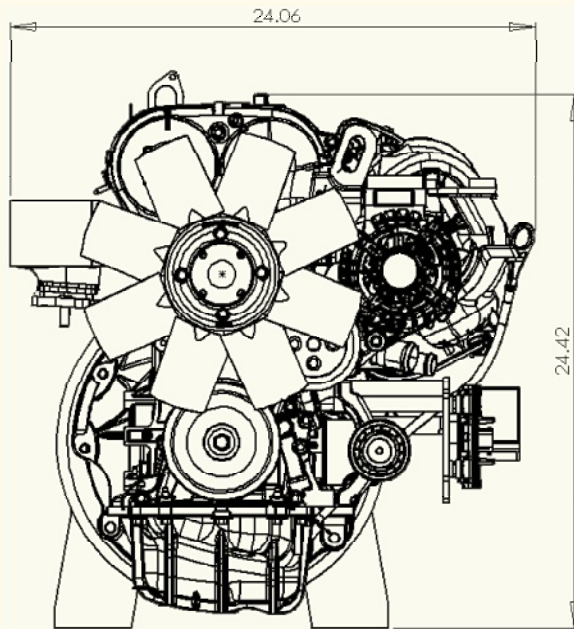
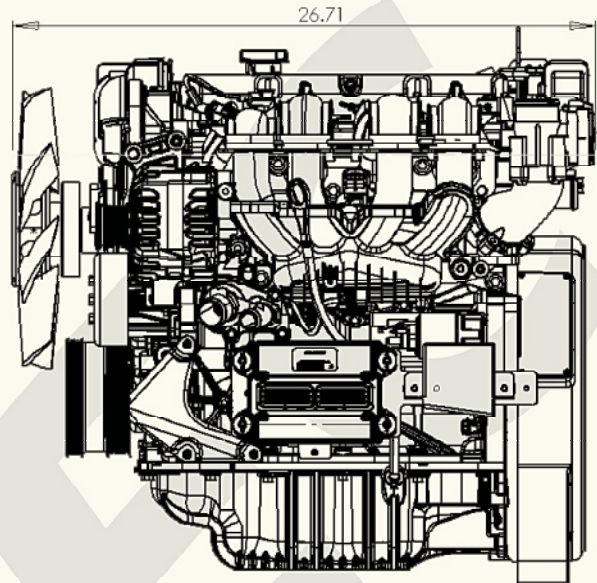


# Installation Drawings

Front End View

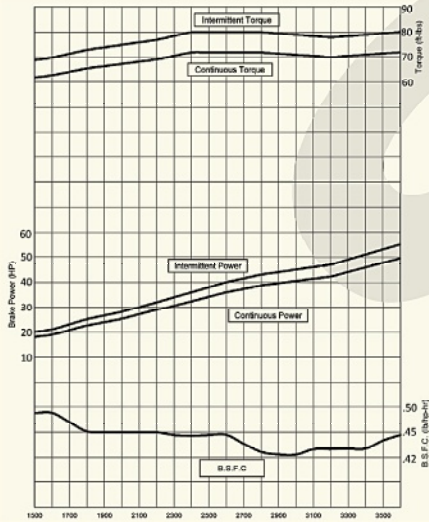


Left Side View



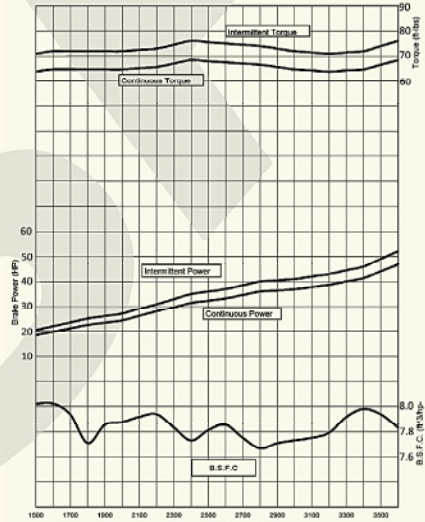
## Power Curves (corrected per SAE J1349)

Gasoline



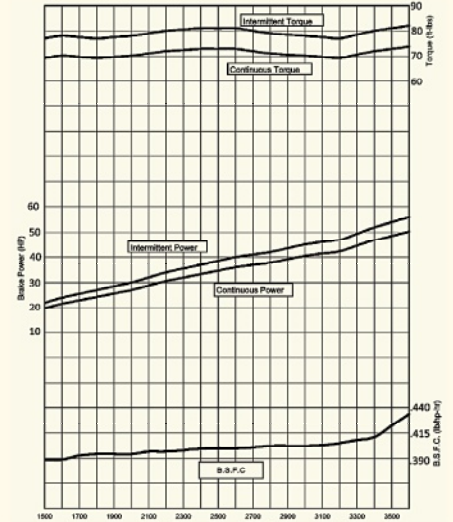
Engine Speed (RPM)

Natural Gas



Engine Speed (RPM)

Liquefied Petroleum Gas



Engine Speed (RPM)



Powertrain Assemblies  
& Components  
Provided By Ford  
Component Sales

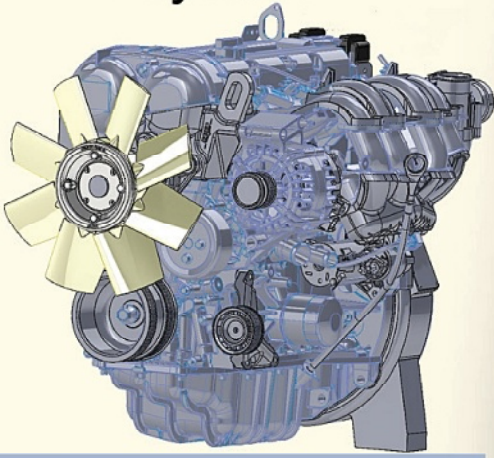
For additional information Contact:



**M-K POWER PRODUCTS CORP.**  
3500 Laird Road, Unit 2  
Mississauga, Ontario L5L 5Y4  
800 263-5011 / [www.M-K.com](http://www.M-K.com) / [info@m-k.com](mailto:info@m-k.com)

# TSG-415<sup>EFI</sup>

## 1.5 Liter 4-Cylinder



### Options

#### Engine Cooling Fans

- 13" (330mm) diameter suction
- 13" (330mm) diameter pusher

#### Flywheels

- 7.5" SAE #5
- Flat face flywheel

#### Flywheel Housings

- SAE #5

#### Exhaust Manifold

- Side dump down

#### Wiring Harnesses

#### Discrete Speed Switch

#### Variable Speed Hand Throttle

#### Variable Speed Foot Pedal

#### Engine Mounts

- Open power unit

#### Electronic Instrument Panel, Gauges

#### Three Way Catalyst / Muffler Standard

### Emissions Information

California Air Resources Board (CARB)  
Environmental Protection Agency (EPA)  
Emission Certified Packages Available.

### Warranty

Contact Engine Distributors, Inc  
for warranty details.



Powertrain Assemblies  
& Components  
Provided By Ford  
Component Sales

### Specifications

Engine Type .....	I-4
Bore and Stroke .....	3.11" x 3.01" (79mm x 76.4mm)
Displacement .....	1.5L Liter (91.5 CID)
Compression Ratio .....	11:1
Oil Capacity .....	4.25 qts. including filter
Net Weight .....	196.2 Lbs. (88.9 kgs.)
Dimensions .....	L 23.8" x W 23.4" x H 26.8" (604 mm x 594 mm x 680 mm)

### Gasoline (corrected per SAE J1349)

Unleaded 87 or 89 octane	
Intermittent Power .....	55 [HP] @ 3600rpm (41 [kW] @ 3600rpm)
Continuous power .....	49 [HP] @ 3600rpm (37 [kW] @ 3600rpm)
Intermittent Torque .....	80 [ft-lbs] @ 2600rpm (108 [N-m] @ 2600rpm)
Continuous Torque .....	72 [ft-lbs] @ 2600rpm (98 [N-m] @ 2600rpm)

### Natural Gas (corrected per SAE J1349)

Fuel Specification .....	1050 BTU/FT3
Intermittent Power .....	52 [HP] @ 3600rpm (39 [kW] @ 3600rpm)
Continuous power .....	47 [HP] @ 3600rpm (35 [kW] @ 3600rpm)
Intermittent Torque .....	76 [ft-lbs] @ 2400rpm (103 [N-m] @ 2400rpm)
Continuous Torque .....	68 [ft-lbs] @ 2400rpm (93 [N-m] @ 2400rpm)

### Liquefied Petroleum Gas (corrected per SAE J1349)

Fuel Specification .....	HD-5
Intermittent Power .....	56 [HP] @ 3600rpm (42 [kW] @ 3600rpm)
Continuous power .....	50 [HP] @ 3600rpm (38 [kW] @ 3600rpm)
Intermittent Torque .....	81 [ft-lbs] @ 2500rpm (110 [N-m] @ 2500rpm)
Continuous Torque .....	73 [ft-lbs] @ 2500rpm (99 [N-m] @ 2500rpm)

### Standard Features / Benefits

Set-for-life valvetrain

Direct Acting Mechanical Bucket (DAMB) valvetrain with polished buckets for reduced friction

Cast aluminum, low-friction coated pistons

Structural front cover and oil pan

Alternate fuel ready valvetrain components

Individual coil electronic ignition

Five bearing cast iron crankshaft and forged connecting rods

Broadband knock sensor, calibrated for individual cylinder use

Gasoline Sequential Port Fuel Injection

Closed loop fuel control for all fuels

Electronic engine management system with built-in engine protection against detonation, high coolant temperature, low oil pressure, over speed shutdown and starter lockout

Next generation governing – discrete speeds, variable speeds, drive by wire – using the highest quality components.