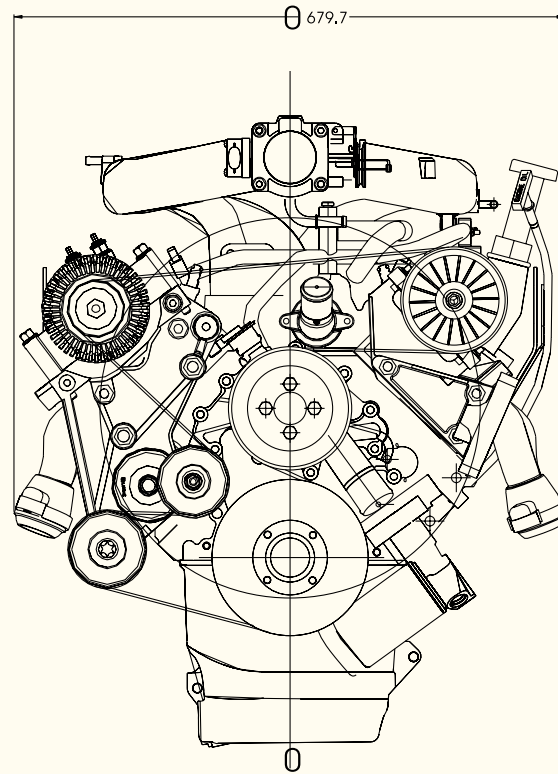
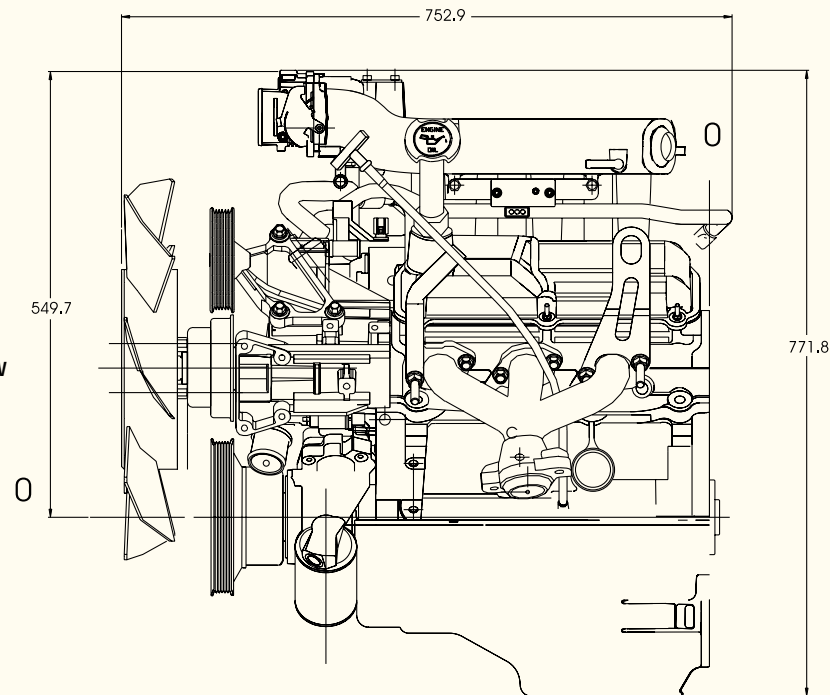


Front End View

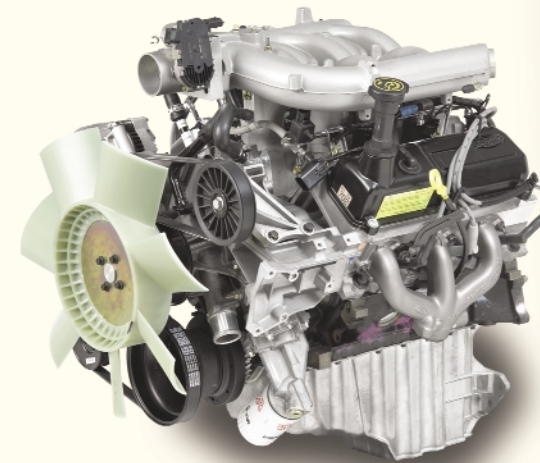


Left Side View



Measurements mm

## ESG-642 Base Industrial Engine 4.2-Litre 6-Cylinder



Powerful  
Performance  
from one  
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Corporate Web Site:  
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Contact Ford Power Products or your local  
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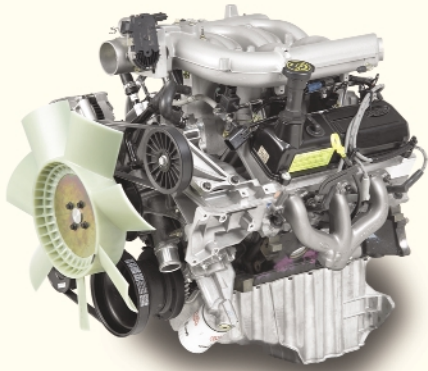
Ford Power Products  
15700 Lundy Parkway Drive  
Suite 200  
Dearborn, Michigan 48126  
Phone: 1-800-833-4773  
Fax: 1-313-619-2600

Ford Power Products  
Trafford House  
Station Way  
Basildon, Essex, SS16 5XX, England  
Phone: 44 (0)1268 704181  
Fax: 44 (0)1268 702121



# ESG-642 Base Industrial Engine

## 4.2-Litre 6-Cylinder



### Options

- Flywheel Housing**
  - SAE #3
- Flywheels**
  - 11.5" (292.1 mm) Over-Center Clutch
- Aluminum Intake Manifold**
- Conventional Engine Cooling Fans**
  - 18.5" (470 mm) Diameter Suction
  - 18.5" (470 mm) Diameter Pusher
- Engine Supports (Rubber Isolated Mounts)**
- Electronic Control Modules (Refer to FPP 192-583)**
  - Ignition Control Module (ICM)
  - Engine Performance Module (EPM)
- Wiring Harnesses**
  - ICM Application
  - EPM Application
- Exhaust Manifolds**
  - Center Dump Down
  - Rear Dump Down
- Power Steering Pump**
- Oil Cooler**
- Gaseous (LPG, NG, LPG/NG) Fuel Delivery System**
- Gasoline Fuel Injection (EFI/Sequential Port) System**
- Water Pump-Mounted Fan**
- Lifting Eyes**
- Three-Way Catalyst**

### Transmissions

Accompanying transmissions are available for the ESG-642 through Ford Power Products.

### Emissions Information

California Air Resources Board (CARB) emission-certified packages available. (Gasoline, LPG, CNG, Gasoline/LPG Dual-Fuel, Gasoline/CNG Dual-Fuel and LPG/CNG Dual-Fuel)

### Warranty

**EPI Engine:** 3 years/2,000 hours, whichever occurs first, on complete package (base engine and ancillary parts)  
**Gen-Set:** 5 years/3,000 hours, whichever occurs first, on base engine and 2 years, regardless of hours, on ancillary parts  
**Electronic Controls:** 5 years/3,500 hours, whichever occurs first, on EPM, actuator and main engine harness  
**Electronic Controls:** 2 years/2,000 hours, whichever occurs first, on ICM

### Specifications

Engine Type.....V-6  
 Bore and Stroke.....3.81 in (96.8 mm) x 3.74 in (95.0 mm)  
 Displacement.....4.2 Litre (256 CID)  
 Compression Ratio.....9.3:1  
 Oil Capacity.....6 Qts (5.68 litres)  
 Net Weight.....403 Lbs (183 Kgs)  
 Dimensions.....L 29.6" x W 26.7" x H 30.3"  
 (752.9 mm x 679.7 mm x 771.8 mm)

### Gasoline (corrected per SAE J1995)

Fuel Specification.....87 A.K.I.  
 Rated Power @ 3600 RPM ..... Intermittent: 146 HP (109 kW)  
 Continuous: 125 HP (93 kW)  
 Peak Torque @ 2600 RPM..... Intermittent: 240 Ft. Lbs. (325 Nm)  
 Continuous: 206 Ft. Lbs. (279 Nm)  
 Power @ 1800 RPM..... Intermittent: 73 HP (54 kW)  
 Continuous: 62 HP (46 kW)

### Natural Gas (corrected per SAE J1995)

Fuel Specification.....1050 BTU/FT3  
 Rated Power @ 3600 RPM..... Intermittent: 120 HP (89 kW)  
 Continuous: 102 HP (76 kW)  
 Peak Torque @ 2200 RPM..... Intermittent: 214 Ft. Lbs. (290 Nm)  
 Continuous: 182 Ft. Lbs. (246 Nm)  
 Power @ 1800 RPM ..... Intermittent: 72 HP (54 kW)  
 Continuous: 61 HP (45 kW)

### Liquefied Petroleum Gas (corrected per SAE J1995)

Fuel Specification.....ASI-Grade HD-5  
 Rated Power @ 3600 RPM..... Intermittent: 131 HP (98 kW)  
 Continuous: 114 HP (85 kW)  
 Peak Torque @ 2200 RPM..... Intermittent: 238 Ft. Lbs. (322 Nm)  
 Continuous: 201 Ft. Lbs. (272 Nm)  
 Power @ 1800 RPM..... Intermittent: 79 HP (58 kW)  
 Continuous: 67 HP (50 kW)

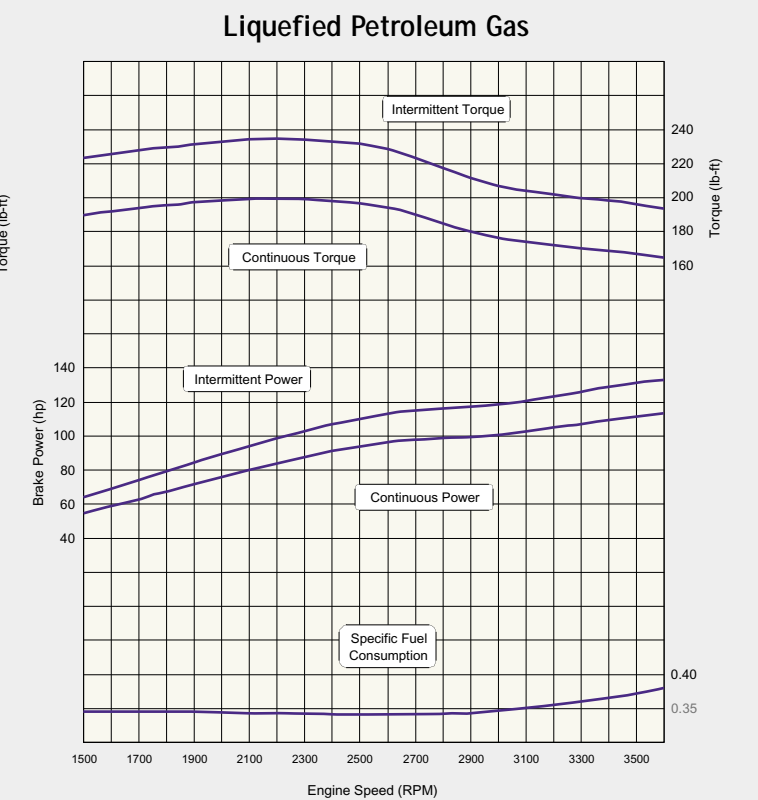
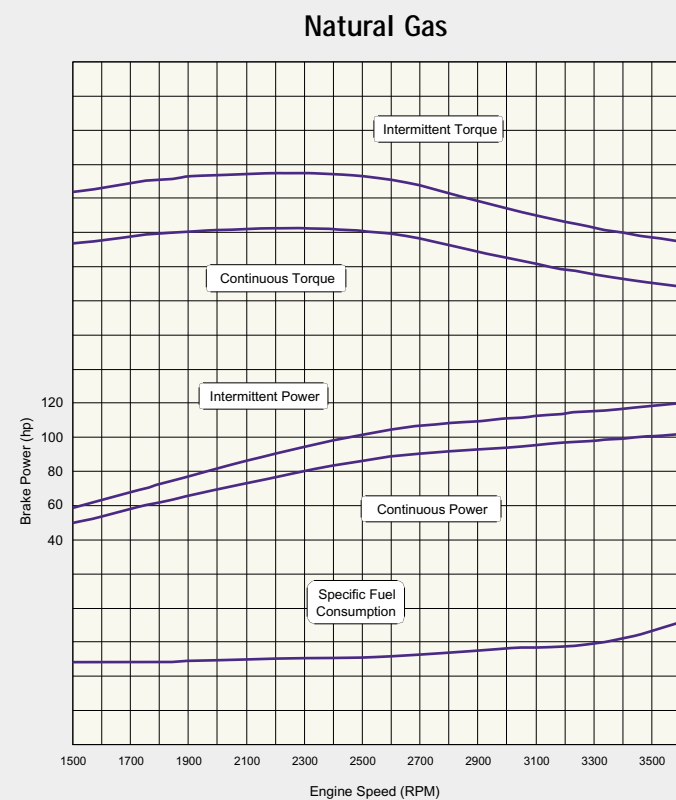
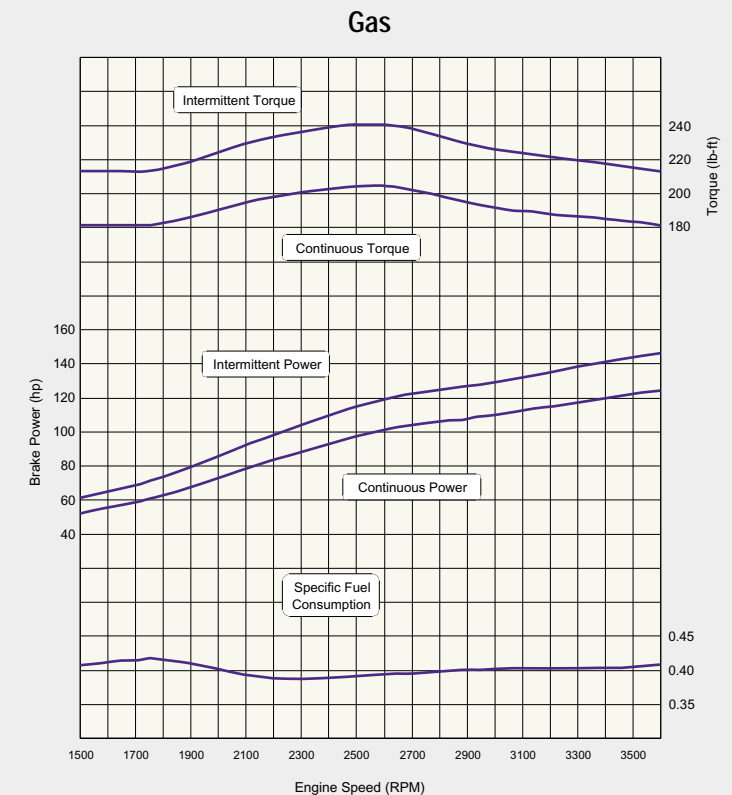
### Standard Features/Benefits

- Cast Aluminum Cylinder Heads and Intake Manifold** for improved power and fuel efficiency
- Roller Lifter Camshaft** for reduced friction and improved fuel efficiency
- Cast Iron Cylinder Block with Four Main Bearing Caps** for maximum strength
- Internally Balanced Engine Components and Counter-Rotating Balance Shaft** for smoother engine operation
- Nodular Iron Crankshaft** for durability
- Six-Quart (with Filter) Capacity Aluminum Oil Pan** for maximum oil supply
- High-Flow Oil Pump** for long engine life
- Composite Rocker Arm Covers** for noise reduction
- Single Serpentine Accessory Drive Belt and Automatic Tensioner** for long, maintenance-free operation
- Hydraulic Valve Tappets** for reduced maintenance
- Harden Intake and Exhaust Valve Seats and Inserts** for multi-fuel capability
- Closed-Loop Fuel Control** for improved emissions control

### Emissions Levels

g/bhp-hr	HC = NOx	CO
Standards	3.0	37.0
Certification Levels	0.5	5.7

## Power Curves (corrected per SAE J1995)



Above power curves utilized the FPP EPM and emission-certified package.

