



CATERPILLAR

INDUSTRIAL ENGINE

3412

410-750 hp

Features

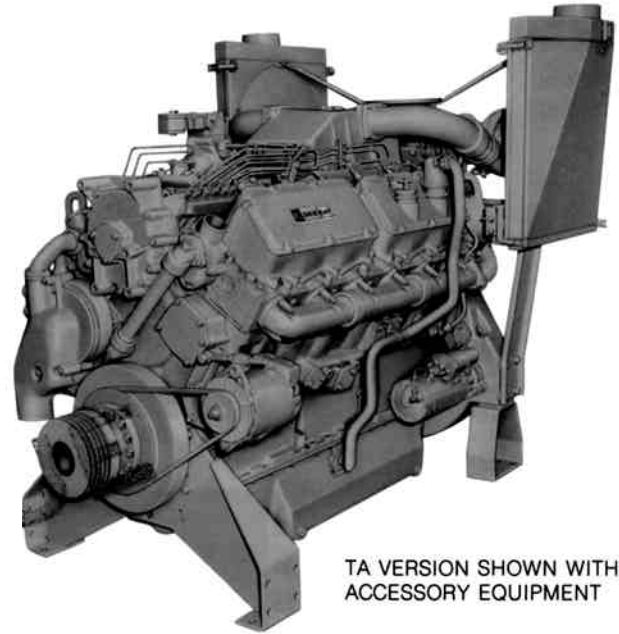
- **Fuel Economy** — consistent performance . . . variable-timed fuel injection . . . broad rpm turbocharger match . . . excellent fuel economy over entire operating range
- **Reliability and Diesel Durability** — diesel tough components . . . precise balance and conservative speed for smooth operation and long engine life
- **Flexible Application Range** — high torque rise . . . big displacement . . . fast response . . . ease of installation . . . broad range of optional equipment for specific needs

Standard Equipment

- **Air Intake**
service indicator, dry air cleaner
- **Cooling**
lubricating oil cooler, gear-driven water pump, thermostats
- **Exhaust**
dry manifold, 8" dry elbow
- **Flywheel and Housing, SAE #0**
- **Fuel**
priming and transfer pumps, filter
- **Governor, hydra-mechanical**
- **Instruments and Gauges**
fuel pressure, lubricating oil pressure, water temperature gauges, service meter

Accessory Equipment

- **Air Intake**
dry air cleaners, precleaners, air cleaner rain cap
- **Cooling**
dry-charge conditioners, heat exchangers, auxiliary pumps, radiators, fans, expansion tanks
- **Exhaust**
flexible fitting, 8" elbow, muffler
- **Instruments and Gauges**
tachometer, premium panel, ammeter
- **Power Takeoffs**
auxiliary drives, hydraulic pump drives, air compressors, flywheels and front stub shafts, enclosed clutches
- **Protection Devices**
alarm switches, electro-mechanical shutoffs, manual shutoff
- **Starting**
air, electric, starting aids



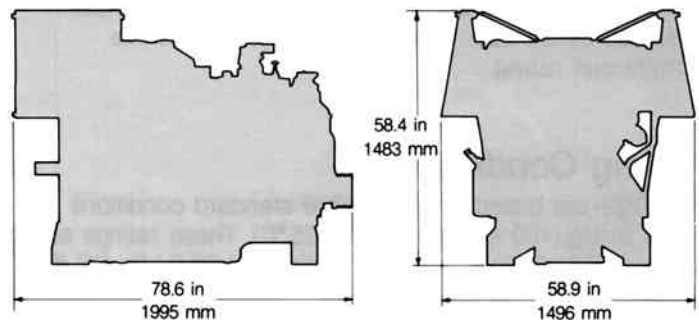
TA VERSION SHOWN WITH ACCESSORY EQUIPMENT

Specifications

V12, 4-Stroke-Cycle Diesel

Bore—in (mm)	5.4 (137)
Stroke—in (mm)	6.0 (152)
Displacement—cu in (liter)	1649 (27.0)
Low Idle—rpm	600
Rotation (from flywheel end)	ccw
Capacity for Liquids—U.S. gal (liter)	
Cooling System (engine only)	14.5 (54.9)
Lube Oil System (refill)	18.0 (68.1)
Weight, net dry (approximate)—lb (kg)	
Turbocharged-Aftercooled (TA)	4720 (2141)

Dimensions



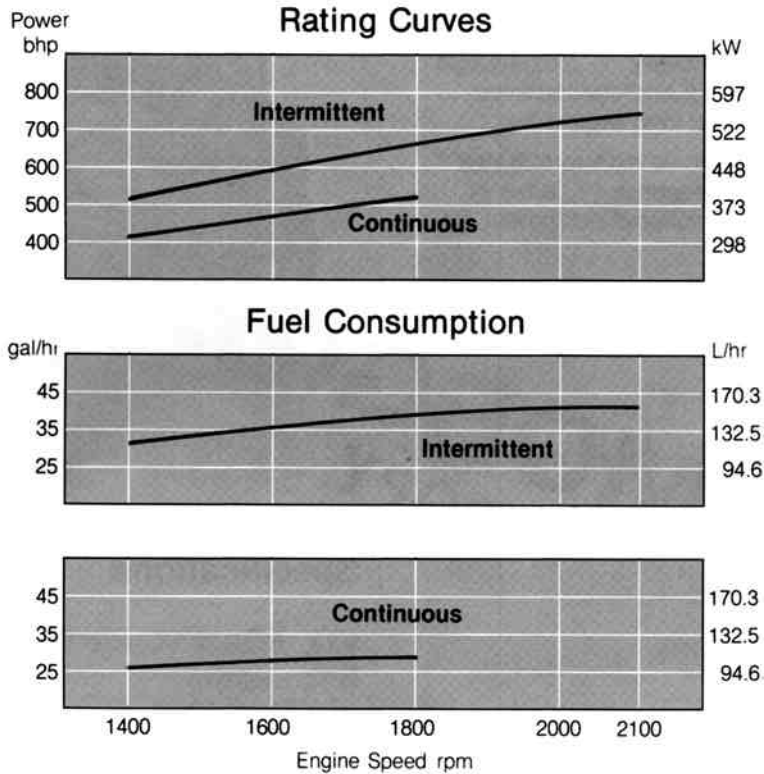
Performance Data

Turbocharged-Aftercooled

Power Ratings

Intermittent
Continuous

750 hp (559 kW) @ 2100 rpm
520 hp (388 kW) @ 1800 rpm



Altitude Capability

Intermittent
Continuous

5,500 ft (1676 m)
9,000 ft (2743 m)

Rating Definitions

Intermittent

Intermittent is the horsepower and speed capability of the engine which can be utilized for about one hour, followed by an hour of operation at or below the continuous rating.

Continuous

Continuous is the horsepower and speed capability of the engine which can be used without interruption or load cycling.

Additional ratings are available for specific customer requirements. Consult your Caterpillar Dealer.

Rating Conditions

Ratings are based on SAE J1349 standard conditions 29.61 in Hg (100 kPa) and 77°F (25°C). These ratings also apply at DIN 6270 standard conditions of 97.8 kPa (28.97 in Hg) and 68°F (20°C).

Fuel Rates are based on power requirements of fuel oil having an HHV of 19,590 Btu/lb (45 570 kJ/kg) and weighing 7.076 lb/U.S. gal (848 g/liter).