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Office: 602.437.5020 Email: sales@buytsi.com Fax: 602.437.5025

## **Safety Requirements**

**1.** Thoroughly read all of this manual before using this machine.

2. Only personnel trained should operate this machine.

**3.** Personal Protective Equipment must be used including safety glasses.

**4.** Never wet the motor, electric switch, or components. Cover these items if machine is to be washed. Always disconnect electrical power before attempting any maintenance.

**5.** Remove all debris from tires before using the grooving tool

### **Installation Requirements**

115 Volt, 60 Cycle, 20 Amp and 90 PSIG Air x .25" diameter air hose

220 Volt, 50 Cycle, 20 Amp and 90 PSIG Air x .25" diameter air hose

# **Set-Up Instruction**

- **1.** Uncrate machine and remove all packaging materials.
- **2.** Insert upper control arm support tube into lower tube socket and tighten locking cap screws.
- **3.** Insert cross arm over vertical arm support adjust to upper vertical height. Tighten lock nut.
- 4. Insert base level screws and level machine.
- **5.** Remove solid reservoir plug in rear of machine and replace with reservoir breather.
- **6.** Connect electric cord to electric supply.
- 7. Connect airline to air valve at rear of machine.

**8.** Insert grooving cutter into grooving head. Depending on width of groove desired, a variety of cutters are available. Choose width as desired.

9. After grooving cutter is installed – tighten locking screws to retain grooving cutter.

**10.** Grease zerks that are marked to grease on a regular basis. Apply light oil to all other moving or pivot points.



## **Operating Instruction**

**1.** To begin grooving, first tire must be put on holding arms. To activate hydraulic system, push start button to Power Hydraulic System (to stop machine push or rotate knob to stop position).

**2.** Place tire over holding arms. Hold tire in position and activate expanding holding arms by stepping on left hand foot pedal marked "Spread Tire". Position tire to the left side of holding arm next to the stop arm. When fully expanded, lock safety value to hold tire secure.

**3.** To rotate tires, step on right hand pedal. To groove a tire the tire must rotate toward the operator. Slowly rotate tire and using a tire pick, remove all stones and any other foreign material. Stones will break the groover cutter blade.

**4.** To adjust rotation speed adjust foot pedal speed control. To slow down rotation, turn speed control clockwise or to the right. To speed up rotation, turn speed control counter clockwise.

**5.** Open ball valve approximately 1/8' to  $\frac{1}{4}''$  turn to allow a small airflow. This air flows through the cord sheath to the grooving gun. This air keeps the cord and tool cool.

**6.** The grooving tool control unit has four heat settings. Setting 1 is the coolest and 4 is the hottest. Use your judgment when setting the control unit. A small blade will require less heat than a large wide blade.

7. Grasp the grooving tool with cable and roller assembly attached. Step on right hand pedal to rotate tire. With the air valve on and one button of control unit pushed down, position grooving tool and follow existing zig-zag pattern. Pull out grooved tire ribbon as tire rotates. After first groove is complete, more grooving tool to second and succeeding grooves in tire. Cross grooves can also be done by manually handling the grooving tool.

**8.** After tire is grooved the tire can be removed by first opening the safety valve. To release arms lift up with the toe of operator's shoe. This will release the tire, shut off air and electric motor until operator is ready to groove another tire.



### **Repair Parts List (110v or 220v)**





# **Repair Parts List (110v or 220v)**

Item	Description	Each	U/M
10395	Bushing, Oilite or Bronze	2	Ea
10298-60	Electric Hyd Power Unit 1HP -60 hertz		
or		1	Ea
10298-50	Electric Hyd Power Unit 1HP -50 hertz		
706B	Valve, 2 spool with handles inlet & outlet	1	Ea
706B-Kit	Spool Seal Retainer for the 2 Spool Valve	1	Ea
3019-4000	Gauge 2.5 Dia x 1/4 NPT	1	Ea
RHHG-110	Rillfit 110 V Hand Held Groover		
or		1	Ea
RHHG-220	Rillfit 220/230 V Hand Held Groover		
5904	Rillfit Groover Assembly	1	Ea
10300	Hydraulic Motor H Motor	1	Ea
10299	Cylinder 1-3/4 x 4	1	Ea
10299-RK	Repair Kit for 10299 Cylinder	1	Ea
04.103	Ball Valve Silver/Black	1	Ea
10361	Cylinder Pin	1	Ea
3517	Pin, Cotter 3/16	2	Ea
485-GR8	HHCS 1/2-13 x 3 Grade 8	1	Ea
10127	Bushing	2	Ea
10345	Sprocket, #40, 12 tooth, 1"bore	1	Ea
10137	Sprocket, #40, 60 tooth, 2" bore,3/18-16 tap	1	Ea
10136	Bearing Flange	2	Ea
206-GR8	HHCS 1/2-13 x 3 Grade 8	1	Ea
12638	Ball Valve High Pressure	1	Ea
12885	Pad, Rubber 12.75 x 1.25 x .187"	2	Ea
230	Handle Grip	1	Ea
4796	Switch for overseas only	1	Ea
19.071W1	W1 Rillfit Blades 5/64″ - 2mm 20-CT	1	Ea
19.071W2	W2 Rillfit Blades 5/32″ - 4mm 20-CT	1	Ea
19.071W3	W3 Rillfit Blades 1/4″ - 6mm 20-CT	1	Ea
19.071W4	W4 Rillfit Blades 5/16″ - 8mm 20-CT	1	Ea
19.071W5	W5 Rillfit Blades 13/32" - 10mm 20-CT	1	Ea
19.071W6	W6 Rillfit Blades 7/8″ - 22mm 10-CT	1	Ea



# Notes



## Notes



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# **California Proposition 65**

California's Proposition 65 entitles California consumers to special warnings for products that contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm if those products expose consumers to such chemicals above certain threshold levels.

WARNING: Some of Tire Service International's products can expose you to chemicals including chromium compounds, which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to **www.P65Warnings.ca.gov**.

Your risk from exposure to these chemicals varies, depending on exposure time. To reduce your exposure, work in a well-ventilated area and with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles. Wash your hands after touching TSI's products.

### Warranty and Return Policy

Warranty & Workmanship you can depend on.

With over 30 years of manufacturing experience we maintain the ability to provide competitive prices while employing and manufacturing the majority of our products in the USA. Pride in our workmanship and standing behind each and every product is not just our claim but our uncompromising responsibility.

Tire Service International equipment is warranted to be free from defects in materials and workmanship for a period of one year from the date of original purchase to the original owner. Repair labor is warranted for 90 days from the date of original purchase. Bushings, blades, bearings and normal wear and tear are not covered under warranty. Careless handling, negligence, misuse, abuse, mutilation, improper operation, making unauthorized repairs, additions, and or alterations automatically cancel this warranty and relieves TSI of any obligation. Cheetah tanks claimed to be defective while under warranty will be evaluated at our manufacturing plant and either repaired if possible or exchanged and returned or credit issued to the customer account at our discretion. Damage resulting from dropping the tanks will not receive warranty consideration. Warranty parts need to be returned prepaid to the plant for credit. Any replacement parts shipped from the plant will be shipped at the customer's expense. Machines requiring warranty work must be brought to the manufacturing plant in 201 Chelsea Rd, Monticello, MN or to a repair facility authorized by TSI.



**!!WARNING!!** Goods returned without an RGA will be refused. A Returned Goods Authorization form must be obtained before returning any material or goods. All non-warranty returns will be subject to a 15% restocking fee plus any additional charges for reconditioning/repacking.

Visit www.buyTSI.com for any additional information. Also be sure to follow us on all the Socials, and subscribe to our YouTube channel for all our product videos.

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