PNEUMATIC DRIFTER

SAFETY & MAINTENANCE INSTRUCTIONS

V7

FEB 2025

ACE PNEUMATICS PVT. LTD.

WWW.ACEPNEUMATICS.COM

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INTRODUCTION:

Thank You for Choosing Ace Pneumatics Drifter.

Ace Pneumatics Pvt. Ltd. is a leading manufacturer of high-performance pneumatic tools, specializing in paving breakers, rock drills, DTH Hammer, Pneumatic Drifter, Jackleg Drill, Pusherleg Drill, chipping hammers, Rivet Buster and more. Committed to innovation and quality, we deliver durable and efficient solutions for construction, mining, and industrial applications. Visit **www.acepneumatics.com** to explore our products.

PRODUCT DESCRIPTION:

The ACE Drifter is a pneumatic drill designed for long hole drilling, bench drilling, and drifting, with a hole size range of 51–89 mm (2"–3½"). It is widely used in both surface and underground drilling applications, especially when drilling through tough surfaces. Powered by compressed air, the drifter efficiently drills through rock, and is known for its robust construction and reliability in harsh environments.

Remote-controlled, the drill features a rifle-bar actuated rotation motor with eight pawls (four in each direction) that engage or disengage. It can be easily converted from water flushing to air blowing, and hoses can be positioned on either side to minimize the risk of accidental damage.

The ACE Drifter can be fitted to various drilling rigs such as Simba, Wagon, etc., and supports shank adapters with R32, R38, and T38 threads.

ABOUT THE SAFETY AND OPERATING INSTRUCTIONS

Based on noise and vibration values in connection with operation of the hammer drill, the operator is exposed to a risk of health problems when the tool is used in the long term. The construction of the product does not protect the operator against the electric shock hazard. The service staff must use respirators in locations with dust nuisance that exceeds the values permitted by the relevant hygienic regulations.

CHOOSING THE RIGHT JACKLEG DRILLS FOR THE TASK

Selecting the correct Drifter is crucial for efficient work. A drifter that is too small will make the task take longer, while one that is too large will require frequent repositioning, leading to unnecessary fatigue for the operator. Choosing the right size helps maximize productivity and minimizes effort.

DRIFTER DESIGN AND FUNCTION

The ACE Drifter series, including models Ace 120F and Ace 120KZ, are pneumatic drilling tools specifically designed for long hole drilling, bench drilling and drifting Hole size 51 - 89 mm. These drills utilize compressed air to generate the power needed for efficient rock penetration, making them essential for mining, tunnelling, and construction applications. With their robust construction, these tools are built to withstand harsh environments and provide reliable performance in tough conditions. The ergonomic design of the models ensures operator comfort during extended use, while their high-efficiency drilling capabilities make them ideal for tasks that require durability and precision in rock drilling.

GENERAL PRODUCT SAFETY INFORMATION

Failure to follow these warnings may lead to death or serious injury:

- Read and understand this manual and all related documents before using, maintaining, or repairing this product.
- Only qualified operators should install, adjust, or use this tool.
- Ensure all users are informed of this safety information.
- Identify and mitigate any specific application hazards before use.
- Follow all applicable laws, regulations, and standards during installation, operation, and maintenance.
- Operate and maintain the tool as instructed to minimize risks from noise, vibration, dust, and fumes.

SAFETY INSTRUCTION

Wear Respiratory Protection | Wear Eye Protection | Wear Hearing Protection | Read Manuals Before Operating Product

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 or property damage.
NOTICE	Indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

PRODUCT SAFETY INSTRUCTION - WHEN PLACING THE TOOL IN SERVICE

- Before starting any job, the operator or employer must assess and control potential risks. Always use clean, dry air at a maximum of 90 psig (6.2 bar/620 kPa) unless specified otherwise. Exceeding the maximum pressure can lead to hazardous situations.
- The air and water supply elbow pipes are rotary whereas the air supply elbow pipe can be fit in place both from the right and left sides of the hammer drill. The sockets to supply the compressed air to the slide valve are adjustable within 180° range. The water supply for central drilling mud is made up of a socket located in the hammer right above the collar. The supplied water pressure should be 0.3 to 0.4 MPa (3-4 bar).
- Avoid using damaged hoses or fittings, and check that all connections are secure before applying air pressure. Only use recommended accessories that comply with the product manual to reduce hazards.
- Seizing is the most dangerous problem with the new hammer drill. To avoid this problem, it is necessary to make sure that lubrication is sufficient and that the compressed air is clean. Before connecting to the hammer drill, the hose coming from the flow-through lubricator to the hammer must be adequately blown through until the internal surface of the hose is covered with oil. After performing that operation, the correct value is set up. The new hose is blown through (off load) for 5 – 10 min.
- The flow-through lubricator must be adjusted in such a way that the stem of the surface rod is properly lubricated, which can be found out by the fact that even a section of the surface rd is covered with a thin layer of oil. In this case, the lubrication of the impacting mechanism is adequate.

PRODUCT SAFETY INSTRUCTION - WHEN USING THE TOOL

WORKPLACE HAZARDS:

- Slips, trips, and falls are common injuries. Keep work areas clean, clutter-free, well-ventilated, and well-lit. Be mindful of slippery surfaces and trip hazards from air lines.
- Wear safety helmets for overhead work and assess risks to operators and others.
- Maintain a safe distance from others or ensure they wear proper PPE.
- This tool is not for use in explosive atmospheres, near fumes, dust, or flammable materials.
- This tool is not insulated against electric shock.
- Avoid damaging cords, conduits, pipes, or hoses containing electrical wires, explosive gases, or harmful liquids.

PROJECTILE HAZARDS:

- Always wear eye protection when using or maintaining this tool. Choose impact-resistant glasses, goggles, or a face shield as needed.
- Secure workpieces with clamps or Vises.
- Workpiece failure or debris can create high-speed projectiles.

NOISE HAZARDS:

- Always wear hearing protection when using this tool.
- Prolonged exposure to high noise can cause hearing loss and tinnitus.
- Implement controls to reduce noise, like using damping materials to prevent "ringing."
- Ensure the tool's silencer is in place and functioning.

DUST AND FUME HAZARDS:

- Wear proper respiratory protection when dust or fumes are present.
- Dust from power tools can cause serious health issues like cancer, birth defects, asthma, and dermatitis. Control dust at the source.
- Work in a well-ventilated area and use safety equipment, like approved dust masks.
- Do not use the tool on materials that create flammable or explosive dust/fumes.
- Direct exhaust to minimize dust disturbance.
- Use and maintain dust collection accessories as per manufacturer instructions.
- Inspect and replace worn accessories to prevent excessive dust or fumes.

REPETITIVE MOTION HAZARDS:

- Repetitive motions or poor posture can harm your body. Stop using the tool if you experience discomfort, pain, tingling, or stiffness.
- Seek medical advice before resuming use.

SLIPPING, TRIPPING, AND FALLING HAZARDS:

- Tripping on hoses or objects can cause injury.
- To reduce risk:
  - Ensure hoses and objects are clear of pathways.
  - Stand with feet shoulder-width apart for stability and balance.

CONCEALED OBJECT HAZARD:

- Concealed wires and pipes can cause serious injury.
- To prevent risk:
  - Check material composition before use.
  - Watch for hidden cables and pipes (electricity, water, gas, etc.).
  - If the tool hits a concealed object, turn off the machine immediately.
  - Ensure safety before resuming.

ENTANGLEMENT HAZARDS:

- Keep loose clothing, jewelry, hair, gloves, and other items away from the tool's working end to avoid entanglement.
- Entanglement can cause choking, lacerations, broken bones, or severed extremities.

VIBRATION HAZARDS:

- Vibration can damage hands and arms. Seek medical advice if numbness or pain occurs.
- Grip the tool lightly; avoid excessive force.
- Wear warm clothing and keep hands dry in cold conditions.
- Support the tool with a stand when possible.
- Inspect and replace accessories to reduce vibration.
- Avoid holding the tool with your free hand.
- Keep handles cantered and avoid pushing them into end stops.

INSTALLATION

a) COMPRESSED AIR HOSE SAFETY:

- Use the correct operating pressure: 87 psig (6 bar (e)).
- Do not exceed the maximum air pressure: 90 psig (6.2 bar (e)).
- Blow out impurities from the air hose before connecting it.
- Choose the right hose size:
- For up to 100 feet (30 meters), use a hose with a ¾" (19 mm) internal diameter.
- For 100 to 330 feet (30 to 100 meters), use a hose with a 1" (25 mm) internal diameter.

b) DAILY MACHINE INSPECTION:

- Clean and inspect the machine before use.
- Check tool retainer for wear and function.
- Inspect for leaks and damage.
- Ensure the air inlet nipple is tight and the claw coupling is undamaged.
- Check chisel bushing for wear to avoid excessive vibration.
- Ensure vibration-absorbing handles move freely.
- Replace damaged or worn parts promptly.
- Maintain attached equipment (hoses, water separators, oilers).

TOOL MAINTENANCE INSTRUCTIONS:

- Perform regular maintenance to ensure safe operation, including checking speed and vibration.
- Avoid exposure to hazardous dust or substances when maintaining the tool. Use approved cleaning solvents in a well-ventilated area.
- Do not remove or damage labels. Replace damaged labels and ensure all information is legible.

PRODUCT SAFETY INSTRUCTION- WHEN MAINTAINING THE TOOL

Ensure safe operation with regular maintenance, including checks on speed and vibration. Avoid inhaling hazardous dust or substances when maintaining the tool. Use only approved cleaning solvents that meet safety standards, and clean in a well-ventilated area. Do not remove labels; replace any damaged labels and ensure all information on the tool is legible.

Periodic Maintenance:

- Dismantle and clean the machine every 150 impact hours or twice a year.
- Maintenance should only be performed by authorized and trained personnel.
- Use an insertion tool with the correct shank dimensions.
- Ensure the machine receives the appropriate amount of lubricant; excess can affect performance.
- Verify the air system provides adequate pressure for optimal power.
- Confirm air hose dimensions and length meet recommended specifications.

STORAGE

- Clean the machine properly before storage, in order to avoid hazardous substances. See “Dust and Fume hazard”
- Pour approximately ½ oz (5 cl) of oil directly into the air inlet nipple, connect the machine to the Compressed air supply and start it for a few seconds.
- Always store the machine in a dry place.

DISPOSAL

- A used machine must be treated and disposed of in such a way that the greatest
- possible portion of the Material can be recycled and any negative influence on the
- environment is kept as low as possible, and in respect to local restrictions.