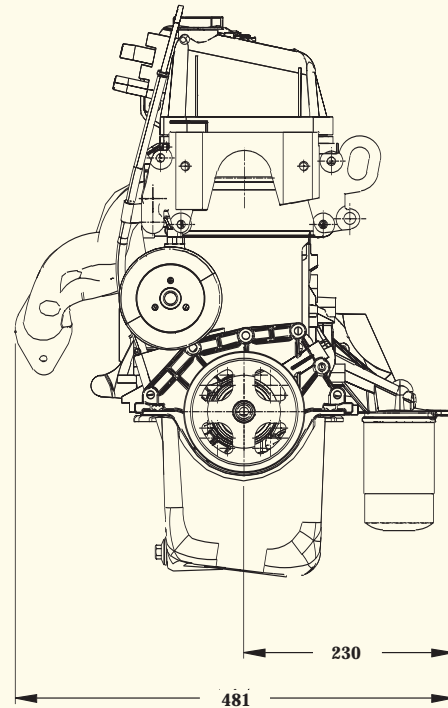
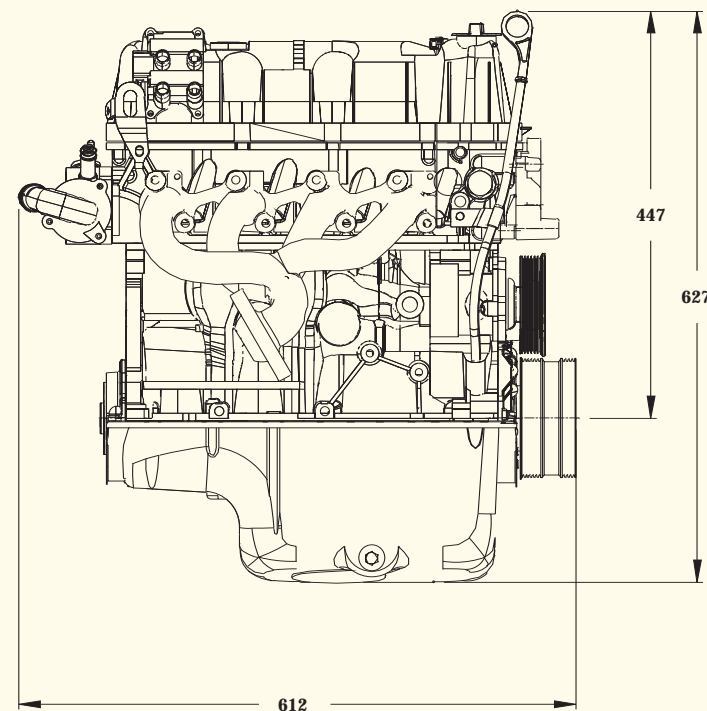


Front End View



Right Side View



Measurements mm

TSG-416 **Base Industrial** **Engine EFI** **1.6-Litre** **4-Cylinder**



Powerful
Performance
from one
source.



TSG-416

Base Industrial Engine EFI

1.6-Litre 4-Cylinder



Options

- Flywheel Housing**
 - SAE #5M with feet and side pads
- Flywheels**
 - Flat face
 - SAE 7.5" O/C
- Aluminum Intake Manifold**
- Engine-Mounted Cooling Fans**
 - 14.9" (380 mm) diameter suction
 - 14.9" (380 mm) diameter pusher
- Front Engine Supports (without Radiator)**
 - Single Foot
 - Dual Foot
- 90 Amp Generator**
- LH and RH Mounted Starters**
 - Parts conform to SAE J1171 (marine) specifications
- Electronic Control Modules (refer to FPP-192-583)**
 - Ignition Control Module (ICM)
 - Engine Performance Module (EPM)
- Wiring Harnesses**
 - ICM application
 - EPM application
- Electronic Throttle Control**
- Discrete Speed Switch**
- Variable Speed Foot Pedal**
- Variable Speed Hand Control**
- Gaseous (LPG, NG, LPG/NG) Fuel Delivery System**
- Gasoline Fuel Injection (EFI/Sequential Port) System**
- Exhaust Pipe with Rain Cap**
- Three-Way Catalyst (available 2003)**

Emissions Information

EPA and ARB emission-certified packages available. Contact FPP or local distributor for specific details.

Warranty

Contact FPP or local distributor for warranty terms.

Specifications

Engine Type..... 2V, SOHC, I-4
 Bore and Stroke..... 3.23 in x 2.97 in (82.1 mm x 75.5 mm)
 Displacement..... 1.6 Litre (97.4 CID)
 Compression Ratio..... 9.5:1
 Oil Capacity..... 4.4 Qts (4.2 litres)
 Net Weight 200 Lbs (90.7 Kgs)
 Dimensions..... L 24.1" x W 18.9" x H 24.7"
 (612 mm x 481 mm x 627 mm)

Gasoline (corrected per SAE J1995)

Fuel Specification..... 87 A.K.I.
 Rated Power @ 3600 RPM Intermittent: 63 HP (47 kW)
 Continuous: 53 HP (40 kW)
 Peak Torque @ 3200 RPM..... Intermittent: 93 Ft. Lbs. (126 Nm)
 Continuous: 79 Ft. Lbs. (107 Nm)
 Power @ 1800 RPM..... Intermittent: 29 HP (22 kW)
 Continuous: 24 HP (18 kW)

Natural Gas (corrected per SAE J1995)

Fuel Specification..... 1050 BTU/FT3
 Rated Power @ 3600 RPM..... Intermittent: 52 HP (39 kW)
 Continuous: 44 HP (33 kW)
 Peak Torque @ 3200 RPM..... Intermittent: 78 Ft. Lbs. (106 Nm)
 Continuous: 66 Ft. Lbs. (89 Nm)
 Power @ 1800 RPM..... Intermittent: 26 HP (19 kW)
 Continuous: 22 HP (16 kW)

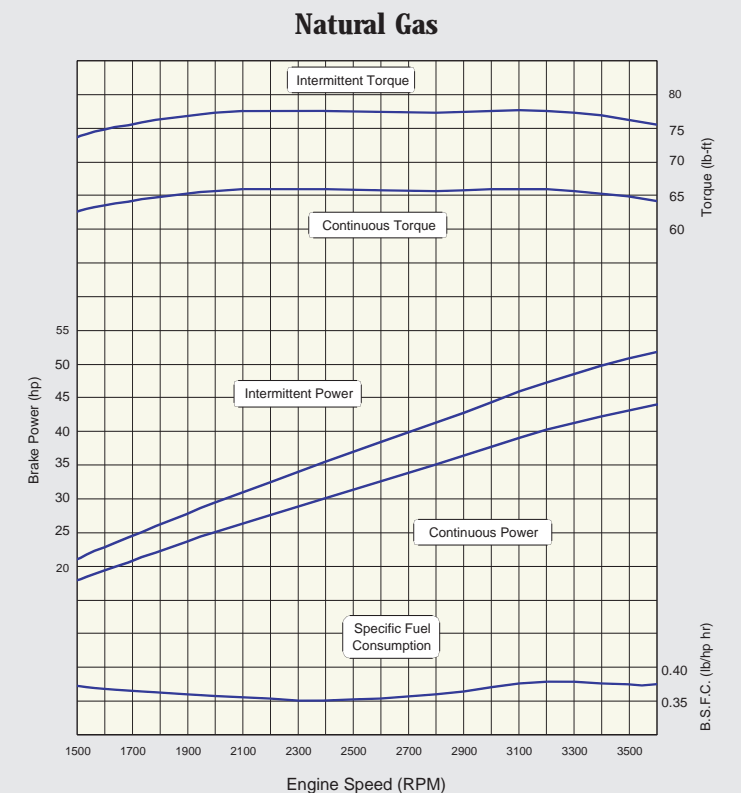
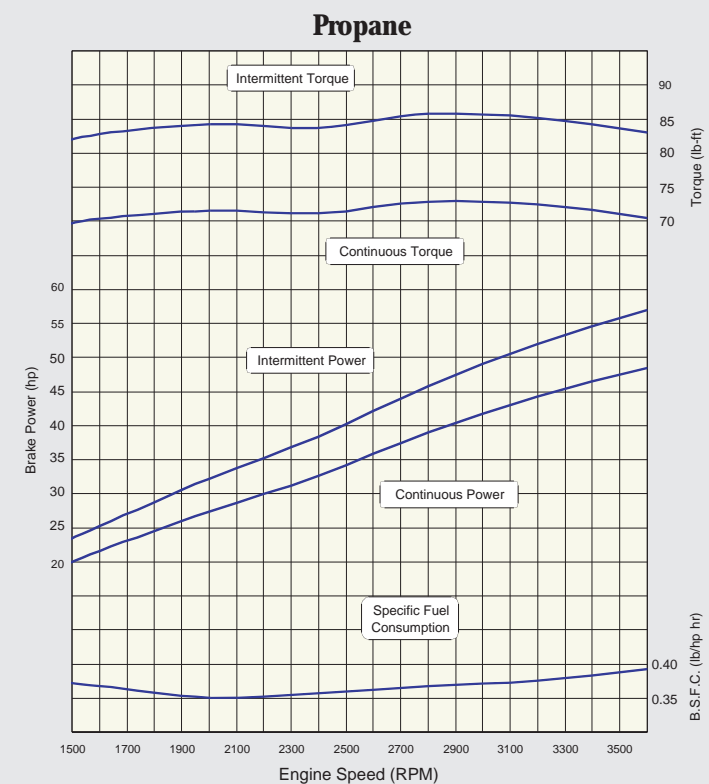
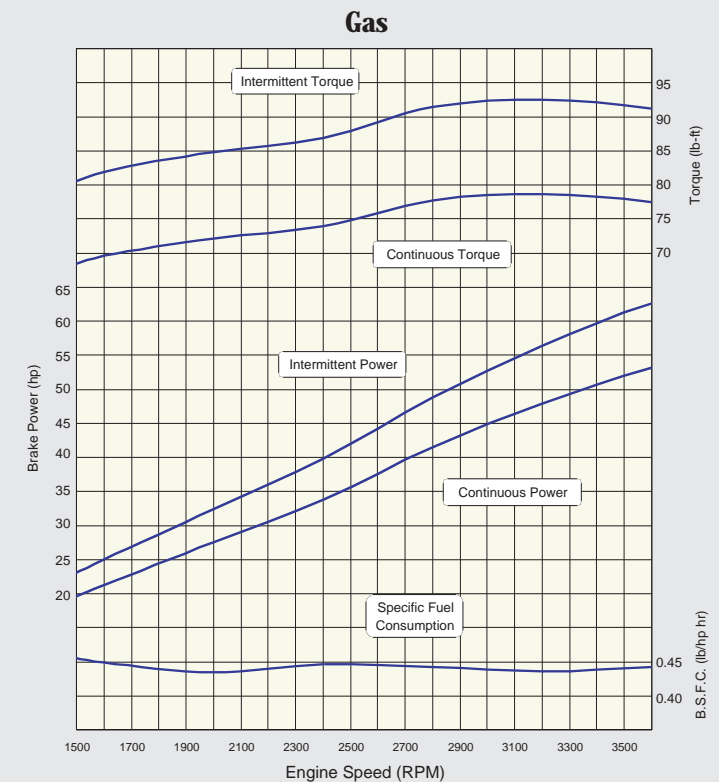
Liquefied Petroleum Gas (corrected per SAE J1995)

Fuel Specification..... ASI Grade HD-5
 Rated Power @ 3600 RPM..... Intermittent: 57 HP (43 kW)
 Continuous: 48 HP (36 kW)
 Peak Torque @ 2800 RPM..... Intermittent: 86 Ft. Lbs. (117 Nm)
 Continuous: 73 Ft. Lbs. (99 Nm)
 Power @ 1800 RPM..... Intermittent: 26 HP (20 kW)
 Continuous: 22 HP (17 kW)

Standard Features/Benefits

- Single Overhead Camshaft (SOHC) Featuring Single Sleeve Type, Chain Driven Camshaft with Hydraulic Tensioning System** for reduced engine noise and friction, increased performance, durability and service-free chain tensioning
- Low Friction Roller Finger Follower Valve Train** for minimal friction, improved reliability and increased torque
- Low Pressure Die Cast Aluminum Cylinder Head** for improved durability and decreased weight
- Alternate-Fuel-Ready Valve Train Components** for alternate fuel operation
- Cast Iron High Compression Swirl (HCS) Cylinder Block** for reduced emissions and improved combustion efficiency
- Piston Cooling Jets** for increased performance and durability
- Integrated Knock Sensor** for improved engine protection and increased engine durability
- Nodular, Graphite Cast Iron Crankshaft with Five Main Bearings** for increased strength and durability
- Cast Iron Exhaust Manifolds for Off-Highway Market** for increased engine performance and durability
- Polyamid Plastic Camshaft Cover** for corrosion resistance and reduced noise
- Coil Assembly Electronic Ignition System with Cam and Crank Shaft Position Sensors** for reliable and effective spark delivery
- Gasoline Sequential Port Fuel Injection** ensures controlled fuel delivery throughout the various engine speeds, providing increased performance and reducing emissions
- Closed-Loop Fuel Control** for improved emissions control
- Next Generation Governing Using the Latest DC, Stepper-Motor Technology** for accurate, dependable and reliable speed control

Power Curves (corrected per SAE J1995)



Specifications are subject to change without notice.

Above power curves utilized the Ford Power Products EPM and emissions certified package.

