MICHIGAN PNEUMATIC TOOL

Industrial Air Tools

MP-HS-1SC Manual

Single Piston Heavy Duty Scabbler

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Features

The MP-HS-1SC is a single piston hand held scabbler with carbide tipped piston. The unit is designed for close quarter applications, vertical surfaces and other areas that standard scabblers cannot reach.

Piston Diameter . . . . . 2"
Blows Per Minute . . . . . 2000 bpm
Height . . . . . 9-1/2"
Length . . . . . 8.5"
Weight . . . . . 10 lbs.
Air Inlet Thread . . . . . 3/8"
Avg. Air Consumption . . . . . 15 cfm

Safety

General Product Safety Information

• Failure to observe the following warnings and failure to avoid these potentially hazardous situations could result in death or serious injury.

• Read and understand this and all other supplied manuals before installing, operating repairing, maintaining, changing accessories or working near this product.

• Only qualified and trained operators should install, adjust or use the tool.

• It is your responsibility to make this safety information available to others that will operate this product.

• The warnings given in this and all other supplied manuals are for identifying hazards that are foreseeable in the general use of this tool. However, specific applications may create other hazards that must be identified and reduced before using the tool.

• Always install, operate, inspect and maintain this product in accordance with all applicable standards and regulations (local, state, country, federal, etc.) Operate and maintain this tool as recommended in this manual to prevent an unnecessary increase in noise, vibration, dust and fume hazards.

WARNING

Product Safety Information – When Placing the Tool in Service

• Before beginning a job the operator or their employer must assess all potential risks of using this product to do the job. These risks must be eliminated or appropriate controls must be implemented to reduce the risk to a safe level.

• Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet, unless a higher pressure rating is specified on the tool. Exceeding the maximum rated pressure (PMAX) shown on the tool may result in hazardous situations including excessive speed, rupture, or incorrect output torque or force.

• Ensure an accessible emergency shut off valve has been installed in the air supply line, and make others aware of its location.

• Install a properly sized Safety Air Fuse upstream of hose and use an anti-whip device across any hose coupling without

internal shut-off to prevent hose whipping if a hose fails or coupling disconnects.

• Whenever universal twist couplings (claw couplings) are used, lock pins should be installed to prevent connection failure. Whip hoses can cause severe injury. Do not use damaged, frayed or deteriorated air hoses and fittings. Check that all fittings are tight before applying air pressure.

WARNING

Product Safety Information – General Hazards While Tool In Use

• Always use Personal Protective Equipment appropriate to the tool used and material worked. This may include dust masks or other breathing apparatus, safety glasses, ear plugs, gloves, apron, safety shoes, hard hat and other equipment.

• Air under pressure can cause severe injury. Never direct air at yourself or anyone else.

• Always turn off the air supply. Bleed the air pressure and disconnect the air supply hose when not in use before performing any maintenance on this tool or any accessory.

• Keep clear of whipping air hoses. Shut off the compressed air before approaching a whipping hose.

• Do not use power tools when tired or under the influence of medication, drugs or alcohol.

• Never use a damaged or malfunctioning tool or accessory.

• Do not modify the tool, safety devices or accessories. Modifications can reduce the effectiveness of safety measures; increase the risks to the operator, and void the warranty.

• Do not use this tool for purposes other than recommended.

• Exposed throttles shall not be used where obstructions can hold the throttle in the “on” position.

• When a secondary handle is supplied ensure it is properly installed and use two hands to maintain control when operating the tool.

Safety

Workplace Hazards

• Slips, trips and falls are major causes of workplace injury. Keep work area clean, uncluttered, ventilated, and illuminated.

• Be aware of slippery surfaces caused by the use of the tool and also of trip hazards caused by the air line.

• For overhead work, safety helmets must be worn. The increased risks to the operator and others must be assessed and reduced to a safe level.

• Keep others at a safe distance from your work area or ensure they use appropriate Personal Protective Equipment.

• This tool is not designed for use in potentially explosive atmospheres including those caused by fumes, dust or near flammable materials.

• This tool is not insulated against electric shock.
Be aware of buried, hidden or other hazards in your work environment. Do not contact damage cords, conduits, pipes or hoses that may contain electrical wires, explosive gases or harmful liquids.

Projectile Hazards

• Always wear eye protection when operating or performing maintenance on this tool. The grade of protection required should be assessed for each use and may include impact-resistant glasses with side shields, goggles, or a full face shield over those glasses.

• Ensure work pieces are secure. Use clamps or vises to hold work piece whenever possible.

• Failure of the work piece or accessories can generate high-velocity projectiles.

Noise Hazards

• Always wear hearing protection when operating this tool.

• Exposure to high noise levels can cause permanent, disabling hearing loss and other problems such as tinnitus (ringing, buzzing, whistling or humming in the ears). Therefore, risk assessment and the implementation of appropriate controls for these hazards are essential.

• Appropriate controls to reduce the risk from noise hazards may include actions such as damping materials to prevent work pieces from “ringing.”

• If the tool has a silencer, always ensure it is in place and in good working order when the tool is being operated.

Operating Hazards

• Operators and maintenance personnel must be physically able to handle the bulk, weight and power of the tool.

• Keep body stance balanced and firm. Do not overreach when operating this tool. Anticipate and be alert for sudden changes in motion or forces during start up and operation. The operator should change posture during extended tasks, which can help avoid discomfort and fatigue.

• Use of the tool can expose the operator’s hands to hazards, including crushing, impacts, cuts, abrasions and heat. Wear suitable gloves to protect hands. However, ensure that the gloves do not restrict your ability to release throttle mechanism.

• To avoid accidental starting – ensure the tool is in the “off” position before applying air pressure, avoid the throttle when carrying, and release the throttle with loss of air.

• Do not lubricate tool with flammable or volatile liquids such as kerosene, diesel or jet fuel. Use only recommended lubricants.

• Do not carry or drag the tool by the hose.

• Tool and/or accessories may briefly continue their motion after throttle is released.

Accessory Hazards

• Use only sizes and types of accessories and consumables that are recommended by the tool manufacturer; do not use other types or sizes of accessories or consumables.

Safety

Dust and Fume Hazards

• Wear appropriate respiratory protection if dust or fumes are present in the work area.

• Dust and fumes generated when using power tools, and existing dust disturbed by their use can cause ill health (for example, cancer, birth defects, asthma and/or dermatitis,). Risk assessment and implementation of appropriate controls for these hazards are essential. The priority shall be to control them at the source.

• Direct the exhaust so as to minimize disturbance of dust in a dust-filled environment.

• All integral features or accessories for the collection, extraction or suppression of airborne dust or fumes should be correctly used and maintained in accordance with the manufacturer's instructions. Prevent exposure and inhalation of harmful dust and particles created by power tool use.

• Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain chemicals known 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

• Your risk from these exposures varies, depending on how often you do this type of work.

• To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment such as dust masks that are specially designed to filter out microscopic particles.

Entanglement Hazards

• Entanglement of loose clothing, personal jewelry, neckwear, hair, gloves or other items can occur if not kept away from the working end of the tool. Entanglement can result in choking, scalping, lacerations, broken bones and/or severed extremities.

Vibration Hazards

• Power tools can vibrate in use. Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms. If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the tool and seek advice from a qualified health professional before resuming use.

• Hold the tool with a light but safe grip, taking account of the required hand reaction forces because the risk arising from vibration is generally greater where the grip force is higher.

• Wear warm clothing when working in cold conditions and keep your hands warm and dry.

Repetitive Motion Hazards

• Repetitive motions or uncomfortable positions may be harmful to your hands, arms, shoulders, neck or other parts of the body. Stop using any tool if symptoms such as persistent or recurring discomfort, pain throbbing, aching, tingling, numbness, burning sensations or stiffness occur. These warning signs should not be ignored. Seek advice from a qualified health professional before resuming use.

WARNING

Product Safety information – When Maintaining the Tool

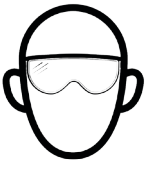
• Keep the tool operating safely through regular preventative maintenance including regular checks of speed and vibration.

• When maintaining the tool, avoid exposure or breathing of hazardous dust and other substances deposited on the tool during use.

• Use only proper cleaning solvents to clean parts. Use only cleaning solvents which meet current safety and health standards. Use cleaning solvents in a well ventilated area.

Safety

- Do not remove any labels.
- Replace any damaged label.



Wear Eye Protection

Wear Hearing Protection

Wear Respiratory Protection

Read Manuals Before Operating Product

Using The Scaler

Remember that it is always the tool that must do the work. There is no need for the operator to apply extra pressure on the tool when it is working.

Maintain the contact with the work surface by applying enough pressure to stop the tool from bouncing.

Maintenance

1. To obtain maximum efficiency from the pneumatic tool, preserve its features and avoid repeated repairs, a routine inspection and repair programme are recommended at least every 1000 hours, the intervals between the various inspections depending on the amount of exertion on the power tool.

2. Disassemble the tool, clean the parts with an appropriate solvent and check them carefully.

3. Lubricate and reassemble the unit.

Maintenance

Air Supply

1. Always use clean, dry air at 90 psig (6.2 bar/620kPa) maximum air pressure.

2. Be sure all hoses and fittings are the correct size and are secured tightly.

3. Always use a Filter, Regulator, Lubricator ***(see figure 10.1).***

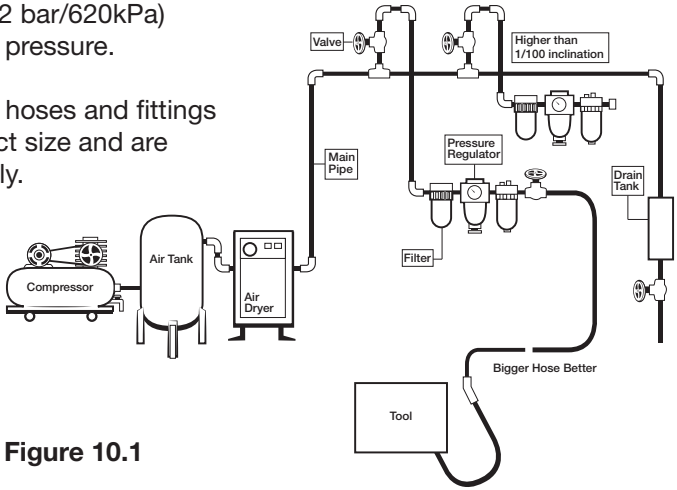


Figure 10.1

Lubrication

1. Each time a tool is dis-assembled for maintenance or repair, the tool must be lubricated.

2. Apply 6-8 drops of air tool oil into the inlet prior to and after each use ***(see figure 10.2).***

Figure 10.2

Specification Sheet

Michigan Pneumatic Tool, Inc.

Model

MP-HS-1SC

Single Piston Heavy Duty Scabbler

The MP-HS-1SC is a single piston hand held scabbler with carbide tipped piston. The unit is designed for close quarter applications, vertical surfaces and other areas that standard scabblers cannot reach.

Piston Diameter	2"
Blows Per Minute	2000 bpm
Height	9-1/2"
Length	8.5"
Weight	10 lbs.
Air Inlet Thread	3/8"
Avg. Air Consumption	15 cfm

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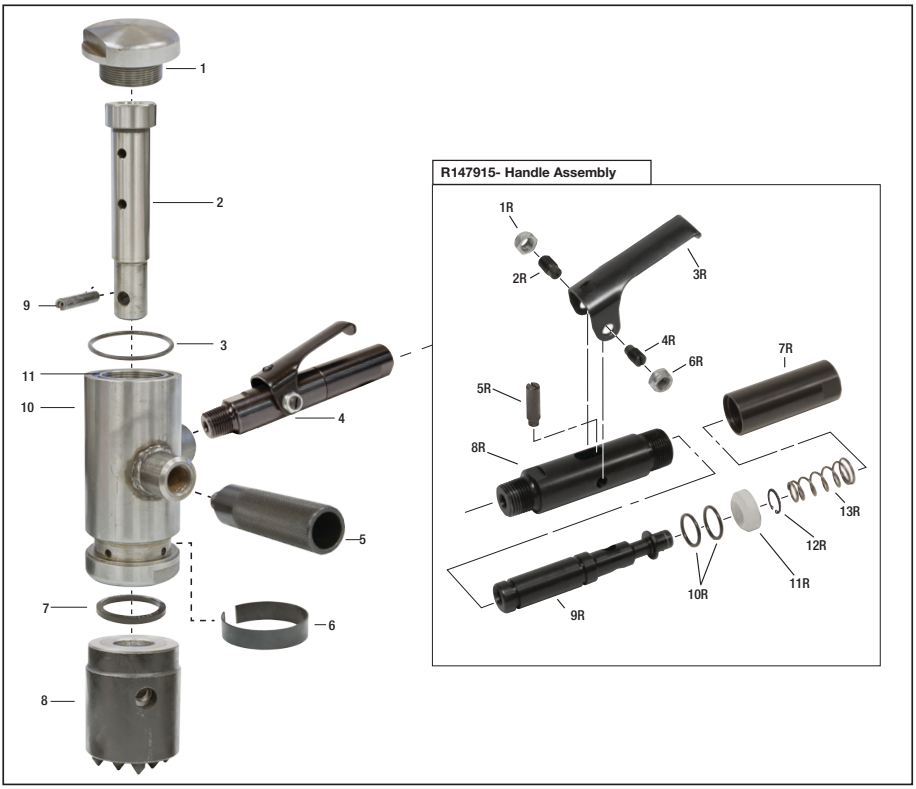
MP-HS-1SC Single Piston HD Scabbler



Index	Part No.	Description	Qty.
1	HS-BCAP	Back Cap	1
2	HS-PISTON	Piston	1
3	568-132BN70	O-Ring	1
4	R147915	Handle Assembly Includes; see ***R147915- Handle Assembly**	1
5	834-48	Dead Handle	1
6	HS-EXHCVR	Exhaust Cover	1
7	PWB-11	Seal	1
8	810019	Bit Scabbler 9-Point	1
9	SNP-9.857	Pin Spring Lock (incl. SNP-528)	1
10	HS-CYLASM	Complete Cylinder Assembly Includes (HS-Bush)	1
11	HS-BUSH	Scabbler Bushing	1

***R147915** - Handle Assembly			
Index	**Part No.**	**Description**	**Qty.**
1R	R147620	Pivot Screw Nut	1
2R	R147617	Pivot Screw	1
3R	R147612	Throttle Lever	1
4R	R147617	Pivot Screw	1
5R	R147621	Operating Stud	1
6R	R147620	Pivot Screw Nut	1
7R	R147613	Body End	1
8R	R147607	Snap Handle Body	1
9R	R147609	Snap Handle Valve	1
10R	A043001	Valve Ring Seal	2
11R	R147618	Nylon Washer	1
12R	R147619	Washer Retaining Ring	1
13R	R147615	Valve Spring	1

Troubleshooting

Trouble	Possible Cause	Solution
Low Power	Restriction in Air Strainer Screen/Muffler	Remove Inlet Bushing, Air Stainer Screen, and Muffler. Clean with a suitable solvent in a well ventilated work space. Replace Inlet Bushing, and Air Stainer Screen.
Low Power	Worn and/or Broken Pistons	Replace Piston
Low Power	Worn/Damaged Cylinders	Replace Body
Low Power	Debris in	Completely disassemble tool. Clean all parts with a suitable solvent in a well ventilated work space.
Runs without actuating Trigger	Worn/Damaged Valve Stem O-Ring and/or Valve Spring	Replace the Throttle Vave Seat and Throttle Valve (see page 12).

Limited Warranty

MP-HS-1SC 1-YEAR LIMITED EXPRESS WARRANTY

Michigan Pneumatic Tool, Inc. makes every effort to ensure that its MP-HS-1SC scabblers are of high quality, and warrants all new MP-HS-1SC scabblers it sells to be free from defects in materials and workmanship for a period of three hundred sixty five (365) days from the date of original purchase. This warranty shall not apply to defects due, directly or indirectly, to abuse, misuse, negligence, normal wear and tear or improper maintenance, nor shall it apply to any product which has been repaired or altered outside of our facilities. Should any product fail to provide satisfactory service, return the complete product requiring warranty service to Michigan Pneumatic Tool for examination, with transportation charges prepaid, together with an explanation of the complaint and proof of purchase. Michigan Pneumatic Tool guarantees to repair or replace any product found upon our inspection to be so defective. Michigan Pneumatic Tool makes no other warranty expressed or implied and expressly disclaims any implied warranty of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description contained herein. Michigan Pneumatic Tool shall in no event be liable for death, injuries to persons or property, or for incidental, consequential, indirect or special damages of any nature arising from the sale or use of the MP-HS-1SC, excepting only the cost or expense of repair and replacement as described above. This warranty gives the customer specific legal rights. Other legal rights may vary from state to state.

For Your Records:

Dealer Contact Name _____

Dealer Contact Phone _____

Date of Purchase _____

Serial Number _____

Notes

Michigan Pneumatic Tool

Industrial Air Tools

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