

# Amermac 501A Electronic Strobe Balancer

#### buyTSI.com - 800.223.4540





#### READ INSTRUCTIONS THOROUGHLY 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

Contact us for any assistance

800.223.4540

Revised: June 2024

#### **General Description**

When balancing a tire and wheel assembly on the vehicle, it also includes the rotor (or drum) and hub assembly to ensure a more accurate balance. It is more precise than balancing the tire and wheel off the vehicle. The Amermac 501A Electronic Strobe Balancer is the companion component to the 525 Wheel Spinner. The 501A delivers fast precise balancing on the vehicle. No special wheel attachments are required. The flashing strobe indicator pin points exact placement of wheel weights.

The 501A consists of a Pick-up unit that senses the vibration from behind the wheel and the Strobe unit that uses the input from the sensor to flash the wheel on the outside, highlighting a mark on the tire as it spins. With this information, the user is directed where to add weights to the wheel, both the correct side and the correct location.

#### Safety Requirements

To maintain machine and user safety, the responsibility of the owner is to read and follow these instructions:

- 1. Follow all installation instructions and decals
- 2. Make sure installation conforms to all applicable Local, State, and Federal Codes, Rules, and Regulations; such as State and Federal OSHA Regulations and Electrical Codes
- **3.** Make certain all operators are properly trained, know how to safely and correctly operate the unit, and are properly supervised
- 4. Allow unit operation only with all parts in place and operating safely
- **5.** Carefully inspect the unit on a regular basis
- **6.** Be sure cable is clear of spinning wheel.
- 7. Be sure to safely slow and stop wheel before handling
- **8.** Service and maintain the unit only with authorized or approved replacement parts
- **9.** Keep all instructions permanently with the unit and all decals/labels/notices on the unit clean and visible
- **10.** Do not override safety features

#### **Set-Up Instruction**

- **1.** Carefully check for shipping damage and promptly notify the freight company, if any is found.
- **2.** Remove machine from packaging materials.
- **3.** Prepare a clean, level surface with adequate room to maneuver.
- **4.** If Model 525 Tire Spinner was purchased with the strobe unit, make sure the spinner is set-up and ready.



#### Wheel Preparation

In order to achieve the best possible results while balancing a wheel, please follow the suggestions below.

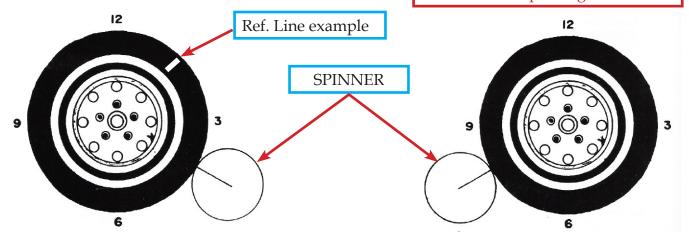
- 1. The vehicle must be lifted correctly. When lifting front straight axles lift only one wheel at a time by the frame or frame pads. When lifting Twin "I" Beams place jack under radius arm behind wheel to be balanced, when lifting independent front suspensions, lift from the center of the cross member, with both wheels suspended.
- **2.** Check tire tread for extreme wear and remove all debris from tire.
- **3.** Fill tire to recommended air pressure.
- **4.** Wheel and axle bearings should not be loose. Loose bearings should be adjusted or replaced.
- **5.** Check brakes for excessive drag and repair or replace.
- **6.** Suspension should be checked for loose parts and adjusted if necessary.

#### **Basic Balancing Operation**

- **1.** Lift the vehicle by the frame so the tire is raised about 4" above the surface and is free to spin. Be sure to safely stabilize the vehicle.
- **2.** Install the pick-up unit under the ball-joint or axle as close to wheel as possible in a vertical position with all three feet solidly on the floor..
- 3. The pick-up unit should be compressed approximately 1/2" inch (approximately halfway between the two scribed marks). This insures the sensor registers the vibration.
- **4.** Run the cord behind the tire toward the center of vehicle and secure away from wheel.
- **5.** Remove all existing wheel weights for first spin.
- **6.** Using chalk, draw a reference line anywhere on tire



CAUTION: Pick-up cord should be in a safe position avoiding contact with the spinning wheel.



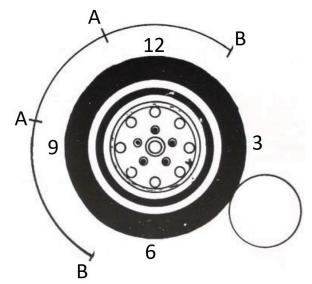
#### **Basic Balancing Operation continued**

- **7.** Plug light cabinet into 110 volt power supply.
- **8.** Switch to Static on the control panel.
- **9.** Spin the wheel to desired speed (recommend using the 525 Spinner) and then disengage spinner. This speed must be sufficient to make the wheel vibrate, but do not exceed 35 mph for safety reasons. Make sure vehicle is stable and secure before spinning.
- **10.** Remember the location of the reference mark on tire during flashes. This is the Static reference mark and one of two needed to determine weight location.
- **11.** Switch to Dynamic before spinning is slowed and notice where the second reference point is located. The weight side of the wheel is determined with these two points.
  - **A.** If there is a 1 hour difference between the two points, ALL weight goes on the <u>inside</u> of the wheel. Using the clock numbers as reference for the differences.
  - **B.** If a 2 hour difference, MOST weight goes on the <u>inside</u> of the wheel.
  - C. If beyond 2 hours (or no dynamic flash) ALL the weight goes <u>outside</u> of the wheel.
- **12.** Switch back to Static on the panel.
- **13.** Slow and stop the wheel safely and reposition the reference mark to the same location as the static reference location as noted previously when the switch was set to Static.
- **14.** Use the Dynamic suggestions mentioned in step 11 to determine which side of the wheel to add the weight (inside, outside or both).
- **15.** Add the weight at the spinner contact position (at 8:00 or 4:00). The amount of weight is determined with practice and is based on the vibration, wheel size, and location.
- **16.** Repeat the Static process until vibration is eliminated. The Dynamic process is only needed the first spin of the wheel.



#### **Additional Notes**

- 1. When balanced, the strobe will not flash. Placing a hand on the vehicle will confirm this.
- 2. In subsequence spins, the weights should be adjusted toward the spinner contact point. For example, the spinner contact is at 4:00, the first spin indicated the weight added beyond 1:00 (more than 3:00 hour difference) after the wheel is rotated showing the new static point. Since the second spin has the weight being added at the spinner contact, then the weight should be removed and a different size weight added midway between the two. With experience, this will become easier.
- **3.** If the second static spin shows the reference point to be directly opposite the spinner contact (between A-A), the weight is too heavy. Reduce the weight size and spin again.



### Notes

(Page intentional left blank)



#### Notes

## MODEL 525 LOW PROFILE SPINNER LOW PROFILE DESIGN



#### **SHIPPING SPECIFICATIONS:**

48" L x 38" W x 27" H 271 lbs shipping weight

#### **PRODUCT FEATURES**

The **525** Low Profile Spinner allows for easy access under lower body style cars and trucks. Completely portable, this heavy duty spinner will handle passenger cars and up to heavy duty truck tires, including rear wheels and drive duals.

- Power cord hangers for convenient storage of 20 foot power cord.
- Handle bolts loosen to fold handle bars down for compact storage.
- Brake pad swivels to firmly contact tire when braking.



#### 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.

No part of this manual may be reproduced without specific approval from Tire Service International, LLC.

Copyright © 2024 Tire Service International, LLC

