after the Switch is released.



4. The tool has variable speed. Apply more pressure to Paddle Switch to increase speed, up to the speed set with the Speed Control button. Lessen pressure on Paddle Switch to decrease speed.
5. Allow the Die Grinder to come up to speed before touching the work surface.
6. Apply the accessory to the work surface, allowing the Grinder to operate at full speed. If the Grinder bogs down, use lighter pressure.
7. To create a smoother surface, keep the accessory moving over the work surface.
8. When finished, release the Paddle Switch to stop the Grinder.
9. Allow the Grinder to come to a complete stop before setting it down.
10. To prevent accidents, turn off the Grinder and remove its Battery Pack after use. Clean, then store the Grinder indoors out of children's reach.

MAINTENANCE AND SERVICING

Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Make sure that the Paddle Switch is in the OFF position and the Battery Pack is removed before performing any procedure in this section.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:
Do not use damaged equipment.
If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE,** inspect the general condition of the tool. Check for:
   - leaking, swollen, or cracked battery pack
   - loose hardware
   - misalignment or binding of moving parts
   - cracked or broken parts
   - any other condition that may affect its safe operation.
2. **AFTER USE,** wipe external surfaces of the tool with clean cloth.
3. **PERIODICALLY,** blow dust and grit out of the motor vents using dry compressed air. Wear ANSI-approved safety goggles and NIOSH-approved breathing protection when performing this procedure.
4. **Li-Ion BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.**
   Do not short, incinerate or open battery.
5. Disconnect battery pack and store battery pack, charger, and tool in dry, indoor area out of reach of children and away from metal objects (i.e., paperclips, coins) to prevent shorting.

Accessory Storage and Handling

1. Handle accessories carefully to prevent dropping or bumping. Do not use accessories that have been dropped or bumped.
2. Store accessories in shelves, racks, boxes, or drawers. Keep storage area dry and above freezing. Any accessories exposed to humidity or freezing temperatures must not be used.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	1. Battery Pack not properly connected.	1. Remove Battery Pack, make sure there are no obstructions, reinsert the Battery Pack according to its shape (it should only fit one way), and press firmly until the Battery Pack locks in place.
	2. Battery Pack not properly charged.	2. Make sure Charger is connected and operating properly. Give enough time for Battery Pack to recharge properly.
	3. Battery Pack stopped working.	3. Dispose of old Battery Pack properly or recycle. Replace Battery Pack.
	4. Tool's thermal reset breaker tripped (if equipped).	4. Turn off tool and allow to cool. Press reset button on tool.
	5. Internal damage or wear. (Power Switch, for example.)	5. Have qualified technician service tool.
Tool operates slowly.	1. Excess pressure applied to workpiece.	1. Decrease pressure, allow tool to do the work.
	2. Battery Pack power low.	2. Recharge Battery Pack.
	3. Battery Pack wearing out.	3. Dispose of old Battery Pack properly or recycle. Replace Battery Pack
Performance decreases over time.	Battery Pack wearing out.	Battery Pack capacity will gradually decrease through use. If symptoms are severe, recycle old Battery Pack (or dispose of properly) and replace it.
Excessive noise or rattling.	Internal damage or wear. (Bearings, for example.)	Have qualified technician service tool.
Overheating.	1. Forcing tool to work too fast.	1. Allow tool to work at its own rate.
	2. Blocked motor housing vents.	2. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air.
Tool does not grind, sand or brush effectively.	1. Accessory loose.	1. Confirm accessory mandrel is correct and Collet Nut is tight.
	2. Accessory damaged, worn or wrong type for the material.	2. Check condition and type of accessory. Use only proper type of accessory in good condition.

Follow all safety precautions whenever diagnosing or servicing the tool.
Disconnect Battery Pack and Charger power supply before service.

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Replacement parts may be available for this item.
Visit **harborfreight.com/parts** for a list of in-stock parts. Refer to UPC 193175476500.

5-YEAR LIMITED WARRANTY

This Hercules tool is warranted to the original purchaser to be free from defects in materials and workmanship for a period of five (5) years beginning on the date of purchase. This warranty does not cover battery packs and battery chargers, which are covered under separate warranties. To obtain warranty service, visit your local Harbor Freight retail store. Warranty registration is not required. The product or part must be returned to us with proof of purchase (e.g. in-store receipt or packing slip/invoice) and may require shipment by purchaser to a service center at purchaser's expense. If our inspection verifies a covered defect in materials or workmanship during the warranty period, we will, at our option, repair or replace the defective product. We will return repaired products within a reasonable time at our expense, but if we determine that there is no defect, or that the defect resulted from causes not within the scope of our warranty, then we will return the product to you if you pay return shipping costs.

This warranty does not cover any failure or damage that we determine is due directly or indirectly to normal wear and tear, misuse, use not for the intended purpose or not in accordance with the product manual, abuse, accident, rental, modification or alteration, unauthorized repair, improper installation, neglect, lack of maintenance, or any other failure not arising from defective materials or workmanship. Fraudulent returns or claims will be denied. The repair or replacement described in this warranty shall be your sole and exclusive remedy. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES, WRITTEN OR ORAL, AND ANY IMPLIED WARRANTIES ARE DISCLAIMED TO THE EXTENT PERMITTED BY LAW AND OTHERWISE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. HARBOR FREIGHT SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR ANY INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES OR COSTS ARISING FROM THIS WARRANTY OR THE USE OF THIS PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THESE LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE

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