



MID-LINER[®] MS SERIES



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Mack[®]



- Integrated, "Balanced Design."
- Charge-air cooled, turbocharged diesel power with no highway mileage restrictions.
- Comfort, maneuverability, and visibility.
- Truck and tractor configurations to suit all types of medium-duty applications.
- Mack quality, reliability, and low life-cycle cost.
- The established industry leader in its class!



THE MACK MID-LINER® MS SERIES

Mack Superiority for the Medium Segment

MACK. As a result of more than 86 years of quality and innovation... the name has become synonymous with *trucks*. But Mack means much more than heavy-duty trucks. It likewise means agility, convenience, versatility, and economy... all of the attributes required in the demanding Class 6 and 7 medium-duty marketplace. Since its introduction in 1979, the Mack Mid-Liner Series has set a high standard of performance in millions of tough customer miles.

The Mack Mid-Liner team includes the cab-over-engine MS Series as well as the conventional cab CS Series, each offered in a variety of platform truck and tractor configurations to suit a full range of weight capacities and applications. The MS and CS models share the same basic powertrain, chassis components and cab design, with virtually full parts interchangeability. Whatever your cab choice, whatever your business... from intra-city pick-up and delivery to highway tractor-trailer service, you can profit from the power and economy of Mid-Liner's fuel efficient turbocharged and charge-air cooled diesel engines, roomy and comfortable accommodations, contemporary design and robust construction, and... in the Mack tradition... proven, low life-cycle cost.

Most important of all, the Mack Mid-Liner serves the driver as well as the bottom line, with a friendliness that makes a tough job easier. Look beyond the obvious. Consider "The Mack Difference."



The Mack Mid-Liner MS (left) and CS (right) models. Business machines with proven performance.

DRIVER'S HEADQUARTERS

A comfortable driver's environment means a more productive operation. The Mid-Liner MS cab combines all of the benefits of cabover design—excellent visibility and a commanding seating position—with easy, safe entry and exit, and ample room for the driver and two full-size passengers. Rich, textured surface materials cover the cab interior and door panels, sealing out noise and weather. Form-fitting seats and standard integral power steering minimize fatigue. The instrument panel displays clear, functional gauges at a glance and convenient controls within easy reach. Storage bins and provisions for radios are also included, along with padded sun visors. A comprehensive ventilation system, including in-door vent windows and optional in-dash air conditioning, provides effective coverage. The suspended accelerator, brake, and clutch pedals help keep the driver's floor area clean. And the hand falls naturally to the transmission's smooth-shifting lever.



Mack's roomy, comfortable Mid-Liner cab incorporates wide door openings, self-cleaning cab steps, and strategically-placed grab handles for easy, safe entry and exit.



A STRONG FOUNDATION

The Mack concept of balanced design means a complete vehicle...conceived and built with matched components that perform in concert with reliable efficiency, easy serviceability, long service life and outstanding resale value. This strong foundation is the basis of the Mack Mid-Liner's exceptional versatility—truck and tractor versions for general freight hauling, pick-up and delivery, the beverage and food industries, light construction and utility jobs, agricultural applications, fuel and bulk transport, refuse service, and much more. Mack offers five different models suited for a variety of weight capacities: the MS200P, 250P, and 300P platform trucks; as well as the MS250T and 300T tractors. Just name the task. All Mid-Liner MS models share the virtues you expect from The Greatest Name In Trucks.

The backbone of the Mack Mid-Liner promise is a strong frame. High-quality nine inch steel rails resist the bending and twisting forces of heavy loads and uneven terrain. Specify front axles from 7,500 to 9,500 lb. capacities, and rear axles from 20,000 to 23,000 lb. capacities, in single or two-speed versions. Integral power steering, taper-leaf front springs, standard front shock absorbers, and available anti-sway bars contribute to superior riding comfort and handling precision. Air over hydraulic or full air brakes (depending on model) provide safe and predictable stopping ability. Pilot-mounting of wheels means better alignment, less tire wear. Bolted chassis components from the rear suspension to end of frame facilitate easier wheelbase modifications when necessary.

The MS cab joins the frame with a three-point suspension mounting, employing a torsion bar in front and rubber pads and shock absorbers at the rear...for added comfort. The convenient, counterbalanced hydraulic mechanism tilts the cab a full 52°, with a positive lock, for easy service access. And every Mid-Liner double-wall welded steel cab undergoes extensive rustproofing treatments before the deep, lustrous paint finish is applied.



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1. The strong Mid-Liner frame, built with 64,200 psi yield material steel.
2. Cab suspension mounting and tilt mechanism.
3. External radiator expansion tank for easy coolant check and fill.
4. Simple, quick oil check and fill—no need to tilt the cab.
5. Standard maintenance-free batteries.
6. Turbocharged, charge-air cooled diesel power with no highway application restrictions.
7. Donaldson air filter with integral restriction monitor.
8. 75 gallon fuel tank with sump.

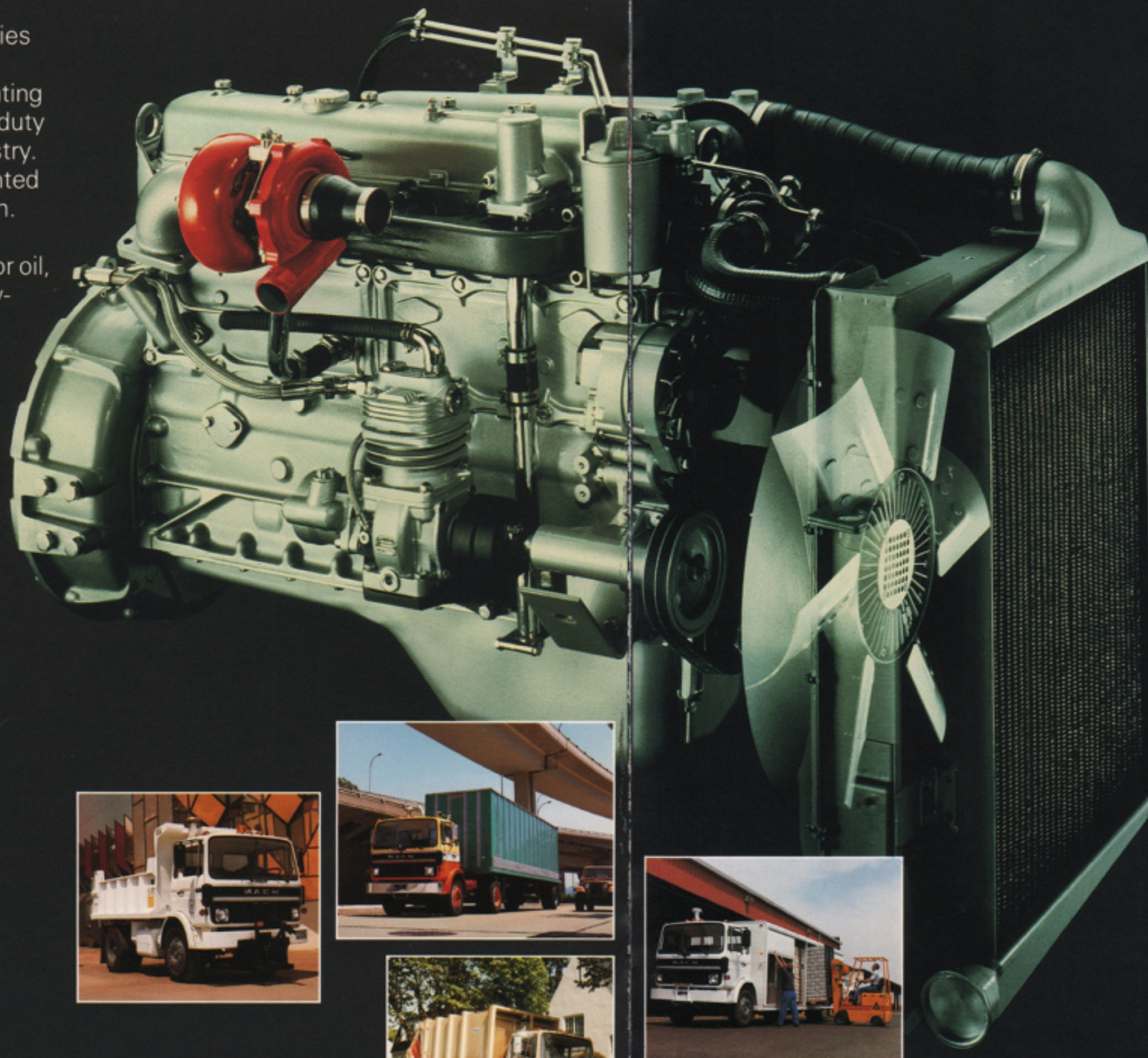
THE HEART OF EVERY MID-LINER

Both the Mid-Liner 200 and 300 series diesel engines deliver an amazing blend of power and economy, incorporating features that have made Mack's heavy-duty diesel engines the standard of the industry. Advanced turbocharging. Chassis mounted charge-air cooling. Bosch direct injection. Viscous fan drive for less parasitic horsepower loss. Mack spin-on filters for oil, fuel, and coolant systems. Domestically-sourced service components. Fully rebuildable, wet-sleeve design for long-term service. And...unlike much of the competition, no mileage restrictions or highway operations.

Mid-Liner's 200 series engine delivers 175 horsepower at 2600 rpm (165 hp for California-certified version), while the larger 300 series engine turns out 215 horsepower at 2300 rpm (205 hp for the California-certified version). Both deliver reliable, fuel efficient performance proven by millions of customer miles.

Mack complements these high performance powerplants with durable, smooth-shifting transmissions in 5, 6, and 10 speed versions, including a 6 speed with a "low hole" feature. Allison automatics are also available.

Mack Balanced Design...the essence of The Mack Difference; the key to more profit for medium-duty truck operators.



The Efficient Solution.



New, more efficient methods of conducting business and managing inventories provide the perfect proving ground for Mid-Liner's capabilities. Class 7 tractor/trailer applications are well-suited for the short-to-medium distance highway hauls associated with "just-in-time" delivery systems. The MS cabover configuration affords excellent visibility and maneuverability on tight city streets and in cramped loading areas...but with plenty of comfort and power for the open road. Add Mid-Liner's demonstrated low cost of operation and high resale value...and you have the efficient solution to just about any medium-duty trucking job!

Mack Mid-Liner MS Series

Standard Specifications

	MS200/250	MS300
ENGINE	E3-175 (EC3-165 Calif. Cert.) 4-cycle, diesel, direct injection Turbocharged and charge-air cooled 175 HP @ 2600 RPM (49 state) 395 lb.-ft. torque @ 1800 RPM 165 HP @ 2600 RPM (Calif. Cert.) 385 lb.-ft. torque @ 1800 RPM Bosch multi-plunger type fuel pump 75 gallon fuel tank with sump Donaldson air cleaner (behind cab) with restriction monitor and moisture eliminator Underframe exhaust	E5-215 (EC5-205 Calif. Cert.) 4-cycle, diesel, direct injection Turbocharged and charge-air cooled 215 HP @ 2300 RPM (49 state) 544 lb.-ft. torque @ 1500 RPM 205 HP @ 2300 RPM (49 state) 488 lb.-ft. torque @ 1500 RPM Bosch multi-plunger type fuel pump 75 gallon fuel tank with sump Donaldson air cleaner (behind cab) with restriction monitor and moisture eliminator Underframe exhaust
ELECTRICAL SYSTEM	Bosch 12V starter Motorola 12V alternator Delco maintenance-free batteries (2) 950 total CCA Breaker panel in-cab	Delco 12V starter Motorola 12V alternator Delco maintenance-free batteries (3) 1425 total CCA Breaker panel in-cab
TRANSMISSION	Spicer 5552A 5-speed 14" organic, non-asbestos single plate clutch, hydraulic control Dana 1550 series driveline	T1060 6-speed 15" organic, non-asbestos single-plate clutch, air-assist hydraulic control Dana 1610 series driveline
FRONT AXLES	9,500 lb. capacity Taper-leaf springs Shock absorbers Sheppard 292 S-6 power steering 42% inside wheel cut	12,000 lb. capacity Taper-leaf springs Shock absorbers Sheppard 292 S-6 power steering 42% inside wheel cut
REAR AXLE	20,000 lb. capacity Multi-leaf and helper springs (optional rear stabilizer bar)	20,900 lb. capacity Multi-leaf and helper springs (optional rear stabilizer bar)
FRAME	9.8 in. ³ section modulus per rail 629,160 lbs.-in. RBM per rail 138" wheelbase (120" MS250T) 185" effective load platform (135" MS250T) 70" BBC Frame-mounted tow eyes	9.8 in. ³ section modulus per rail 629,160 lbs.-in. RBM per rail 138" wheelbase (112" MS300T) 185" effective load platform (135" MS300T) 70" BBC Frame-mounted tow eyes
BRAKE SYSTEM	Air over hydraulic dual system (full air dual system - MS250) Wedge type (cam type - MS250) Spring/air parking brake 1,464 in. ³ air reservoir capacity Automatic drain valves	Full air dual system Cam type Auxiliary spring brake chambers 2,928 in. ³ air reservoir capacity Automatic drain valves
WHEELS/TIRES	7.5 × 22.5 steel disc wheels 11-22.5 12-ply tires	7.5 × 22.5 steel disc wheels 11-22.5 12-ply tires

Cab Equipment Summary (same for all models)

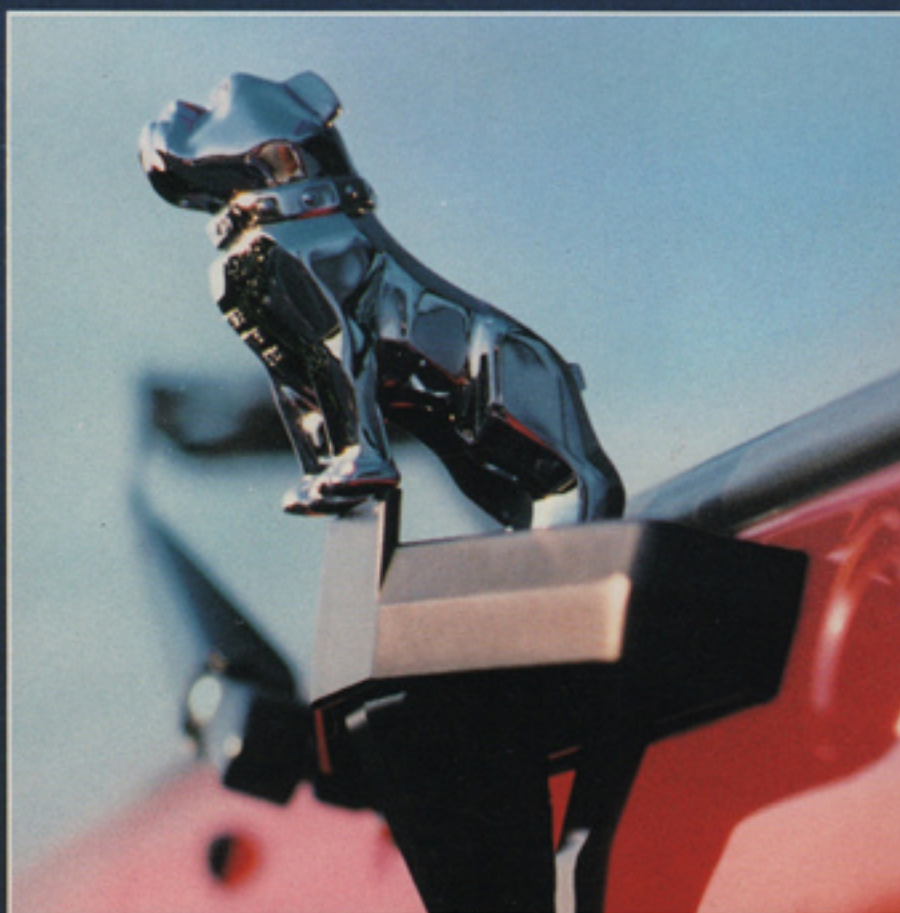
Fixed driver's seat (suspension optional, two-man bench, and three sets of seat belts (retractors optional); 34,000 BTU/hr. @ 100° F. integrated heater and defroster; left and right side sun visors and West Coast rear view mirrors; laminated windshield glass (tint optional) and tempered door and window glass; vent windows in doors; T.M.C. recommended instrument panel design; speedometer showing m.p.h. and km.p.h. with odometer; electronic tachometer; gauges showing air pressure, fuel level, oil pressure, and coolant temperature; indicator lights for

battery charge, oil pressure, coolant temperature, air pressure, high beam, parking brake, headlamps, signal lamps, marker lamps, wiper/washer, and headlamp dimmer; key start (push button optional); two speed electric windshield wipers and washers; glovebox and coat hooks; cigar lighter and ashtrays; electric horn (air optional); padded grab handles; 3-point cab suspension mounting with front torsion bar and rear rubber pads and shock absorbers; counterbalanced 52° cab tilt with positive lock.

Consult your Mack Mid-Liner dealer for details and options.



Built Like a Mack Truck.[®] It's More Than A Phrase. It's a Philosophy.



Mack's substantial investments in fast, accurate parts availability and quality service mean confidence for Mid-Liner customers. More than 200 authorized Mid-Liner dealers and seven parts distribution centers throughout North America, plus strong warranty coverage, keep your Mid-Liner on the road. Specialized Mid-Liner service training is offered for customers and their employees.

Mack's confidence in Mid-Liner quality is demonstrated by its standard published warranty. Coverage on the basic vehicle is 12 months, unlimited mileage, 100 percent parts and labor. The diesel engine: 24 months, unlimited mileage, 100 percent parts and labor. Other powertrain components*: 24 months, 100,000 miles, 100 percent parts and labor. Cab rust

perforation: 36 months, unlimited mileage, 100 percent parts and labor. *Certain components may be covered by the supplying manufacturer's warranty. Consult your Mack Mid-Liner dealer for specific warranty language and details.

With heavy-duty support like this, Mid-Liner is clearly the smart investment for your business. And if an emergency does occur on the road, Bulldog Protection™ is never far away. In the U.S.A., just call Mack's toll-free hotline: 1-800-262-MACK. Mack representatives will help put you and your Mid-Liner back in action as quickly as possible.

The Mack Mid-Liner team—the conventional CS Series, and the cab-over-engine MS Series. Mack Superiority for the Medium Segment.



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