



TIRE SERVICE INTERNATIONAL

CH-22 & CH-23 Small Tire Changer, Stand and Floor Plate

buyTSI.com - 800.223.4540



Read this manual before operating

Tire Service International, LLC

3451 S. 40TH ST.
Phoenix, AZ 85040

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

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Revised: March 2024



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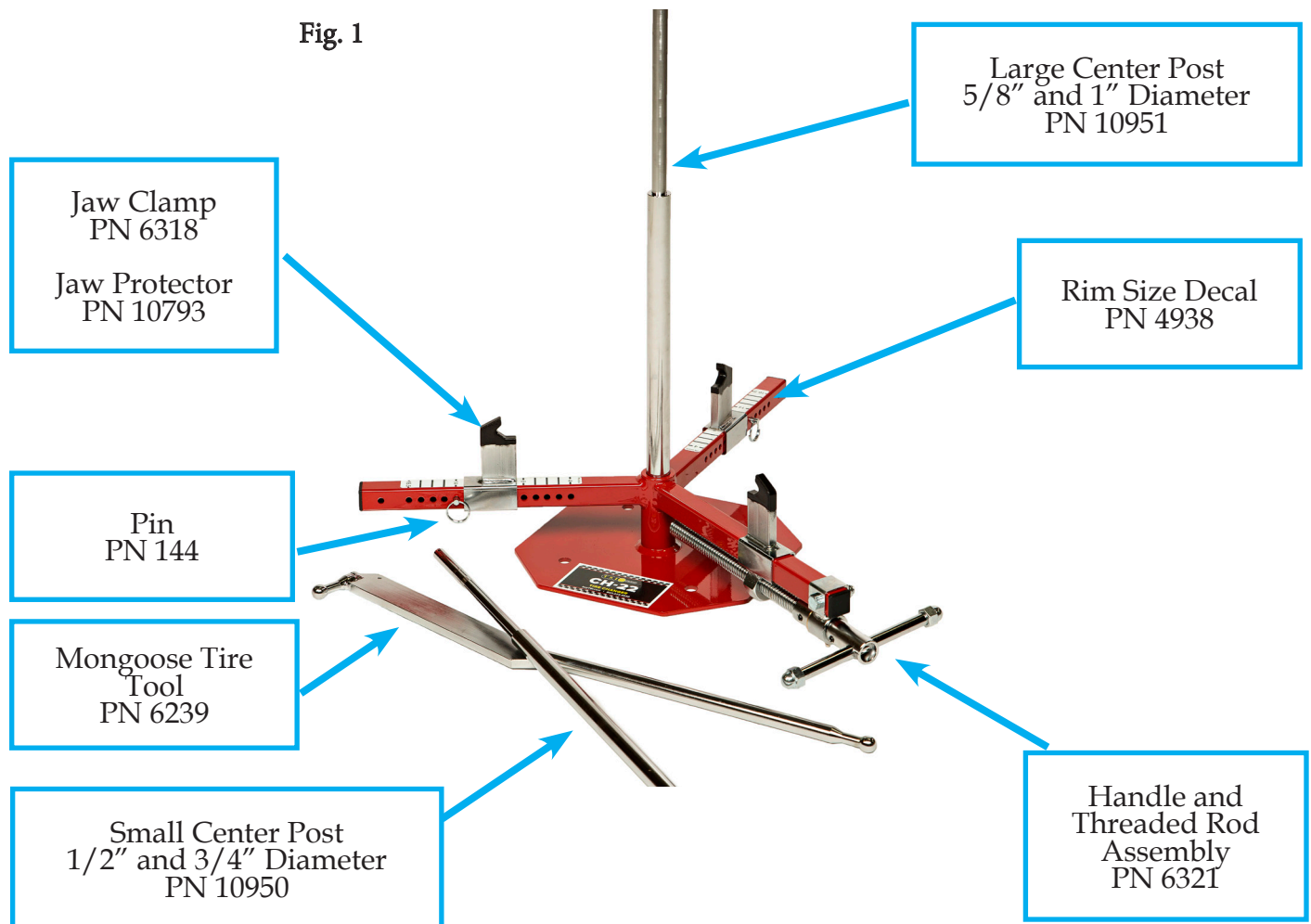
Notes and Safety Requirements

1. Remove contents from box and assemble as shown below.
2. Read and follow instructions for optimum use.
3. The CH-22 Small Tire Changer accommodates tires ranging from 4" to 16.5" in diameter. This is made possible by using different center posts and varying the position of the jaw clamps.
4. With the assortment of other available options, the Small Tire Changer is given a broader range of tire size capabilities along with increasing a users operational flexibility.
5. Use a suitable tire and tube lubricant for mounting and removal.

WARNING - WEAR SAFETY GLASSES

USE CAUTION! Machine can pinch fingers if not careful.

Primary Features and Replacement Parts



Set-Up Notes

1. The CH-22 Multi-Tire Changer must be mounted to a solid, level surface, in a clean working environment and with necessary clear access around the unit.
2. TSI has developed an optional Stand and Floor Plate which assemble into a convenient package to raise the CH-22 for better handling, provide a tire Bead Breaker and include a stable platform (see page 7).
 - A. The CH-23 Stand raises the CH-22 to a good working height, provides a very handy Bead Breaker and tool storage.
 - B. The Floor Plate (PN 6192) provides a non-slip surface for the technician.
 - C. Assemble the three items and then bolt them to the floor
3. Loosen the tire bead before using the CH-22 Multi-Tire Changer

Operating Instructions

Determine the tire size being serviced and set the jaw clamps (see Fig. 2) accordingly.

Put the pins in matching holes on the two arms with the free-moving jaw clamps. Slide the jaw clamps against the pins.

Fig. 2

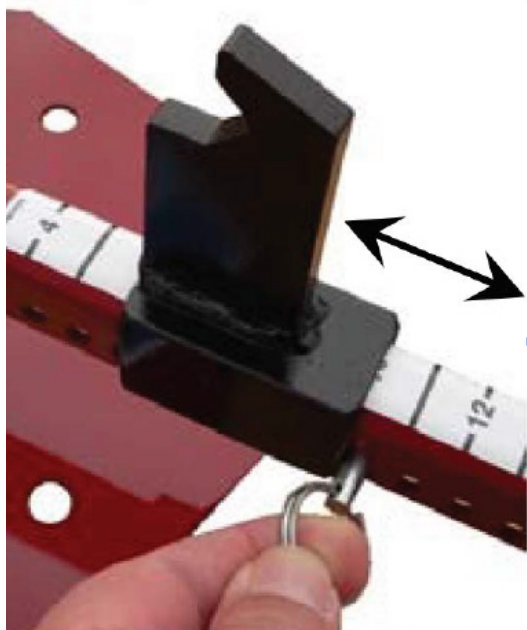
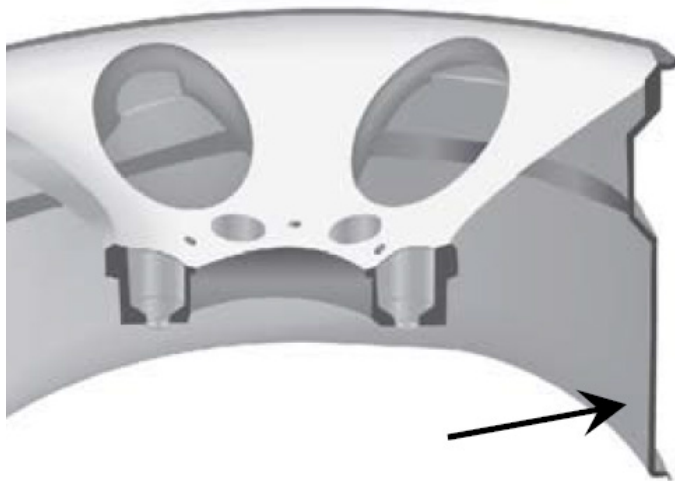


Fig. 3



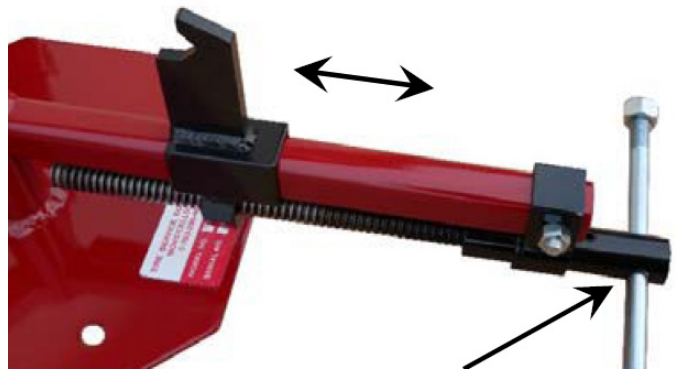
For best results, have the longer area of the rim facing down for the jaw clamps. (See Fig. 3)

Most the time the valve stem will be up and accessible. If not, mount the tire and later flip it over to connect an air hose to the valve stem for adding air.

Operating Instructions

Adjust the moveable jaw clamp using the threaded rod assembly (see Fig. 4) so the tire flange clears each of the jaws. Ideally the rim should be centered over the center hole on the Tire Changer.

Fig. 4



Before tightening the rim, determine the largest center post to fit in the wheel hole (see Fig. 5).

Each post has two sizes.

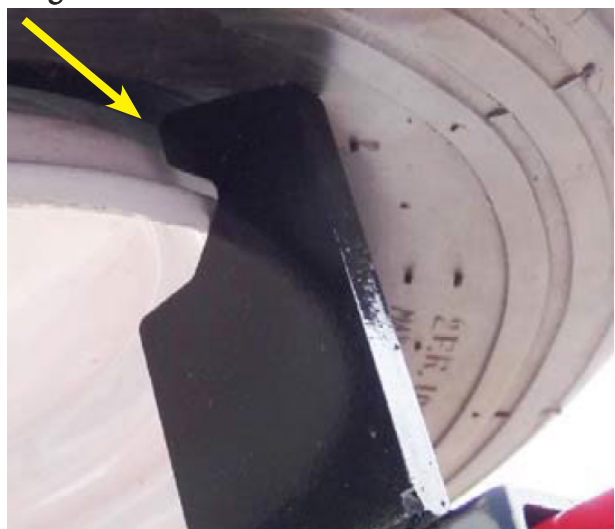
Fig. 5



Lubricate the tire and entire rim flange area around the tire before mounting or dismounting the tire (see yellow arrow in Fig. 5). Be sure to use lubricant intended for tire and rim.

Make sure to secure the edge of the rim and tighten the adjusting clamp to secure the wheel.

Fig. 6



Operating Instructions

Make sure the tire bead is in the “drop center” of the rim for this process. Press and hold with one hand while prying the Mongoose Tire Tool around the center post.

Demount deflated tire using the “rod end” of the Mongoose Tire Tool (see Fig. 7). The ball-end is pushed under the top bead and rested on the rim as illustrated. While holding the Mongoose Tool against the center post with one hand, and lifting up on the tire with the other, rotate the tool full circle. Demount the bottom bead the same way.

Vary the angle of the Mongoose Tire Tool against the center post can achieve better results for each user based on the different rim or tire sizes and the shapes of each.

Mounting the tire uses the "flat-end" of the Mongoose Tire Tool (see Fig. 8). While applying pressure to the low side of the tire (always facing the operator) place the ball-end between rim and bead. With the flat side against the center post rotate the tool full circle for both bottom and top beads.

Remember to use lubrication on the rim and tire bead.

Optional Demount Tool (PN 12489)

To protect chrome or aluminum rims from tool scrapes use this handy plastic accessory with the regular size Mongoose Tire Tool or the the Mini Mongoose Tire Tool.

Hold the Demount tab on the Mongoose Tire Tool. Push down and into the tire flange/bead area (see Fig. 9).

Fig. 7



Fig. 8



Fig. 8

Fig. 9



Fig. 9

Operating Instructions

Insert the Demount tab into the rim flange area (see Fig. 10). With your other hand guide the tire beads into the “drop center” of the rim opposite the side where you've placed the Mongoose Tire Tool and demount tab.

USE LUBRICANT AND BE CAREFUL TO
AVOID PINCHING FINGERS

Pry up on the Mongoose Tire Tool and demount tab in an arced motion so they rest on the rim as shown in Fig. 11. With the tool against the center post rotate them in a circular motion around the post until the tire is free from the rim.

Do this for both tire beads until the tire is completely demounted.

Optional Mount Tool (PN 12488)

Fig. 12 shows optional PN 12488 Mount tab with the Mongoose Tire Tool. Place the tire over the rim and plunge the two tools over the edge of the rim (see Fig. 13). Use the Mongoose Tire Tool to pry against the center post in a circular motion to mount the tire.

Repeat for both sides of the tire. Upon mounting the tire wipe off the lubricant and clean the tools and tire.

Loosen the Handle and Threaded Rod Assembly to remove the tire.

Fig. 10



Fig. 11



Fig. 12



Fig. 13



CH-22 Tire Changer and Options

Small Tire Changer
CH-22



CH-22 shown
mounted to
OPTIONAL Stand
and OPTIONAL
Floor Plate
(sold separately)

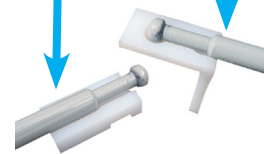


Optional Items

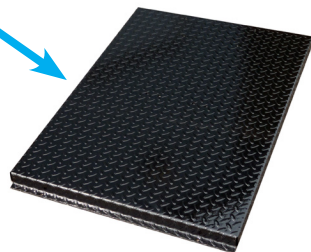
Optional Stand
with bead breaker
PN CH-23



Mongoose Tire Tool
PN 12489 and 12488



Optional Floor
Plate
PN 6192



Mini Mongoose
Tire Tool
PN CH-4M





TIRE SERVICE INTERNATIONAL

CH-23 Stand for CH-22 description

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General Description

The CH-23 Stand w/ Bead Breaker is primarily used in conjunction with mounting the CH-22 Small Tire Changer (sold separately) on it. As a Bead Breaker it's fully adjustable to accept many ranges of tire sizes and using it is quick, easy and effortless.

Safety Requirements

1. READ THIS MANUAL BEFORE OPERATING
2. SAFETY GLASSES ARE REQUIRED
3. Do not wear loose clothing.
4. Use with caution to avoid possible pinch points while operating
5. Before each use visually inspect the for loose bolts, and damaged or improperly assembled accessory equipment.
6. Use in a clean area to avoid slipping and have enough room to operate safely.

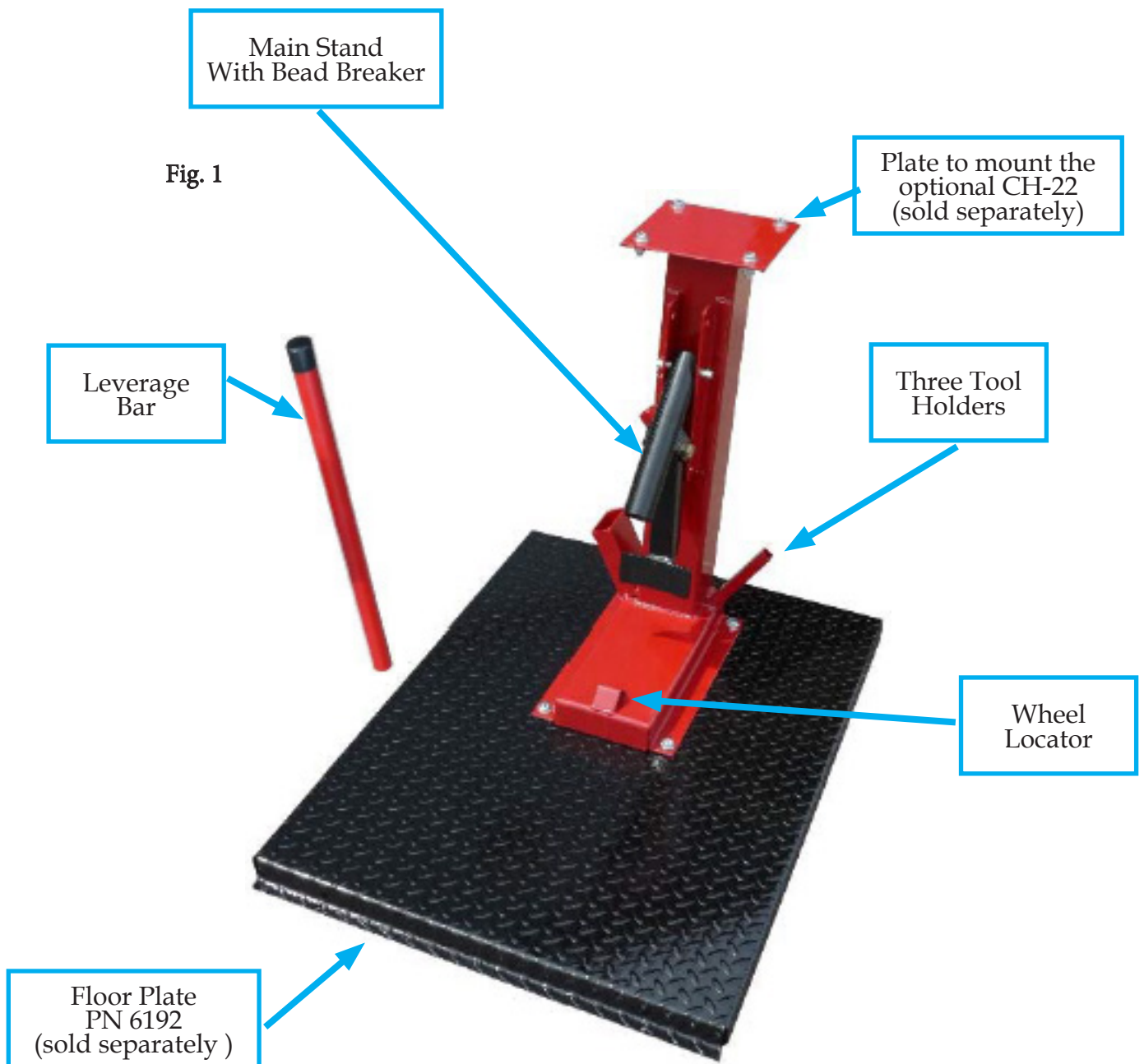
Installation Requirements

No power or air requirements, but unit should be bolted to a solid, clean, level surface. TSI has developed a Floor Stand (sold separately) for this purpose.

Set-Up Instruction

- Remove machine from packaging materials.
- Prepare a clean, level surface with adequate room to maneuver tires around the unit.
- Fasten the CH-23 Stand to a solid surface. Use 3/8" hardware to bolt to a cement floor. (If using the optional Floor Plate, secure it firmly to floor using 3/8" hardware and bolt the units together.)
- Insert the leverage bar, if necessary adjust shoe height for the tire size.

Primary Parts



Shown mounted to a very durable Floor Plate (an optional accessory) that bolts to the floor. The CH-23 is 12" wide x 22.5" long x 26.5" high. Shipping weight is 46 pounds.

Operational Instructions

Use

Deflate the tire.

Place the inside edge of tire on wheel locator.

Position bead breaking shoe in bead area and adjust the pivoting tube to an appropriate height with pin (see A). It should be situated above the tire to apply a reasonable amount of pressure with the leverage bar in order for the shoe to displace the bead from the rim (see B).

It may be necessary to rotate the tire around the Wheel Locator (see C) and repeat operation until the entire bead is loose from the rim.

Flip tire over and repeat.

Adjust

For wider tires simply adjust pin (see A) and proceed. There are four heights to choices.

Make sure the area around shoe is free from hands or fingers before prying down on leverage bar.

Store the leverage bar on tool holder when not in use.

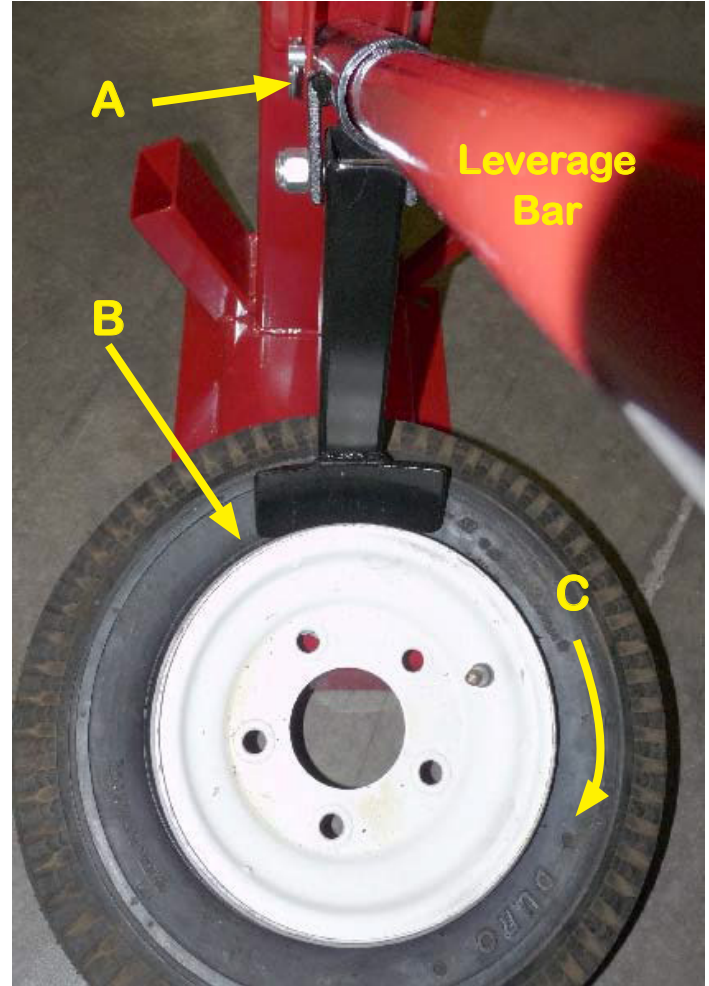
Maintenance

If pivot tube becomes loose tighten the bolt holding it in place.

Lightly lubricate with oil or grease.

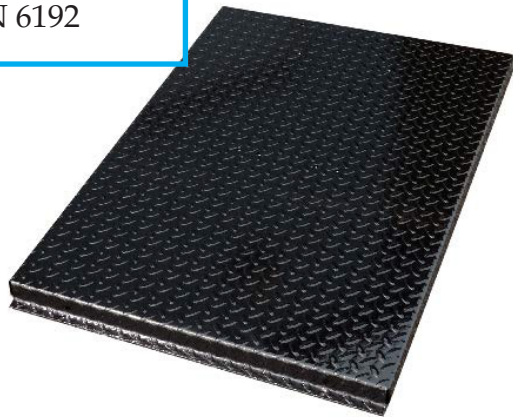
Make sure the CH-23 remains bolted down firmly while in use.

Fig. 2



Options and Accessories

Optional Floor Plate
PN 6192



The optional CH-22 comes complete with the fully adjustable rim clamps and 2 center posts to accommodate open hub and bearing wheels. It is easily mounted on the top of the CH-23 Stand.



The complete package is shown below which includes the CH-22 Small Tire Changer, the CH-23 Stand, and the 6192 Floor Plate. All are sold separately. This Manual Tire Changing Station makes the tire changing job easy, fast and economical. No other multi tire changer works as well as the CH-22 ... we GUARANTEE it.



Notes

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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