

# SINGLE ENGINE PULLEY DRIVE ECU

FUEL: NG & LPG

**ENGINE:** GM

# **SPECIFICATION SHEET**

Fuel	Rating	Power hp (kW)	Torque ft-lbs (N-m)
Natural Gas	Intermittent	119 (88.8)	280 (779)
	Continuous	104 (77.6)	252 (341)
LPG	Intermittent	160 (119)	295 (399)
	Continuous	139 (108)	266 (359)

Rating Definitions: Rated for 2700 rpm engine speed. (Corrected per SAE J1349) Intermittent - Applicable for a varying intermittent loads with no overload capability. Continuous - Continuous prime rating is applicable for supplying power to a varying load for an unlimited amount of running time, with 10% overload capacity available for 1 out of every 12 hours.

#### STANDARD FEATURES:

Tradewinds Power Corp engine power units are designed, packaged, and tested to meet the power requirements of a wide range of equipment used in agricultural applications. All our systems and components are prototyped, assembled and tested within a purpose built packaging, manufacturing, and test facility.

## Key System Features are:

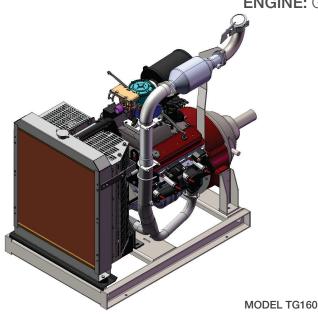
- · Engine power units will accept one-step loading
- · EPA and CARB certified for Agricultural use
- Four (4) point lifting eyes
- Assembled on integral sub-base with fork lift pockets
- · Self contained with mounted exhaust and air-cleaner
- TPC Controller for engine start and stop
- Low oil pressure and high engine temperature fault detection and shut-down protection

## Engine:

- PSI GM5.7L
- · Heavy duty rated for continuous prime power operation
- Cooling system capable of operation at 120°F ambient
- · Hydraulic lash adjusters with roller finger cam followers
- · Even firing order with internal balance shaft to be vibration free
- · Broadband knock sensor, calibrated for individual cylinder use
- Coil on plug ignition system for reliable and effective spark delivery
- · 12 volt electric start and charging system
- Electronic engine management system with built-in engine protection against detonation, high coolant temperature, low oil pressure, over-speed shutdown, and starter lockout

#### Drive System:

- · Manual clutch assembled to engine flywheel housing
- · Clutch shaft running @ 1800 rpm



Engine Power Unit Arrangement:

- · Assembled on steel base frame
- · Designed to be moveable via standard door way
- · Oil and water drain lines

#### **AUTOMATIC ENGINE CONTROLLER:**

- · CAN-based display with rich, full-color graphics
- · Full engine control and safety shut-down monitoring
- · Bonded glare-free LCD screen, viewable in direct sunlight
- · Easy -to-use configuration software
- · Full autostart, manual start, and off controls
- · Rugged design for extreme environments



MPC-20 ENGINE CONTROLLER (Available on remote stand)

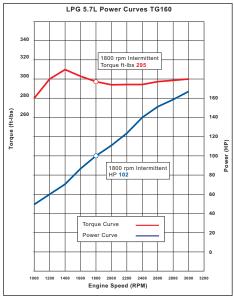
## **WARRANTY:**

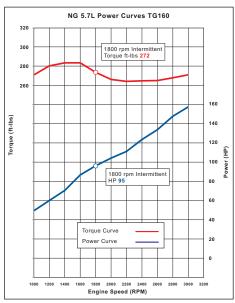
- Engine covered under the original equipment manufacturer's warranty - consult Tradewinds Power Corp for details
- · Complete package supplied with one-year unlimited warranty

The manufacture reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

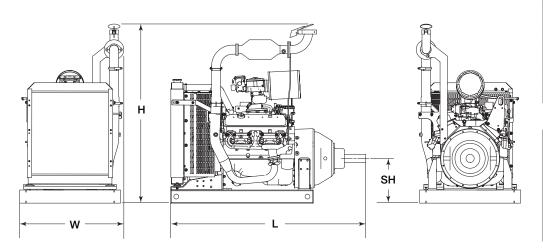


## POWER & TORQUE CURVES





# ARRANGEMENT DRAWING MODEL: TG160 1800 rpm Shaft



DRIVE ASSEMBLY:		
Configuration	Single engine 1800 rpm clutch drive	
Drive Connection	Twin Disc	
Operation	Manual	
Pulley Drive Arrangement	N.A.	
Engine to Drive Shaft Speed rpm	1800	
Bearings	N.A.	
ENGINE SPECIFICATION:		
Manufacturer	GM	
Model	PSI 5.7L NA	
Emissions	EPA and CARB certified	
Max. (Cont.) HP Power 1800 rpm	LPG 102 (89) NG 76 (66)	
Туре	Industrial, four-stroke	
Combustion system	Electronic Spark Ignition	
Aspiration	Naturally Aspirated	
Engine type	Natural Gas and LPG spark ignition	
Fuel NG (LPG)	NG 1050 BTU/FT3 (LPG HD-5)	
Min. NPT Supply Pipe Size NG (LPG) inches	1.25 (0.75)	
Cylinder arrangement	V8	
Displacement in <sup>3</sup> (liters)	350 (5.7)	
Bore and Stroke ins (mm)	4.0 X 3.48 (101.6 X 88.4)	
Cooling	Liquid	
Governor	Electronic	
Starting motor & alternator	12 volt	
Compression ratio	9.4:1	
Air cleaner type	Medium duty dry type	
Exhaust Silencer dBA	TBA	
Max. Exh temp at full load degrees F (C)	1350 (732)	
Max. Exh. Back pressure - ins H2O (kPA)	3 (10.2)	
Fuel Filter	Full flow with water separator	
COOLING SYSTEM FOR OPERATING AT 120°F AMB		
Heat Rejection - btu/min (kcal/sec)	3120 (13.1)	
Radiator Capacity gallons (Liters)	8.1 (7.8)	
ENGINE ELECTRICAL SYSTEM:		
Starting motor voltage	12 volt	
Wet Cell Battery	Lead Acid	
Cold Cranking Amps - minimum	720 amps	
LUBRICATION SYSTEM:		
Oil pan capacity with filter - quarts	5 (4.7)	
Recommended lubricating oil grade	SAE 5W-30	
Oil consumption at full load	< 0.1% of fuel consumption	
Oil pressure – psi (kPA)	250 (121)	

KEY DIMENSIONS AND WEIGHT				
Description	Key	Inches		
Height	Н	92.46		
Length	L	62.88		
Width	W	30		
Shaft Height	SH	40		
Dry Weight Ibs (Kg)		796.7 (362.1)		

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