



RL8500

Precision Combination
Brake Lathe

Rotors

Drums

Flywheels

RapidCutSM
Technology



Provides a **FASTER**, more **ACCURATE** and **EASIER** resurfacing capability **THAN** any **OTHER** brake lathe in its class.

An infinitely variable speed controller means you're able to turn rotors and drums faster and get one-cut micro-finish performance every time you use it. The complete lathe package includes lathe, sturdy bench, and large tool storage backboards allowing you to hang all adapters within easy reach.

Cutting Edge Design Features

- Rather than mechanically-driven transmission and gear boxes, the RL8500 uses precision electric DC servo motors designed to meet the demanding requirements of industrial motion control.
- Our Quick-Change Adapter Plus System eliminates the need for conventional bell clamps and cones and features built-in springs so you don't lose them. Works on foreign and domestic car and truck hubless drums and rotors 2-5/32" to 4" center-hole and composite rotors 4" to 6 1/4" center-hole.
- The RL8500 is equipped with features that help increase your service capability, like precision twin cutter tools and a quick drum-to-rotor changeover.
- Infinitely variable spindle and cross feed speed settings allow for quick rough and precision finish cuts.
- Simple ergonomic controls are designed for minimal operator movement.
- The RL8500 maintains accuracy year after year thanks to rugged construction like a forged, hardened and precision ground spindle that resists grooving and eliminates the need for boots.
- Massive tapered spindle bearings offer superior weight support during rotation.
- Our exclusive "splash-lube" oil-feed system supplies a constant flow of oil to the bearings making sure they provide years of trouble-free service.
- Serpentine belts provide a faster, quieter operation and reduce chatter and vibration.
- An independent cross-feed motor eliminates the need for plastic or bronze shear-gears which are expensive and timely to replace.
- A convenient top storage tray means your popular adapters and tools are kept within easy reach.
- Separate motors on the drum and rotor feed help maximize the main motor's efficiency.
- Our deluxe standard adapter package includes a Quick-Change hubless adapter system that makes mounting rotors and drums quick and easy. A variety of adapters lets you machine all standard and composite rotors for foreign and domestic cars and light trucks.
- A 450-pound cast iron body and a solid work bench eliminates transient vibrations ensuring a smooth uninterrupted surface finish with each pass.
- Easily change arbor speeds in seconds. Choose 150 or 250 RPM depending on the job. Speed up for smaller import work or slow down for large truck work.
- Positive rake cutter tip angle provides for a one pass finish virtually every time, allowing you to complete your work faster than multi-pass lathes.
- Double-ended boring bar adapts to most drums, large or small without the need for specialty cutting tools or adapters.
- Dual voltage motor (110V-220V, 50/60HZ, 1-phase) accommodates global voltages.
- A forged, hardened and precision ground spindle eliminates the need for rubber boots that can be costly to replace.



DESIGNED with the **FEATURES** and performance **YOU NEED.**

The legendary control of our RL8500 makes using it easy to learn and simple to operate making it the soundest investment you've ever considered, and providing more utility, flexibility and productivity than you've ever imagined. The RL8500 is flexible enough for both high-torque, heavy-duty cutting as well as your finest one-pass finish cut operations.

RL8500 Precision Combination Brake Lathe

Durable Work Lamps

Dual lamps help keep both sides of your work lighted even in dark corners of your shop. Separate switch means you can turn off or on at your convenience.

Safety Shield

A clear Plexiglas safety shield comes standard and increases user safety.

Standard Arbor

A standard 1" arbor provides you a multitude of tooling choices from your Ranger® dealer or other aftermarket supplier.

Variable Speeds

Infinitely variable spindle and cross feed settings provide smooth micro-finish cuts that meet or exceed factory specs.

Let The Chips Fly

A large chip "catch" funnel and bin keeps your work area clean and safe.

Simple Convenience

A tool tray is located near the front of the machine. Helps keep your favorite brake lathe tooling within easy reach.

One Cut Finish

A one cut micro-finish can be made with our positive rake twin micro-dial twin tool cutters.

Built To Last

Rugged cast iron body and precision ground components.

Work Bench

While others charge extra, we include this sturdy, steel bench with large tool storage boards.

Ranger
PRODUCTS
"The Benchmark of Quality"
Precision
Combination Brake Station



Specifications

Overall Height - Mounted on Bench	62" / 1575 mm.
Floor Space Needed - Width	49" / 1245 mm.
Floor Space Requirements - Depth	36" / 914 mm.
Spindle To Floor - Mounted On Bench	39-1/2" / 1003 mm.
Electrical Requirements Standard	115/230 VAC, 50/60 Hz, Single-Phase, 20 Amps
Spindle Travel	6-7/8" / 175 mm.
Spindle Speed - Inner Groove	150 RPM
Spindle Speed - Outer Groove	200 RPM
Cross Feed Speed	Infinitely Variable / 0 - .010" Per Revolution (0 - 0.25 Mm/Rev)
Spindle Feed Speed	Infinitely Variable / 0 - .020" Per Revolution (0 - 0.55 Mm/Rev)
Spindle Travel	6-7/8" / 175 mm.
Maximum Brake Rotor Diameter	17" / 432 mm.
Maximum Brake Rotor Thickness	2-1/2" / 63.5 mm.
Brake Drum Diameter	6" - 28" / 152 mm. - 711 mm.
Maximum Load - With Standard 1" Arbor	150 Lbs. / 68 Kg.
Maximum Load - With 1-7/8" Truck Arbor	250 Lbs. / 113 Kg.
Shipping Weight - With Bench & Standard Tools	685 lbs. / 310 kg.

Optional Truck Adapter Kit

Our super-duty truck tooling package consists of an upgraded 1-7/8" arbor and a wide variety of adapters. This enormous set allows you to expand the coverage to handle virtually any vehicle through 1-ton trucks.



Uses **VARIABLE-SPEED** DC servo motors to control the **CROSS FEED** and **SPINDLE FEED** drives.

Independent DC motors eliminate complex mechanical gear boxes and transmissions typically found on mechanically-driven lathes. Eliminating these components reduces service and repair costs dramatically over the term of ownership and eradicates vibration and chatter typically transferred to the tool-tip leaving an irregular machined finish. Infinitely adjustable feed rates offers the ability to easily modify cut speeds whether speeding through an initial rough cut or a performing a one-pass micro-finish.

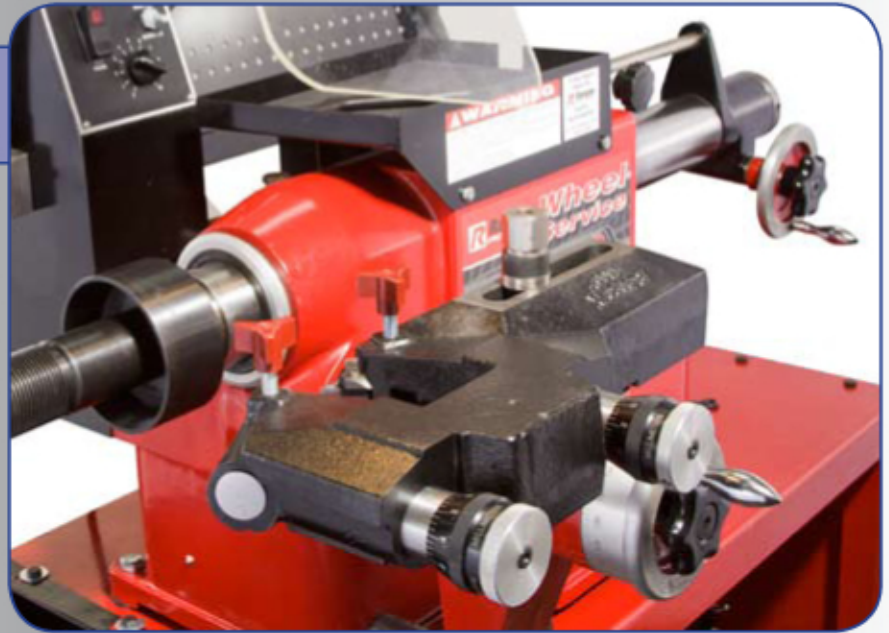


Standard Tooling Package

- | | |
|---|-----------------------------|
| (A) Quick-Change Adapter Plus System | (O) Bell Clamp 4 1/4" OD |
| (B) Backing Plate 6.75" OD | (P) Step Adapter 1" x 2" |
| (C) Backing Plate 5.25" OD | (Q) Spring |
| (D) Sm. Cup w/ Built-in Spring 5.25" OD | (R) Drum Silencer |
| (E) Lg. Cup w/ Built-in Spring 6.75" OD | (S) Universal Silencer Band |
| (F) Dbl. Tapered Collet 1.322" x 1.670" | (T) Large Wrench |
| (G) Dbl. Tapered Collet 1.362" x 1.710" | (U) Large Rubber Silencer |
| (H) Dbl. Tapered Collet 1.711" x 2.073" | (V) Small Rubber Silencer |
| (I) Dbl. Tapered Collet 2.074" x 2.440" | (W) Small Wrench |
| (J) Dbl. Tapered Collet 2.441" x 2.897" | (X) Spanner Wrench |
| (K) Centering Cone 1.187" x 2.25" | (Y) Arbor/Arbor Nut |
| (L) Self-Aligning Spacer 1 5/8" Long | (Z) Twin Cutter Assembly |
| (M) Spacer 1/2" Long | (B1) Boring Bar Assembly |
| (N) Spacer 2" Long | |

SIMPLE. DURABLE. TROUBLE FREE.

Ranger® brake lathes are easy to operate and durable enough to withstand every day abuse, especially in a busy shop environment. A massive cast iron body, forged, hardened and precision ground components and a massive floating spindle make this one of the toughest, most dependable and trouble-free machines you will ever own.

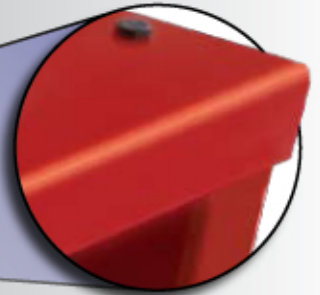


**Large Tool
Storage
Backboard**



**Dual, Fine-Tune,
Micro-Dial Cranks**

**Rolled Steel Edges,
Durable Finish and
Bolted Joints**



STANDARD HEAVY-DUTY BENCH

While others charge extra, we include this sturdy steel bench with large tool storage backboards allowing you to hang all adapters within easy reach. A durable, multi-compartment toolbox provides storage for adapters and accessories. Large chip "catch" funnel and chip bin keeps work area clean and safe.



EASILY CHANGE FROM ROTORS TO DRUMS

A convenient quick-change tool head design allows operators to quickly change the setup from rotors to drums. Up front controls are designed for minimal operator movement. A handy tool tray is located near the working end of the machine so you can keep your favorite brake lathe tooling within easy reach.



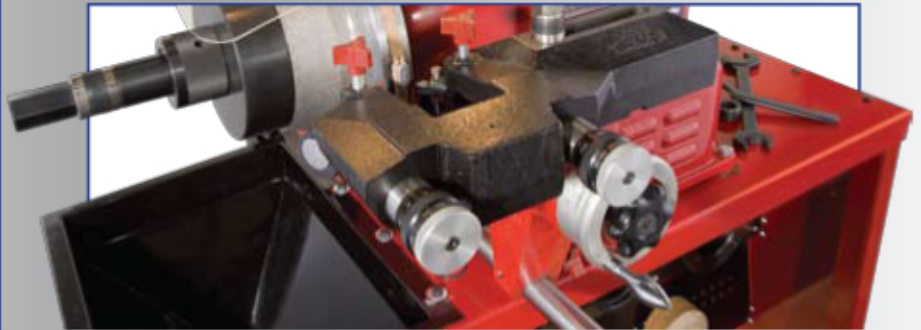
**Quick Rotor to Drum
Changeover**





SAFE AND EASY TO USE

Our sensible, ergonomic design means easier operation and allows you to work quickly and efficiently. Simple, up-front controls are designed for minimal operator movement. Large bench with tool storage boards provide ample space for adapters and accessories.



A PROVEN DESIGN THAT PERFORMS YEAR AFTER YEAR

Since its introduction nearly four decades ago, the design of our RL8500 has been a favorite among brake technicians everywhere for its simplicity, quickness and precision. It features our twin-cutter tool head with micrometer dials and executes quick rotor to drum changeovers.

An infinitely adjustable spindle-feed gear box provides variable speed settings providing finish cuts that meet or exceed factory specs. Our positive rake tooling yields one-pass finish cuts every time and a standard 1" arbor provides you a multitude of tooling and adapter choices from either Ranger® or other aftermarket suppliers.



QUICK-CHANGE ADAPTER PLUS SYSTEM

Our Quick-Change Adapter Plus system eliminates the need for conventional bell clamps and cones and features built-in springs so you don't lose them. This system fits foreign and domestic car and light truck hubless drums and rotors with 2-5/32" to 4" center-holes and composite rotors with center-holes 4" to 6 1/4".

Adapter package also includes micro-dial twin tool cutter, boring bar, hubless adapters, backing plates, tapered collets, centering cones, self-aligning spacer, bell clamp, step adapter, drum silencer, universal silencer band, wrenches and safety shield.



WARNING

ALWAYS FOLLOW THE INSTRUCTIONS AND SAFETY GUIDELINES ACCOMPANYING THIS PRODUCT FOR SAFE AND PROPER OPERATION.



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The design, material and specifications are subject to change without notice. Always follow the instructions and safety guidelines accompanying this product for safe and proper operation.
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