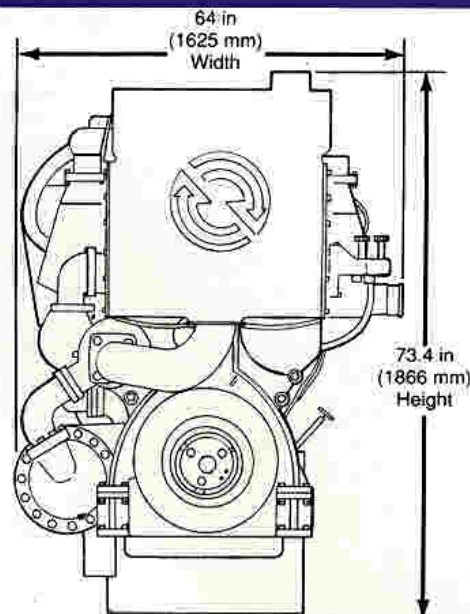
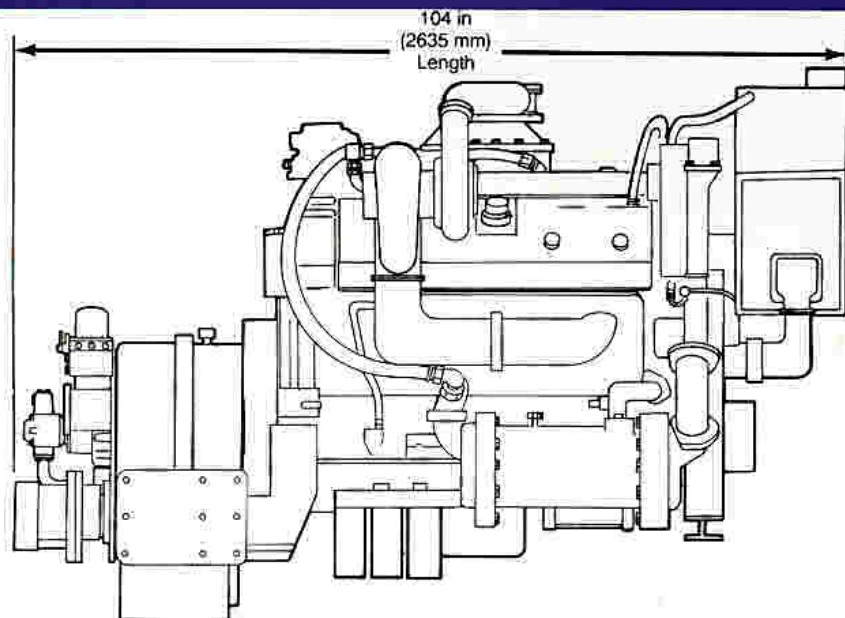


DETROIT DIESEL



8V-149TI DDEC
630 BHP

Marine Commercial
Continuous



General Specifications

Basic Engine	8V-149TI
Model—Port	9082-7C21
Starboard	9082-7C20
Description	Turbocharged-Intercooled
Number of Cylinders	8
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	1195 cu in (19.6 liters)
Compression Ratio	14.0 to 1
Weight (dry w/gear)	9000 lbs (4106 kg)

Rated Power Output—Continuous

Gross Power	630 BHP (470 kW) @ 1800 RPM
Net Power	608 SHP (454 kW) @ 1800 RPM

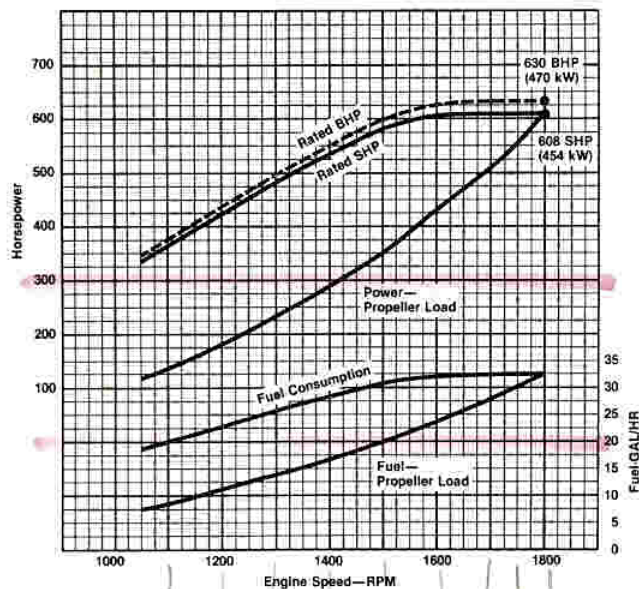
Equipment Specifications

Alternator—12 volt, 70 amp
Cooling System—Cast iron expansion tank for keel cooling
Crankcase vapor collectors with silencers
Crankshaft Pulley—Poly vee grooves
DDEC—Detroit Diesel Electronic Controls
Exhaust System—Dry insulated manifolds and turbine housing
Flywheel Housing—SAE #0
Fuel System—Cam operated electronic unit injectors with low pressure USCG Type A external hoses, fuel filters and cooler
Lube Oil Filter—Full flow spin on
Marine Gear—Detroit Diesel DD 520
Oil Pan—Designed for 0°-12° inclination angle
Starting—Air starter

30 CKIM 1996

Performance Curve

Model 8V-149TI—Continuous



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 CONTINUOUS The marine continuous rating applies to medium or low speed boats (normally of the displacement type) which operate up to 24 hours a day, 365 days a year, at high load factors. Typical examples include tugs, towboats, offshore supply boats, fishing trawlers and draggers.

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

DETROIT DIESEL
CORPORATION



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Telephone: 313-592-5000

FAX: 313-592-7288

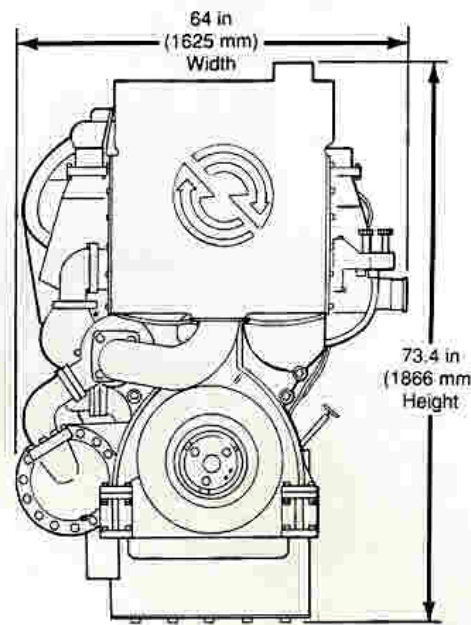
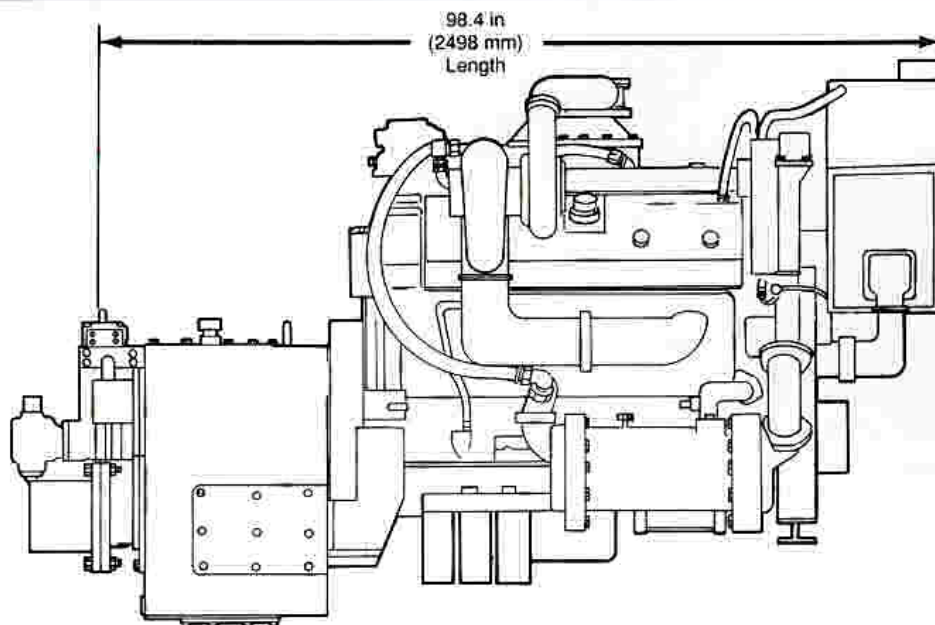


DETROIT DIESEL



**8V-149TI DDEC
800 BHP**

**Marine Commercial
Continuous**



General Specifications

Basic Engine	8V-149TI
Model—Port	9082-7C23
Starboard	9082-7C22
Description	Turbocharged-Intercooled
Number of Cylinders	8
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	1195 cu in (19.6 liters)
Compression Ratio	14.0 to 1
Weight (dry w/gear)	9040 lbs (4106 kg)

Rated Power Output—Continuous

Gross Power	800 BHP (597 kW) @ 1800 RPM
Net Power	773 SHP (577 kW) @ 1800 RPM

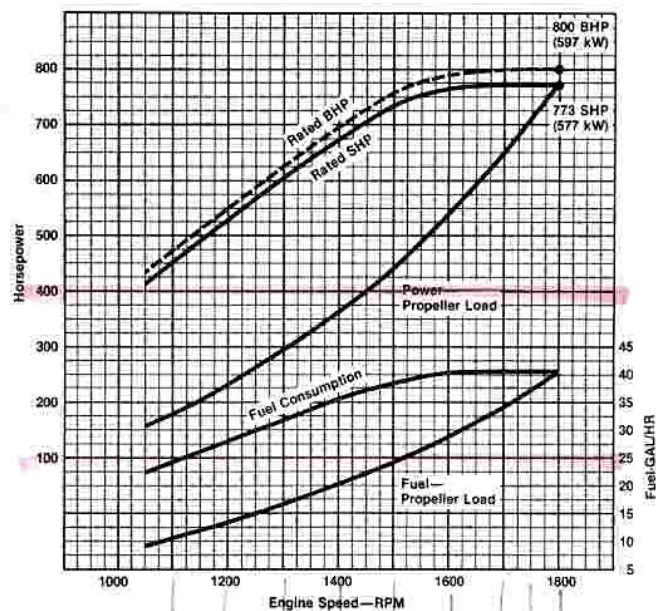
Equipment Specifications

Alternator—24 volt, 70 amp
Cooling System—Cast iron expansion tank for keel cooling
Crankcase vapor collectors with silencers
Crankshaft Pulley—Poly vee grooves
DDEC—Detroit Diesel Electronic Controls
Exhaust System—Fresh water-cooled manifolds and turbine housing
Flywheel Housing—SAE #0
Fuel System—Cam operated electronic unit injectors with low pressure USCG Type A external hoses, fuel filters and cooler
Lube Oil Filter—Full flow spin on
Marine Gear—Detroit Diesel DD 530
Oil Pan—Designed for 0°-12° inclination angle
Starting—24 volt starter

30 EKIM 1996

Performance Curve

Model 8V-149TI—Continuous



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 CONTINUOUS The marine continuous rating applies to medium or low speed boats (normally of the displacement type) which operate up to 24 hours a day, 365 days a year, at high load factors. Typical examples include tugs, towboats, offshore supply boats, fishing trawlers and draggers.

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

DETROIT DIESEL
CORPORATION

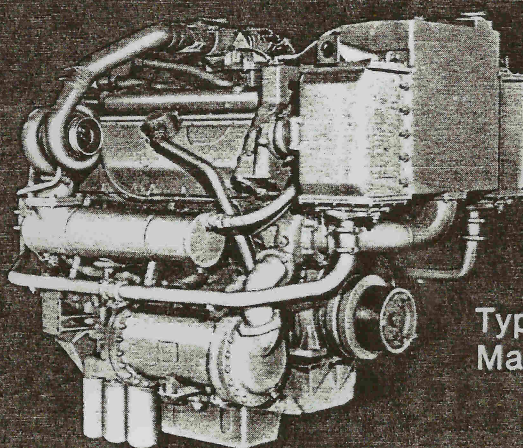


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FAX: 313-592-7288

Detroit Diesel Engines

marine models

8V-149TI
900 hp



Typical 8V-149TI
Marine Model

specifications

Basic Engine	8V-149TI
Model	9082-7301
Description	Turbocharged-Intercooled
Number of Cylinders	8
Bore and Stroke	5.75 in × 5.75 in (146 mm × 146 mm)
Displacement	1195 cu in (19.6 liters)
Compression Ratio	16 to 1
Dimensions: (approx.)	
Length	64 in (1626 mm)
Width	64 in (1626 mm)
Height	68 in (1727 mm)
Net Weight (dry)	6000 lbs (2722 kg)

Rated Power Output

Continuous	
Injectors	140
Rated Gross Power	640 BHP (477 kW) @ 1800 RPM†
Rated Net Power	621 SHP (463 kW) @ 1800 RPM†
Intermittent	
Injectors	150
Rated Gross Power	760 BHP (567 kW) @ 1900 RPM†
Rated Net Power	734 SHP (548 kW) @ 1900 RPM†
Maximum	
Injectors	190
Rated Gross Power	900 BHP (671 kW) @ 1900 RPM†
Rated Net Power	870 SHP (649 kW) @ 1900 RPM†

†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 or obligation.

standard equipment

Air Inlet Housing

Alternator—24 volt, 65 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

Governor—Hydraulic

Heat Exchanger—Includes raw water pumps & piping

Injectors—Cam operated, unit type, clean tip

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

Intercooler

Lube Oil Cooler—Tube and shell type

Lube Oil Filter—Dual full-flow, spin-on

Oil Pan—For 0-15° inclination angle

Starting Motor—24 volt

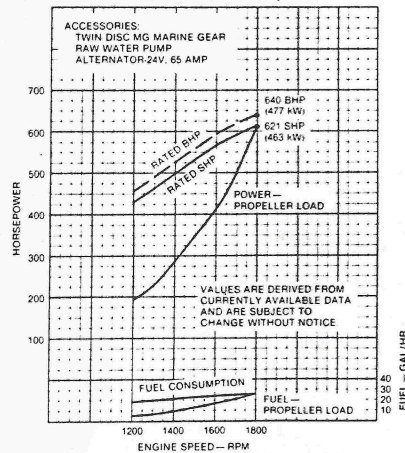
Turbocharger—Twin turbos

Vibration Damper—Viscous torsional damper

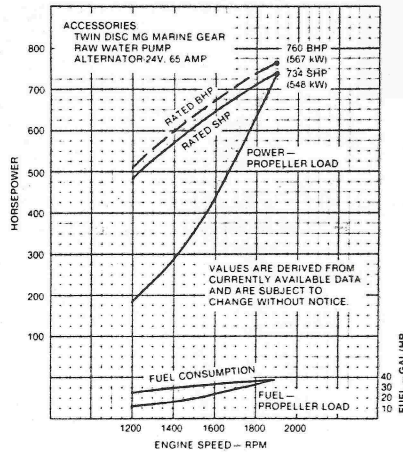
For a complete listing of standard and optional equipment, consult your authorized Detroit Diesel Allison representative.

8V-149TI

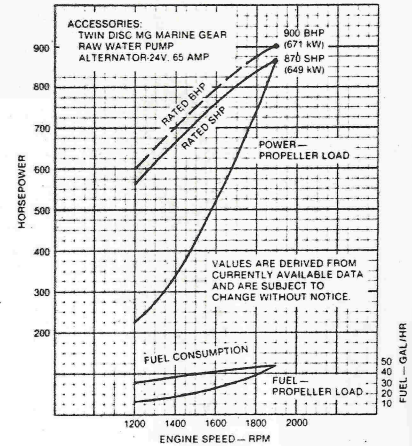
MODEL 8V-149TI MARINE CONTINUOUS RATING 140 INJECTORS†



MODEL 8V-149TI MARINE INTERMITTENT RATING 150 INJECTORS†



MODEL 8V-149TI MARINE MAXIMUM RATING 190 INJECTORS†



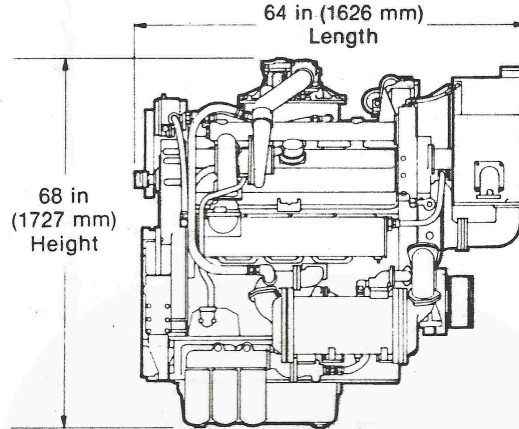
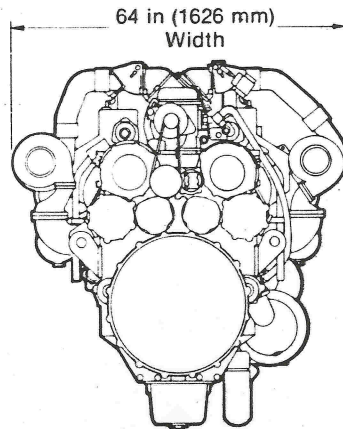
Rating Explanation

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

Model 9082-7301

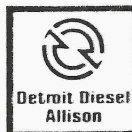


Approximate dimensions shown. For complete information, refer to installation drawing

8V-149TI

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Detroit Diesel Allison Division of General Motors

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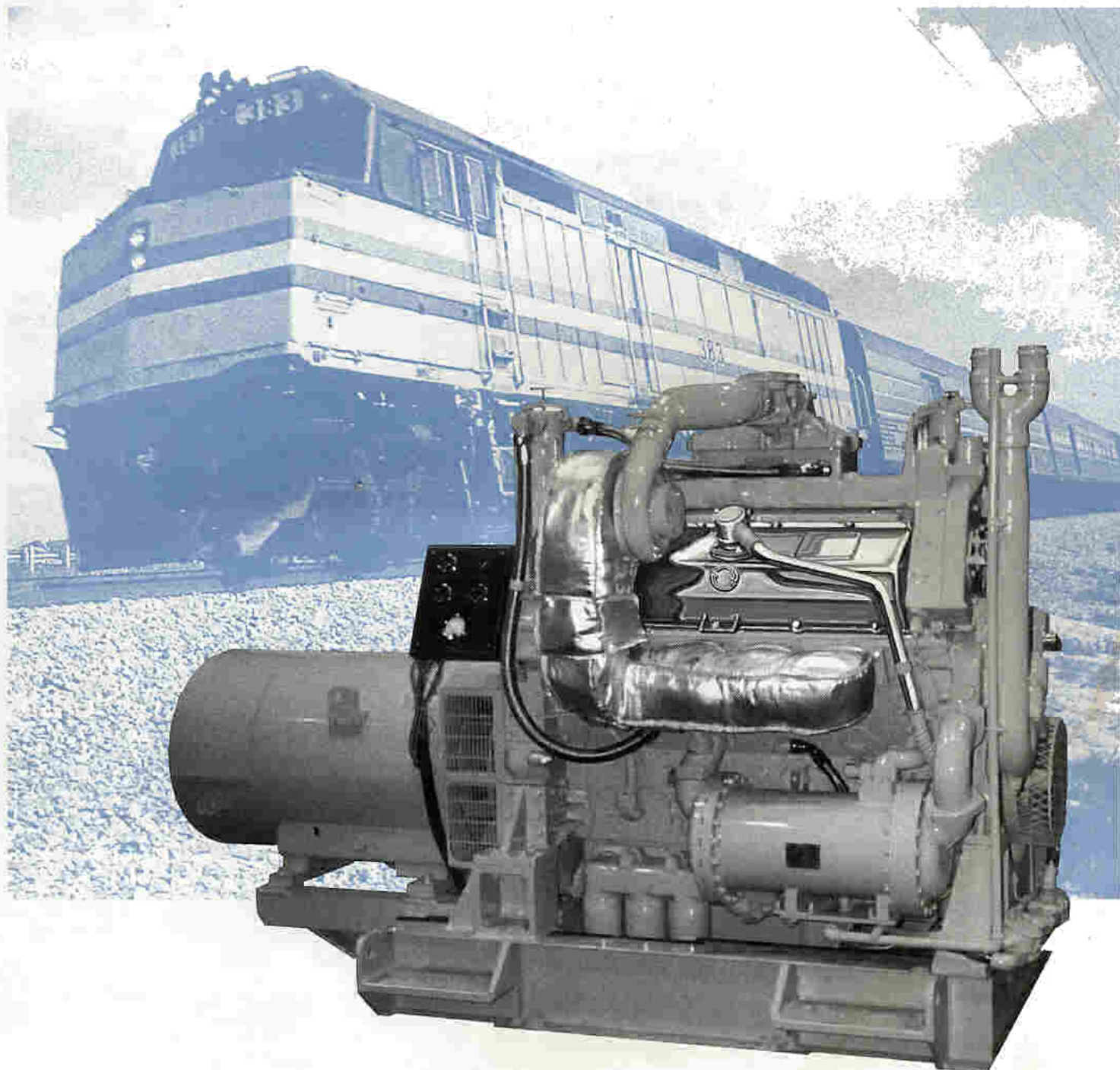
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Sydney, Australia
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DETROIT DIESEL



8V-149TI Head End Power



For Commuter Locomotives

Series 149 Engines Combine Traditional Features with Advanced Technology

When you purchase a Series 149 engine, you benefit from our proven two-cycle design which incorporates a number of significant product features. Features such as replaceable cylinder liners, unit injectors, turbochargers, bypass blowers and crosshead pistons.

Two-Cycle Design

Because power is provided on every piston downstroke, Detroit Diesel two-cycle engines are more responsive to power demands. This is a key benefit in applications which require quick response to changing loads. Unlike most competitive engines, Detroit Diesel two-cycle engines provide full power up to 10,000 feet above sea level. This results from our efficient air induction system which provides greater air flow than most other engines.

Cylinder Liners

All heavy-duty Detroit Diesel engines have cylinder liners for long-life and rebuildability. With a Detroit Diesel, your uptime is maximized since cylinder kit replacement is a simple procedure.

Unit Injectors

This is a simple fuel system which allows high injection pressure for maximum fuel efficiency and low emissions. Since each unit injector provides the pressure, there is no need for external high pressure fuel lines. This system is less costly to maintain since each injector can be individually serviced.

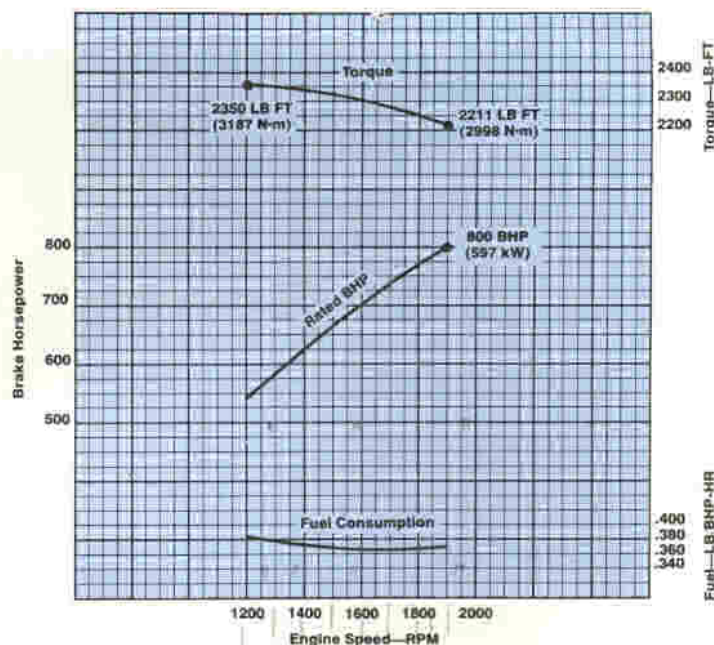
Crosshead Pistons

Crosshead pistons have gained popularity because they allow the use of an iron piston dome which permits the placement of the top compression ring very close to the top of the piston which results in maximum fuel efficiency.

Turbocharging and Bypass Blower

Efficient turbocharging and a bypass blower provide a power boost when air box pressure is equalized with blower inlet pressure. The result is optimum performance and fuel economy.

8V-149TI 800 BHP



DETROIT DIESEL
CORPORATION



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Telephone: 313-592-5000

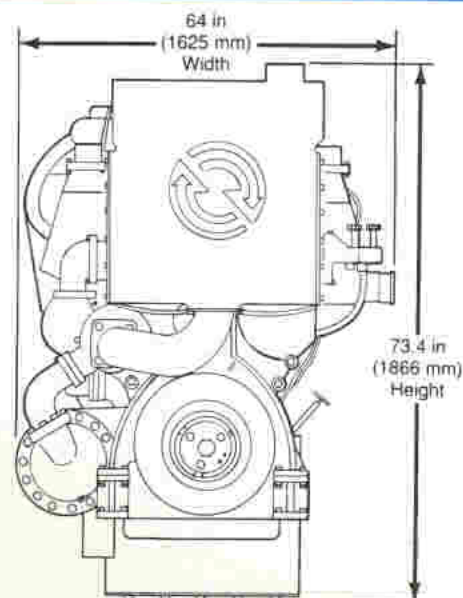
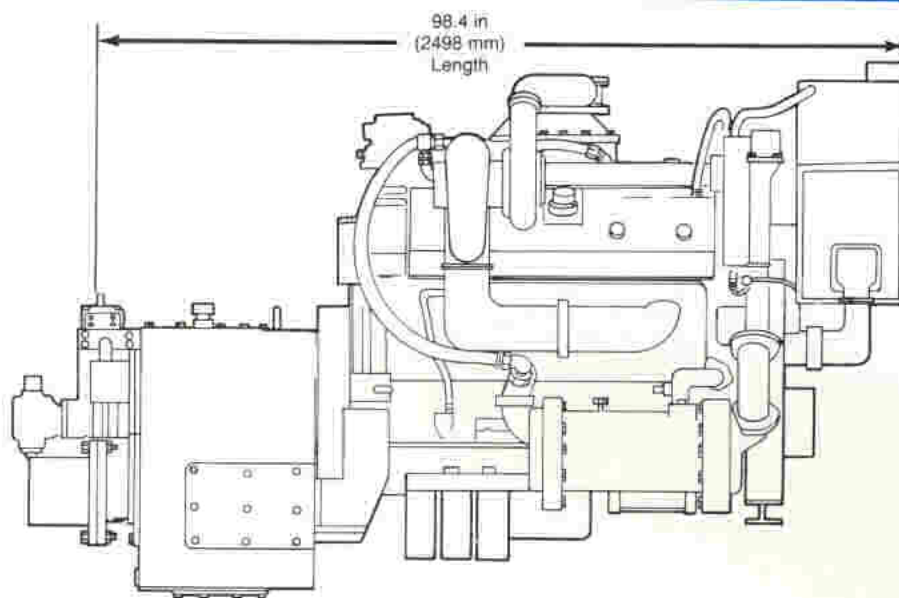
Telex: 4320091 / TWX: 810-221-1649

FAX: 313-592-7288

DETROIT DIESEL

**8V-149TI DDEC
900 BHP**

**Marine Commercial
Intermittent**



General Specifications

Basic Engine	8V-149TI
Model—Port	9082-7C11
Starboard	9082-7C10
Description	Turbocharged-Intercooled
Number of Cylinders	8
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	1195 cu in (19.6 liters)
Compression Ratio	14.0 to 1
Weight (dry w/gear)	9040 lbs (4106 kg)

Rated Power Output—Intermittent

Gross Power	900 BHP (671 kW) @ 1900 RPM
Net Power	870 SHP (649 kW) @ 1900 RPM

Equipment Specifications

Alternator	—24 volt, 70 amp
Cooling System	—Cast iron heat exchanger
Crankcase vapor collectors	with silencers
Crankshaft Pulley	—Poly vee grooves
DDEC	—Detroit Diesel Electronic Controls
Exhaust System	—Dry insulated manifolds and turbine housing
Flywheel Housing	—SAE #0
Fuel System	—Cam operated electronic unit injectors with low pressure USCG Type A external hoses, fuel filters and cooler
Lube Oil Filter	—Full flow spin on
Marine Gear	—Detroit Diesel DD 530
Oil Pan	—Designed for 0°-12° inclination angle
Starting	—24 volt starter

Rating conditions: ISO 3046, SAE J1349, SAE J1228
77°F (25°C) and 29.31 in. Hg. (99 kPa) Barometer (Dry)

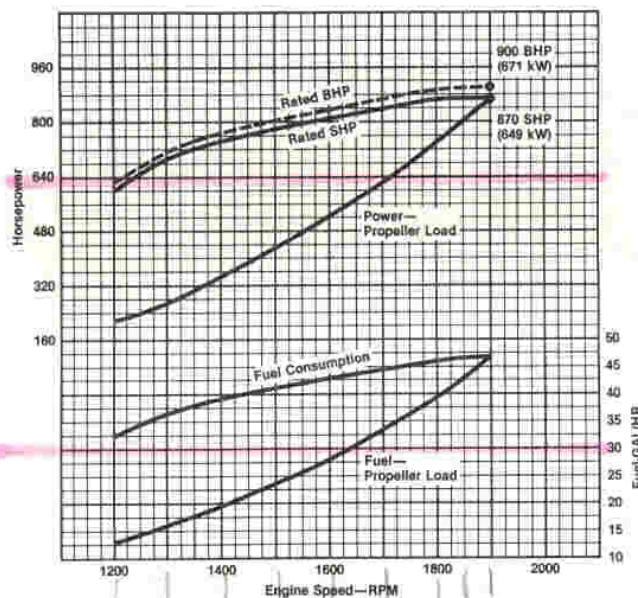
For a complete listing of standard and optional equipment,
consult your authorized Detroit Diesel Corporation representative.

Illustration represents a typical marine engine

30 EXAM 1996

Performance Curve

Model 8V-149TI—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



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FAX: 313-592-7288

marine models

ANK. Tel. 173824 - IST. Tel. 472831

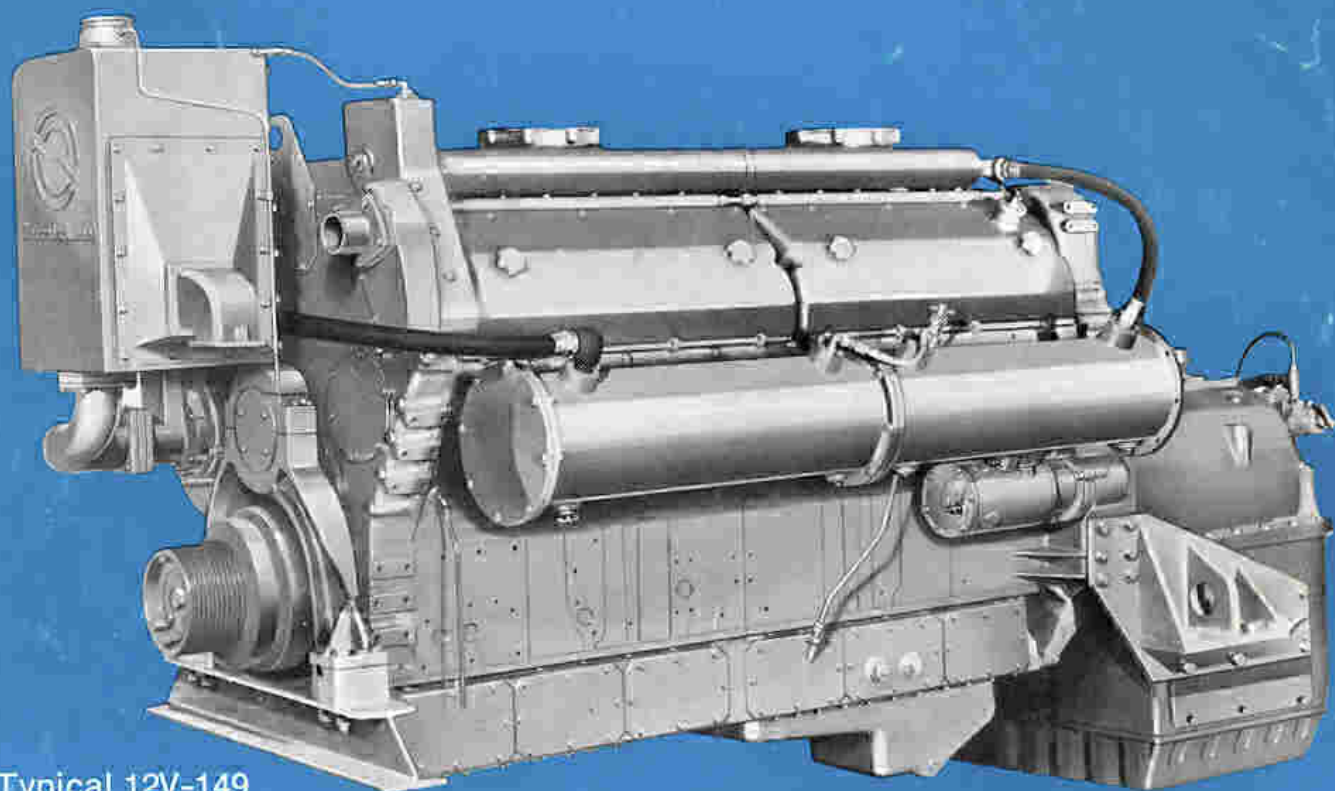
Vol. 142 1917 - 1428: 37

800 hp



Model

12V-149 9122-7000



Typical 12V-149
Marine Model

specifications

Basic Engine

12V-149

12V-149

Model Number	9122-7000	9122-7000
Description	For Workboat Application	For Crewboat Application
Engine Type	Two Cycle	Two Cycle
Number of Cylinders	12	12
Bore and Stroke	5¾ in. x 5¾ in.	5¾ in. x 5¾ in.
Two Cycle Displacement (Every Downstroke a Powerstroke)	1788 cu. in.	1788 cu. in.
Rated Brake Horsepower 85°F and 500 ft.	—	800 @ 1900 RPM
Rated Shaft Horsepower 85°F and 500 ft.	—	770 @ 1900 RPM
Continuous Brake Horsepower	700 @ 1800 RPM	—
Continuous Shaft Horsepower	675 @ 1800 RPM	—
Piston Speed (feet/minute)	1725 @ 1800 RPM	1820 @ 1900 RPM
Compression Ratio	18 to 1	18 to 1
Approximate Dimensions		
Length	129 in.	129 in.
Width	58 in.	58 in.
Height	74 in.	74 in.
Weight (Dry)	12,000 lbs.	12,000 lbs.

performance

Rating Explanation

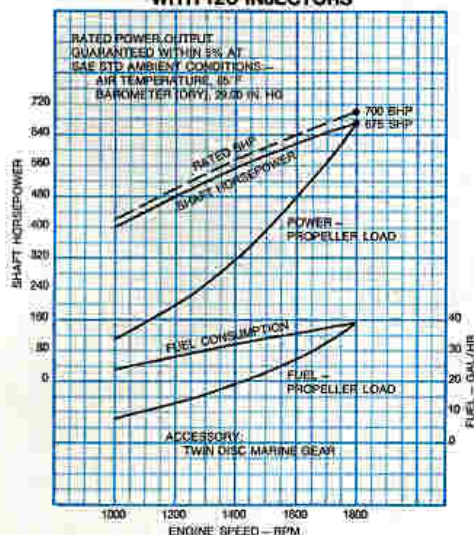
RATED SHAFT HORSEPOWER—Net power available at the marine gear output shaft; for crewboat applications.

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

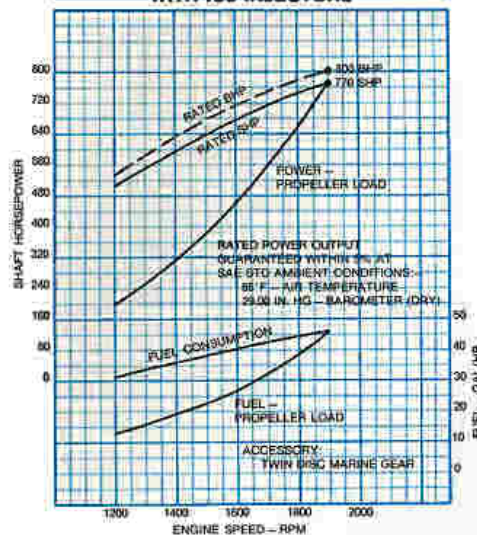
PROPELLER LOAD—Indicates horsepower absorbed by a typical propeller and the corresponding fuel consumption throughout the speed range.

Propeller load and shaft horsepower 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 12V-149
WITH 120 INJECTORS

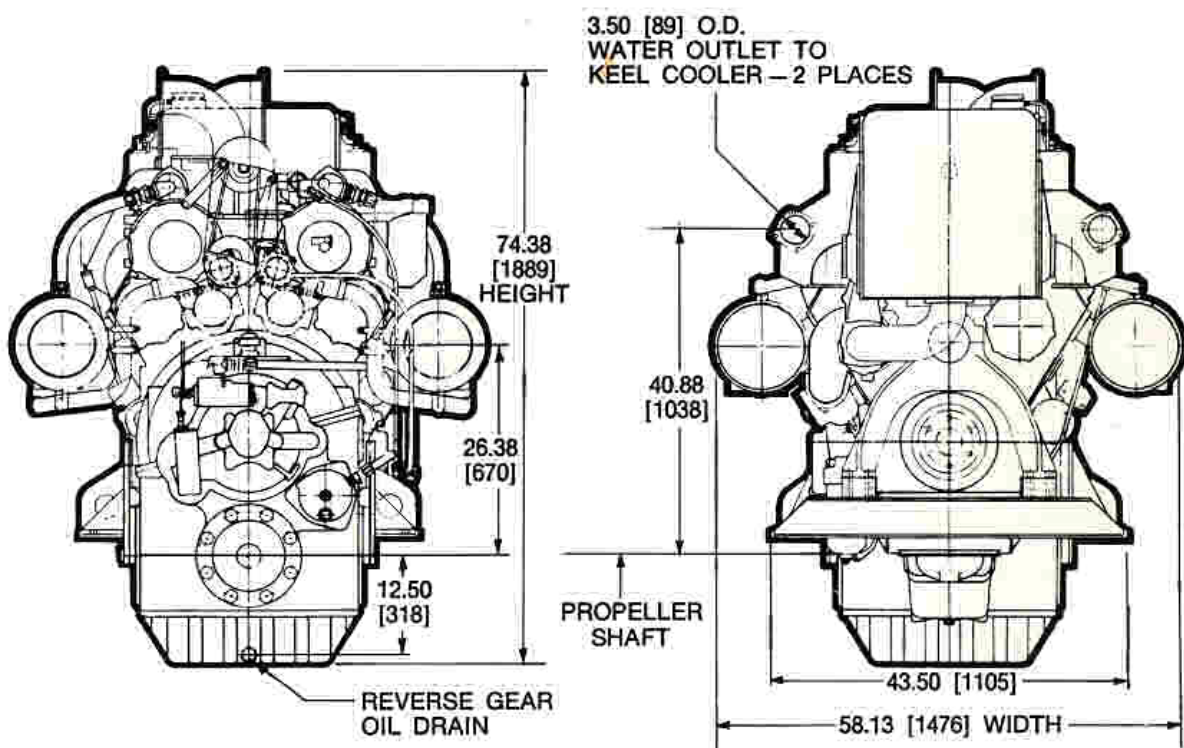
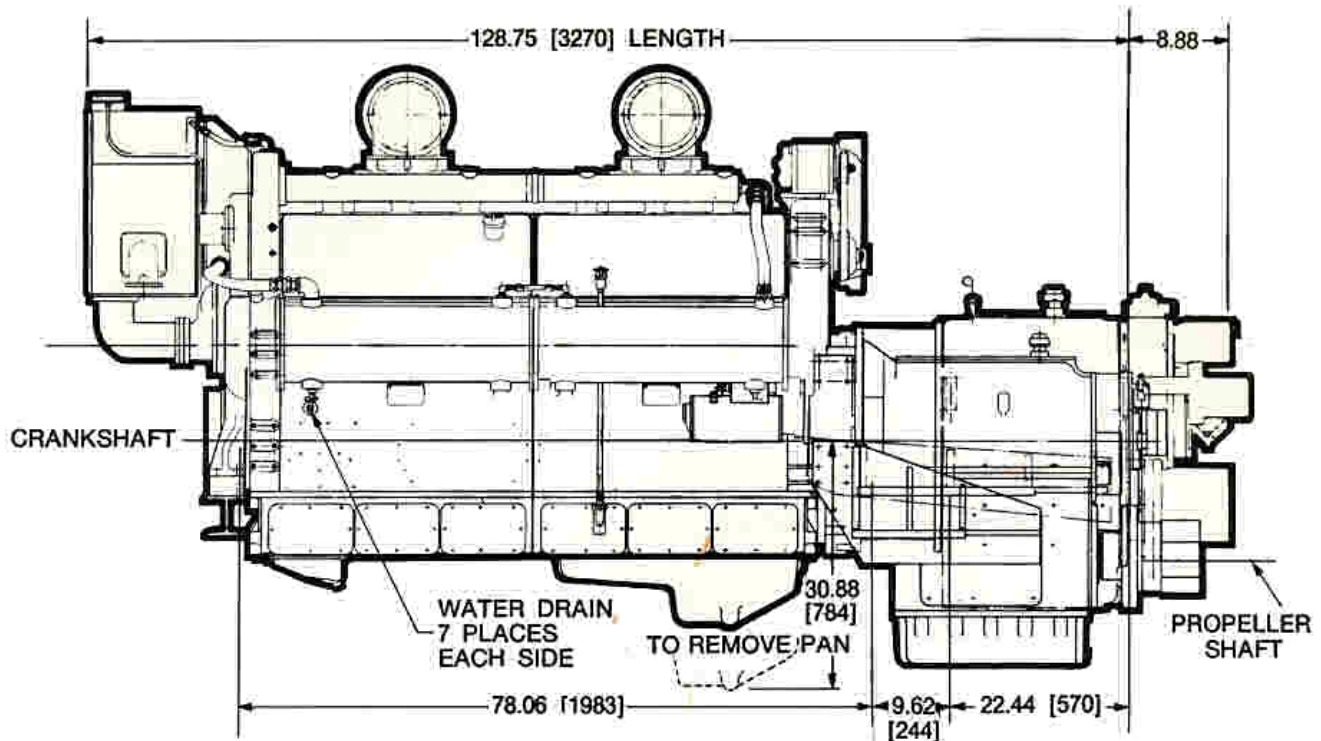


ENGINE PERFORMANCE 12V-149
WITH 130 INJECTORS



principal dimensions

9122-7000



For complete dimensional information refer to installation drawing 2SA361.

standard equipment

Air Cleaners—Oil Bath

Air Inlet Housing—Includes manual shutdown

Crankshaft Pulley—9.40 in. diameter poly-vee

Engine Mounts—Trunnion Mounts

Exhaust Manifold—Water-Cooled

Flywheel Housing—SAE #0, dual starter pads

Flywheel—SAE #0

Fuel Filter and Strainer

Generator—24 volt, 30 amp, AC

Governor—Variable speed, with throttle controls

Injectors—Cam operated, unit type, Needle Valve

Instruments—Includes tachometer, oil pressure gauge, water temperature gauge, and oil pressure gauge

Keel Cooling

Lube Oil Filters—Dual Full-flow Filters

Marine Gear—Twin Disc MG-527, 5.17 to 1 ratio

Oil Cooler—Engine and marine gear coolers

Oil Pan—8° installation angle, dual sump

Starting Equipment—Dual 24 volt, sprag clutch starters

Vibration Damper—Double, 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

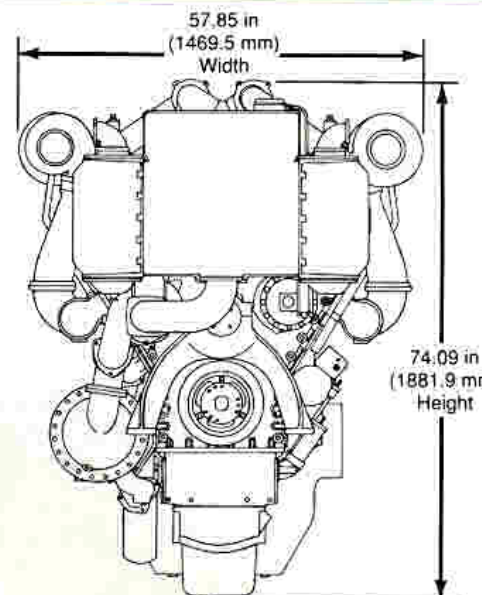
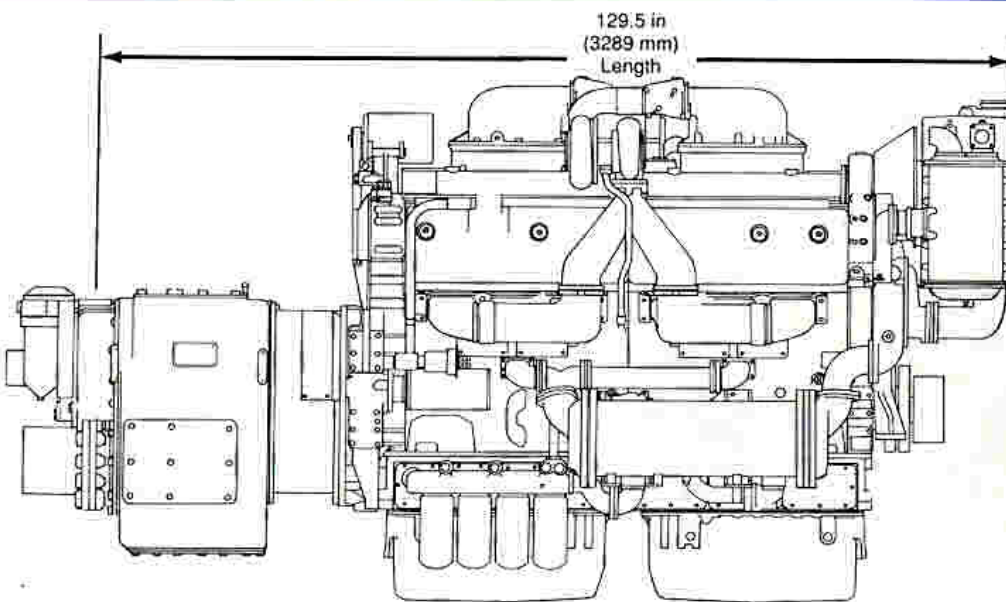
13400 West Outer Drive Detroit, Michigan 48228

DETROIT DIESEL



12V-149TI DDEC
960 BHP

Marine Commercial
Continuous



General Specifications

Basic Engine	12V-149TI
Model—Port	9122-7C21
Starboard	9122-7C20
Description	Turbocharged-Jacket water intercooled with Bypass Blower
Number of Cylinders	12
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	1792 cu in (29.39 liters)
Compression Ratio	14 to 1
Weight (dry)	13950 lbs (6330 kg) with gear

Rated Power Output—Continuous

Gross Power	960 BHP (716 kW) @ 1800 RPM
Net Power	930 SHP (694 kW) @ 1800 RPM

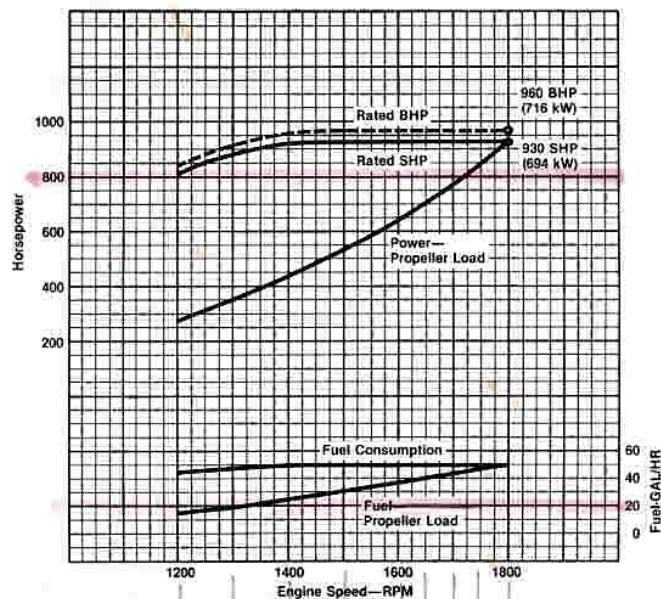
Equipment Specifications

Alternator—12 volt, 75 amp, belt driven
Crankcase vapor collectors with silencers
Crankshaft pulley—Poly vee grooves
DDEC—Detroit Diesel Electronic Controls
Exhaust System—Dry manifolds and dry turbine housing with advanced insulating wrap
Factory Installed Marine Gear—DD 540V
Flywheel Housing—SAE #0
Fuel System—Cam operated electronic unit injectors with low pressure USCG type A external hoses and fuel filters
Governor—DDEC
Lube Oil Filter—Full flow
Oil Pan—Designed for 0°-8° installation angle, rear sump
Starting—Air starter

30 200 1996

Performance Curve

Model 12V-149TI—Continuous



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 CONTINUOUS The marine continuous rating applies to medium or low speed boats (normally of the displacement type) which operate up to 24 hours a day, 365 days a year, at high load factors. Typical examples include tugs, towboats, offshore supply boats, fishing trawlers and draggers.

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

DETROIT DIESEL
CORPORATION



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Telephone: 313-592-5000

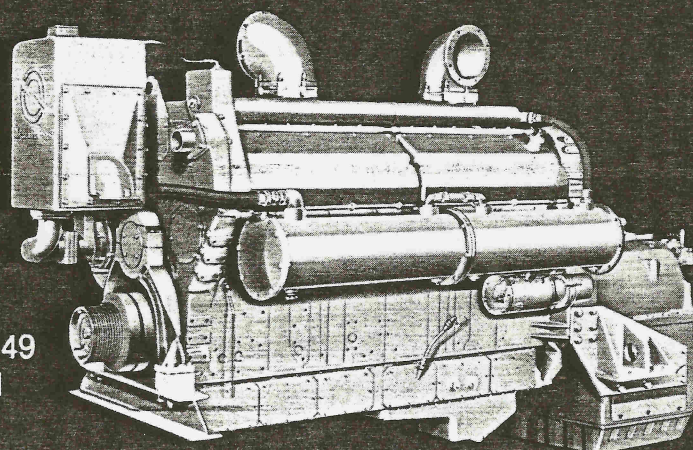
FAX: 313-592-7288



Detroit Diesel Engines marine models

12V-149 12V-149T 12V-149TI
800 hp 1050 hp 1250 hp*

Typical 12V-149
Marine Model



basic specifications

Basic Engine	12V-149	12V-149T	12V-149TI
Model	9122-7000	9122-7300	9122-7301
Description	Naturally Aspirated	Turbocharged	Turbocharged Intercooled
Number of Cylinders	12	12	12
Bore and Stroke	5.75 in × 5.75 in (146 mm × 146 mm)	5.75 in × 5.75 in (146 mm × 146 mm)	5.75 in × 5.75 in (146 mm × 146 mm)
Displacement	1792 cu in (29.39 liters)	1792 cu in (29.39 liters)	1792 cu in (29.39 liters)
Compression Ratio	17 to 1	16 to 1	16 to 1
Net Weight (dry)	12,550 lbs (5693 kg)	14,590 lbs (6618 kg)	14,720 lbs (6677 kg)

power specifications

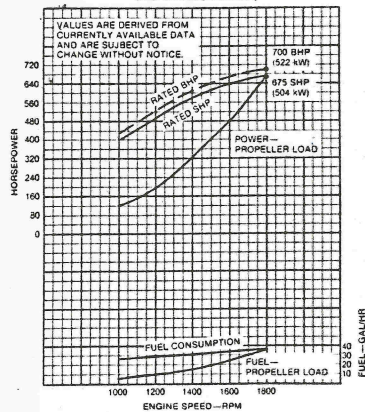
Continuous			
Injectors	120	140	140
Rated Gross Power	700 BHP (522 kW) @ 1800 RPM†	915 BHP (683 kW) @ 1800 RPM†	940 BHP (701 kW) @ 1800 RPM†
Rated Net Power	675 SHP (504 kW) @ 1800 RPM†	885 SHP (660 kW) @ 1800 RPM†	912 SHP (680 kW) @ 1800 RPM†
Intermittent			
Injectors	130	140	145
Rated Gross Power	800 BHP (597 kW) @ 1900 RPM†	950 BHP (709 kW) @ 1900 RPM†	1100 BHP (821 kW) @ 1900 RPM†
Rated Net Power	770 SHP (574 kW) @ 1900 RPM†	920 SHP (686 kW) @ 1900 RPM†	1064 SHP (794 kW) @ 1900 RPM†
Maximum			
Injectors	130	145	165
Rated Gross Power	800 BHP (597 kW) @ 1900 RPM†	1050 BHP (783 kW) @ 1900 RPM†	*1250 BHP (933 kW) @ 1900 RPM†
Rated Net Power	770 SHP (574 kW) @ 1900 RPM†	1015 SHP (757 kW) @ 1900 RPM†	1210 SHP (903 kW) @ 1900 RPM†

†Rating conditions of SAE: 77°F (25.0°C) and 29.31 in Hg (99 kPa) Barometer (Dry).

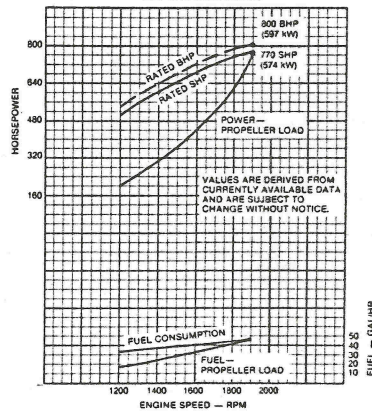
*Preliminary data

12V-149

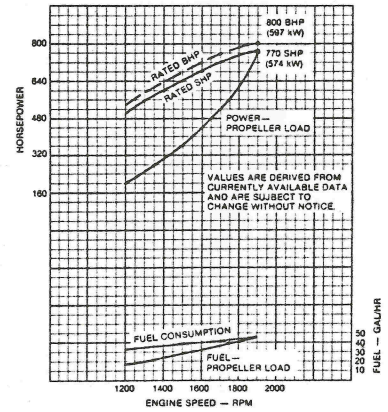
**MODEL 12V-149
MARINE CONTINUOUS RATING
120 INJECTORS†**



**MODEL 12V-149
MARINE INTERMITTENT RATING
130 INJECTORS†**

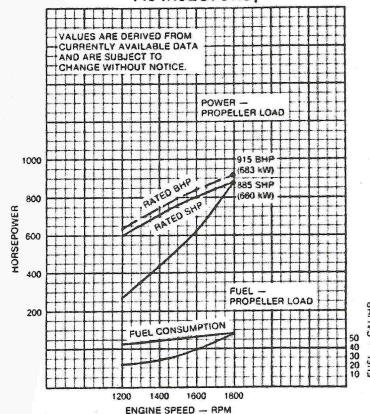


**MODEL 12V-149
MARINE MAXIMUM RATING
130 INJECTORS†**

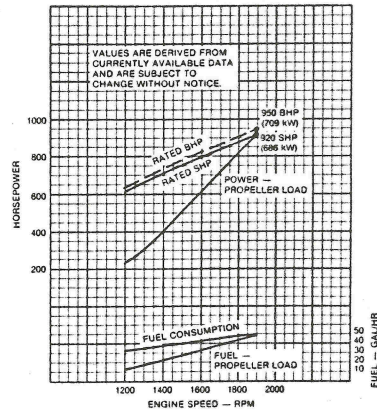


12V-149T

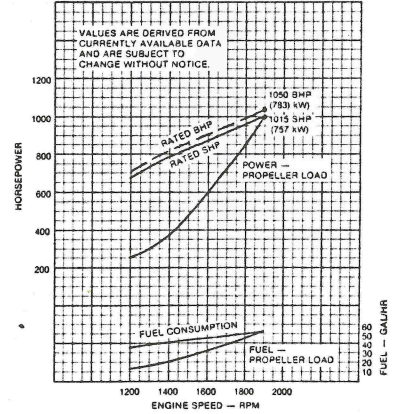
**MODEL 12V-149T
MARINE CONTINUOUS RATING
140 INJECTORS†**



**MODEL 12V-149T
MARINE INTERMITTENT RATING
140 INJECTORS†**

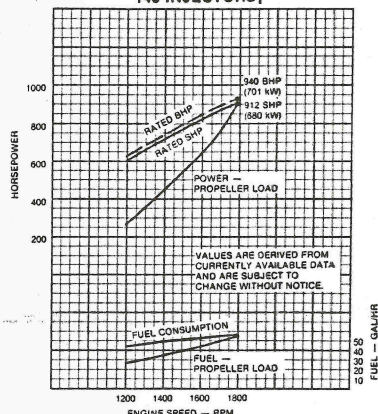


**MODEL 12V-149T
MARINE MAXIMUM RATING
145 INJECTORS†**

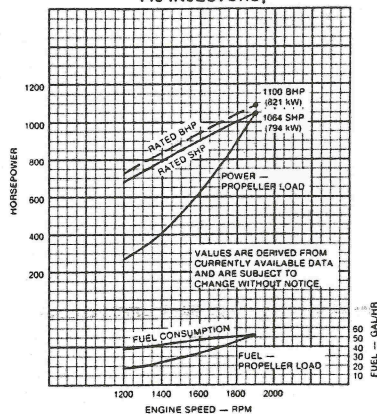


12V-149TI

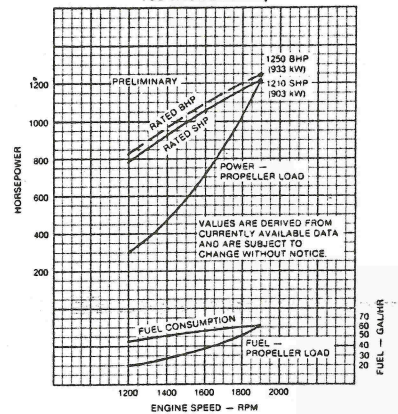
**MODEL 12V-149TI
MARINE CONTINUOUS RATING
140 INJECTORS†**



**MODEL 12V-149TI
MARINE INTERMITTENT RATING
145 INJECTORS†**



***MODEL 12V-149TI
MARINE MAXIMUM RATING
165 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

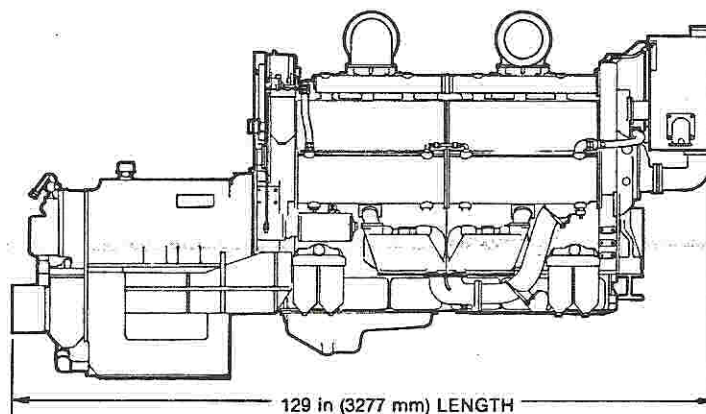
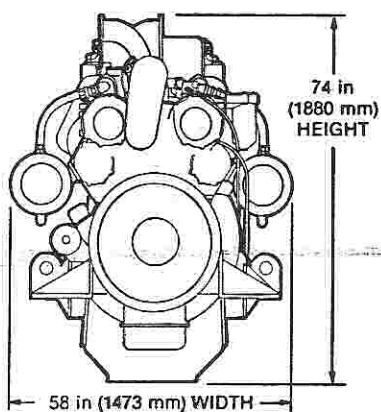
representative for the rating that will apply to your vessel.

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

* Preliminary data

Model 9122-7000

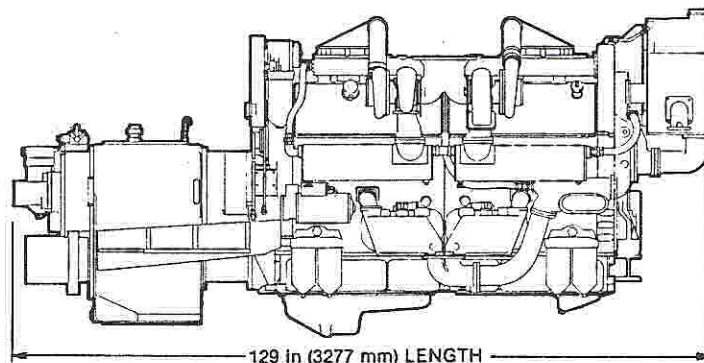
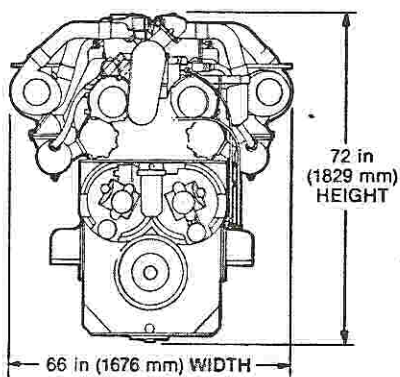
12V-149



Approximate dimensions shown.
For complete dimensional information, refer to installation drawing 2SA361.

Model 9122-7300

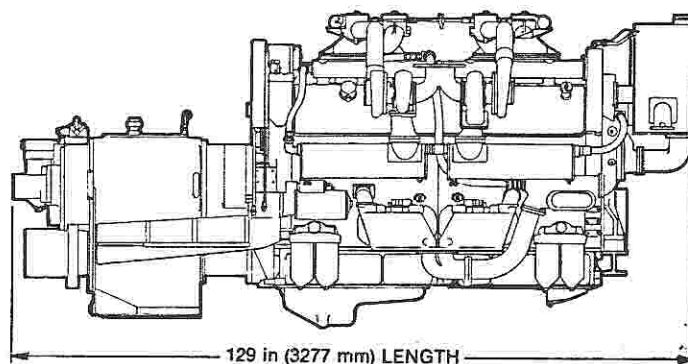
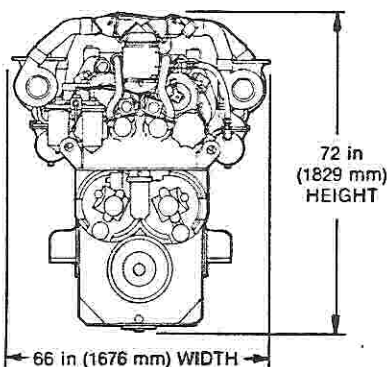
12V-149T



Approximate dimensions shown.

Model 9122-7301

12V-149TI



Approximate dimensions shown.

standard equipment

Air Cleaner—Light duty oil bath, 12V-149 only

Air Inlet Housing

Alternator—24 volt, 65 amp

Crankshaft Pulley

Engine Mounts—Mounts for engine and marine gear

Exhaust Manifold—Water cooled

Flywheel—SAE #0

Flywheel Housing—SAE #0

Fuel Filters

Governor—Variable speed

Injectors—Cam operated, unit type, clean tip

Intercooler—12V-149TI only

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

Keel Cooling—Expansion tank only

Lube Oil Cooler

Lube Oil Filter—Full-flow, spin-on

Marine Gear—Twin Disc, reverse and reduction, MG520, 2 to 1 ratio, 12V-149 only; Twin Disc, reverse and reduction, MG540, 7 to 1 ratio, 12V-149T and 12V-149TI

Oil Pan—15° inclination angle, dual sump

Starting Motor—Dual, 24 volt

Turbochargers—Four, 12V-149T and 12V-149TI

Vibration Damper—Double, heavy, viscous

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

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Detroit Diesel Allison

Division of General Motors

13400 Outer Drive, West, Detroit, Michigan 48239-4001
(313/592-5000)

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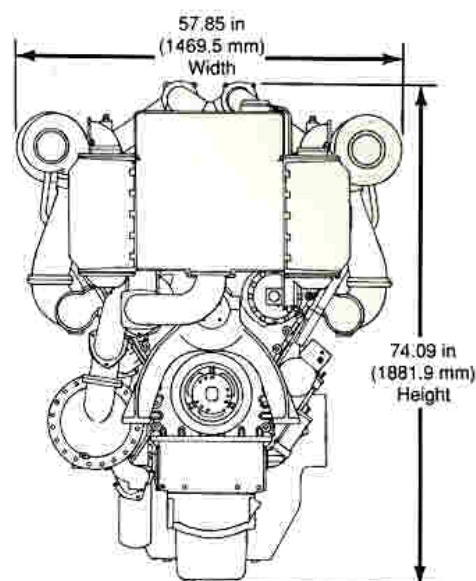
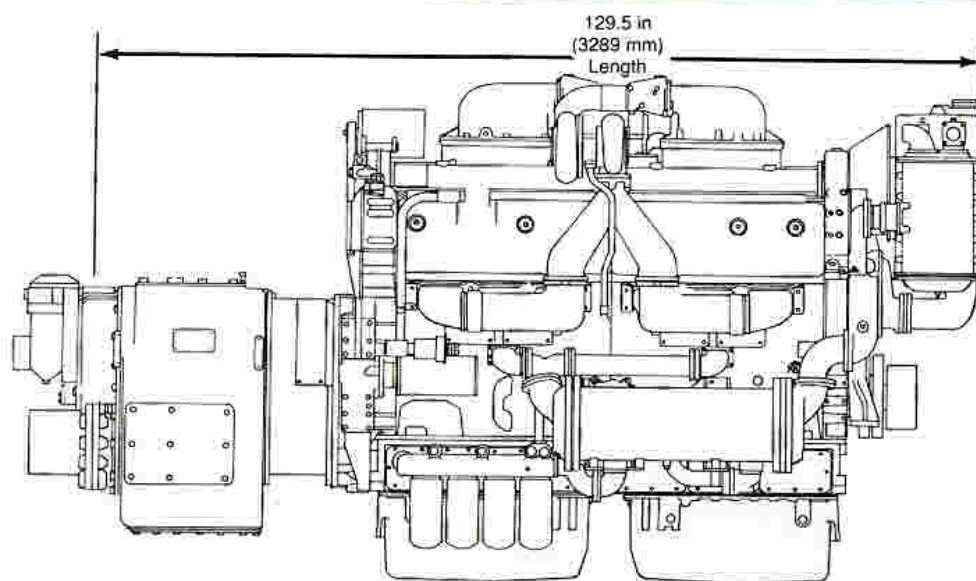
Lima, Peru
Santiago, Chile
Sao Paulo, Brasil

DETROIT DIESEL



12V-149TI DDEC
1200 BHP

Marine Commercial
Continuous



General Specifications

Basic Engine	12V-149TI
Model—Port	9122-7C23
Starboard	9122-7C22
Description	Turbocharged-Independent pump intercooled with Bypass Blower
Number of Cylinders	12
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	1792 cu in (29.39 liters)
Compression Ratio	14 to 1
Weight (dry)	13950 lbs (6330 kg) with gear

Rated Power Output—Continuous

Gross Power	1200 BHP (895 kW) @ 1800 RPM
Net Power	1165 SHP (869 kW) @ 1800 RPM

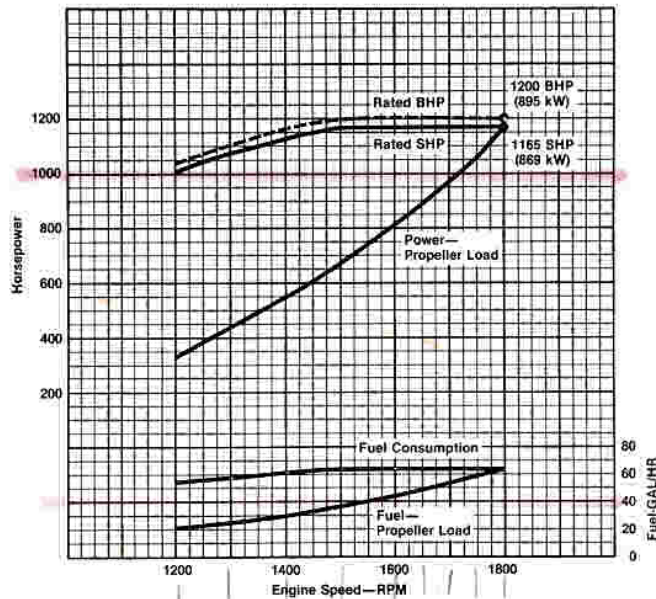
Equipment Specifications

Alternator—12 volt, 75 amp, belt driven
Crankcase vapor collectors with silencers
Crankshaft pulley—Poly vee grooves
DDEC—Detroit Diesel Electronic Controls
Exhaust System—Dry manifolds and dry turbine housing with advanced insulating wrap
Factory Installed Marine Gear—DD 540V
Flywheel Housing—SAE #0
Fuel System—Cam operated electronic unit injectors with low pressure USCG type A external hoses and fuel filters
Governor—DDEC
Lube Oil Filter—Full flow
Oil Pan—Cast iron, designed for 0°-8° installation angle, rear sump
Starting—Air starter

30 12V-149TI 1996

Performance Curve

Model 12V-149TI—Continuous



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 CONTINUOUS The marine continuous rating applies to medium or low speed boats (normally of the displacement type) which operate up to 24 hours a day, 365 days a year, at high load factors. Typical examples include tugs, towboats, offshore supply boats, fishing trawlers and draggers.

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

DETROIT DIESEL
CORPORATION



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FAX: 313-592-7288

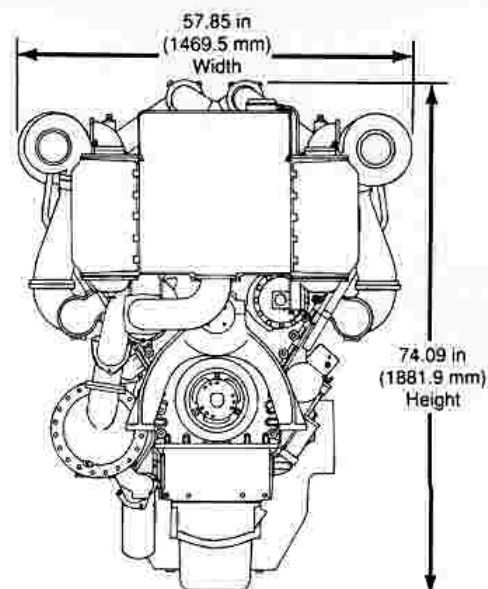
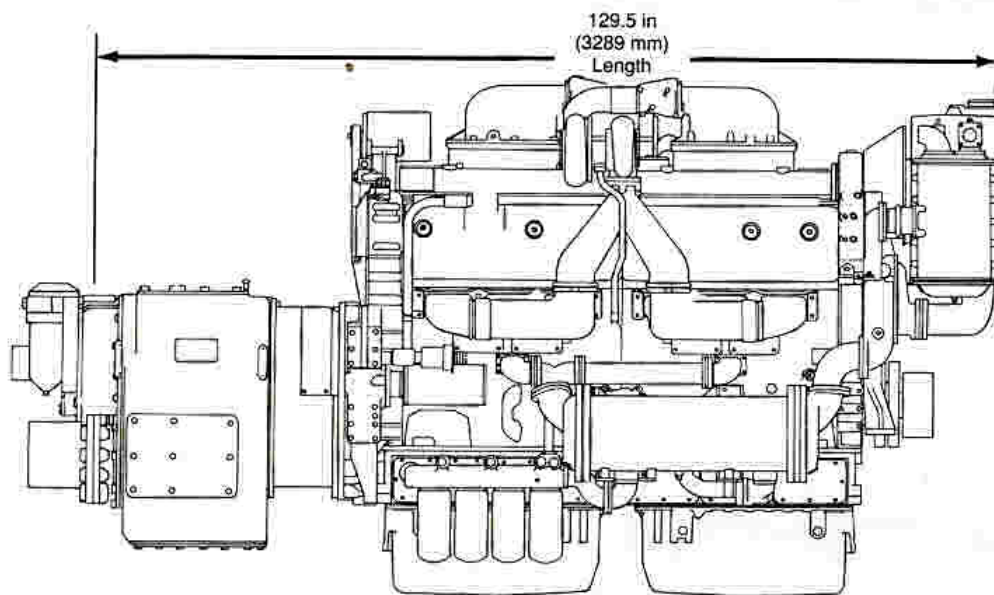


DETROIT DIESEL



12V-149TI DDEC
1350 BHP

Marine Commercial
Intermittent



General Specifications

Basic Engine	12V-149TI
Model—Port	9122-7C11
Starboard	9122-7C10
Description	Turbocharged-Independent pump intercooled with Bypass Blower
Number of Cylinders	12
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	1792 cu in (29.39 liters)
Compression Ratio	14.0 to 1
Weight (dry w/gear)	13950 lbs (6330 kg) with gear

Rated Power Output—Intermittent

Gross Power	1350 BHP (1007 kW) @ 1900 RPM
Net Power	1310 SHP (977 kW) @ 1900 RPM

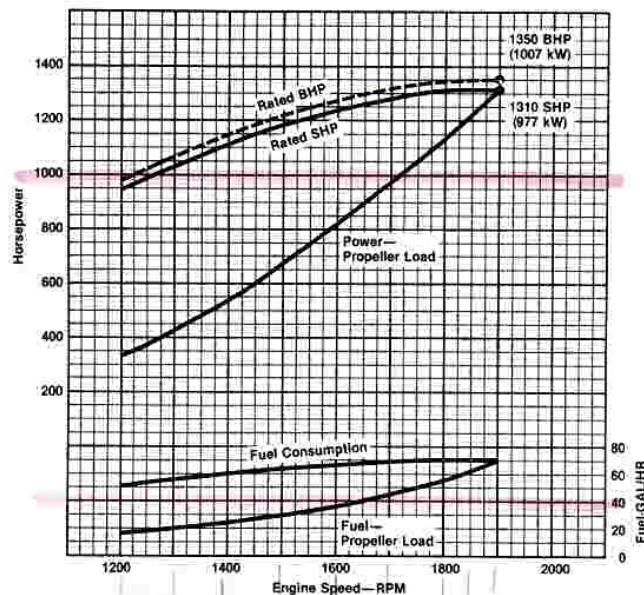
Equipment Specifications

Alternator—24 volt, 65 amp, belt driven
Crankcase vapor collectors with silencers
Crankshaft Pulley—Poly vee grooves
DDEC—Detroit Diesel Electronic Controls
Exhaust System—Dry manifolds and dry turbine housing with advanced insulating wrap
Factory Installed Marine Gear—DD 540
Flywheel Housing—SAE #0
Fuel System—Cam operated electronic unit injectors with low pressure USCG Type A external hoses, and fuel filters
Governor—DDEC
Lube Oil Filter—Full flow
Oil Pan—Cast iron designed for 0°-8° installation angle, rear sump
Starting—24 volt starter

311 1311 1996

Performance Curve

Model 12V-149TI—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



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Telephone: 313-592-5000

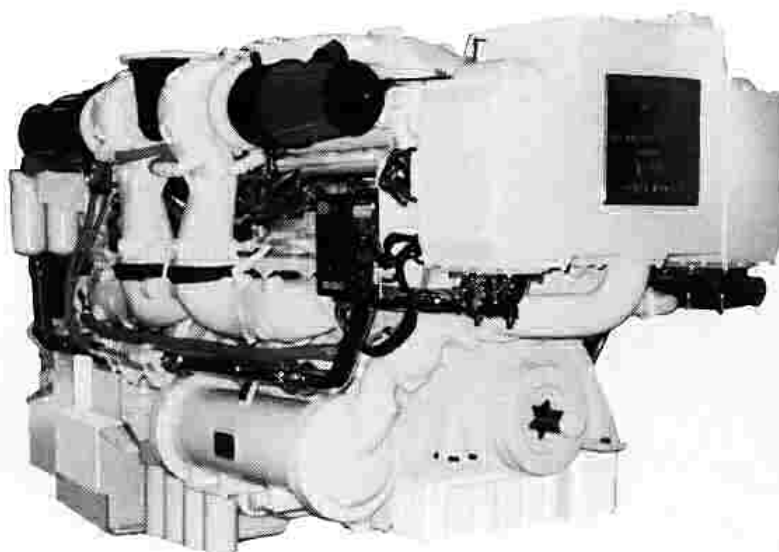
FAX: 313-592-7288

DETROIT DIESEL



**12V-149TI DDEC
1800 BHP**

Marine Pleasure Craft



General Specifications

Basic Engine	12V-149TI
Model - Port	9122-7C01
Starboard	9122-7C00
Description	Turbocharged-Raw water intercooled with Bypass Blower
Control	DDEC
Number of Cylinders	12
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	1792 cu in (29.36)
Compression Ratio	14.0 to 1
Weight (dry)	11140 lbs (5058 kg)

Rated Power Output—Maximum

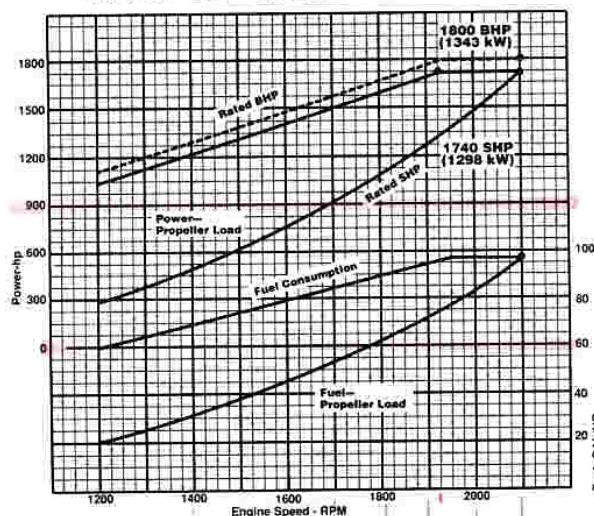
Gross Power	1800 BHP (1343 kW) @ 2100 RPM
Net Power	1740 SHP (1298 kW) @ 2100 RPM

Equipment Specifications

Alternator—24 volt, 70 amp
Appearance Package — Chrome plating and polished castings with premium paint
Cooling System—Cast expansion tank, dual heavy duty raw water pumps, and coolant heater
Crankcase vapor collectors with silencers
DDEC—Detroit Diesel Electronic Controls
Engine Mounts—Resilient mounts for both engine and marine gear
Exhaust System—Cast jacket water-cooled manifolds and turbine housings
Flywheel Housing—SAE #0
Fuel System—Cam operated electronic unit injectors with low pressure USCG type A external hoses, fuel filters and cooler
Lube Oil Filter—Full flow, spin-on
Marine Gear—Available with Detroit Diesel-433G, with trolling valve and trailing pump
Oil Pan—Cast, designed for 0°-8° inclination angle, dual sumps
Starting Motors—Two 24 volt electric

Performance Curve

Model 12V-149TI—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 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.

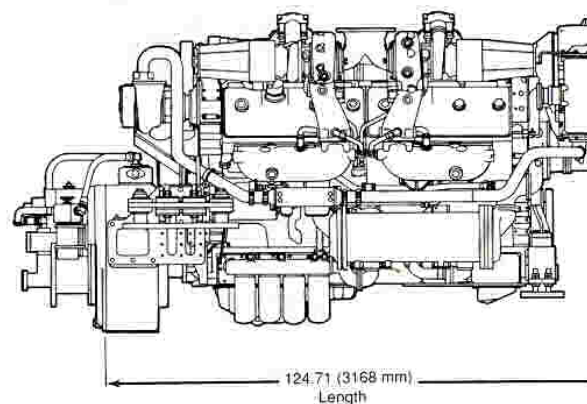
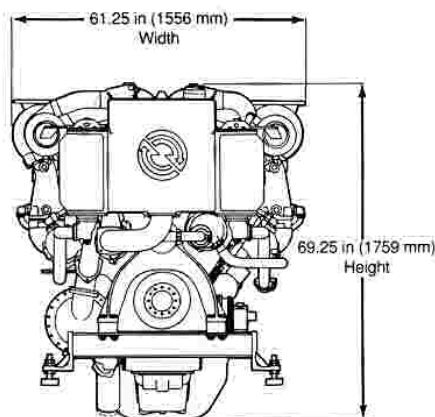
Dimensional Drawing

Model 9122-7C00

12V-149TI

Approximate dimensions shown.

For complete dimensional information, refer to installation drawing



DETROIT DIESEL
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Detroit Diesel Engines

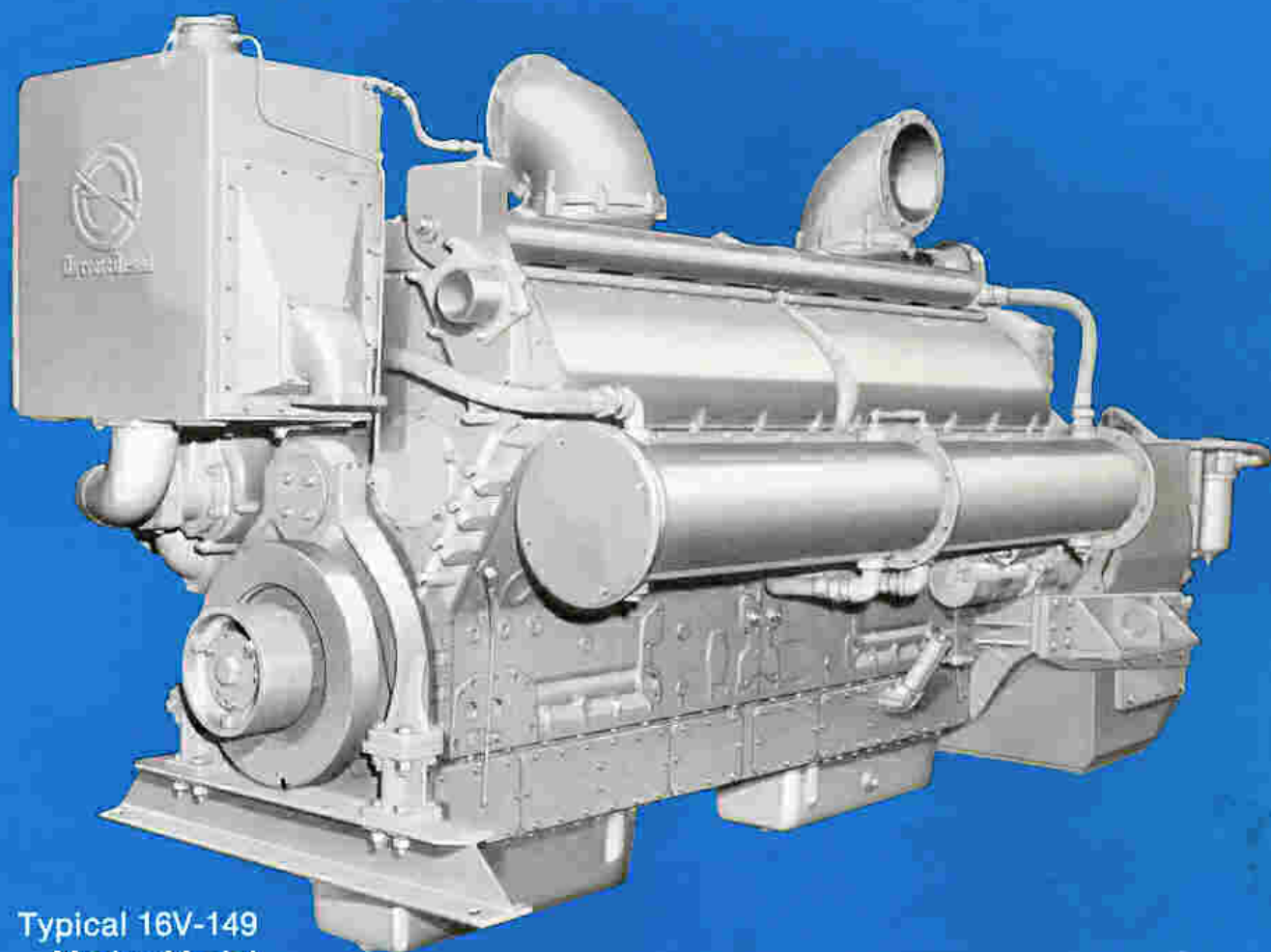
marine models

16V-149

1060 hp



Deniz Motor Tamir Atölyesi
İbrahim ve Sultan Cemberci
Kardeşler
Büyükdere, Nispetiye Sok. No. 7
İSTANBUL
Tel. 147 1247 - 142 04 51



Typical 16V-149
Marine Model

specifications

Basic Engine

16V-149 Workboat

16V-149 Crewboat

Model	9162-7000	9162-7000
Engine Type	Two Cycle	Two Cycle
Number of Cylinders	16	16
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	2389 cu in (39.18 litres)	2389 cu in (39.18 litres)
Rated Gross Power: SAE: 85°F (29.4°C) and 500 ft (152.4 m)	—	1060 BHP (791 kW) @ 1900 RPM
Rated Net Power: SAE: 85°F (29.4°C) and 500 ft (152.4 m)	—	1025 SHP (765 kW) @ 1900 RPM
Continuous Gross Power: SAE: 85°F (29.4°C) and 500 ft (152.4 m)	930 BHP (694 kW) @ 1800 RPM	—
Continuous Net Power: SAE: 85°F (29.4°C) and 500 ft (152.4 m)	900 SHP (671 kW) @ 1800 RPM	—
Compression Ratio	17 to 1	17 to 1
Net Weight (dry)	16,000 lbs (7258 kg)	16,000 lbs. (7258 kg)

kW as shown is the metric equivalent to horsepower rating.

performance

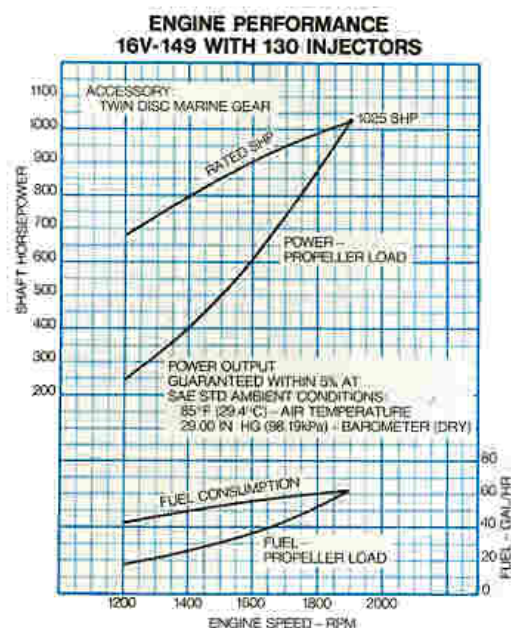
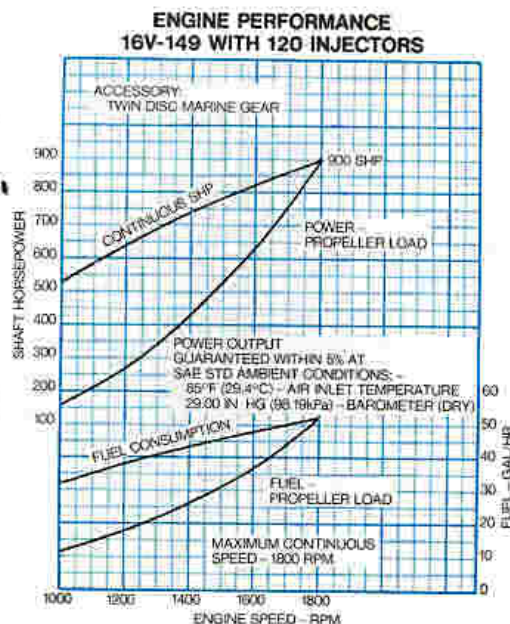
Rating Explanation

RATED BHP—Basic engine gross power.

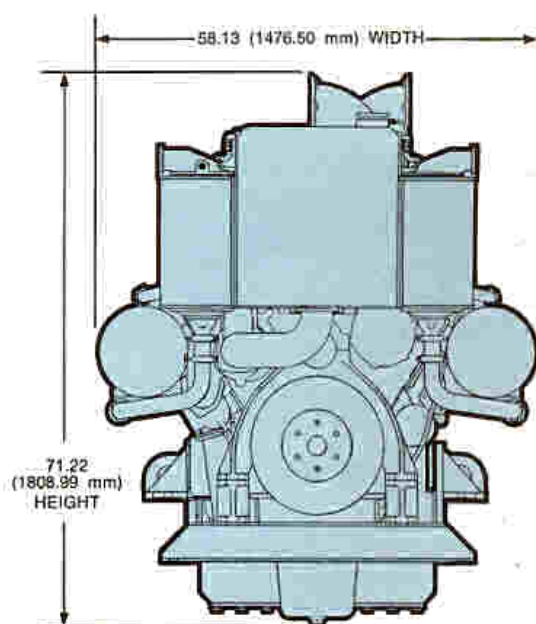
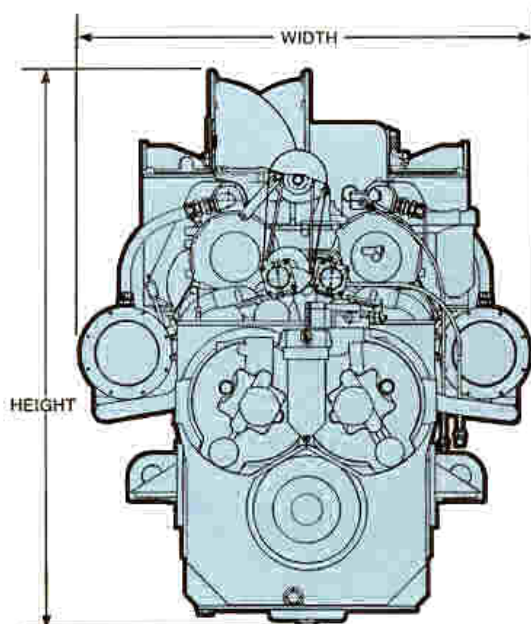
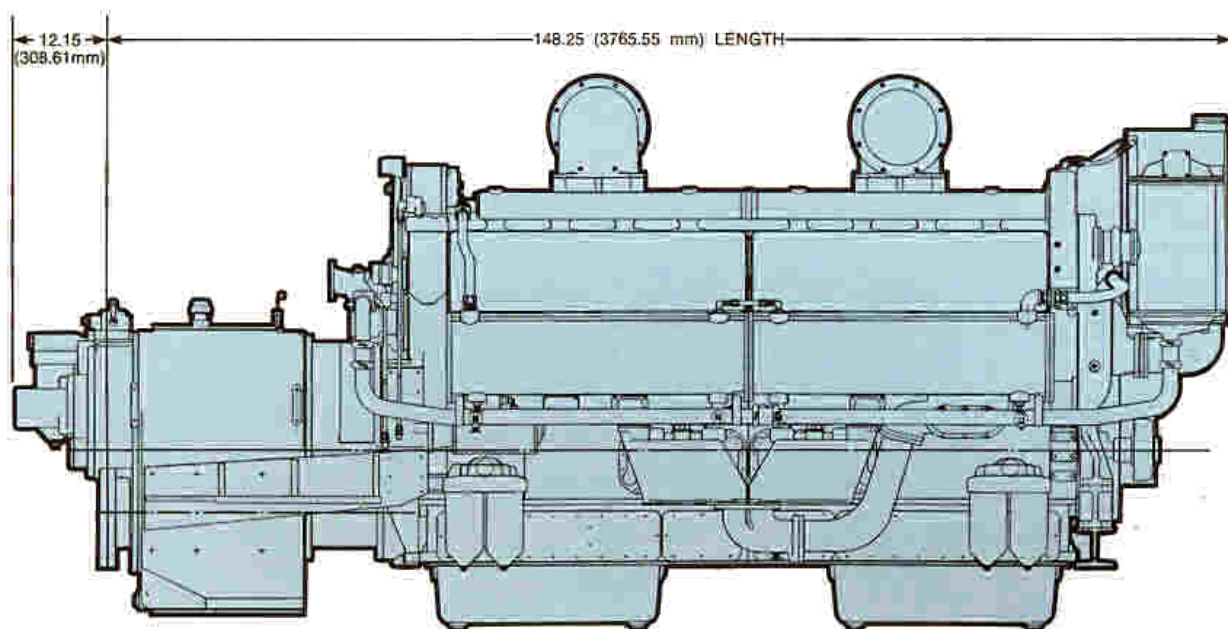
RATED SHP—Net power available at the marine gear output shaft; this rating is recommended for crewboat applications.

CONTINUOUS SHP—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.



principal dimensions



For complete dimensional information, refer to installation drawing 2SA373.

standard equipment

Air Cleaners—Oil bath

Air Inlet Housing—Aluminum housing with manual shutdown

Alternator—Battery charging, 24 volt, 65 amp

Crankshaft Pulley—9.40 in (238.76 mm) diameter, poly-vee

Engine Mounts—Trunnion mounts

Exhaust Manifold—Water-cooled

Flywheel Housing—SAE #0, dual starter pads

Flywheel—SAE #0

Fuel Filter and Strainer

Governor—Variable speed

Instruments—Includes tachometer, oil pressure gauge, water temperature gauge, and drive oil pressure gauge

Keel Cooling

Lube Oil Filters—Full-flow filters, dual can

Marine Gear—Twin Disc MG-540, 7 to 1 ratio

Oil Cooler

Oil Pan—For 15° front or rear down operating angle, dual sump

Starting Equipment—dual 24 volt

Vibration Damper—single, heavy, viscous

For complete specifications and a listing of standard and optional equipment, consult your authorized Detroit Diesel Allison Distributor or Dealer.

Specifications subject to change without notice.



Detroit Diesel Allison
Division of General Motors Corporation

13400 West Outer Drive Detroit, Michigan 48228

Detroit Diesel Engines

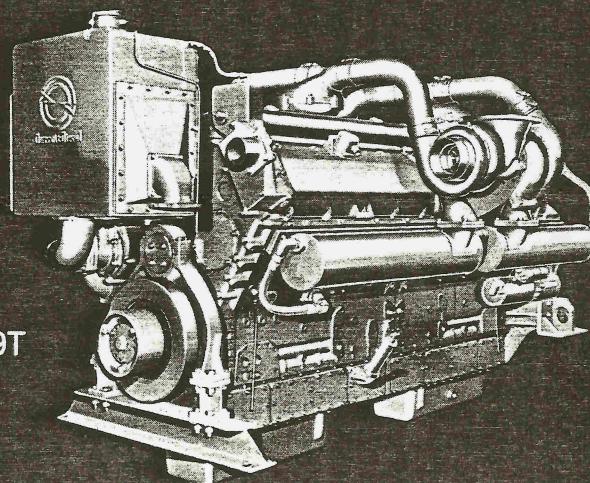
marine models

16V-149
1060 hp

16V-149T
1385 hp

16V-149TI
1800 hp

Typical 16V-149T
Marine Model



basic specifications

Basic Engine	16V-149	16V-149T	16V-149TI
Model	9162-7000	9162-7300	9162-7301
Description	Naturally Aspirated	Turbocharged	Turbocharged Intercooled
Number of Cylinders	16	16	16
Bore and Stroke	5.75 in × 5.75 in (146 mm × 146 mm)	5.75 in × 5.75 in (146 mm × 146 mm)	5.75 in × 5.75 in (146 mm × 146 mm)
Displacement	2389 cu in (39.18 liters)	2389 cu in (39.18 liters)	2389 cu in (39.18 liters)
Compression Ratio	17 to 1	16 to 1	16 to 1
Net Weight (dry)	16,000 lbs (7258 kg)	11,750 lbs** (5330 kg)	11,950 lbs** (5421 kg)

**Weights shown are without marine gear.

power specifications

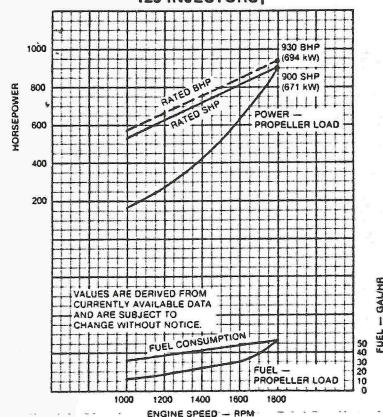
Continuous			
Injectors	120	140	140
Rated Gross Power	930 BHP (694 kW) @ 1800 RPM†	1215 BHP (907 kW) @ 1800 RPM†	1280 BHP (955 kW) @ 1800 RPM†
Rated Net Power	900 SHP (671 kW) @ 1800 RPM†	1175 SHP (877 kW) @ 1800 RPM†	1242 SHP (927 kW) @ 1800 RPM†
Intermittent			
Injectors	130	140	150
Rated Gross Power	1060 BHP (791 kW) @ 1900 RPM†	1260 BHP (940 kW) @ 1900 RPM†	1515 BHP (1130 kW) @ 1900 RPM†
Rated Net Power	1025 SHP (765 kW) @ 1900 RPM†	1220 SHP (910 kW) @ 1900 RPM†	1466 SHP (1094 kW) @ 1900 RPM†
Maximum			
Injectors	130	145	190
Rated Gross Power	1060 BHP (791 kW) @ 1900 RPM†	1385 BHP (1033 kW) @ 1900 RPM†	■ 1800 BHP (1343 kW) @ 1900 RPM†
Rated Net Power	1025 SHP (765 kW) @ 1900 RPM†	1340 SHP (1000 kW) @ 1900 RPM†	1745 SHP (1302 kW) @ 1900 RPM†

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

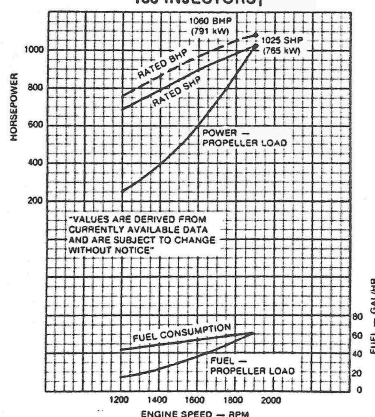
■ Preliminary data

16V-149

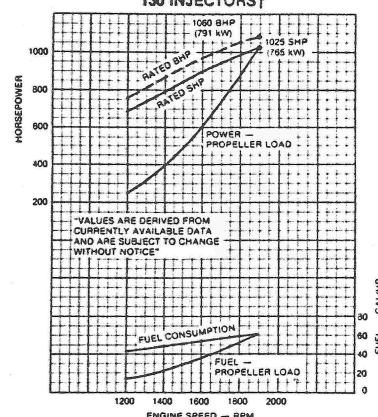
**MODEL 16V-149
MARINE CONTINUOUS RATING
120 INJECTORS†**



**MODEL 16V-149
MARINE INTERMITTENT RATING
130 INJECTORS†**

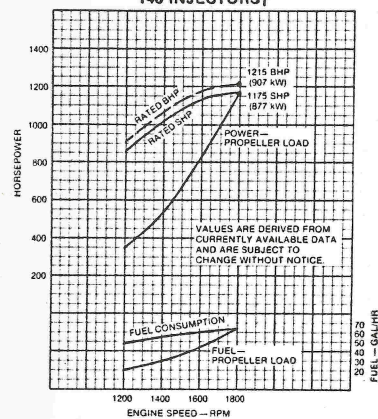


**MODEL 16V-149
MARINE MAXIMUM RATING
130 INJECTORS†**

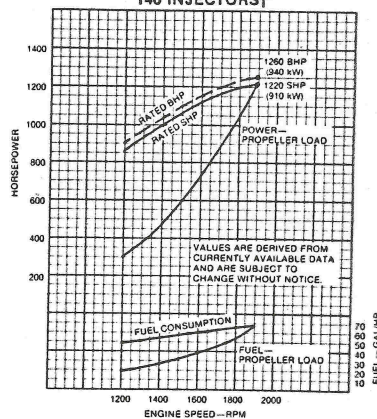


16V-149T

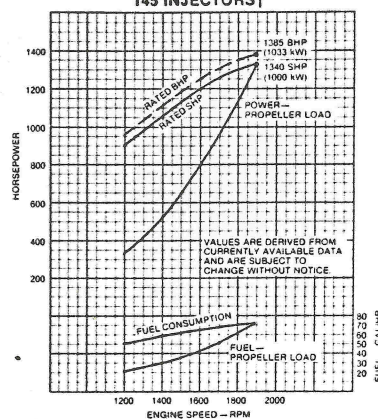
**MODEL 16V-149T
MARINE CONTINUOUS RATING
140 INJECTORS†**



**MODEL 16V-149T
MARINE INTERMITTENT RATING
140 INJECTORS†**

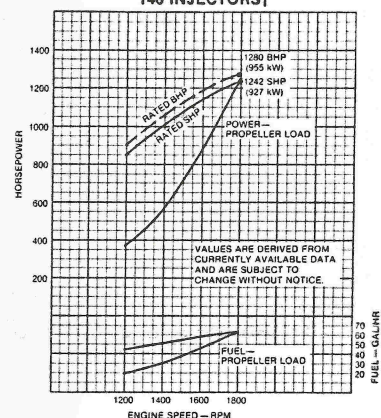


**MODEL 16V-149T
MARINE MAXIMUM RATING
145 INJECTORS†**

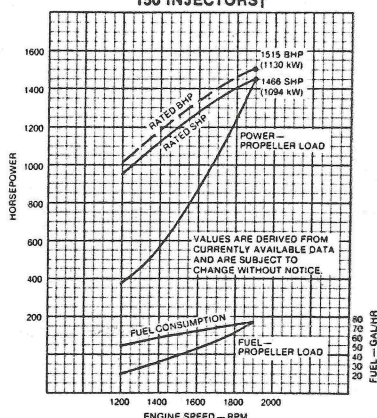


16V-149TI

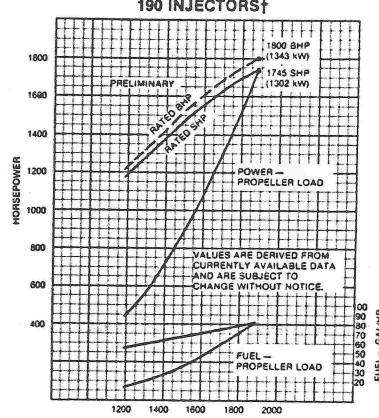
**MODEL 16V-149TI
MARINE CONTINUOUS RATING
140 INJECTORS†**



**MODEL 16V-149TI
MARINE INTERMITTENT RATING
150 INJECTORS†**



**MODEL 16V-149TI
MARINE MAXIMUM RATING
190 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

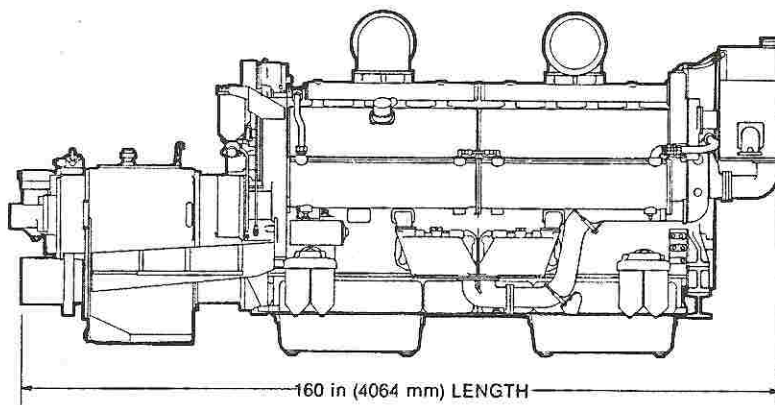
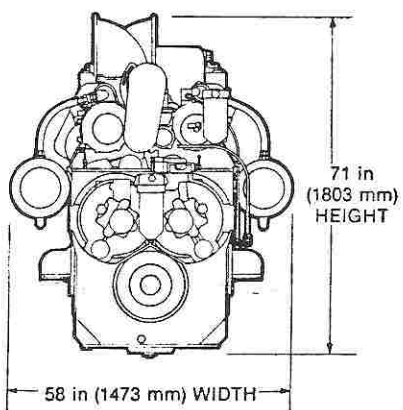
installed. See your Detroit Diesel Allison representative for the rating that will apply to your vessel.

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

■ Preliminary data

Model 9162-7000

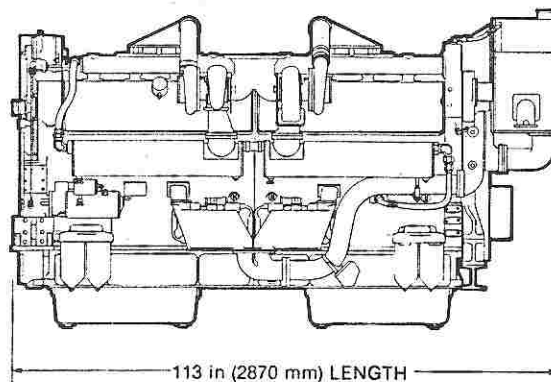
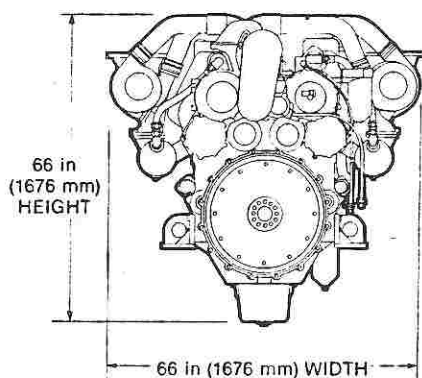
16V-149



Approximate dimensions shown.
For complete dimensional information, refer to installation drawing No. 2SA373.

Model 9162-7300

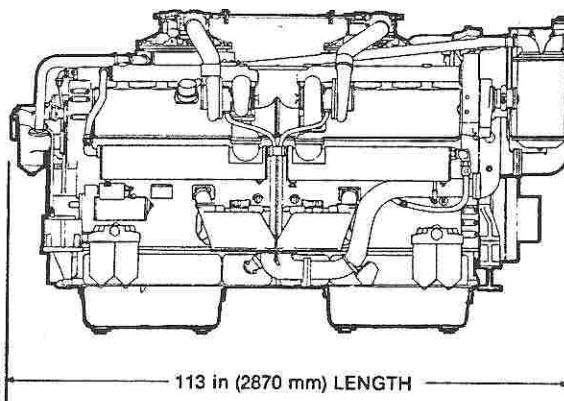
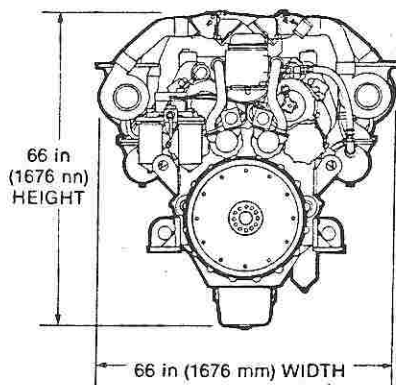
16V-149T



Approximate dimensions shown.
For complete dimensional information, refer to installation drawing No. 2SA451.

Model 9162-7301

16V-149TI



Approximate dimensions shown.
For complete dimensional information, refer to installation drawing No. 2SA475.

standard equipment

Air Cleaner—Light duty oil bath, 16V-149 only

Air Inlet Housing

Alternator—24 volt, 65 amp

Crankshaft Pulley

Engine Mounts

Exhaust Manifold—Water cooled

Flywheel—SAE #0

Flywheel Housing—SAE #0, dual starter pads

Fuel Filters

Governor—Variable speed

Injectors—Cam operated, unit type, clean tip

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

Intercooler—Jacket water cooled, 16V-149TI only

Keel Cooling—Expansion tank only

Lube Oil Cooler

Lube Oil Filter—Full-flow, spin on

Marine Gear—Twin Disc, reverse and reduction; model MG540, 7 to 1 ratio, 16V-149 only

Oil Pan—Cast iron pan for 15° inclination angle, dual sump

Starting Motor—Two 24 volt

Turbochargers—Four Turbochargers, 16V-149T and 16V-149TI

Vibration Damper—Heavy, thick, viscous

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

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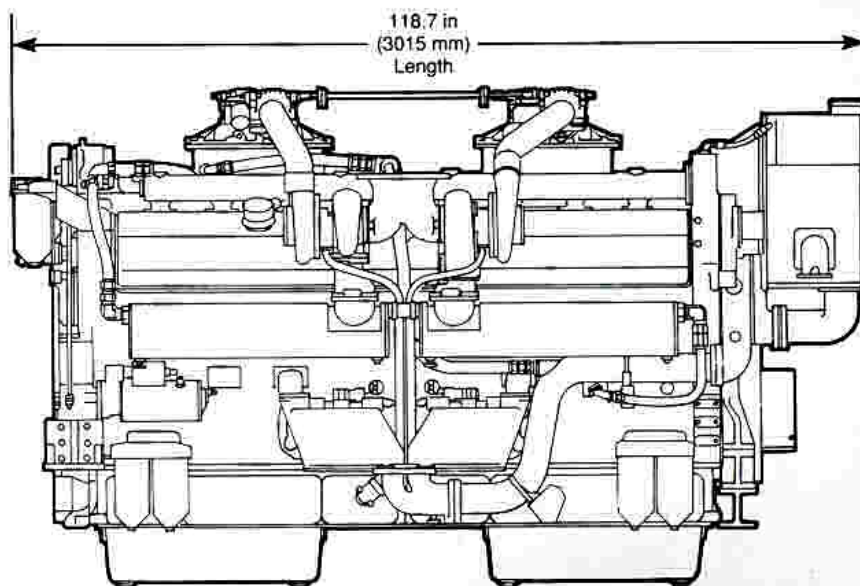
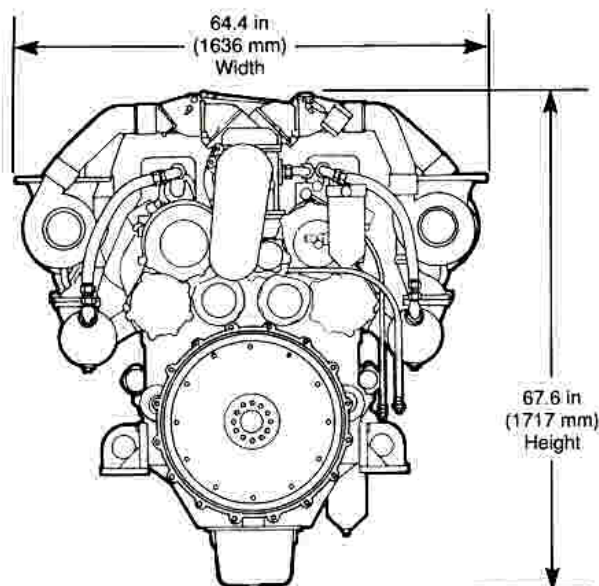
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Buenos Aires, Argentina
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DETROIT DIESEL



**16V-149TI DDEC
1280 BHP**

**Marine Commercial
Continuous**



General Specifications

Basic Engine	16V-149TI
Model—Port	9162-7C21
Starboard	9162-7C20
Description	Turbocharged-Jacket Water Intercooled with Bypass Blower
Number of Cylinders	16
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	2389 cu in (39.18 liters)
Compression Ratio	14 to 1
Weight (dry)	11950 lbs (5422 kg) w/o gear

Rated Power Output—Continuous

Gross Power	1280 BHP (955 kW) @ 1800 RPM
Net Power	1242 SHP (927 kW) @ 1800 RPM

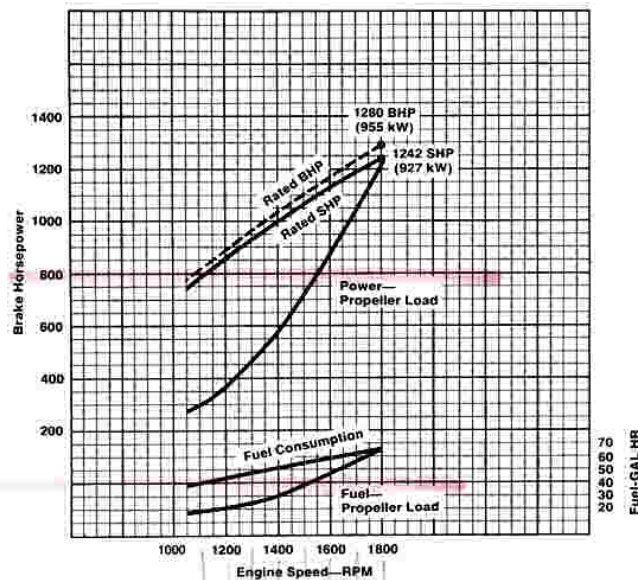
Equipment Specifications

Alternator	12 volt, 75 amp
Cooling System	Cast iron expansion tank for keel cooler
Crankcase vapor collectors	with silencers
Crankshaft pulley	Poly vee grooves
DDEC	Detroit Diesel Electronic Controls
Exhaust System	Cast manifolds and turbos with advanced insulating wrap
Flywheel Housing	SAE #0
Fuel System	Electronic unit injectors with low pressure USCG type A external hoses, fuel filters and cooler
Governor	DDEC
Lube Oil Filter	Full flow, spin on
Oil Pan	Cast iron, designed for 0°-12° installed angle, rear sump
Starting	Air starters

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Performance Curve

Model 16V-149TI—Continuous



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 CONTINUOUS The marine continuous rating applies to medium or low speed boats (normally of the displacement type) which operate up to 24 hours a day, 365 days a year, at high load factors. Typical examples include tugs, towboats, offshore supply boats, fishing trawlers and draggers.

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

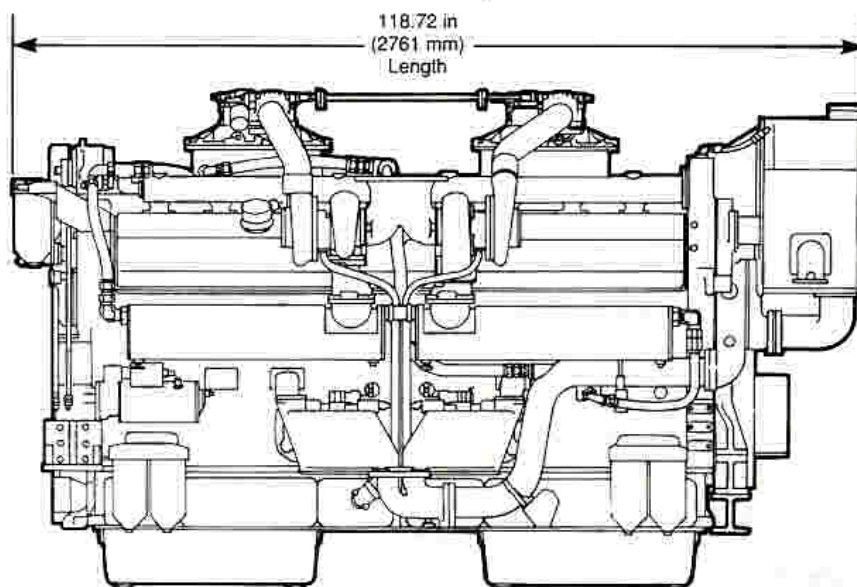
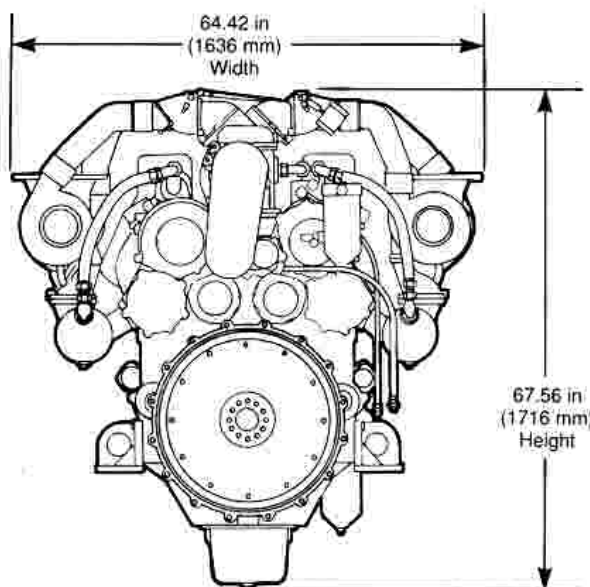


DETROIT DIESEL



16V-149TI
1440 BHP

Marine Commercial
Continuous



General Specifications

Basic Engine	16V-149TI
Model	9162-7301
Description	Turbocharged-Jacket water intercooled with Bypass Blower
Number of Cylinders	16
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	2389 cu in (39.18 liters)
Compression Ratio	16 to 1
Weight (dry)	11950 lbs (5422 kg)

Rated Power Output—Continuous

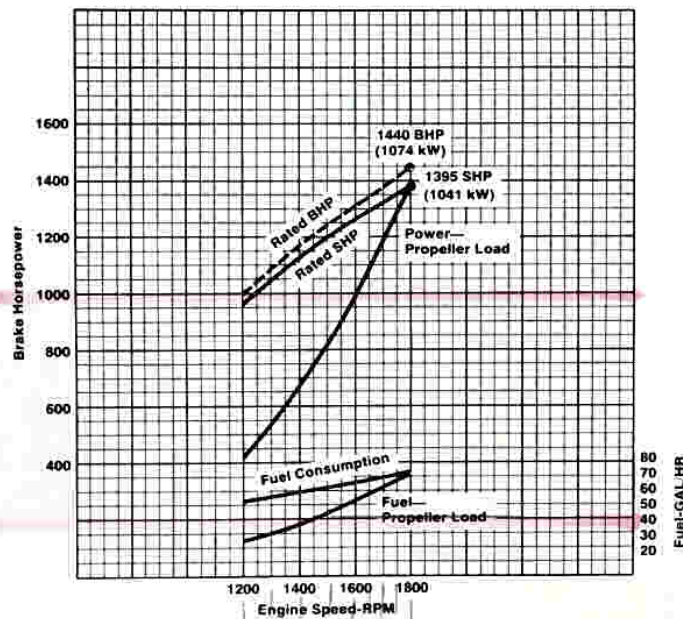
Gross Power	1440 BHP (1074 kW) @ 1800 RPM
Net Power	1395 SHP (1041 kW) @ 1800 RPM

Equipment Specifications

Alternator—24 volt, 65 amp
Cooling System—Cast iron expansion tank for keel cooling
Crankcase vapor collectors with silencers
Crankshaft pulley—Poly vee grooves (optional)
Exhaust System—Cast manifolds and turbos with advanced insulating wrap
Flywheel Housing—SAE #0
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, spin on
Oil Pan—Cast iron, designed for 0°-15° inclination angle, rear sump
Starting Motor—Two 24 volt electric

Performance Curve

Model 16V-149TI—Continuous



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 CONTINUOUS The marine continuous rating applies to medium or low speed boats (normally of the displacement type) which operate up to 24 hours a day, 365 days a year, at high load factors. Typical examples include tugs, towboats, offshore supply boats, fishing trawlers and draggers.

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

DETROIT DIESEL
CORPORATION



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Telex: 4320091 / TWX: 810-221-1649

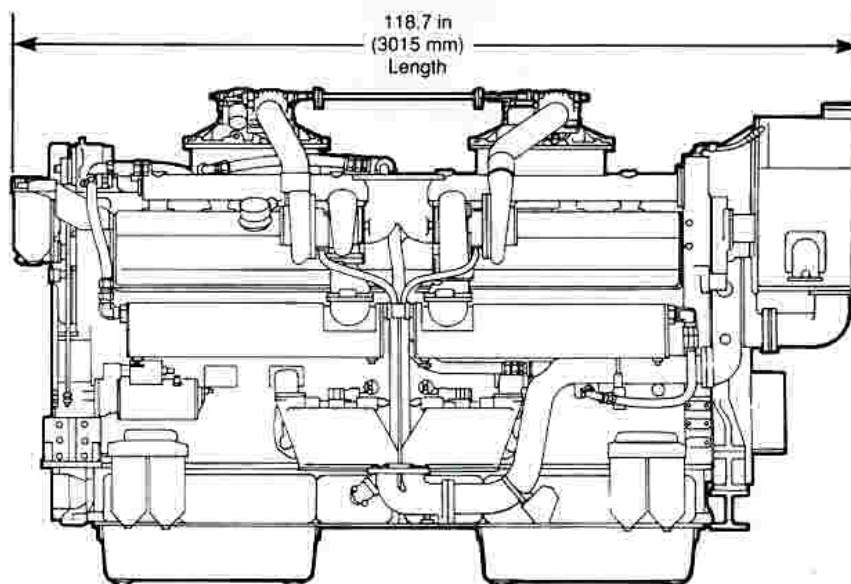
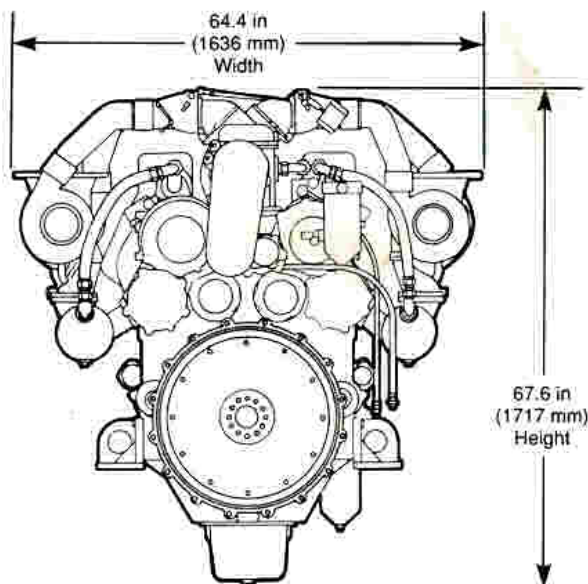
FAX: 313-592-7288

DETROIT DIESEL



16V-149TI DDEC
1800 BHP

Marine Commercial
Intermittent



General Specifications

Basic Engine	16V-149TI
Model—Port	9162-7C11
Starboard	9162-7C10
Description	Turbocharged-Jacket Water Intercooled with Bypass Blower
Number of Cylinders	16
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	2389 cu in (39.18 liters)
Compression Ratio	14 to 1
Weight (dry)	11950 lbs (5421 kg)w/o gear

Rated Power Output—Intermittent

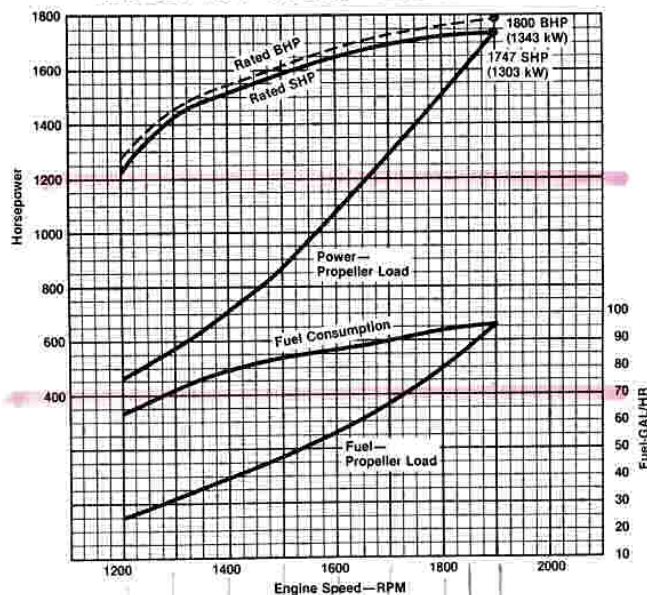
Gross Power	1800 BHP (1343 kW) @ 1900 RPM
Net Power	1747 SHP (1303 kW) @ 1900 RPM

Equipment Specifications

Alternator—24 volt, 75 amp
Cooling System—Cast iron heat exchanger
Crankcase vapor collectors with silencers
Crankshaft pulley—Poly vee grooves
DDEC—Detroit Diesel Electronic Controls
Exhaust System—Cast manifolds and turbos with advanced insulating wrap
Flywheel Housing—SAE #0
Fuel System—Electronic unit injectors with low pressure USCG type A external hoses, fuel filters and cooler
Governor—DDEC
Lube Oil Filter—Full flow, spin on
Oil Pan—Cast iron, designed for 0°-12° installed angle, rear sump
Starting—24 volt starter

Performance Curve

Model 16V-149TI—Intermittent



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 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



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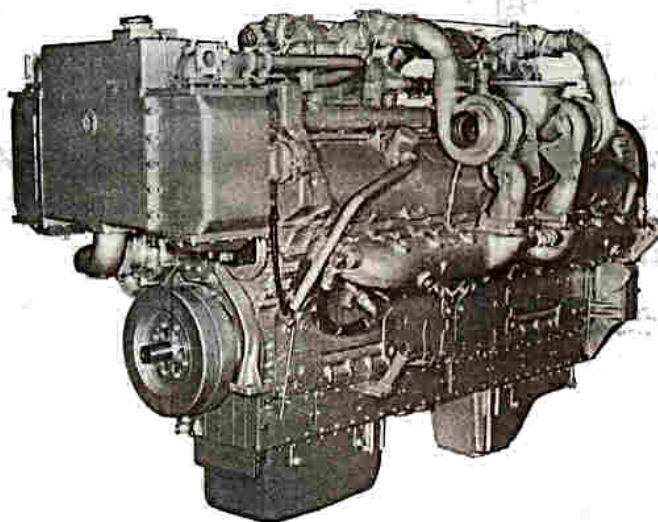
FAX: 313-592-7288



Detroit Diesel Marine Model



**16V-149TI
2000 HP
Pleasure Craft**



General Specifications

Basic Engine	16V-149TI
Model	9162-7411
Description	Turbocharged-Intercooled with Bypass Blower
Number of Cylinders	16
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	2389 cu in (39.18 liters)
Compression Ratio	15.0 to 1
Weight (dry)	11950 lbs (5420 kg) w/o marine gear

Rated Power Output—Maximum

Injectors	240
Gross Power	2000 BHP (1492 kW) @ 1900 RPM
Net Power	1935 SHP (1444 kW) @ 1900 RPM

Rated Power Output—Intermittent-Maximum

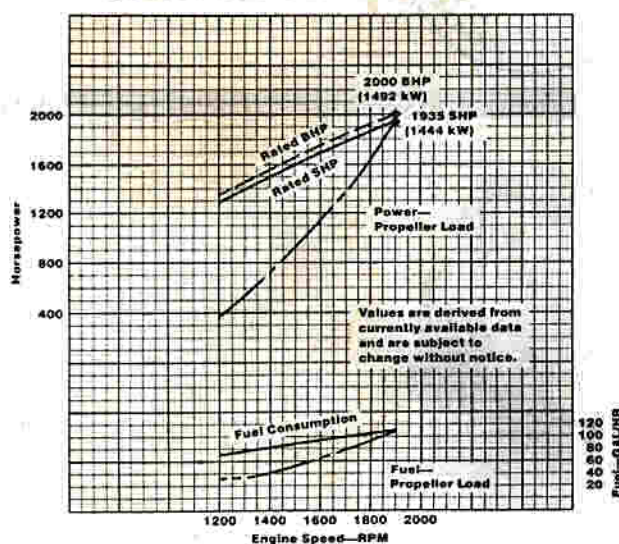
Injectors	190
Gross Power	1800 BHP (1343 kW) @ 1900 RPM
Net Power	1740 SHP (1298 kW) @ 1900 RPM

Equipment Specifications

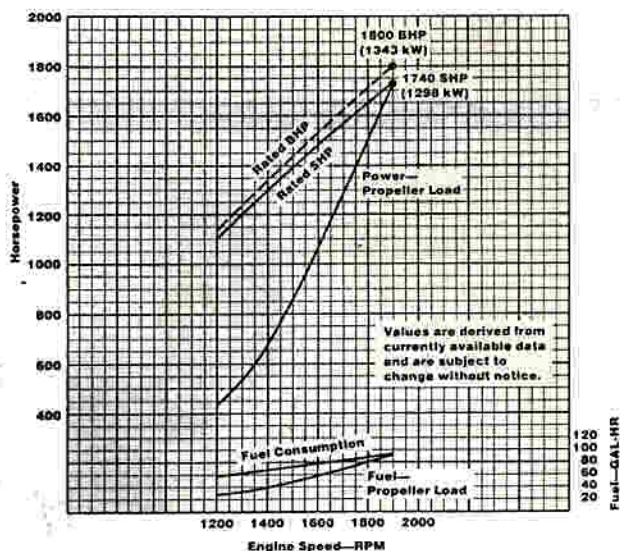
Alternator—24 volt, 65 amp
Cooling System—Cast iron expansion tank and dual raw water pumps.
Crankshaft Pulley—Poly vee grooves (optional)
Engine Mounts—Resilient mounts for both engine and marine gear
Exhaust System—Cast fresh water cooled manifolds
Flywheel Housing—SAE #0
Fuel System—Cam operated unit injectors with low pressure USCG type A external hoses, fuel filters and cooler
Governor—Hydraulic, SG type
Lube Oil Filter—Full flow
Oil Pan—Cast iron, designed for 0°-15° inclination angle, rear sump
Starting Motors—Two 24 volt electric (standard) —Single air starter (optional)

Performance Curve

Model 16V-149TI—Maximum



Model 16V-149TI—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.

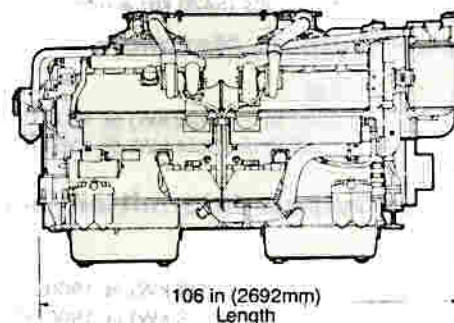
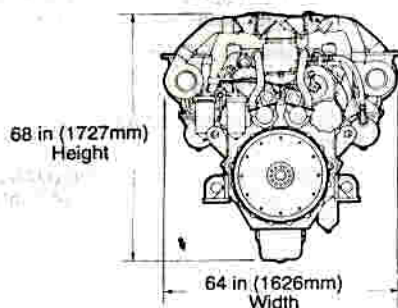
MARINE INTERMITTENT- MAXIMUM The intermittent-maximum rating is reserved for privately-owned yachts with long-range cruising capability and/or used in seasonal charter operation. Normal or continuous cruising RPM should be limited to 90% of the rated engine RPM and the use of full rated power should 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 Allison representative for the rating that will apply to your vessel.

Dimensional Drawing

Model 9162-7411
16V-149TI



Approximate dimensions shown. For complete dimensional information, refer to installation drawing 23503222.



Detroit Diesel Allison

Division of General Motors

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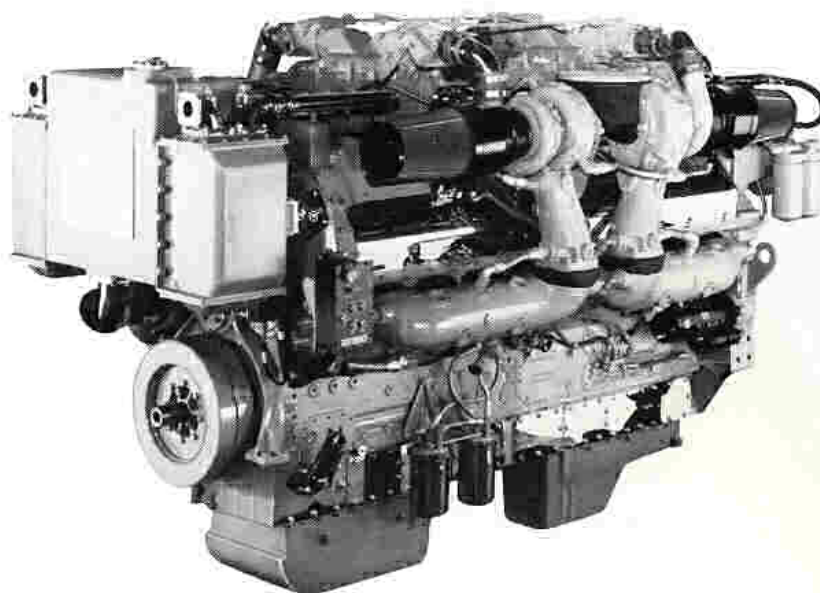
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DETROIT DIESEL



16V-149TI DDEC Marine Pleasure Craft 2200 BHP



General Specifications

Basic Engine	16V-149TI
Model	9162-7C24
Description	Turbocharged-Raw water intercooled with Bypass Blower
Control	DDEC
Number of Cylinders	16
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	2389 cu in (39.18 liters)
Compression Ratio	15.0 to 1
Weight (dry)	14103 lbs (6397 kg)

Rated Power Output—Maximum

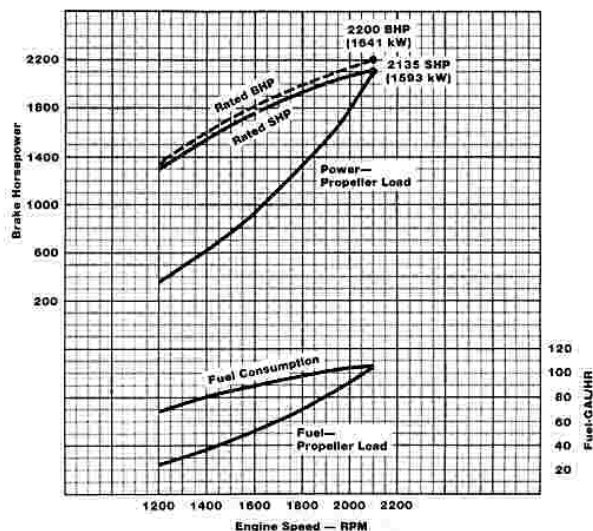
Gross Power	2200 BHP (1641 kW) @ 2100 RPM
Net Power	2135 SHP (1593 kW) @ 2100 RPM

Equipment Specifications

Alternator—24 volt, 75 amp
Cooling System—Cast iron expansion tank and dual raw water pumps
Crankshaft Pulley—Poly vee grooves (optional)
DDEC—Detroit Diesel Electronic Controls
Engine Mounts—Resilient mounts for both engine and marine gear
Exhaust System—Cast jacket water-cooled manifolds
Flywheel Housing—SAE #0
Fuel System—Cam operated electronic unit injectors with low pressure USCG type A external hoses, fuel filters and cooler
Lube Oil Filter—Full flow, spin on
Marine Gear—Detroit Diesel-433G, 2.51:1 ratio
Oil Pan—Cast iron, designed for 0° - 20° inclination angle, rear sump
Starting Motors—Two 24 volt electric

Performance Curve

Model 16V-149TI—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 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 hours.

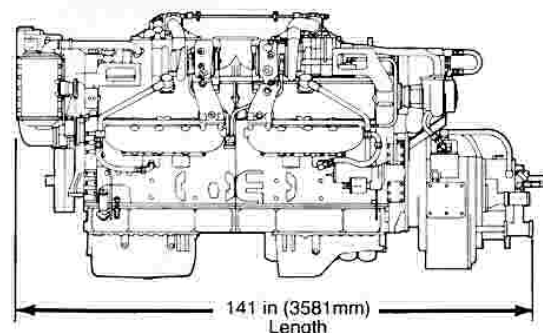
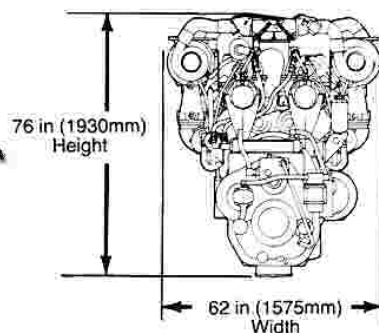
NOTE: Other boats; e.g., fire, police, with an overall duty cycle similar to maximum or intermittent-maximum may be applied at the appropriate rating.

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

Dimensional Drawing

Model 9162-7C24
16V-149TI

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



DETROIT DIESEL
CORPORATION



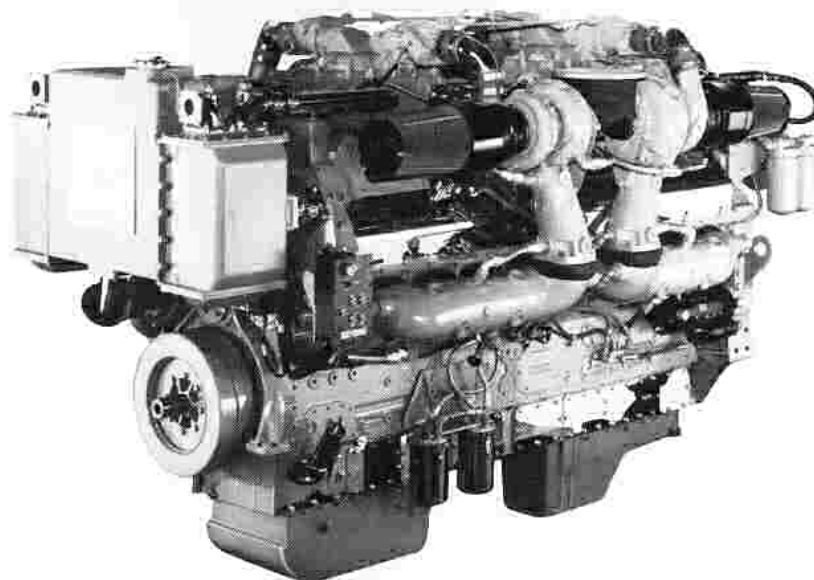
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DETROIT DIESEL



**16V-149TI DDEC
2200 & 2400 BHP**

Marine Pleasure Craft



General Specifications

Basic Engine	16V-149TI
Model — Port	9162-7C01
Starboard	9162-7C00
Description	Turbocharged—Raw water intercooled with Bypass Blower
Control	DDEC
Number of Cylinders	16
Bore and Stroke	5.75 in x 5.75 in (146 mm x 146 mm)
Displacement	2389 cu in (39.18 liters)
Compression Ratio	15.0 to 1
Weight (dry)	13450 lbs (6114 kg)

Rated Power Output—Maximum

Gross Power	2200 BHP (1641 kW) @ 2100 RPM
Net Power	2135 SHP (1593 kW) @ 2100 RPM
Gross Power	2400 BHP (1790 kW) @ 2100 RPM
Net Power	2330 SHP (1738 kW) @ 2100 RPM

Equipment Specifications

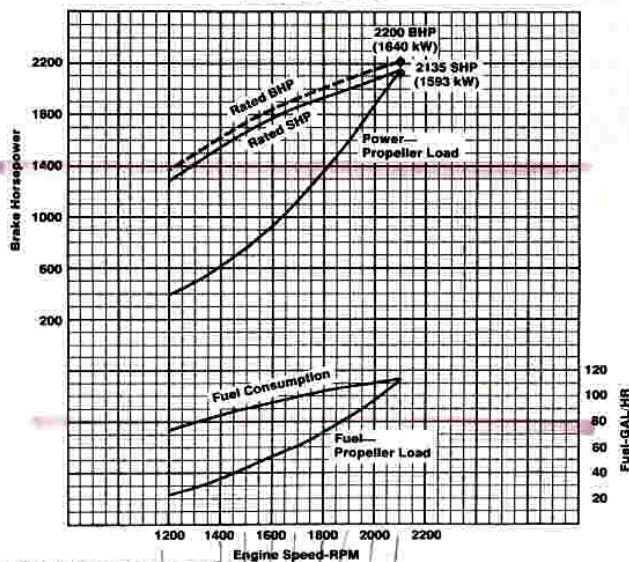
Alternator—24 volt, 75 amp
Cooling System—Cast expansion tank and dual raw water pumps
Crankcase vapor collectors with silencers
Crankshaft Pulley
DDEC—Detroit Diesel Electronic Controls
Engine Mounts—Resilient mounts for both engine and marine gear
Exhaust System—Cast jacket water-cooled manifolds
Flywheel Housing—SAE #0
Fuel System—Cam operated electronic unit injectors with low pressure USCG type A external hoses, fuel filters and cooler
Lube Oil Filter—Full flow, spin-on
Marine Gear—Available with Detroit Diesel-433G, 2.51:1 ratio
Oil Pan—Cast, designed for 0°-12° inclination angle, rear sump
Starting Motors—Two 24 volt electric

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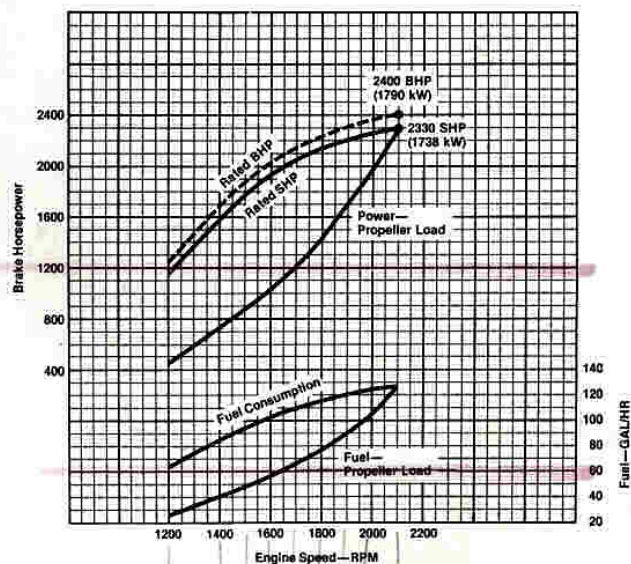
Performance Curve

Model 16V-149TI—Maximum

2200 BHP



2400 BHP



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 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.

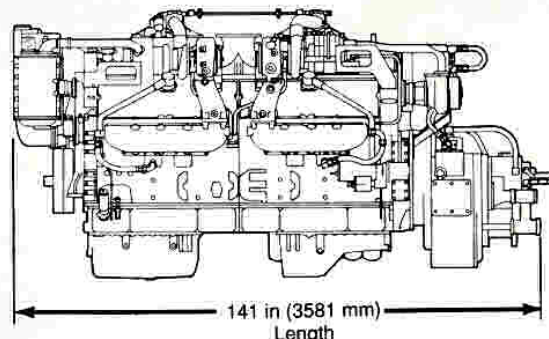
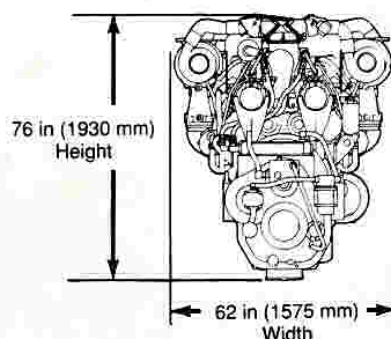
NOTE: Other boats; e.g., fire, police, with an overall duty cycle similar to maximum or intermittent-maximum may be applied at the appropriate rating.

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

Dimensional Drawing

Model 9162-7C00
16V-149TI

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



DETROIT DIESEL
CORPORATION



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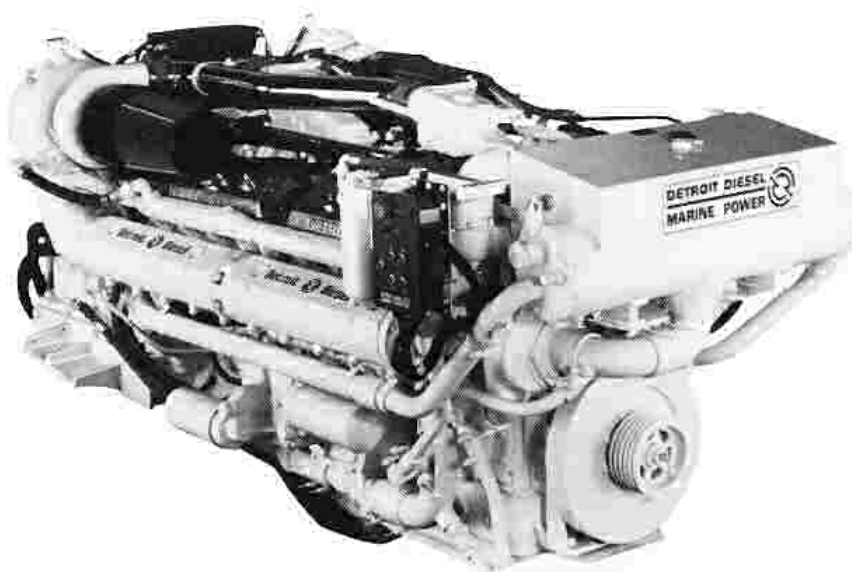


DETROIT DIESEL



**16V-92TA
1400 BHP**

Marine Pleasure Craft



General Specifications

Basic Engine	16V-92TA
Model	8162-7400
Description	Turbocharged-Aftercooled with Bypass Blower
Number of Cylinders	16
Bore and Stroke	4.84 in x 5.00 in (123 mm x 127 mm)
Displacement	1472 cu in (24.1 liters)
Compression Ratio	17.0 to 1
Weight (dry)	7006 lbs (3178 kg)

Rated Power Output—Maximum

Gross Power	1400 BHP (1044 kW) @ 2300 RPM
Net Power	1350 SHP (1007 kW) @ 2300 RPM

Rated Power Output—Intermittent-Maximum

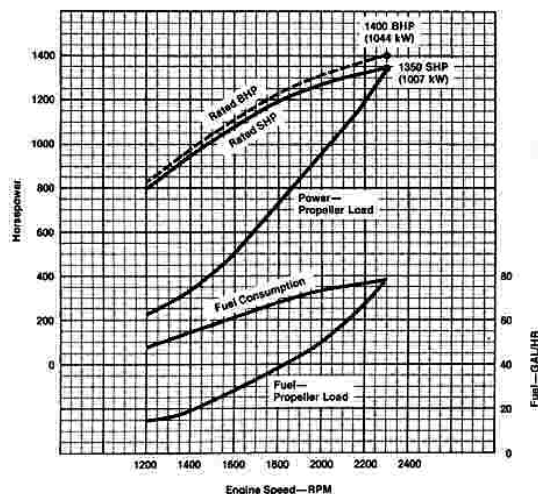
Gross Power	1300 BHP (969 kW) @ 2300 RPM
Net Power	1254 SHP (935 kW) @ 2300 RPM

Equipment Specifications

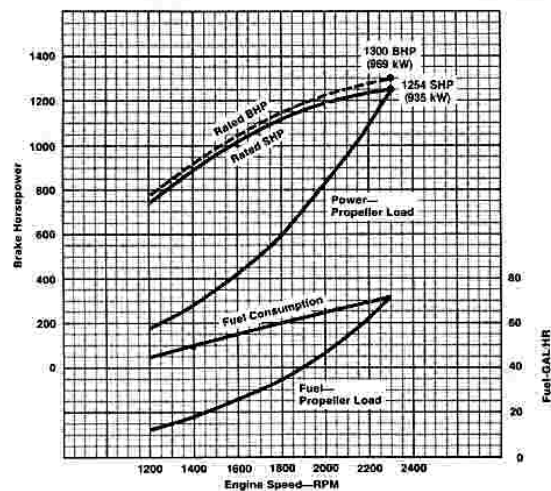
Aftercooler—Two-pass with precooled coolant supply (Boostcooler)
Air Inlet Housing—With manual shutdown
Air Silencer
Alternator—24 volt, 65 amp
Crankshaft Pulley—5 Grooves, .50 inch wide
Engine Mounts
Exhaust Manifold—Fresh water-cooled manifolds and twin turbine housings
Flywheel Housing—SAE #1
Fuel System—Cam operated unit injectors with low pressure USCG type A external hoses, fuel filters and cooler
Governor—Variable speed
Heat Exchanger—Includes 2 raw water pumps & piping
Lube Oil Filter—Dual full flow, spin on
Marine Gear—Detroit Diesel-232EV (1.18, 1.50, 1.74, 2.04)
Oil Pan—Stamped steel for 0-15° inclination angle, rear sump
Starting Motors—Two 24 volt
Vibration Damper—Viscous torsional damper

Performance Curves

Model 16V-92TA—Maximum



Model 16V-92TA—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.

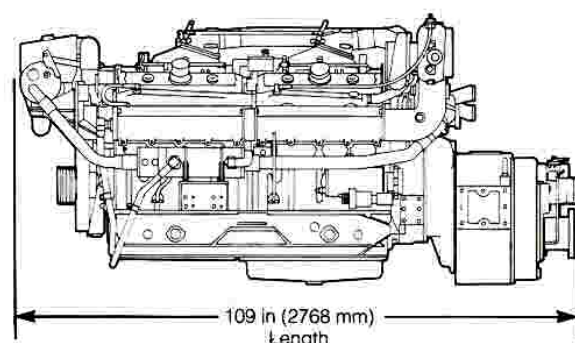
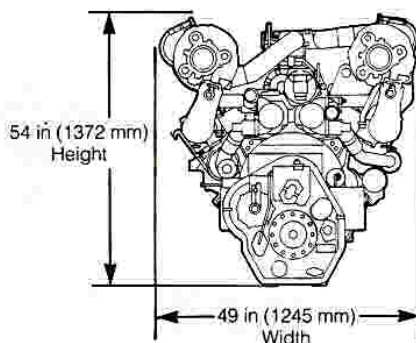
NOTE: Other boats; e.g., fire, police, with an overall duty cycle similar to maximum or intermittent-maximum may be applied at the appropriate rating.

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

Dimensional Drawing

Model 8162-7400
16V-92TA

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



DETROIT DIESEL
CORPORATION

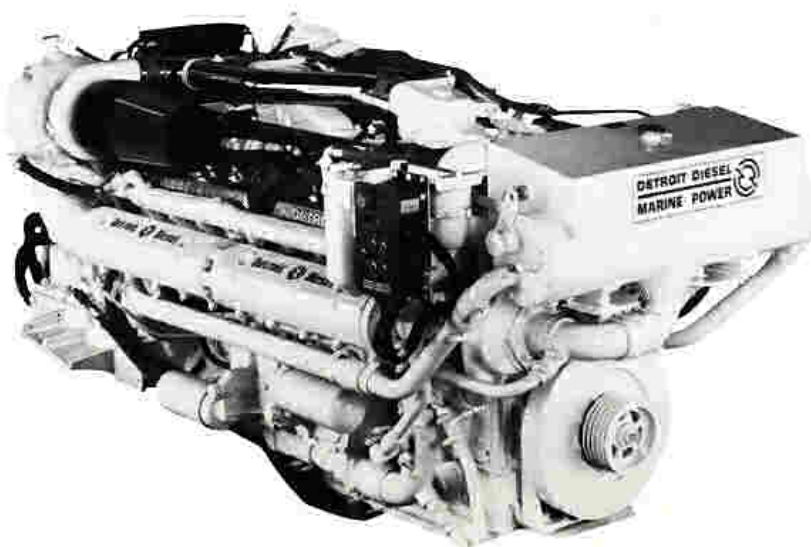


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DETROIT DIESEL

**16V-92TA DDEC
1450 BHP**

Marine Pleasure Craft



General Specifications

Basic Engine	16V-92TA
Model	8162-7B00
Description	Turbocharged-Aftercooled with Bypass Blower
Control	DDEC
Number of Cylinders	16
Bore and Stroke	4.84 in x 5.00 in (123 mm x 127 mm)
Displacement	1472 cu in (24.1 liters)
Compression Ratio	15.0 to 1
Weight (dry)	7240 lbs (3284 kg)

Rated Power Output—Maximum

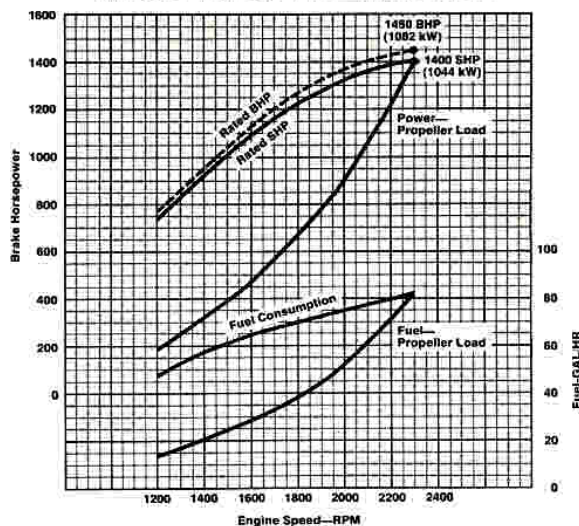
Gross Power	1450 BHP (1082 kW) @ 2300 RPM
Net Power	1400 SHP (1044 kW) @ 2300 RPM

Equipment Specifications

Aftercooler—Two-pass with precooled coolant supply (Boostcooler)
Air Inlet Housing—With manual shutdown
Alternator—24 volt, 65 amp
Crankshaft Pulley—5 Grooves, .50 inch wide
DDEC—Detroit Diesel Electronic Control
Engine Mounts
Exhaust Manifold—Fresh water-cooled manifolds and twin turbine housings
Flywheel Housing—SAE #1
Fuel System—Electronic unit injectors with low pressure USCG type A external hoses, fuel filters and cooler
Heat Exchanger—Includes 2 raw water pumps & piping
Lube Oil Filter—Dual full flow, spin on
Marine Gear—Detroit Diesel-272EV (1.18, 1.50, 1.74, 2.04)
Oil Pan—Stamped steel for 0-15° inclination angle, rear sump
Starting Motors—Two 24 volt
Vibration Damper—Viscous torsional damper

Performance Curve

Model 16V-92TA—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.

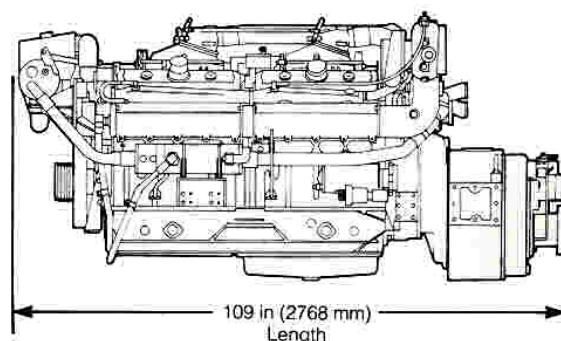
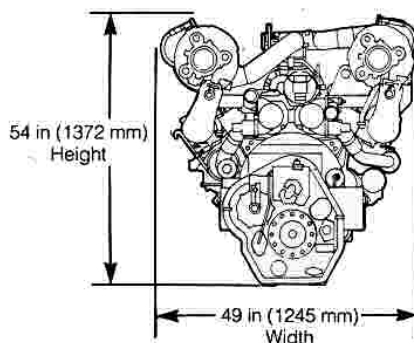
NOTE: Other boats; e.g., fire, police, with an overall duty cycle similar to maximum or intermittent-maximum may be applied at the appropriate rating.

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

Dimensional Drawing

Model 8162-7B00
16V-92TA DDEC

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



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