



TIRE SERVICE INTERNATIONAL

TC-50 & TC-55 Tire Cutter

buyTSI.com - 800.223.4540



Read this manual before operating

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Safety Requirements

1. Thoroughly read 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. Keep bystanders and children out of the work area while operating this tool.
5. Inspect before each use. Do not use if broken, bent, cracked or damaged parts are noted (Including warning label). If the unit appears damaged in any way, is missing parts, or operates abnormally, it shall be removed from service immediately. All units that have been dropped, impacted suddenly, or dented should be removed from service.
6. Never wet the motor, electric switch, or components. Cover these items if machine is to be washed.
7. Always disconnect electrical power before attempting any maintenance.
8. Do not leave unit "ON" and unattended.
9. CAUTION: Operation of this machine for use other than cutting tires is strictly prohibited.

Set-Up Instruction

1. Choose a non-slip surface that is level and has at least 5 feet around the footprint of the unit to prevent injury from flying debris. To uncrate the machine, cut the bands and remove the sidewalls and top of the crate. Unbolt the unit from the pallet and remove.
2. Remove plug in oil reservoir and install breather cap. See maintenance for hydraulic fluid type and recommendations.
3. Check fluid levels for gas engines.
4. For electric units refer to page 6 of this booklet for required power supply input.
5. Motor rotation must be clockwise when looking at end of motor. If motor runs counter-clockwise reverse the wires as indicated on the motor plate diagram.
6. It is advised to use the holes in the mounting base angles to properly secure this unit for operation.

Operating Instruction

1. Start engine or turn electrical power on.
2. Place tire on support table with engine/motor running.
3. Pull on both control handles.
4. Shear arm will come down and cut through one side of the tire as shown.
5. Turn tire 180° and cut tire again. Repeat turning and cutting until the pieces of tire tread suits your needs. You can also cut down through the center of several pieces of tire tread.
6. Keep support table clear of debris for safe operation. Periodically make a visual check on moving parts to see no debris interferes with their movement. Machine should be turned off prior to removing any debris.



Maintenance Instruction

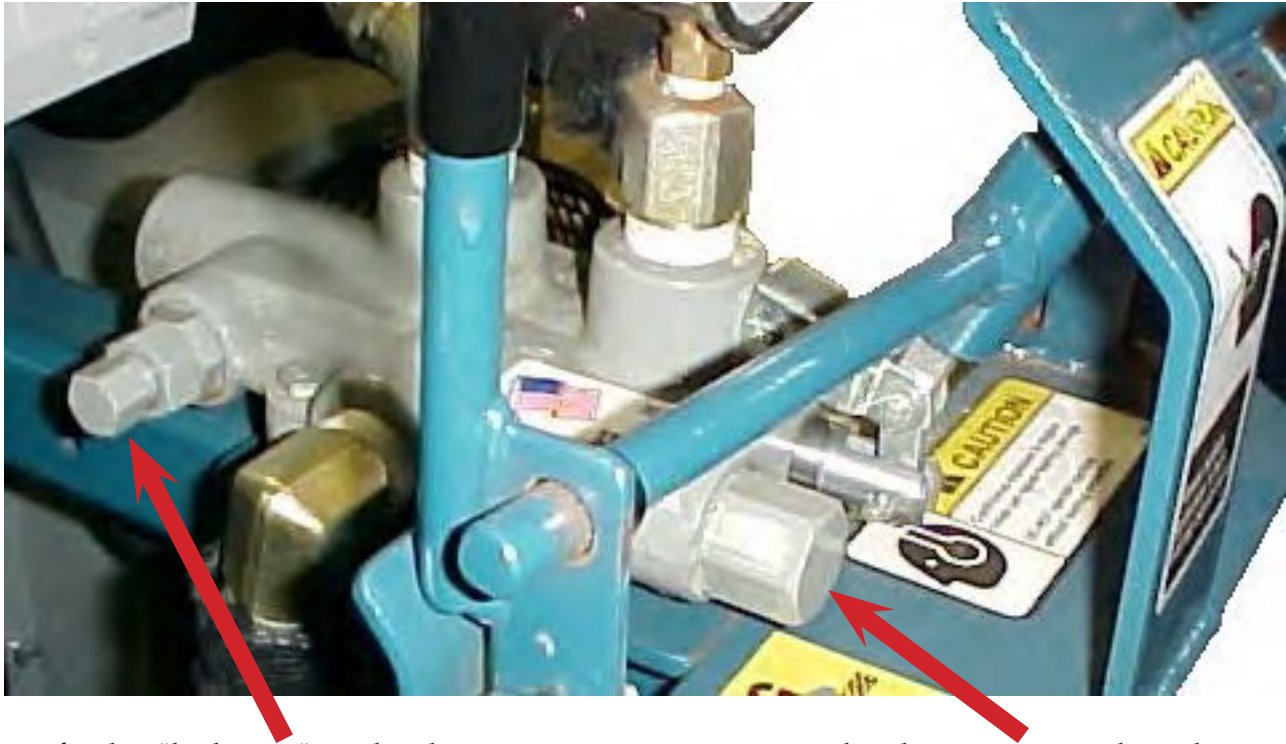
1. For maintenance shut off engine or unplug electric unit from power source.
2. Follow engine manufacturers recommended maintenance requirements.
3. Replace engine oil, oil filter, air filter and gas filter every 6 months.
4. Replace Hydraulic oil filter element every 6 months. (TC-55 #10130-E) (TC-50 #3154-Filter)
5. Drain and replace Hydraulic oil from reservoir once per year with SAE 20 or SAE 30 Automatic Transmission Fluid. Capacity 19 gallons.
6. Grease unit as indicated:



GREASE DAILY
5 PUMPS WITH
GREASE GUN
USING MOLY-GRAPHITE
GREASE ONLY



Maintenance Instructions



If valve "kicks out" on the shear arm return stroke, the detent will have to be slightly tightened. Tighten outer nut 1/4 turn and tighten lock nut. Continue to cut. If valve still "kicks out" readjust it another 1/4 turn.

Hydraulic pressure to the valve is to read 2800 PSI on the gauge. If pressure adjustment is needed, remove the cap and either loosen or tighten adjusting nut beneath the cap.

NOTE: Extra stress is placed on machine if proper sharpness and adjustment is not maintained.

1. Maintain reservoir oil level 3" (7.62 cm) from top with any brand or type of automatic transmission fluid. The machine comes with automatic transmission fluid.
2. Avoid contact with eyes, skin and inhalation. Change the hydraulic filter every 6 months. Use 10 Micron hydraulic filter. To reorder TSI's Hydraulic filter element, please reference model and serial # of your machine.
3. Change engine oil every six months.

Female Shear Blade

Adjusting the Female Shear Bars

1. As the steel belting from a tire starts to string out and not cut properly, the original bar edges will eventually need to be adjusted. To do this run the unit and stop the Male Shear Arm in the lowest position so it rests withing the female blades..
2. Shut off or unplug unit.
3. Loosen the 1/2" Bolts (7) on one side of the unit and loosen the (6) Lock Nuts for the Socket Head Screws. Use an Allen Head wrench to adjust the Socket Head Screws to drive the Female Shear Bar securely flush against the Male Shear Arm and tighten the Lock Nuts. Do this for both sides. There should be zero clearance between the Male and Female Shears.

Replacing the Female Shear Bars

1. Each Female Shear Bar has 4 available cutting edges. Run the unit and stop the Male Shear as described above.
2. Shut off or unplug the unit.
3. Remove the 1/2" Bolts from both sides as well as both Female Shear Bars. Loosen the Locking Nuts and back-out the Socket Head Screws so there's access to clean the mounting surface. It's a good idea to use Emery cloth to scrape the mounting surface as clean as possible.
4. Reposition each Female Shear Bar by choosing a newer edge to use for cutting.
5. Continue to adjust both blades.

Male Shear Blade

1. The Male Cutter Bar may be turned end for end if it shows areas of wear.
2. After turning it around, make sure to readjst the Female Shear Blades as stated above.

Repair Parts List

Item	Description
BASE UNIT	(all models unless noted)
3020	Valve, Hydraulic
3019-4000	Gauge, 2.5"
3154-Filter (TC-50)	Filter Element, White
10130-E (TC-55)	Filter Element with O-ring
3363	Female Shear Blade (bottom)
3364	Male Shear Blade (top)
3469	Cylinder 5 x 12 (TC-50)
10585	Cylinder 6 x 12 (TC-55)
10171	Gauge, Sight for Reservoir
ELECTRIC MODEL	(note model designated)
3477-3-1-60	Electric Motor TC-50 3 HP 1 Phase
3143-10HP-1PH-60CY	Electric Motor TC-55 10 HP 1 Phase
3480	Pump, 2 Stage, 13gpm (TC-50)
4571	Pump, 2 Stage, 28gpm (TC-55)
GAS MODEL	(note model designated)
3516	Engine, 10 HP (TC-50)
4643	Engine, 18 HP (TC-55)
3010	Pump, Hydraulic 16gpm (TC-50)
4571	Pump, Hydraulic 28gpm (TC-55)
3160	Vibration Isolator (TC-50)

	TC-50	TC-55
Unit Footprint:	24" x 40"	19" x 48"
Cylinder Bore & Stroke:	5" x 12"	6" x 12"
Cycle Time:	15 seconds approx.	14 seconds approx.
System Pressure	2,800 PSI Max	2,800 PSI Max
Power Unit:	Gas: 10 HP Briggs & Stratton	Gas: 18 HP Briggs & Stratton
	Electric: 3 HP, Single Phase, 220V, 60Hz / 50Hz	Electric: 10 HP, 3 Phase, 30 Amp, 440 V/230 V, 60 Hz/ 50 Hz
		Electric: 10 HP, Single Phase

Notes

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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