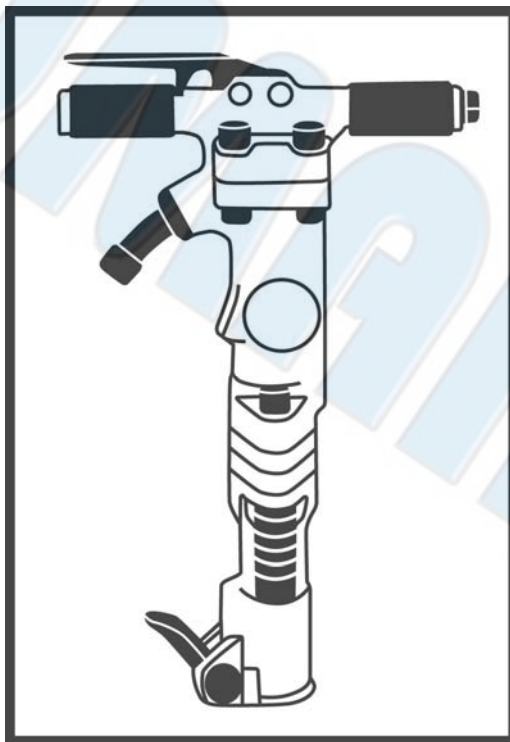




SUMAKE PNEUMATIC TOOLS



60Lbs Paving Breaker ST-22181(2)

Specification:

Blow Per Minute	1,400 b.p.m.
Shank Size	1-1/8"x6 (28mm) 1-1/4"x6 (32mm)
Piston Diameter	2-1/4" (57.15 mm)
Piston Stroke	4" (100 mm)
Air Consumption	58 CFM (1641 L/min)
Overall Length	25-6/15" (645 mm)
Air Inlet (PT)	3/4" (19 mm)
Air Hose (I.D.)	3/4" (1 mm)
Air Pressure	90 psi (6.3 bar)
Net Weight	66 lbs (30 kg)

Noise and Vibration:

Vibration EN ISO 28927-9	Noise EN ISO 15744	Remark
No Load: 30 m/s ² Uncertainty K= 1.5 m/s ²	Sound Pressure Level No load: 98 dB(A)	Please always wear ear protector at environment noise level > 80 dB(A) due to risk of impaired hearing!
	Sound power level No load: 109 dB(A)	
	Uncertainty K= 3dB	

SUMAKE INDUSTRIAL CO., LTD

4F,NO.351,Yangguang St.,Neihu District TAIPEI, TAIWAN, ZIP:114-91

ST-22181(2)-S-1503B-SLF



EC DECLARATION OF CONFORMITY

We: **SUMAKE INDUSTRIAL CO., LTD.**

4F, No. 351, Yangguang St., Neihu District, Taipei City, Taiwan

declare in sole responsibility that the equipment

Equipment : **60LBS PAVING BREAKER**

Model/ Serial No. : **ST-22181(2)**

to which this declaration applies, complies with these normative documents:

- Machinery Directive: 2006/42/EC

and conforms to the following EN standard,

- EN ISO 12100: 2010
- EN ISO 11148-4:2012

Name and Signature/Position

Mike Su – Managing Director

Date and Place

2013/6/28

Taipei, Taiwan

ST-22181(2)-D-1503B-SLF

Foreword

Sumake is a manufacturer and exporter of air tools since established. We have devote all our efforts in improving quality and tools' life. As well as the noise and vibration of tools. Bring all of you working efficiencies, profits, and enjoy using the tool is our principle.

Features

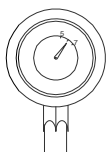
This air tool is a pneumatic tool that injects high efficiency into manual chipping, riveting, breaking of concrete and asphalt etc. Your care in handling it is, however, important if performance is to be realized over a long period of time. This booklet is prepared to equip you with the knowledge necessary to keep it on the job efficiently.

Operator's instruction

1. Cautions for Use

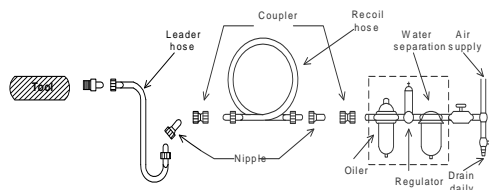
1-1 Air pressure

Maximum performance is displayed at the proper sanding speed, obtainable at a gauge pressure of 6.2 bar. Range-wise, this is an air pressure from 5 to 7 bar (70 to 100 psi)



1-2 Air line

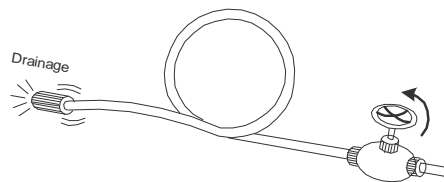
Use a 3/8" air hose between the compressor and the tool. Compressed air is cooled and its water content separated, as soon as the air leaves the compressor.



A portion of the water content, however, is condensed in the piping, and can enter the tool mechanism, and may cause trouble. So, install an air filter and an oiler between the compressor and the tool. Use a 3 HP or larger compressor for each sander.

1-3 Air hose

Clean the hose with a blast of compressed air before connecting the hose to air tool. This will prevent both moisture and dust within the hose from entering the tool and causing possible rust or malfunction. To compensate for unusually long hose (over 25 ft), the line pressure should be increased accordingly.



1-4 The approved eye protector, ear-muff, mouth-muffle, and gloves should be worn when operate this tool.

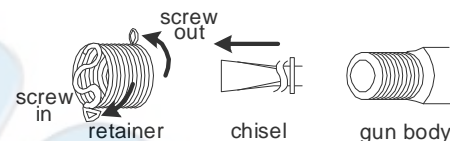
1-5 The working place shall be well ventilated.

1-6 Release the on-off device in the case of energy supply failure.

2. Operation, Adjusting And Replacing Method

2-1 Inserting a chisel

First disconnect the air hose from this tool. Insert the desired chisel from the open end of the quick change retainer so that the retainer could hold the protuberance on the chisel shank. Secure the retainer and the chisel to the gun body by screw the retainer on the closed end in the clockwise direction. Loose the retainer and the chisel from the gun body by screw the retainer on the open end in the reverse direction.



2-2 On-off device

Please note that the tool never running unless the insert tool is properly fixed on the gun body. To operate this tool, just push the trigger, which is on the grip, down. The tool continuously reciprocating as one push the trigger down and it stops running as the trigger is released.

For the sake of safety, put it on hanger or on a soft flat pad when not in use.

2-3 Replace and adjusting

There is no user serviceable part inside this tool. Please send the tool to a qualified personnel or our service section to repair or/and replace worn parts.

3. Maintenance

3-1 Lubrication

Before connecting the hose, apply 4 or 5 drops of SAE #10 spindle oil at the air inlet. Use of a thicker oil can lead to reduced performance or malfunction. If a thicker oil is used by accident, wipe it away immediately. Also, every 3 or 4 hours of operation, oiling is necessary.

3-2 Storage

Avoid storing the tool in a location subject to high humidity. If the tool is left as it is used, the residual moisture inside the tool can cause rust. Before storing and after operation, oil the tool at the air inlet with spindle oil and run it for a short time.

3-3 Disposal

If the tool is too seriously damaged to be used anymore, drop it in a resource recycling can. Never drop it into fire.

3-4 Ordering service Parts

For further operational and handling information or for replacement of parts and components, contact the sale agent from whom you purchased the tool or the service division of our company.

* In ordering parts and components, give each part number, name and quantity.

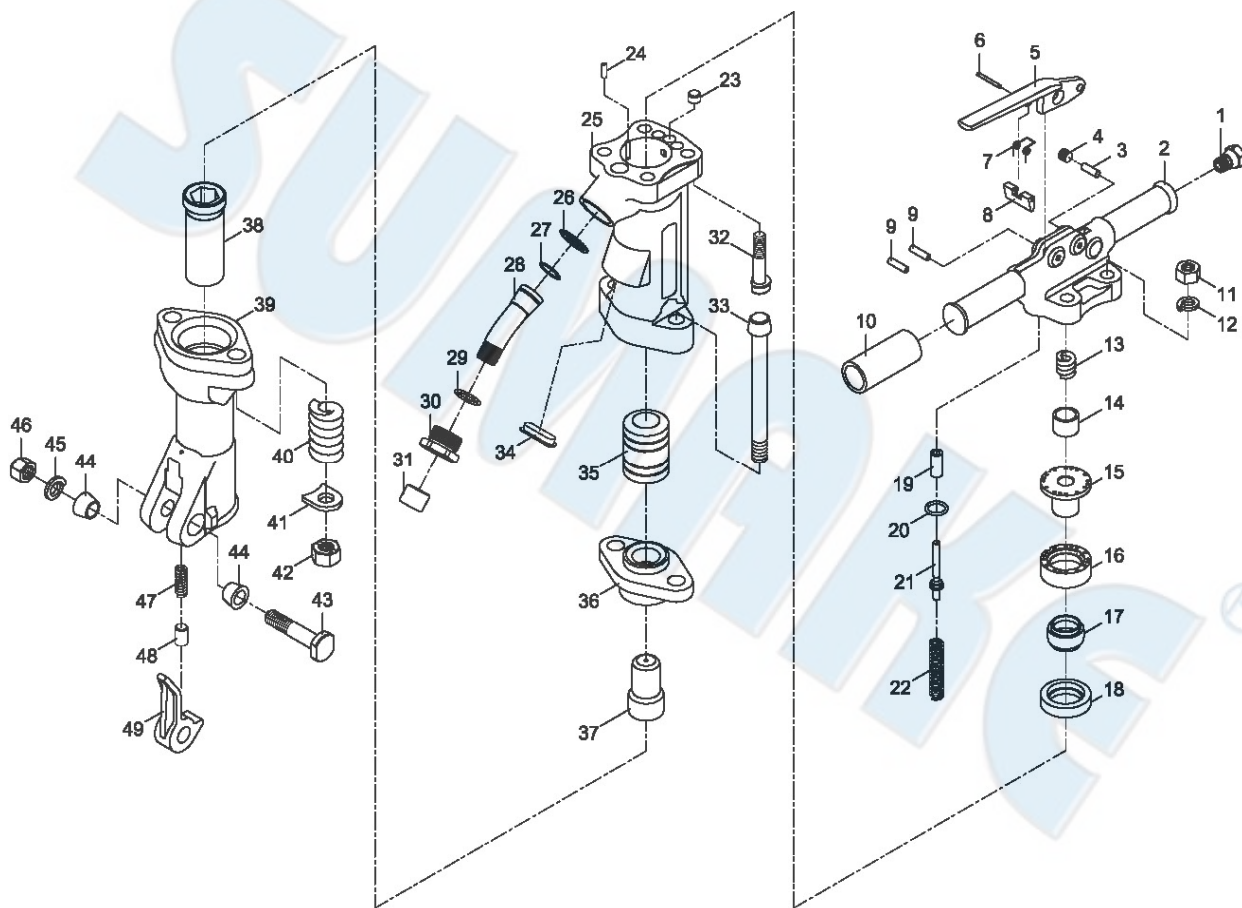
Warning

1. This tool is not insulated for coming into contact with electric power source.
2. It is forbidden to use this tool in explosive atmospheres and do not put any combustible material near the workpiece since it might emit sparks when working on hard material.
3. Check the wear of the insert tool and the retainer before operating this tool.
4. Working with this tool will generate dust, depending on the material being worked on, could be harmful to the operator
5. This tool can cause the ejection of particles at chipping or demolishing work, hence the operator shall wear appropriate protective device and do not let other person near the work area.
6. The insert tool and the retainer on heavy types are exposed to heavy strains and can after a long period of use break due to fatigue.
7. Keep your body balance and beware of the break of the severed workpiece.
8. If one needs to use the free hand, although it is a source of vibration damage, we suggest place the hand by holding the tool in the part between the retainer and the grip and do not place the hand on the rear part by pushing the tool. The former posture provides the operator more balance than the latter one.
9. Always disconnect the tool from the air power source when maintenance, placing any insert tool, and not in use.
10. Never carry the tool by hose and beware of a whipping compressed air hose.
11. The workpiece shall be fixed by proper device.



ST-22181(22182)

60LBS PAVING BREAKER SHANK SIZE: 1-1/8"x6 (28MM) [1-1/4"x6 (32MM)]



PARTS LIST

No.	Parts No.	Description	Q'ty
1	22181-01	Oil Plug	1
2	22181-02	Back Head	1
3	22181-03	Felt Oiler (Φ8.5x25L)	1
4	22181-04	Oil Control Plug (PT 1/8")	1
5	22181-05	Throttle Lever	1
6	22181-06	Spring Pin (Φ4x40L)	1
7	22181-07	Stop Lever Spring	1
8	22181-08	Stop Lever	1
9	22181-09	Throttle Lever Pin (Φ8x30L)	2
10	22181-10	Rubber Grip	2
11	22181-11	Back Head Bolt Nut	4
12	22181-12	Lock Washer (5/8")	4
13	22181-13	Plunger Spring	1
14	22181-14	Plunger	1
15	22181-15	Valve Guide	1
16	22181-16	Valve Chest	1
17	22181-17	Automatic Valve	1
18	22181-18	Valve Seat	1
19	22181-19	Throttle Valve Stem Guide	1
20	22181-20	O-Ring (Φ21.7xΦ3.5)	1
21	22181-21	Throttle Valve	1
22	22181-22	Throttle Valve Spring	1
23	22181-23	Cylinder Plug	3
24	22181-24	Valve Chest Dowel Pin (Φ1/4"x20L)	1
25	22181-25	Cylinder	1

26	22181-26	Air Inlet Screen	1
27	22181-27	Air Inlet Swivel O-Ring (Φ28.5xΦ2)	1
28	22181-28	Air Inlet Swivel	1
29	22181-29	O-Ring (Φ29.4xΦ3.1)	1
30	22181-30	Air Inlet Swivel Nut	1
31	22181-31	Rubber Grip	1
32	22181-32	Back Head Bolt	4
33	22181-33	Back Head Bolt	2
34	22181-34	Rubber Plug	1
35	22181-35	Piston Hammer	1
36	22181-36	Tappet Seat	1
37	22181-37	Tappet	1
38	22181-38A	Front Head Bushing [ST-22181]	1
	22181-38B	Front Head Bushing [ST-22182]	1
39	22181-39	Front Head	1
40	22181-40	Front Head Bolt Spring	2
41	22181-41	Front Head Bolt Lock Washer	2
42	22181-42	Front Head Bolt Nut	2
43	22181-43	Steel Retainer Bolt	1
44	22181-44	Steel Retainer Bolt Bushing	2
45	22181-45	Lock Washer (3/4")	1
46	22181-46	Steel Retainer Bolt Nut (3/4"-16UNF)	1
47	22181-47	Steel Retainer Spring	1
48	22181-48	Steel Retainer Plunger	1
49	22181-49	Steel Retainer	1

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