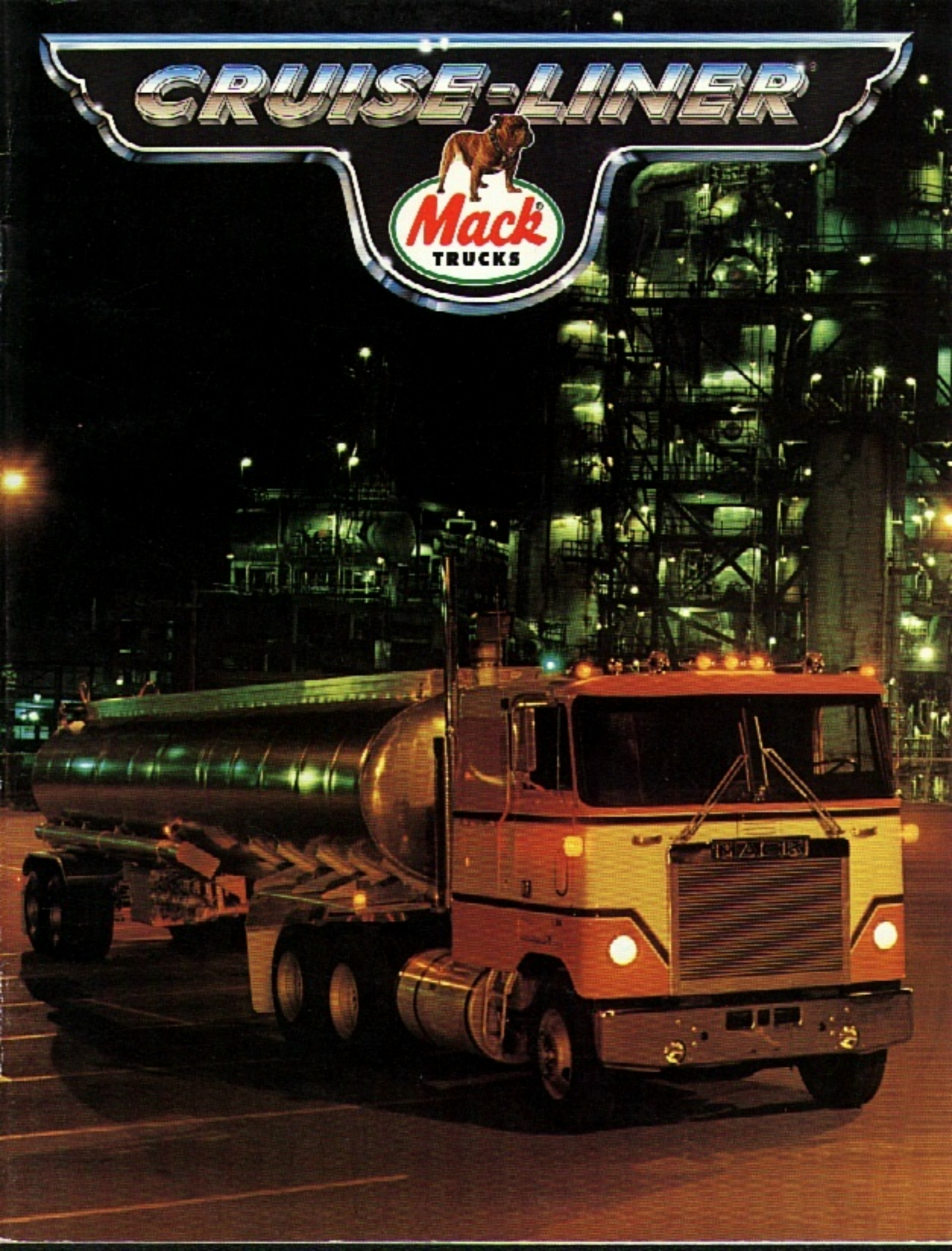
CRUISE-LINER®

Mack® TRUCKS



Cruise-Liner quietly tells you about its luxury, comfort, convenience, efficiency

Cruise-Liner is one of the quietest COEs on the road. Interior sound levels are lower than the approved BMCS standards.

A new, very compact, highly efficient fresh air heater and heater/air conditioning combo, designed specifically for Cruise-Liner, provide outstanding all-season climate control—for total comfort in a wide variety of weather conditions. The system has seven adjustable vents, two for the driver's feet. The constant temperature control feature maintains air temperature to within a very narrow range. The heater/defroster circulates a large volume of air and distributes it efficiently throughout the cab...a separate fan is not necessary. Defroster openings are located across the entire width of the windshield, side defroster ducts direct warm air horizontally across door windows to keep them clear of mist and frost.

CRUISE-LINER conquers the continent in style

The console is now more compact, offering less intrusion into the driver passenger area. The wood grain dash has been redesigned to provide improved instrument visibility. The new configuration accommodates a single tachograph. Wiring and plumbing have been improved to simplify servicing the dash area. Overall, instruments and controls are grouped according to TMC recommendations in the semi-wraparound console. Hinged panels swing out for fast access to gauges and wiring. A one-bulb fiber optic system provides no glare illumination for identification of controls and reduces bulb replacement.

Cruise-Liner features a spacious, fully-padded, color-coordinated, luxurious interior in eight styles. A rich dark brown vinyl throughout is standard; blue, black and burgundy are the Custom styles. Deluxe styles feature diamond tufted vinyls in the same colors. (Deluxe burgundy is shown.)

An air-suspension driver's seat and fully-adjustable steering column assure comfortable driving for anyone. The seat and column can be moved up and down, backward and forward as desired. The vinyl seat upholstery has breatheable nylon cloth inserts for additional driving comfort. With the fully-padded and insulated engine tunnel only 17-inches high and level with the seats, and a redesigned console permitting an unobstructed seating area, plenty of additional cross seats stretch-out space is now available. A comfortable, fixed-cushion passenger seat is standard; an air-suspension seat is available.

For style, strength and money-making capability, Mack Cruise-Liner has coast-to-coast credentials. With large and small fleets and with owner-operators, Cruise-Liner has proved its place as one of America's greatest heavy-duty cabovers. With many new features, standards and options, Cruise-Liner now looks better, rides easier and works harder than ever before.

The completely rust-proof cab is all-aluminum with a fiberglass roof. To maximize payload without sacrificing traditional Mack strength, there are many component options to make Cruise-Liner a leader in lightweight trucks. The new Mack Econodyne™ diesel engine offers top performance with up to 10% more fuel efficiency than other manufacturers' comparable engines currently on the market. Eight cab interior combinations range from Standard to Deluxe. An environment of comfort features, great visibility and superb interior weather control assure top driver safety and long-haul productivity. Outside, anything for the asking...unlimited striping design and paint options. Numerous chrome and other bright metal possibilities. Mack has so many ways to help you make a Cruise-Liner truly your own truck.

No one knows trucks better than Mack...no other American manufacturer so completely engineers and manufactures a heavy-duty truck from chassis to powertrain. By the fleet or by itself, Cruise-Liner is a great truck...drivers and owners know that from experience.

The headliner provides overhead and roof-mounted antenna locations. Various audio systems are available to specification. An effective sound deadener, the headliner is a two-piece type for easy removal if required.

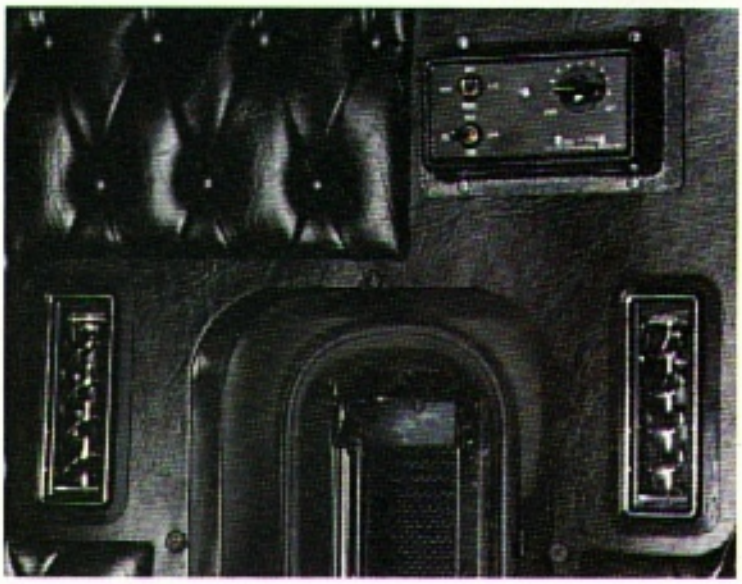
Three padded visors effectively block out the sun across the entire width of the windshield.

Sleep better, see better, drive more confidently

Mack's axle-mounted steering gear and steering geometry virtually eliminates wheel kick, even under the most severe road conditions. You get optimum road feel with minimum steering effort for a safer, less fatiguing ride. Entire front suspension is engineered with a 50,000-mile (80 450 km) highway service interval.

The windshield provides excellent visibility in a 2640-square-inch (17 035 cm²) total viewing area. Cruise-Liner has the largest windshield of any COE. High-strength, shatter-resistant, tinted windshield and quarter windows are standard.

Luxury appointments extend to the sleeper area—36-inch (91 cm) by 76-inch (193 cm) compartment in the 90-inch (229 cm) BBC cab, and 24-inch (61 mm) by 76-inch (193 cm) compartment in the 76-inch (193 cm) BBC cab. Richly upholstered with fully-cushioned durable vinyl. The bunk has an entirely separate heater and controls and additional outlets. With vinyl curtain down, sleeper temperature can be controlled independently from within. The optional integral air conditioner has a separate evaporator unit in the sleeper cab. Both units use trouble free air valve controls. All components can be easily serviced from the console. Remote controls for audio equipment. Two additional radio speakers with separate controls and a built-in wardrobe are optional. Low-profile engine tunnel does not impede entry into sleeper.

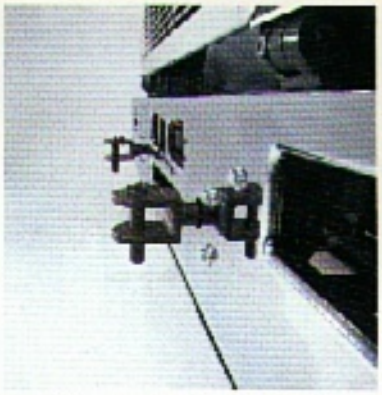


Double-arm pantograph wipers provide a wipe area of 1500 square inches (9 678 cm²) with washer outlets mounted directly on the wiper arms. Note optional exterior visor for extra protection from the sun.

As safe operation as possible is a primary concern. Great blind-side visibility—a right-hand view many times better than a door peep window—is offered by a convex mirror over the right door, which shows the driver the normally blind area on the right side.

Mack's standard—and exclusive design—one-piece "S" grab handle and step arrangement make cab entry easy, quick and comfortable for any driver.

The shift lever stays in the cab even when tilted. Permanently attached to the cab floor, it is connected to the transmission by means of a ball-and-socket break-away linkage. This shift mating design is a Cruise-Liner exclusive. It eliminates the typical COE shift tower which requires a hole in the cab floor, seals out engine heat, cold air, dirt and noise.

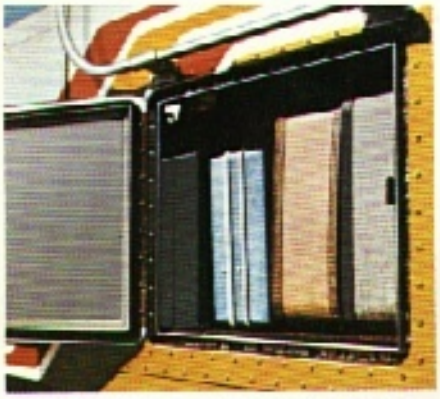


Drop flanges at bumper ends help protect tires in the event of accident. 15½ inches (39 cm) deep, the bumper provides air flow openings, windshield cleaning steps, accommodates road lights and tow clevises which attach directly onto a frame-mounted casting.

Oil fill and dip stick located for easy servicing from side of cab.

A distinctive new look. Cruise-Liner's new grille-denser—a combination rigid-tube-and-fin grille and condenser for the air conditioning system. Radiator size varies from 1180 square inches (7 613 cm²) to 1650 square inches (10 646 cm²) to provide adequate cooling for all engines available in this model. Viscous fans are standard.

Rust-proof cab keeps everything together—looks, strength, earning power



Large storage compartment provides ample space for luggage and tools. Floor is insulated to protect contents and reduce noise.

To make maintenance as simple as possible, cab has a maximum hydraulic tilt for easy access to engine and other components. Underside of cab is clean and uncluttered; there is no exposed insulation to get oil-soaked or soiled.

Cruise-Liner's cab is completely rust proof...all aluminum with a fiberglass roof. The cab frame and bulkhead doors are of extruded aluminum channels with all-riveted aluminum double wall outer panels, providing an extra-strong section, yet remaining lightweight throughout and easy to repair. Design is noise-rejecting and offers a measure of weather resistance and temperature control. Bulkhead door sills of tubular design provide a rigid backbone that joins with the frame for additional strength.

Cruise-Liner offers three cab sizes—the 54-inch (137 cm) BBC non-sleeper, and 76-inch (193 cm) and 90-inch (229 cm) BBC sleepers. Wheelbase from 116 inches (295 cm) to 176 inches (447 cm). Standard cab height is 121 inches (307 mm) unloaded.

CRUISE-LINER®

style it your way

Cruise-Liner's paint system with 10 basic striping designs (or create your own design) and unlimited color selections, gives you almost endless options in personalizing your truck. Distinctive paint designs are applied with the highest quality, long-lasting acrylic baked enamels.

Choose from among any of the many bright finish options to help make your Cruise-Liner distinctively your own:

- polished battery box covers
- bumper
- exhaust system including shield
- Luber Finer
  (when specified - vendor engines only)
- snorkel and Air Ram II intake
- polished aluminum fuel tanks
- bright fuel tank straps and steps
- air reservoirs
- aluminum wheels

Design B

Design BH

Design D

Design E

Design F

Design G

Design H

Design J

Design K

Design L

New Mack Econodyne™ Diesel Engines...

up to 10% more fuel efficient than other manufactures' comparable engines

Advanced turbocharging and chassis-mounted charge-air cooling systems make the difference

The new Econodyne series is comprised of 11 full- and reduced-speed engines—in-line six cylinder engines ranging from 250 to 350 horsepower (187 to 261 kW) and V-8s of 400 and 440 horsepower (298 and 328 kW).

Mack pioneered the dieselization of heavy-duty trucks in America. With the introduction of Mack's first diesel in 1938, the fuel-efficient Thermodyne® engine in the Fifties, the high-torque-rise and still-more fuel efficient Maxidyne® six-cylinder engine in 1967, and finally the Maxidyne V-8 in 1969, Mack revolutionized the heavy-duty diesel engine concept in the trucking industry.

Mack has now introduced its new Econodyne series diesel engines, the most fuel-efficient Mack has ever produced. The Econodyne engines are service-proven, and promise exciting fuel-efficient performance in the '80s.

Mack's new chassis-mounted charge-air cooling

The heart of the Mack Econodyne engine is advanced turbocharging and Mack's new chassis-mounted charge-air cooling system. Chassis-mounted charge-air cooling offers the following improvements over other systems:

1. Improved fuel economy
2. Increased horsepower
3. Improved engine durability
4. Longer engine life

These benefits are achieved without adverse effects on peak cylinder pressures, gaseous emissions or smoke. In addition, Mack Econodyne engines offer up to a 600-pound (272 kg) weight advantage over other comparable engines.

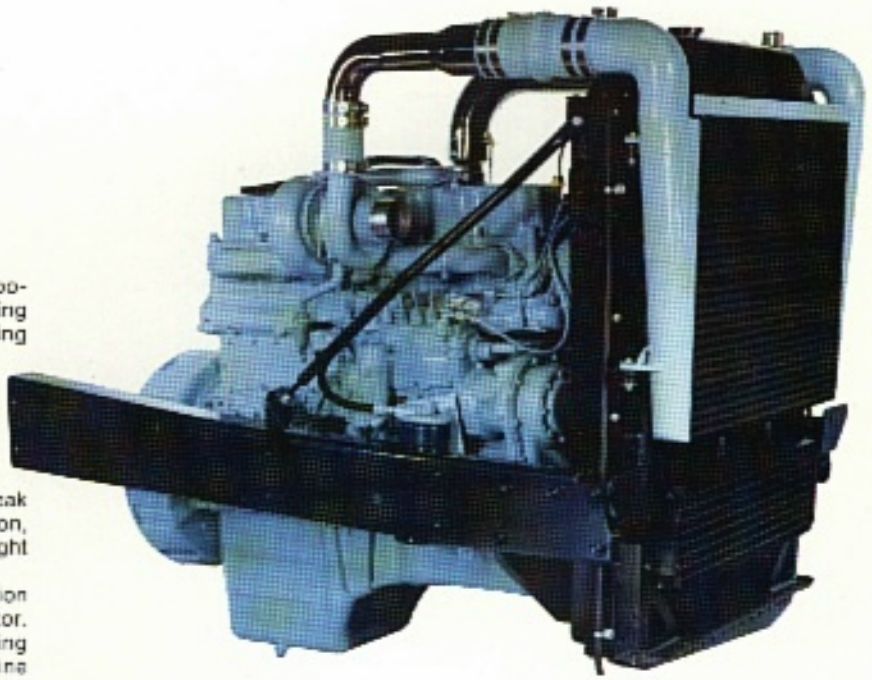
Through chassis-mounted charge-air cooling, engine induction air is cooled in a heat exchanger mounted ahead of the radiator. The elimination of the tip turbine fan and much of the inter-cooling apparatus in high-mileage vehicles results in improved engine accessibility for lower engine maintenance expense. Cooling air for the heat exchanger is supplied by the engine fan as well as the ram effect of the vehicle's forward motion. Air that leaves the turbocharger at 325°F is cooled to 110°F.

This cooler, denser air permits more complete combustion of the fuel, resulting in increased engine performance with less smoke and acceptable gaseous emissions levels.

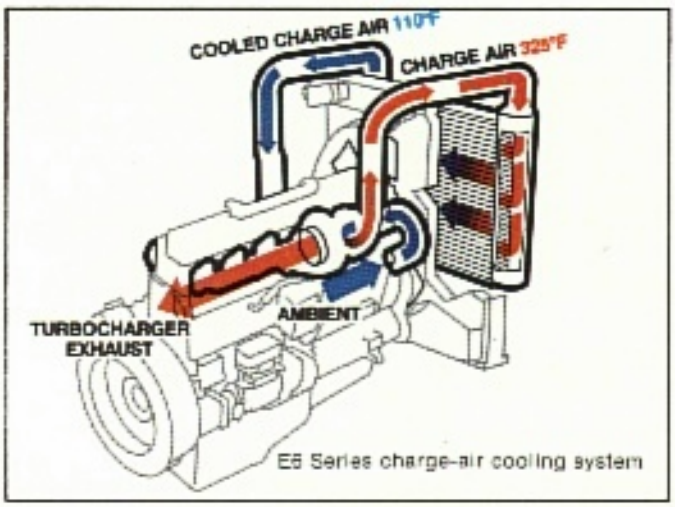
In addition, lowering of the inlet manifold air temperature has the beneficial effect of significantly extending engine durability. Depending on the engine model selected, the chassis-mounted charge-air cooling system can achieve reductions of up to eight percent in brake specific fuel consumption.

In 1973, Mack introduced the first single-stage charge-air cooling system for heavy-duty highway diesel trucks. Since then, Mack has conducted an on-going program of charge-air systems development and performance evaluation.

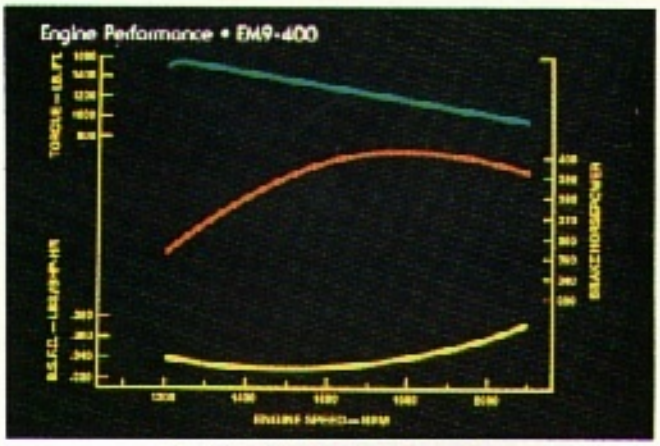
Mack is the only North American producer of heavy-duty trucks who manufactures all driveline components. This balanced-design concept assures complete compatibility among engine, transmission and rear axle to achieve the maximum in performance and fuel economy. They are all designed to work together, better, longer. The ability of Mack to maintain precise balance between the chassis and such an advanced system as chassis-mounted charge-air cooling is a major achievement yet to be matched.



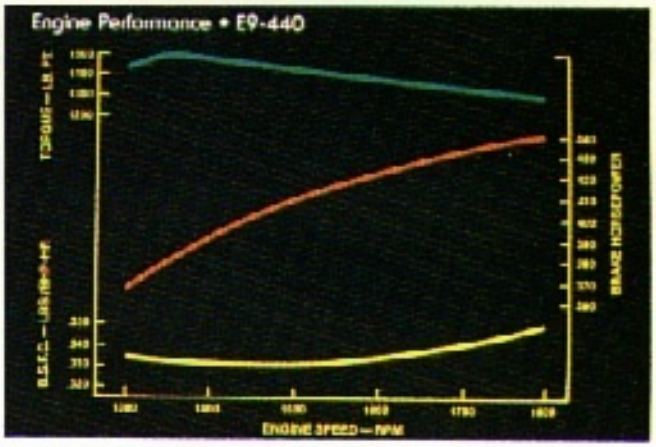
Econodyne EM6-300R engine



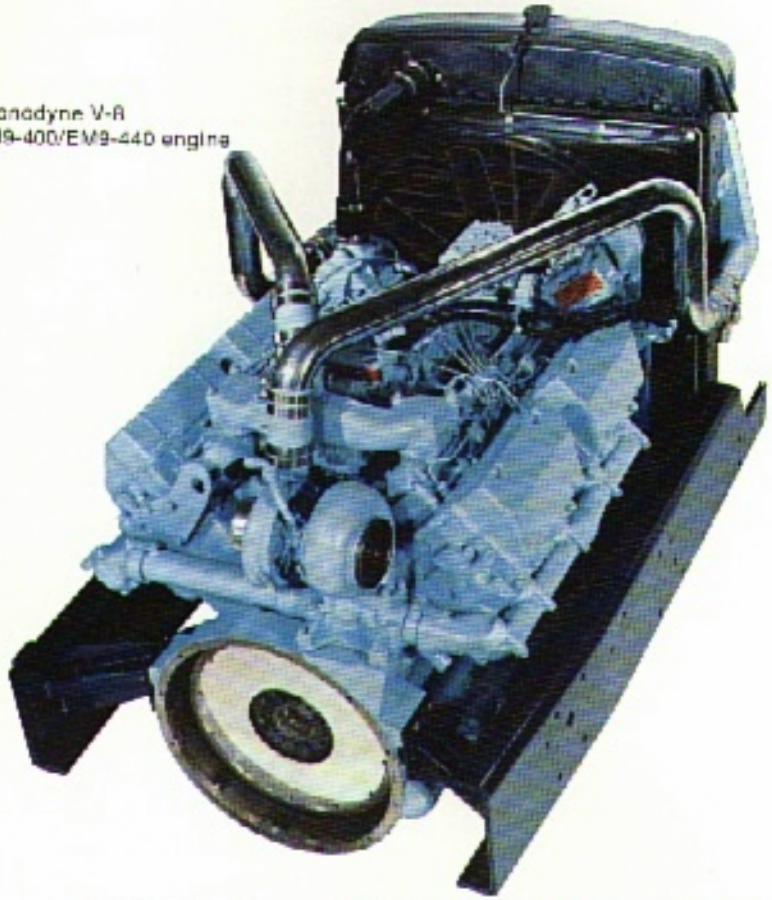
E6 Series charge-air cooling system



EM9-400 V-8 engine performance



E9-440 V-8 engine performance

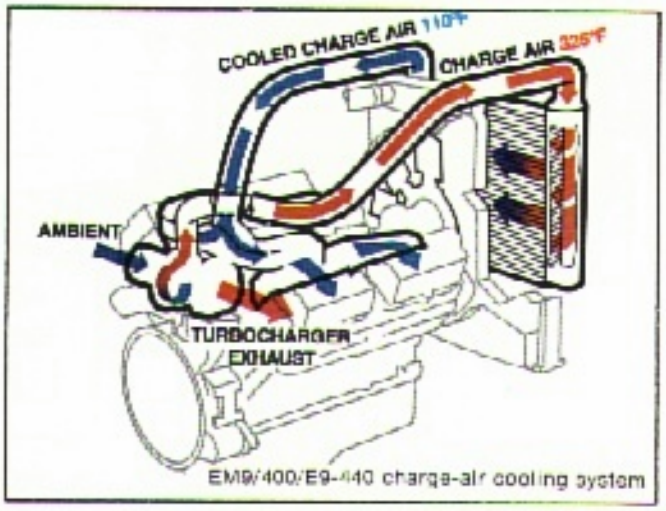


Econodyne V-8
EM9-400/EM9-440 engine

Econodyne V-8 engines... most fuel-efficient at their horsepower

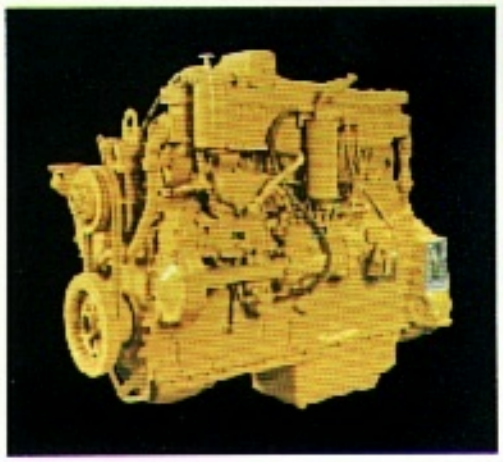
The Econodyne V-8 series with the chassis-mounted charge-air cooling system is today the most fuel efficient engine in its horsepower class. This series of Econodyne engines includes the EM9-400, 400 horsepower (298 kW), governed at 2100 rpm, 55% torque rise; the EM9-400R, 400 horsepower (298 kW), governed at 1700 rpm, 25% torque rise, and the E9-440, 440 horsepower (328 kW), governed at 1800 rpm, 16% torque rise.

Throughout the operating speed range of the EM9-400R, brake specific fuel consumption does not exceed .34 lbs./BHP-HR. This has not been achieved by any other engine on the market in this horsepower class. Performance curves for the EM9-400 high-torque rise V-8 illustrate unexcelled fuel economy also...performance tailored to match the simple, easy-to-operate Mack five- and six-speed Maxitorque® transmissions. The fuel curve for the E9-440 shows comparably excellent fuel economy.



EM9/400/E9-440 charge-air cooling system

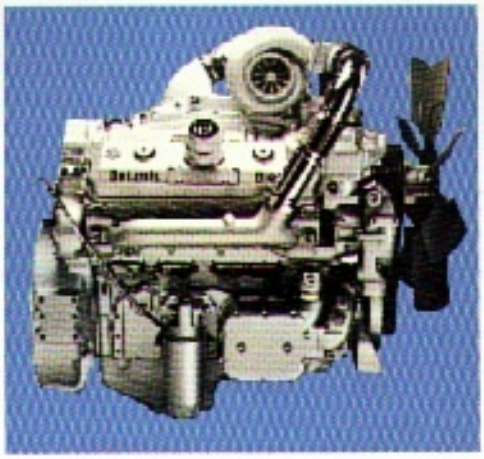
Many power options to 525 horsepower



Caterpillar

The Caterpillar 3406 diesel engine delivers from 250 horsepower (209 kW) to 380 horsepower (283 kW). It is available in high-torque-rise, conventional-torque-rise and economy versions.

For mid-range applications, the Caterpillar 3208 diesel is economical and practical for local and short haul applications. Available at 175 and 210 horsepower (131 and 157 kW).



Detroit Diesel

In the Detroit Diesel 92 Series, turbocharged V-6 engines are available with ratings from 355 horsepower (272 kW) governed at 1950 rpm to 435 horsepower (325 kW) governed at 2100 rpm. Both versions have a 100,000-mile oil change interval.

Cummins

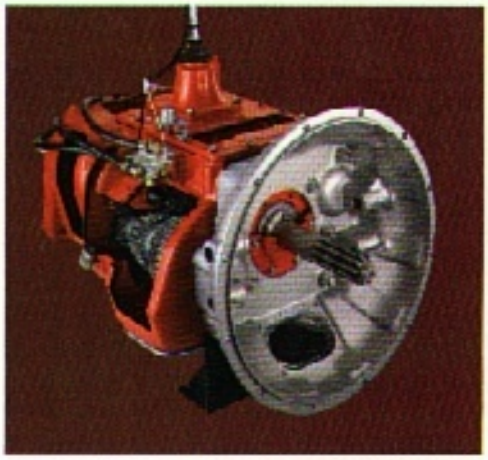
Pictured is the Cummins NTC350 diesel engine which is governed at 2100 rpm, providing 1120 lb. ft. (1 519 N•m) of torque at 1300 rpm. The Formula 350 engine is governed at 1900 rpm, and provides 1120 lb.-ft. (1 519 N•m) of torque at 1300 rpm. California version is governed at 1800 rpm, providing 1065 lb.-ft. (1 444 N•m) of torque at 1300 rpm. Other available engines include the NTC290, KT450 and KTA525.

Maxitorque Transmission

Mack Maxitorque transmissions were developed to obtain the maximum efficiency and economy from the constant high torque of the Maxidyne engines. And they are ideal to help obtain the high performance and efficiency of the new Econodyne engines. Available in five-speed, five-speed with extended range, direct-in-fifth as well as lo-range and lo lo-range which provide six forward and five reverse speeds. Its evenly spaced gears simplify shifting in any application, allows faster acceleration, and higher average road speeds at lower average engine rpms, resulting in outstanding fuel economy. Fewer total engine revolutions mean longer engine life. One of these transmissions is suitable for almost any operation including very slow speed applications, gear reduction for running off the road, or direct-in-high for top speeds of interstate highways.

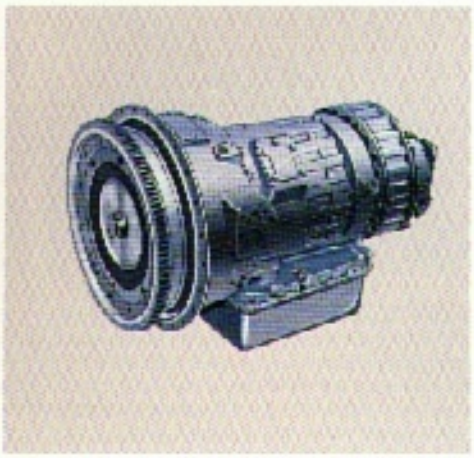
Cruise-Liner, equipped with tandem steering front axles, has a self-equalizing front suspension providing even front axle load distribution for reduced tire wear. Design permits maximum payload capacity and platform length within highway legal limits, as well as excellent traction in arduous off-highway use.

CRUISE-LINER



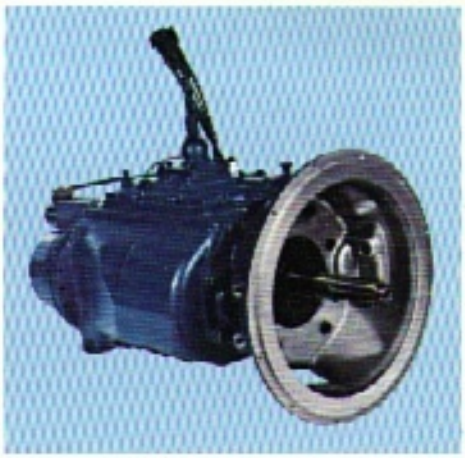
Fuller

Fuller Roadranger multi-speed transmissions feature twin countershaft design. They provide overall ratio ranges for starting heavy loads, hill climbing and highway cruising. Many are available in either direct or over geared versions from 9 to 15 forward speeds.



Allison

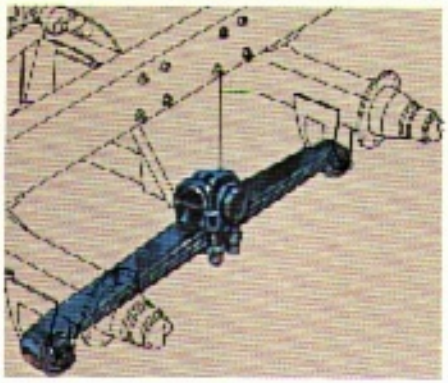
In addition to easy driving, Allison Transmissions offer automatic matching of engine power to road and load requirements, and eliminate clutching and shifting. A full line of Allison automatics is available.



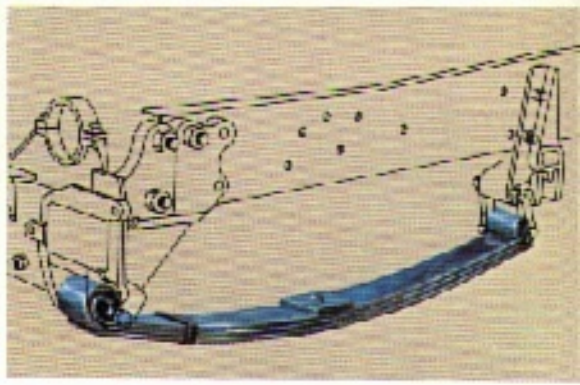
Spicer

Seven-speed Spicer Transmission is a good choice for highway service. Simple shift pattern and good starting gear for fuel-efficient engines. Fourteen-speed transmissions are designed for highway and on/off highway applications where versatile gear selection is required to fit all working conditions. Auxiliary transmissions also available.

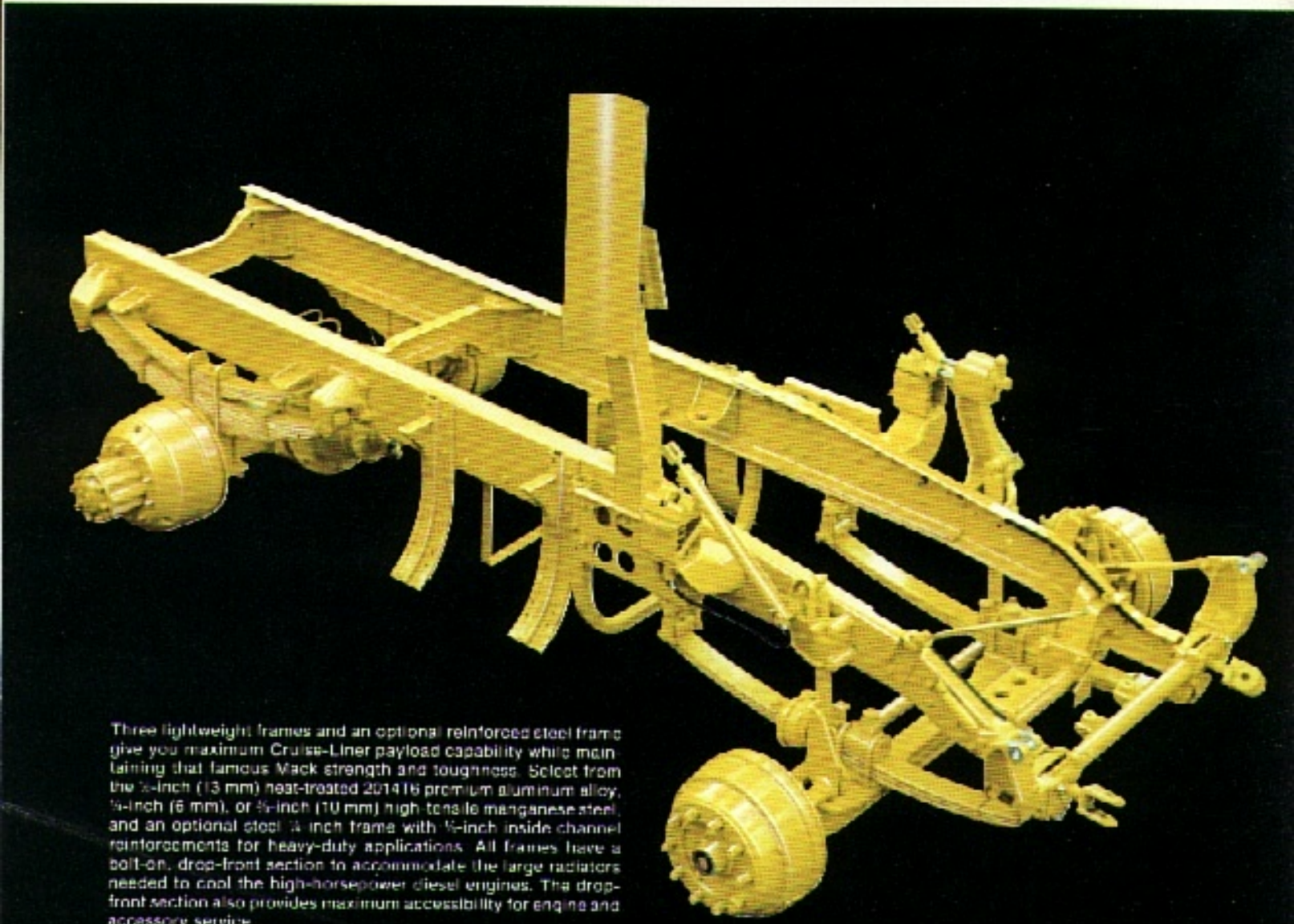
The great Mack truck ride starts from strength



Mack's ST Series taper-leaf spring suspension shown here is standard. Three leaf spring pack with eye-type end is pinned to the axle with cast steel brackets and forged-aluminum caps. For 34,000-pound (15 422 kg) bogies. The SS Series camel-back spring suspension is optional. Eight to ten leaves are set in rubber shock insulators with forged-aluminum or cast-steel caps. Spring brackets are integral with the axle housing. For 34,000- to 44,000-pound (15 422 to 19 958 kg) bogies.



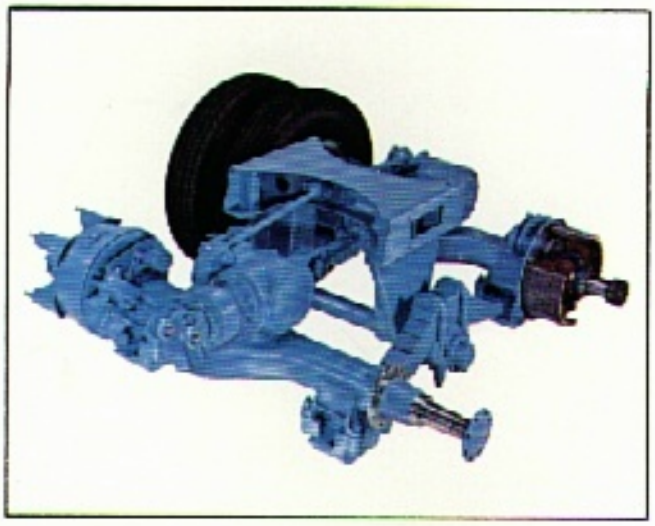
Mack's high-alloy steel, shackle-type, taper-leaf suspension...design takes twisting and maximum deflection, yet provides a softer ride. Sealed tapered king pin and accessible thrust bearing adjustment design has been a Mack standard for many years.



Three lightweight frames and an optional reinforced steel frame give you maximum Cruise-Liner payload capability while maintaining that famous Mack strength and toughness. Select from the ½-inch (13 mm) heat-treated 201416 premium aluminum alloy, ¼-inch (6 mm), or ⅜-inch (10 mm) high-tensile manganese steel, and an optional steel 4-inch frame with ½-inch inside channel reinforcements for heavy-duty applications. All frames have a bolt-on, drop-front section to accommodate the large radiators needed to cool the high-horsepower diesel engines. The drop-front section also provides maximum accessibility for engine and accessory service.

Mack's FAW537 front axle is a 12,000-pound (5 000 kg) capacity Reverse-Elliot, drop-forged, I-beam construction for both toughness and lightweight. Mack's selective steering geometry permits sharper turns with less effort.

The Mack-designed Interaxle Power Divider automatically divides the power between the forward and rear axles, delivering more torque to the axle with the greater traction, providing power when and where you need it.



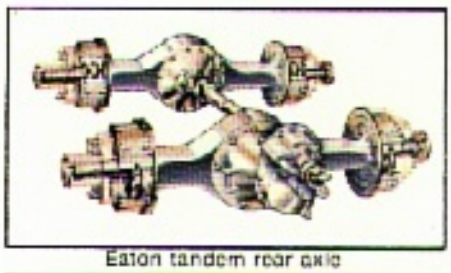
The famous Mack bogie is balance-designed for the right weight distribution and maximum use of available power. It has a proven in-service record of hundreds of millions of highway miles, through all kinds of weather and road conditions. Easy, safe driving, low maintenance and long truck life are among the many advantages of this Mack designed and built tandem axle, contributing its share to Mack truck profitability.

Overall, the Mack bogie is simple in design, rugged, exceptionally flexible, and precisely matches the power output of other driveline components. The result is maximum horsepower utilization.

Low, trunnion mounted springs, and top-mounted torque rods anchored in a frame crossmember and the carrier housings form a parallelogram configuration which prevents axle rotation. Uneven surfaces, acceleration and braking do not throw weight rearward or forward to cause rearing or hopping. Axles and wheels are evenly loaded. With "straight-line" drive, drive shaft angles are less severe, resulting in less vibration, lower stresses in transmission and carriers, and longer U joint life. Top-mounted carriers with dual-reduction gearing provide ratios from 3.65:1 to 11.38:1.

Shown here is the Mack B134 bogie with 34,000- and 38,000-pound (15 422 and 17 236 kg) capacities.

Quality rear axles and suspensions from other manufacturers



Eaton tandem rear axle

Neway air spring suspension

Hendrickson RT380 tandem has steel springs combined with the forged steel equalizing beam and below-axle load suspension to absorb strain, twist and road shock. Rubber bushings are used throughout, virtually eliminating lubrication. 38,000 pounds (17 236 kg) rated capacity.

Rockwell SQ-100 tandem with fast gearing for today's more fuel-efficient, low rpm diesel engines. Ratios from 3.55 to 7.80 available to match these new economy-oriented powertrains. 38,000 pounds (17 236 kg) rated capacity.

Eaton DS381P new high-torque tandem features rolled splines on input and output, pinion and axle shafts, heavier-duty output shaft bearing, and improved power divider for greater strength. Overall, increased tonnage capability. 38,000 pounds (17 236 kg) rated capacity.

Reyco Smooth Ride Model 102W tractor suspension has extra wide hanger flanges for maximum frame protection. Can be used for round or square axles, for either tandem or single drive axles. 52-inch (132 cm) axle spacings. Rated capacities up to 38,000 pounds (17 236 kg).

Neway ARD234 new air spring design absorbs road shocks and vibrations better than ever. No lubrication—all pivots on suspension are rubber bushed. Axle spacing of 48-inches min. to 52-inches max. (122 cm min. to 132 cm max.).