



### A rugged, dependable construction truck

The Mack DM Series vehicles are designed for the most demanding on/off road service... for maximum performance and reliability as well as the flexibility to do virtually any kind of work, and do it well. They are custom-built for dumper/mixer applications on highway and heavy construction projects, with long wheelbase models for block truck and refuse service. They're also ideal for logging, oil field rigging, and as lowboy tractors for heavy equipment hauls.

DM's are heavy-duty, yet they're designed with minimum deadweight for maximum payload. A short 65-inch front-axle-to-back-of-cab dimension increases front-end loading capability; provides better overall weight distribution and maneuverability.

A Mack truck's principle job is to lower the cost per ton or cubic yard . . . and a DM does deliver an excellent profit/performance ratio. It does this because of its design criteria—a high load-carrying capacity, a high availability for work, minimum maintenance downtime, and extended service under grueling conditions.

The Mack DM 400/600 Series trucks have power options from 180 to 315 hp. with 237 to 375 hp. available in the 800 Series. Transmissions match power to job requirements. Twenty DM models include single and tandem rear axle dumpers, mixers to 12 yards, wheelbases to 280 inches, and GVW's to 103,000 pounds.

A DM is a tough, durable truck, designed for maximum productivity and profitability.













Driver Comfort. The 101-inch BBC DM cab has plenty of leg room and belly room for the largest drivers, with a fully-adjustable driver's seat (vinyl-covered foam rubber over coil springs) and movable steering column as standard equipment. A powerful fresh air or recirculating air heater and defroster unit (37,000 BTU) located under the instrument panel provides optimum cold-weather comfort, while a dual-purpose screened roof vent permits air intake or exhaust.

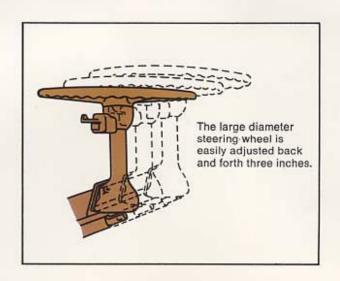
Excellent Visibility. The cab is offset 111/2 inches to the left, putting the driver directly behind the left front wheel-a position that provides unexcelled visibility for maneuvering in tight places. The large, 2-piece wraparound windshield (1271 sq. in.) is made of tinted Solex safety glass to reduce glare. Dual west coast mirrors (96 sq. in. each) are standard. Dozens of air outlets across the bottom of the windshield insure quick, effective defrosting and defogging. Airactuated, bottom-mounted wipers are powered by a single motor rated at 340 inch/pounds of torque. Windshield washer outlets are mounted on the wiper arms to provide an excellent spray pattern and fast cleaning of the 840-sq.-in. wipe area.

Superb Instrumentation. Mack's padded instrument panel is arranged according to RCCC and SAE recommended groupings, as are the dashmounted controls. Automatic reset circuit breakers are standard. All instruments and controls are well-illuminated by a 1-bulb fiber optic system that eliminates the need for large numbers of spare bulbs. Standard instruments are the speedometer and tachometer, air and oil



pressure gauges, fuel gauge, and voltmeter, all housed in 4 easily-removed instrument modules.

Designed for Durability. The Mack all-steel welded conventional cab has been continuously improved for the past 15 years. Of double-skin unitized construction, it features heavy-duty concealed hinges, electrodeposition rustproofing, and a 3-point cab suspension system with rubber insulators between the frame brackets and cab to absorb road shock.



# Here's the Mack Command Cab



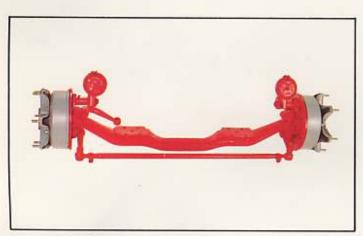
spacious, driver-oriented, offset for exceptional visibility



## Here's how Mack puts power to work

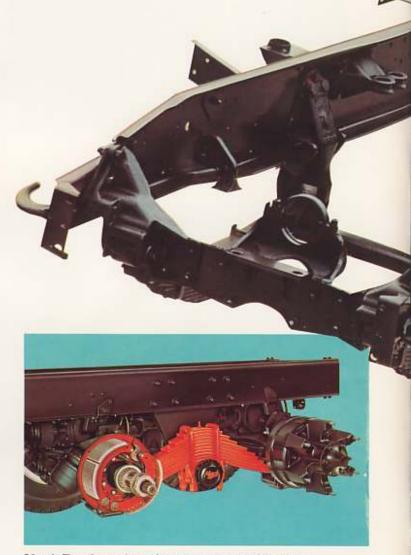
### The backbone of a Mack a custom-engineered frame

The DM 400/600 Series Macks have a massive 13%" x 3¼" x 3%" heat treated, deep-section steel frame (110,000 psi minimum yield strength) with an RBM of 2.7 million inch-pounds per rail. Extra-heavy-duty DM600 SX models have a full ¼" inside channel for an RBM of 3.4 million inch-pounds per rail. DM800SX models have 105%" x 3¼" x 5%" rails with a full ¼" inside channel; and ¼", 3%", or ½" outside channels available for RBMs up to 8.4 million inch-pounds per rail. Extra-heavy crossmembers are positioned at every major stress point, and gusseted to maintain frame integrity. Heat-treated, body-bound bolts are used at major stress points to insure maximum joint integrity.



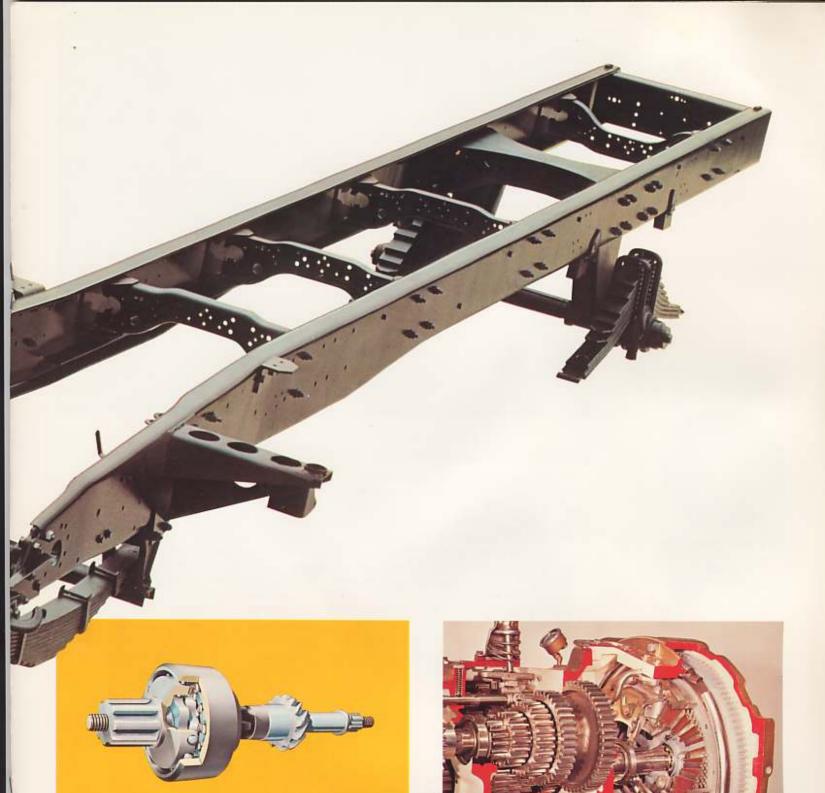
#### Front Axle Steering — Sharper turns with less effort

Reversed-Elliot, drop forged I-beam construction—tough, lightweight. Mack built. Ratings to 20,000 pounds for the 400/600 models, 23,000 for the 800 models. Mack front axle suspension of high-alloy steel, leaf spring design takes cocking and bounding. Mack's selective steering geometry permits closer turns with minimum effort. Power steering optional on 400/600 Series, standard on DM800.



#### Mack Tandems for a better, more stable ride

Exclusive Mack parallelogram design compensates for driving and braking torque, eliminates hopping. Overall simplicity and compact design save considerable weight and maintenance. Below-axle load suspension increases stability under all conditions. Frequency-calibrated camel-back leaf spring suspension, cushioned with Mack-designed silent insulators. Other Mack and vendor suspensions available. Mack's top-mounted dual-reduction drive carriers deliver straight-line-through drive. Many ratios, with capacities to 65,000 pounds for 400/600 models, and 80,000 for 800 models.



#### Mack's Power Divider for positive traction

Simple and fully-automatic, the Mack Inter-axle Power Divider — standard on all Mack bogies — replaces conventional spider gear type inter-axle differentials. It divides the power between the forward and rear axles; delivers more torque to the axle with the greater traction.

### Mack's exclusive Dynamax® (optional)

This principle extends clutch life. An oil bath absorbs heat and cushions driveline shock. A long-wearing multiple disc component with air treadle operation permits fast, effortless disengagement for easy shifting.





Primary spin-on fuel filter



Secondary spin-on fuel filter



Two spin-on lube filters



Coolant conditioner

### The 237 hp Maxidyne® Six

This is the original 6-cylinder Maxidyne engine that revolutionized diesel truck technology when it was introduced over a decade ago. The first high torque rise engine (53%) in the industry, it is now widely imitated, but remains unequaled in overall performance and economy. Delivering essentially constant horsepower over a wide operating range (1200-2100 rpm), it produces its peak torque of 906 ft/lbs. at 1200 rpm—the low speed torque that is so essential in construction service. Its companion Maxitorque® triple

countershaft transmission is specifically designed to work with the Maxidyne, enabling it to operate with only five evenly-spaced steps. This results in greatly reduced shifting, higher average road speeds, reduced trip time, and superior fuel economy.

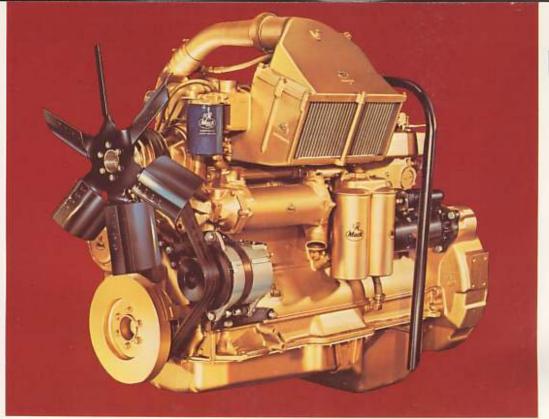
Nearly 120,000 of these engines have been produced over the past decade, and over 30,000 of them have proven themselves in construction service. For overall performance, reliability, and economy, the 237 hp Maxidyne is in a class by itself.

#### ESI for construction trucks

Mack's Extended Service Interval (ESI) is a Mack-developed and proven program to increase productivity by reducing maintenance downtime. You get 16,000 miles, 300 hours, or 90 days (whichever comes first) between lube oil and filter changes, and corresponding periods for chassis lubrication, as long as Mackrecommended lubricants and filters are used. All Mack filters are color-coded and threadcoded for fast, no-mistake installation. ESI is standard on all DM models with Mack powertrains.

#### With Dynatard, everything's under control

The high quality of powertrain performance is reflected also in the Mack-designed Dynatard® engine brake. Hydraulically actuated, it has braking hp absorption almost equal to engine output. It's actuated by a convenient onoff switch on the dash.



## Maxidyne...

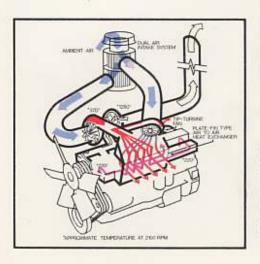
unmatched in performance, reliability and durability

### The 300 Series Maxidyne for greater power and torque

First introduced in 1973, the Maxidyne 300 Series 6-cylinder diesel is the result of billions of miles of working experience with the standard Maxidyne diesel, from which it was developed. Although its displacement (672 c.i.d.) is the same as the original Maxidyne, a revolutionary air-to-air aftercooling system enables a greater volume of fuel and air to undergo combustion, resulting in a substantial increase in horsepower with no increase in the dynamic loading of components.

Rated 285 horsepower at 1900 rpm, it delivers essentially constant horsepower throughout the 1200-2100 rpm operating range, with tremendous torque backup—1,080 ft./lbs. at 1200 rpm, and 707 ft./lbs. at 2100 rpm.

The 300 Series Maxidyne has the power and stamina for the toughest construction applications; yet it has the same fuel-efficient characteristics and durability that have made the name Maxidyne synonymous with economy all over the world.



#### Mack's air-to-air aftercooling system minimizes heat load and engine cooling requirements

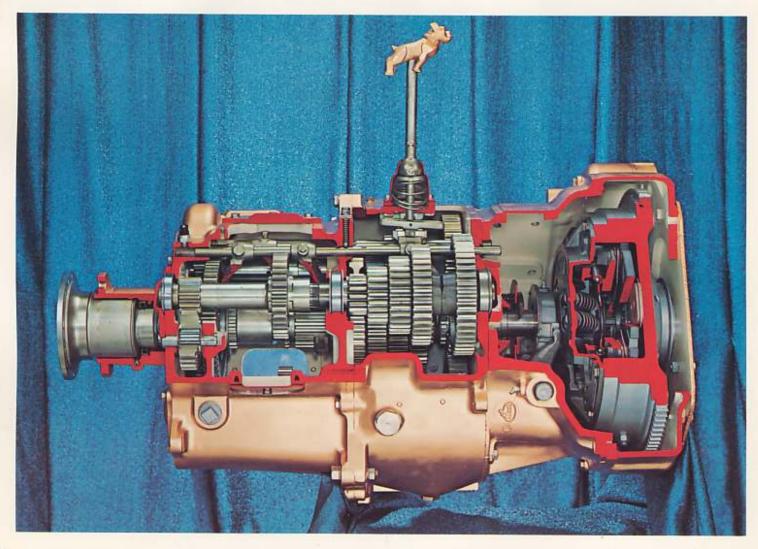
This system reduces the temperature of the charge air from the turbocharger before it enters the engine, providing a lower inlet manifold temperature than that achieved by conventional water-to-air aftercooling.

The Mack aftercooler thus minimizes overall heat load and cooling requirements of the base engine cooling system. The entire aftercooler core can be easily lifted out for cleaning, if necessary.

# Maxitorque Transmissions



Companion to the constant horse-power Maxidyne engines are the high-torque-capacity, triple countershaft Maxitorque transmissions, which are justly famous for their rugged simplicity and durability. The basic Maxitorque, with 5 evenly-spaced forward speeds, provides excellent startability and overall performance for many construction applications. For severe off-road service, two lo-hole Maxitorque transmissions offer first gear ratios of 14.10 or 23.08 in the low range.



# **Specifications**

#### Selected power options for the Mack DM Series

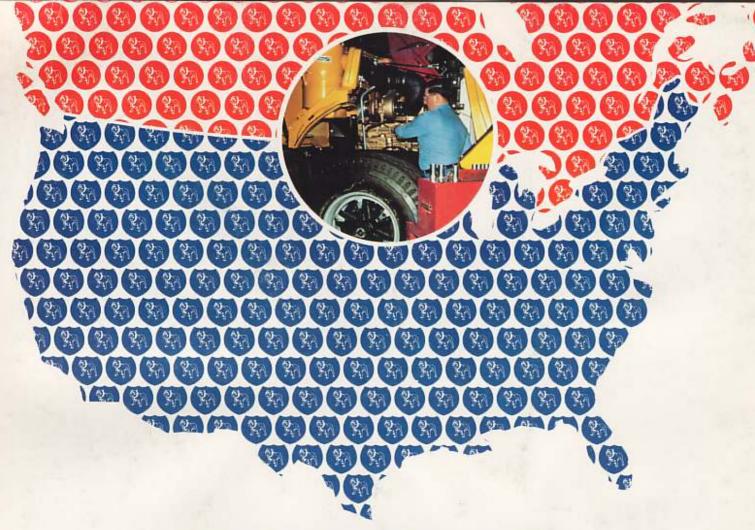
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yl. *BHP	(kW)	@ RPM	lbft.	(N.m)	@ RPN	
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3 315	(235)	@1900	1050	(1 424)	@1450	
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350	(261)	@2100	1006	(1 364)	@1500	
375	(280)	@2200	1040	(1 410)	@1600	
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kW = kilowatt N.m. = Newton-metre (M-S) = Mack-Scania Engine (Cat) = Caterpillar Engine (C) = Cummins Engine \*Based on performance @ SAE Standard Conditions of 500° Altitude and 85°F. Air Intake Temperature. \*\*Based on performance @ Sea Level and 60°F. Air Intake Temperature.



# The V-8 Maxidyne for Top Performance

Mack's most powerful Maxidyne diesel, an 866 cubic-inch V-8, is ideal for those applications requiring higher horse-power for high gross weight operations. This engine develops 325 horsepower at 2200 rpm and a peak torque of 1100 ft./lbs. at 1350 rpm; provides excellent overall performance and operating economy.



# **Parts and Service** throughout North America

Mack's parts and service division is an organization of dedicated professionals who have but one goal-topquality service support and parts availability to keep Mack customers' trucks on the job.

Over the past 5 years, Mack has given top priority to the expansion of its parts and service network ... and today there are more than 800 Mack sales, parts, and service centers in the U.S. and Canada.

These outlets are staffed with factory-trained technicians and service managers; and are stocked with a full line of Genuine Mack parts as well as other manufacturers' components - Caterpillar, Cummins, Detroit Diesel, Eaton, Fuller, Rockwell, Spicer.

Mack parts availability is assured by a triple-tier parts inventory system that backs up every Mack outlet with regional parts distribution centers in the U.S. and Canada, These centers, in turn, are linked to Mack's master parts warehouse in Bridgewater, N.J. by means of a satellite communications system that can transmit data to the Bridgewater computer at 2,400 bits per second! This is the kind of space-age technology employed by the Mack parts and service division to get parts where they're needed fast!

For a complete list of Mack sales, parts, and service centers in the U.S. and Canada, contact: Manager, Construction & Refuse Equipment Sales, Mack Trucks, Inc., Box M, Allentown, Pa. 18105.

"Built Like a Mack Truck"-it's part of the language



One of The Signal Companies [6]