

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 | 167 (125) | 495 (669) |
| | Continuous | 158 (118) | 445 (602) |
| LPG | Intermittent | 244 (182) | 521 (705) |
| | Continuous | 212 (158) | 469 (634) |

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:

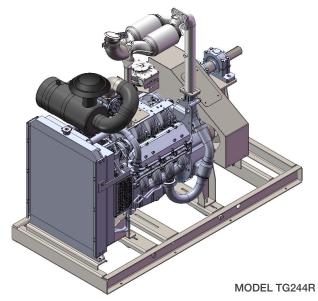
- · Engine power units will accept one-step loading
- · EPA and CARB certified for Agricultural use
- Four (4) point lifting eyes
- Assembled on integral sub-base with fork lift pockets
- · Self contained with mounted exhaust and air-cleaner
- · TPC Controller for engine start and stop
- Low oil pressure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

Engine:

- PSI GM8.8L
- · 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:

- · Single engine 2,700 rpm engine reduction drive system
- Pulley arrangement reduces speed to a constant 1800 rpm
- · Pulley and belt assembly fully enclosed in guard assembly
- · Pedestal drive shaft on robust 2-bearing assembly
- · Ease of connection to 2-bearing generator or pump



Engine Power Unit Arrangement:

- · Belts are tighten using all-thread adjustment
- · Easily removable belt cover lid
- · 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)

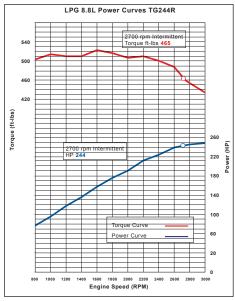
WARRANTY:

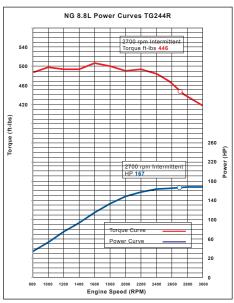
- Engine covered under the original equipment manufacturer's warranty - consult Tradewinds Power Corp for details
- · Complete package supplied with one-year unlimited warranty

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

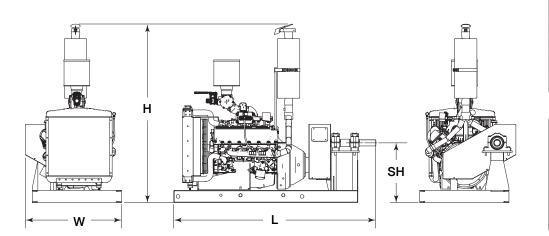


POWER & TORQUE CURVES





ARRANGEMENT DRAWING MODEL: TG244R 1800 rpm Shaft



| Drive Connection Drive Connection Shaft @ 1800 rpm Operation Pulley Drive Arrangement Engine to Drive Shaft Speed rpm Bearings Pedestal drive shaft bearings ENGINE SPECIFICATION: Manufacturer Model PSI 8.8L NA Emissions EPA and CARB certified Max. (Cont.) HP Power 1800 rpm LPG 244 (212) NG 167 (158) Type Industrial, four-stroke Combustion system Aspiration Aspiration Naturally Aspirated Engine type Natural Gas and LPG spark ignition Fuel NG (LPG) Min. NPT Supply Pipe Size NG (LPG) inches Displacement in³ (liters) Bore and Stroke ins (mm) Cooling Governor Shaft @ 1800 rpm Pulley connects two engines Pulley reduction 2700 to 1800 rpm Pulley ready for flexible coupling Pulley connects two engines Pulley ready for flexible coupling Pulley connects two engines Pulley connects two engines Pulley ready for flexible coupling Pulley connects two engines Pulley reduction 2700 to 1800 rpm Pulley connects two engines Pulley reduction 2700 to 1800 rpm Pulley connects two engines Pulle | | | | | |
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| Cooling Liquid | | | | | |
| - | | | | | |
| Governor | | | | | |
| GOVERNO. | | | | | |
| Starting motor & alternator 12 volt | | | | | |
| Compression ratio 10.1:1 | | | | | |
| 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 AMBIENT: | | | | | |
| Heat Rejection - btu/min (kcal/sec) 4184 (17.58) | | | | | |
| Radiator Capacity gallons (Liters) 14.5 (13.7) | | | | | |
| 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 8 (7.57) | | | | | |
| 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 | 69.72 | | |
| Length | L | 81.53 | | |
| Width | W | 38.79 | | |
| Shaft Height | SH | 24.13 | | |
| Dry Weight Ibs (Kg) | | 1203 (547) | | |

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