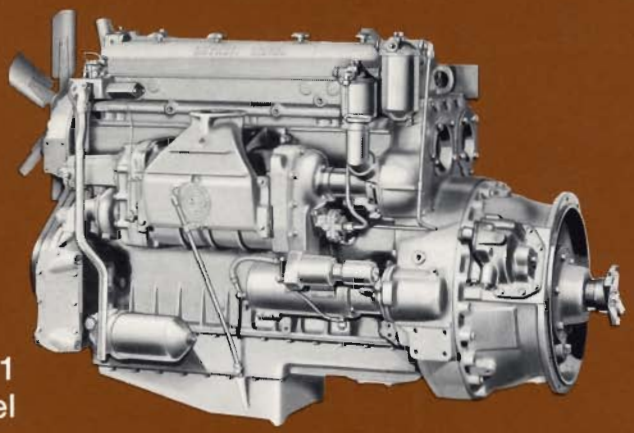
Detroit Diesel Engines

fan-to-flywheel models
with torque converter

4-71
6-71



Typical 6-71
Fan-to-Flywheel Model
with Torque Converter

specifications

Basic Engine	4-71 N65 Injectors	6-71 N65 Injectors
Model	1043-5001	1063-5001
Engine Type	Two Cycle	Two Cycle
Number of Cylinders	4	6
Bore and Stroke	4¼ in x 5 in (108 mm x 127 mm)	4¼ in x 5 in (108 mm x 127 mm)
Compression Ratio	18.7 to 1	18.7 to 1
Rated Gross Power:		
60°F (15.6°C) and 29.92 in Hg (101.31 kPa) Bar. (Dry)	160 BHP (119 kW) @ 2100 RPM	238 BHP (178 kW) @ 2100 RPM
SAE: 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Bar. (Dry)	152 BHP (113 kW) @ 2100 RPM	228 BHP (170 kW) @ 2100 RPM
Continuous Gross Power:		
SAE: 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Bar. (Dry)	117 BHP (87 kW) @ 1800 RPM	175 BHP (131 kW) @ 1800 RPM
Torque:		
SAE: 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Bar. (Dry)	400 lb ft (542 N•m) @ 1600 RPM	600 lb ft (813 N•m) @ 1600 RPM
Net Performance at Converter Output:		
Torque Converter Model	Series TC 430	Series TC 570
Torque Multiplication at Stall Speed	3.44 to 1	3.19 to 1
Rated Shaft Horsepower*		
85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Bar. (Dry)	108 BHP (81 kW) @ 1700 RPM	178 BHP (133 kW) @ 1850 RPM
Torque at Stall Speed	1260 lb ft (1708 N•m)	1810 lb ft (2454 N•m)
Approximate Dimensions:		
Length	56 in (1422 mm)	68 in (1727 mm)
Width	33 in (838 mm)	33 in (838 mm)
Height	42 in (1067 mm)	43 in (1092 mm)
Net Weight (Dry)	2100 lbs (953 kg)	2610 lbs (1184 kg)

*Converter output shaft speed, engine governed at 2100 RPM.

For complete dimensional information, refer to installation drawing 2SA104 for Model 1043-5001 and 2SA89 for Model 1063-5001.

performance

Rating Explanation

Basic Engine Performance

RATED BHP is the power rating for variable speed and load applications where full power is required intermittently. Performance may be derated to improve fuel economy and extend engine life.

CONTINUOUS BHP is the power rating for applications operating under a constant load and speed for long periods of time.

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

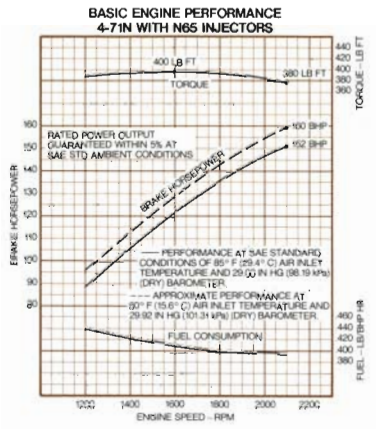
THESE RATINGS do not include power requirements for acecssory and standard equipment.

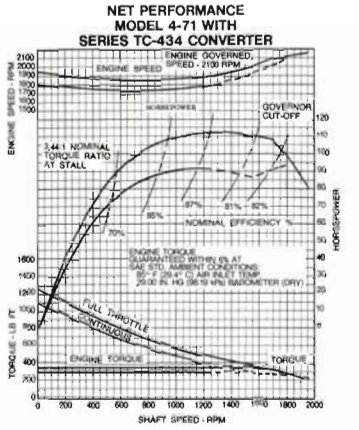
Net Performance

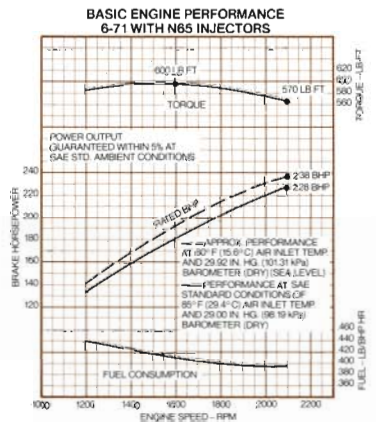
RATED PERFORMANCE—Full throttle performance is shown. The recommended normal operating range is above 70% efficiency. Maximum torque capacity is available for starting heavy loads without shifting gears.

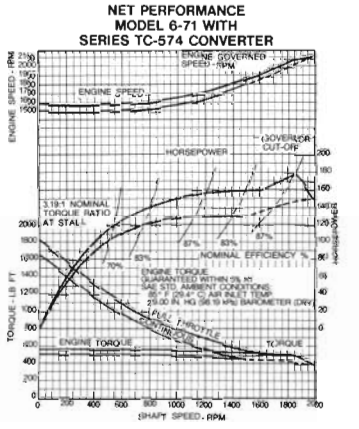
CONTINUOUS OPERATION—The horsepower output will increase rapidly at low shaft speeds and will remain approximately constant over the remainder of the speed range. If the application has periods of constant load and speed, the average load should correspond to the continuous rating of the engine. The average speed should be above the 70% efficiency line.

TORQUE CONVERTER RATINGS are based on SAE operating conditions of 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Barometer (Dry) with standard equipment.









standard equipment

Air Inlet Housing

Alternator—24 volt, 40 amp

Crankshaft Pulley

Exhaust Manifold—Center outlet

Fan—22 in (599 mm), 6 blades, suction

Flywheel Housing—SAE #1

Fuel Filters

Governor—Limiting speed with throttle controls

Injectors—Cam operated, unit type, clean tip

Instruments—Ammeter, oil pressure and water temperature gauges for both engine and torque converter, starter switch

Lube Oil Cooler

Lube Oil Filter—Full flow

Oil Pan—Stamped for 30° inclination angle

Shutdown Controls—Manual shutdown with 50 in (1270 mm) cable

Starting Motor—24 volt

Torque Converter—

Series TC 434—Model 1043-5001

Series TC 574—Model 1063-5001

For a complete listing of standard and optional equipment, consult your authorized Detroit Diesel Allison representative.

Specifications subject to change without notice.

Detroit Diesel Allison

Division of General Motors Corporation

13400 West Outer Drive Detroit, Michigan 48228

In Canada: Diesel Division, General Motors of Canada Limited London Ontario