

Detroit Diesel Engines

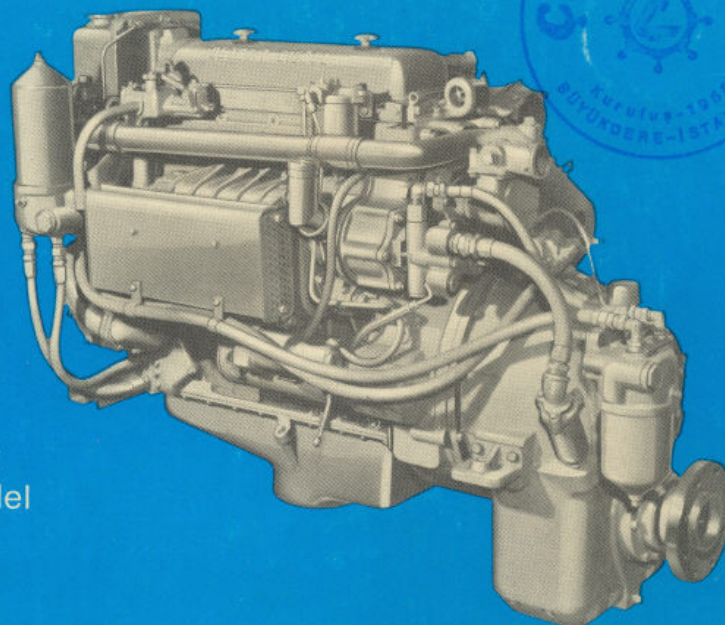
marine models



TÜRKİYE GENEL MÜMESSİLİ
KURT DAŞAKINCI MÜESSESESİ
 MERKEZ - ANKARA ŞUBESİ - İSTANBUL
 TELF : 173822 - 121342 TELF : 472880 - 472881

Deniz Motor Tamir Atölyesi
 İbrahim ve Sultan Çemberci
 Kardeşler
 Bayındır, Kırklar Soka. No. 7
 İSTANBUL
 Tel. 642 1917 - 142 01 51

4-71
175 hp



Typical 4-71
Marine Model

Model
4-71 1042-3000
1042-5000

specifications

Basic Engine

4-71

Model Number	1042-3000 (port) 1042-5000 (starboard)
Engine Type	Two Cycle
Number of Cylinders	4
Bore and Stroke	4 1/4 in. x 5 in.
Two Cycle Displacement (Every Downstroke a Powerstroke)	284 cu. in.
Rated Brake Horsepower 60°F and Sea Level	175 @ 2300 RPM
Rated Shaft Horsepower 85°F and 500 ft.	160 @ 2300 RPM
Continuous Shaft Horsepower 85°F and 500 ft.	115 @ 1800 RPM
Compression Ratio	18.7 to 1
Approximate Net Weight (dry) With Standard Equipment	2275 lbs.

Rating Explanation

RATED BRAKE HORSEPOWER— Approximate basic engine power rating at 60°F and Sea Level.

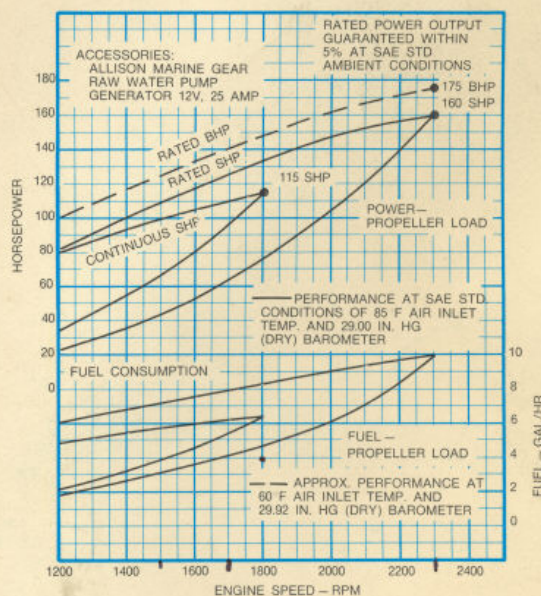
RATED SHAFT HORSEPOWER—Net power available at the marine gear output shaft; this rating is recommended for pleasure craft applications.

CONTINUOUS SHAFT HORSEPOWER—Net power available at the marine gear output shaft for continuous duty or workboat applications.

PROPELLER LOAD—Indicates horsepower absorbed by a typical propeller and the corresponding fuel consumption throughout the speed range.

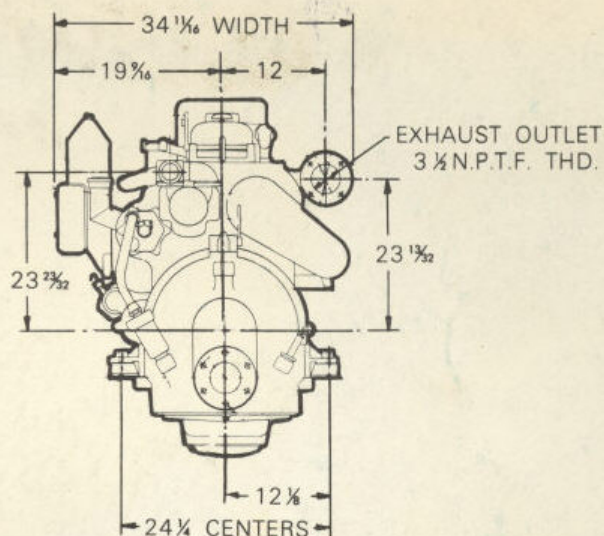
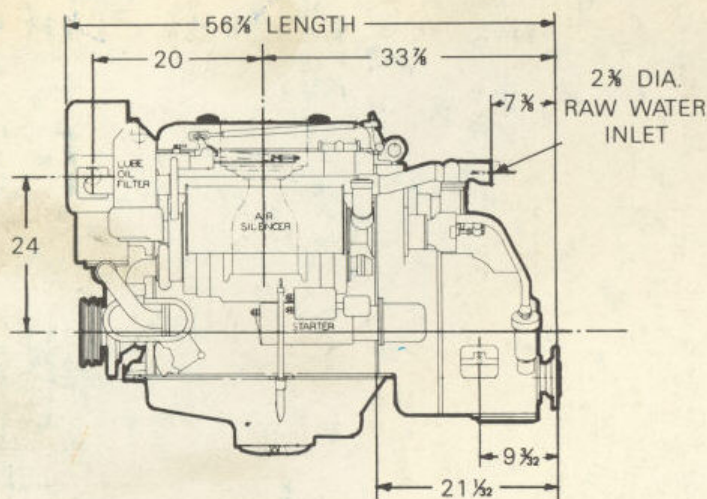
Propeller load and shaft horsepowers as shown are based on ambient conditions of 85°F, Bar. (dry) 29.00 in. HG and include deduction for standard marine accessory equipment.

ENGINE PERFORMANCE
MODELS 1042-3000, 1042-5000



principal dimensions

4071C



For complete dimensional information, refer to installation drawing 2 SA 256 for model 1042-5000 and 2 SA 260 for model 1042-3000.

standard equipment

Air Inlet Housing—Aluminum housing with manual air shutdown. Includes air silencer

Crankshaft Pulley—7.5 in. diameter, 2-groove

Engine Mounts—Includes mounts for engine and marine gear

Exhaust Manifold—Water-cooled

Flywheel Housing—SAE #2

Generator—Battery-charging, 12-volt, 25 amp. DC

Governor—Variable speed, includes throttle controls

Heat Exchanger—Includes raw water pump and piping

Injectors—Cam-operated, unit type, "Clean Tip"

Instrument Panel—Includes ammeter, hourmeter, tachometer, water temperature gauge, and oil pressure gauges for engine and marine gear

Lube Oil Filter—Full-flow filter

Marine Gear—Allison hydraulic reverse and reduction gear, 2 to 1 ratio

Oil Pan and Distribution System—Stamped oil pan for 30° installation angle, rear sump

Starting Equipment—12 volt, starting motor, sprag over-running clutch

Vibration Damper—Single, light, viscous

Water Filter—Fresh water filter with 10-gallon capacity

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

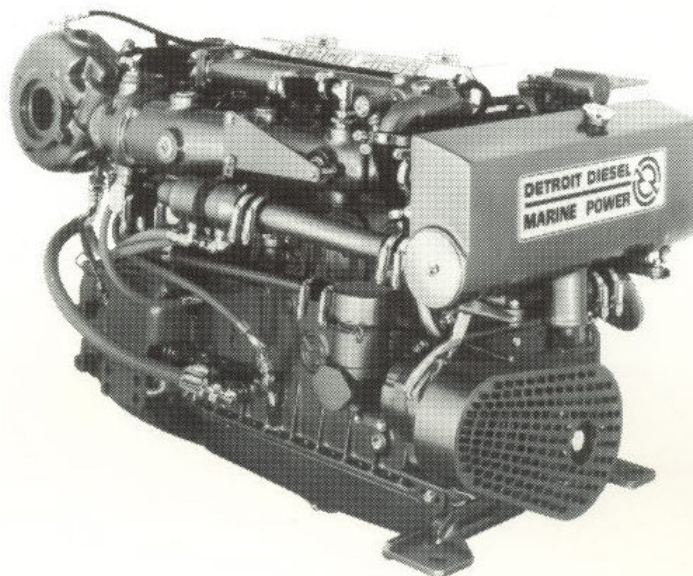
In Canada: Diesel Division, General Motors of Canada Limited, London Ontario

DETROIT DIESEL



4-71TI
325 BHP

Marine Pleasure Craft



30 EKIM 1996

General Specifications

Basic Engine	4-71TI
Model — Port	1042-7300
Starboard	1042-5300
Description	Turbocharged-Intercooled with Bypass Blower
Number of Cylinders	4
Bore and Stroke	4.25 in x 5.00 in (108 mm x 127 mm)
Displacement	284 cu in (4.7 liters)
Compression Ratio	17:1
Weight (dry) w/o Gear	1800 lbs (817 kg)

Rated Power Output—Maximum

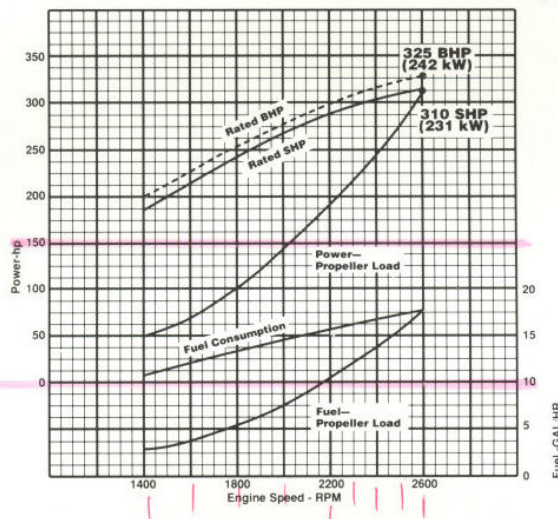
Gross Power	325 BHP (242 kW) @ 2600 RPM
Net Power	310 SHP (231 kW) @ 2600 RPM

Equipment Specifications

Air Inlet Housing—12 Volt electric air shut down, manual optional
Alternator—12 volt, 66 amp
Blower—Maxi by-pass
Crankcase vapor collectors with silencers
Engine mounted Gauge Package
Engine Mounting—Brackets for both engine and marine gear
Exhaust System—Water-cooled manifold, riser and turbocharger
Flywheel Housing—#2 SAE Aluminum
Governor—Variable speed
Heat Exchanger—Tube and shell
Intercooler—Raw water
Manual Fuel Prime Pump
Marine Gear—Available with Detroit Diesel 5050V or 5050A
Oil Drain Connection
Starting Motor—12 volt

Performance Curve

Model 4-71TI—Maximum



Rating Explanation

RATED BHP Basic engine gross horsepower.

RATED SHP Net power available at the marine gear output flange.

PROPELLER LOAD Indicates horsepower absorbed by a typical fixed pitch propeller.

POWER OUTPUT guaranteed within 5% at rated ambient conditions.

MARINE MAXIMUM The marine maximum rating applies to high performance boats where speed is of primary importance and overall load factors are low. Normal or continuous cruising RPM should be limited to 90% of rated engine RPM, and the use of full rated power should be limited to 10% (average) of operating time. This rating is normally reserved for privately-owned yachts in non-revenue applications with an average annual hour accumulation of 500 hrs.

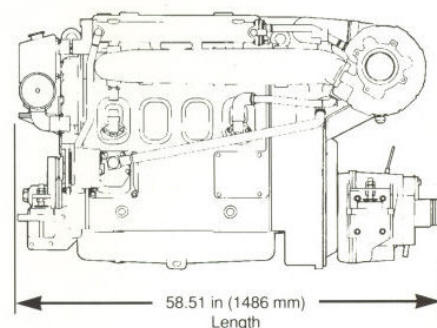
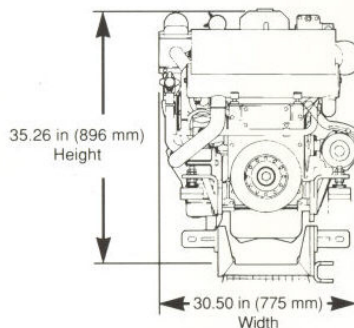
NOTE: Other boats; e.g., fire, police, with an overall duty cycle similar to the maximum category may be applied at the appropriate rating.

Consult your authorized Detroit Diesel Corporation representative for the rating that will apply to your vessel.

Dimensional Drawing

Model 1042-7300
4-71TI

Approximate dimensions shown.
For complete dimensional information,
refer to installation drawing



DETROIT DIESEL
CORPORATION



13400 Outer Drive, West / Detroit, Michigan 48239-4001

Telephone: 313-592-5000

FAX: 313-592-7288



Detroit Diesel Engines

truck models

6-71T
262 hp *

TÜRKİYE GENEL MÜMESSİLİ



kurt başakıncı müessesesi

Merkez: ANKARA

Şube: İSTANBUL

Tel: 27 08 57 - 27 54 51

Tel: 17 13 50 - 47 28 31

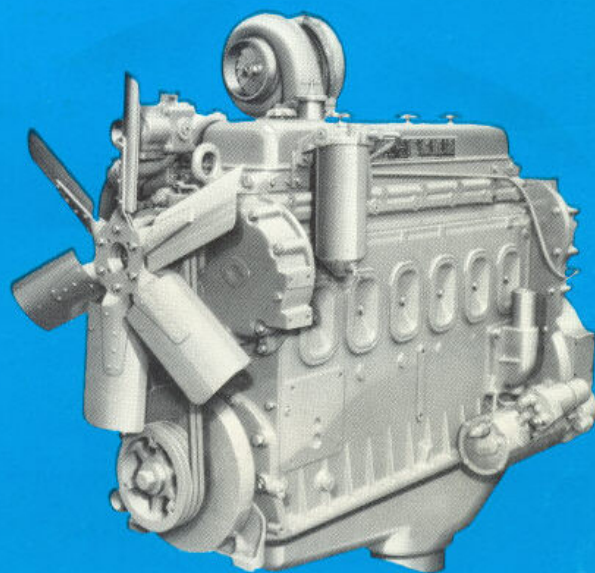


**AUTOCAR®
FREIGHTLINER®
WESTERN STAR™
WHITE®**

WHITE MOTOR CORPORATION

Model

6-71T 1067-8340



Typical 6-71T
Truck Model

specifications

Basic Engine	6-71T with N70 Injectors	6-71T with N75 Injectors
Engine Type	Two Cycle	Two Cycle
Number of Cylinders	6	6
Bore and Stroke	4.25 in. x 5 in. (108 mm x 127 mm)	4.25 in. x 5 in. (108 mm x 127 mm)
Two Cycle Displacement (Every Downstroke a Powerstroke)	426 cu. in. (6981 cc)	426 cu. in. (6981 cc)
Rated Brake Horsepower 85° F and 500 ft. (SAE) Metric 85° F and 500 ft.	250 @ 2100 RPM 253 @ 2100 RPM	262 @ 2100 RPM 266 @ 2100 RPM
Torque 85° F and 500 ft. (SAE) Metric 85° F and 500 ft.	690 lb. ft. @ 1400 RPM 95.4 kg/m @ 1400 RPM	725 lb. ft. @ 1600 RPM 100.2 kg/m @ 1600 RPM
Compression Ratio	17 to 1	17 to 1
Approximate Dimensions:		
Length	56 in. (1425 mm)	56 in. (1425 mm)
Width	35 in. (893 mm)	35 in. (893 mm)
Height	52 in. (1315 mm)	52 in. (1315 mm)
Net Weight (dry)	2195 lb. (996 kg)	2195 lb. (996 kg)

For complete dimensional information, refer to installation drawing 2SA392.

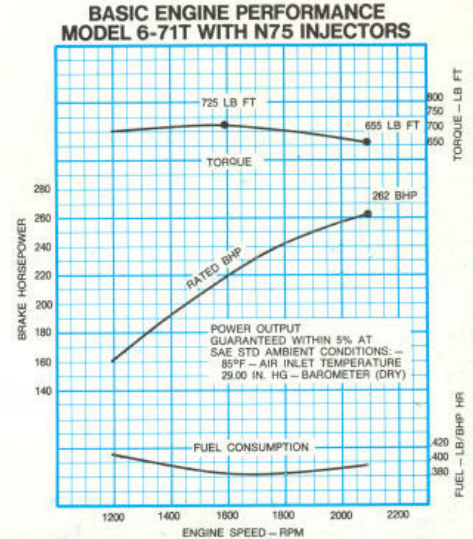
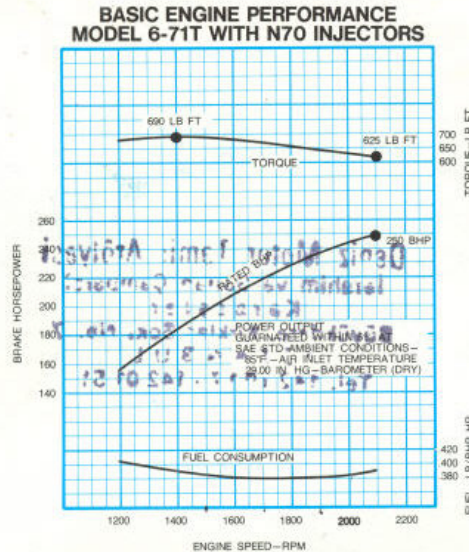
Rating Explanation

RATED BHP is the power rating for variable speed and load applications where full power is required intermittently. This horsepower rating can be maintained at higher altitudes due to turbocharging.

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

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

For complete engine specifications for your particular application, see your truck dealer or authorized Detroit Diesel Allison Representative



standard equipment

Air Compressor—12 CFM

Air Inlet Housing—Aluminum housing and manual air shutdown with 50" control cable

Crankshaft Pulley—7.50" diameter, 3-groove

Exhaust Manifold—Center vertical outlet to turbocharger

Fan—26", 6-blade, suction

Flywheel—SAE #2 for 14" clutch

Flywheel Housing—SAE #2

Generator—Battery-charging, 12-volt, 62 amp, AC

Governor—Double weight, limiting speed

Injectors—Cam-operated, unit type, "Clean Tip"

Lube Oil Filter—Full flow filter

Oil Pan and Distribution System—Stamped oil pan, rear sump for 30° (rear down) inclination

Starting Equipment—12 volt starting motor with sprag over-running clutch

Turbocharger—"Vaneless" turbocharger

Vibration Damper—single, heavy viscous

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

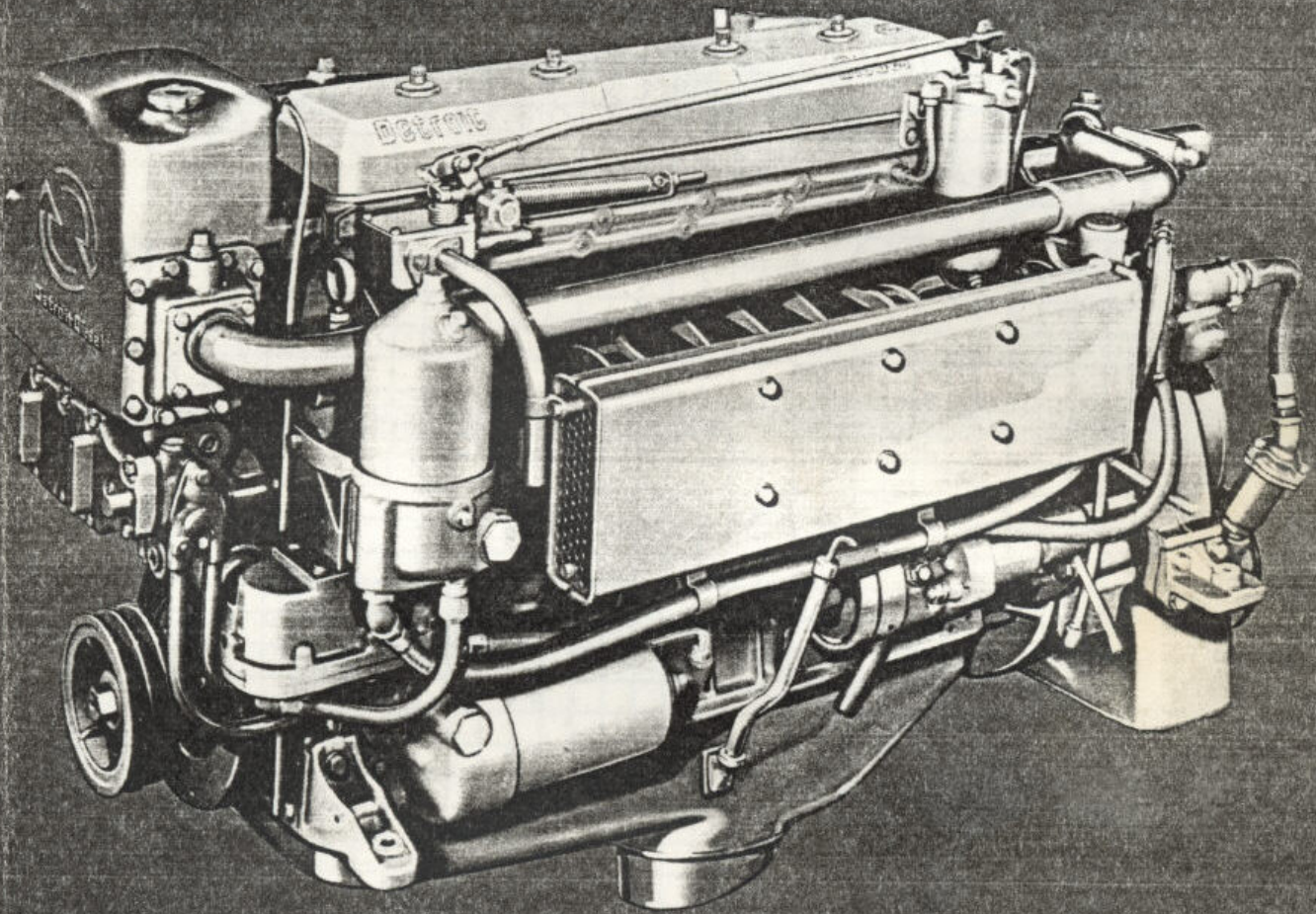
Detroit Diesel Engines

marine models

6-71
265 hp

6-71M
280 hp

6-71M
(low-profile)
280 hp



Typical 6-71
Marine Model



Detroit Diesel
Allison

ENGINE PERFORMANCE CURVE

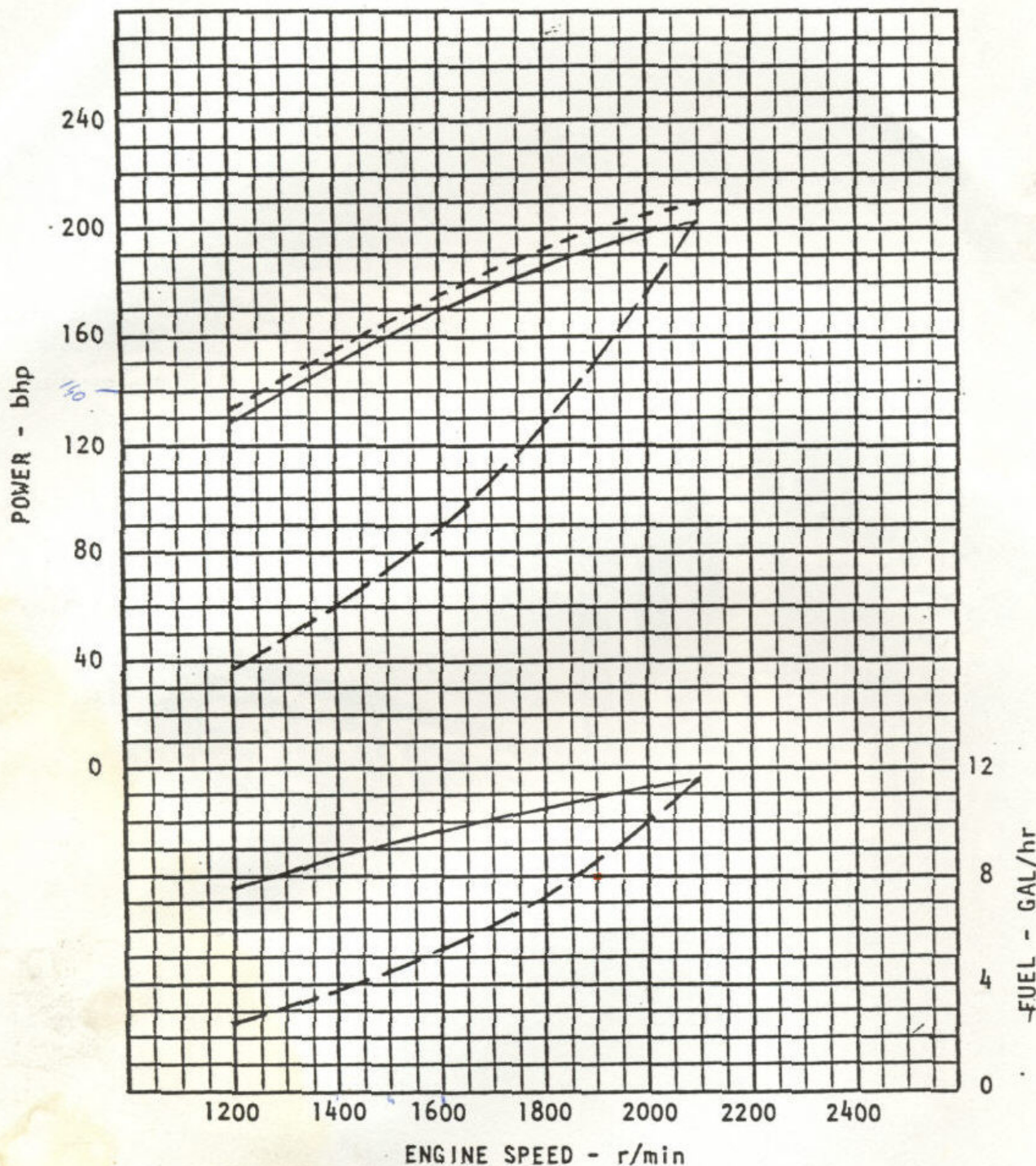
RATING: NET POWER - SEE BELOW

APPLICATION: MARINE - INTERMITTENT
CREW BOAT

MODEL: 6-71

210 bhp @ 2100 r/min

203 shp @ 2100 r/min



----- RATED BRAKE HORSEPOWER
———— RATED SHAFT HORSEPOWER
- · - · - PROPELLER LOAD

ACCESSORIES: ALLISON M GEAR, RAW WATER PUMP, ALTERNATOR 12V42A

CONVERSION FACTOR: LITERS/hr = GAL/hr x 3.785

- POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
- CONVERSION FACTORS: POWER: $kW = bhp \times 0.746$
FUEL: $kg/kW-hr = lb/bhp-hr \times 0.608$
TORQUE: $N-m = lb-ft \times 1.356$
- VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO
CHANGE WITHOUT NOTICE.

CERTIFIED BY:

STAFF ENGINEER

CURVE NO.

E4-1062-52-2

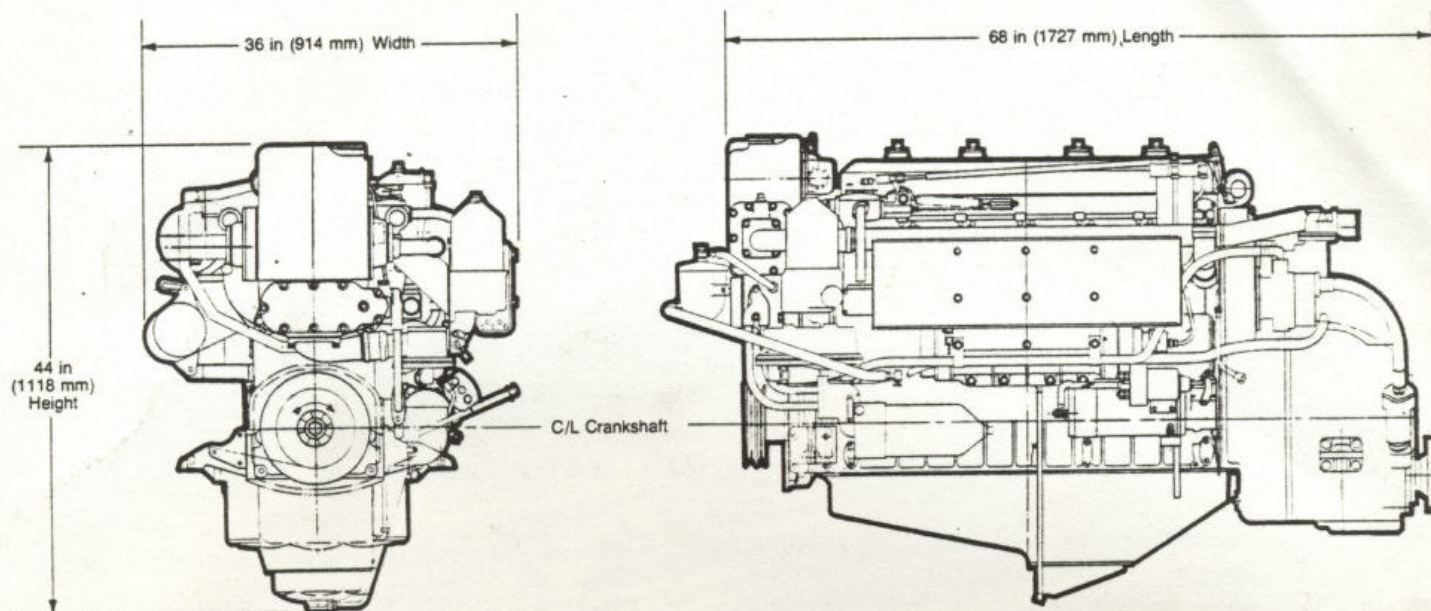
DATE: 4-18-69

REV./DATE: 2/8-14-85

SHT. 1 OF 3

principal dimensions

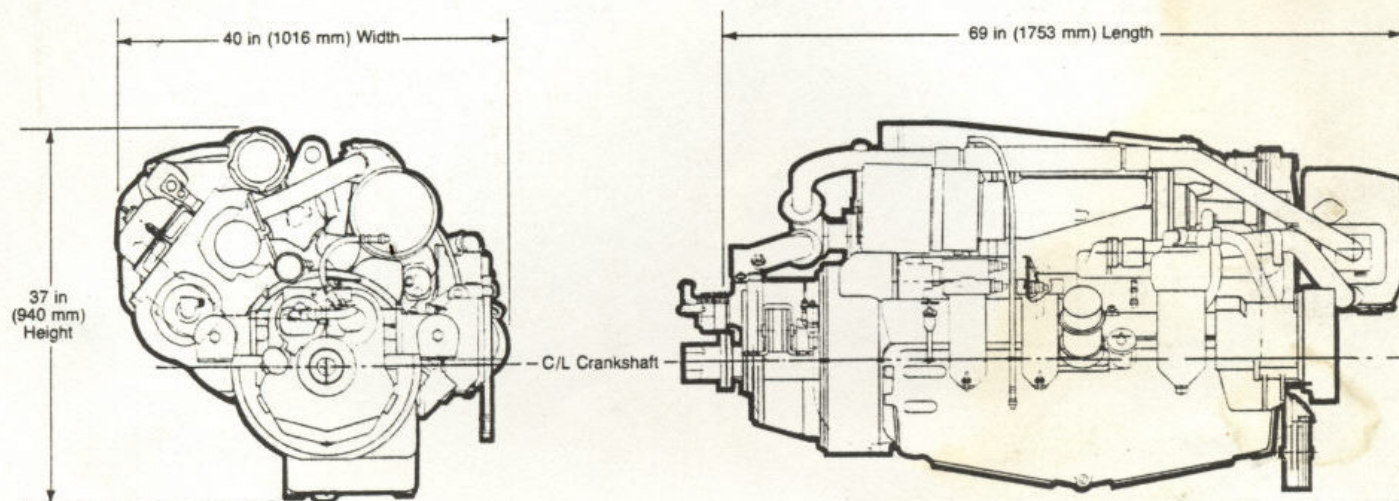
Model 1062-5000



Approximate dimensions shown.

For complete dimensional information, refer to installation drawing 2SA-219 for Models 1062-3000, 1062-3001, and drawing 2SA-218 for Models 1062-5000, 1062-5001.

Model 1062-6001 (low-profile)



Approximate dimensions shown.

For complete dimensional information, refer to installation drawing 2SA-222.

standard equipment

Air Box Drain Tubes

Air Inlet Housing

Air Silencer

Alternator—12 volt, 42 amp, Models 1062-3000, 1062-3001, 1062-5000, and 1062-5001 only

Crankshaft Pulley

Engine Mounts—Includes mounts for engine and marine gear

Exhaust Manifold—Water cooled

Flywheel Housing—SAE #2

Fuel Filters

Governor—Variable speed, Models 1062-3000, 1062-3001, 1062-5000, 1062-5001; limiting speed, Model 1062-6001

Heat Exchanger

Injectors—Cam-operated, unit type, clean tip

Instruments—Includes ammeter, hourmeter, tachometer, and oil pressure gauge and water temperature gauge for engine and marine gear

Lube Oil Cooler

Lube Oil Filter—Full flow

Marine Gear—Allison "M" type, hydraulic reverse and reduction gear, 2 to 1 ratio

Oil Pan—Cast iron pan for 21°-30° inclination angle, rear sump, Models 1062-3000, 1062-3001, 1062-5000, 1062-5001; stamped steel pan for 10° inclination angle, Model 1062-6001 only

Starting Motor—12 volt

Vibration Damper

Water Filter—Fresh water filter with 10 gallon (37.9 Liters) capacity

For complete specifications and a 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

1340 West Outer Drive Detroit, Michigan 48228

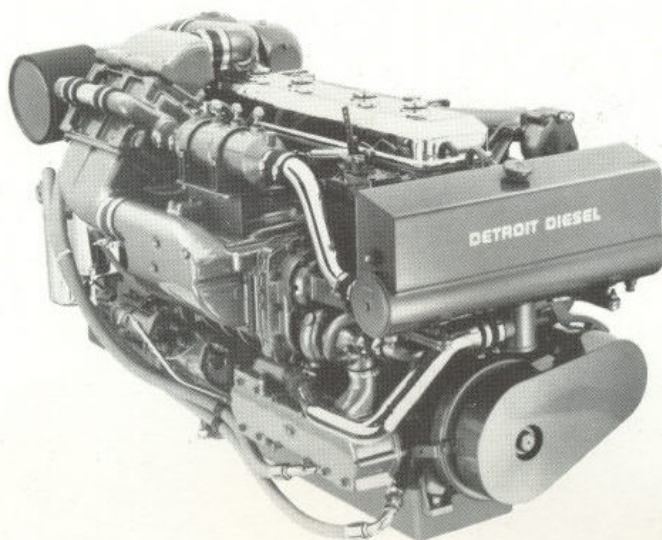
In Canada: Diesel Division, General Motors of Canada Limited, London, Ontario

DETROIT DIESEL



6-71TI
485 BHP

Marine Pleasure Craft



General Specifications

Basic Engine	6-71TI
Model—Port	1062-7300
Starboard	1062-5300
Description	Turbocharged-Intercooled with Bypass Blower
Number of Cylinders	6
Bore and Stroke	4.25 in x 5.00 in (108mm x 127mm)
Displacement	426 cu in (6.9 liters)
Compression Ratio	17:1
Weight (dry)	2850 lbs (1293 kg)

Rated Power Output—Maximum

Gross Power	485 BHP (362 kW) @ 2500 RPM
Net Power	465 SHP (347 kW) @ 2500 RPM

Rated Power Output—Intermittent-Maximum

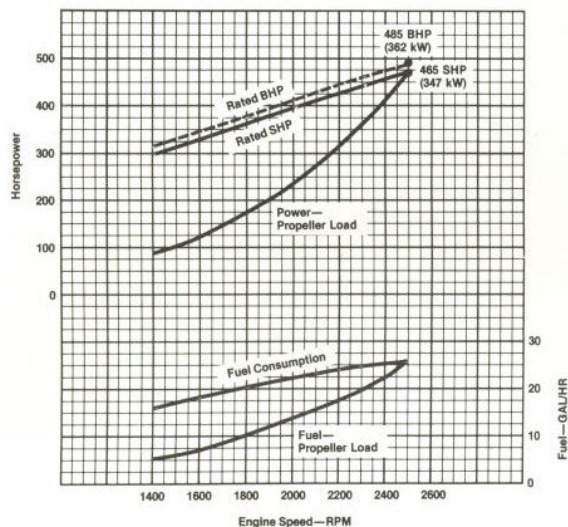
Gross Power	450 BHP (336 kW) @ 2500 RPM
Net Power	430 SHP (321 kW) @ 2500 RPM

Equipment Specifications

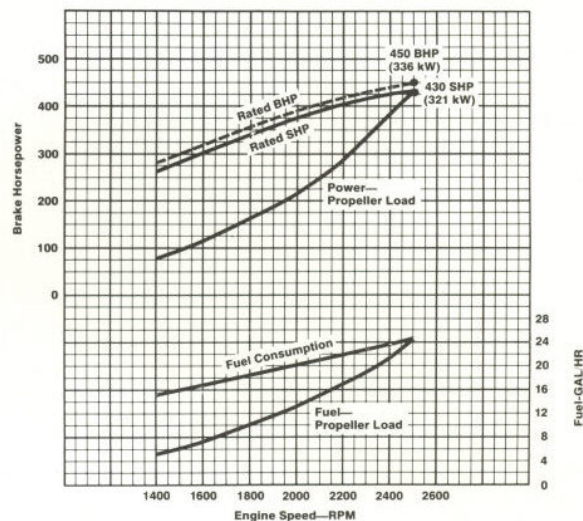
Air Inlet Housing—Electric air shut down, manual optional
Alternator—12 volt, 66 amp, 90 amp optional
Blower—Maxi by-pass
Breather Collector System
Cam—Integral Advance Timing
Engine—Mounting Brackets for both engine and marine gears
Exhaust System—Fresh water - cooled manifolds and turbine housing
Governor—Variable speed
Heat Exchanger—Single pass tube and shell
Intercooler—Raw water
Marine Gear—Detroit Diesel MG507-2, MG507A-2 and MG5091
Turbocharger—High and low mounting options

Performance Curve

Model 6-71TI—Maximum



Model 6-71TI—Intermittent-Maximum



Rating Explanation

RATED BHP Basic engine gross horsepower.

RATED SHP Net power available at the marine gear output flange.

PROPELLER LOAD indicates horsepower absorbed by a typical fixed pitch propeller.

POWER OUTPUT guaranteed within 5% at rated ambient conditions.

MARINE MAXIMUM The marine maximum rating applies to high performance boats where speed is of primary importance and overall load factors are low. Normal or continuous cruising RPM should be limited to 90% of rated engine RPM, and the use of full rated power should be limited to 10% (average) of operating time. This rating is normally reserved for privately-owned yachts in non-revenue applications with an average annual hour accumulation of 500 hrs.

MARINE INTERMITTENT-MAXIMUM The intermittent-maximum rating is reserved for privately-owned yachts with long-range cruising capability and/or used in seasonal charter operation. Normal or continuous cruising RPM should be limited to 90% of the rated engine RPM and the use of full rated power should be limited to 10% (average) of operating time. All boats in this category are limited to a maximum of 1,000 hours per year.

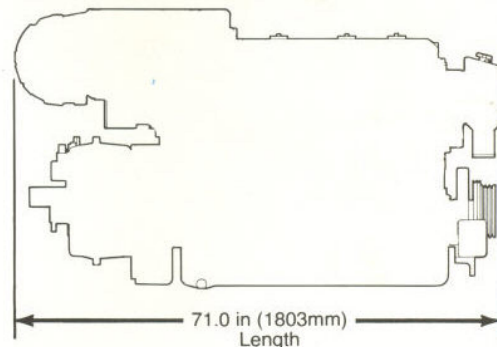
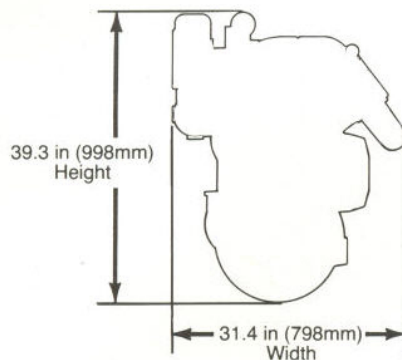
NOTE: Other boats; e.g., fire, police, with an overall duty cycle similar to maximum or intermittent-maximum may be applied at the appropriate rating.

Consult your authorized Detroit Diesel Corporation representative for the rating that will apply to your vessel.

Dimensional Drawing

Model 1062-7300
6-71TI

Approximate dimensions shown.
For complete dimensional information,
refer to installation drawing



DETROIT DIESEL
CORPORATION



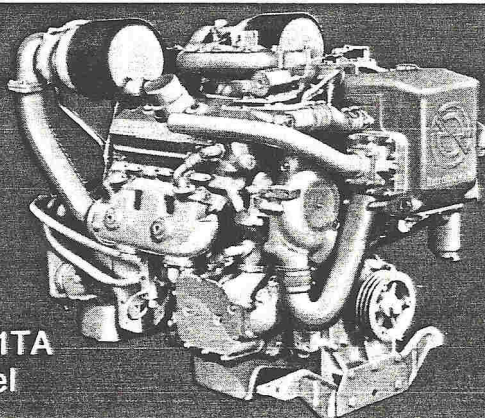
50 Outer Drive, West / Detroit, Michigan 48239-4001
phone: 313-592-5000
4820091 / TWX: 810-221-1649
313-592-7288

Detroit Diesel Engines marine models

6V-71
250 hp

Low Profile
6V-71TA
375 hp
*Twin Disc MG507
Marine Gear*

Low Profile
6V-71TA
435 hp
*Allison "M"
Marine Gear*



Typical 6V-71TA
Marine Model

basic specifications

Basic Engine	6V-71	Low Profile 6V-71TA <i>Twin Disc MG507 Marine Gear</i>	Low Profile 6V-71TA <i>Allison "M" Marine Gear</i>
Model-Port Starboard	7062-3000 7062-7000	— 7062-7601	7062-3600 7062-7600
Description	Naturally Aspirated	Turbocharged-Aftercooled	Turbocharged-Aftercooled
Number of Cylinders	6	6	6
Bore and Stroke	4.25 in × 5 in (108 mm × 127 mm)	4.25 in × 5 in (108 mm × 127 mm)	4.25 in × 5 in (108 mm × 127 mm)
Displacement	426 cu in (6.99 liters)	426 cu in (6.99 liters)	426 cu in (6.99 liters)
Compression Ratio	18.7 to 1	17 to 1	17 to 1
Net Weight (dry)	2570 lbs (1166 kg)	2725 lbs (1236 kg)	2780 lbs (1261 kg)

power specifications

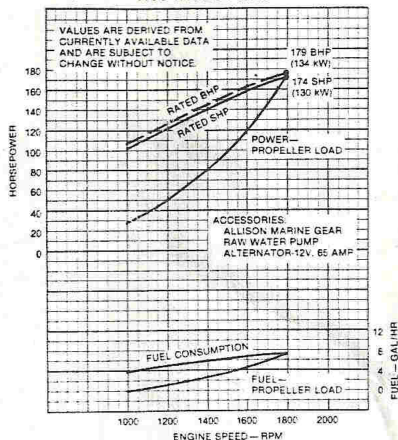
Continuous			
Injectors	N55	No continuous rating is currently available for the 6V-71TA	No continuous rating is currently available for the 6V-71TA
Rated Gross Power	179 BHP (134 kW) @ 1800 RPM*		
Rated Net Power	174 BHP (130 kW) @ 1800 RPM*		
Intermittent			
Injectors	N65	N70	N70
Rated Gross Power	228 BHP (170 kW) @ 2100 RPM*	260 BHP (194 kW) @ 2100 RPM†	260 BHP (194 kW) @ 2100 RPM†
Rated Net Power	221 SHP (165 kW) @ 2100 RPM*	250 SHP (187 kW) @ 2100 RPM†	250 SHP (187 kW) @ 2100 RPM†
Maximum			
Injectors	N70	7N95	9215
Rated Gross Power	250 BHP (187 kW) @ 2300 RPM*	375 BHP (280 kW) @ 2300 RPM*	435 BHP (325 kW) @ 2300 RPM†
Rated Net Power	240 SHP (179 kW) @ 2300 RPM*	365 SHP (272 kW) @ 2300 RPM*	425 SHP (317 kW) @ 2300 RPM†

*Rating conditions of 85 °F (29.4 °C) and 29.00 in Hg (98.19 kPa) Barometer (Dry)

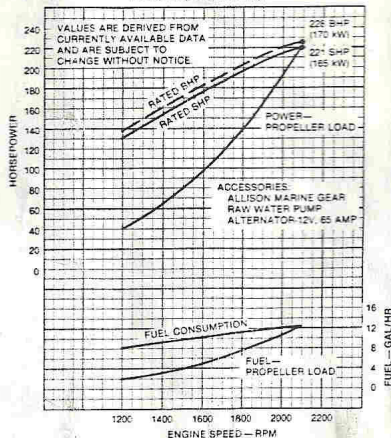
†Rating conditions of SAE: 77 °F (25 °C) and 29.31 in Hg (99 kPa) Barometer (Dry)

6V-71

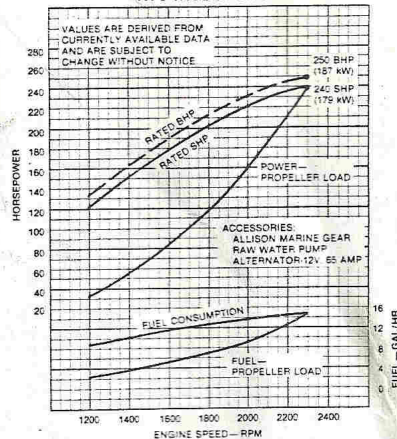
**MODEL 6V-71
MARINE CONTINUOUS RATING
N55 INJECTORS***



**MODEL 6V-71
MARINE INTERMITTENT RATING
N65 INJECTORS***



**MODEL 6V-71
MARINE MAXIMUM RATING
N70 INJECTORS***

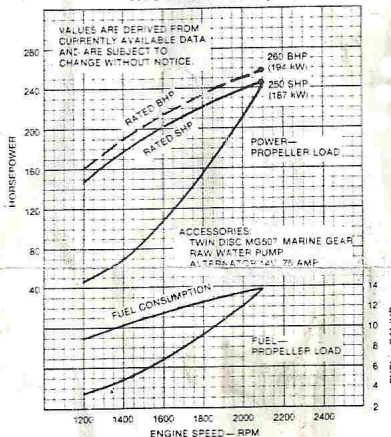


6V-71TA

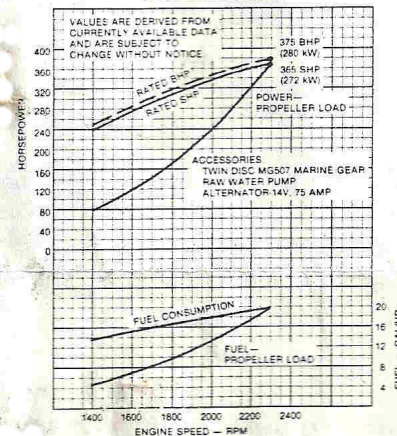
(Twin Disc MG507 Marine Gear)

No continuous rating is currently available for the 6V-71TA.

**MODEL 6V-71TA
MARINE INTERMITTENT RATING
N70 INJECTORS†**



**MODEL 6V-71TA
MARINE MAXIMUM RATING
7N95 INJECTORS***

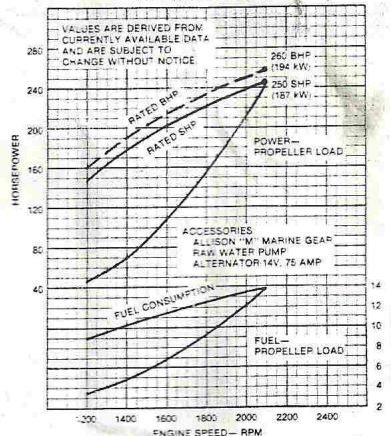


6V-71TA

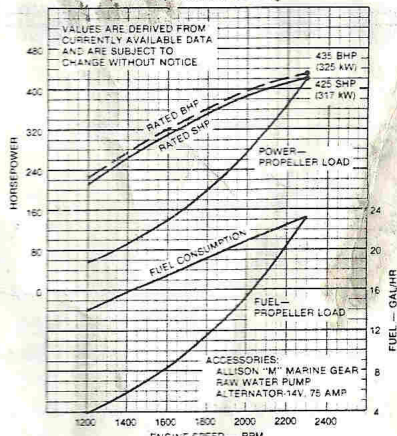
(Allison "M" Marine Gear)

No continuous rating is currently available for the 6V-71TA.

**MODEL 6V-71TA
MARINE INTERMITTENT RATING
N70 INJECTORS†**



**MODEL 6V-71TA
MARINE MAXIMUM RATING
92.5 INJECTORS†**



Rating Explanation

RATED BHP—Basic engine gross horsepower.

RATED SHP—Net power available at the marine gear output shaft.

PROPELLER LOAD—Indicates horsepower absorbed by a typical propeller and the corresponding fuel consumption throughout the speed range.

POWER OUTPUT guaranteed within 5%

at standard ambient conditions.
MARINE ENGINE RATING—The use of the ratings e.g., maximum, intermittent and continuous; varies with type of vessel in which the engine is installed. See your Detroit Diesel Allison representative for the rating

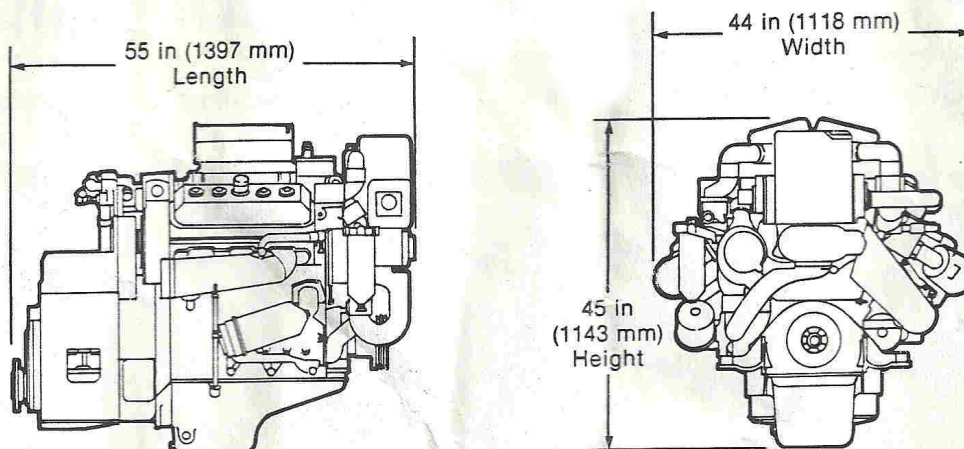
that will apply to your vessel.

*Rating conditions of 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Barometer (Dry)

†Rating conditions of SAE: 77°F (25°C) and 29.31 in Hg (99 kPa) Barometer (Dry)

Model 7062-3000, 7062-7000

6V-71

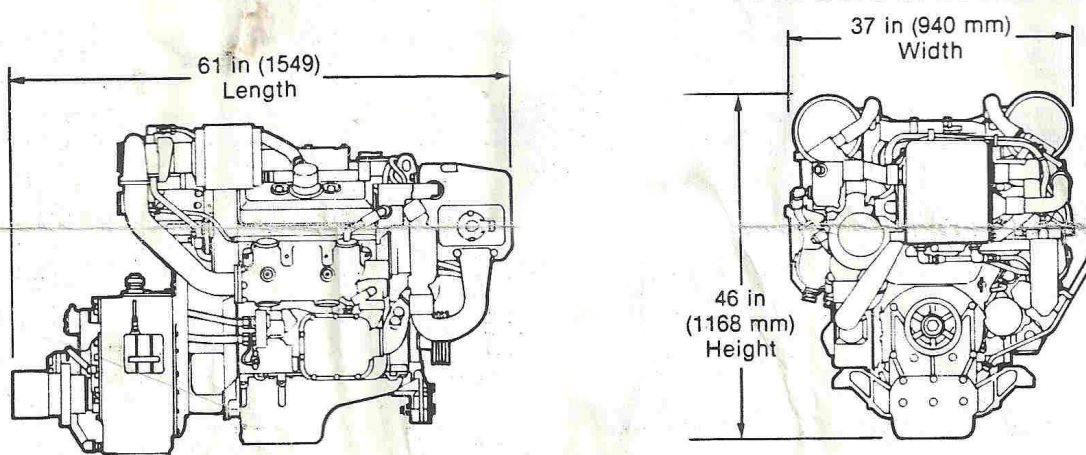


Approximate dimensions shown.
For complete dimensional information, refer to installation drawing 2SA234.

Model 7062-7601

6V-71TA

Twin Disc MG507 Marine Gear

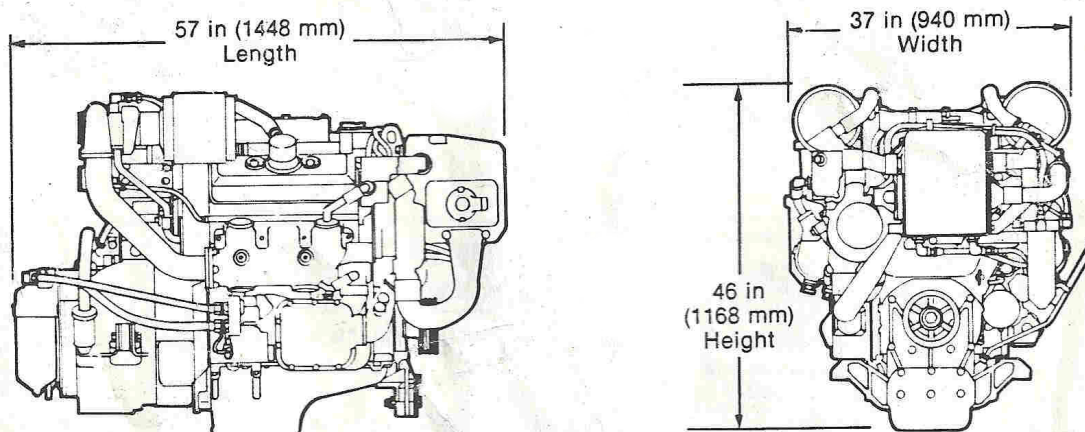


Approximate dimensions shown.

Model 7062-3600, 7062-7600

6V-71-TA

Allison "M" Marine Gear



Approximate dimensions shown.

standard equipment

Aftercooler—6V-71TA only

Air Inlet Housing

Air Silencers

Alternator—12 volt, 65 amp, 6V-71; 14 volt, 75 amp (for normal 12 volt charging system), 6V-71TA

Crankshaft Pulley

Engine Mounts—Resilient mounts for engine and marine gear

Exhaust Manifold—Water-cooled

Flywheel Housing—SAE #2

Fuel Cooler—6V-71TA only

Fuel Filters

Governor—Variable speed

Heat Exchanger—Includes raw water pump and piping

Injectors—Cam operated, unit type, clean tip

Lube Oil Cooler

Lube Oil Filter—Full-flow

Marine Gear—Allison "M" Marine Gear, 2 to 1 ratio, 6V-71 and 6V-71TA; Twin Disc Marine Gear, MG507, 1.98 to 1 ratio, 6V-71TA

Oil Pan and Distribution System—Cast iron oil pan for 0-15° inclination angle, rear sump

Starting Motor—12 volt, 6V-71; 12 volt, high output, 6V-71TA

Turbochargers—Twin turbos, 6V-71TA only

Water Filter—Fresh water filter with 30-gallon (113.6 liters) capacity

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

Demirhan Sadıkoğlu
2015

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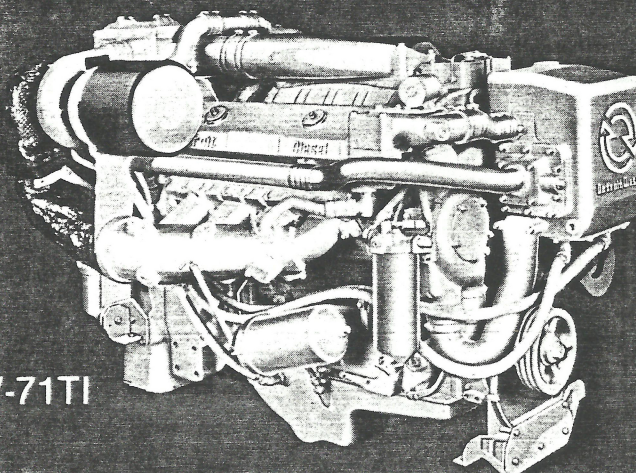
Detroit Diesel Engines

marine models

8V-71
333 hp

Low Profile 8V-71
333 hp

Low Profile 8V-71TI
462 hp



Typical
Low Profile 8V-71TI
Marine Model

basic specifications

Basic Engine	8V-71	Low profile 8V-71	Low profile 8V-71TI
Model-Port Starboard	7082-3000 7082-7000	7082-3001 7082-7001	7082-3300 7082-7300
Description	Naturally Aspirated	Naturally Aspirated	Turbocharged-Intercooled
Number of Cylinders	8	8	8
Bore and Stroke	4.25 in × 5 in (108 mm × 127 mm)	4.25 in × 5 in (108 mm × 127 mm)	4.25 in × 5 in (108 mm × 127 mm)
Displacement	568 cu in (9.32 liters)	568 cu in (9.32 liters)	568 cu in (9.32 liters)
Compression Ratio	18.7 to 1	18.7 to 1	17 to 1
Net Weight (dry)	3130 lbs (1420 kg)	3100 lbs (1406 kg)	3430 lbs (1556 kg)

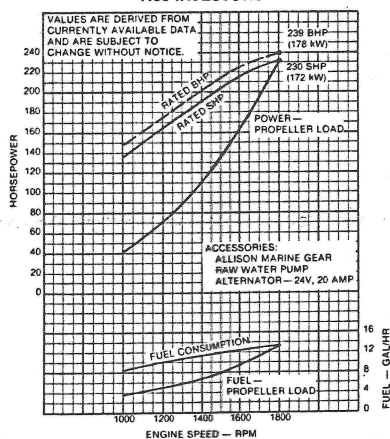
power specifications

Continuous Injectors	N55	N55	No continuous rating is currently available for the 8V-71TI.
Rated Gross Power	239 BHP (178 kW) @ 1800 RPM*	239 BHP (178 kW) @ 1800 RPM*	
Rated Net Power	230 SHP (172 kW) @ 1800 RPM*	230 SHP (172 kW) @ 1800 RPM*	
Intermittent Injectors	N65	N65	N70
Rated Gross Power	304 BHP (227 kW) @ 2100 RPM*	304 BHP (227 kW) @ 2100 RPM*	349 BHP (260 kW) @ 2100 RPM*
Rated Net Power	296 SHP (221 kW) @ 2100 RPM*	296 SHP (221 kW) @ 2100 RPM*	340 SHP (254 kW) @ 2100 RPM*
Maximum Injectors	N70	N70	N90
Rated Gross Power	333 BHP (248 kW) @ 2300 RPM*	333 BHP (248 kW) @ 2300 RPM*	462 BHP (345 kW) @ 2300 RPM*
Rated Net Power	325 SHP (242 kW) @ 2300 RPM*	325 SHP (242 kW) @ 2300 RPM*	450 SHP (336 kW) @ 2300 RPM*

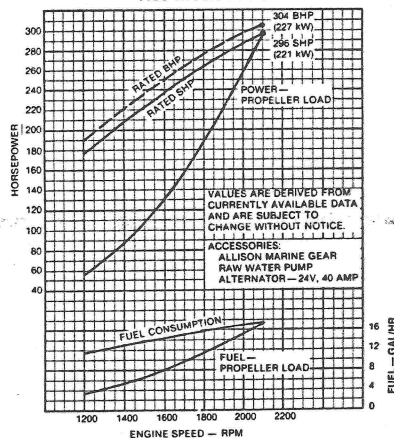
*Rating conditions of: 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Barometer (Dry).

8V-71

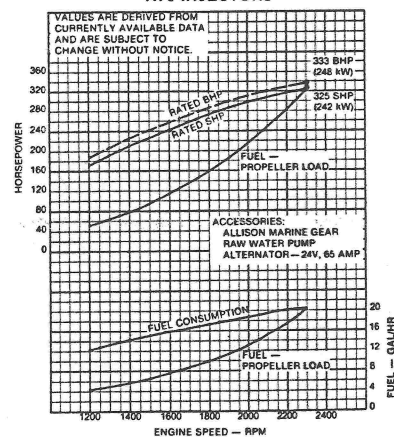
*MODEL 8V-71 MARINE CONTINUOUS RATING N55 INJECTORS



*MODEL 8V-71 MARINE INTERMITTENT RATING N65 INJECTORS

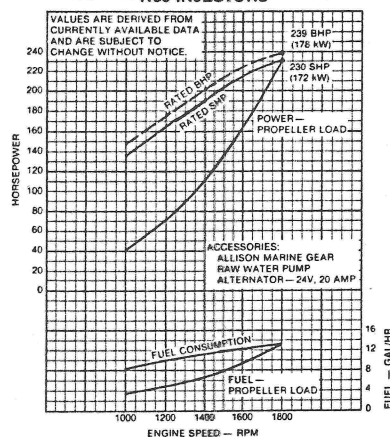


*MODEL 8V-71 MARINE MAXIMUM RATING N70 INJECTORS

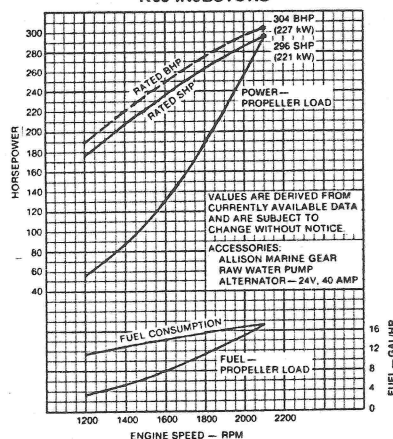


8V-71 Low Profile

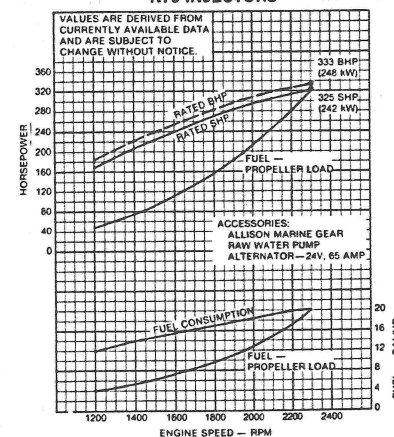
*MODEL 8V-71 LOW PROFILE MARINE CONTINUOUS RATING N55 INJECTORS



*MODEL 8V-71 LOW PROFILE MARINE INTERMITTENT RATING N65 INJECTORS

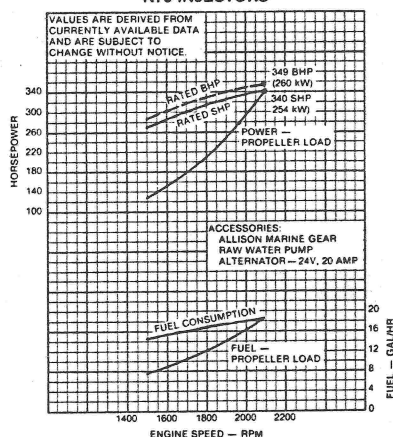


*MODEL 8V-71 LOW PROFILE MARINE MAXIMUM RATING N70 INJECTORS

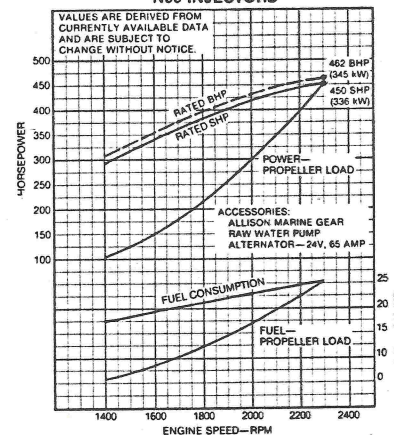


8V-71TI Low Profile

*MODEL 8V-71TI MARINE INTERMITTENT RATING N70 INJECTORS



*MODEL 8V-71TI MARINE MAXIMUM RATING N90 INJECTORS



No continuous rating is currently available for the 8V-71TI

Rating Explanation

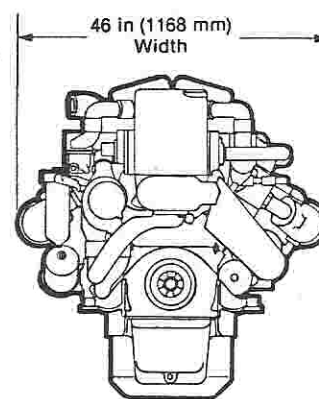
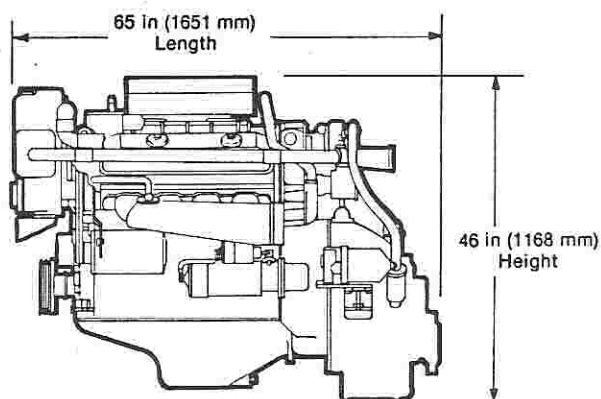
RATED BHP—Basic engine gross horsepower.
RATED SHP—Net power available at the marine gear output shaft.
PROPELLER LOAD—Indicates horsepower absorbed by a typical propeller and the corresponding fuel

consumption throughout the speed range.
POWER OUTPUT guaranteed within 5% at standard ambient conditions.
MARINE ENGINE RATING—The use of the ratings e.g., maximum, intermittent and continuous; varies with

type of vessel in which the engine is installed. See your Detroit Diesel Allison representative for the rating that will apply to your vessel.
*Rating conditions of 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Barometer (Dry)

Model 7082-3000, 7082-7000

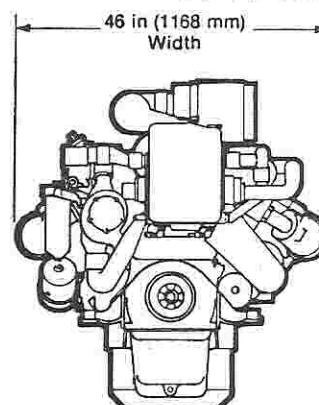
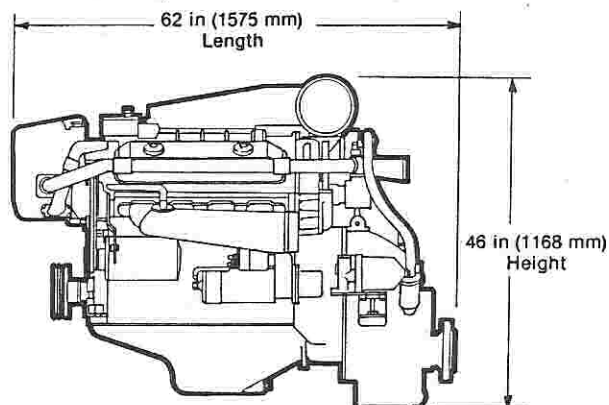
8V-71



Approximate dimensions shown.
For complete dimensional information, refer to installation drawing 2SA235.

Model 7082-3001, 7082-7001

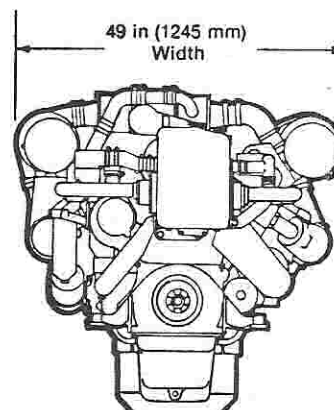
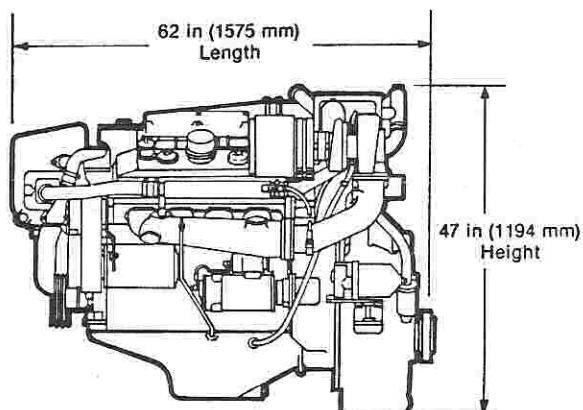
8V-71 Low Profile



Approximate dimensions shown.
For complete dimensional information, refer to installation drawing 2SA366.

Model 7082-3300, 7082-7300

8V-71TI Low Profile



Approximate dimensions shown.
For complete dimensional information, refer to installation drawing 2SA368.

standard equipment

Air Inlet Housing

Air Silencer

Alternator—24 volt, 50 amp, 8V-71TI only; 24 volt, 65 amp, 8V-71 and 8V-71 low profile

Crankshaft Pulley

Engine Mounts—Includes mounts for both engine and marine gear

Exhaust Manifold—Water cooled

Flywheel Housing—SAE #2

Fuel Filters—Spin-on

Governor—Variable speed

Heat Exchanger—Includes raw water pump and piping

Injectors—Cam operated, unit type, clean tip

Instruments—Includes ammeter, hourmeter, tachometer, water temperature gauge, and oil pressure gauges for both engine and marine gear

Intercooler—8V-71TI only

Lube Oil Cooler—16 plate, 8V-71 and 8V-71 low profile; 18 plate, 8V-71TI only

Lube Oil Filter—Full-flow, spin-on

Marine Gear—Allison "M" type, hydraulic reverse and reduction gear, 2 to 1 ratio, 8V-71 low profile, and 8V-71TI; Allison "MH" type, hydraulic reverse and reduction gear, 1.97 to 1 ratio, 8V-71 only

Oil Pan—Cast iron, designed for 0°-15° inclination angle, rear sump

Starting Motor—24 volt

Turbocharger—TH08A64, .96 A/R

Water Filter—Fresh water filter with 30-gallon (113.5 liters) capacity

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

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Detroit Diesel Engines

marine models
low profile

TÜRKİYE GENEL MÜMESSİLİ



kurt başakine müessesesi

Merkez : ANKARA

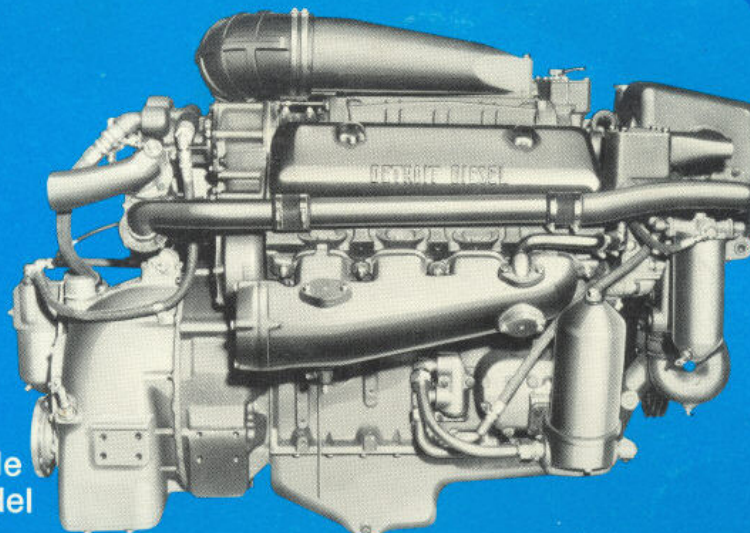
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Tel: 44 74 61 - 44 72 11



8V-71
350 hp*



Typical Low Profile
8V-71 Marine Model

Model
8V-71 7082-3001
7082-7001

specifications

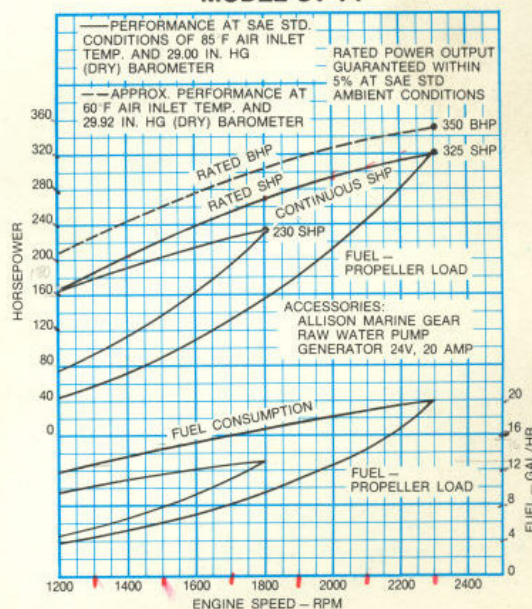
Basic Engine

8V-71

Model	7082-3001 (port) 7082-7001 (starboard)
Engine Type	Two Cycle
Number of Cylinders	8
Bore and Stroke	4.25 in. x 5 in. (108 mm x 127 mm)
Two Cycle Displacement (Every Downstroke a Powerstroke)	568 cu. in. (9.32 litres)
Rated Gross Power:	
60°F and Sea Level (approx.)	*350 BHP @ 2300 RPM
15.6°C and Sea Level (approx.)	261 kW @ 2300 RPM
Rated New Power:	
85°F and 500 ft. (SAE)	325 SHP @ 2300 RPM
29.4°C and 152.4 m (SAE)	242 kW @ 2300 RPM
Continuous Net Power:	
85°F and 500 ft. (SAE)	230 SHP @ 1800 RPM
29.4°C and 152.4 m (SAE)	172 kW @ 1800 RPM
Compression Ratio	18.7 to 1
Net Weight (Mass) (dry) (approx.)	3100 lbs. (1406 kg)

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İbrahim ve Sultan Çemberci
Kardeşler
Büyükdere, Kırklar Sok. No. 7
İSTANBUL
Tel. 142 1917 - 142 01 51

ENGINE PERFORMANCE* MODEL 8V-71



Rating Explanation

RATED BRAKE HORSEPOWER—Approximate basic engine (gross) power at conditions of 60°F (15.6°C) and Sea Level.

RATED SHAFT HORSEPOWER—Net power available at the marine gear output shaft; this rating is recommended for pleasure craft applications.

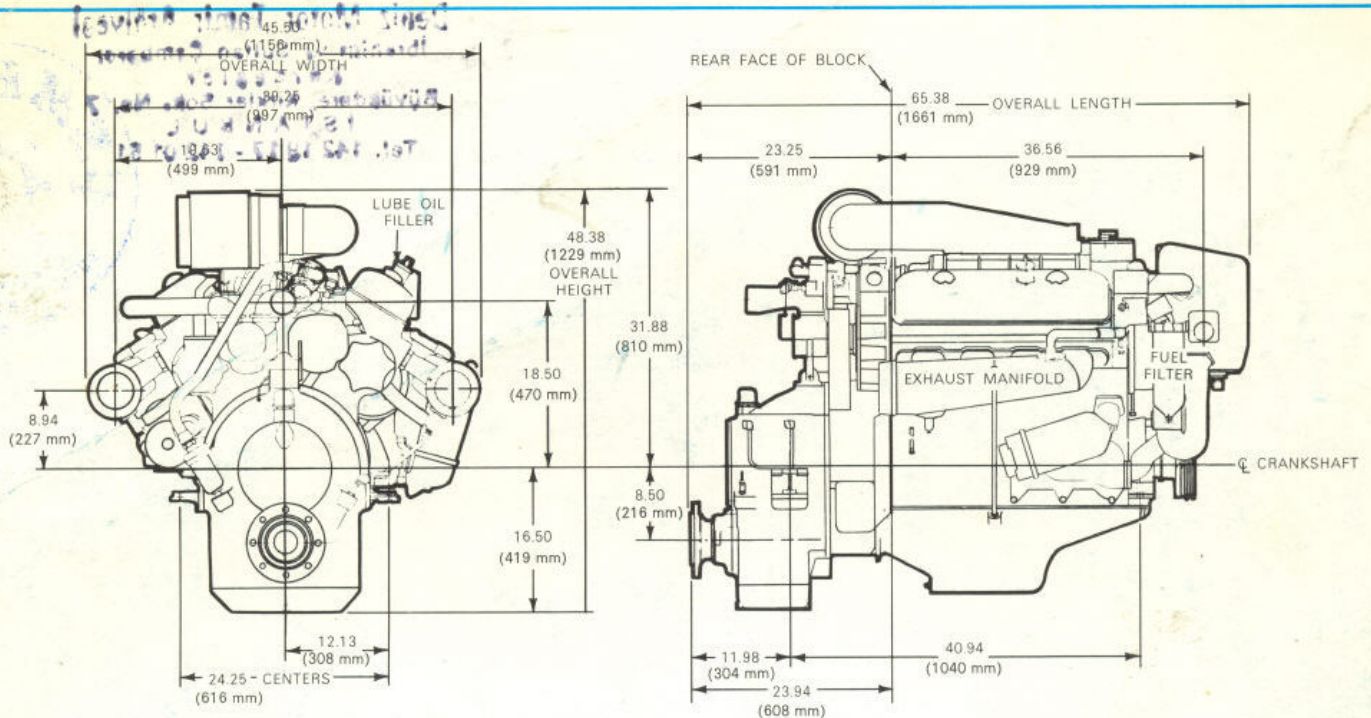
CONTINUOUS SHAFT HORSEPOWER—Net power available at the marine gear output shaft for continuous duty or workboat applications.

PROPELLER LOAD—Indicates horsepower absorbed by a typical propeller and the corresponding fuel consumption throughout the speed range.

Propeller load and shaft horsepowers as shown are based on ambient conditions of 85°F (29.4°C), Bar. (dry) 29.00 in. Hg (98.19k Pa) and include deduction for standard marine accessory equipment.

*"Rated" curves based on use of N70 Injectors
"Continuous" curves based on use of N55 Injectors

principal dimensions



For complete dimensional information, refer to installation drawing 2SA366

standard equipment

Air Inlet Housing—Includes manual shutdown
 Air Silencer
 Crankshaft Pulley—7.5 in diameter, 3-groove
 Engine Mounts—Includes mounts for engine and marine gear
 Exhaust Manifold—Water-cooled with flange
 Flywheel—SAE #2
 Flywheel Housing—SAE #2
 Generator—24 volt, 20 amp, DC
 Governor—Variable speed, with throttle controls
 Heat Exchanger—Includes raw water pump and piping

Injectors—Cam-operated, unit type, "Clean Tip"
 Instruments—Includes ammeter, tachometer, water temperature gauge, oil pressure gauges for engine and reverse gear
 Lube Oil Filter—Full-Flow filter
 Marine Gear—Allison hydraulic reverse and reduction gear, 1.97 to 1 ratio
 Oil Pan and Distribution System—0-15 degree installation angle
 Starting Equipment—24 volt starting motor, with sprag over-running clutch
 Water Filter—Engine fresh water, 30 gallon capacity

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

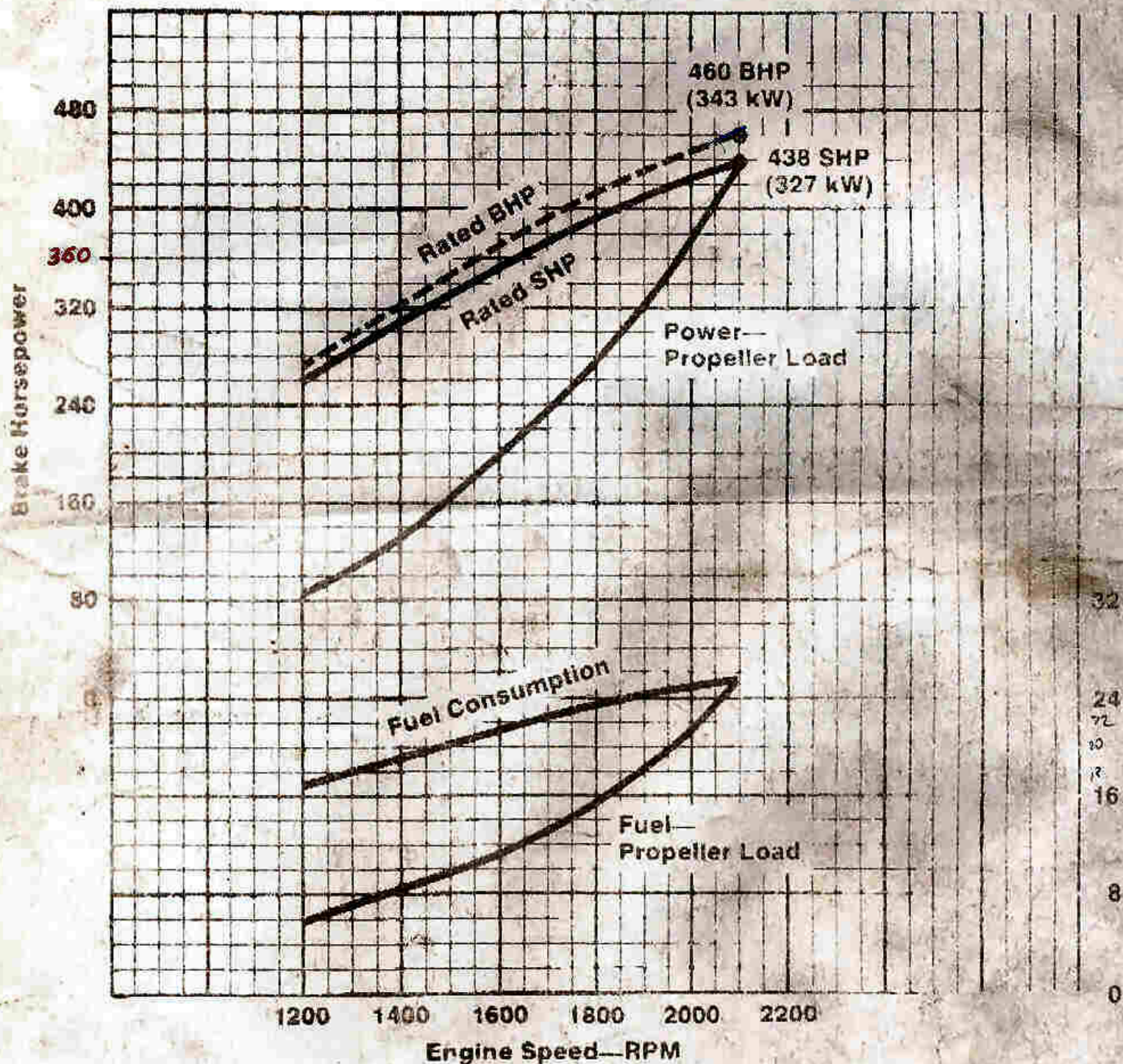
13400 West Outer Drive Detroit, Michigan 48228



12V-71
Marine
Rating: Intermittent
460 BHP @ 2100 RPM
438 SHP @ 2100 RPM
Injector: 7N65

m

ENGINE PERFORMANCE CURVE



ACCESSORIES: TWIN DISC MG514 GEAR, RAW WATER PUMP, ALTERNATOR 24 V/100A

Air Intake Restriction - in. H₂O (kPa) . . . 10 (2.5)

Exhaust Back Pressure - in. H₂O (kPa) . . . 15

- Power output guaranteed for 1000 hours at 2100 RPM and 460 BHP (343 kW) at 2100 RPM. 1200 RPM and 260 SHP (327 kW) at 2100 RPM. 1200 RPM and 260 SHP (327 kW) at 2100 RPM. 1200 RPM and 260 SHP (327 kW) at 2100 RPM.
- Operating conditions: 1200 RPM and 260 SHP (327 kW) at 2100 RPM. 1200 RPM and 260 SHP (327 kW) at 2100 RPM. 1200 RPM and 260 SHP (327 kW) at 2100 RPM.
- Various other operating conditions are available upon request.

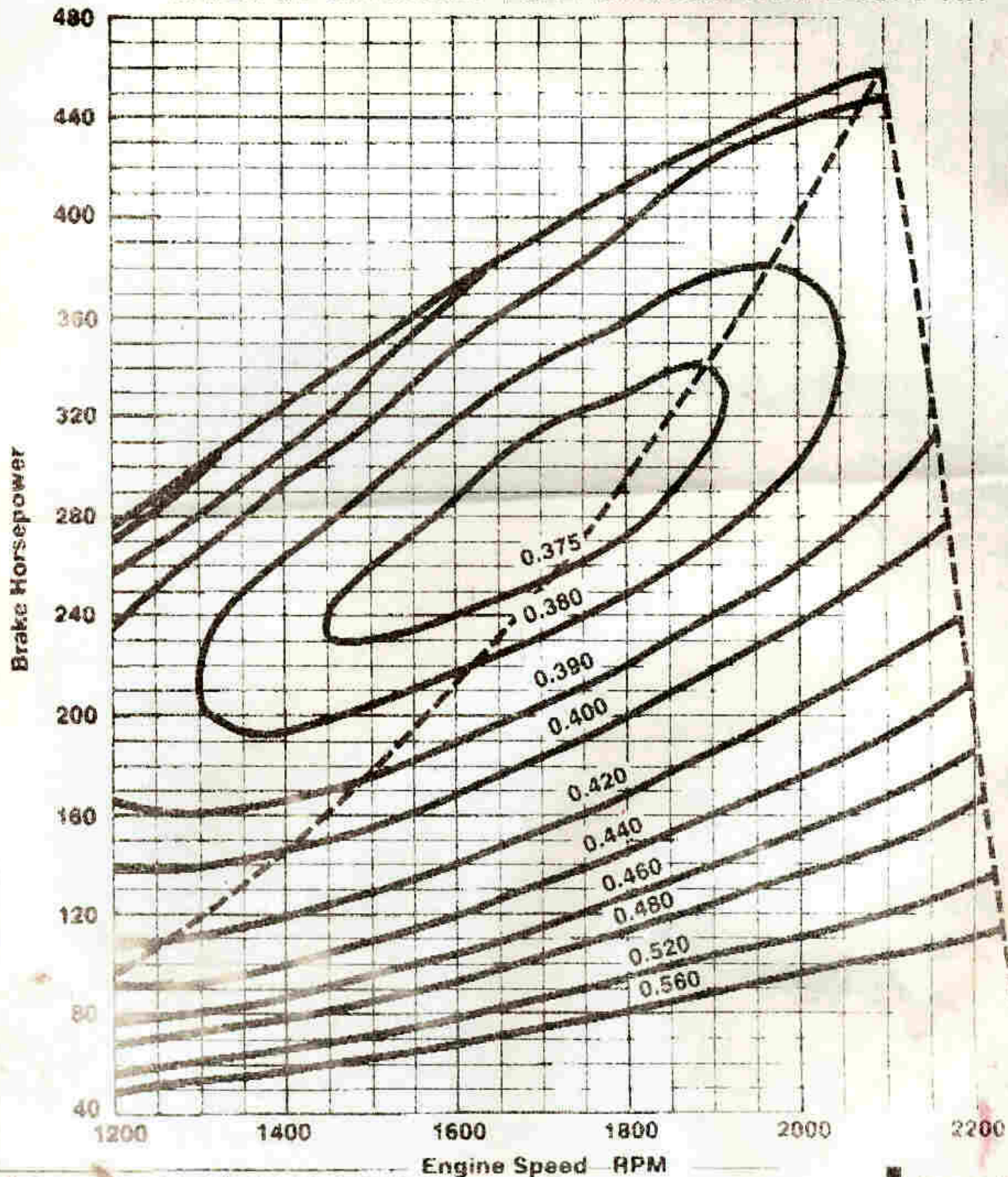
Certified by:

Mark S. Kuhn

Curve No. 54-712-500
Date: 10-20-70
Rev: 10-20-70
Sheet: 1



LINES OF CONSTANT FUEL CONSUMPTION LB/BHP-HR



- Power is based on test with 15.4% SAE standard fuel, 100°F air, and 100°F water. 100°F air is based on 100°F air, 100°F water, and 100°F fuel. Power rated at 100°F air, 100°F water, and 100°F fuel.
- Conversion factors: Power (kW) = BHP x 0.746; Fuel (kg/hr) = BHP x 0.047.
- Values are derived from currently stated data and are not to be used without modification.

Curve No.
E4-7122-52
Date: 6-16-83
Rev. Date:
Sht. 3 of 4

Engine Specification Data

General Data

Model	7122-7000
Number of Cylinders	12
Bore and Stroke-in (mm)	4.25x5.00 (108x127)
Displacement-in ³ (L)	852 (13.97)
Compression Ratio	18.7:1
Piston Speed-ft/min (mm/min)	1750 (533)
Valves Per Cylinder	
Intake	Not Applicable
Exhaust	4
Combustion System	Direct Injection
Engine Type	63.5" Vee-2 Cycle
Aspiration	Natural

Configuration

Turbocharger	Not Applicable
Charge Air Cooling System	None
Blower Type	Standard
Blower Drive Ratio	2.05:1
Low Idle Speed-r/min	550
Max. No. Load Speed-r/min	2250
Thrust Bearing Load Limit	
Continuous-lbf (N)	800 (2670)
Intermittent-lbf (N)	1800 (8000)
Engine Crankcase Vent System	Open
Maximum Pressure-in H ₂ O (kPa)	1.9 (0.47)

Physical Data

Size	
Length-in (mm)	93.5 (2375)
Width-in (mm)	47.8 (1213)
Height-in (mm)	56.7 (1440)
Weight, dry-lb (kg)	4925 (2234)
Weight, wet-lb (kg)	5281 (2400)
Center of Gravity Distance	
From R.F.O.B. (x axis)-in (mm)	Not Available
Above Crankshaft (y axis)-in (mm)	Not Available
Right of Crankshaft (z axis)-in (mm)	Not Available
Installation Drawing	5102672

Marine Gear

Type	Twin Disc MG-514
Reduction Ratio	4.5:1
Lube Oil Capacity approx. (Does not include heat exchanger & connections used externally)-qt (liters)	24 (23)
(Marine gear must use straight viscosity oil)	

Fuel System

Fuel Injector/Timing	7463-1 484
Fuel Injection Pump/Timing	Not Applicable
Fuel Consumption-lb/hr (kg/hr)	180.7 (82.0)
Fuel Consumption-gal/hr (L/hr)	25.9 (97.8)
Fuel Spill Rate-lb/hr (kg/hr)	897 (407)
Fuel Spill Rate-gal/hr (L/hr)	126.2 (476)
Total Fuel Flow-lb/hr (kg/hr)	1078 (488)
Total Fuel Flow-gal/hr (L/hr)	154.2 (584)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg (kPa)	8 (20)
Dirt System-in Hg (kPa)	12 (41)
Fuel Filter Micron Size	
Primary-Micron	30
Secondary-Micron	12
Recommended Supply Line Diameter in (mm)	0.5 (12.7)

Lubrication System

Oil Pressure	
Rated Speed-lb/in ² (kPa)	60 (414)
Low Idle-lb/in ² (kPa)	5 (34)
In Pan Oil Temperature-F (°C)	200-235 (93-113)
Oil Flow-gal/min (L/min)	48.5 (187)
Oil Pan Capacity	
High-qt (L)	33 (31.2)
Low-qt (L)	25 (23.7)
Total Engine Oil Capacity with Filter-qt (L)	37 (35.0)
Bypass Oil Filter Orifice-in (mm)	0.125 (3.18)
Maximum Installation Angle	15°

Emission Data

CO-gm/hr	10780
HC-gm/hr	193
NO _x -gm/hr	6160
SO _x -gm/hr	820
Smoke-Bech Number	1.5
Noise-dB (A) @ 1m	103.1

Ref: E&PR-7121-52-2

All values at rated speed and power with standard engine hardware unless otherwise noted

Cooling System

Engine Heat Rejection Btu/hr (kW)	15180 (266.9)
Engine Radiated Heat-Btu/hr (kW)	2880 (46.7)
Max. Fresh Water Flow-gal/min (L/min)	202 (785)
Raw Water Flow-gal/min (L/min)	100 (379)
Thermostat	
Start to Open-F (°C)	170 (77)
Fully Open-F (°C)	187 (86)
Maximum Water Pump Inlet Restriction	
Fresh Water-in Hg (kPa)	3.0 (10.2)
Raw Water-in Hg (kPa)	5.0 (17.0)
Fresh Water Capacity-qt (L)	140 (132)
Minimum Pressure Cap-lb/in ² (kPa)	7.0 (48.3)
Maximum Coolant Pressure Exclusive of Pressure Cap-lb/in ² (kPa)	Not Available
Maximum Raw Water Pump Pressure lb/in ² (kPa)	10.0 (69.0)
Maximum Top Tank Temperature-F (°C)	219 (110)
Minimum Top Tank Temperature-F (°C)	160 (71)
Minimum Coolant Fill Rate gal/min (L/min)	3.0 (11.4)
Suggested Raw Water Pipe Size-in (mm)	3.0 (76)
Suggested Sea Strainer Size	
Simplex-in (mm)	3.0 (76)
Duplex-in (mm)	4.0 (102)

Air System

Maximum Allowable Temperature Rise (Outside Air to Engine Inlet)-F (°C)	30 (16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O (kPa)	25 (6.2)
Clean Air Cleaner-in H ₂ O (kPa)	16.0 (4.0)
Engine Air Flow-ft ³ /min (L/min)	1310 (37.1)
Engine Air Box/Manifold Pressure in Hg (kPa)	10.0 (33.8)
Recommended Intake Pipe Dia-in (mm)	6.0 (152)
Suggested min. engine room ventilation (Max. engine room depression 0.2 in H ₂ O-in ² (cm ²))	126 (81.1)

Exhaust System

Exhaust Flow-ft ³ /min (L/min)	3240 (91.8)
Exhaust Temperature-F (°C)	870 (488)
Maximum Allowable Back Pressure-in Hg (kPa)	4.4 (14.9)
Recommended Dry Exhaust Pipe Dia	
Single-in (mm)	6.0 (152)
Dual-in (mm)	4.0 (102)

Electrical System

Recommended Battery Capacity (CCA @ 0°F)	
12 Volt System	
Above 32°F (0°C)-A	1900
Below 32°F (0°C)-A	2500
24 Volt System	
Above 32°F (0°C)-A	950
Below 32°F (0°C)-A	1250
Maximum Allowable Resistance of Starting Circuit	
12 volt system-ohms	0.0012
24 volt system-ohms	0.002

Performance Data

Power Output-bhp (kW)	480 (343)
Power Output-shp (kW)	438 (321)
Rated Speed-r/min	2100
BMEP-lb/in ² (kPa)	101.5 (703)
Friction Power	
Rated Speed-bhp (kW)	118 (81)

Engine

Speed r/min	Power bhp (kW)	Power shp (kW)	Fuel gal/hr (liter/hr)	BSFC lb/bhp hr (g/kW hr)
2100	480 (343)	438 (322)	25.9 (97.9)	393 (239)
2000	446 (333)	425 (317)	25.0 (94.8)	392 (239)
1900	411 (307)	391 (292)	23.3 (88.0)	386 (241)
1500	347 (259)	330 (246)	20.3 (76.7)	408 (249)
1200	275 (205)	261 (194)	17.0 (64.2)	431 (262)

Engine

Speed r/min	Prop Load shp (kW)	Prop Fuel gal/hr (liter/hr)	Prop BSFC lb/bhp hr (g/kW hr)
2100	438 (321)	25.9 (97.9)	393 (239)
2000	375 (282)	21.9 (82.9)	383 (233)
1800	276 (206)	15.8 (59.9)	374 (228)
1500	180 (133)	9.9 (37.4)	390 (237)
1200	82 (61)	5.9 (22.4)	430 (261)

CURVE NO: 747-22-52-6

DATE: 3-21-82

REV: DATE 5/8/75-82

SHT 2 OF 4



12V-71

Marine

Rating: Intermittent-Maximum

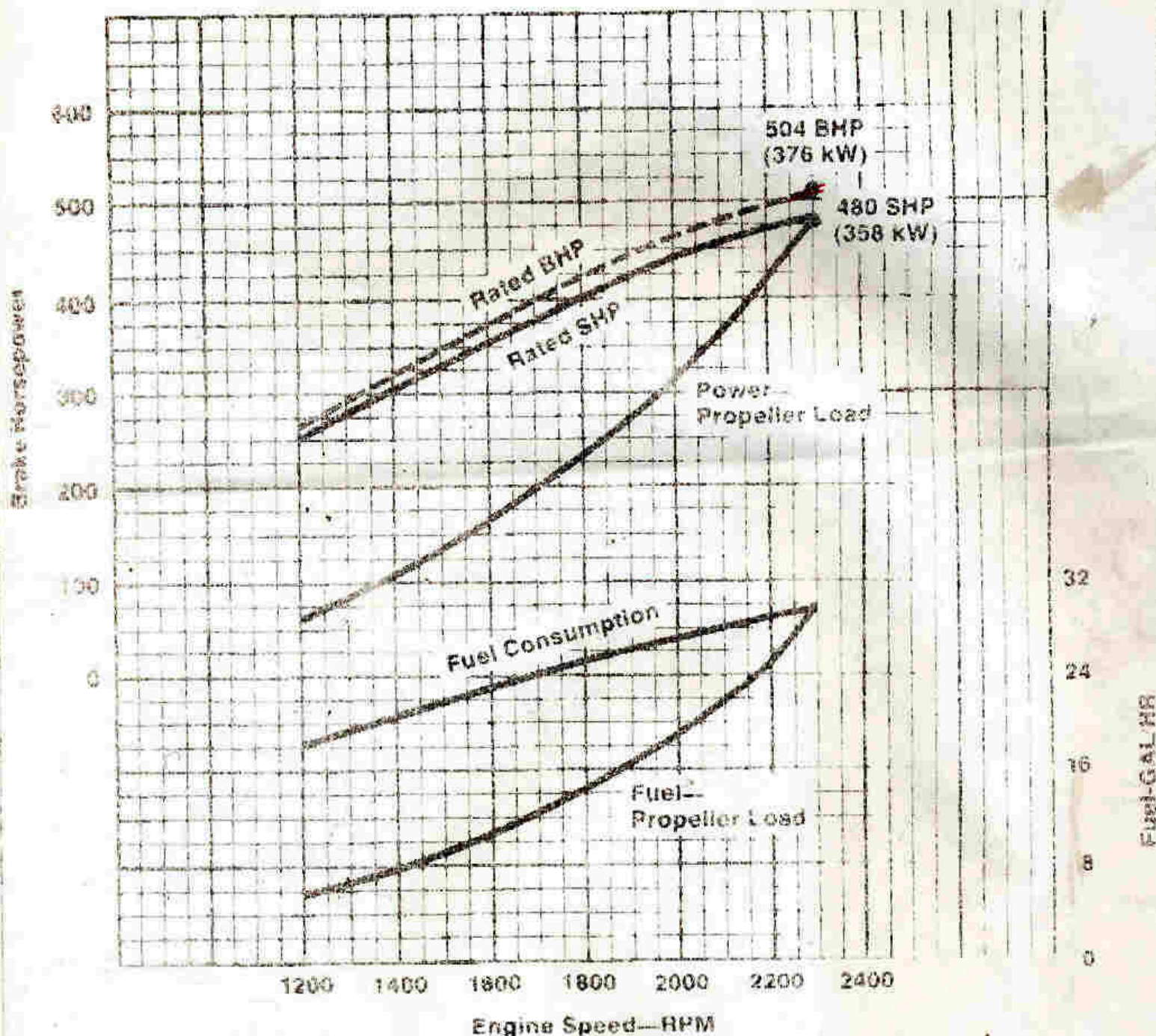
504 BHP @ 2300 RPM

480 SHP @ 2300 RPM

Injector: N70

m

ENGINE PERFORMANCE CURVE



ALUMINUM TWIN DIESEL M65A GEAR BOX WATER PUMP ALTERNATOR 12V 100A

Air Intake Restriction - in. H₂O (kPa) - 10 (2.5)

Exhaust Back Pressure - in. H₂O (kPa) - 15 (3.7)

1. Fuel consumption is based on 15.5% diesel oil at 15.5% water content.
2. The 15.5% water content is based on 15.5% water content in the fuel.
3. Fuel consumption is based on 15.5% diesel oil at 15.5% water content.
4. Fuel consumption is based on 15.5% diesel oil at 15.5% water content.

5. Fuel consumption is based on 15.5% diesel oil at 15.5% water content.
6. Fuel consumption is based on 15.5% diesel oil at 15.5% water content.

7. Fuel consumption is based on 15.5% diesel oil at 15.5% water content.
8. Fuel consumption is based on 15.5% diesel oil at 15.5% water content.

Certified by:

Mark A. Kuster

Curve No.

E4-7122-52-3

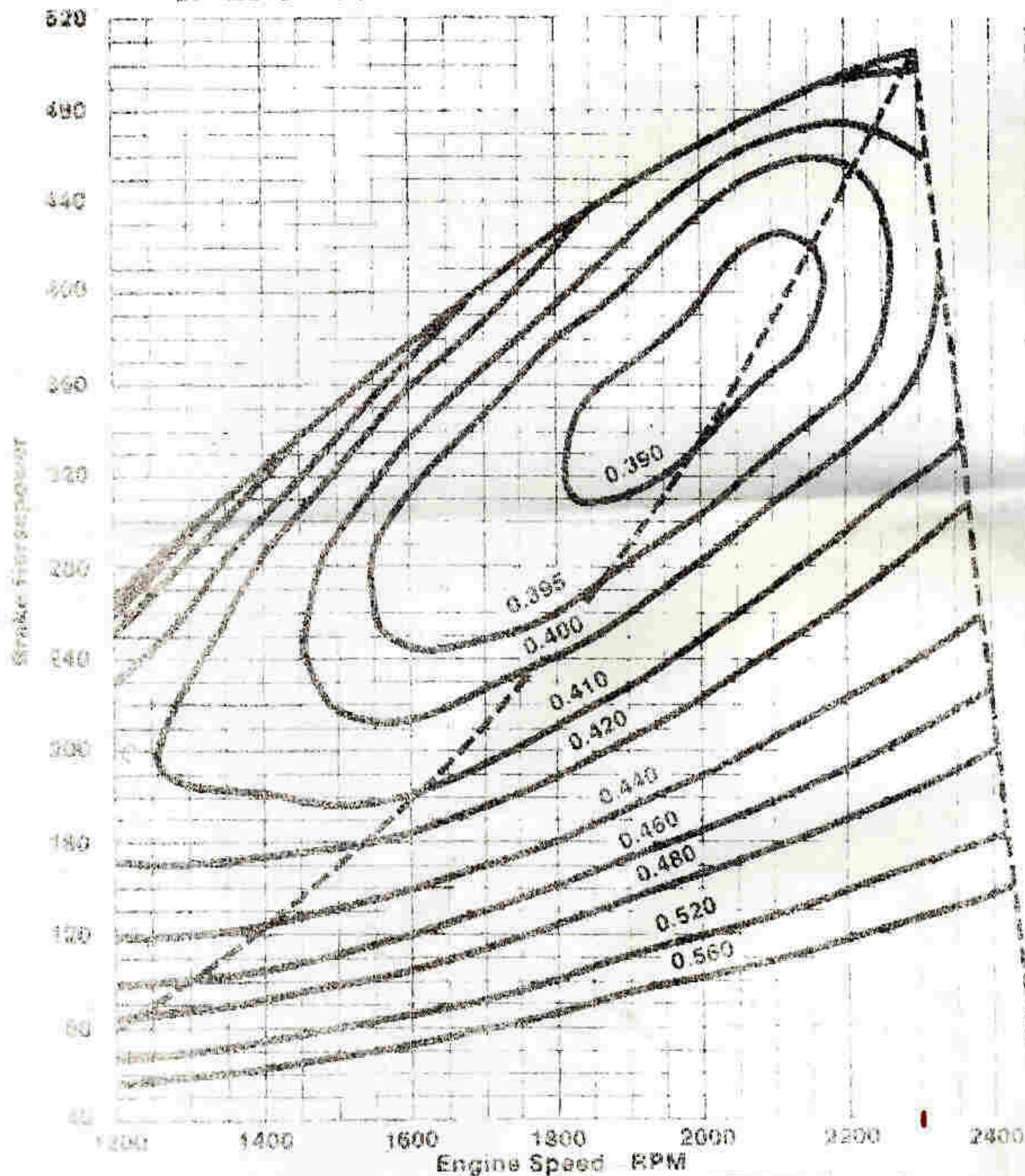
Date 3-21-82

Rev. Date 5-8-89

Sht. 1 of 4



LINEs OF CONSTANT FUEL CONSUMPTION LB/BHP-HR



Engine Specification Data

General Data

Model	7122-7000
Number of Cylinders	12
Bore and Stroke-in (mm)	4.25x5.00 (108x127)
Displacement-in ³ (l)	852 (13.97)
Compression Ratio	18.7:1
Rated Speed-r/min	1817 (584)
Valves Per Cylinder	
Intake	Not Applicable
Exhaust	4
Combustion System	Direct Injection
Engine Type	63.5" Vee - 2 Cycle
Aspiration	Natural

Configuration

Turbocharger	Not Applicable
Charge Air Cooling System	None
Blower Type	Standard
Blower Drive Ratio	2.05:1
Low Idle Speed-r/min	550
Max. No Load Speed-r/min	2450
Thrust Bearing Load Limit	
Continuous-lbf (N)	600 (2670)
Intermittent-lbf (N)	1800 (8000)
Engine Crankcase Vent System	Open
Maximum Pressure-in H ₂ O (kPa)	1.9 (0.47)

Physical Data

Size	
Length-in (mm)	93.5 (2375)
Width-in (mm)	47.8 (1213)
Height-in (mm)	56.7 (1440)
Weight-dry-lb (kg)	4325 (2234)
Weight-wet-lb (kg)	5291 (2400)
Center of Gravity Distance	
From R.P.O.B. to axis-in (mm)	Not Available
Above Crankshaft to axis-in (mm)	Not Available
Right of Crankshaft to axis-in (mm)	Not Available
Installation Drawing	5102972

Marine Gear

Type	Twin Disc MC-S14
Reduction Ratio	4.5:1
Lube Oil Capacity-gal (l)	Does not include heat exchanger & connections used externally oil (l)
Marine gear must use straight viscosity oil	24 (23)

Fuel System

Fuel Injection Timing	N/A - 480
Fuel Injector Pump Timing	Not Applicable
Fuel Consumption-lb/hr (kg/hr)	205.5 (94.4)
Fuel Consumption-gal/hr (l/hr)	28.5 (112.7)
Fuel Spill Rate-lb/hr (l/hr)	697 (437)
Fuel Suck Rate-gal/hr (l/hr)	126.2 (478)
Total Fuel Flow-lb/hr (l/hr)	1105 (501)
Total Fuel Flow-gal/hr (l/hr)	158 (598)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg (kPa)	5 (20)
Dirty System-in Hg (kPa)	2 (41)
Fuel Filter Micron Size	
Primary-Micron	30
Secondary-Micron	12
Recommended Supply Line Diameter	0.51-2.7

Lubrication System

Oil Pressure	
Rated Speed-lb/in ² (kPa)	60 (414)
Low Idle-lb/in ² (kPa)	5 (34)
Oil Pan Oil Temperature-°F (°C)	200-235 (93-113)
Oil Flow-gal/min (l/min)	49.5 (187)
Oil Pan Capacity	
High-l (l)	33 (31.2)
Low-l (l)	25 (23.7)
Total Engine Oil Capacity with Filter-l (l)	37 (35.0)
Synthetic Oil Filter Oil-life-in (mm)	0.125 (0.13)
Maximum Installation Angle	15°

Installation Data

CO-gal/hr	7120
NO-gal/hr	143
NO _x -g/hr	7860
SO-gal/hr	944
Exhaust Back Pressure	1.8
Exhaust Back Pressure	104

See page 2 for more details

Engine is to be installed in a dry area and must be protected from weather and other environmental factors.

Cooling System

Engine Heat Rejection Rate-kW	18630 (292.5)
Engine Radiated Heat Rejection-kW	3080 (53.6)
Max. Fresh Water Flow-gal/min (l/min)	202 (765)
Raw Water Flow-gal/min (l/min)	107 (405)
Thermostat	
Start to Open-°F (°C)	170 (77)
Fully Open-°F (°C)	187 (69)
Maximum Water Pump Inter-Resistance	
Fresh Water-in Hg (kPa)	3.0 (10.2)
Raw Water-in Hg (kPa)	5.0 (17.0)
Fresh Water Capacity-l (l)	140 (132)
Minimum Pressure Cap-lb/in ² (kPa)	7.0 (48.3)
Maximum Coolant Pressure (Exclusive of Pressure Cap)-lb/in ² (kPa)	Not Available
Max. Raw Water Pump Pressure	
lb/in ² (kPa)	10 (69)
Maximum Top Tank Temperature-°F (°C)	210 (110)
Minimum Top Tank Temperature-°F (°C)	160 (71)
Minimum Coolant Fill Rate-gal/min (l/min)	3.0 (11.4)
Suggested Raw Water Pipe Size-in (mm)	3.0 (76)
Suggested Sea Strainer Size	
Simplex-in (mm)	3.0 (76)
Duplex-in (mm)	4.0 (102)

Air System

Maximum Allowable Temperature Rise (Outside Air to Engine Inlet)-°F (°C)	30 (16.7)
Air Intake Restriction Maximum-in H ₂ O (kPa)	25 (16.2)
Dirty Air Cleaner-in H ₂ O (kPa)	17.5 (14.4)
Clean Air Cleaner-in H ₂ O (kPa)	17.5 (14.4)
Engine Air Flow-cfm (m ³ /min)	1400 (40.5)
Engine Air Box/Manifold Pressure	
in Hg (kPa)	10.0 (33.8)
Recommended Intake Pipe Dia-in (mm)	6.0 (152)
Suggested min. engine room ventilation (Max. engine room depression 0.2 in H ₂ O-in (cm))	137.3 (188)

Exhaust System

Exhaust Flow-lb/min (kg/min)	3125 (180.4)
Exhaust Temperature-°F (°C)	820 (438)
Maximum Allowable Back Pressure-in Hg (kPa)	4.0 (13.5)
Recommended Exhaust Pipe Dia	
Single-in (mm)	6.0 (152)
Dual-in (mm)	4.0 (102)

Electrical System

Recommended Battery Capacity (CCA @ 0°F)	
12 Volt System	
Above 32°F (0°C)-A	190
Below 32°F (0°C)-A	250
24 Volt System	
Above 32°F (0°C)-A	95
Below 32°F (0°C)-A	125
Maximum Allowable Resistance at Starting C.R.	
12-volt system-ohm	0.012
24-volt system-ohm	0.007

Performance Data

Power Output-shp (kW)	504 (375)
Power Output-shp (kW)	480 (356)
Full Load Speed-r/min	2300
BNEP-lb/in ² (kPa)	102.0 (70.7)
Friction Power	
Rated Speed-shp (kW)	138 (101)

Engine

Speed r/min	Power shp (kW)	Power shp (kW)	Fuel lb/hr (kg/hr)	BSFC lb/hrp-hr (g/kWh)
2300	480 (356)	480 (356)	29.8 (13.5)	413 (251)
2100	457 (341)	457 (341)	28.0 (12.7)	407 (248)
1800	405 (302)	405 (302)	26.1 (11.8)	410 (251)
1500	332 (248)	332 (248)	21.8 (9.9)	406 (246)
1200	255 (188)	255 (188)	18.2 (8.3)	475 (291)

Engine

Speed r/min	Prop. Load shp (kW)	Prop. Fuel lb/hr (kg/hr)	Prop. BSFC lb/hrp-hr (g/kWh)
2300	480 (356)	29.8 (13.5)	413 (251)
2100	457 (341)	28.0 (12.7)	407 (248)
1800	405 (302)	26.1 (11.8)	410 (251)
1500	332 (248)	21.8 (9.9)	406 (246)
1200	255 (188)	18.2 (8.3)	475 (291)

ENGINE NO. E4-7122-523

DATE 10/1/82

REV DATE 5/8/85

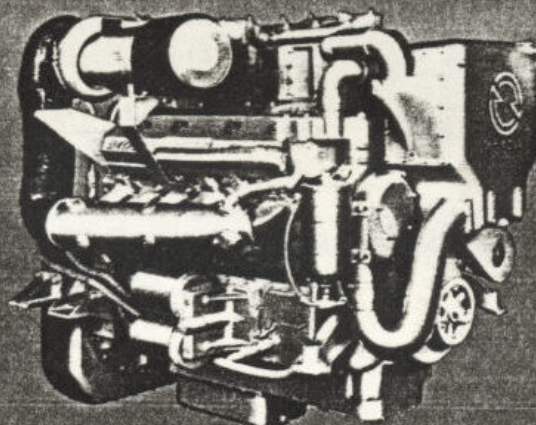
SHT 2 OF 4

Detroit Diesel Engines marine models

12V-71
500 hp

12V-71TI
750 hp
*Twin Disc MG514CHP
Marine Gear*

12V-71TI
870 hp
*ZF BW 195
Marine Gear*



Typical 12V-71TI
Marine Model

basic specifications

Basic Engine	12V-71	12V-71TI <i>Twin Disc MG514CHP Marine Gear</i>	12V-71TI <i>ZF BW 195 Marine Gear</i>
Model-Port	7122-3000, 7122-3001**	7122-3300 [▲] , 3302	—
Starboard	7122-7000, 7122-7001**	7122-7300 [▲] , 7302	7122-7303
Description	Naturally Aspirated	Turbocharged-Intercooled	Turbocharged-Intercooled
Number of Cylinders	12	12	12
Bore and Stroke	4.25 in x 5 in (108mm x 127mm)	4.25 in x 5 in (108mm x 127mm)	4.25 in x 5 in (108mm x 127mm)
Displacement	852 cu in (13.97 liters)	852 cu in (13.97 liters)	852 cu in (13.97 liters)
Compression Ratio	18.7 to 1	17 to 1	17 to 1
Net Weight (dry)	4925 lbs (2234 kg)	5200 lbs (2359 kg)	5000 lbs (2268 kg)

**Models 7122-3001 and 7122-7001 are designed specifically for workboat use. See continuous ratings for power specifications.

[▲] Models 7122-3300 and 7122-7300 are designed specifically for crewboat/intermittent use only and use the Twin Disc MG514 gear. See Twin Disc intermittent ratings for power specifications.

power specifications

Continuous			
Injectors	N55		
Rated Gross Power	359 BHP (268 kW) @ 1800 RPM*	No continuous rating is currently available for the 12V-71TI	No continuous rating is currently available for the 12V-71TI
Rated Net Power	340 SHP (254 kW) @ 1800 RPM*		
Intermittent			
Injectors	N65	N70	N70
Rated Gross Power	456 BHP (340 kW) @ 2100 RPM*	539 BHP (402 kW) @ 2100 RPM*	539 BHP (402 kW) @ 2100 RPM*
Rated Net Power	437 SHP (326 kW) @ 2100 RPM*	510 SHP (380 kW) @ 2100 RPM*	510 SHP (380 kW) @ 2100 RPM*
Maximum			
Injectors	N70	7N95	9215
Rated Gross Power	500 BHP (373 kW) @ 2300 RPM*	750 BHP (560 kW) @ 2300 RPM†	870 BHP (649 kW) @ 2300 RPM†
Rated Net Power	480 SHP (358 kW) @ 2300 RPM*	720 SHP (537 kW) @ 2300 RPM†	840 SHP (627 kW) @ 2300 RPM†

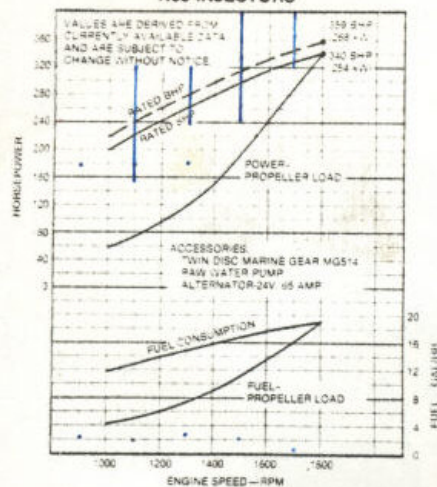
*Rating conditions of 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Barometer (Dry)

†Rating conditions of SAE: 77°F (25°C) and 29.31 in Hg (99 kPa) Barometer (Dry)

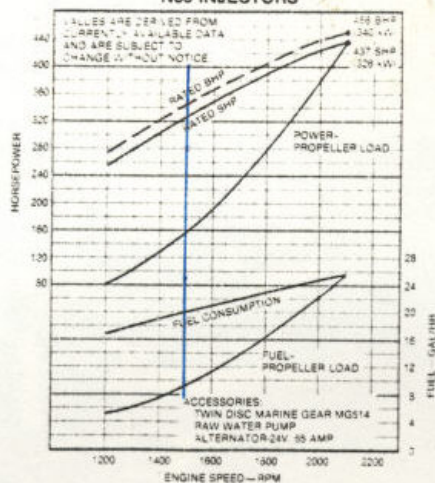
Values are derived from currently available data and are subject to change without notice.

12V-71

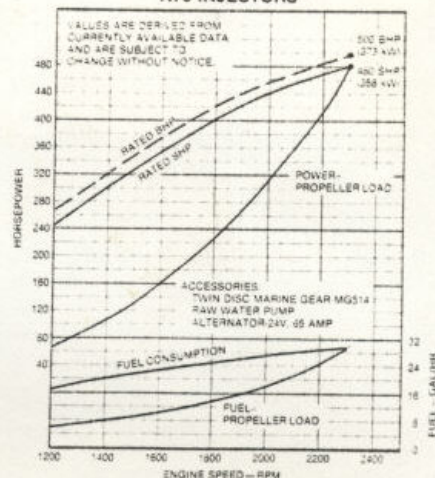
**MODEL 12V-71
MARINE CONTINUOUS RATING
N55 INJECTORS***



**MODEL 12V-71
MARINE INTERMITTENT RATING
N65 INJECTORS***



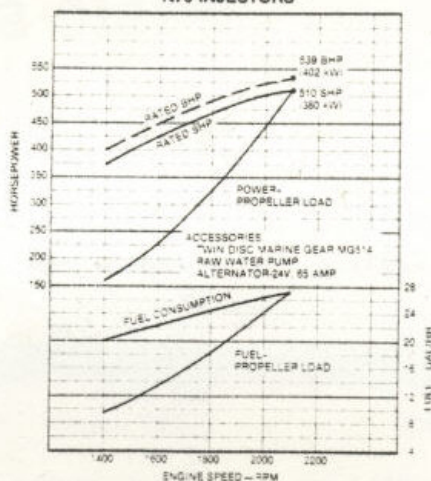
**MODEL 12V-71
MARINE MAXIMUM RATING
N70 INJECTORS***



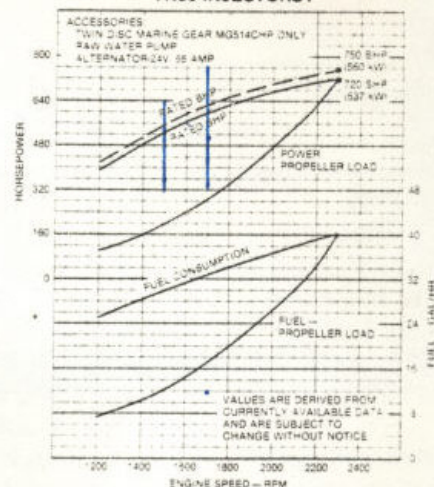
12V-71TI (Twin Disc MG514 and Twin Disc MG514CHP Marine Gear)

No continuous rating is currently available for the 12V-71TI

**MODEL 12V-71TI
MARINE INTERMITTENT RATING
N70 INJECTORS***



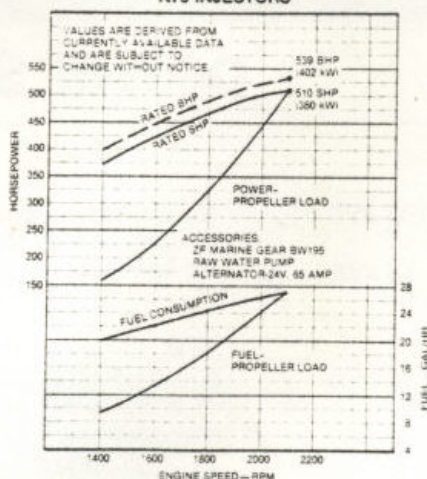
**MODEL 12V-71TI
MARINE MAXIMUM RATING
7N95 INJECTORS†**



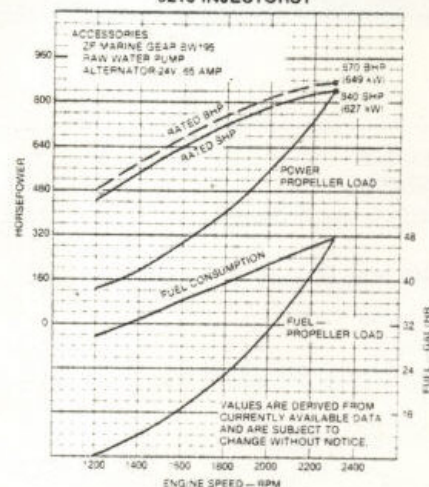
12V-71TI (ZF BW 195 Marine Gear)

No continuous rating is currently available for the 12V-71TI

**MODEL 12V-71TI
MARINE INTERMITTENT RATING
N70 INJECTORS***



**MODEL 12V-71TI
MARINE MAXIMUM RATING
9215 INJECTORS†**



Rating Explanation

RATED BHP—Basic engine gross horsepower.

RATED SHP—Net power available at the marine gear output shaft.

PROPELLER LOAD—Indicates horsepower absorbed by a typical propeller and the corresponding fuel consumption throughout the speed range.

POWER OUTPUT guaranteed within 5% at standard ambient conditions.

MARINE ENGINE RATING—The use of

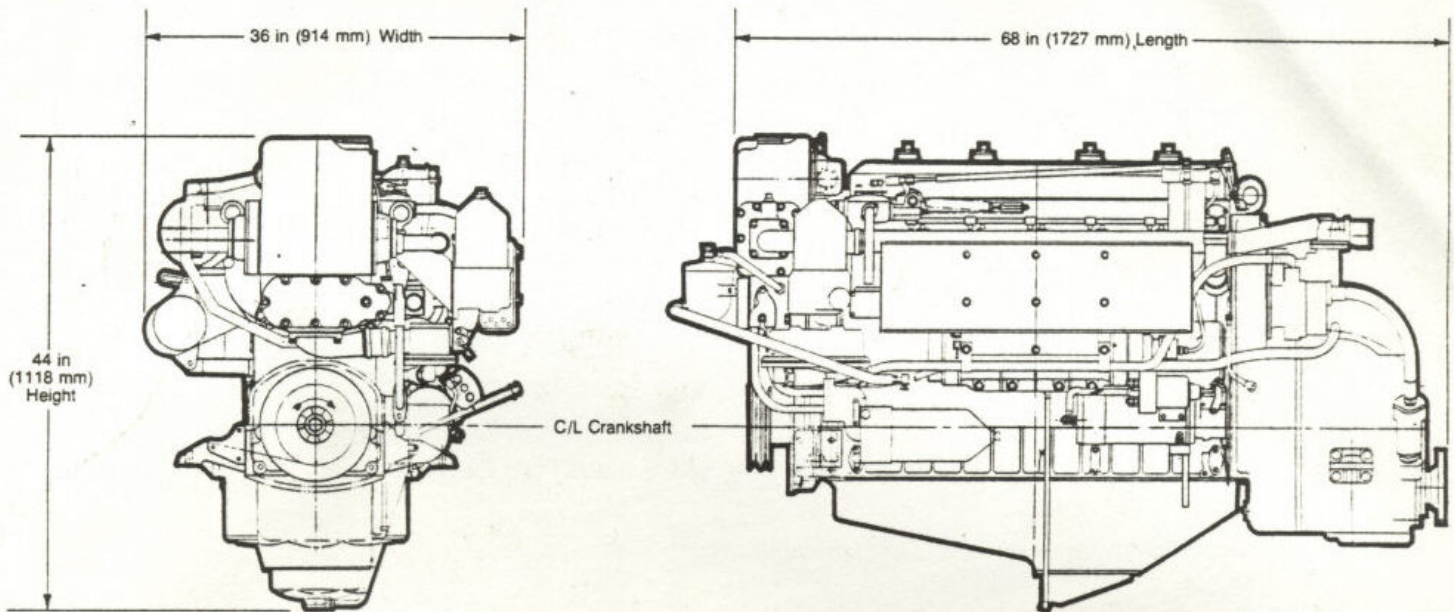
the ratings e.g., maximum, intermittent and continuous; varies with type of vessel in which the engine is installed. See your Detroit Diesel Allison representative for the rating that will apply to your vessel.

*Rating conditions of 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Barometer (Dry)

†Rating conditions of SAE: 77°F (25°C) and 29.31 in Hg (99 kPa) Barometer (Dry)

principal dimensions

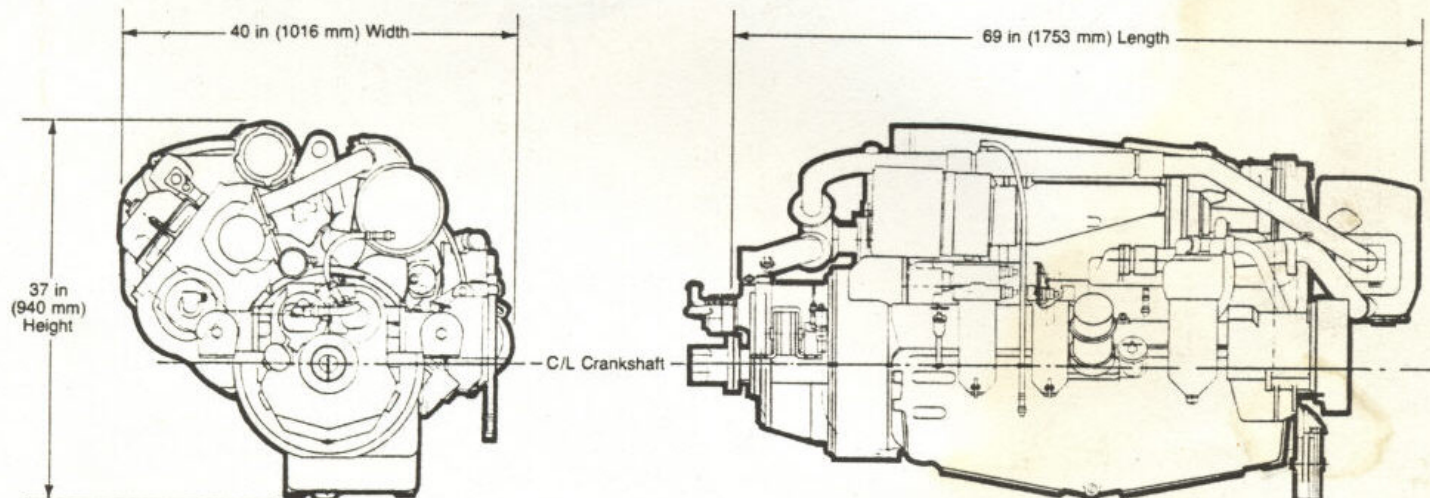
Model 1062-5000



Approximate dimensions shown.

For complete dimensional information, refer to installation drawing 2SA-219 for Models 1062-3000, 1062-3001, and drawing 2SA-218 for Models 1062-5000, 1062-5001.

Model 1062-6001 (low-profile)



Approximate dimensions shown.

For complete dimensional information, refer to installation drawing 2SA-222.

standard equipment

Air Box Drain Tubes

Air Inlet Housing

Air Silencer

Alternator—12 volt, 42 amp, Models 1062-3000, 1062-3001, 1062-5000, and 1062-5001 only

Crankshaft Pulley

Engine Mounts—Includes mounts for engine and marine gear

Exhaust Manifold—Water cooled

Flywheel Housing—SAE #2

Fuel Filters

Governor—Variable speed, Models 1062-3000, 1062-3001, 1062-5000, 1062-5001; limiting speed, Model 1062-6001

Heat Exchanger

Injectors—Cam-operated, unit type, clean tip

Instruments—Includes ammeter, hourmeter, tachometer, and oil pressure gauge and water temperature gauge for engine and marine gear

Lube Oil Cooler

Lube Oil Filter—Full flow

Marine Gear—Allison "M" type, hydraulic reverse and reduction gear, 2 to 1 ratio

Oil Pan—Cast iron pan for 21°-30° inclination angle, rear sump, Models 1062-3000, 1062-3001, 1062-5000, 1062-5001; stamped steel pan for 10° inclination angle, Model 1062-6001 only

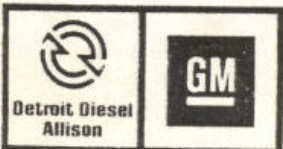
Starting Motor—12 volt

Vibration Damper

Water Filter—Fresh water filter with 10 gallon (37.9 Liters) capacity

For complete specifications and a 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

1340 West Outer Drive Detroit, Michigan 48228

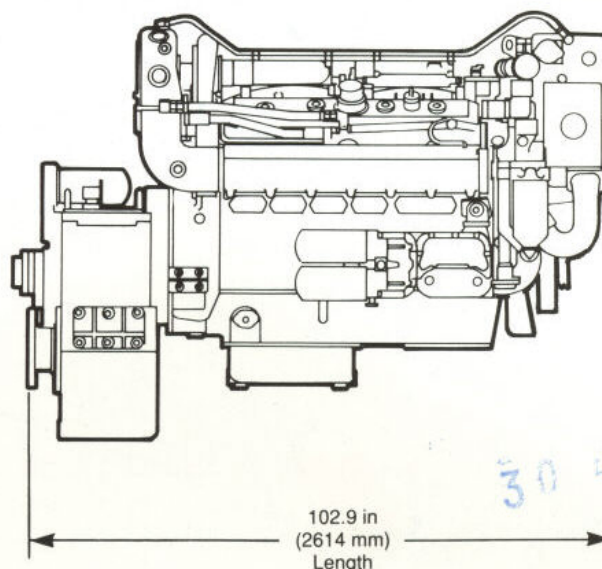
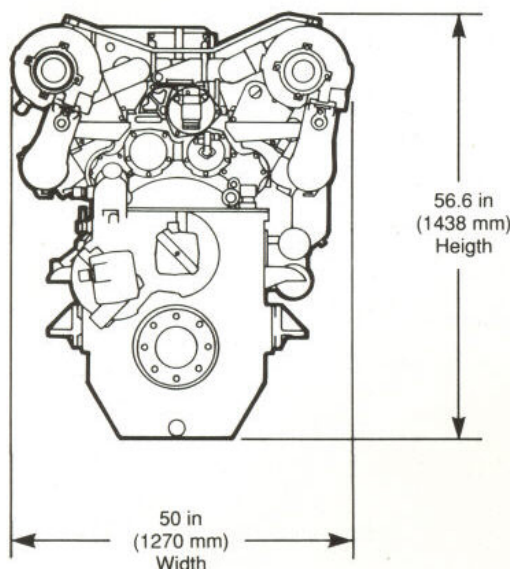
In Canada: Diesel Division General Motors of Canada Limited London Ontario

DETROIT DIESEL



**12V-71TA DDEC
670 BHP**

**Marine Commercial
Intermittent**



General Specifications

Basic Engine	12V-71TA
Model—Port	7122-7K23
Starboard	7122-7K22
Description	Turbocharged-Aftercooled
Number of Cylinders	12
Bore and Stroke	4.25 in x 5.00 in (108 mm x 127 mm)
Displacement	852 cu in (13.97 liters)
Compression Ratio	17.0 to 1
Weight (dry, without marine gear)	5630 lbs (2554 kg)

Rated Power Output—Intermittent

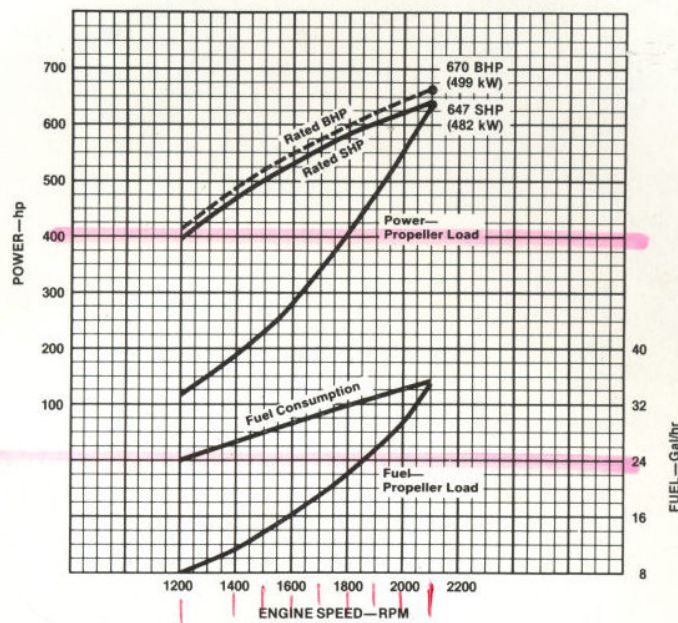
Gross Power	670 BHP (499 kW) @ 2100 RPM
Net Power	647 SHP (482 kW) @ 2100 RPM

Equipment Specifications

Air Inlet Housing—With manual shutdown
Aftercooler—Three-pass
Alternator—24 volt, 65 amp, flange mounted (32 volt optional)
Cooling System—Heat exchanger with cast iron expansion tank and raw water pump. Keel cooling available option
Crankcase vapor collectors with silencers
DDEC—Detroit Diesel Electronic Controls
Engine Mounts—Solid mounts for both engine and marine gear
Exhaust System—Fresh water-cooled manifolds and turbine housings
Factory Installed Marine Gear Options—DD 516, 3.07, 3.50, 4.04, DD 518, 4.48, 5.07
Flywheel Housing—SAE #1
Front PTO—Available option—65 HP or 160 HP
Fuel System—Cam operated electronic unit injectors with low pressure USCG type A external hoses and fuel filters
Lube Oil Filter—Full flow
Oil Pan—Cast iron, designed for 0°-15° inclination angle, rear sump
Starting Motor—24 volt (32 volt optional)

Performance Curve

Model 12V-71TA—Intermittent



Rating Explanation

RATED BHP Basic engine gross horsepower.

RATED SHP Net power available at the marine gear output flange.

PROPELLER LOAD Indicates power absorbed by a typical fixed pitch propeller.

MARINE INTERMITTENT The intermittent rating applies to medium to high speed commercial boats that operate at moderate to low load factors. These are boats intended for commercial service where 3,000 hours or less (3,500 hours for Series 149 engine) are accumulated annually. Normal or continuous cruising RPM should be limited to 95% of rated RPM, with intermittent use of rated power permitted. Typical examples include crewboats, water taxis, pilot boats, ferryboats, lobster boats, party fishing boats, charter sportfisherman, and patrol boats.

Consult your authorized Detroit Diesel Corporation representative for the rating that will apply to your vessel.

DETROIT DIESEL
CORPORATION



13400 Outer Drive, West / Detroit, Michigan 48239-4001
Telephone: 313-592-5000
FAX: 313-592-7288

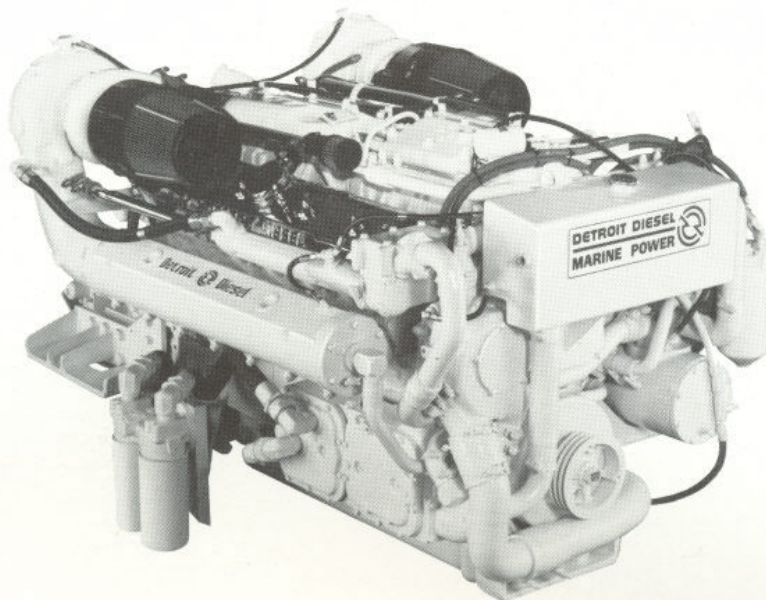


DETROIT DIESEL



**12V-71TA
900 BHP**

Marine Pleasure Craft



General Specifications

Basic Engine	12V-71TA
Model—Starboard	7122-7603 (RH only)
Description	Turbocharged-Aftercooled with Bypass Blower
Number of Cylinders	12
Bore and Stroke	4.25 in x 5.00 in (108 mm x 127 mm)
Displacement	852 cu in (13.97 liters)
Compression Ratio	17.0 to 1
Weight (dry)	4761 lbs (2240 kg) with gear

Rated Power Output—Maximum

Injectors	7030 M15
Gross Power	900 BHP (671 kW) @ 2300 RPM
Net Power	870 SHP (649 kW) @ 2300 RPM

Rated Power Output—Intermittent-Maximum

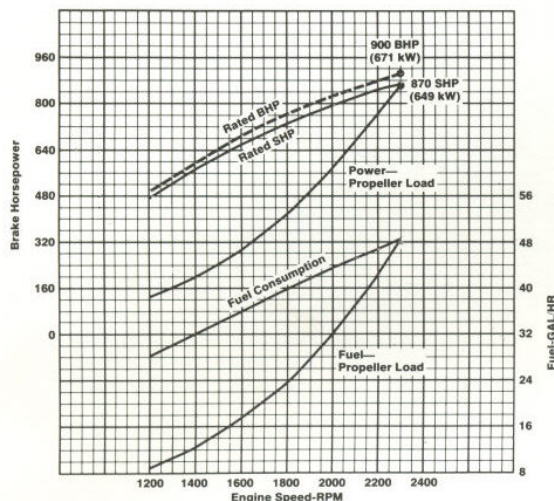
Injectors	7015 M95
Gross Power	800 BHP (597 kW) @ 2300 RPM
Net Power	775 BHP (578 kW) @ 2300 RPM

Equipment Specifications

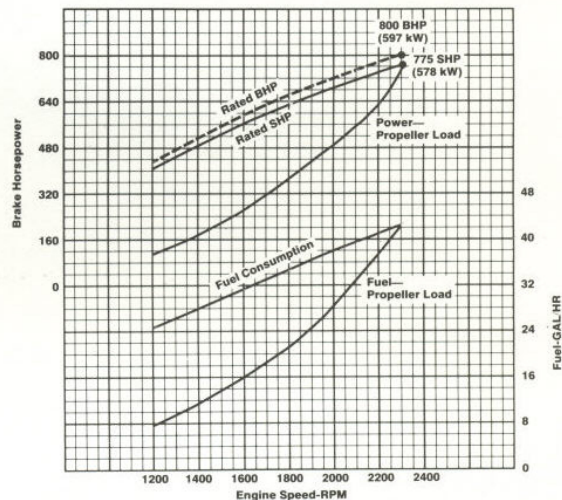
Air Inlet Housing—With manual shutdown
Air Silencer—Two
Aftercooler—Two-pass with precooled coolant supply
Alternator—24 volt, 65 amp, flange mounted
Cooling System—Side mounted heat exchanger with low profile expansion tank
Engine Mounts—Resilient mounts for both engine and marine gear
Exhaust System—Fresh water-cooled manifolds and turbine housing
Flywheel Housing—SAE #1
Fuel System—Cam operated unit injectors with low pressure USCG type A external hoses, fuel filters and cooler
Governor—Variable speed
Lube Oil Filter—Full flow, two spin-on elements
Marine Gear—Detroit Diesel-232V (1.50, 1.76, 1.96, 2.48 reduction ratios) and 232A (1.52, 1.77, 1.97 reduction ratios)
Oil Pan—Designed for 0°-12° installation angle, no sump
Starting Motor—24 volt

Performance Curves

Model 12V-71TA—Maximum



Model 12V-71TA Intermittent-Maximum



Rating Explanation

RATED BHP Basic engine gross horsepower.

RATED SHP Net power available at the marine gear output flange.

PROPELLER LOAD indicates horsepower absorbed by a typical fixed pitch propeller.

POWER OUTPUT guaranteed within 5% at rated ambient conditions.

MARINE MAXIMUM The marine maximum rating applies to high performance boats where speed is of primary importance and overall load factors are low. Normal or continuous cruising RPM should be limited to 90% of rated engine RPM, and the use of full rated power should be limited to 10% (average) of

operating time. This rating is normally reserved for privately-owned yachts in non-revenue applications with an average annual hour accumulation of 500 hrs.

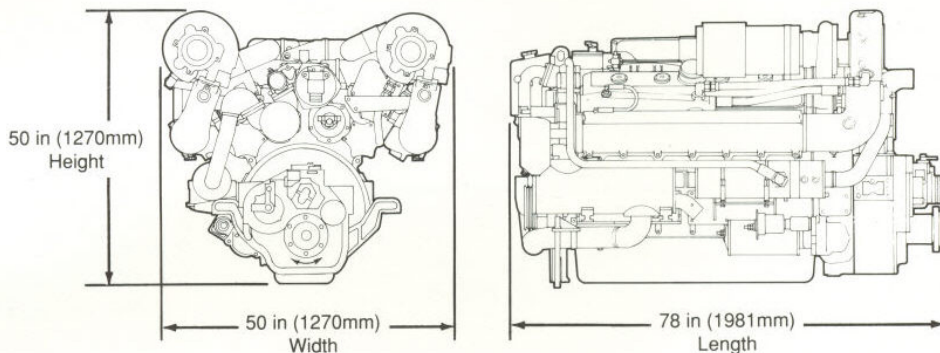
NOTE: Other boats; e.g., fire, police, with an overall duty cycle similar to maximum or intermittent-maximum may be applied at the appropriate rating.

Consult your authorized Detroit Diesel Corporation representative for the rating that will apply to your vessel.

Dimensional Drawing

Model 7122-7603
12V-71TA

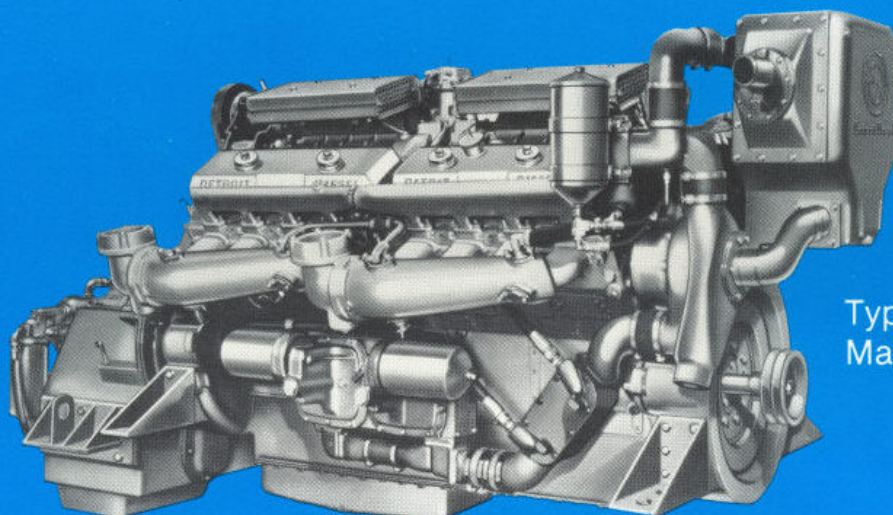
Approximate dimensions shown.
For complete dimensional information,
refer to installation drawing



DETROIT DIESEL
CORPORATION



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Typical 16V-71
Marine Model

specifications

Basic Engine	16V-71
Model-Port	7162-3000
Starboard	7162-7000
Description	Naturally Aspirated
Number of Cylinders	16
Bore and Stroke	4.25 in × 5 in (108 mm × 127 mm)
Displacement	1136 cu in (18.63 liters)
Compression Ratio	18.7 to 1
Dimensions: (approx.)	
Length	115 in (2921 mm)
Width	49 in (1245 mm)
Height	58 in (1473 mm)
Net Weight (dry)	7400 lbs (3357 kg)

Rated Power Output

Continuous	
Injectors	N55
Rated Gross Power	478 BHP (357 kW) @ 1800 RPM*
Rated Net Power	455 SHP (339 kW) @ 1800 RPM*
Intermittent	
Injectors	C65
Rated Gross Power	608 BHP (454 kW) @ 2100 RPM*
Rated Net Power	583 SHP (435 kW) @ 2100 RPM*
Maximum	
Injectors	N70
Rated Gross Power	666 BHP (497 kW) @ 2300 RPM*
Rated Net Power	640 SHP (477 kW) @ 2300 RPM*

Values are derived from currently available data and are subject to change without notice.

standard equipment

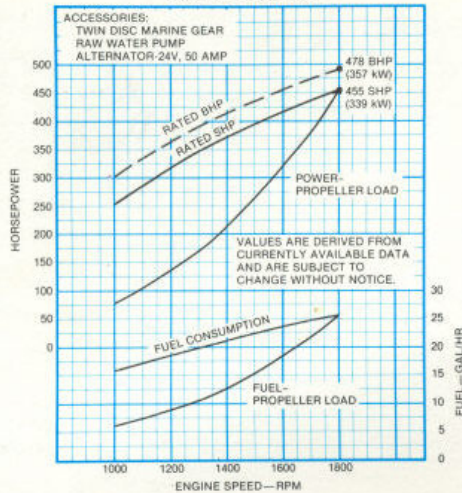
- Air Inlet Housing**
- Air Silencers**
- Alternator**—24 volt, 50 amp
- Crankshaft Pulley**
- Engine Mounts**—Includes mounts for both engine and marine gear
- Exhaust Manifold**—Water cooled
- Flywheel Housing**—SAE #0
- Fuel Filters**—Primary & secondary, spin-on
- Governor**—Variable speed
- Heat Exchanger**—Includes raw water pump & piping
- Injectors**—Cam operated, unit type, clean tip
- Instruments**—Includes ammeter, hourmeter, tachometer, plus oil pressure gauges and water temperature gauges for both engine and marine gear
- Lube Oil Cooler**—48 plates
- Lube Oil Filter**—Dual full-flow, spin-on
- Marine Gear**—Twin Disc, MG 518-1, 2.194 to 1 ratio
- Oil Pan**—Stamped steel for 15° inclination angle, rear sump
- Starting Motor**—24 volt
- Vibration Damper**—Viscous torsional
- Water Filter**—Fresh water filter with 65-gallon (246.0 liters) capacity

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

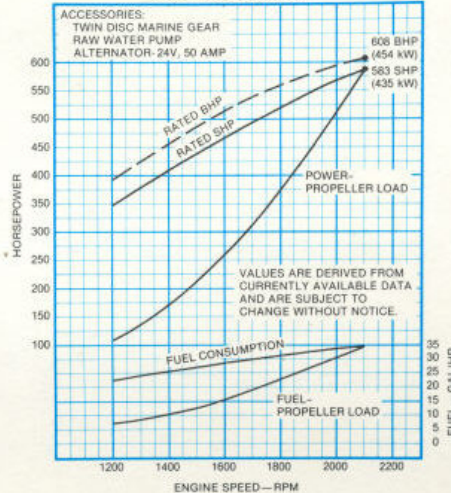
*Rating conditions of: 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Barometer (Dry)

16V-71

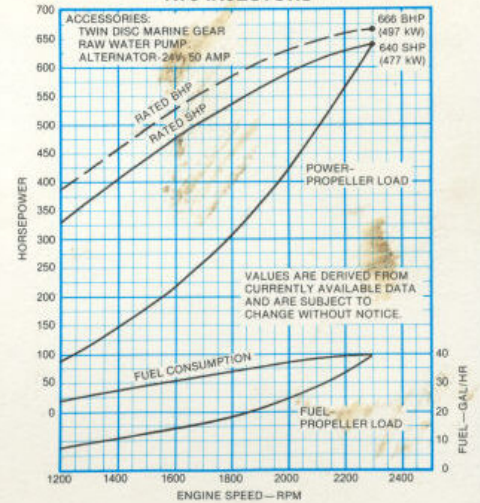
MODEL 16V-71 MARINE CONTINUOUS RATING N55 INJECTORS*



MODEL 16V-71 MARINE INTERMITTENT RATING C65 INJECTORS*



MODEL 16V-71 MARINE MAXIMUM RATING N70 INJECTORS*



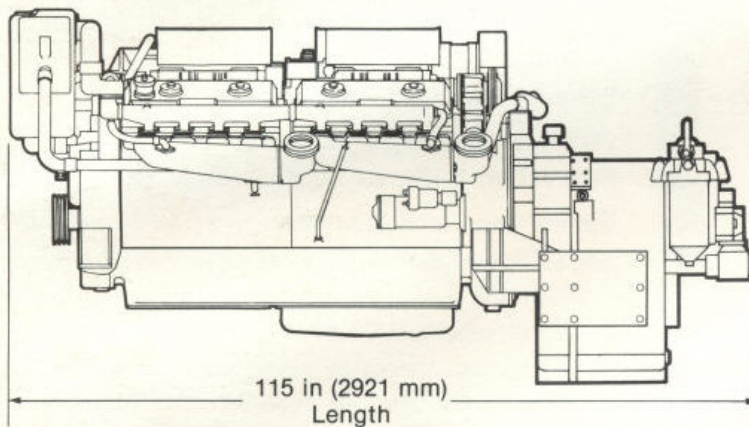
Rating Explanation

RATED BHP—Basic engine gross horsepower.
RATED SHP—Net power available at the marine gear output shaft.
PROPELLER LOAD—Indicates horsepower absorbed by a typical propeller and the corresponding fuel

consumption throughout the speed range.
POWER OUTPUT guaranteed within 5% at standard ambient conditions.
MARINE ENGINE RATING—The use of the ratings e.g., maximum, intermittent and continuous; varies with

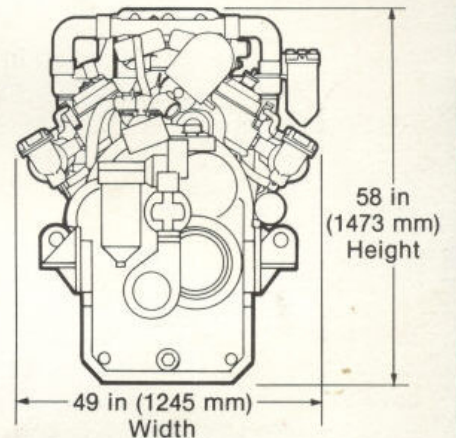
type of vessel in which the engine is installed. See your Detroit Diesel Allison representative for the rating that will apply to your vessel.
*Rating conditions of 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Barometer (Dry)

Model 7162-3000, 7162-7000



Approximate dimensions shown. For complete information, refer to installation drawing 2SA316.

16V-71



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