

1/4" Die Grinder Instruction Manual

Meuleuse à rectifier les matrices de 6,35 mm (1/4")

Manual d'instructions

Esmeriladora a troquel de 1/4" Manual de instrucciones

TOOL SPECIFICATIONS

Max RPM.....	25,000
Average SCFM Requirements.....	8.0 SCFM @ 90 PSI
Air Inlet.....	1/4" NPT (female)
Collet size.....	1/4"
Recommended Hose Size.....	3/8"
Maximum Working Pressure.....	90 PSI

CARACTÉRISTIQUES DE L'OUTIL

Vitesse de rotation maximale.....	25 000
Exigences de pression moyenne.....	0,23 m³/min à 620 kPa (8,0 pi³/min à 90 lb/po²)
Admission d'air.....	1/4 po NPT (femelle)
Grosseur de pince.....	6 mm (1/4 po)
Taille de tuyau flexible recommandée.....	10 mm (3/8 po)
Pression d'utilisation maximale.....	620 kPa (90 lb/po²)

ESPECIFICACIONES DE LA HERRAMIENTA

RPM máx.....	25 000
Requisitos SCFM promedio.....	8.0 SCFM a 90 PSI
Entrada de aire.....	1/4" NPT (hembra)
Tamaño de boquilla.....	1/4"
Tamaño recomendado de manguera.....	3/8"
Presión máxima de trabajo.....	90 PSI



▲ WARNING Read and understand all safety precautions in this manual before operating. Failure to comply with instructions in this manual could result in personal injury, property damage and/or voiding of your warranty. The manufacturer **WILL NOT** be liable for any damage because of failure to follow these instructions.

▲ AVERTISSEMENT Lisez et veillez à bien comprendre toutes les consignes de sécurité de ce manuel avant d'utiliser l'appareil. Toute dérogation aux instructions contenues dans ce manuel peut entraîner l'annulation de la garantie, causer des blessures et/ou des dégâts matériels. Le fabricant **NE SAURA** être tenu responsable de dommages résultant de l'inobservation de ces instructions.

▲ ADVERTENCIA Lea y comprenda todas las precauciones de seguridad contenidas en este manual antes de utilizar esta unidad. Si no cumple con las instrucciones de este manual podría ocasionar lesiones personales, daños a la propiedad y/o la anulación de su garantía. El fabricante **NO SERÁ** responsable de ningún daño por no acatar estas instrucciones.

SAFETY GUIDELINES - DEFINITIONS



This manual contains information that is important for you to know and understand. This information relates to protecting YOUR SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the following symbols. Please read the manual and pay attention to these sections.

⚠ 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 an imminently hazardous situation which, if not avoided, will result in death or serious injury.

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

⚠ CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury and/or property damage.


IMPORTANT SAFETY INSTRUCTIONS

* SAVE THESE INSTRUCTIONS *

⚠ WARNING To reduce the risk of electric shock, fire, and injury to persons, read all the instructions before using the tool. You must also read the compressor manual and follow all compressor safety instructions.


GENERAL SAFETY

⚠ WARNING **RISK OF ELECTRIC SHOCK, FIRE, AND/OR INJURY. Keep the work area clean and well lighted.** Cluttered benches and dark areas increase the risks of electric shock, fire, and injury to persons. Place cleaning rags and other flammable waste materials in a secured metal container. The container should be disposed of properly in accordance with local, state, and federal regulations.

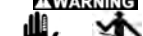


WORK AREA SAFETY

⚠ WARNING **RISK OF EXPLOSION AND/OR FIRE. Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** The tool is able to create sparks resulting in the ignition of the dust or fumes.




⚠ WARNING **RISK OF INJURY. Keep bystanders, children, and visitors away while operating the tool.** Distractions are able to result in the loss of control of the tool.



PERSONAL SAFETY

⚠ WARNING **RISK OF INJURY. Stay alert.** Watch what you are doing and use common sense when operating the tool. Do not use the tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool increase the risk of injury to persons.




RISK OF INJURY. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair increase the risk of injury to persons as a result of being caught in moving parts.


RISK OF INJURY. Avoid unintentional starting. Be sure the trigger is off before connecting to the air supply. Do not carry the tool with your finger on the trigger or connect the tool to the air supply with the trigger on. Do not carry the tool by the hose or yank the hose to disconnect it from the air supply.

⚠ WARNING **RISK TO BREATHING/INHALATION HAZARD. Always wear MSHA/NIOSH approved, properly fitting face mask or respirator and work in a well ventilated area when using tools that generate dust.** Some dust created by power sanding, grinding, drilling and other construction activities contains chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints
- crystalline silica from bricks and cement and other masonry products
- arsenic and chromium from chemically treated lumber.




⚠ WARNING **RISK OF INJURY. Remove adjusting keys and wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool increases the risk of personal injury.







RISK OF INJURY. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.




⚠ WARNING **RISK OF EYE INJURY. After oiling, cover the exhaust port with a towel and operate the tool for a few seconds to safely remove the excess oil.** Failure to cover the exhaust port can result in serious injury. **Note: Keep the towel away from moving parts!**




PERSONAL SAFETY (continued)

 <p>▲ WARNING</p>	<p>RISK OF HEARING LOSS. Always wear ANSI S3.19 approved ear protection when using the tool. Prolonged exposure to high intensity noise is able to cause hearing loss.</p>
 <p>▲ WARNING</p>	<p>RISK OF EYE INJURY. Always wear ANSI Z87.1 approved safety goggles when using an air tool. Air powered equipment and power tools are capable of propelling materials such as metal chips, sawdust, and other debris at high speed which could result in serious eye injury.</p>
 <p>▲ WARNING</p>	<p>RISK OF ELECTRIC SHOCK. Explore the workpiece to avoid contact with hidden wiring. Thoroughly investigate the workpiece for possible hidden wiring before performing work. Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.</p>
 <p>▲ WARNING</p>	<p>RISK OF INJURY. Avoid prolonged exposure to vibration. Air powered tools can vibrate during use and repetitive motion or vibration may cause injury. Avoid prolonged use of the tool or stop using the tool if discomfort occurs.</p>



TOOL USE AND CARE SAFETY

 <p>▲ WARNING</p>	<p>RISK OF INJURY. Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against the body is unstable and is able to lead to loss of control.</p> <p>RISK OF INJURY. Do not force the tool. Use the correct tool for the application. The correct tool will do the job better and safer at the rate for which the tool is designed.</p> <p>RISK OF INJURY. Do not use the tool if the trigger does not turn the tool on or off. Any tool that cannot be controlled with the trigger is dangerous and must be repaired.</p> <p>RISK OF INJURY. Disconnect the tool from the air source before making any adjustments, changing accessories, or storing the tool. Such preventative safety measures reduce the risk of starting the tool unintentionally.</p> <p>RISK OF INJURY. Store the tool when it is idle, out of reach of children and other untrained persons. A tool is dangerous in the hands of untrained users.</p>
 <p>▲ WARNING</p>	<p>RISK OF BURSTING AND/OR INJURY. Check for misalignment or binding of moving parts, breakage of parts and any other condition that affects the tool's operation. If damaged, have the tool serviced before using. Do not operate the tool with the protective guarding removed or damaged. Replace the tool or have it repaired by an authorized service center. Many accidents are caused by poorly maintained tools or air hose. There is a risk of bursting if the tool is damaged.</p> <p>RISK OF BURSTING AND/OR INJURY. Check for damaged air hose. Keep the air hose away from heat, oil, and sharp edges. Inspect the air hose periodically and replace it if it becomes worn or damaged.</p> <p>RISK OF BURSTING AND/OR INJURY. Use compressed air regulated to a maximum pressure at or below the rated pressure of any attachments. Never operate the tool over 90 PSI. Exceeding the maximum pressure rating of tools or accessories could cause an explosion resulting in serious injury.</p>
 <p>▲ WARNING</p>	<p>RISK OF INJURY. Use only accessories that are designed for the specific tool. Use of an accessory not intended for use with the specific tool, increases the risk of injury to persons.</p>

TOOL SERVICE SAFETY

 <p>▲ WARNING</p>	<p>RISK OF INJURY. Tool service must be performed only by qualified repair personnel.</p> <p>RISK OF INJURY. When servicing a tool, use only identical replacement parts. Use only authorized parts.</p> <p>Use only the lubricants supplied with the tool or specified by Coleman Powermate.</p>
--	---

AIR SOURCE SAFETY

 <p>▲ WARNING</p>	<p>RISK OF BURSTING AND/OR INJURY. Never connect to an air source that is greater than 90 psi. Over pressurizing the tool is able to result in bursting, abnormal operation, breakage of the tool, or serious injury to persons. Use only clean, dry, regulated compressed air at the rated pressure or within the rated pressure range as marked on the tool. Always verify prior to using the tool that the air source has been adjusted to the rated air pressure or within the rated air pressure range.</p>
 <p>▲ WARNING</p>	<p>RISK OF EXPLOSION AND INJURY. Never use oxygen, carbon dioxide, combustible gases or any bottled gas as an air source for the tool. Such gases are capable of explosion and serious injury to persons.</p>

TYPICAL INSTALLATION

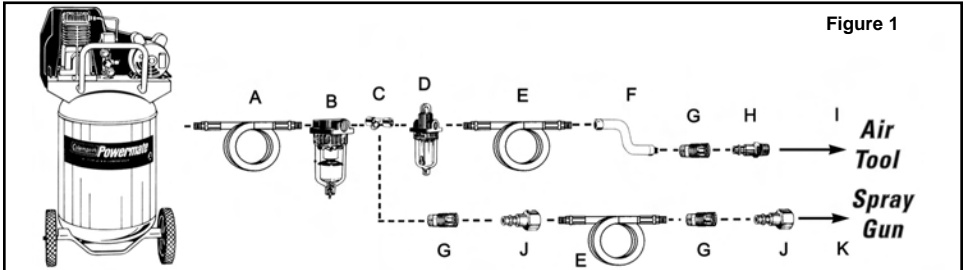


Figure 1

Key	Description	Key	Description	Key	Description	Key	Description
A	Air hose	D	In-line Oiler	G	Quick Coupler	J	Female Connector
B	In-line Filter	E	Air Hose	H	Male Connector	K	Spray Gun
C	Tee Fitting	F	Whip Hose	I	Air Tool		

OPERATING INSTRUCTIONS

To begin using the tool:

- As a standard practice, drain water from the air compressor tank and air lines prior to use each day (reference your compressor operators manual for detailed instructions).
- Install a 1/4" NPT male connector (not included) into the air inlet port on the tool (see Figure 2). **Note: Use Teflon® Tape on all threaded connections.**
- Turn on the air compressor and allow it to build up pressure.
- Adjust the air compressor's regulator or the supply line regulator to 90 PSI.

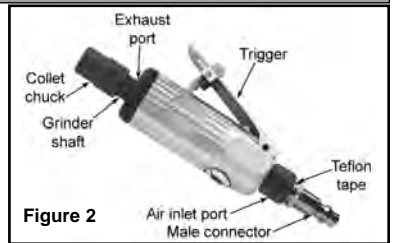


Figure 2

⚠ WARNING Always make sure the tool is disconnected from any air supply before changing the grinding stones or accessories, or serious injury could occur.

⚠ WARNING Grinders will attain extremely high R.P.M. or free speed. Use only accessories that are rated with R.P.M. equal to or greater than the no-load free speed of your tool.

⚠ WARNING Inspect each grinding stone for cracks or chips prior to mounting. DO NOT use a grinding stone that is chipped, cracked or damaged in any other way.

- Select the desired grinding stone or accessory. **NOTE: This tool is equipped with a 1/4" collet chuck, which uses grinding stones and accessories with a 1/4" spindle.**

To change the grinding stones or accessories:

- Loosen the collet chuck with the collet wrenches (included with your tool) by placing one collet wrench on the flats of the grinder shaft to hold it from turning. Place the other collet wrench on the flats of the collet chuck and turn counter-clockwise to loosen (see figure 3).
- Insert a grinding stone or accessory into the collet chuck, then turn the collet chuck clockwise to tighten using the collet wrenches.

⚠ WARNING Make sure the grinding stone or accessory spindle is fully inserted into the collet chuck opening and the collet chuck is securely tightened. Loose attachments could fly off during operation and cause serious injury.

- After mounting a grinding stone or accessory, hold the grinder under a workbench and run it for at least 60 seconds to be sure the grinding accessory is secure. Make sure no one (including the operator) is in the operating plane of the grinding accessory.

To change the collet chuck:

- Loosen the collet chuck with the collet wrenches (included with your tool) by placing one collet wrench on the flats of the grinder shaft to hold it from turning. Place the other collet wrench on the flats of the collet chuck and turn counter-clockwise to loosen (see figure 3). Remove the collet chuck from the tool.

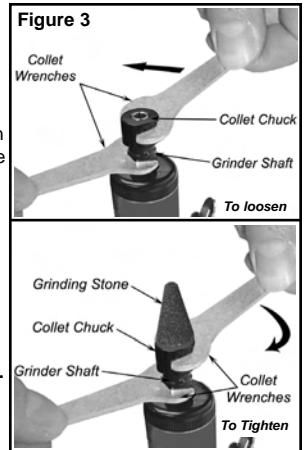


Figure 3

OPERATING INSTRUCTIONS (continued)

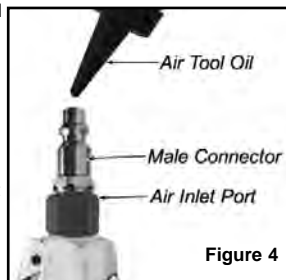
- b. Insert the desired collet chuck into the tool and tighten, using the collet wrenches.
6. Connect the tool to the air hose quick coupler. **NOTE: It is recommended that a whip hose with a swivel (P012-0079SP - not included) be used to prevent twisting, kinking and excessive wear to the air hose (ref. item "F" in figure 1 for recommended connections).**
 7. Squeeze the trigger gently. When starting with a cold grinding stone or accessory, apply it to the work slowly until the stone or accessory gradually warms up. Make smooth contact with the work, and avoid any bumping action or excessive pressure. When the trigger is fully depressed, the tool is at full speed. As the trigger is released, the tool slows down, allowing the operator to choose the best speed and power for the job. Release the trigger to stop the tool.

USER-MAINTENANCE INSTRUCTIONS

Air Motor Lubrication

To maintain the maximum performance of the air tool, it must be lubricated each time it is used. Dust, dirt, rust and oil residue will build up inside the tool and reduce the performance. An in-line oiler is recommended for proper automatic tool lubrication (see Figure 1). If an in-line oiler is not available, the tool can be lubricated manually through the inlet port (see Figure 4).

1. Disconnect the air tool from the air supply.
2. Turn the tool upside down and while depressing the trigger, add 4-6 drops of Coleman Powermate® air tool oil #018-0059SP or SAE10 nondetergent oil into the air inlet. **NOTE: Depressing the trigger helps circulate oil in the air motor.**
3. Reconnect the tool to the air supply, cover the exhaust port end with a towel and run approximately 30 seconds to remove excess oil.
NOTE: If the tool remains sluggish after it has been lubricated, the internal components may need to be cleaned.



To Clean:

Disconnect the air tool from the air supply and pour or spray a generous amount of WD-40® into the air inlet with the trigger depressed. Connect the tool to the air supply, cover the exhaust port end with a towel and run for approximately 30 seconds. Follow the air motor lubrication instructions above after cleaning is completed to re-lubricate the tool.

▲WARNING After oiling or cleaning, cover the exhaust port with a towel and operate the tool for a few seconds to safely remove the excess oil. Clean the handle and surface of the tool of any oil residue. Failure to cover the exhaust port and clean the tool, can result in serious injury. **Note: Keep the towel away from moving parts!**

TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Tool will not run or runs slowly	Grit in tool; tool gummed up No oil in tool Low air pressure Air hose leaks	Clean the air motor inside the tool with WD-40® (see "user maintenance" section). Add 4-6 drops of air tool oil into the air inlet of the tool (see "user maintenance" section). Adjust compressor regulator to 90 PSI. Tighten and seal hose fittings with Teflon® tape if leaks are found.
Excessive vibration	Damaged grinding stone or accessory	Replace with a new stone or accessory.

LIMITED WARRANTY

ONE YEAR LIMITED WARRANTY: Powermate Corporation (the Company) warrants that for a period of twelve (12) months from the date of purchase, it will replace or repair, free of charge, for the original retail purchaser only, any part or parts, manufactured by the Company, found upon examination by the Company or its assigned representatives, to be defective in material or workmanship or both. All transportation charges for parts submitted for replacement or repair under this warranty must be borne by the original retail purchaser. This is the exclusive remedy under this warranty.

Failure by the original retail purchaser to install, maintain and operate said equipment in accordance with good industry practices, or failure to comply with the specific recommendations of the Company set forth in the owner's manual, shall render this warranty null and void. The Company shall not be liable for any repairs, replacements, or adjustments to the equipment or any costs for labor performed by the purchaser without the Company's prior written approval. The effects of corrosion, erosion and normal wear and tear are specifically excluded from this warranty.

THE COMPANY MAKES NO OTHER WARRANTY OR REPRESENTATION OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED EXCEPT THAT OF TITLE. ALL IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES UNDER ANY AND ALL WARRANTIES, OTHER CONTRACTS, NEGLIGENCE, OR OTHER SORTS IS EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW.




Notwithstanding the above, any legal claim against the Company shall be barred if legal action thereon is not commenced within twenty-four (24) months from the date of purchase or delivery whichever occurs last. This warranty constitutes the entire agreement between the Company and the original retail purchaser and no representative or agent is authorized to alter the terms of same without expressed written consent of the Company.



**Powermate Corporation
4970 Airport Road
P.O. Box 6001
Kearney, NE 68848
1-308-237-2181
Fax 1-308-234-4187**

Manufactured in China for / Fabriqué à China pour / Fabricado en China para
Powermate Corporation, Aurora, IL 60504
©2006 Powermate Corporation

All Rights Reserved. Tous droits réservés. Reservados todos los derechos.

Coleman® and  are registered trademarks of The Coleman Company, Inc. used under license.
Coleman® et  sont des marques déposées de The Coleman Company, Inc. utilisées sous licence.
Coleman® y  son marcas comerciales registradas de The Coleman Company, Inc. utilizadas bajo licencia.

Powermate® is a registered trademark of Powermate Corporation
Powermate® est une marque déposée de Powermate Corporation
Powermate® es una marca comercial registrada de Powermate Corporation