MINNICH

THE HORNET 30/27
OPERATOR/SERVICE MANUAL



MINNICH MANUFACTURING

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TABLE OF CONTENTS

Chapter 1-Introduction....1
- General Warnings....3
- General Safety....4
- General Specifications....9
- Safety Decal Location....10

Chapter 2-Parts Manual....12
- Control& Gauges....12
- Recommended Lubricants....13
- Troubleshooting Air Drill....14
- Parts Manual (30# Hammer)....16
- Parts Manual (50# Hammer)....18
- Parts Manual....20
- Notes....24
- Warranty....25
- Parts Ordering Online....26

NOTICE

It is Minnich's policy to constantly strive to improve our products. The information, specifications, and illustrations in this publication are based on the information in effect at the same time as approval for printing and publishing. Minnich therefore reserves the right to make changes in design and improvements whenever it is believed the efficiency of the machine which has been shipped or curring any obligation to incorporate such improvements in any machine which has been shipped or is in service. It is recommended that users contact Minnich or a Minnich Dealer for latest revisions.

NOTICE

See engine manual for information pertaining to the engine.

NOTICE

If there are any questions regarding the machine or its application which are not covered in this manual or in other literature accompanying this unit, please contact your Minnich Dealer or Minnich Manufacturing at 419-903-0010 or sales@minnich-mfg.com

⚠ WARNING

CALIFORNIA PROPOSITION 65

Engine exhaust and some of its constituents, and some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the Sate of California to cause cancer, birth defects and other reproductive harm. Some examples of these chemicals are:

Lead from lead-based paints.
Crystalline silica from bricks.
Arsenic and chromium from chemically treated lumbar.

Your risk from these exposures caries, depending on how often you do this type of work. To reduce your exposure to these chemicals: ALWAYS work in a well ventilated area, and work with improved safety equipment, such as dust masks that are specifically designed to filter out microscopic particles.

⚠ WARNING



SILICOSIS WARNING
Grinding/cutting/drilling of masonry, concrete,-metal and other materials with silica in their composition may give off dust or mist containing crystalline silica.
Silica is a basic components of sand, quarts, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respirator disease, including silicosis. In addition, California and some authorities have listed repairable crystalline silica as a substance known to cause cancer. When cutting such materials, always follow the respiratory precautions mentioned above.

⚠ WARNING

RESPIRATORY HAZARDS



Grinding/cutting/drilling of masonry, concrete,metal and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproduction harm, if you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheet and/or consult your employer, the material manufacturer/supplier, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufactures of suppliers, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet cutting is feasible. When the hazards from inhalation of dust, mist and fumes cannot be eliminated, the operator and any bystanders should always wear a respirator approved by OSHA/NIOSH for the materials being used.

Do not operate or service the equipment before reading the entire manual. Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the safety messages and operating instructions could result in injury to yourself and others.

This operation manual has been developed to provide complete instruction for the safe and efficient operation. Refer to the engine manufactures instructions for data relative to its safe operation. Before using, ensure that the operation individual has read and understood all instructions in the manual. The surrounding environment and you, could be damaged if you do not follow instructions.

SAFETY MESSAGES

The four safety messages shown below will inform you about potential hazards that could injure you or others. The safety messages specifically address the level of exposure to the operator and are preceded by one of four words: DANGER, WARNING, CAUTION or NOTICE.

⚠ 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

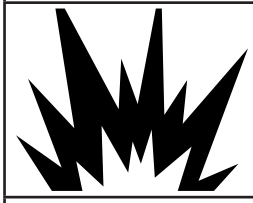
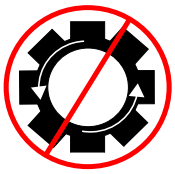
Indicates a hazardous situation which, if not avoided, COULD result in MINOR or MODERATE INJURY

NOTICE

Addresses practices not related to personal injury

SAFETY SYMBOLS

Potential hazards associated with the operation of this equipment will be referenced with hazards symbols which may appear throughout this manual in conjunction with safety messages.

SYMBOL	SAFETY HAZARD
	Lethal exhaust gas hazards
	Explosive fuel hazards
	Burn hazard
	Overspeed hazards

⚠ WARNING

DO NOT USE TOOL IF IT IS IN NEED OF SERVICE!

⚠ CAUTION

Δ NEVER operate this equipment without proper protective clothing, shatter proof glasses, respirator protection, hearing protection, steel-toes boots and other protective devices required by the job or city and state regulations.



Δ Never operate this equipment when not feeling well due to fatigue, illness or when under medication.



Δ NEVER operate this equipment under the influence of drugs or alcohol.



Δ ALWAYS check the equipment for loosened threads or bolts before starting.

Δ NEVER operate around corrosive chemicals or water containing toxic substances. These fluids could create serious health and environmental hazards. Contact local authorities for assistance.

Δ DO NOT use the equipment for any purpose other than its intended purpose or applications.

NOTICE

Δ This equipment should only be operated by trained and qualified personnel 18 years of age and older.

Δ This equipment is for industrial use only. Whenever necessary, replace nameplate, operation and safety decals when they become difficult to read.

Δ Manufacturer does not assume responsibility for any accident due to equipment modifications. Unauthorized equipment modifications will void all warranties. Any modification which it could lead to change in the original characteristics of the machine should be made only by the manufacturer who shall confirm that the machine is in comfortability with appropriate safety regulations.

Δ Never use accessories or attachments that are not recommended by Minnich for the equipment. Damage to the equipment and/or injury to user may result.

Δ Always know the location of the nearest fire extinguisher.



Δ ALWAYS know the location of the nearest first aid kit.

Δ ALWAYS know the location of the nearest phone or keep a phone on the job site. Also, know the phone numbers of the nearest ambulance, doctor and fire department. This information will be invaluable in the case of an emergency.



⚠ DANGER

Δ NEVER operate the equipment in an explosive atmosphere, near combustible materials, or near flammable or low flash point fluids. An explosion or fire could result causing severe bodily harm or even death.



⚠ WARNING

Δ NEVER disconnect any emergency or safety devices. These devises are intended for operator safety. Disconnection of these devices can cause severe injury, bodily harm or even death. Disconnection of any of these will void all warranties.

Δ NEVER operate equipment with the covers or guards removed. Keep fingers, hands, hair and clothing away from all moving parts to prevent injury. Wear clothing that will not likely become caught in the equipment or snag on any moving parts.

⚠ CAUTION

Δ ALWAYS be sure the operator is familiar with the proper safety precautions and operating techniques before using.

Δ NEVER leave the machine unattended. Turn off when unattended

- Δ DO NOT expose vibrator to rain.
- Δ DO NOT use vibrator motor in damp or wet locations without proper electrical circuits.
- Δ DO NOT immerse the motor part in concrete.
- Δ ALWAYS keep clear of rotating or moving parts while operating.
- Δ NEVER leave the machine unattended while running
- Δ ALWAYS disconnect the motor from the power source when not in use, before servicing, and when changing flexible shafting and vibrator heads.

- Δ Allow the machine to cool before servicing. Contact with hot components can cause serious burns.



- Δ Before Each use, ALWAYS check the motor to make certain that there are no damaged parts and that all parts function properly. If any damage or malfunctioning parts are found, have them repaired or replaced by an authorized service facility.

NOTICE

- Δ ALWAYS secure forms. Make sure the form work is well made and braced to withstand the stresses made by vibration.
- Δ ALWAYS keep vibrator motor clean for better and safer operation.
- Δ ALWAYS store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of reach of children and unauthorized personnel.
- Δ Use only factory authorized replacement parts.
- Δ Store idle vibrator motor. When not in use, motor should be stored in a dry, safe storage area.

ENVIRONMENTAL SAFETY/DECOMMISSIONING

NOTICE

- Δ DO NOT pour waste or oil directly into the ground, down a drain or into any water source.
- Δ Contact you country department of Public Works or recycling agency in your area and arrange for proper disposal of any electrical components, waste or oil associated with this equipment.



- Δ When the life cycle of this equipment is over, remove battery (if equip) and bring to appropriate facility for lead reclamation. Use safety precautions when handling batteries that contain sulfuric acid.
- Δ When the life cycle of this equipment is over, it is recommended that the unit frame and all other metal parts be sent to a recycling center.

  Metal recycling involves the collection of metal from discarded products and its trans formation into raw materials to use in many Manufacturing a new product.

  Recyclers and manufactures alike promote the process of recycling center promotes energy cost savings.

NOTICE

Decommissioning is a controlled process used to safely retire a piece of equipment that is no longer serviceable. If the equipment poses an unacceptable and unrepairable safety risk due to wear or damage or is no longer cost effective to maintain (beyond life-cycle reliability) and is to be decommissioned (demolition and dismantlement), be sure to follow rules below.

- Δ ALWAYS observe all applicable compulsory regulations relevant to environmental protection, especially fuel storage, the handling of hazardous substances, and the wearing of protective clothing and equipment. Instruct the user as a necessary, or, as the user, request this information and training.

- ALWAYS Dispose of hazardous waste properly. Examples of potentially hazardous waste include used motor oil, fuel, and fuel filters.
- DO NOT use food or plastic containers to dispose hazardous waste.
- DO NOT pour waste or oil directly onto the ground, down or drain or into any waste source.

NOTICE

- ALWAYS keep the machine in proper running condition.
- ALWAYS become familiar with the components of the machine before operation.
- Fix damage to machine and replace any broken parts immediately.
- ALWAYS store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children and unauthorized personnel.
- NEVER lubricate components or attempt service on a running machine

⚠ CAUTION

- NEVER tamper with the factory settings of the engine or engine governor. Damage to the engine or equipment can result in operation in speed ranges above the maximum allowability.



BEFORE CONNECTING THE AIR COMPRESSOR:

⚠ CAUTION

- Install the drill steel and bits into the drill motors and close the latch retainers and rod guides.
- Make sure that the air compressor is set at an operating pressure of not more than 120 PSIG (8Bar)
- Make sure air line is cleaned out and is of the proper size and pressure rating for the drill unit.
- Make sure the lubricator is filled with proper lubricant. See Minnich recommended lubricant below.
- Make sure all controls are in the “off” position and the lift lever (if so equipped) is in the “up” position.
- Make sure all lock pins are in their locked position.

⚠ WARNING

- NEVER attempt to loosen any compressed air hose that is pressurized.
- KEEP AWAY from all hot or spark generating objects, do not smoke when handling fuel.
- So as to facilitate shipment, new or repaired units are not lubricated before delivery to customers.
- DO NOT use hydrocarbons and especially do not use fuel oil for lubricating purposes.
- DO NOT OPERATE MACHINE WITHOUT GUARDS AND COVERS IN PLACE
- ALWAYS disconnect the air supply before changing steel or dismantling the tool for service or repair. For maximum safety we advise the installation of a shut-off valve at the end of the air line.
- NEVER operate the engine with heat shields or guards removed.
- DO NOT remove the engine oil drain plug while the engine is hot. Hot oil will gush out of the engine crankcase and severely scald any persons in the general area of the machine.



NOTICE

- Δ CLEAR AIR SUPPLY LINE: Before connecting vibrator, clear the compressed air supply line of possible impurities, contaminants and water.
- Δ LUBRICATE: Every day or every four hours of continuous service, pour a ½ teaspoon of non-detergent oil into the quick release coupling. NOTE: An optional oiler/strainer is available.

CONNECT/START

NOTICE

If the vibration intensity drops, check that the filters are not clogged or that hoses are not kinked.

STORAGE

NOTICE

To properly store unit after use, hang the vibrator with the head up and set the handle (variable control assembly) in the open position to permit the discharge of possible impurities, contaminants and water.

PLACEMENT AND CONSOLIDATION

NOTICE

The force exerted by an internal concrete vibrator is controlled by the weight and the speed at which the eccentric rotates. The centrifugal force exerted can be arrived at by various combinations of weight (size of eccentric weight) and the speed at which the weight rotates. For years the most favorable working speed for a vibrator was considered to be around 10,200 RPM (VPM) and consequently this figure is used in many vibrator comparisons. More recently, the optimum speed for compaction has been accepted as being between 7500 and 9000 RPM.

PERSONAL SAFETY

- Δ Stay alert, watch what you are doing, and use common sense when operating the machine.
- Δ DO NOT use the tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury or death.
- Δ Dress properly. DO NOT wear loose clothing or jewelry. Tie up long hair. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelery, or long hair can be caught in moving parts.
- Δ DO NOT overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control in unexpected situations.

SERVICE

- Δ Tool service must be preformed only by qualified repair personnel. Service or maintained preformed by unqualified personnel could result in injury or death
- Δ When servicing a tool, use only identical replacement parts. Use of unauthorized parts smay create a risk of injury or death.

NOTICE

To find the latest revision of this publication, visit our website at: www.minnich-mfg.com

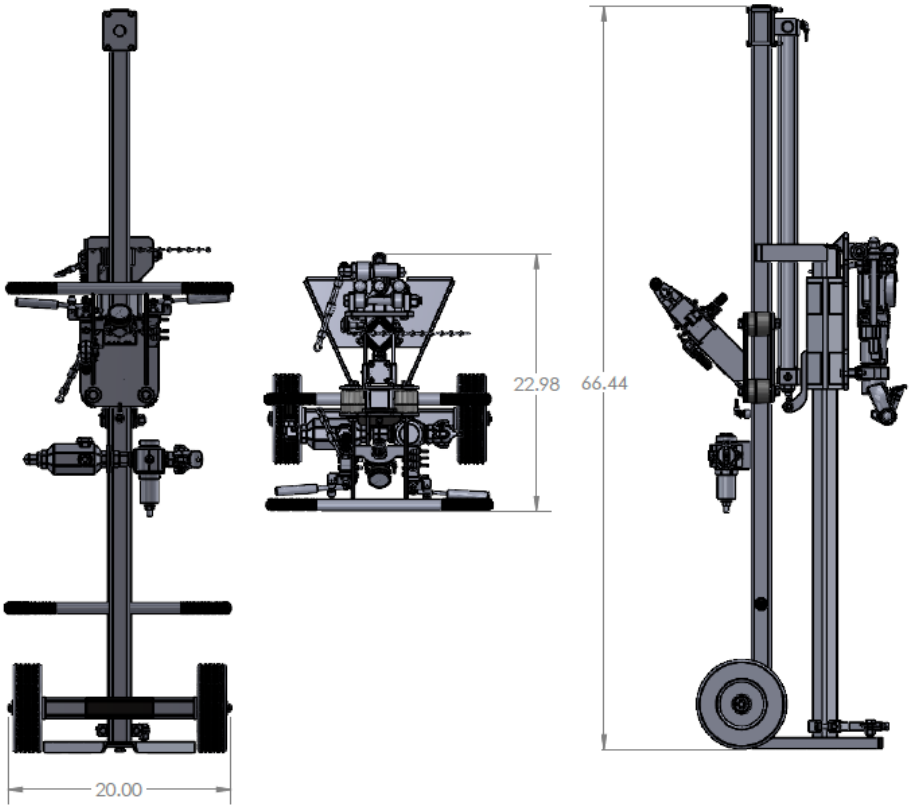
NOTICE

THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.

NOTICE

Specifications and part numbers are subject to change without notice.

THE HORNET



MODEL	HORNET 30/27
Drill Steel Shank	7/8" x 3-1/4" (22.2mm x 82.6mm)
Drill Steel Length (Under Collar)	27" (68.6cm) SF 30" (76.2cm) STD
Maximum Drill Depth*	23" (58.4cm) SF 26" (66.0cm) STD
SCFM Required	90 (2.55 m3/min)
Weight (15lb (6.8kg) Hammer) Weight (30lb (13.6kg) Hammer)	90lbs (40.8kg) 104lbs (47.2kg)

HAMMER OPTIONS:

15LB (6.8KG) HAMMER: 5/8" - 1" (1.59CM - 2.54CM) HOLE DIAMETER
30LB (13.6KG) HAMMER: 5/8" - 1-5/8" (1.59CM - 4.13CM) HOLE DIAMETER
SPECIFICATIONS SHOWN ARE STANDARD. VARIATIONS TO THE STANDARD ARE AVAILABLE.

***BASED ON 2 PIECE STEEL AND BITS. WHIRLYBITS SHOULD BE 1" (2.5CM) LONGER FOR MAXIMUM DRILLING DEPTH.**

SF = TAMCO SEIZE FREE BITS STD = STANDARD BITS

NOTICE

All safety labels on Minnich Manufacturing units have been carefully placed so they can be easily seen at all times. There are several different types of labels on the units. Always keep these warnings free of dirt, concrete, or anything else that restricts visibility. Never remove the labels for any reason. If the label on your machine become worn or in any way difficult to read, call our parts department for replacements.

A



B



M

FEED PRESSURE

Recommended Settings 4-7 PSI

J

Drill

K

Feed

H

7/8" HEX x 3 1/4"

C



D



I



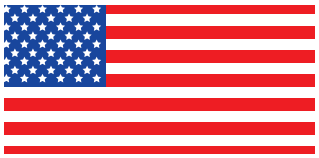
N

PRIOR TO OPERATION

- Read and understand owners manual completely.
- Tighten all loose bolts, inspect all lines, pipes, and hoses for damage. Repair as necessary.
- Drill steel must not be binding in guide bearing. Make sure drill steel is straight, free of obstructions, and not binding in any way.
- Fill the oiler per manual.

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E



L



O



F

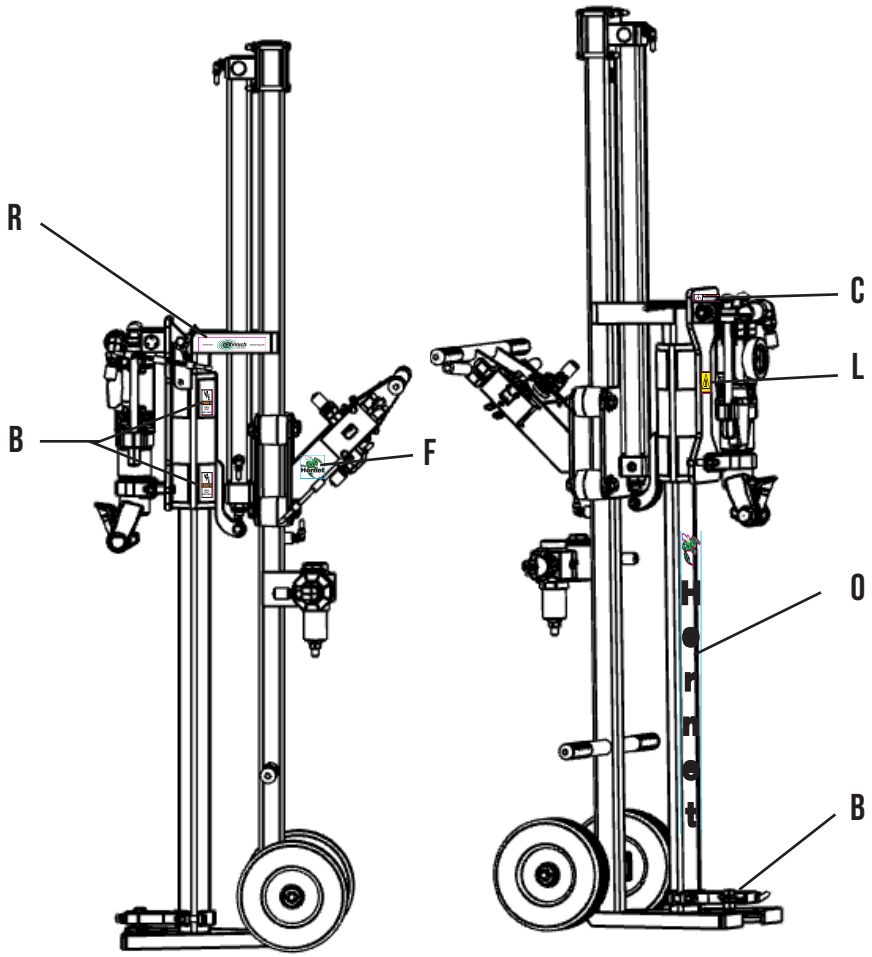


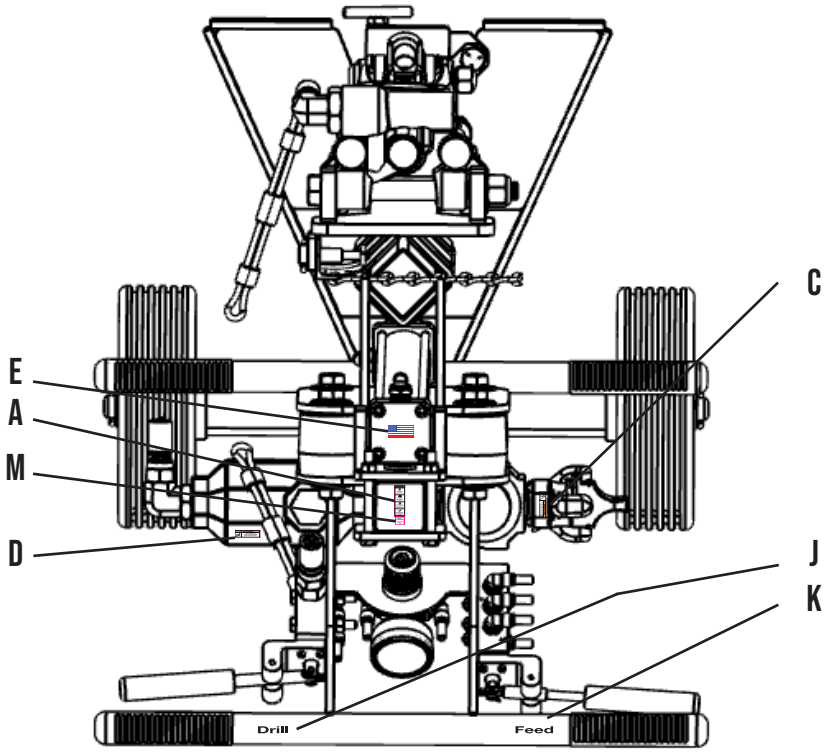
R

(419) 903-0010

Minnich CONCRETE VIBRATORS & DOWEL PIN DRILLS

minnich-mfg.com


R
B
F
C
L
O
B
Hornet


C
E
A
M
D
J
K
Drill
Feed

INSTALLATION

Shut off air pressure. Install in air line with air flow in direction of arrow on body.

RECOMMENDED SETTINGS

Regulator should read approximately between 4 and 7 PSI. Some adjustment may be necessary.

ADJUSTMENT

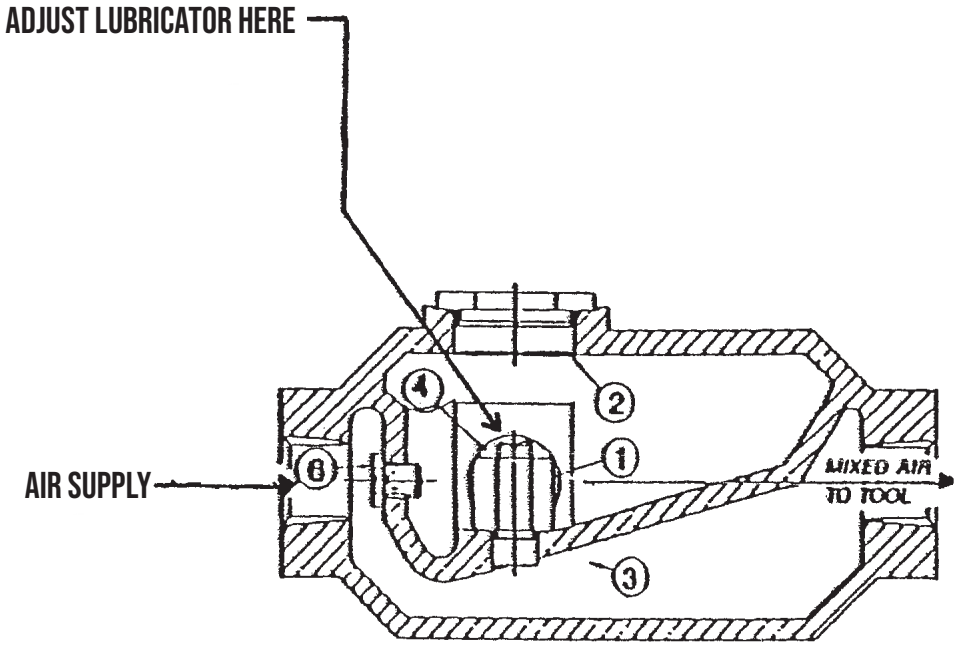
Turn adjustment screw clockwise to increase outlet pressure setting and counterclockwise to decrease outlet pressure setting. To reduce pres-sure, first reduce to a pressure less than that desired, then increase to the desired outlet pressure.

⚠ WARNING

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed on the product label.

LUBRICATOR IS SET AT 4.5 FROM FACTORY. DIFFERENT TEMPERATURES MAY AFFECT FLOW OR OIL. YOU MIGHT HAVE TO ADJUST LUBRICATOR ACCORDINGLY. BE SURE LUBRICATOR IS SET SO THAT YOU ALWAYS HAVE A LIGHT FILM OF OIL ON EXHAUST DEFLECTOR.

TO ADJUST LUBRICATOR, DISCONNECT AIR PRESSURE FROM DRILL UNIT. PUSH DOWN ON PRESSURE RELIEVING BUTTON ON FILL CAP. REMOVE FILL CAP. USING A SCREW DRIVER, ADJUST LUBRICATOR TO REQUIRED SETTING. TO INCREASE OIL, SET AT HIGHER NUMBER. TO DECREASE OIL, SET AT LOWER NUMBER.



STEP 1 Be sure lubricator is full. See recommended oils below.

STEP 2 Make sure slab wheels are square against face of slab.

STEP 3 Using feed control valve, feed bit against slab.

STEP 4 Using drill control valve, turn drill on and drill until the drill slider is against the stop clamp, which should be set for the required depth of hole.

STEP 5 Once drill slider is against the stop clamp, leave the drill on and use the feed control valve to retract the drill from the hole. Note: If bit will not retract from hole, feed drill back into hole and retract drill again.

⚠ WARNING

DO NOT hit drill slider to retract the bit from the hole. This will damage the drill slider.

RENEWABLE LUBRICANTS™

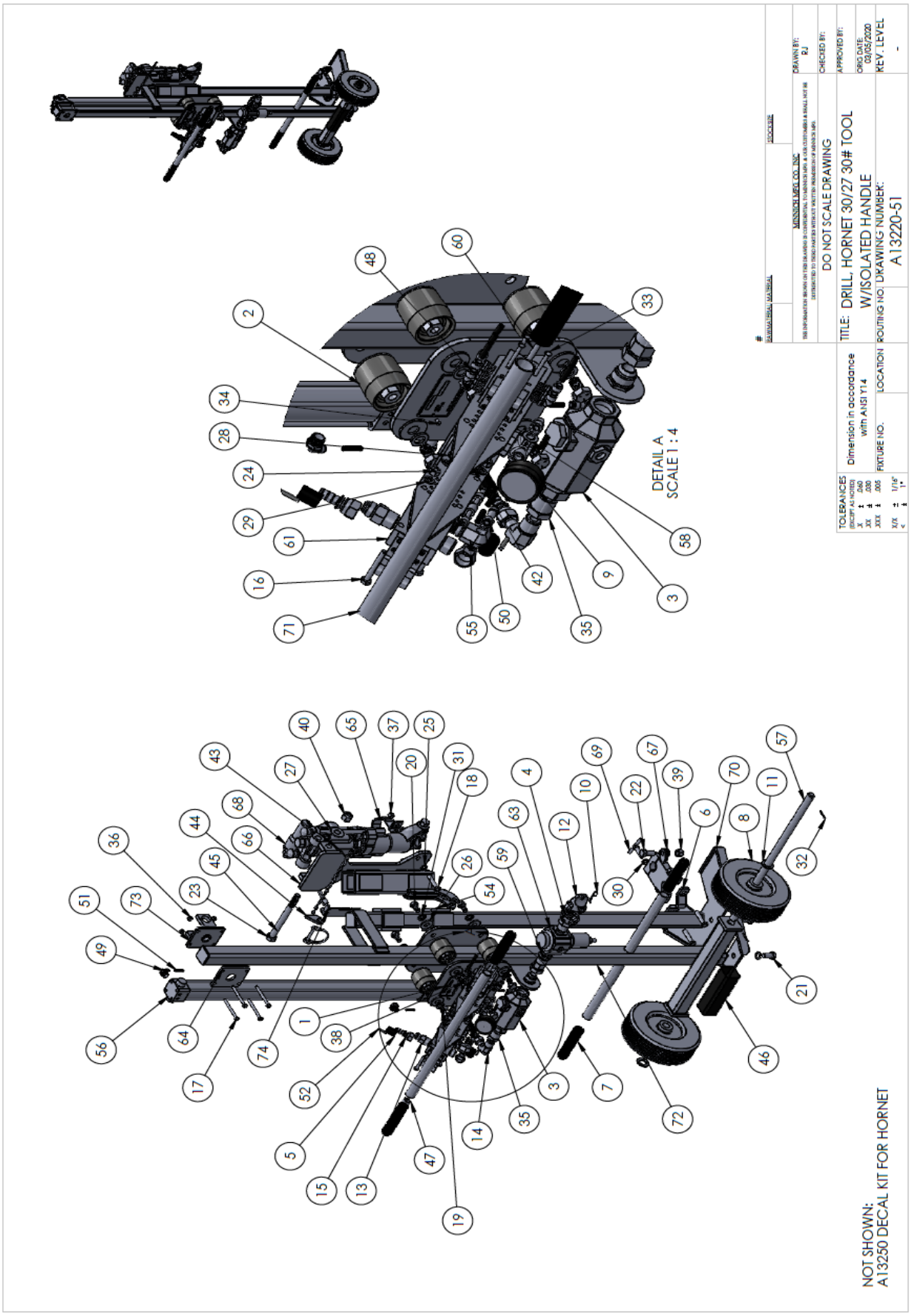
Bio-Rock Drill™ Oil 15W50

PROBLEM: DRILL DOES NOT RUN

CAUSE	REMEDY
DRILL NOT GETTING AIR	1. On Multi Drill units, switch airline with drill that is working properly. If drill now runs check the air control valve. If the valve works, check the drill. 2. Check clave on air compressor and drill unit to be certain they are completely open 3. Check compressor. It should have 100SCFM (47.20m^3/sec.) per drill and 110PSI (7.6 BAR) at drill manifold when drilling with large drills. 4. Make certain all fittings are connected properly and not leaking.
COUPLING OR HOSE OBSTRUCTION	Remove Obstruction
FAILURE IN THE ELECTRICAL CIRCUIT	Check switches, connections, coils, ground & voltage. If the power unit (backhoes, grader, ETC.) is being jump started, check the AMPS & voltage being jump supplied to coils from the battery, it may be too low.
FAILURE OF DRILL SOLENOID VALUE (MULTI DRILL UNITS WITH REMOTE ELECTRICAL CONTROLS)	Check valve - you should be able to feel the solenoid move when it is actuated. Make sure you have current to the solenoid coil. Replace the dolenoid if there is no movement.
MECHANICAL FAILURE OF DRILL	Disassemble the drill & inspect for damaged parts.

PROBLEM: DRILL RUNS SLOW OR DOES NOT DRILL EFFECTIVELY

CAUSE	REMEDY
NOT ENOUGH AIR REACHING DRILL. IT SHOULD HAVE 100SCFM (47.2DM^3/SEC.) PER DRILL AND 110 PSI (7.6 BAR)	On Multi Drill units. Turn off one or two drills. If the remaining drills pick up speed, check the air compressor.
RESTRICTION IN AIR LINE	A foreign object in the air line or possibly a reduction in the air line caused by a reducer fitting.
TOO SMALL AIR LINE	Following are supply line sizes for drilling: A-1 Single Drill 3/4" (19mm) A-2 Two Drills 1-1/4" (38.75mm) A-3& A-4 Three & four drills 1-1/2" (38.1mm) A-5 Five Drills 2" (50.8mm)
AIR PRESSURE TO CYLINDER "FEEDING" DRILL INTO CONCRETE NOT ADJUSTED PROPERLY	Excessive pressure can cause drill to "bind up" in the hole. Pressure that is too low will not "feed" the drill into the concrete. The air pressure required varies with the drill model. Horizontal- all units with large drills use 22-26 PSI (1.5-1.8 bar). Drill units using the 15LB (6.8kg) class drill will use 16-20 PSI (1.1-1.4 Bar). Vertical - all drill units use 5-6 PSI (0.34-0.41 Bar). With the correct air pressure, the drill steel should have a slight rattle.
INSUFFICIENT AIR FLOW TO KEEP HOLE BLOWN CLEAN	Check for obstruction in the blow tube in the drill.
LUBRICATOR PUTTING OUT TOO MUCH OIL TO DRILL	If you notice more than a light film of oil on the air deflector on the bottom of the drill adjust the lubricator, make certain you are using the type of oil called for in the operation and maintenance manual.
MECHANICAL BLINDING OF DRILL CARRIER	Make sure the eight bearing pads are adjusted correctly. The square tube that the drill carrier slides on must be free of rust so that the carrier slides freely, drill steel must not be binding in the guide bearing.
BENT DRILL STEEL, WORN DRILL BIT OR DRILLING INTO REBAR	Replace the drill steel or bit. If drilling into rebar, move the drill.
USING 3 1/4" (8.25CM) SHANK DRILL STEEL IN 4 1/4" (10.8CM) SHANK CHUCK DRILL	The drill steel will rotate but it will not allow the drill piston to hammer properly, replace it with the correct 4 1/4" (10.8cm) drill steel.


DETAIL A
SCALE 1 : 4
NOT SHOWN:
A13250 DECAL KIT FOR HORNET
TITLE: DRILL, HORNET 30/27 30# TOOL W/ISOLATED HANDLE
DRAWING NUMBER: A13220-51
DO NOT SCALE DRAWING
DRAWN BY: RJ
ORIG DATE: 03/05/2020
REV : LEVEL -
TOLERANCES
Dimension in accordance with ANSI Y14
FIXTURE NO.
LOCATION
ROUTING NO:

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	708-4	SERIAL TAG	1
2	1206-3	ISOLATOR	4
3	1810	LUBRICATOR	1
4	1811	COUPLING - HOSE 2 PRONG/MALE PIPE	1
5	2304	GENERAL PURPOSE HOSE	60"
6	2844-1	HEIGHT ADJUSTMENT CLAMP	1
7	3016-44	HANDLE - GRIP	4
8	3017-19	WHEEL	2
9	3656	PRESSURE GAUGE	1
10	3820	SAFETY PIN & LANYARD	1
11	4674	AXEL WASHER	2
12	5856	PLUG - AIR HOSE COUPLING	1
13	6007-17	CONNECTOR, 37 DEG MALE/PIPE 08-08	1
14	6019-17	ELBOW, 90 DEG EXT PIPE/37 DEG 08-08	1
15	6032-2	END, HOSE 37 DEG FEM SWIV/ BARBED 08	4
16	6036-2.00	HEX BOLT 1/4-20 X 2	2
17	6036-3.00	HHCS, 1/4-20 X 3.00 GR.5	4
18	6038-2.00	HHCS, 3/8"-16 X 2" GR.5	4
19	6039-1.75	HEX BOLT 7/16-14 X 1.75 GR.5	1
20	6040-0.875	HHCS, 12-13 X 0.875 GR.5	8
21	6040-1.00	HHCS, 1/2-13 X 1.00" GR.5	2
22	6040-1.25	HHCS, 1/2-13 X 1-1/4 GR.5	1
23	6042-6.50	HHSC, 5/8-11 X 6.50 GR.5	1
24	6070	1/4-20 HEX NUT	2
25	6107	3/8 FLAT WASHER	2
26	6112	FW 9/16 ID 1-3/8 OD	8
27	6115	5/8 SAE FLAT WASHER	1
28	6144	LOCK WASHER #8	3
29	6147	LOCKWASHER 1/4	2
30	6149	LOCK WASHER 3/8"	1
31	6151	1/2" LOCK WASHER	10
32	6174-1.00	COTTER PIN 1/8" X 1"	2
33	6256-1.50	RHMS, #8-32 X 1-1/2 SLOTTED	3
34	6262-1	SCREW, DRIVE HD RD. #4 X 1/4"	2
35	6296-6	BUSHING, REDUCER PIPE 12-08	1
36	6402	1/4-20" LOCKNUT	4
37	6404	LOCKNUT 3/8"	4
38	6405	LOCKNUT 7/16-14	1
39	6406	1/2-13 LOCK NUT	1
40	6408	LOCKNUT 5/8	1
41	6471-4	PLUG, PIPE HEX SOC 1/2	1
42	6653	HEXNUT 8-32	3
43	7282	CHAIN	7.5"
44	8409-1	TAB - HINGE	1
45	8479-1	PIN, TAB LOCK	1
46	10084	NON-SLIP TRACK ADHESIVE BACKED BLACK	12.5"
47	10300	VALVE LEVER EXT.	2
48	10829-110	1/4 NPT BRASS PIPE	8
49	10829-111	FITTING, BRASS 1/4 TUBE TO 3/8 MALE NPT	2
50	10831-108	BRASS FITTING	1
51	10863	NYLON TUBING	144"
52	10872-1	1/2" EXPANDABLE SLEEVING	24"
53	11163-10	SWIVEL NUT ADAPTER	1
54	11739-4	BEARING - DRILL CARRIER	8
55	11879-4	90 DEG. EXT. PIPE ELBOW MODIFICATION	1
56	13036-29	DOUBLE ACTING AIR CYLINDER	1
57	13052-2	AXLE	1
58	13057	REGULATOR	1
59	13057-2	REGULATOR PANEL NUT	1
60	13058	2 POS SPRING RETURN VALVE	1
61	13059	VALVE	1
62	13065	MACHINED, ROD END	1
63	13089	AIR REGULATOR	1
64	13213	MOUNTING PLATE	1
65	A4336	MOUNTING BRACKET CLAMP WELDMENT	1
66	A8399-37	DRILL CARRIER WELD'T FOR 30 LBS ROCK DRILL	1
67	A10876	UTILITY ROD GUIDE WELDMENT	1
68	A11104-100	DRILL, RD319 7/8 X 3-1/4 30 LB	1
69	A12246-1	UTILITY ROD GUIDE BOLT	1
70	A13047-4	END BRACKET WELDMENT	1
71	A13056-5	HANDLE WELDMENT	1
72	A13212-6	FRAME WELDMENT 30/27	1
73	A13214	CYLINDER MOUNT WELDMENT	1
74	A13237	DRILL TRANSPORT WELDMENT	1
75	A13250	DECAL KIT FOR HORNET	1
76	A13270-4	SPRING WHIP CABLE ASSEMBLY	2

#

RAW MATERIAL / MATERIAL | STOCK SIZE

MINNICH MFG. CO., INC.

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DRAWN BY: RJ

CHECKED BY:

DO NOT SCALE DRAWING

APPROVED BY:

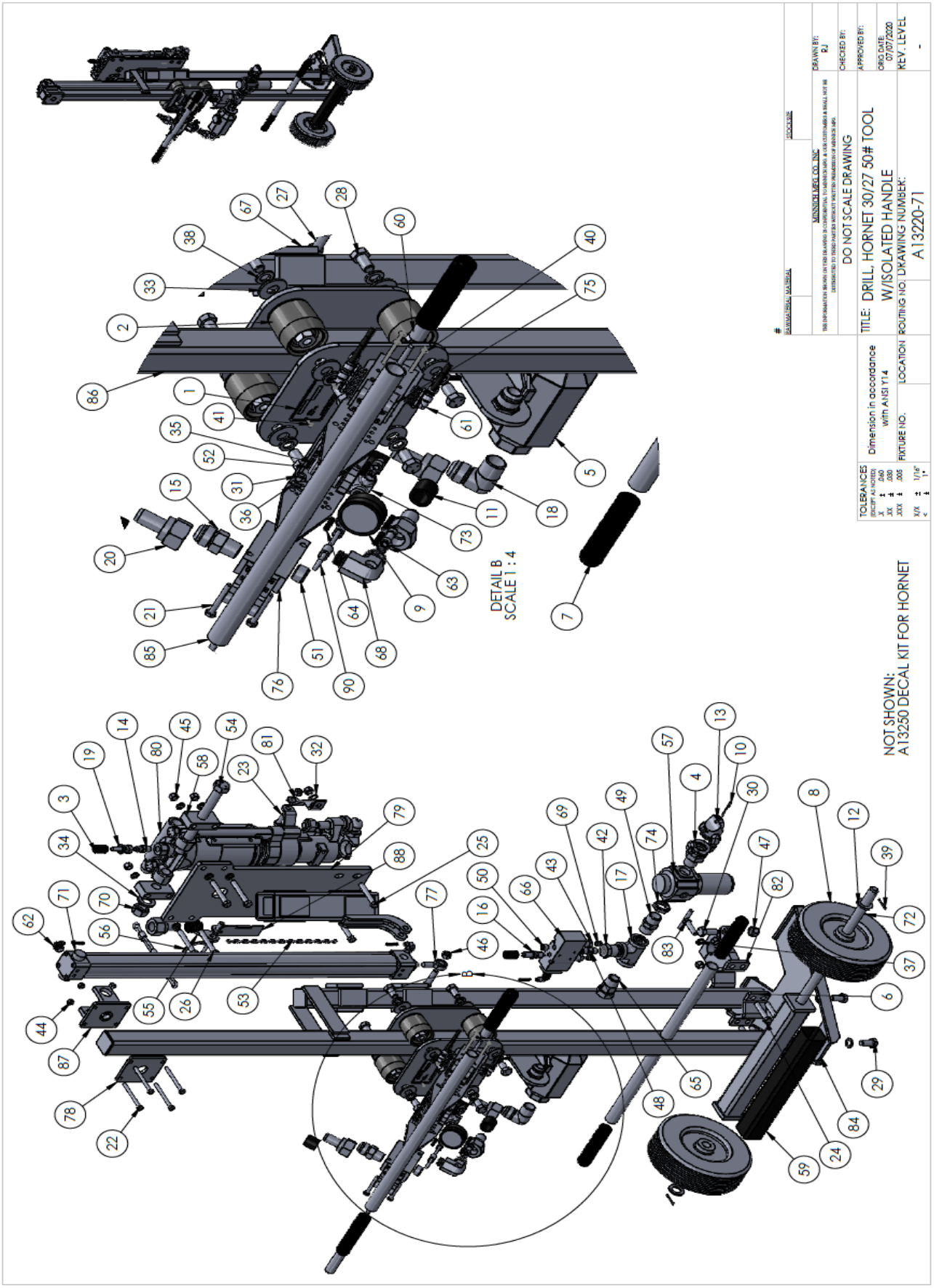
TOLERANCES (EXCEPT AS NOTED) .X ± .060 .XX ± .030 .XXX ± .005 X/X < ± 1/16" 1°

Dimension in accordance with ANSI Y14

TITLE: DRILL, HORNET 30/27 30# TOOL W/ISOLATED HANDLE

ORIG DATE: 03/05/2020

FIXTURE NO. | LOCATION | ROUTING NO. | DRAWING NUMBER: A13220-51 | REV. LEVEL -


DETAIL B
SCALE 1 : 4
NOT SHOWN:
A13250 DECAL KIT FOR HORNET
TITLE: DRILL, HORNET 30/27 50# TOOL
W/ISOLATED HANDLE
DO NOT SCALE DRAWING
DRAWING NUMBER:
A13220-71
REV: LEVEL
-
DRAWN BY: RJ
CHECKED BY:
APPROVED BY:
ORIG DATE: 07/07/2020
MATERIAL:
FINISH:
TOLERANCES
Dimension in accordance with ANSI Y14
FIXTURE NO.
LOCATION
ROUTING NO.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	708-4	SERIAL TAG	1
2	1206-3	ISOLATOR	4
3	1807	AIR HOSE	42"
4	1811	COUPLING - HOSE 2 PRONG/MALE PIPE	1
5	1864	LUBRICATOR	1
6	2844-9	HEIGHT ADJUSTMENT CLAMP	1
7	3016-44	HANDLE - GRIP	4
8	3017-19	WHEEL	2
9	3656	PRESSURE GAUGE	1
10	3820	SAFETY PIN & LANYARD	1
11	3997	HOSE, 3/4 ID. 250 PSI	60"
12	4674	AXEL WASHER	2
13	5856	PLUG - AIR HOSE COUPLING	1
14	6007-8	CONNECTOR, 37 DEG MALE/PIPE 04-06	1
15	6007-19	CONNECTOR, 37 DEG MALE/PIPE 08-12	1
16	6010-4	END, HOSE MALE PIPE/BARBED BR 04-06	1
17	6015-5	INTERNAL PIPE TEE	1
18	6019-24	90 DEG. ELBOW W/ 37 DEG. FLARE	1
19	6032-5	END-HOSE 37 DEG. SWIVEL BARBED	1
20	6032-6	END HOSE 37 DEG. SWIV/BARDED 12	4
21	6036-2.00	HEX BOLT 1/4-20 X 2	2
22	6036-3.00	HHCS, 1/4-20 X 3.00 GR.5	4
23	6038-1.00	HHCS, 3/8"-16 X 1.00 GR.5	1
24	6038-2.00	HHCS, 3/8"-16 X 2" GR.5	4
25	6038-2.50	CAP SCREW 3/8"-16	2
26	6038-2.75	HHCS, 3/8-16 X 2.75 GR.5	4
27	6039-1.75	HEX BOLT 7/16-14 X 1.75 GR.5	1
28	6040-0.875	HHCS, 12-13 X 0.875 GR.5	8
29	6040-1.00	HHCS, 1/2-13 X 1.00" GR.5	2
30	6040-1.25	HHCS, 1/2-13 X 1-1/4 GR.5	1
31	6070	1/4-20 HEX NUT	2
32	6107	3/8 FLAT WASHER	2
33	6112	FW 9/16 ID 1-3/8 OD	8
34	6117	3/4" FLAT WASHER	1
35	6144	LOCK WASHER #8	3
36	6147	LOCKWASHER 1/4	2
37	6149	LOCK WASHER 3/8"	9
38	6151	1/2" LOCK WASHER	10
39	6174-1.00	COTTER PIN 1/8" X 1"	2
40	6256-1.50	RHMS, #8-32 X 1-1/2 SLOTTED	3
41	6262-1	SCREW, DRIVE HD RD. #4 X 1/4"	2
42	6296-4	BUSHING, REDUCER PIPE 12-04	1
43	6296-16	BUSHING, REDUCER PIPE 04-02	2
44	6402	1/4-20" LOCKNUT	4
45	6404	LOCKNUT 3/8"	11
46	6405	LOCKNUT 7/16-14	1
47	6406	1/2-13 LOCK NUT	1
48	6466-3	NIPPLE, PIPE STEEL 04-04	1
49	6466-10	NIPPLE, PIPE STEEL 12-12	1
50	6471-2	PLUG, PIPE HEX SOC 1/4	1
51	6471-4	PLUG, PIPE HEX SOC 1/2	1
52	6653	HEXNUT 8-32	3
53	7282	CHAIN	7.5"
54	7667-8.00	3/4-16 BOLT	1
55	8409-1	TAB - HINGE	1
56	8479-1	PIN, TAB LOCK	1
57	9626-10	AIR REGULATOR - PRESET 96 PSI	1
58	10066-3	BRACKER - DRILL HANDLE	2
59	10084	NON-SLIP TRACK ADHESIVE BACKED BLACK	12.5"
60	10300	VALVE LEVER EXT.	2
61	10829-110	1/4 NPT BRASS PIPE	9
62	10829-111	FITTING, BRASS 1/4 TUBE TO 3/8 MALE NPT	2
63	10831-108	BRASS FITTING	1
64	10863	NYLON TUBING	84"
65	11163-10	SWIVEL NUT ADAPTER	1
66	11549	PILOTED AIR VALVE	1
67	11739-4	BEARING - DRILL CARRIER	8
68	11879-6	90 DEG EXT. PIPE ELBOW MODIFICATION	1
69	12135	BREATHER VENT	2
70	12300	NUT, 3/4"-16, TORQUE LOCKNUT	1
71	13036-29	DOUBLE ACTING AIR CYLINDER	1
72	13052-2	AXLE	1
73	13057	REGULATOR	1
74	13057-2	REGULATOR PANEL NUT	1
75	13058	2 POS SPRING RETURN VALVE	1
76	13059	VALVE	1
77	13065	MACHINED, ROD END	1
78	13213	MOUNTING PLATE	1
79	A8399-40	DRILL CARRIER WELDMENT FOR 50# ROCK DRILL ON UTILITY	1
80	A9350	DRILL, AIR 7/8 X 4-1/4 CHUCK TOYO 50 LB	1
81	A9383	FRONT MTG. CLAMP WELD'T	2
82	A10876	UTILITY ROD GUIDE WELDMENT	1
83	A12246-1	UTILITY ROD GUIDE BOLT	1
84	A13047-4	END BRACKET WELDMENT	1
85	A13056-5	HANDLE WELDMENT	1
86	A13212-6	FRAME WELDMENT 30/27	1
87	A13214	CYLINDER MOUNT WELDMENT	1
88	A13237	DRILL TRANSPORT WELDMENT	1
89	A13250	DECAL KIT FOR HORNET	1
90	A13270-4	SPRING WHIP CABLE ASSEMBLY	2

30# (13.2KG) ROCK DRILL (011104-00000)

When ordering replacement parts you need to furnish the model and serial number of the drill tool.

SPECIFICATIONS

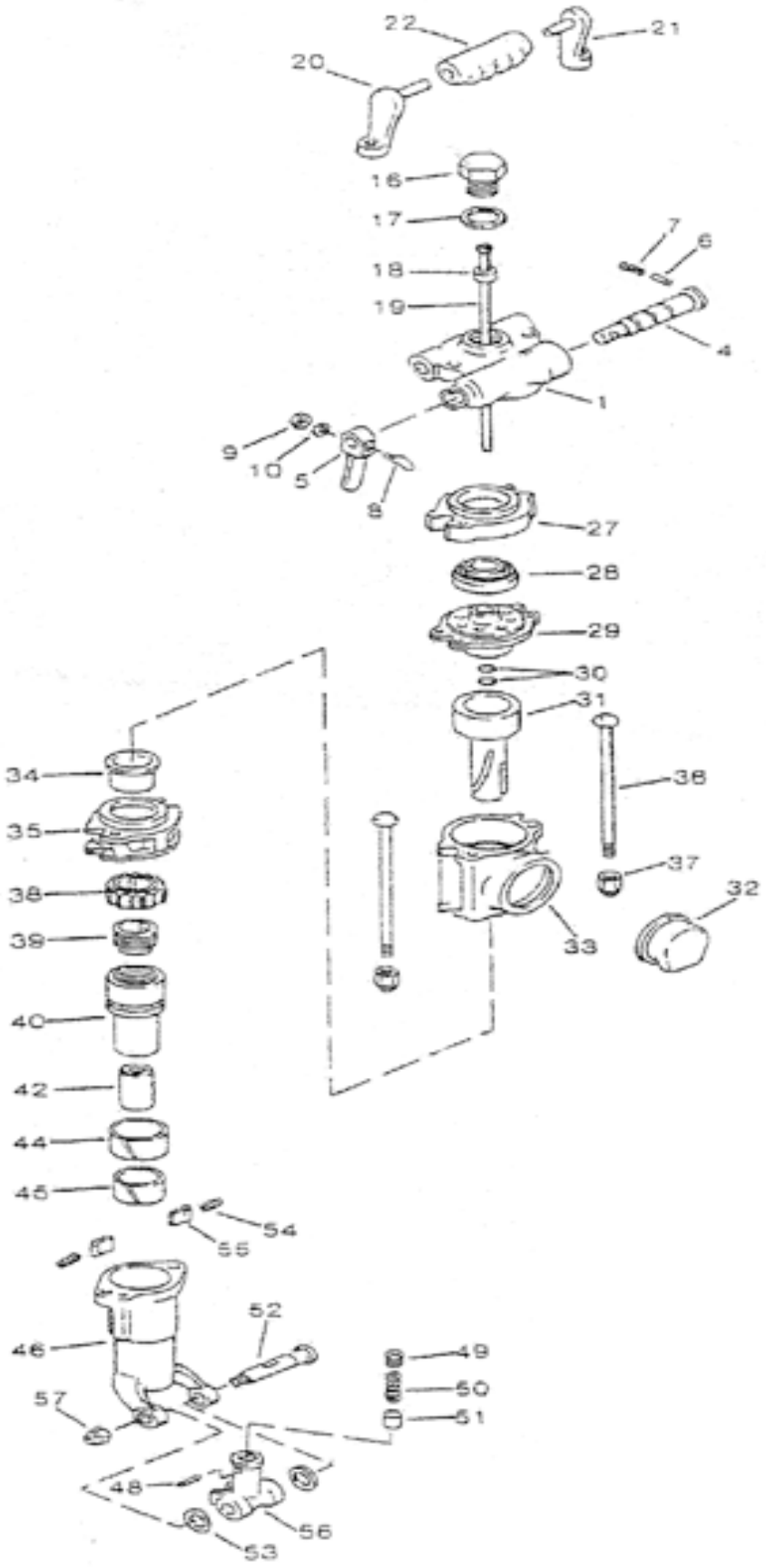
Net Weight	29lbs. (13.2kg)
Blows Per Minute	2700
Chuck Size	7/8" x 3 1/4" (22.2mm x 82.6mm)
Air Inlet (NPT)	3/4" (19.1mm)
Air Consumption	73cfm (2.12m3/min)

FIG.	PART #	DESCRIPTION	QTY
1A	011104-00001	BACKHEAD ASSEMBLY	1
1	011104-00002	BACKHEAD	1
4	011104-00003	THROTTLE VALVE	1
5	011104-00004	THROTTLE VALVE HANDLE	1
6	011104-00005	THROTTLE VALVE PLUNGER	1
7	011104-00006	THROTTLE VALVE SPRING	1
8	011104-00007	THROTTLE VALVE BOLT	1
9	011104-00008	THROTTLE VALVE NUT	1
10	011104-00009	THROTTLE VALVE WASHER	1
16A	011104-00015	BLOW TUBE ASSEMBLY	1
16	011104-00016	BLOW TUBE GLAND	1
17	011104-00017	BLOW TUBE GLAND GASKET	1
18	011104-00018	BLOW TUBE GASKET	1
19	011104-00019	BLOW TUBE	1
20	011104-00020	RIGHT GRIP SUPPORT	1
21	011104-00021	RIGHT GRIP SUPPORT	1
22	011104-00022	CENTER GRIP	1
27A	011104-00027	VALVE ASSEMBLY	1
27	011104-00028	VALVE CHEST	1
28	011104-00029	VALVE	1
29	011104-00030	VALVE COVER	1
30	011104-00031	O-RING	2
31	011104-00032	PISTON	1
32	011104-00033	EXHAUST DEFLECTOR	1

FIG.	PART #	DESCRIPTION	QTY
33	011104-00034	CYLINDER	1
34	011104-00035	FRONT WASHER BUSHING	1
35	011104-00036	FRONT WASHER	1
36	011104-00037	THROUGH BOLT	2
37	011104-00038	THROUGH BOLT NUT	2
38	011104-00039	RATCHET RING & RIFFLE NUT	1
39	011104-00040	SLEEVE NUT	1
40	011104-00041	ROTATION SLEEVE	1
42	011104-00043	SLEEVE BUSHING	1
43A	011104-00045	FRONT HEAD ASSEMBLY	1
44	011104-00046	FRONT HEAD LINER II	1
45	011104-00047	FRONT HEAD LINER II	1
46	011104-00048	FRONT HEAD	1
48	011104-00049	STEEL HOLDER PIN	1
49	011104-00050	STEEL HOLDER SCREW	1
50	011104-00051	STEEL HOLDER SPRING	1
51	011104-00052	STEEL HOLDER PLUNGER	1
52	011104-00053	STEEL HOLDER BOLT	1
53	011104-00054	STEEL HOLDER PACKING	2
54	011104-00055	PAWL SPRING	2
55	011104-00056	ROTATION PAWL	2
56	011104-00058	STEEL HOLDER	1
57	011104-00059	NUT	1
NS	011104-00061	ADAPTER	1

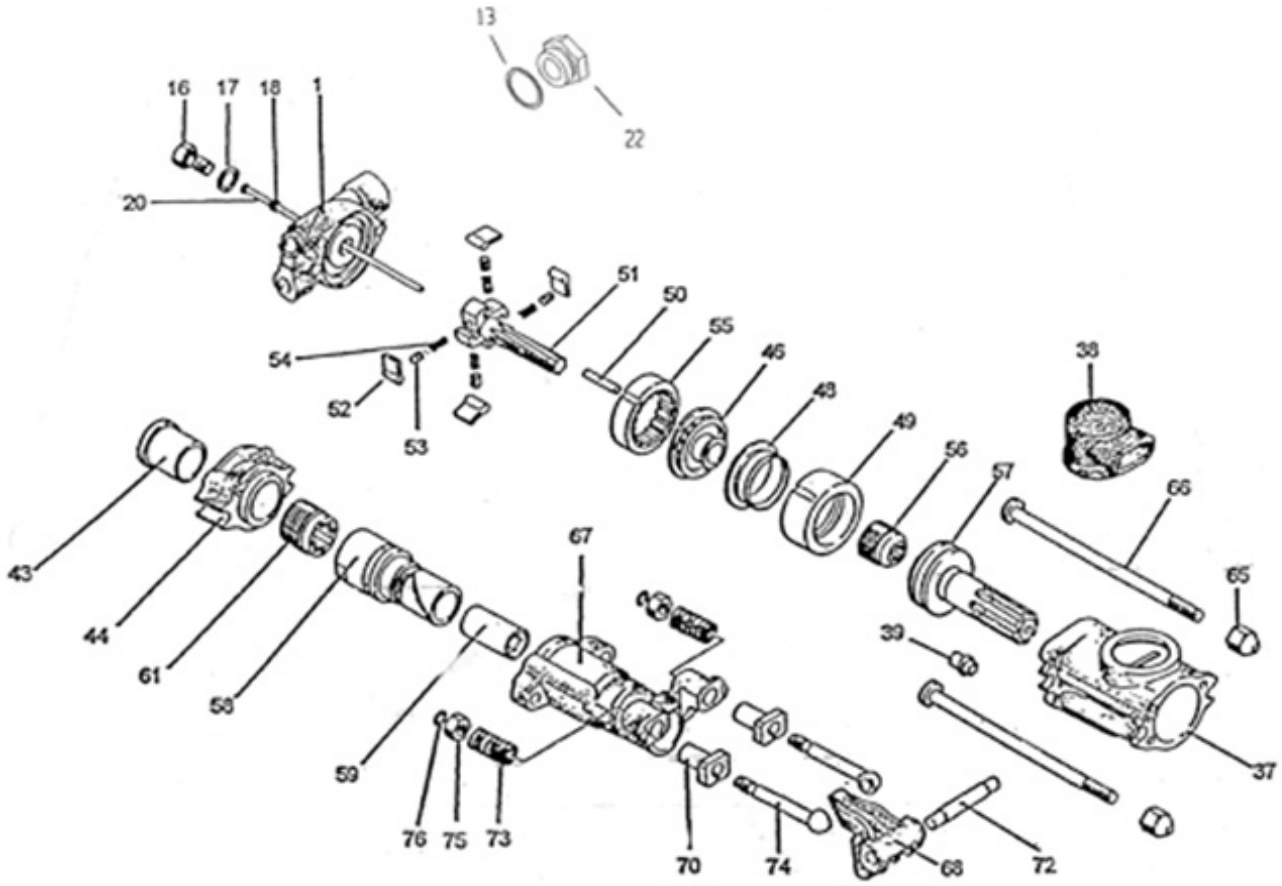
⚠ WARNING

Always disconnect the air supply before changing steel or dismantling the tool for service or repair. For maximum safety we advise the installation of a shut-off valve at the end of the air line.


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50# (23KG) ROCK DRILL
0A9350-00000

WHEN ORDERING REPLACEMENT PARTS YOU NEED TO FURNISH THE MODEL AND SERIAL NUMBER OF THE DRILL TOOL



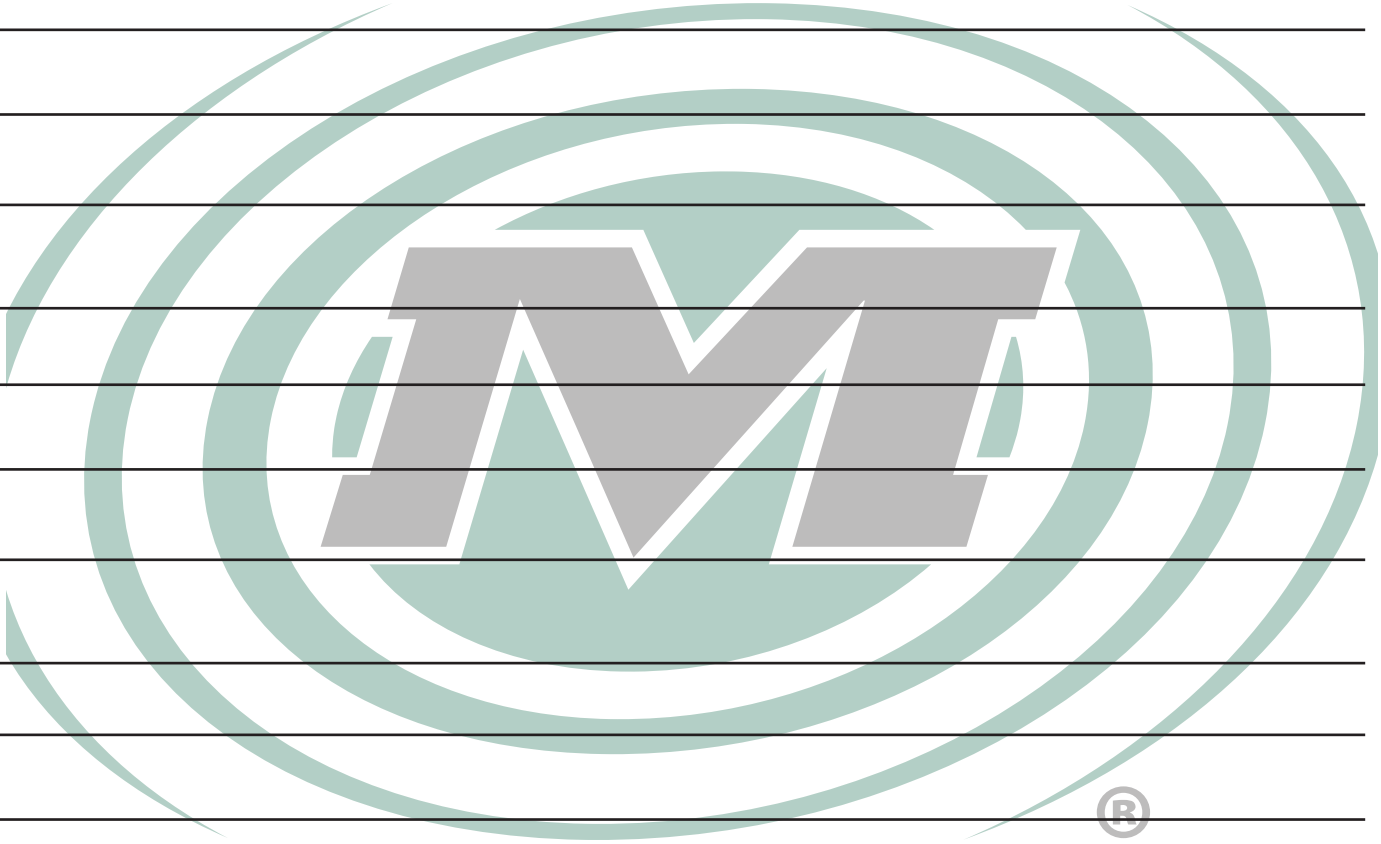
SPECIFICATIONS

Net Weight	51lbs. (23kg)
Blows Per Minute	2300
Chuck Size	7/8" X 4 1/4" (22.2mm X 107.9mm)
Air Inlet (NPT)	3/4" (19.1mm)
Air Consumption	92.2cfm (2.6m3/min)

⚠ WARNING

Always disconnect the air supply before changing steel or dismantling the tool for service or repair. For maximum safety we advice the instillation of a shut-off valve at the end of the air line.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	009350-00001	BACKHEAD ASSEMBLY	1
13	009350-00013	AIR CONNECTION WASHER	1
16	009350-00016	BLOW TUBE GLAND	1
17	009350-00017	TUBE GLAND GASKET	1
18	009350-00018	BLOW TUBE GASKET	1
20	009350-00020	BLOW TUBE	1
22	009350-00022	PLUG ADAPTER	1
37	009350-00037	CYLINDER	1
38	009350-00038	EXHAUST DEFLECTOR	1
39	009350-00039	BLOWING CONNECTION	1
43	009350-00043	FRONT WASHER BUSHING	1
44	009350-00044	FRONT WASHER	1
46	009350-00046	VALVE CHEST COVER	1
48	009350-00048	AUTOMATIC VALVE	1
49	009350-00049	VALVE CHEST	1
50	009350-00050	VALVE DOWEL PIN	1
51	009350-00051	RIFLE BAR	1
52	009350-00052	ROTATION PAWL	4
53	009350-00053	PAWL PLUNGER	4
54	009350-00054	PAWL SPRING	4
55	009350-00055	RATCHET RING	1
56	009350-00056	RIFLE NUT	1
57	009350-00057	PISTON	1
58	009350-00058	ROT. SLEEVE 1" X 4-1/4" (2.5cm X 10.8cm)	1
59	009350-00059	SLEEVE BSG 1" HEX. X 4-1/4" (2.5cm HEX X 10.8cm)	1
59A	009350-0059A	SLEEVE BSG 7/8" HEX. X 4-1/4" (2.2cm X 10.8cm)	1
61	009350-00061	SLEEVE NUT	1
65	009350-00065	SIDE ROD NUT	2
66	009350-00066	SIDE ROD	2
67	009350-00067	FRONTHEAD 1" X 4-1/4" (2.5cm X 10.8cm)	1
68	009350-00068	STEEL RET. 1" X 4-1/4" (2.5cm X 10.8cm)	1
68A	009350-0068A	STEEL RET. 7/8" X 4-1/4" (2.2CM X 10.8CM)	1
70	009350-00070	FRONTHEAD BSG.	2
72	009350-00072	STEEL RET. PIN	1
73	009350-00073	STEEL RET. SPRING	2
74	009350-00074	STEEL RET. BOLT	2
75	009350-00075	STEEL RET. NUT	2
76	009350-00076	RET. BOLT CLIP	2



Supplier warrants to Customer that the Services shall be provided in a workmanlike manner and that the Goods shall be free from defects in material and workmanship at the date of shipment from Supplier's facility. This warranty shall not run to any person other than Customer.
All claims under this warranty must be made in writing and delivered to Supplier prior to the expiration of one (1) year after the Goods have been delivered (or, if applicable, within one (1) year after the Services have been performed) or be forever barred. Supplier will repair or replace Goods or parts recognized and acknowledged by Supplier as being defective at the time of delivery without charge. However, Supplier will bill Customer for Goods and/or Services not covered by the warranty, including travel expenses incurred while performing warranty service calls. EQUIPMENT, COMPONENTS OR OTHER GOODS FURNISHED THAT ARE NOT MANUFACTURED BY SUPPLIER ARE ONLY COVERED TO THE EXTENT OF THE ORIGINAL MANUFACTURER'S WARRANTY, WHICH MAY VARY FROM THE ABOVE. Further, the above warranty shall not apply to any hardware or software that has been repaired or altered without Supplier's written permission by anyone other than Supplier's personnel. The foregoing states the sole and exclusive remedy for any breach of warranty or for any other claim based on any defect in, or nonperformance of, the Goods or Services, whether based upon contract, warranty, negligence, tort (including strict liability) or otherwise.
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WHAT IS NOT COVERED

This Limited Warranty does not cover any damage, deterioration or malfunction resulting from normal wear or tear, or any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This Limited Warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Minnich to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product.

WHAT IS COVERED

This limited warranty ("Limited Warranty") covers manufacturing defects in materials and workmanship of a product.

WHO IS COVERED:

Only the original purchaser of this product is covered under this Limited Warranty. This Limited Warranty is not transferable to subsequent purchasers or owners of this product. The product must have been purchased directly from Minnich or from an authorized Minnich reseller.

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NOTICE

All orders are treated as Standard Orders and will ship the same day if received prior to 3PM EST