

GAS GEN SET ENGINE (F)  
LAFAYETTE, INDIANA

Ship Weight  
lbs

List Price  
At Factory

Product Consist:

### PRICING INFORMATION

These prices are manufacturer suggested resale prices and are subject to change without notice. Shipment will usually be made from source of manufacture, or at factory discretion. Attachment prices are for attachments installed as original equipment unless otherwise specified.

Net price items are subject to no further discounts.

All prices are installed list prices unless otherwise specified.

\*SHIPMENT DATE SPECIFIC PRICING IS BEST FOUND THROUGH THE CSQ QUOTING TOOL\*.

List Price at Factory

### AVAILABILITY

For product availability go to Power Net at <https://engines.cat.com>  
Under the quick links, select Engine Availability Letters.

### GLOSSARY OF TERMS

For product abbreviations go to Power Net at <https://engines.cat.com>  
Under the quick links, select TMI Web. Once in TMI select Abbreviations, listed under TMI Definitions.

### DESIGN TO ORDER (DTO)

Orders requiring special engineering (referred to as DTO) will require additional process time. This time is over and above normal order processing or product availability.

Attachments listed in the price list are NOT interchangeable between sales models or applications. If attachments are required for a particular model or configuration but are not listed as compatible for this model in a specific price list, the order will require a DTO. This is true even when the same attachment or configuration has been ordered in the past.

A DTO will require an application and installation (A & I) marketing quote. For further information contact the Application Support Center.

Requests for special ratings not listed in the Price List should also be sent to the Application Support Center. If the special rating is possible, it may also require a DTO and could require additional processing time if the appropriate details have not yet been established.

Please keep this information in mind when discussing or quoting approximate availability to your customers.

DTO quotes are typically valid for six (6) months. If the quote expires, regardless if it has been ordered or not, a new DTO quote will be required before an order can be placed.

### DEALER SPECIFIC PRICING TERMS

To obtain the latest specific conditions from Caterpillar to

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## DEALER SPECIFIC PRICING TERMS (CONT.)

individual Cat dealers please use Engine Order Management Process (EOMP) quoting and order tools like ISA or PSQ. For questions or special requests, please contact your Caterpillar representative.

## TECHNICAL PERFORMANCE DATA

Technical performance data and Engine rating information is available in Power Net at <https://engines.cat.com>. Under the quick links, select TMI Web. Once in TMI select TMI Performance Definitions.

To request dealer specific authorization, please follow links to Engine Order Management Process (EOMP) at Caterpillar Power Net (<https://engines.cat.com>). CWS logon id is needed to access Power Net.

## RATINGS GUIDE

The EPG Ratings Guide may be ordered through Media Logistics by calling +1 (800) 566-7782 or +1 (309) 266-0942. The current EPG Ratings Guide media number for Cat Generator Sets is LEXE7582 or LEXE7581 for Olympian Generator Sets.

Current EPG ratings are also available by accessing the Electronic Media Center at <https://emc.cat.com> and on Power Net at <https://engines.cat.com>, select Electric Power then select References/Sales Tools.

## AIR INLET SYSTEM

Air cleaner, intermediate duty, with service indicator.

## CONTROL SYSTEM

Governor, Woodward 2301A Speed Control, EG3P Actuator.  
- 2301A installed in EMCP II+ control panel if ordered. Shipped loose if no panel is ordered.

## COOLING SYSTEM

Thermostats and housing, full open temperature 98 C (208 F).  
Jacket water pump, gear driven, centrifugal, non-self-priming.  
Aftercooler water pump, gear driven, centrifugal, non-self-priming (TA only).  
Aftercooler thermostats & housing, full open temperature 35 C (95 F).

## EXHAUST SYSTEM

Exhaust manifolds, watercooled

## FLYWHEELS & FLYWHEEL HOUSINGS

Flywheel, SAE No. 00  
Flywheel housing, SAE No. 00  
SAE standard rotation

## FUEL SYSTEM

Gas pressure regulator  
- Requires 172.4 - 206.8 kPa (25 - 30 psi) gas.  
Natural gas carburetor  
Fuel filter is required but not provided as standard:  
Customer may provide or see Optional Fuel Filters.  
Fuel system is sized for 31.5 to 47.2 MJ/Nm<sup>3</sup> (800 to 1200 btu/scf).

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**IGNITION SYSTEM**

Caterpillar Ignition System (controlled by ADEM A4)  
(includes detonation sensitive timing)

**INSTRUMENTATION**

Instrument panel, RH, 12 hole:  
- Oil pressure.  
- Water temperature.  
- Oil pressure differential.  
- Intake manifold temperature (TA only).  
- Service meter.

**LUBE SYSTEM**

Crankcase breather, top mounted  
Oil cooler  
Oil filter, RH  
Oil bypass filter (shipped loose)  
Shallow oil pan

**MOUNTING SYSTEM**

Rails, engine mounting, 330 mm (13 in), industrial-type

**POWER TAKE-OFFS**

Front housing, two-sided.

**PROTECTION SYSTEM**

EMCP II+ is an option (see description under mandatory attachments).  
Gas valve 50.8 mm (2 in) pipe size installed. Energized to run.  
If customer chooses the "No Panel" mandatory attachment, he must provide protection and safety shutdowns plus controls for starting, stopping, and control of the energized-to-run shutoff valve.  
- Low oil pressure, low idle 69 kPa (10 psi): high idle 207 kPa (30 psi).  
- High coolant temperature 99 C (211 F).  
- Overspeed.  
- Emergency stop push-button.  
- Detonation.  
- Gas valve 50.8 mm (2 in) pipe size. Energized to run.  
- Start, run, stop switch.

**GENERAL**

Paint, Caterpillar Yellow  
Vibration damper and guard  
Lifting eyes

Note: "Stationary Use Only Label": Effective January 2004, the US EPA Nonroad Mobile SI rule restricts the use of SI gas engines in the United States. Caterpillar's gas engines are not certified for mobile applications within the US and are to be used in "stationary use only" applications. All gas engines will have this label attached regardless of the dealer placing the order.

Note: Torsional analysis is recommended if other than a Caterpillar generator is used.

# G3516AEPL

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GAS GEN SET ENGINE (F)  
LAFAYETTE, INDIANA

Ship Weight  
lbs

List Price  
At Factory

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**60 HERTZ, 1200 RPM, 3 PHASE, 480 VOLT.**

# G3516AEPL

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GAS GEN SET ENGINE (F) LAFAYETTE, INDIANA		Ship Weight lbs	List Price At Factory
F	516GE5I <b>G3516 TA GEN SET ENGINE</b> ..... 0 Continuous rating w/o fan. TECHNICAL:9:1 compression ratio; 1200 rpm.		<b>\$440,803</b>

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GAS GEN SET LOW EMISSION ENGINE (L)  
LAFAYETTE, INDIANA

Ship Weight  
lbs

List Price  
At Factory

Product Consist:

### AIR INLET SYSTEM

Air cleaner, intermediate duty, with service indicator.

### CONTROL SYSTEM

Governor, Woodward 2301A Speed Control, EG3P Actuator  
- 2301A installed in EMCP II+ control panel if ordered (shipped loose if no panel is ordered).  
- Idle air bleed circuit.

### COOLING SYSTEM

Thermostats and housing, full open temperature 98 C (208 F).  
Jacket water pump, gear driven, centrifugal, non-self-priming.  
Aftercooler water pump, gear driven, centrifugal, non-self-priming.  
Aftercooler thermostats & housing, full open temperature 35 C (95 F).

### EXHAUST SYSTEM

Exhaust manifolds, watercooled

### FLYWHEELS & FLYWHEEL HOUSINGS

Flywheel, SAE No. 00  
Flywheel housing, SAE No. 00  
SAE standard rotation

### FUEL SYSTEM

Gas pressure regulator  
Requires 206.8 - 275.8 kPa (30 - 40 psi) gas (11:1 c/r).  
Requires 241.3 - 275.8 kPa (35 - 40 psi) gas (8:1 c/r).  
Natural gas carburetor  
Fuel filter is required but not provided as standard:  
Customer may provide or see Optional Fuel Filters.  
Fuel system is sized for 31.5 to 47.2 MJ/Nm<sup>3</sup> (800 to 1200 btu/scf).

### IGNITION SYSTEM

Caterpillar Ignition System (controlled by ADEM A4)  
(includes detonation sensitive timing).

### INSTRUMENTATION

Instrument panel, RH, 12 hole:  
- Oil pressure.  
- Water temperature.  
- Oil pressure differential.  
- Intake manifold temperature.  
- Service meter.  
- Exhaust pyrometer and thermocouples (individual exhaust ports and right and left bank exhaust stacks).  
- Intake manifold pressure gauge.

### LUBE SYSTEM

Crankcase breather, top mounted  
Oil cooler  
Oil filter, RH  
Shallow oil pan

### MOUNTING SYSTEM

Rails, engine mounting, 330 mm (13 in), industrial-type

GAS GEN SET LOW EMISSION ENGINE (L)  
LAFAYETTE, INDIANA

Ship Weight  
lbs

List Price  
At Factory

**PROTECTION SYSTEM**

EMCP II + is an option (see description under mandatory attachments).

If customer chooses the "No Panel" mandatory attachment, he must provide protection and safety shutdowns, plus controls for starting, stopping; and control of the energized-to-run gas shutoff valve.

Gas valve 50.8 mm (2 in) pipe size. Energized to run.

Start, run, stop switch.

**GENERAL**

Paint, Caterpillar Yellow

Vibration damper and guard

Lifting eyes

Note: "Stationary Use Only Label": Effective January 2004, the US EPA Nonroad Mobile SI rule restricts the use of SI gas engines in the United States. Caterpillar's Gas Engines are not certified for mobile applications within the US and are to be used in "stationary use only" applications. All gas engines will have this label attached regardless of the dealer placing the order.

Note: Torsional analysis is recommended if other than a Caterpillar generator is used.

GAS GEN SET LOW EMISSION ENGINE (L) LAFAYETTE, INDIANA	Ship Weight lbs	List Price At Factory
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**60 HERTZ, 1200 RPM, 3 PHASE, 480 VOLT**

<b>L</b>	<b>516GE5K</b>	<b>G3516 LE GEN SET ENGINE</b> ..... 0 Continuous rating w/o fan. TECHNICAL:11:1 compression ratio; 1200 rpm. FOR USE WITH: Pipeline natural gas.	<b>\$464,417</b>
<b>L</b>	<b>516GE5J</b>	<b>G3516 GEN SET ENGINE</b> ..... 0 Continuous rating w/o fan. TECHNICAL:8:1 compression ratio; 1200 rpm. FOR USE WITH: Pipeline natural gas or propane with optional equipment.	<b>\$464,417</b>

**50 HERTZ, 1500 RPM, 3 PHASE, 400 VOLT**

<b>L</b>	<b>516GE5L</b>	<b>G3516 LE GEN SET ENGINE</b> ..... 0 Continuous rating w/o fan. TECHNICAL:8:1 compression ratio; 1500 rpm. ONLY FOR USE WITH: Pipeline natural gas or propane with optional equipment.	<b>\$490,742</b>
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GAS GEN SET LOW EMISSION, LOW ENERGY FUEL GAS ENG (N)  
LAFAYETTE, INDIANA

Ship Weight  
lbs

List Price  
At Factory

Product Consist:

### **AIR INLET SYSTEM**

Air cleaner, intermediate duty, with service indicator.

### **CONTROL SYSTEM**

Governor; Woodward 2301a Speed Control, EG3P Actuator  
- 2301A installed in EMCP II+ control panel if ordered. Shipped loose if no panel is ordered.  
- Idle air bleed.

### **COOLING SYSTEM**

Thermostats (high temperature) and housing, full open temperature 110C (127F).  
Jacket water pump (high temperature seal), gear driven, centrifugal, non-self-priming.  
Aftercooler water pump, gear driven, centrifugal, non-self-priming.  
Aftercooler thermostats & housing, full open temperature 66 C (151 F).  
Oil cooler thermostatic control to maintain 93 C (200 F) minimum oil temperature.

### **EXHAUST SYSTEM**

Exhaust manifolds, watercooled  
Exhaust & intake valves & guides, corrosion resistant

### **FLYWHEELS & FLYWHEEL HOUSINGS**

Flywheel, SAE No. 00  
Flywheel housing, SAE No. 00  
SAE standard rotation

### **FUEL SYSTEM**

Gas pressure regulator  
Requires 10.3 - 34.5 kPa (1.5 - 5 psi) gas.  
Fuel filter is required but not provided as standard:  
Customer to provide.

### **IGNITION SYSTEM**

Caterpillar Ignition System (controlled by ADEM A4)  
(includes detonation sensitive timing).

### **INSTRUMENTATION**

Instrument panel, RH, 12 hole:  
- Oil pressure.  
- Oil temperature.  
- Jacket water pressure.  
- Water temperature.  
- Oil pressure differential.  
- Intake manifold temperature.  
- Service meter.  
- Exhaust pyrometer and thermocouples (individual exhaust ports and right and left bank exhaust stacks).  
- Intake manifold pressure gauge.

### **LUBE SYSTEM**

Crankcase ventilation system breathers (power vent blower required).  
Oil filter, RH.  
Shallow oil pan.

GAS GEN SET LOW EMISSION, LOW ENERGY FUEL GAS ENG (N)  
LAFAYETTE, INDIANA

Ship Weight  
lbs

List Price  
At Factory

## LUBE SYSTEM (CONT.)

Lubricating oil cooler, separate circuit, thermostatically controlled oil temperature.

## MOUNTING SYSTEM

Rails, engine mounting, 330 mm (13 in), industrial-type

## POWER TAKE-OFFS

Front housing, two-sided.

## PROTECTION SYSTEM

EMCP II+ is an option (see description under mandatory attachments). If customer chooses the "No Panel" mandatory attachment, he must provide protection and safety shutdowns plus controls for starting, stopping, and control of the energized forum gas shutoff valve.

Gas valve 50.8 mm (2 in) pipe size installed. Energized to run.

Shipped loose for remote mounting. 20 ft. wiring harness.

- Low oil pressure, low idle 69 kPa (10 psi); high idle 207 kPa (30 psi).
- High coolant temperature 124 C (255 F).
- High oil temperature 102 C (215 F).
- High intake air temperature alarm 71 C (160 F).
- Overspeed.
- Emergency stop push-button.
- Jacket water pressure.
- Detonation.
- Gas valve 50.8 mm (2 in) pipe size. Energized to run.
- Start, run, stop switch.

## GENERAL

Paint, Caterpillar Yellow

Vibration damper and guard

Lifting eyes

Note: "Stationary Use Only Label": Effective January 2004, the US EPA Nonroad Mobile SI rule restricts the use of SI gas engines in the United States. Caterpillar's Gas Engines are not certified for mobile applications within the US and are to be used in "stationary use only" applications. All gas engines will have this label attached regardless of the dealer placing the order.

Note: Torsional analysis is recommended if other than a Caterpillar generator is used.

# G3516AEPL

GAS GEN SET LOW EMISSION, LOW ENERGY FUEL GAS ENG (N)  
LAFAYETTE, INDIANA

Ship Weight  
lbs

List Price  
At Factory

**60 HERTZ, 1200 RPM, 3 PHASE, 480 VOLT**

N	516GE5M	<b>G3516 LE GEN SET ENGINE</b> . . . . . 0 Continuous rating without fan. Includes corrosion resistant aftercooler core. TECHNICAL:11:1 compression ratio; 1200 rpm. ONLY FOR USE WITH: 16.5-23.6 MJ/Nm <sup>3</sup> gas (420 - 600 Btu/scf)	<b>\$543,905</b>
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USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**GRID CODE COMPLIANCE**

FLN	GDCDNRE	<b>GRID CODE COMPLIANCE NOT REQ . . . . . 0</b> Dynamic grid codes, also known as electrical network codes, provide conditions under which a generator connected to the public electrical grid must meet to help ensure safe, secure operation of the grid. These codes can vary depending on the regional, national, or international grid authority. If you have a project with a specific electrical grid code requirement, and you anticipate quoting Electric Power Gas genset products from the price list of a US source facility, please contact the ASC for assistance. Cat gas genset products are not guaranteed compliant with any specific country's grid code requirements. By working with the ASC, we can evaluate the project requirements and quote products that will meet specific electrical network codes.		NC
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**VOLTAGE INDICATORS**

***Voltage Indicators***

All generator set orders REQUIRE a voltage be specified. Choose the appropriate voltage feature code from the following list based on frequency and generator arrangement being ordered.

***50 Hertz Voltage Indicators.***

L	50H0400	<b>VOLTAGE INDICATOR 400V (WYE) . . . . . 0</b> TECHNICAL: 50 Hz, Wye connection		NC
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***60 Hertz Voltage Indicators***

FLN	60H0480	<b>VOLTAGE INDICATOR 480V (WYE) . . . . . 0</b> TECHNICAL: 60 Hz, Wye connection.		NC
FLN	60H4160	<b>VOLTAGE INDICATOR 4160V (Wye) . . . . . 0</b> TECHNICAL: 60 Hz, Wye connection.		NC

***Special Voltage Indicator***

FLN	VLIND1	<b>VOLTAGE INDICATOR - SPECIAL . . . . . 0</b> TECHNICAL: Non-standard voltage, frequency & connection to be specified in custom quote on order.		NC
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USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**APPLICATION INDICATORS**

*Market Segmentation*

FLN	MSEPGGS	<b>END USE: GENERAL EPG GAS</b> ..... 0 All gaseous fueled, spark ignited generator sets utilized in the generation of electrical power and or combined heat and power applications including cogen, trigen, and quadgen. These gas genset products are applied in, but not limited to commercial, industrial, agricultural, utility, public and civil service sectors. These products are often leveraged in utility applications, food processing plants, landfill sites, agriculture livestock facilities, wastewater treatment plants, biofuel manufacturing plants, communication sites, data centers, commercial/residential buildings, manufacturing plants, greenhouses, and mining sites. These gensets are often applied in base load, load management, and standby applications. This category should not be used for EP Rental, Petroleum, Locomotive, or Marine electric power applications.	0	NC
FLN	MSPMDXQ	<b>END USE:EPG Rental-All Product</b> ..... 0 All Power Modules and Rental units, utilized in energy utilities, communications, commercial and residential buildings, agricultural, construction, mining, manufacturing, public and civil services. This category should not be used for Petroleum, Locomotive, or Marine electric power applications. Please ensure the selected unit complies with regional emission standards.	0	NC
FLN	MSPETDR	<b>PETROLEUM LAND DRILLING</b> ..... 0 Engines, transmissions and packages used to drill oil and gas wells (including auxiliary GEN Sets mounted on drill rigs). This includes Petroleum, Industrial, EPG, and Marine price list products.	0	NC
FLN	MSPETPG	<b>END USE: PETRO PRODUCTION/PUMP</b> ..... 0 All engines utilized in the generation of mechanical and electrical power for exploration, recovery and transmission of petroleum products including gathering, production, pumping, and refining, (but not gas compression or drilling). Applications include camp power, emergency gen sets (non-drilling), prime power at production and storage facilities, cranes, fire pumps, air compressors, primary or secondary recovery systems such as down hole pumps, water flood or disposal systems, etc. This includes rental products which fit Petroleum Production/Pumping market segment description. This includes industrial, marine, and EPG price list products.	0	NC

**Application Indicators - select one.**

Provides power setting and name plate for use in specified applications.

FLN	CONTINU	<b>CONTINUOUS POWER APPLICATION</b> ..... 0 For application at continuous rating.	0	NC
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**ENGINE RATING AND SPEED**

**RATINGS**

Select one of the following ratings.

FLN	PSTSPC1	<b>SPECIAL SETTING REQUEST</b> ..... 0 REQUIRES: Approved Special Rating Request (SRR) before order is submitted.	0	NC
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USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**ENGINE RATING AND SPEED (CONT.)**

***RATINGS (Cont.)***

L	KMM1030	1030 EKW W/O FAN (32C) .....	0	NC
L	KWW0975	975 EKW W/O FAN (54C) .....	0	NC
L	KMM0870	870 EKW W/O FAN (54C/130F) .....	0	NC
N	KMM0800	800 EKW W/O FAN (54C/130F) .....	0	NC
L	KWW0800	800 EKW W/O FAN (32C/90F) .....	0	NC
F	KWM0770	770 EKW W/O FAN (32C) .....	0	NC
L	KWW0770	770 EKW W/O FAN (54C/130F) .....	0	NC
L	KMM0765	765 EKW W/O FAN (54C/130F) .....	0	NC
F	KWW0750	750 EKW W/O FAN (54C/130F) .....	0	NC
F	KWW0740	740 EKW W/O FAN (54C/130F) .....	0	NC

**MANDATORY ATTACHMENTS**

***EMISSIONS LEVEL***

Select One.

NL	EMISS03	STANDARD LOW EMISSIONS - 50 Hz .....	0	NC
FL	EMISS08	STOCHIOMETRIC EMISSIONS.....	0	NC

***AFTERCOOLER TEMPERATURE***

Select One.

FL	ACTEMP1	32C/90F SINGLE STAGE .....	0	NC
F	ACTEMP2	43C/110F SINGLE STAGE .....	0	NC
FLN	TSTAT38	THERMOSTATIC VALVE (54 DEG C) .....	0	NC

***COMPRESSION RATIO***

Select One.

L	COMRA01	8:1 COMPRESSION RATIO .....	0	NC
LN	COMRA09	11:1 COMPRESSION RATIO.....	0	NC
F	COMRA08	9:1 COMPRESSION RATIO .....	0	NC

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**MANDATORY ATTACHMENTS (CONT.)**

**CONTROL PANELS**

Panel will be mounted rear facing, on generator terminal box.

***Electronic Modular Control Panel II Plus Option***

FLN	EMCPLS2	<p><b>ELECT. MODULAR CONT. PANEL II+ . . . . . 0</b></p> <p>Technical:                      EMCP II+ control panel including:                      24-volt DC control.                      NEMA 12, IP44 dust-proof enclosure.                      Lockable hinged door.                      Generator terminal box.                      Mounted (rear facing) - LV &amp; MV.                      Single location customer connection.                      Panel illuminating lights.                      Auto start/stop control switch.                      Purge cycle and staged shutdown.                      Digital indication for:                      - RPM.                      - Operating hours.                      - Oil pressure.                      - Coolant temperature.                      - DC Volts.                      - L-L Volts, L-N Volts, Phase, Amps, Hz.                      - ekW, kVa, kVAR, kWhr, % kW, PF.                      - Oil temperature.                      Shutdowns with indicating lights for:                      - Low oil pressure.                      - High coolant temperature.                      - Overspeed.                      - Emergency stop.                      - Failure to start (overcrank).                      - Low coolant level (customer must connect).                      - Oil temperature.                      - Programmable protective relaying functions.                      - Under and over voltage.                      - Under and over frequency.                      - Reverse power.                      - Over current (phase and total).                      - 3 spare indicating LED's (programmable).                      - 4 spare alarm/shutdown inputs.</p>	0	\$13,390
FLN	NOPANEL	<p><b>NO PANEL PROVIDED . . . . . 0</b></p> <p>Customer must provide start/stop logic, control of gas shutoff valve and shutoff protection as follows:                      - Low oil pressure, low idle 69 kPa (10 psi): high idle 207 kPa.                      - (30 psi).                      - High coolant temperature 99 C (211 F).                      - Overspeed.                      - Emergency stop push-button.                      - Detonation.</p>	0	NC

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**MANDATORY ATTACHMENTS (CONT.)**

***Control Panel Digital Display***

Required with EMCPLS2.

FLN	EMCENGU	<b>ENGLISH DISPLAY UNITS</b> . . . . . 0		<b>NC</b>
		Used on control panel digital display for engine oil pressure and coolant temperature. TECHNICAL: psi/degrees F.		
FLN	EMCMETU	<b>METRIC DISPLAY UNITS</b> . . . . . 0		<b>NC</b>
		Used on control panel digital display for engine oil pressure and coolant temperature. TECHNICAL: kPa/degrees C.		

***FUEL TYPE***

Select One.

FLN	NGASFUE	<b>NATURAL GAS FUEL</b> . . . . . 0		<b>NC</b>
FL	PROPFUE	<b>PROPANE FUEL</b> . . . . . 0		<b>NC</b>
FL	FIELDGS	<b>FIELD GAS</b> . . . . . 0		<b>NC</b>
N	DIGESLF	<b>DIGESTER-LANDFILL FUEL</b> . . . . . 0		<b>NC</b>

**EUROPEAN CERTIFICATIONS**

***European Union Certifications***

FLN	EUDGDOI	<b>EUROPEAN DIRECTIVE GENSET DOI</b> . . . . . 0		<b>\$271 NET</b>
		TECHNICAL: Provides Declaration of Incorporation document per 2006/42/EC (Machinery Safety Directive), and 2006/95/EC (Low Voltage Safety Directive). The Declaration of Incorporation allows free movement of goods in the EU per the Machinery Safety Directive, 2006/42/EC, and references demonstrated compliance to other applicable directives. This is required by OEM manufacturers when the subject product is installed in a more complex installation. CANNOT BE USED WITH: ELEPAC1.  NOTE: Not for use with Hazardous Location engines.		
FLN	NOEUCRT	<b>NO EU CERT REQUEST-SEE DETAILS</b> . . . . . 0		<b>NC</b>
		TECHNICAL: If full CE certification (Declaration of Conformity, complete gensets) or Declaration of Incorporation (partially completed gensets) is not selected then this product cannot be legally placed on the market in the EU/EEA or any country where the product would otherwise be subject to national legislation implementing the requirements of the machinery directive (2006/42/EC) (collectively "the Region"). If shipped to an address in the Region without the necessary certification/documentation, the buyer has undertaken that the product will then be exported from the Region.		



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**GENERATORS**

**INSTALLED GENERATORS ARRANGEMENTS FOR GSE**

Brushless SR4 generators installed. Includes generator, flexible plate coupling, 330 mm (13 in) mounting rails and hardware. Ratings shown are generator set electrical output without fan. Specify EkW rating. Power terminal strip INCLUDED on LOW VOLTAGE generators. Power terminal strip NOT INCLUDED on MEDIUM VOLTAGE generators. Must select one.  
 VR6 Voltage Regulator is standard on all SE generators. Caterpillar's Digital Voltage Regulator (CDVR) is standard on all PM generators. CDVR includes KVAR/PF control.

**TA Engine, 50 Hertz, 3 Phase, 1500 RPM**

L	OGNPMQR	GENERATOR 697 FRAME PM . . . . . 0	\$81,551
		RECOMMENDED FOR CONTINUOUS DUTY APPLICATIONS. 1030 EkW at 1500 rpm, 32 C (90 F) SCAC 975 EkW at 1500 rpm, 54 C (130 F) SCAC 870 EkW at 1500 rpm, 54 C (130 F) SCAC TECHNICAL: 400 volt, PM excited, high efficiency, form wound VPI. Six leads. Generator Argt 144-1814 With 115-230 volt, 1200 watt space heater and 100 ohm platinum RTD's.	

**TA Engine, 60 Hertz, 3 Phase, 1200 RPM**

FLN	OGNPMQP	GENERATOR 862 FRAME . . . . . 0	\$91,856
		TECHNICAL: DOES NOT INCLUDE POWER TERMINAL STRIP. 4160 volt, PM excited, form wound VPI. Six leads. Generator Argt= 158-6424. With 115-230 volt, 1200 watt space heater. RECOMMENDED FOR CONTINUOUS DUTY APPLICATIONS. 800 EkW at 1200 rpm, 54 C (130 F) SCAC(K). 770 EkW at 1200 rpm, 54 C (130 F) SCAC(E). 765 EkW at 1200 rpm, 54 C (130 F) SCAC (N). 750 EkW at 1200 rpm, 54 C (130 F) SCAC (K). 740 EkW at 1200 rpm, 54 C (130 F) SCAC (E).	
FLN	OGPM473	GENERATOR 864 FRAME PM . . . . . 0	\$90,297
		TECHNICAL: 480 volt, PM excited, form wound VPI. Six leads. Generator Argt= 158-6416 With 115-230 volt, 1200 watt space heater. add 100 ohm platinum RTD's RECOMMENDED FOR CONTINUOUS DUTY APPLICATIONS. 800 EkW at 1200 rpm, 32 C (90 F) SCAC 770 EkW at 1200 rpm, 32 C (90 F) SCAC 800 EkW at 1200 rpm, 54 C (130 F) SCAC	

USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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## LANGUAGE OPTIONS

### *Language Options - select ONE*

Provides nameplate, decals, and operator's manual in specified language. For other Language Options contact your Marketing Profit center. Additional literature available through Corporate Literature System.

I	LANDANO	LANGUAGE MARKINGS-DANISH . . . . .	0	NC
I	LANDUTO	LANGUAGE MARKINGS-DUTCH . . . . .	0	NC
I	LANENGO	LANGUAGE MARKINGS-ENGLISH . . . . .	0	NC
I	LANFREO	LANGUAGE MARKINGS-FRENCH . . . . .	0	NC
I	LANGERO	LANGUAGE MARKINGS-GERMAN . . . . .	0	NC
I	LANITAO	LANGUAGE MARKINGS-ITALIAN . . . . .	0	NC
I	LANPORO	LANGUAGE MARKINGS-PORTUGUESE . . . . .	0	NC
1	LANSPAO	LANGUAGE MARKINGS-SPANISH . . . . .	0	NC

## LUBE SYSTEM

### *Lubricating Oil*

FLN	LUBOILU	LUBRICATING OIL - ULTRA . . . . . TECHNICAL: Cat NCEO, ULTRA 40 Wt, 416 L (110 gal).	0	\$2,359
FNL	NOLUB01	NO LUBRICATING OIL DESIRED . . . . . TECHNICAL: Engine shipped dry.	0	NC

### *Electric Prelube Pumps - AC*

Continuous duty. Reference wiring diagram 113-7313.

FLN	ELEPAC1	ELECTRIC PRELUBE PUMP-60 HZ. . . . . TECHNICAL: Requires 115-230 VAC 60 Hz power source. REQUIRES: TA engine and oil bypass filter removal or LE engine.	0	\$3,825
FL	ELEPAC2	ELECTRIC PRELUBE PUMP-50 HZ. . . . . TECHNICAL: Requires 115-230 VAC 50 Hz power source. REQUIRES: TA engine and oil bypass filter removal or LE engine.	0	\$3,825

### *Electric Prelube Pumps - DC*

Intermittent duty. Includes pump and j-box with pressure switch, start switch, and relay. Wiring and PLC must be provided by customer.

FLN	ELEPP28	ELECT PRELUBE PUMP 24V/3500B . . . . . REQUIRES: 24V DC power source and Deep Sump Oil pan OPTDS01	0	\$3,384
FLN	ELEPP29	ELECT PRELUBE PUMP 24V/3500B . . . . . REQUIRES: 24V DC power source CANNOT BE USED WITH: Deep Sump Oil pan OPTDS01	0	\$3,384

USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**LUBE SYSTEM (CONT.)**

*Manual Prelube Pump*

FLN	OPAPLC9	PRELUBE CONVERSION-RH. . . . . 0 Allows sump pump to function as manual prelube pump. REQUIRES: RH Sump Pump SPMPRH1. CANNOT BE USED WITH: Electric prelube pump.		\$463
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*No Prelube Pump*

FLN	NOPLUBE	NO PRELUBE DESIRED. . . . . 0 Provides crankcase cover and other components that are needed when prelube is not desired.		\$31
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**PROTECTION SYSTEM**

*Crankcase Covers / Explosion Relief Valves*

FLN	EXRVL13	EXPLOSION RELIEF VALVE. . . . . 0 TECHNICAL: Requires 7 kpa (1.0 psi) per valve to open. Provides three pressure relief valves for crankcase protection. REQUIRES: Standard oil pan.		\$1,442
FLN	EXRVL14	EXPLOSION RELIEF VALVE. . . . . 0 TECHNICAL: Requires 7 kpa (1.0 psi) per valve to open. Provides TECHNICAL: four pressure relief valves for crankcase protection. REQUIRES: Deep Sump Oil Pan OPTDS01.		\$1,670
FLN	CVR0049	CRANKCASE COVERS. . . . . 0 Provides crankcase covers, no explosion relief valve cover are provided.		\$435

**MANDATORY OPTIONS**

*Mandatory Options - NSPS Emission Rule*

US EPA SI (Spark Ignited) Stationary NSPS (New Source Performance Standard) Regulations:  
Effective July 2007, the US EPA will enforce the new Spark Ignited New Source Performance Standard (SI NSPS) for gas stationary engines operating in the United States equal to or above 500 bhp. Effective Jan 1 2008, this standard will apply to all gas engines rated below 500 bhp. This rule will affect all applications including landfill and ag bio-gas. Effective Jan 1 2009, this rule will apply to all Standby units. For more information, see Cat Power Net website--Product News dated April 2007, Media No. LEXE7149.

FLN	NSPSNUS	NON-U.S. GENSET. . . . . 0 Application-gas generator sets used outside of the United States of America. The SI NSPS rule does not apply.		NC
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USE	REF NO.	<b>MANDATORY ATTACHMENTS</b>	Ship Weight lbs	List Price At Factory
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**MANDATORY OPTIONS (CONT.)**

*Mandatory Options - NSPS Emission Rule (Cont.)*

F	<b>NSPSCOM</b>	<b>U.S. NSPS COMPLIANT . . . . . 0</b> Application - gas generator sets to be used in continuous power applications in the United States (all gasses including digester, landfill and ag bio-gas).  These gas products are not certified, but can be made field compliant through on-site emissions testing. It is the customer's responsibility to coordinate and complete site emissions testing and submit for an EPA certificate of compliance. Some products may require an air/fuel ratio-control and a 3-way catalyst (note: For rich burn products the catalyst rating must be used). Some low emission products might need an oxidation catalyst to meet CO2 or NMHC limits (note: Catalysts cannot be used with corrosive fuels such as digester, landfill and ag bio-gas). REQUIRES: 9:1 Compression Ratio Engine.	0	<b>NC</b>
LN	<b>NONNSPS</b>	<b>NSPS NON-COMPLIANT ENG . . . . . 0</b> Application--gas generator sets to be used in continuous power applications in the United States (all gasses including digester, landfill and ag bio-gas).  Even after extensive modifications these gensets are not expected to meet the SI NSPS customer conducted field emissions test. Examples are the G3300 and G3400 ratings. Nearly all these rich burn ratings have 24% excess oxygen in the exhaust. To use a 3-way catalyst the excess oxygen must be near 0%, or ratings must be labeled as "Cat" or "Catalyst" ratings. The G3500 LE products have a nominal 2 g/bhp hr Nox setting. NSPS requires a not-to-exceed 2 g/bhp-hr limit. Possible lower Nox settings are available for G3500 LE products through an SRR (Special Rating Request). REQUIRES: NON 9:1 Compression Ratio Engine.	0	<b>NC</b>

**EXTENDED SERVICE COVERAGE**

New procedures must be followed to purchase ESC with the gen sets offered in this price list. The new procedures are:

Complete the ESC Special Quote Request Form found at [dealer.cat.com/EPESC](http://dealer.cat.com/EPESC). Please submit the completed form to [engineesc@cat.com](mailto:engineesc@cat.com).

Contact [engineesc@cat.com](mailto:engineesc@cat.com) if you have any questions.

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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## AIR INLET SYSTEM

### *Remote Air Inlet Adapters*

Shipped loose. For remote air inlets.

FLN	AIARM04	<b>AIR INLET ADAPTER-RECTANGULAR</b> . . . . . 0 TECHNICAL: Rectangular (See TMI for installation). REQUIRES: TA engine.		<b>\$738</b>
FLN	AIARM05	<b>AIR INLET ADAPTER-ROUND</b> . . . . . 0 TECHNICAL: 305 mm (12 in) round outside diameter inlet. REQUIRES: TA engine.		<b>\$545</b>

## CHARGING SYSTEM

### *Battery Chargers - Shipped loose.*

24-VDC output for use with lead acid or nicad batteries.  
 Current limiting...need for crank disconnect relay. Not warranted or serviced by Caterpillar Inc.

FLN	BTC1032	<b>BATTERY CHARGER 10 AMP</b> . . . . . 0 Includes high voltage, low voltage and AC failure alarm outputs, DC Ameter and Voltmeter. Meets requirements of NFPA 99 and NFPA 110. TECHNICAL: For 120-208-240 VAC input. Regulated. 2-rate charging with automatic switching from equalize to float.		<b>\$1,171</b>
FLN	BTC20A2	<b>BATTERY CHARGER 20 AMP</b> . . . . . 0 Includes high voltage, low voltage and AC failure alarm outputs. DC Ameter and Voltmeter, NEMA 1 enclosure. TECHNICAL: For 120-208-240 VAC input. 50/60 Hz. Regulated. Meets requirements for NFPA 99 and NFPA 110. UL 1564 and CSA C22.2 No. 107 listed 2-rate charging with automatic switching from equalize to float.		<b>\$1,486</b>

### *Charging Alternators*

Belt driven. Heavy duty with integral regulator.

FLN	ALT2469	<b>CHARGING ALTERNATOR 24V 35 AMP</b> . . . . . 0 TECHNICAL: RH mounted. Includes voltmeter.		<b>\$1,144</b>
FLN	ALT2471	<b>CHARGING ALTERNATOR 24V 60 AMP</b> . . . . . 0 TECHNICAL: RH mounted. Includes voltmeter.		<b>\$1,262</b>

## CONTROL SYSTEM

### *2301A Load Sharing governor*

FLN	GOVLS15	<b>2301A LOAD SHARING GOVERNOR</b> . . . . . 0 TECHNICAL: Shipped loose. Woodward 2301A speed controller. Removes standard 2301A governor. REQUIRES: Electronic Modular Control Panel EMCPLS2.		<b>NC</b>
FLN	GOVLS16	<b>2301A LOAD SHARING GOVERNOR</b> . . . . . 0 TECHNICAL: Shipped loose. Woodward 2301A speed controller. Removes standard 2301A governor. REQUIRES: No Panel option NOPANEL.		<b>\$290</b>

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**CONTROL SYSTEM (CONT.)**

**2301E Governor**

Shipped loose.

FLN	GOVDG07	<b>2301E DUAL GAIN GOVERNOR</b> . . . . . 0 Shipped loose. Removes standard 2301A speed control governor. TECHNICAL: Recommended when auto paralleling and tied to utility grid. REQUIRES: No Panel option NOPANEL.		\$3,779
FLN	GOVDG08	<b>2301E DUAL GAIN GOVERNOR</b> . . . . . 0 Shipped loose. Removes standard 2301A speed control governor. TECHNICAL: Recommended when auto paralleling and tied to utility grid. REQUIRES: EMCP II+ panel.		\$3,779

**COOLING SYSTEM**

**Aftercooler Core**

FL	CSCA001	<b>CLEANABLE AFTERCOOLER</b> . . . . . 0 Cleanable. For use with treated water. Replaces standard aftercooler core. Includes standard aftercooler water lines, auxiliary pump and thermostatic valve.		\$3,401
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**Connections**

FL	COLMJA0	<b>MECH JOINT ASSEMBLY</b> . . . . . 0 Shipped loose. Mechanical flexible connection for jacket water inlet and outlet. REQUIRES: TWO.		\$169
FL	CLIOC2	<b>INLET/OUTLET CONNECTION/JW</b> . . . . . 0 Flange connections for jacket water inlet and outlet. Outlet moves from LH to RH connection. CANNOT BE USED WITH: 2 or 3 Circuit high temperature cooling or Expansion and overflow tank.		\$112
FL	CLIOC3	<b>INLET CONNECTION/JW</b> . . . . . 0 Flange connection for jacket water pump inlet. CANNOT BE USED WITH: 2 or 3 Circuit high temperature cooling or Expansion and overflow tank.		\$64

**Expansion and overflow tank**

Refer to installation drawing 119-5091 for installed dimensions.

FL	EXPOFT1	<b>EXPANSION AND OVERFLOW TANK</b> . . . . . 0 Provides expansion tank, overflow tank and turbocharger and wastegate vent line. Expansion tank is installed; overflow tank tank and vent lines shipped loose. Includes sight gauge and low water level switch. Overflow tank mounts on top of expansion tank. (See installation drawing for installed height.) TECHNICAL: Maximum system volume external to engine: 341 L (90 gal). Maximum system pressure 7 psi. CANNOT BE USED WITH: 2 or 3 Circuit high temperature cooling.		\$9,800
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**Water level switch gauge**

FL	WTLVLS4	<b>WATER LEVEL SWITCH GAUGE</b> . . . . . 0 REQUIRES: Expansion and overflow tank.		\$212
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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## EXHAUST SYSTEM

### *Flexible Fittings*

Shipped loose. Includes one set hardware and gasket to bolt to engine.

FLN	EXCFF12	<b>FLEXIBLE FITTING/203MM/8IN</b> . . . . . 0 TECHNICAL: 203 mm (8 in) x 305 mm (12 in) long with 8 bolt flanges at both ends. REQUIRES: TA engine.		\$477
FLN	EXCFF11	<b>FLEXIBLE FITTINGS</b> . . . . . 0 TECHNICAL: 305 mm (12 in) x 305 mm (12 in) long with 12 bolt flanges at both ends. REQUIRES: TA engine.		\$806

### *Elbows*

Shipped loose. Weldable, 90 degree bend.

FLN	EXCEL10	<b>ELBOW - 254 MM (10 IN)</b> . . . . . 0 TECHNICAL: 254 mm (10 in) standard schedule short radius elbow. REQUIRES: TA engine. ONLY FOR USE WITH: Flange and exhaust expander EXCFE03 and customer supplied 254 mm (10 in) pipe.		\$720
FLN	EXCEL08	<b>ELBOW - 305 MM (12 IN)</b> . . . . . 0 TECHNICAL: 305 mm (12 in) standard schedule short radius elbow. REQUIRES: TA engine. ONLY FOR USE WITH: Flange and exhaust expander EXCFE02 and customer supplied 305 mm (12 in) pipe.		\$925

### *Flange*

Shipped loose. Weldable.

### *Flange and Exhaust Expanders*

Shipped loose.

FLN	EXCFE03	<b>FLANGE &amp; EXH EXP/203 TO 254MM</b> . . . . . 0 TECHNICAL: 203 to 254 mm (8 to 10 in) expander. Includes gaskets, hardware and 254 mm (10 in) mating flange for welding to customer supplied 254 mm (10 in) pipe. REQUIRES: TA engine.		\$427
FLN	EXCFE02	<b>FLANGE &amp; EXH EXP/203 TO 305MM</b> . . . . . 0 TECHNICAL: 203 to 305 mm (8 to 12 in) expander. Includes gaskets, hardware and 305 mm (12 in) mating flange for welding to customer supplied 305 mm (12 in) pipe. REQUIRES: TA engine.		\$818

### *Mufflers*

Shipped loose.

FLN	MUF0010	<b>MUFFLER/15DBA/254MM/10IN</b> . . . . . 0 TECHNICAL: 15 dBA typical sound reduction. Includes mating flanges for welding to 254 mm (10 in) pipe. REQUIRES: TA engine. ONLY FOR USE WITH: Flange and exhaust expander EXCFE03 and customer supplied 254 mm (10 in) pipe.		\$1,760
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**EXHAUST SYSTEM (CONT.)**

*Mufflers (Cont.)*

FLN	MUF0011	<b>MUFFLER</b> . . . . . 0 TECHNICAL: 18 dBA typical sound reduction. Includes mating mating flanges for welding to 305 mm (12 in) pipe. REQUIRES: TA engine. ONLY FOR USE WITH: Flange and exhaust expander EXCFE02 and customer supplied 305 mm (12 in) pipe.		\$2,528
FLN	MUFSA04	<b>MUFFLER-SPARK/20DBA/10IN</b> . . . . . 0 Spark arresting muffler with 10 in. flat face 150# ANSI flange connections. Does not include mating flanges. TECHNICAL: 20 dBA typical sound reduction. REQUIRES: TA engine.		\$2,229

**FUEL SYSTEM**

Fuel system components are sized to supply fuel to a single generator set. Use of single system components for multiple units may result in inadequate fuel flow. For design and sizing guidelines refer to Gaseous Fuel Systems A&I Guide.

**Low Pressure Gas Conversions**

See dimension drawing 7C-2948.

L	LPGCV02	<b>LOW PRESSURE GAS CONVERSION</b> . . . . . 0 TECHNICAL: Transient load capability: maximum 50 percent first load step, maximum 25 percent successive steps. Constant inlet air temperature required to maintain constant emissions. For applications requiring less than 2.0g/bhp-hr NOx emissions or more than 2000 ft. altitude capability, consult factory. Increases aftercooler heat rejection by approximately 10 percent. REQUIRES: Engine 516GE5J, 516GE5K or 516GE5L. ONLY FOR USE WITH: 10.3-34.5 kPa (1.5-5 psi) natural gas. CANNOT BE USED WITH: Export boxing.		\$10,332
F	LPGCV01	<b>LOW PRESSURE GAS CONV-TA</b> . . . . . 0 TECHNICAL: Transient load capability: maximum 50 percent first load step, maximum 25 percent successive steps. Increases aftercooler heat rejection by approximately 10 percent. REQUIRES: TA Engine. ONLY FOR USE WITH: 10.3-34.5 kPa (1.5-5 psi) natural gas. CANNOT BE USED WITH: Export boxing.		\$10,328

**Propane Gas Valve and Jet Kits**

Shipped loose.

L	CRBVJ04	<b>PROPANE CONVERSION KIT</b> . . . . . 0 REQUIRES: Engine 516G35J run at 1200 rpm. ONLY FOR USE WITH: Propane gas (HD-5). CANNOT BE USED WITH: Low pressure gas conversion.		\$379
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**FUEL SYSTEM (CONT.)**

*Propane Gas Valve and Jet Kits (Cont.)*

L	CRBVJ03	PROPANE CONVERSION KIT . . . . . 0 REQUIRES: Engine 516GE5L. ONLY FOR USE WITH: Propane gas (HD-5). CANNOT BE USED WITH: Low pressure gas conversion.		\$527
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*Fuel Filter*  
Shipped loose.

L	FULFL14	FUEL FILTER. . . . . 0 Remote mounted gas filter for use upstream of engine fuel inlet. Filter selected to provide no greater than 2 kPa (0.3 psi) initial pressure differential with new element for 10.3 kPa (1.5 psi) or greater gas supply at rated flow. Maximum working pressure of 450 kPa (65 psi). Comes with one element designed to filter 1 micron particle size. DN100 (4") flanged filter inlet/outlet connections with taps for pressure gages. Manufactured in accordance with European Pressure Equipment Directive (PED). Shipped loose. ONLY FOR USE WITH: Dry pipeline natural gas and low pressure gas conversion.		\$9,431
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FL	FULFL12	FUEL FILTER. . . . . 0 Remote mounted gas filter for use upstream of engine fuel inlet. Filter selected to provide no greater than 2 kPa (0.3 psi) initial pressure differential with new filter element for 172.4 kPa (25 psi) or greater gas supply at rated flow. Maximum working pressure of 450 kPa (65 psi). Comes with one element designed to filter 1 micron particle size. 2" NPT filter inlet/outlet connections. Manufactured in accordance with European Pressure Equipment Directive (PED). ONLY FOR USE WITH: Dry pipeline natural gas. CANNOT BE USED WITH: Low pressure gas conversion.		\$1,872
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**GENERATOR ATTACHMENTS**

*Bearing Temperature Detectors (RTD)*  
Provides generator rear bearing temperature monitoring capability by having an RTD in the bearing housing. Instrumentation must be provided by the customer.

FLN	RTD0001	BEARING TEMPERATURE RTD. . . . . 0 TECHNICAL: Platinum RTD (100 ohm). REQUIRES: OGNPMQR		\$430
FLN	RTD0003	BEARING TEMPERATURE RTD. . . . . 0 TECHNICAL: Two Bearing Platinum RTD (100 ohm). REQUIRES: OGNPMQP or OGPM473		\$808
FLN	SHREL01	SPACE HEATER RELAY . . . . . 0 TECHNICAL: Disconnects space heaters when generator set is running. Customer must supply 115-230 volts power to relay. REQUIRES: EMCP II+ panel.		\$74

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**GENERATOR ATTACHMENTS (CONT.)**

**Manual Voltage Controls**

Provides manual regulation of generators. Shipped loose for remote mounting.

FLN	MVC0003	<b>MANUAL VOLTAGE CONTROL</b> . . . . . 0 ONLY FOR USE WITH: Permanent magnet excited generator. CANNOT BE USED WITH: 3300 or 4160 volt generator.		\$741
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**INSTRUMENTATION**

**Attachments to Electronic Modular Control Panel II**

FLN	EMCDV01	<b>DUAL VOLTAGE CAPABILITY</b> . . . . . 0 Control panel to be set to operate at 400 or 480 volts and the ammeter CTs and setting as if it were set to 200 or 240 volts. Generator set may be shipped with leads connected for 400 or 480 volts. May be used for 50 or 60 hertz. REQUIRES: EMCP II+ panel.		NC
FLN	EMCDP01	<b>DUST-PROOF ENCLOSURE.</b> . . . . . 0 Meets the intent of NEMA 12 and IP44. REQUIRES: EMCP II+ panel.		\$101

**Alarm Module**

Shipped loose.

FLN	EMCAM01	<b>ALARM MODULE.</b> . . . . . 0 Provides flashing LEDs and horn to annunciate high coolant temperature alarm, low DC volts alarm, plus the following which require customer-provided switches: low oil level alarm, low coolant level alarm, and one spare LED.		\$979
FLN	EMCSM01	<b>SYNCHRONIZING MODULE.</b> . . . . . 0 Includes lights only, for parallel operation. REQUIRES: EMCP II+ panel. CANNOT BE USED WITH: Alarm modules.		\$626
FLN	EMCSM02	<b>SYNCHRONIZING MODULE.</b> . . . . . 0 Includes lights and reverse power relay. REQUIRES: EMCP II+ panel. CANNOT BE USED WITH: EMCAM01.		\$1,929
FLN	EMCEFR1	<b>ENGINE FAILURE RELAY.</b> . . . . . 0 Provides 4-pole double-throw 10-amp relay contacts for customer use. Relay activities on any oil pressure, coolant temperature, (optional) coolant loss, overspeed, overcrank, emergency stops or EMCP II diagnostic shutdowns. REQUIRES: EMCP II+ panel.		\$48
FLN	EMCPLAR	<b>PANEL LIGHTS/AUXILIARY RELAY</b> . . . . . 0 Provides 3-pole double throw 6-10 amp relay contacts for customer use and two lights with an on/off switch. REQUIRES: EMCP II+ panel.		\$203
FLN	EMCCIM1	<b>CUSTOMER INTERFACE MODULE-CIM.</b> . . . . . 0 Shipped loose. Provides dry contacts for the following conditions for customer use: low coolant temperature alarm, system not in automatic alarm, high coolant temperature alarm, high coolant temperature shutdown, low oil pressure shutdown, overcrank shutdown, overspeed shutdown, Electronic Modular Control Panel diagnostic shutdown. REQUIRES: EMCP II+ panel.		\$542

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**INSTRUMENTATION (CONT.)**

***NFPA 99 Electronic Modular Control Panel II Requirements***

FLN	EMCAM06	<b>ALARM MODULE - NFPA99</b> . . . . . 0 Provides flashing LEDs and horn to annunciate: high coolant temperature alarm, low coolant temperature alarm, low oil pressure alarm, low DC volts alarm and system not in automatic. Two spare LEDs for customer switch inputs. No other contactors needed. REQUIRES: EMCP II+ panel.		<b>\$929</b>
FLN	EMCRMP1	<b>REM 8-LIGHT ANNUNCIATOR</b> . . . . . 0 Shipped loose. 24-32 volts DC. Remote mounted. Provides flashing LEDs and horn to annunciate: low coolant temperature alarm, high coolant temperature shutdown, low oil pressure shutdown, overcrank, overspeed shutdown, generator on load (via customer switch), charger malfunction (via charger switch).		<b>\$636</b>
FLN	EMCAM03	<b>CUSTOM ALARM MODULE - 8 LIGHTS</b> . . . . . 0 Provides 4 red and 4 amber LEDs which can be individually controlled by customer-provided switches. Polycarbonate labels of typical functions are provided along with mounting template, thus providing an easy to customize alarm module. Will be mounted in EMCP II along with selected alarm module. REQUIRES: Low or medium voltage generator & EMCPII+ control panel. ONLY FOR USE WITH: Other alarm modules. CANNOT BE USED WITH: EMCSM01 Synch Module.		<b>\$615</b>

***NFPA 110 Electronic Modular Control Panel II Requirements***

FLN	EMCAM07	<b>ALARM MODULE - NFPA110</b> . . . . . 0 Provides flashing LEDs and horn to annunciate: high coolant temperature alarm, low coolant temperature alarm, low oil pressure alarm, low DC volts alarm and system not in automatic; plus the following which require customer provided switches: battery charger malfunction, engine inlet air damper closed. REQUIRES: EMCP II+ panel.		<b>\$1,090</b>
FLN	EMCRMP4	<b>REM ANNUNC 2-LIGHT NFPA110</b> . . . . . 0 Shipped loose. 24 volts DC. Remote mounted. Provides one common light and horn to annunciate for all alarms described in the above NFPA 110 alarm module and all shutdowns provided on the control panel. As required by NFPA 110 1985 code, paragraph 3-5.5.5, level 1. REQUIRES: Alarm module EMCAM07 (installed in control panel).		<b>\$355</b>

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**INSTRUMENTATION (CONT.)**

*Customer Management Device*

FLN	CMOD003	<b>COMMUNICATIONS MODULE-PL1000T . . . . . 0</b> Shipped loose. Communications Management Device; replacement product for the CCM. Provides ability for customer to monitor and control engine function and diagnostic parameters. TECHNICAL: Provides an interface between Engine ECM and remote computer or other RS-232, RS-422, RS-485, or J1939 device. Can be configured for extension of J1939 connection and Cat Data Link. Can be used with Hayes compatible modem. Provides the capability to remotely start or stop engine. Not intended for high speed control systems. Data throughput rate varies with application. Includes PC software and harness assembly.		\$1,554
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FLN	CMOD006	<b>COMMUNICATIONS MODULE-PL1000E . . . . . 0</b> Shipped loose. Enhanced Communications Management Device; provides ability for customer to monitor and control engine function and diagnostic parameters. Built-in Web Server, MODBUS RTU/TCP, and Ethernet device port for increased versatility and capability. TECHNICAL: Provides an interface between Engine ECM and remote computer, Ethernet, or other RS-232, RS-422, RS-485, or J1939 device. Web Server capability to view Status and Configuration web pages stored on ECM. Supports Cat Data Link J1939 to MODBUS RTU and MODBUS TCP. CDL Boost allows extension of CDL harness up to 1000 feet without compromising data integrity. Not intended high speed control systems. Data throughput rate varies with application. Provides the capability to remotely start or stop the engine. Includes software and harness assemblies.		\$1,456
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*Instrument Panel Gauges*

FLN	GIPDT05	<b>DIGITAL TACHOMETER . . . . . 0</b> Electric self powered tachometer with magnetic pickup. TECHNICAL: Will not display below -18 C (0 F).		\$294
F	GIPPYT1	<b>PYROMETER AND THERMOCOUPLES . . . . . 0</b> Includes installed thermocouples, pyrometer and selector switch. Measures temperature at individual cylinder exhaust ports and right and left bank exhaust stacks.		\$3,234
FL	GIPAWP1	<b>AUX. WATER PRESSURE GAUGE. . . . . 0</b> TECHNICAL: 0 - 100 psi (0 - 690 kPa). CANNOT BE USED WITH: Attachments which remove the aux. water pump (2 or 3 circuit high temperature cooling or raw water aftercooler).		\$471

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**LUBE SYSTEM**

***Oil Bypass Filter Removal***

Removes the ship loose oil bypass filter (auxiliary oil filter) from the engine.

F	OILRMV1	AUX. OIL RESERVOIR REMOVAL. . . . . 0 REQUIRES: STANDBY APPLICATIONS ONLY.		\$-4, 901
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NOTE: Dealer will be responsible for advising customer that the oil change interval will be less than half of the standard 750 hour oil change interval. Recommend customer perform oil analysis to determine proper oil change interval.

***Oil Pan Accessories***

FL	OPTDS01	DEEP SUMP OIL PAN . . . . . 0 Pan extends below rails and base of isolation mounts. Consult general dimension drawing for mounting dimensions. CANNOT BE USED WITH: High temperature cooling systems or Sump pumps SPMP LH1 or SPMP RH1.		\$6, 753
FLN	OILDRN3	OIL PAN DRAIN . . . . . 0 Includes standard cover gp and drain valve. Customer may provide hose or pipe for remote drain. TECHNICAL: Includes 2-11 1/2 NPTF threaded female connection for customer connection. CANNOT BE USED WITH: Sump pumps SPMP LH1, SPMP RH1, SPMP LH2, or SPMP RH2.		\$223
FLN	DUOFR00	DUPLEX OIL FILTER-RH SERVICE. . . . . 0 Removes standard oil filter.		\$1, 834
FLN	OLVLRG4	OIL LEVEL REGULATOR . . . . . 0 Maintains safe oil level in pan from customer provided gravity-fed oil supply.		\$525

***Sump Pumps***

FLN	SPMP RH1	SUMP PUMP RH . . . . . 0 TECHNICAL: Mounts on industrial type rails. CANNOT BE USED WITH: Deep sump oil pan OPTDS01.		\$279
FLN	SPMP LH1	SUMP PUMP LH . . . . . 0 TECHNICAL: Mounts on industrial type rails. CANNOT BE USED WITH: Deep sump oil pan OPTDS01.		\$279
FLN	SPMP LH2	SUMP PUMP LH . . . . . 0 TECHNICAL: Mounts on industrial type rails. ONLY FOR USE WITH: Deep sump oil pan OPTDS01.		\$265
FLN	SPMP RH2	SUMP PUMP RH . . . . . 0 TECHNICAL: Mounts on industrial type rails. ONLY FOR USE WITH: Deep sump oil pan OPTDS01.		\$265

***Manual Prelube Pump***

FLN	OPAPLC3	PRELUBE CONVERSION-RH. . . . . 0 Allows sump pump to function as manual prelube pump. REQUIRES: RH sump pump SPMP RH1. CANNOT BE USED WITH: Electric prelube pump.		\$307
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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## MOUNTING SYSTEM

### *Vibration isolators*

Shipped loose. For stationary applications only.

FLN	VIBIS05	<b>VIBRATION ISOLATORS</b> . . . . . 0 Includes 8 coil spring isolators. For installation under rails. If generator rails and deep sump oil pan ordered, contact factory for mounting group. TECHNICAL: Load range 10,896 to 16,344 kg (24,000 to 36,000 lbs).		\$1,263
FLN	FLXISP1	<b>FLEXIBLE ISOLATOR PAD</b> . . . . . 0 Rubber isolator pad for installation between base and foundation. ONE included. SIX suggested for engine only, EIGHT for engine/generator package. Used to accommodate minor misalignment in applications where vibration control is not severe. Pads will not isolate building structure from engine vibration or protect an inoperative engine from nearby equipment. See A&I guide for complete vibration isolation recommendations. TECHNICAL: 108mm (4.25 in) X 457 mm (18 in) x 25 mm (1 in) Recommended loading 50 lbs per sq. inch.		\$86

## POWER TAKE-OFFS

### *Front stub shaft*

FLN	SHAFT03	<b>FRONT STUB SHAFT</b> . . . . . 0 Consult TMI.		\$1,024
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### *Pulleys*

Front crankshaft mounted.

FLN	CRKPL01	<b>CRANKSHAFT PULLEY</b> . . . . . 0 TECHNICAL: 197 mm (7.75 in) diameter. Provides 6 grooves. REQUIRES: Front stub shaft SHAFT03.		\$220
FLN	CRKPL02	<b>CRANKSHAFT PULLEY</b> . . . . . 0 TECHNICAL: 248 mm (9.75 in) diameter. Provides 6 grooves. REQUIRES: Front stub shaft SHAFT03.		\$220

## PROTECTION SYSTEM

### *Gas Valve*

Shipped loose. Provides a gas valve in addition to the one standard on the engine.

FLN	SOV2403	<b>GAS SHUTOFF VALVE</b> . . . . . 0		\$562
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**SPECIAL TESTS/REPORTS**

*Special Tests/Reports*

FLN	TRSGEN1	<b>GENERATOR TEST REPORT</b> . . . . . 0		<b>\$324 NET</b>
		Provides copy of generator test report, for orders when no engine is involved or when customer requires separate generator test report, even with gen set units.		

NOTE: Generators may be tested to a Frequency or Voltage that is higher than advertised on the price list. A passed test at 60Hz indicates the product will meet and exceed the requirements of a 50Hz rating. A passed test at a higher voltage indicates the product will meet and exceed the requirements of the lower voltage rating.

**SPECIAL PACKING/INSPECTIONS FOR SHIPMENT**

*Export Boxing*

FLN	EXB0010	<b>BOX FOR EXPORT</b> . . . . . 0		<b>\$1,695 NET</b>
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*Special Packing*

FLN	SWP0001	<b>SHRINK WRAP PROTECTION</b> . . . . . 0		<b>\$315 NET</b>
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*Storage Preservation*

FLN	SRP0014	<b>PRESERVATION - CORROSION INHIB</b> . . . . . 0		<b>\$939 NET</b>
		Provides vapor corrosion inhibitor in all internal engine compartments and the cooling system. Protects engine and accessories from functional deterioration for a minimum of one year under inside storage conditions.		

**STARTING SYSTEM**

*Electric Starting Motors - Dual 24 Volt*

FLN	ELSM02	<b>ELECTRIC STARTING MOTOR LH</b> . . . . . 0		<b>\$2,668</b>
		Jacket water heater recommended for 20-second starting. Start switch in EMCP II+ panel if one is ordered. For NO PANEL option, customer must connect control wiring to terminal strip connections located in the generator housing. TECHNICAL: -30 to 20 C (-22 to 68 F).		
FLN	ELSDL16	<b>ELECTRIC STARTING MOTOR LH</b> . . . . . 175		<b>\$2,118</b>
		Start switch in EMCPII+ plus panel if one is ordered. Jacket water heater recommended for 20-second starting. For NO PANEL option, customer must connect control wiring to terminal strip connections located in the generator housing. TECHNICAL: Above 20 C (68 F).		

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**STARTING SYSTEM (CONT.)**

**Starting Aids**

Components of jacket water heater are UL recognized.  
Includes low water temperature switch.

FLN	JWH0017	<b>JACKET WATER HEATER</b> . . . . . 0 TECHNICAL: LH mounted. 240-480 volt, single phase, 6 kW. Fixed thermostat. Set for cut in at 60 C (140 F).		\$1,042
FLN	JWHD010	<b>JACKET WATER HEATER - DUAL</b> . . . . . 0 TECHNICAL: LH and RH mounted. 120/240 volt, single phase, 6 kW total. Fixed thermostat. Set for cut in at 60 C (140 F). CANNOT BE USED WITH: Sump pump SPMPRH1 or 2 or 3 circuit high temperature cooling.		\$1,735
FLN	JWHD011	<b>JACKET WATER HEATER - DUAL</b> . . . . . 0 TECHNICAL: LH and RH mounted. 240-480 volt, single phase, 12 kW total. Fixed thermostat. Set for cut in at 60 C (140 F). CANNOT BE USED WITH: Sump pump SPMPRH1 or 2 or 3 circuit high temperature cooling.		\$1,831

**Battery Sets - 24 Volt - Dry**

Shipped loose. Low maintenance, high output.

FLN	BAT2417	<b>24 VOLT BATTERY SET - DRY</b> . . . . . 0 CCA rating 2600, 380 ampere hours. Includes 4 batteries. TECHNICAL: -30 to -12 C (-22 to 10 F). Jacket water heater recommended for 10 second starting below 20 C (68 F).		\$2,536
FLN	BAT2418	<b>24 VOLT BATTERY SET - DRY</b> . . . . . 0 CCA rating 2000, 280 ampere hours. Includes 4 batteries. TECHNICAL: -12 to 20 C (10 to 68 F). Jacket water heater recommended for 10 second starting below 20 C (68 F).		\$1,762
FLN	BAT2401	<b>24V BATTERY SET-DRY 1300 CCA</b> . . . . . 0 CCA rating 1300, 190 ampere hours. Includes 2 batteries. TECHNICAL: Above 20 C (68 F). Jacket water heater recommended for 10 second starting below 20 C (68 F).		\$1,268

**Battery Cables**

FLN	BTRCBL1	<b>BATTERY CABLES/1880MM/74IN</b> . . . . . 0 Shipped loose. Allows battery to be set on the ground. TECHNICAL: 1880 mm (74 in) long.		\$164
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**Battery Rack**

FLN	BTR0001	<b>2 BATTERY RACK/FLOOR</b> . . . . . 0 Shipped loose. Floor type. Will hold 2 batteries. TECHNICAL: 1035 mm (40.75 in) long by 265 mm (10.5 in) wide.		\$187
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**GENERAL**

***Special Paint***

FLN	SPCPNT1	SPECIAL PAINT . . . . . 0 Colors (other than Caterpillar yellow) or high performance paints.		<b>\$684 NET</b>
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***Aid Emblem***

FLN	AIDEMB	US AID EMBLEM . . . . . 0 Provides emblem to indicate Agency for International Development (AID) financing is involved. AID provides economic assistance to advance U.S. economic and political interests in countries located in Africa, Asia, Latin America, Central and Eastern Europe, and the New Independent States of the former Soviet Union. Only available for U.S. built products. Requires one emblem for each side of the engine.		<b>NC</b>
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***General***

FLN	DMGDRM2	DAMPER GUARD REMOVAL . . . . . 0		<b>\$-336</b>
FLN	BARGP01	ENGINE BARRING GROUP . . . . . 0 Used to manually turn engine crankshaft.		<b>\$214</b>

***Tool Set***

Contains basic tools for regular maintenance; such as wrenches, grease gun, feeler gauges, etc. For a complete breakdown, refer to the Tool Guide for Caterpillar Dealers. Order 9S-7977.  
AVAILABLE ONLY FROM PARTS DISTRIBUTION.

***Digital Diagnostic Tool***

Required to set engine timing for EIS engines. Requires service program module NEXG4529 to make operational. Order 7X-1400.  
AVAILABLE ONLY FROM PARTS DISTRIBUTION.

**SVCE TOOLS/SHIP PROT/FACTORY SUPPORT**

***Commissioning***

FLN	FACCOM1	FACTORY COMMISSIONING . . . . . 0 Commissioning will be invoiced at \$1,400 per day, plus expenses, to the selling dealer. This \$7,000 Net charge will be deducted from the total cost of the commissioning.		<b>\$7,575 NET</b>
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**LITERATURE**

***Optional Literature - Other Languages than English***

Includes Operation and Maintenance Instruction Book, Parts Book (provided in CD for English language only) and other miscellaneous forms. These groups remove the English literature that is included in the engine reference numbers. One group shipped free of charge with each engine.

FLN	LITCHIO	SIMPLIFIED CHINESE LITERATURE. . . . .	0	NC
LN	LITDANO	DANISH LITERATURE. . . . .	0	NC
FLN	LITDUTO	DUTCH LITERATURE. . . . .	0	NC
FLN	LITFINO	FINNISH LITERATURE. . . . .	0	NC
FLN	LITFREO	FRENCH LITERATURE. . . . .	0	NC
FLN	LITGERO	GERMAN LITERATURE. . . . .	0	NC
FLN	LITITAO	ITALIAN LITERATURE. . . . .	0	NC
FLN	LITJAPO	JAPANESE LITERATURE. . . . .	0	NC
FLN	LITPORO	PORTUGUESE LITERATURE . . . . .	0	NC
FLN	LITRUSO	RUSSIAN LITERATURE. . . . .	0	NC
FLN	LITSPA0	SPANISH LITERATURE. . . . .	0	NC

***Extra Literature - English and Other Languages***

Shipped loose.  
Includes Operation and Maintenance Instruction Book, Parts Book (provided in CD for English language only) and other miscellaneous forms.  
This literature is in addition to the one group shipped free

FLN	LITENGE	EXTRA LITERATURE - ENGLISH. . . . .	0	\$132 NET
		TECHNICAL: For paper copy Parts Book, reference LITPAPR.		
FLN	LITCHIE	EXTRA CHINESE LITERATURE SET. . . . .	0	\$132 NET
LN	LITDANE	EXTRA LITERATURE - DANISH. . . . .	0	\$132 NET
FLN	LITDUTE	EXTRA LITERATURE - DUTCH. . . . .	0	\$132 NET
FLN	LITFINE	EXTRA LITERATURE - FINNISH. . . . .	0	\$132 NET
FLN	LITFREE	EXTRA LITERATURE - FRENCH. . . . .	0	\$132 NET
FLN	LITGERE	EXTRA LITERATURE - GERMAN. . . . .	0	\$132 NET
FLN	LITITAE	EXTRA LITERATURE - ITALIAN. . . . .	0	\$132 NET
FLN	LITJAPE	EXTRA LITERATURE - JAPANESE. . . . .	0	\$132 NET

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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**LITERATURE (CONT.)**

*Extra Literature - English and Other Languages (Cont.)*

FLN	LITPORE	EXTRA LITERATURE - PORTUGUESE . . . . .	0	\$132 NET
FLN	LITRUSE	EXTRA LITERATURE - RUSSIAN. . . . .	0	\$132 NET
FLN	LITSPA	EXTRA LITERATURE - SPANISH. . . . .	0	\$132 NET

*Optional Literature - English Language*

FLN	LITPAPR	PAPER PARTS BOOK-ENGLISH . . . . .	0	\$163 NET
This literature is in addition to the Parts Book provided on CD that is shipped free of charge with each engine.				

**PACKING**

*Special Packing for Shipment*

FLN	DPX0001	DOMESTIC PACK-EXPORT CONTAINER. . . . .	0	NC
ONLY FOR USE WITH: Engines not boxed.				

NOTE: CONTAINER SHIPMENTS - Charge per container will be included in freight forwarding invoice.  
 40 ft. open top container -- \$675.  
 40 ft. enclosed container -- \$540.  
 20 ft. open top container -- \$450.  
 20 ft. enclosed container -- \$360.