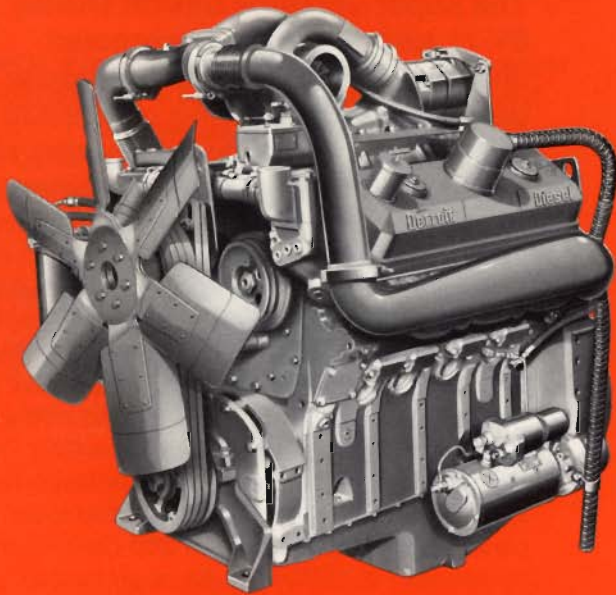


Detroit Diesel Engines

8V-71 TA/TTA
Fuel
Squeezer
Plus



TOP PERFORMANCE

8V-71TA 370 HP @ 2100 RPM

8V-71TA 360 HP @ 1950 RPM

TOP ECONOMY

8V-71TTA 305 HP @ 1950 RPM

ON-OFF HIGHWAY

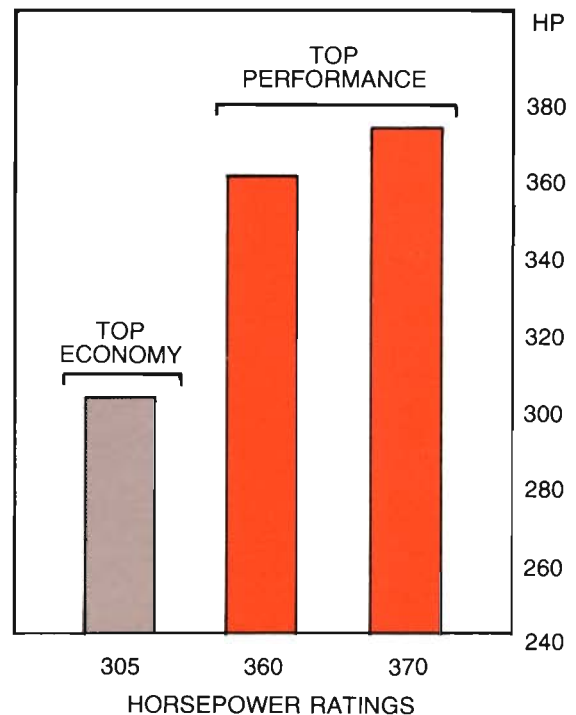
8V-71TTA 305 HP @ 2100 RPM

Typical 8V-71TA

The Versatile 8V-71 Turbocharged Aftercooled Truck Engine Featuring Top Performance and Top Economy
OUTSTANDING WARRANTY...200,000 Miles...
100% Parts...100% Labor

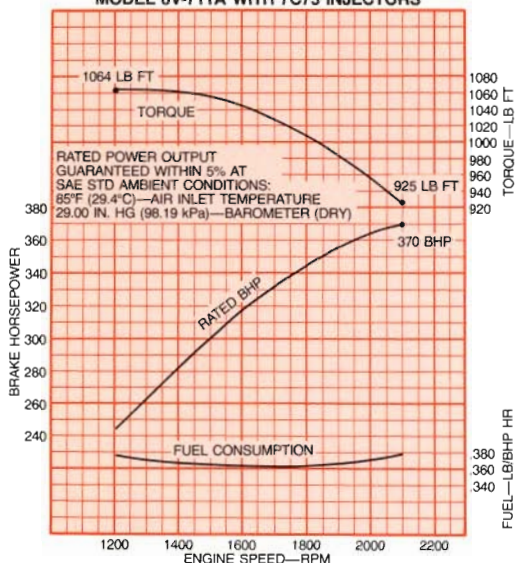
Pick Your Power

The 8V-71 turbocharged aftercooled truck engine gives you one of the broadest horsepower ranges of any truck engine on the market today offering top performance, top economy, and built-in dependability—all from a single engine! Available from 305 to 370 horsepower, this one truck engine is so versatile that it will master your trucking needs of today and can be tailored to meet your power demands of tomorrow. If your trucking needs today fall in the 305 horsepower range then the 8V-71TTA Fuel Squeezer is the engine for you. However, in the future if you find that your power requirements increase, then the same engine you originally bought at 305 horsepower can be modified by your local dealer to give you 360-370 horsepower with no change in other driveline components. Imagine that! An engine that can be rated for top economy at 305 constant horsepower or top performance at 360-370 horsepower. The 8V-71 turbocharged aftercooled engine is built today and made for tomorrow. For the OEM truck dealer this means greater versatility with a lower inventory. You pick the power you need!

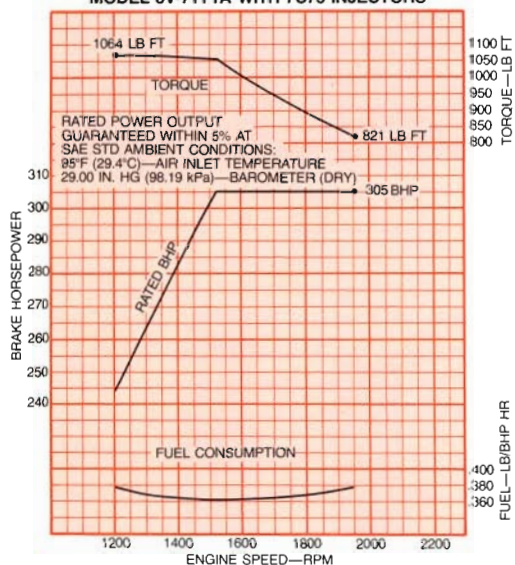


The Right Power...

**BASIC ENGINE PERFORMANCE
MODEL 8V-71TA WITH 7C75 INJECTORS**



**BASIC ENGINE PERFORMANCE
MODEL 8V-71TTA WITH 7C75 INJECTORS**



The 8V-71TTA has been certified for constant horsepower operation at 2100 RPM for certain on-off highway applications.

Rating Explanation

RATED BHP is the power rating for variable speed and load applications where full power is required intermittently.

FUEL CONSUMPTION CURVE shows fuel used in pounds per brake horsepower hour.

THIS RATING does not include power requirements for accessory and standard equipment.

For complete engine specifications for your particular vehicle requirements, see your truck dealer or authorized Detroit Diesel Allison representative.

The super versatile Detroit Diesel 8V-71 turbocharged aftercooled engine...It can develop top power performance at a rating of 360-370 horsepower or top fuel economy at a rating of 305 constant horsepower.

Top Performance

Specifically designed for the trucking industry, the Top Performance 8V-71TA is an engine that is a rugged competitor in today's marketplace. This is an engine that will deliver the right power while maintaining good fuel economy. Depending upon customer need, the 8V-71TA can be rated at 370 conventional horsepower at 2100 RPM for applications where maximum performance is desired, or at 360 conventional horsepower at 1950 RPM for applications where fuel economy, noise, and engine life are of prime importance. Translated into dollars and sense this means heavy payloads and short trip times which should result in higher profits.

Top Economy

Imagine owning a diesel engine designed to squeeze extra miles out of fuel and put more profit into your trucking operation. The 8V-71TTA Fuel Squeezer is designed to do this very job. Governed at 1950 RPM at a rating of 305 constant horsepower, the 8V-71TTA improves fuel economy by 18.6% over standard 8V-71TA engines. The 8V-71TTA has been certified for constant horsepower operation at 2100 RPM for certain on-off highway applications.

High Torque Rise and Constant Horsepower

The 8V-71TTA Fuel Squeezer is a high torque rise, constant horsepower, turbocharged aftercooled engine. The torque rise is 29.5% overall, with a rate of rise of 6.6% per 100 RPM in the constant horsepower segment. This gives the driver a "feeling" of an engine with much greater power than 305 horsepower. The high rate of torque rise is evident to the driver since the horsepower does not decline as the engine speed lugs down due to increasing grades or loads. This high torque rise characteristic encourages truck drivers to operate in the more efficient, lower RPM range.

Performance and Gradeability

This is a typical Vehicle Performance Requirement (VPR) chart of a Top Performance 8V-71TA and an 8V-71TTA Fuel Squeezer engine. The Top Performance 8V-71TA is a 370 horsepower engine governed at 2100 RPM with a 13-speed overdrive transmission. The 8V-71TTA Fuel Squeezer is a 305 constant horsepower engine governed at 1950 RPM with a 9-speed transmission. Both vehicles are using a 3.90:1 rear axle ratio, 10.00 x 20 steel belted radial tires, cab mounted air deflector, GCW of 90,000 lbs., and a 13½ x 8 van freight combinaton.

Tamper Resistant Governor

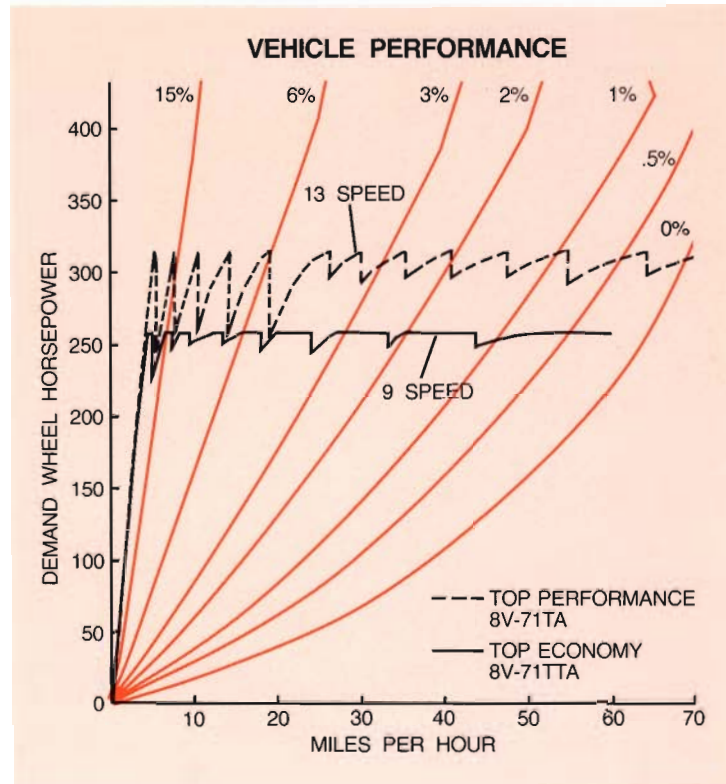
The new tamper-resistant governor prevents the loss of the benefits achieved by the purchase of Detroit Diesel Fuel Squeezer engines. In-use testing has proven that tampering with the high-speed spring has been virtually eliminated when a tamper-resistant governor is used. The hardened steel components and pinned spring pack cover prevent unauthorized tampering with the governor to assure the optimum benefits from your Detroit Diesel engine.

Rear Axle Ratio And Tire Size

The lower the numerical axle ratio, the slower the engine runs for a given vehicle road speed. This gives you the best fuel economy. A geared top speed in the range of 60 mph gives the best balance between economy, performance, and trip time.

Proper Component Selection

To achieve the most efficient operation of a Top Performance 8V-71TA or an 8V-71TTA Fuel Squeezer truck engine, components should be selected to provide maximum economy and performance. These components include: fan, transmission, rear axle (ratio and drive), and tire size. Additional components we recommend are steel belted radial tires, cab mounted air deflectors, and a thermostatically controlled fan.



Top Performance 8V-71TA

Tire Size*	Rear Axle	Geared Road Speed* @ 2100 RPM	Geared Road Speed* w%.87 Overdrive
10:00 x 20 or 11:00 x 22.5 (Tubeless)	4.11:1 3.90:1 3.70:1	60.8 mph 64.1 mph 67.6 mph	70.0 mph 73.7 mph —
10:00 x 22 or 11:00 x 24.5 (Tubeless)	4.33:1 4.11:1 3.90:1	60.6 mph 63.9 mph 67.3 mph	69.7 mph 73.4 mph —

Top Economy 8V-71TTA

Tire Size*	Rear Axle	Geared Road Speed* @ 1950 RPM
10:00 x 20 or 11:00 x 22.5 (Tubeless)	4.11:1 3.90:1 3.70:1	56.5 mph 59.5 mph 62.7 mph
10:00 x 22 or 11:00 x 24.5 (Tubeless)	4.33:1 4.11:1 3.90:1	56.3 mph 59.3 mph 62.5 mph

*Speeds shown are with bias ply tires.

basic specifications

Basic Engine	Top Performance 8V-71TA	Top Economy 8V-71TTA
Model Number	7087-7640	7087-7940
Engine Type	Two Cycle	Two Cycle
Number of Cylinders	8	8
Approximate Dimensions:		
Length	43 in (1092 mm)	43 in (1092 mm)
Width	38 in (965 mm)	38 in (965 mm)
Height	49 in (1245 mm)	49 in (1245 mm)
Net Weight (dry)	2415 lbs (1095 kg)	2415 lbs (1095 kg)

power specifications

7C75 Injectors		
Rated Gross Power*	370 BHP (276 kW) @ 2100 RPM	305 BHP (228 kW) @ 1950 RPM
	360 BHP (269 kW) @ 1950 RPM	**305 BHP (228 kW) @ 2100 RPM
Torque*	1064 lb ft (1443 N·m) @ 1200 RPM	1064 lb ft (1443 N·m) @ 1200 RPM

*SAE: 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Bar (Dry)

**Recommended for on-off highway applications

For complete dimensional information, refer to installation drawings: 2SA377 for Model 7087-7640 and 2SA434 for Model 7087-7940.

Talk About Your Benefits . . . 100,000 Mile Oil Change Interval

Highway truck and intercity bus operators can now drive 100,000 miles before changing the lubricating oil in their Detroit Diesel Engines. The requirements are simple: (1) Use lubricating oil and fuel oil normally recommended for Detroit Diesels, and (2) Replace the full-flow filter element every 25,000 miles, maximum. The 100,000 mile oil change interval applies to all Series 53, 71, and 92 Engines used in highway trucks and intercity buses.

The 100,000 mile approval represents the longest oil change interval in the diesel engine industry. Therefore, these customer BENEFITS can be realized:

- Dollars saved on lube oil usage.
- Reduced down time by eliminating frequent oil changes.
- No bypass oil filters required.
- Less labor hours required for oil changes.
- Less used lube oil to dispose of or store.
- Considerable savings of oil energy resources.

200,000 Mile Warranty...Unequaled In The Trucking Industry

Our Warranty Backs You Up

Detroit Diesel Allison will repair any part of each new Series 71 and Series 92 engine and Optional Equipment which malfunctions due to defects in material or workmanship when used in normal on-highway service and properly maintained. The engine coverage is a full 24 months or 200,000 miles (321,000 km), whichever comes first. Optional equipment, includes each new generator, alternator, starting motor, voltage regulator, air compressor, hydraulic pump and vacuum pump installed on each Series 71 and Series 92 engine used in normal on-highway service and manufactured or supplied by Detroit Diesel Allison, is covered up to 24 months or 50,000 miles (80,450 km), whichever comes first.

Any authorized Detroit Diesel Allison service outlet will repair it. No charge for parts or labor.

Replacement of normal maintenance items, conditions resulting from misuse, negligence, alteration, accident or improper engine repair are not covered.

See your Detroit Diesel Allison Distributor for complete Warranty details.



Detroit Diesel Allison

Division of General Motors Corporation

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