Brand: Ranger™
Model: RB24T
Description: Super-Duty Truck Wheel Balancer with Drive-Check™ Technology

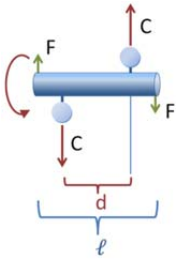
The Ranger RB24T truck wheel balancer is a heavyweight wheel balancer suited especially for high-volume commercial tire dealers and truck fleets. It handles tires up to 52 inches in diameter and 20 inches wide and rim sizes up to 30 inches in diameter. Although best suited for bus, truck and OTR wheels, it's capable and fully equipped to accommodate automobiles and light truck wheels as well. Featuring Ranger's proprietary Drive-Check™ technology, it's a powerful, vibration detection balancing solution that simulates road and driving speed conditions and measures computer-generated imbalance of the tire and wheel assembly automatically. It then recommends the most cost effective weight optimization correction as needed which minimizes weight usage and maximizes productivity. An integrated wheel lift easily lifts the heaviest wheel assemblies for effortless mounting on the balancer.

A full-menu of time saving features include dynamic, static, and performance alloy settings allowing you to balance large and small wheel configurations with minimal effort and speed. Brightly displayed LED indicators mark the exact amount and location for wheel weight placement in mere seconds. Like all Ranger wheel balancers, the RB24T is commercial-grade for perfectly balanced wheels day after day and around the clock.

FEATURES

Drive-Check™ Technology

Pproprietary Drive-Check technology dramatically improves rotational measuring typically used to diagnose and repair ride disturbance complications. The highly precise RB24T performs a computer generated driving simulation then checks and measures the tire/wheel assembly for imbalance and possible run out of the rim and tire. With the RB24T, virtually all possible complaints due to rotational imbalance are eliminated before the wheel is mounted on the vehicle.



Automatic Weight Optimization

The RB24T truck wheel balancer automatically calculates the minimum amount of weight needed to achieve an optimal balance for the tire and wheel configuration so you use less weight which adds up to real savings and increases your bottom line.

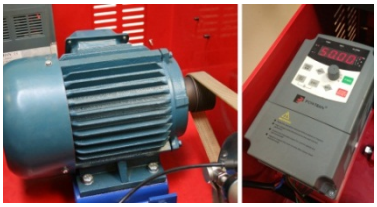
User Friendly Operation

A touch-pad display panel simplifies speed entry of wheel data and helps guide technicians through balancing procedures. Operator function keys are labeled with simple, easy-to-read icons helping operators identify and command all balancing functions. Bright LED weight placement indicators show weight positions as the wheel is gently rolled to exact top-dead-center. A pneumatic braking system automatically engages and secures the wheel firmly in place as soon as the weight placement indicators are lighted and positioned at top-dead-center.

Highly Precise

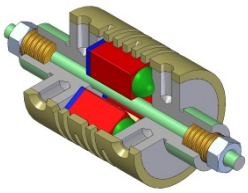
The highly precise and accurate RB24T features 64-bit architecture and single-chip technology for unprecedented speed and accuracy. Single-chip 64-bit architecture provides improved stability and accuracy along with greater application speed and data processing while using less hardware. By reducing hardware, service and maintenance costs are reduced and equipment life cycle is increased. An extremely fast dedicated hyper transport protocol allows data to communicate with the micro-processor at much faster speeds resulting in lower power consumption, reduced heat and increased stability and accuracy.

Three Phase Drive Motor



Although versatile, single phase motors have their limitations, especially in heavy start-up conditions. Single phase motors require special starting arrangements such as capacitors, additional windings and switches in order to get them turning under load. The RB24T features a robust 380V three-phase drive motor to overcome these limitations and get heavy wheels spinning quickly. A built-in digital solid-state phase converter produces 3-phase output voltage regardless of single or three phase power supply.

Multi-Directional Quartz Piezoelectric Force Sensors



The RB24T uses highly precise dual-component piezoelectric quartz load sensors combined with a single digital rotation encoder that measure both longitudinal, transversal, and shear effects for multi-directional force unbalance detection. The piezoelectric force sensors used on the RB24T are very sensitive and offer long-term stability and freedom from fatigue for a service life that is virtually unlimited. The high rigidity quartz crystal sensors result in very high frequency detection in all three directions of measurement.

Fully Equipped Multi-Piece Wheel Mounting Adapter Kit – Everything is Included

Quick-Chuck Kit **-** Our quick-chuck kit reduces operator fatigue and decreases set-up times dramatically. Installation and accuracy is not affected by the weight of wheel because auto-centering hardened steel wheel-holding supports lift, hold and automatically center heavy wheels with ease. Perfectly balanced three-jaw chuck features a forged steel body and hardened wheel-supports and gear slides.

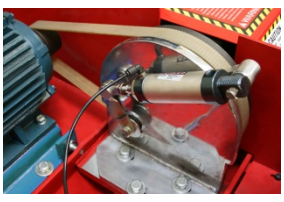
Adjustable Flange Plate and Stud Kit **-** A universal flange plate kit features multi-position interchangeable pins to provide quick setup and universal fitment. The kit adapts to varying lug bolt circles.

Standard Cone Kit **-** The RB24T tooling package includes a fully equipped six-piece cone kit for full coverage of most all wheel configurations from cars and light trucks to super-duty truck, bus and OTR. This well-equipped package includes five standard cones and one dual tapered cone; individual cone sizes; 2.00-2.75, 2.75-4.00, 4.00 – 5.75, 6.00 – 6.50, 6.75 – 8.00, 8.25 – 9.00, and 10, 75 – 11.50.

No More Heavy Lifting

An integrated wheel lift helps technicians mount wheels effortlessly on the balancer preventing potential injuries and reducing fatigue. The 500-pound capacity push-button controlled wheel lift quickly raises the wheel to exact heights and a bearing mounted slider positions them for easy mounting. One handed operation means the technician's free hand remains able to control the wheel assembly once it is lifted into the mounting position.

Superior Stopping Power



Heavy wheels need power assisted braking in order to safely reduce wheel spin. The faster the wheel starts and stops increases productivity and profits. The RB-24T features electro-magnetic pulse control combined with pneumatic braking to get heavy wheels stopping in mere seconds. The pneumatic braking system engages automatically as soon as the weight placement indicator is positioned at top-dead-center. Automatic air brakes hold wheels firmly in place during surface preparation and weight placement operations. Up-front controls on the display panel allow you to engage and disengage the pneumatic brake with a simple push of a button.

FEATURES:

- An ergonomic control board and easy-to-read LED display has vibrant visual cues and keypad to improve efficiency and proper balancing techniques for faster floor-to-floor times.
- Highly precise 64-bit architecture and single-chip technology.
- Perfectly balanced vibration- free counter weighted flywheel belt drive offers performance and dependability under all load conditions. Serpentine belt features a polyester-aramid fiber composite core to resist degradation of functional performance under extreme operating conditions.
- Dynamic, static and performance alloy settings are easily configured with the simple push of a button for a variety of wheel styles and designs.
- Auto-stop function features electro-magnetic pulse combined with pneumatic braking.
- Gram/ounce selection and millimeter/inch selection
- Dual function weight position indicators provides either top-dead-center or bottom-dead-center weight positions.
- Three-phase 380-volt drive-motor for efficient starting under heavy loads. Built-in digital solid-state phase converter provides the required 380-volt power regardless of single or three phase power supply.
- Manual or automatic start when hood is lowered.
- Self-calibration function.
- High-volume top weight tray and side shelf storage gives you room to inventory a wide variety of wheel weights and tools. Side cone storage pegs keeps accessories readily available.
- Low RPM balancing speed and rapid 7-10 second cycle time.
- An integrated wheel lift helps technicians mount wheels effortlessly on the balancer.
- Fully equipped multi-piece wheel mounting adapter kit – everything is included.
- Self-centering quick-chuck adapter dramatically reduces set-up times.
- Precision-machined, hardened-steel 40-mm shaft.
- Manual or automatic pneumatic brake hold wheels at precisely 12-o'clock for proper weight placement.
- Open-sided hood design allows for a broader coverage of tire shapes and sizes.

SPECIFICATIONS	
Power Supply Voltage	208-240V 50/60HZ 1Ph.
Drive Motor	1.5 HP / 380V 50/60HZ 3Ph.
Integrated Power Phase Converter	Standard
Working Temperature	-5C / 27F to 50C / 82F
Drive System	Ribbed Nylon Fiber-Reinforced Drive Belt
Cycle Time	7-10 seconds (Depending on Wheel)
Balancing Modes	1 Dynamic / 1 Static / 3 Alloy
Top Positioning Weight Locator	Standard
Inside & Outside Measuring	Standard
Millimeter / Inches Selection	Standard
Ounce / Gram Selection	Standard
Self-Calibration Function	Standard
Auto Start When Hood is Lowered	Standard
Wheel Spin Braking	Electronic Pulse / Pneumatic Brake
Wheel Holding Device	Standard / Pneumatic Brake
Quick-Chuck Kit	Standard
Adjustable Flange Plate and Stud Kit	Standard
Multi-Piece Mounting Cone Kit	Standard
Shaft Size	40 mm.
Centering Cones Included	5 Standard Cones / 1 Dual Tapered Cone
Wheel Calipers	Standard
Maximum Tire Diameter	50" / 1270 mm
Max Tire Weight	400 pounds (181 kg)
Max. Wheel Diameter	30" / 762 mm
Wheel Width Capacity	2" - 20" / 51 mm - 508 mm
Balancing Increments	0.25 or 0.01 ounce
Balancing Speed	220 RPM
Accuracy / Standard (Cars & Light Truck)	+- 1 Gram / .03 Oz.
Accuracy / Truck (Truck, Bus & OTR)	+- 10 Gram / .35 Oz.
Resolution (Round Off Mode)	+- 7 Gram / .25 Oz.
Dimensions	D-60" / W-60" / H-66"
Shipping Weight	825 pounds / 374 kg.