



MODEL BTT Adjustable Height Tire Tester

Installation, Operation
& Repair Parts
Information



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SAFETY INSTRUCTIONS

This equipment operates using high voltage. Failure to read and follow the instructions and warnings in this manual can result in serious injury or death. Before performing any service to the high voltage enclosure discharge

- NEVER open electrical enclosures while unit has power.
- NEVER allow unauthorized personnel to operate this product.
- NEVER use this product for anything other than its intended use.
- THOROUGHLY train new employees in the proper use and care of this product.
- PROHIBIT unauthorized personnel from being in shop area while this product is in use.

DEFINITIONS

- **CAUTION:** Indicates a potential hazard, which, may result in damage to property or minor personal injury.
- **HAZARD:** A source of potential injury to a person.
- **MAINTENANCE:** Those actions that preserve the correct and proper conditions under which the machine shall be used. This may include adjustment, replacement of wear items, lubrication and cleaning, but not modifications or repair of damage.
- **MAY:** This word is understood to be permissive.
- **MUST:** This word is understood to be mandatory.
- **OPERATION:** The correct and proper use of the machine as described in this manual.
- **SAFETY ALERT SYMBOL:** A symbol that indicates a potential personal safety hazard. It is composed of an equilateral triangle surrounding an exclamation point or lightning bolt.
- **SHALL:** This word is understood to be mandatory.
- **SHOULD:** This word is understood to be advisory.
- **WARNING:** Indicates a potentially hazardous situation, which if not avoided, may result in death or serious personal injury.

CAUTION

- ◆ Before using this product, read and fully understand the operating instructions and all decals on the product. This is necessary to prevent injury to the operator and damage to the product.
- ◆ This product is intended to be used to spread and rotate tire casings for inspection and/or repair only.
- ◆ Keep fingers and hands clear of all hooks and mechanisms during operation.
- ◆ Do not use this product if it is visibly worn, distorted or damaged.
- ◆ Always wear appropriate eye protection.

WARNING

- ◆ NEVER open the electrical enclosures when the unit is plugged in or during operation.
- ◆ Discharge all components inside electrical enclosures before servicing by touching one end of a 16 gauge wire to each component and the other end to a grounded object.
- ◆ Keep feet clear of the tire lift when raising and lowering tire.
- ◆ All personnel must be clear of the spread arms during operation.

SPECIFICATIONS

Max Compressed Air Supply:	150 psi (10.3 bar)
Min Compressed Air Supply:	110 psi (7.6 bar)
Electrical Requirements:	110/120V AC, 50/60 Hz
Dimensional data (max requirements)	55.5" W x 57" H x 82" L (141 x 145 x 208 cm)*
Weight:	625 lbs (284 kgs)

*Maximum dimensions with ramp, probe and operator console fully extended.

INSTALLATION

- 1) Unpack and remove unit from shipping pallet.
- 2) Position unit on a solid level floor leaving adequate clearance for operator and enclosure doors.
- 3) Anchor unit to floor using appropriate anchor bolts (not included) through three bolt holes on base of unit. Unit must be bolted to floor to prevent possible tipping hazard when in use.
- 4) Install a 1/4" NPT quick coupler nipple (not included) into air inlet port of regulator located at on side of high voltage cabinet.
- 5) Connect shop air line to quick coupler nipple.

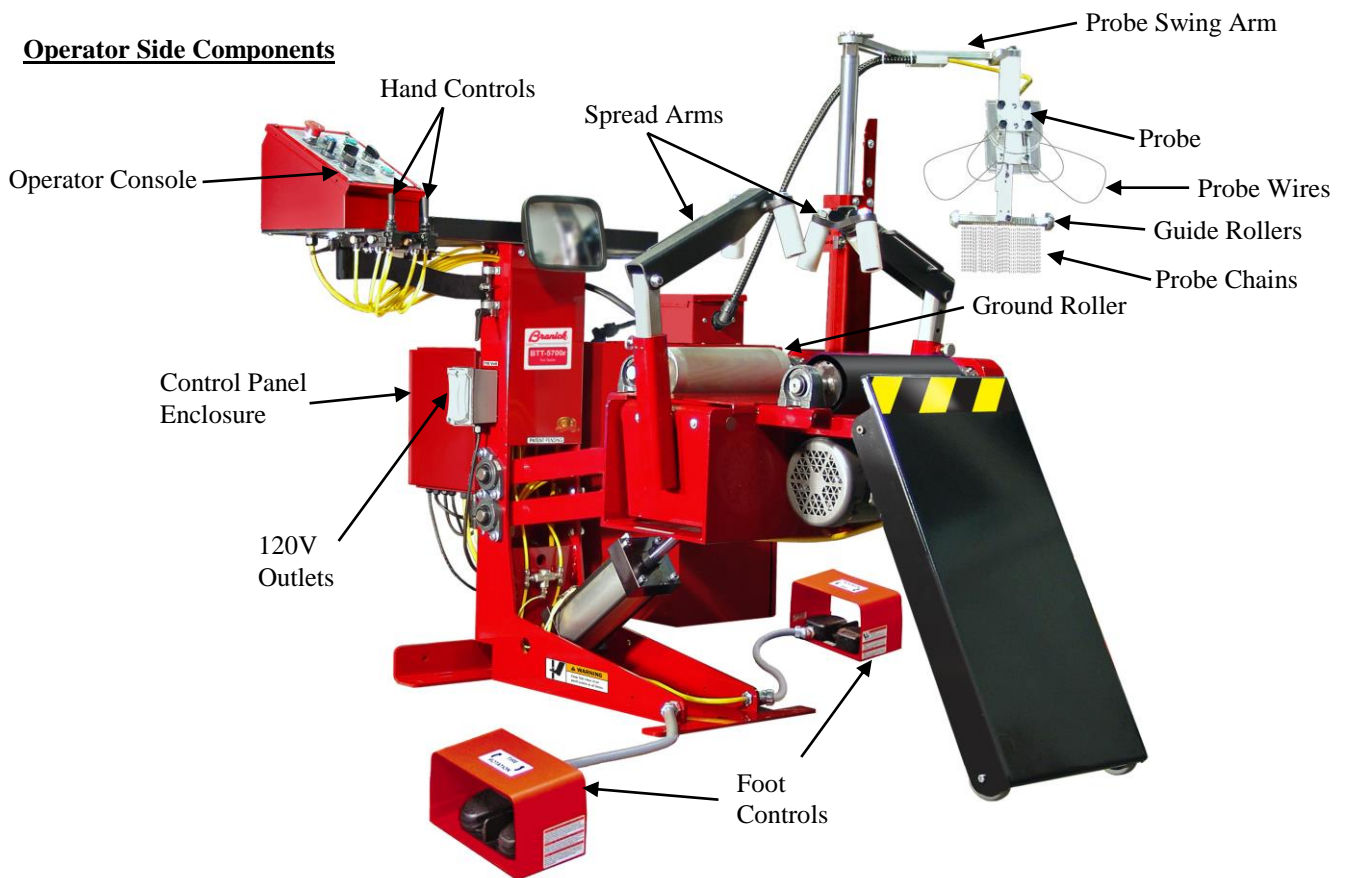
NOTE: Air pressure must be a minimum of 110 psi and must not exceed 150 psi.

- 6) Connect unit to any convenient grounded 110/120V power source.

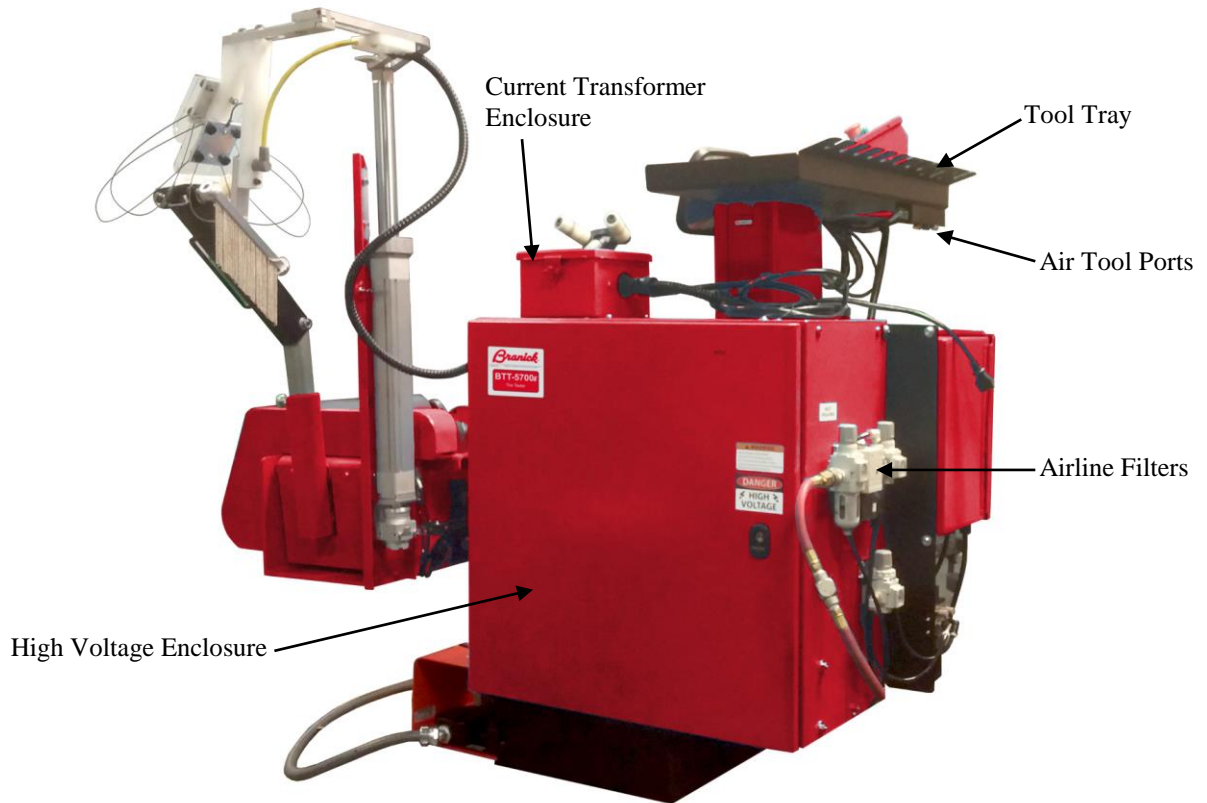
COMPONENT IDENTIFICATION



Operator Side Components



Non-Operator Side Components



OPERATING INSTRUCTIONS

It is recommended that power be turned off by depressing the E-STOP button if unit will not be used for extended periods of time such as overnight or on weekends.

Visual Inspection

NOTE: This unit is equipped with a large red E-STOP (emergency stop) button on operator console. To stop, depress button. To start, pull button up.

- 1) Pull E-STOP button up to power unit on.
- 2) Check probe to ensure it is in UP and OUT positions.
- 3) Lower inspection platform completely using hand control valve in front of operator console.
- 4) Pull bead hooks up and away from center of the machine.
- 5) Roll tire up ramp and center it on rollers. Lower bead hooks inside tire making sure bead rollers are inside tire bead. Vertical position of spread arms is adjustable using quick pin release on side of each arm.
- 6) Steady tire while raising inspection platform to a comfortable working height.
- 7) Use SPREAD control valve in front of operator console to spread tire as required.

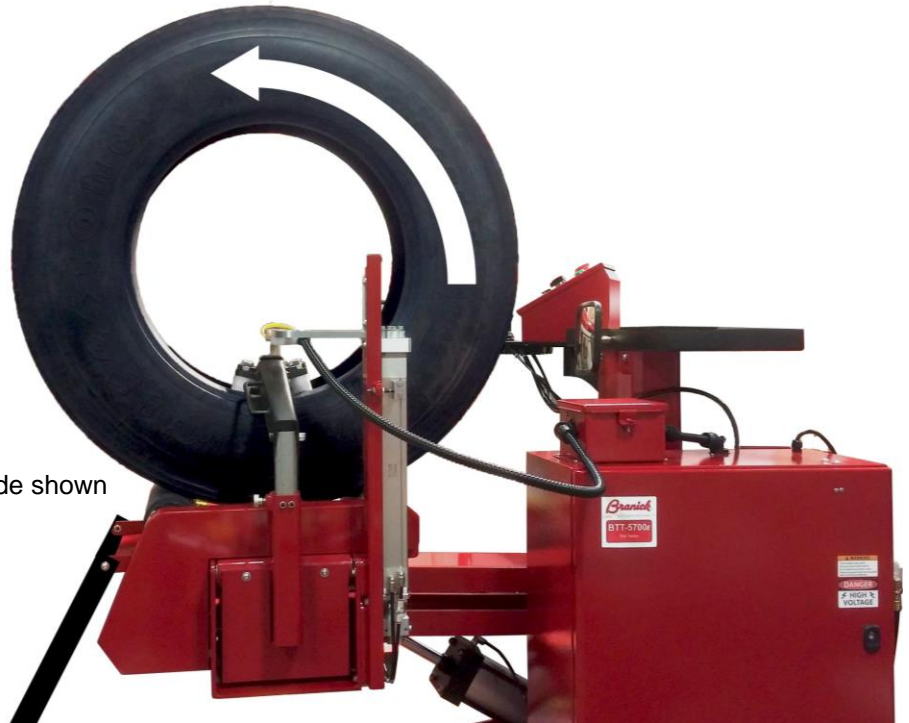
NOTE: If tire is lifted off rollers when spread, release spread and move spread hooks to a lower position.

- 8) Rotate tire using foot controls as needed until inspection is complete. Rotation speed can be adjusted using SPEED dial on operator console.

Automated Inspection

NOTE: When performing an automated inspection, top of tire MUST rotate in FORWARD direction (clockwise when viewed from operator side, counter-clockwise from non-operator side).

Non-operator side shown



NOTE: This unit is equipped with a large red E-STOP button on operator console. To stop, depress button. To start, pull button up.

NOTE: DO NOT TOUCH PROBE, PROBE CHAINS OR SIDEWALL LOOPS.

- 1) Follow steps 1 – 7 in Visual Inspection.
- 2) Set ROTATION switch to FORWARD.
- 3) Turn PROBE IN / OUT switch to IN position then move PROBE UP/DOWN switch to DOWN position to lower probe inside tire.
- 4) Relax spread on tire so probe guide rollers roll across inner surface of tire with chains trailing behind and sidewall loops brushing tire sidewall. If needed, adjust spread for correct contact.
- 5) Press START / STOP button to begin testing.
- 6) There will be a spark at location of a flaw which is visible either inside tire or outside on ground roller (visible in mirror). Tire will stop rotation when a flaw is detected and FLAW light on operator console will be lit.
- 7) If needed, hold MANUAL button and use ROTATION switch to pass back and forth over flaw to locate. MANUAL button must be depressed and held for ROTATION switch to function.
- 8) After flaw has been marked, push START/STOP button to continue test.
- 9) If tire rotation stops and TEST OVER light is on, test has timed out. This does not indicate test is completed, only that it timed out. If inspection is not complete, press START/STOP button again to continue testing.
- 10) When test is complete, move probe UP then OUT of tire.
- 11) Lower platform completely and move spread arms out of tire.
- 12) Roll tire off and raise platform to retract ramp.

CHANGING PROBE HEADS

NOTE: DO NOT TOUCH PROBE, PROBE CHAINS OR PROBE WIRES WHILE UNIT HAS POWER.

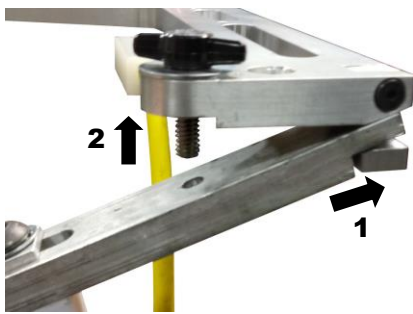


Figure 1



Figure 2

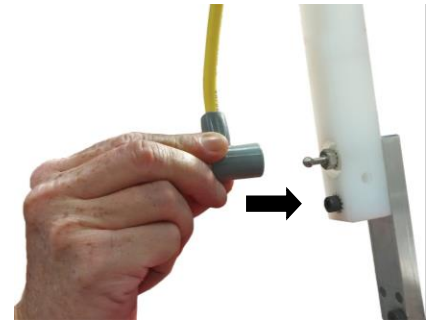


Figure 3

- 1) Ensure probe is in UP and OUT positions.
- 2) Depress E STOP button or unplug unit.
- 3) To remove attached probe, support probe and turn thumbscrew on top of probe swing arm counterclockwise until probe is free. Swivel front of probe down and remove.
- 4) To attach a new probe, align slot in rear of probe with alignment T at rear of swing arm and slide probe back until thumbscrew and hole align. Swivel front of probe up. (Figure 1)
- 5) Turn thumbscrew clockwise until tight. (Figure 2)
- 6) Press power line boot firmly onto power input on probe. Boot should fit snugly with little to no movement, very similar to connecting a spark plug boot. (Figure 3)

ADDITIONAL FEATURES

- 1) Four air tool ports are located below tool tray. Attach a 1/4" NPT quick coupler to each port and attach air tools as needed.
- 2) Two electrical outlets are located on control column. Unit must be plugged in and E-STOP pulled up to supply power to these outlets.

TROUBLESHOOTING

If unit misses flaws or does not operate, please check these items before calling for service so problem can be more quickly resolved.

- 1) Check circuit breakers to see if they are tripped
- 2) Check 12 V power supply
 - a. FLAW and TEST OVER bulbs and 12 V power supply can be checked by holding down each button. If they light, bulbs and power supply are ok.
 - b. Check two circuit breakers in Control Enclosure.
- 3) Check another tire to see if problem only occurs with one tire.
- 4) Is there an arc to a tire penetration?
 - a. Is the penetration part or all the way through tire?
- 5) If problem is not resolved, call for service help
 - a. When calling have serial number ready.

CAUTION

Before performing any service to the machine:

1. Disconnect air line from the unit and unplug the power cord.
2. Discharge all components in the high voltage cabinet since they may retain a charge even if the unit is unplugged.

DAILY

- Check FLAW and TEST OVER lights and replace bulbs if needed
- Check probe
 - If wires are deformed they should be replaced
 - If wires are dirty they can be wiped clean with a dry cloth
 - Replace missing or broken chains
 - Check for broken or cracked Plexiglas and replace if found
 - Ensure probe is centered vertically in the tire and over the metal roller

MONTHLY

- Inspect unit for air leaks and wear or damage on pins and rollers.
- Lubricate all moving parts (bolts, hinges, rollers, etc.) with a lubricating oil.
- Check rollers to ensure they move freely and are clean
 - Use engine de-greaser to clean rollers if needed
- Check airline filters and drain / clean as needed.
- Check all cables for wear or breakage

EVERY 6 MONTHS

- Check Plexiglas resistor mountings and replace any that have carbon marks
 - Carbon marks may look as if Plexiglas is melted or burned
- Check gap on carbon balls and adjust as needed
 - Use care since carbon balls are soft and will strip easily
 - Should be 11/16th inch
- Check carbon balls for flat spots
 - Replace both carbon balls if flat spot on either reaches 1/2" diameter

YEARLY

- Grease all bearings using grease zerks
- Replace high voltage wire regardless of damage or wear
- Clean high voltage cabinet (do not use solvent)
 - Wipe all components with a clean dry cloth
 - Clean high voltage relay contacts lightly with sandpaper

NOTES

NOTES

COMMERCIAL WARRANTY

This product is warranted by BRANICK INDUSTRIES, INC. to the original user-owner against defective materials or workmanship for a period of one year from the date of shipment. During the warranty period, at the discretion of Branick management, if the product is found to be defective, it will be repaired or replaced without charge. For service, contact Branick (800-437-4394) to obtain an RMA. Any product shipped to Branick must have an RMA and proof of original shipment date. The repaired or replacement product will be returned with transportation charges prepaid by Branick.

This warranty does not cover defects in the product caused by ordinary wear and tear, abuse, misuse, overloading, accident (including shipping damage), improper maintenance, alteration, or any other cause not the result of defective materials or workmanship.

REPAIR OR REPLACEMENT IS THE EXCLUSIVE REMEDY FOR DEFECTIVE PRODUCT UNDER THIS WARRANTY. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OF THIS PRODUCT. BRANICK INDUSTRIES, INC. SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES.

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Service parts and regular repair service are available from authorized distributors of Branick products, or from:

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