

OPERATING MANUAL

SCH 2, 3, AND 4" CHIPPERS, 15 LB CLASS

OPERATING AIR PRESSURE

Air pressure should be between 90 to 100 psig (6 bar) at the tool for proper operation. Using the tools at higher pressure will increase vibration to the operator, decrease performance and output, and may cause premature damage to the tool and steel. It is important to note that using long lead hoses, manifolds, leaking and worn hose connections in the air line can cause a pressure drop. Use proper couplings and fittings and proper diameter hose for the type of tool being used. Consult factory for calculating pressure drop data.

COMPRESSOR

Use an air compressor with sufficient CFM delivery to operate the tool(s) at a pressure of 90 to 100 PSI (6 bar) maximum at the tool.

See individual specification chart for CFM requirements.

AIR HOSE CONNECTION

Always inspect air hoses, fittings and gaskets for cuts, abrasions and wear. Check that fittings, on the tool and on the hose, are secure. Be sure to use safety clips and whip check cables to secure the hose and couplings to help prevent hose whipping. Always clear hoses of debris and excess water before attaching them to the tool. We recommend installing all auxiliary safety devices, including whip checks, safety clips, excessive Flow Check Valves to be in compliance with OSHA 1926.302(b)(7)

Please read Sullivan-Palatek General Air Tool Safety brochure and consult Pneumatic Tool Safety Manual from the **Association of Equipment Manufacturers** at www.aem.org

RECOMMENDED LUBRICATION

Sullivan-Palatek Chipping Hammers require minimal lubrication under normal operating conditions. Oil carry-over from the compressor will not normally provide sufficient lubrication. The use of an external line lubricator at the end of a 6' ½" whip hose attached to the tool is recommended. P/N 05019902 0004 6' whip hose with pressure feed 1.4 oz. line oiler for proper operation. A slight mist of moisture/oil at the tool exhaust and on the shank of the steel, is a sign of adequate tool lubrication. Always fill oiler before using. Standard tool oil of ISO VG 68 is recommended for normal ambient temperatures. Sullivan offers Bio Tool Oil for all their tools, ISO 68 is recommended for Chippers and Busters, it is American made from Soy and Canola beans, a renewable source, farm grown and formulated with Antiwear/EP, rust and oxidation inhibitors for superior protection of pneumatic tools. P/N SI9016 ISO 68 Bio Tool Oil, 1 QT. Since this internal device is venturi operated, pressure, temperature and oil viscosity can vary operation time.



FOLLOW ALL SAFETY PRACTICES USE PROPER LUBRICATION



UNPACKING

1. Visually inspect the tool for any signs of damage during shipment.
2. The Serial Number is on the box and is on the serial plate.
3. Keep a copy of the packing slip or invoice for proof of purchase date in the event of return or Warranty.

BEFORE START-UP AND BEFORE EACH USE



“Never remove retainer or replace tool steel with air supply connected to the air tool”

1. Check all bolts and fittings for tightness.
2. For first running and especially if the tool has been in stock for a lengthy time it is a good idea to put a little tool oil in the air inlet before operating the tool, connect hose to the tool and begin work. Remember to fill oil reservoir on inline whip and oiler.
3. Installing Steel
 - Be sure to use steel with same shank and collar type as the tool.
 - Be sure to insert steel properly, collar positioned properly and retainer lock spring inserted in collar and groove on barrel.
 - Check steel shank for wear and the cutting edge of bits for sharpness. Inspect steel for nicks or cracks which could cause breakage. Always use sharp, or properly sharpened steels, dull steel will transfer impact force to the tool causing damage to the tool and increased vibration to the operator.

4. Connecting the Air Hose.

Your Sullivan-Palatek 4 bolt chipper comes in two versions:

- Thumb Trigger Chipper has a 7/8" X 24 fine thread inlet.
- Internal Trigger Chipper has a 3/8" FNPT bushing, remove bushing and handle has 7/8" fine inlet.

Open Handle and Light Chipper:

- Open Handle Chippers have 3/8" FNPT bushing.
- Light Chipper has 7/8" x 24 fine bushing.
- Use air hose with a rated capacity equal to a minimum of 150% of the air compressor and with couplings secured by proper safety clips and whip checks. (OSHA 1926.302(b)(7))
- Always blow out hoses to clean and to remove any dirt, stones, water and oil before attaching to the tool.
- Check rubber gaskets or washers in hose couplings for wear or cracks.
- Always connect couplings properly and secure with approved safety clips and whip checks.
- The use of suitable 1/2" whip hose and oiler of proper length may decrease operator effort and prolong tool life.

- Please read General Air Tool Safety Bulletin



STARTING & OPERATING

1. DO NOT run the tool without proper steel installed in the tool and the retainer locked in place.
2. DO NOT run the tool without the cutting edge (point) firmly against the work surface.
3. DO NOT allow the tool to free run or dry fire, always keep tool on the work.
4. Always apply sufficient down pressure to keep the tool from bouncing or skipping. The proper amount of down pressure may vary depending on the material being worked and the type of steel being used. Moil points, chisels work differently and with varying weight of tools, this requires skill and application knowledge.
5. DO NOT allow the tool to bounce as this may damage the tool and steel.
6. Be sure compressor is not operating above 100 psi and 90 to 100 psi @ the tool.

TIPS TO KEEP THE TOOL OPERATING EFFICIENTLY

1. Use only correct steels with sharp cutting edges.
2. Select a cutting or breaking edge most suited to the material and application needed.
3. Begin close enough to the open end of the work surface so that the breaking effect of the blade or point will cause the material being worked to break or flake away from the mass. Working from the edge back to center should eliminate or help prevent the steel from becoming stuck.
4. Use proper down pressure to keep the cutting edge working into the material.
5. Recommend using Round Collar steels with Universal Ball Retainers.

CARE AFTER EACH USE

1. Be sure to turn off compressor discharge valve and allow the downstream vent to release all air pressure from the hose before disconnecting air hoses. Re-check by teasing throttle on tool. Be sure not to allow dirt or water to enter air inlet of tool.
2. For storage, pour a little recommended oil (1/2 ounce approximately) into the air inlet and tease throttle for a second before putting away, repeat 1. Re-check torque on handle bolts and check throttle plug for proper tightness, see service tips below.
3. Store tool well-oiled and upright in a safe dry place.

By following these suggestions, you can insure your tool will give you the type of service for which it was designed. If you have any questions concerning this information and the operation of your tool, please contact your Sullivan-Palatek Distributor or Sullivan-Palatek by email at info@palatek.com or Phone at 1 219 874 2497, 1 800 438 6203 or fax 1 219 872 5043.

QUICK SERVICE TIPS:

Handle bolts; On 4 bolt models cross tighten so rubber bumper washers de-form slightly, do not over tighten. See manuals for more information.

ACCESSORIES:

See Accessory guide and price sheet for details.

- 50' x 3/4" Hose with crimped on 2 lug fittings (250 psi rated yellow Novaflex)
- 6' 1/2" Whip Hose with 1.4 oz. line oiler with 3/8", 1/2" or 7/8" swivel & 2 lug fitting.
- 6' 1/2" Whip Hose with 3/8" swivel, 1/2" & 7/8" bushings & 2 lug fitting.
- Optional spring held Universal Ball Retainer.
- Barbed hose swivels, 3/8", 1/2", or 7/8"
- Bio Oil, ISO 68 for Chippers and Busters p/n SI9016.
- Line Oilers, Pressure Feed type.
- Steel, Moil Points, Chisels, Bushing Tools
- Hose Couplings:
 - 2 lug x 3/4" FNPT for 185's and breakers
 - 2 lug x 3/4" MNPT for 375's
- Whip Check safety cables
- Gaskets for 2 lug fittings (bag of 50)

Service parts:

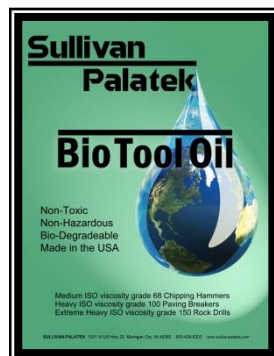
Retainer Springs, sold by bag of 10 only, p/n SI6134



LUBRICATION



1. Lubrication notes: use ISO 68 weight oil in the tool oilers. A light mist from exhaust shows proper oiling, also steel shank should be slightly wet with oil. Keep Chippers well-oiled with ISO 68 tool oil, fill oiler reservoir every few hours.



Sullivan-Palatek offers a Bio Tool Oil for all of its Breakers, Chippers, small demolition tools and Rock Drills. They are formulated with Antiwear/EP, rust and oxidation inhibitors for the protection of Pneumatic tools. It is American Made and a Renewable Oil source.



TROUBLE SHOOTING GUIDE

CHIPPING HAMMERS 2, 3 & 4"

"Never remove retainer or replace tool steel with air supply connected to the air tool"

FOLLOW ALL SAFETY PRECAUTIONS

USE PROPER LUBRICATION



TROUBLE	PROBABLE CAUSE	REMEDY
Will not start or runs sluggishly	Low Pressure at tool. Insufficient air flow. Automatic valve stuck or clogged. Insufficient lubrication.	Increase Pressure to 90-100 PSI (6.2 to 6.9 bar). Check hoses for proper size and for kinking or leaks. Flush Tool with 1/2 oz. of non-flammable cleaning fluid and tool oil. Add a Small Amount of Light-weight Tool Oil or Sullivan-Palatek ISO 68 Chipper Bio Oil.
Tool runs erratically	OSHA valve tripping. Debris in tool Inlet or valve. Auto Valve stuck.	Inspect Valve for Proper Sizing and operation. Clean and Remove debris. Flush Tool with 1/2 oz. of non-flammable cleaning fluid and tool oil. Reduce amount of oil flow on In-Line lubricator.
Tool Will Not Run (Air Blows thru Exhaust)	Automatic Valve Stuck. Steel not inserted.	Flush Tool with 1/2 oz of non-flammable cleaning fluid and tool oil. Proper steel must be inserted fully for tool to run.
Tool continues to run.	Throttle Valve Stuck.	Lubricate throttle valve stem (push pin). Flush Tool with 1/2 oz of non-flammable cleaning fluid and tool oil. Check valve bushing for burrs.
Excessive Kick-Back	Air Pressure Too High at Tool Tool steel dull	Reduce Pressure to 90-100 PSI (6.2 to 6.9 bar). Replace or re-sharpen steel.
Excessive Breakage of Retainer Lock Springs	Collar of Steel Striking Retainer or Dry-firing. (free running) Air Pressure too high at tool.	Exert sufficient down pressure to keep point against work surface. Air Pressure Too High at Tool Reduce Pressure to 90 PSIG at tool. (6.2 to 6.9 bar)
Rapid retainer wear	Retainer Collar of Steel Striking Retainer. Dry-firing or free running.	Exert sufficient down pressure to keep point against work surface. Air Pressure Too High at Tool Reduce Pressure to 90 PSIG at tool.
Rapid Collar wear	Retainer Collar of Steel Striking Retainer. Dry-firing or free running.	Exert sufficient down pressure to keep point against work surface. Air Pressure Too High at Tool, Reduce Pressure to 90 PSIG at tool. (6.2 to 6.9 bar)
Steel will not fit in bushing or retainer.	Match steel properly.	.680 is Round Shank and .580 is Hex Shank. Recommend Oval Collar steel for oval Collar retainer. Recommend Round Collar steel for Ball retainers.