



# SCORE™ 580 SERIES ROTARY ENGINES

ROTARY POWER INTERNATIONAL, INC.



## MODEL 2116R 1000HP

**DIMENSIONS:** 1321mm (52 in.)L, 1270mm (50 in.)W, 1270mm (50 in.)H

### PERFORMANCE AND BRIEF SPECIFICATIONS FOR MODEL 2116R

**2-rotor engine**

**Displacement** – 11.6L (700 in.<sup>3</sup>)

**Weight** – 986 kg (2174 lb.) Dry

**Rated power** – 746 kW  
(1000 bhp) (at 38°C or  
100°F and 100 kPa or  
29.56 in Hg, zero inlet and  
exhaust losses)

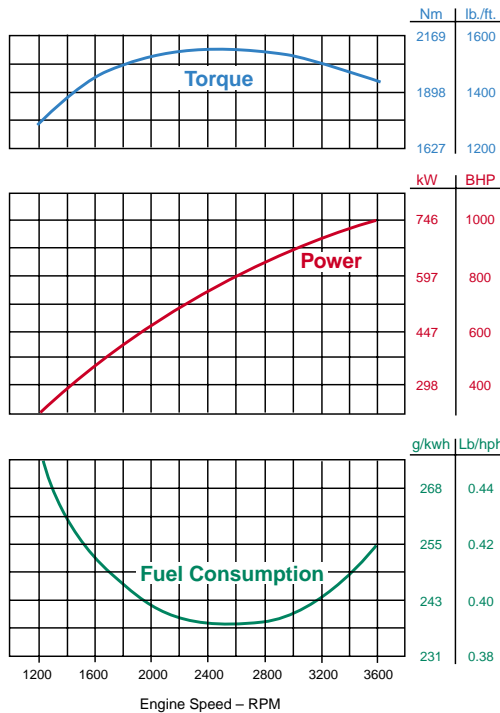
**Rated speed** – 3600 rpm

**Injection** – direct

**Ignition** – spark

**Fuel** – multiple fuel use  
(includes gasoline, JP-5,  
JP-8, Jet A, No. 1 and  
No. 2 diesel fuel)

**Rotation** – counterclockwise  
when viewed from  
flywheel end of engine



• For multi-rotor versions, power and torque increase in proportion to the number of rotors. Specific fuel consumption is the same.

### ENGINE DESCRIPTION:

The SCORE™ 580 Series (Stratified Charge Omnivorous Rotary Engine) is a turbocharged, high pressure direct injected spark ignited rotary engine. The Model 2116R, shown at the left, will be available in prototype configuration for field trials in 2001 with production commencing in 2002. RPI's SCORE™ 580 Series family of rotary engines will offer three power sizes of 1000, 2000 and 3000 horsepower in 2, 4 and 6 rotor models, respectively.

### ADVANTAGES:

- All RPI rotary engines will offer these advantages:
- Patented stratified charge, which allows SCORE™ engines to use a wide range of liquid fuels with no adjustments
  - Exceptional power density
  - Low weight
  - Compact size
  - Fuel efficient
  - Design simplicity
  - Unaided cold weather start-up to -25°F
  - High degree of parts commonality
  - Modular construction
  - Low noise and vibration
  - Low magnetic signature

### FEATURES:

- 12 or 24-volt, belt-driven alternator
- Electronic fuel injection
- Oil and charge air heat exchangers
- 'A' size belt drive pulley
- RPI Electronic Engine Management System
- Twin turbochargers with insulation standard
- SAE No. 1 flywheel housing – two rotor model
- SAE No. 0 flywheel housing – four and six rotor models
- Full flow spin-on lube oil and fuel filter
- Wet sump lube oil system, 15 degree allowable operating inclination
- Twin 24-volt starters, air starter optional
- Ceramic apex seals, investment cast stainless steel rotors, hard coated trochoid running surface, precision-case aluminum alloy power section housings, gear driven coolant pump and optional auxiliary drives

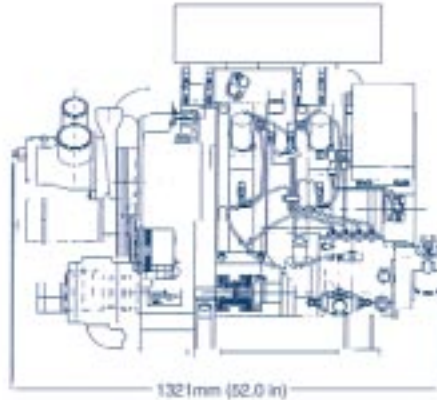
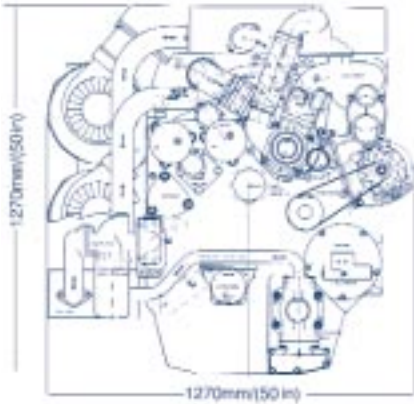
Manufactured by  
**PEGASUS TECHNOLOGIES INC.**  
(A wholly-owned subsidiary of RPI)

**SCORE 580 (continued)**

# THE SCORE™ 580 SERIES FAMILY OF ENGINES

## ROTARY ENGINE DIMENSIONS:

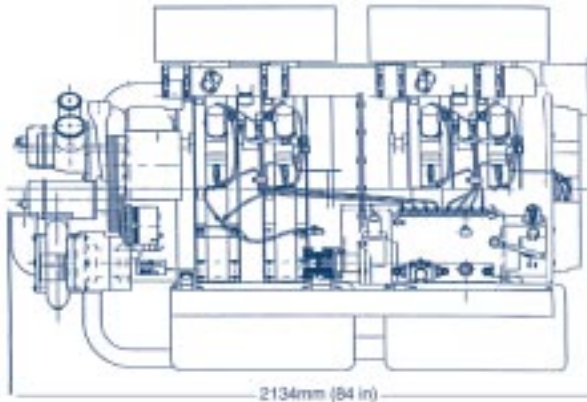
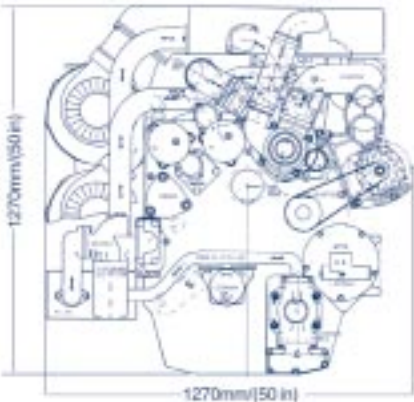
### MODEL 2116R



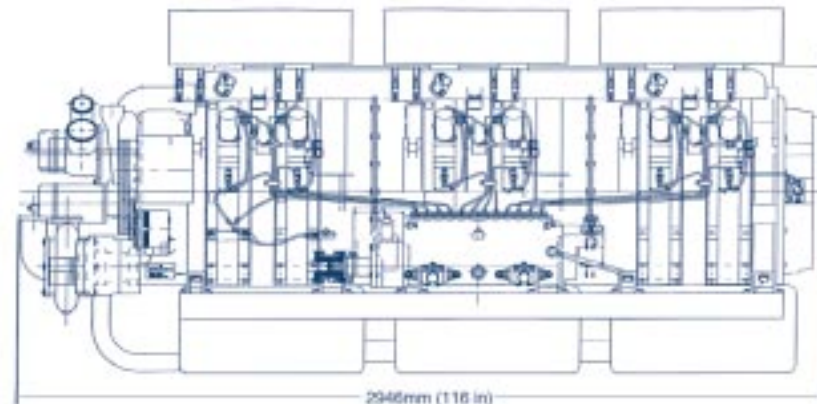
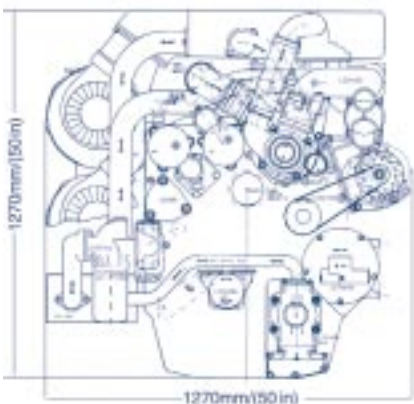
For more information about RPI Rotary Engines visit our websites at [www.rotarypowerinternational.com](http://www.rotarypowerinternational.com) and [www.pegasuspower.com](http://www.pegasuspower.com) or write Rotary Power International, Inc., PO Box 128, Wood-Ridge NJ 07075-0128.

All specifications are subject to change without notice.

### MODEL 4231R



### MODEL 6347R



### SCORE 580 SERIES PERFORMANCE AND BRIEF SPECIFICATIONS:

Model No.	No. of Rotors	Displacement L (in. <sup>3</sup> )	Max Power kW (BHP)	Weight-Dry Kg (lb.)	Specific Kg/kW	Weight lbs/hp
2116R	2	11.6 (700)	746 (1000)	986 (2174)	1.32	2.17
4231R	4	23.1 (1400)	1491 (2000)	1726 (3806)	1.16	1.90
6347R	6	34.7 (2100)	2237 (3000)	2380 (5247)	1.06	1.75