

shindaiwa®

SPECIFICATIONS

Diesel Engine Generator **DGK11F**

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CHAPTER 1: GENERAL

1. Standards

Design and production are in conformity with:

- (1) Japan Industrial Standards: JIS C 9300-1
- (2) Low Noise Type Construction Machinery Standard
- (3) Voluntary Emission Regulations for non-road engines in Japan by MLIT. (Tier 3)
- (4) EPA Tier 4 Final Emission Standards
- (5) CARB Emission Standards

*MLIT stands of Ministry of Land, Infrastructure, Transport and Tourism.

2. Design Conditions

- (1) Installation Place: Outside Only.
- (2) Ambient Temperature: 5 to 104° F (-15 to 40°C)
- (3) Humidity: Less than 80%
- (4) Altitude: Less than 984 ft. (300 m) above sea level

3. Test and Check

Test shall be conducted with a complete workable unit of the diesel engine unit.

Check Items:

- (1) Insulation and Dielectric Test
- (2) Starting
- (3) Protection Device Working Test
- (4) Voltage Deviation and Speed Variation: 0-4/4 Load
- (5) Load Test: Welding and Generating 4/4 Load

4. Painting

Painting and color specifications are as per manufacturer's standard.

5. Structure

- (1) Bed and Vibration Proof Device
Alternator is directly coupled with engine and both are installed on the bed through the vibration proof device.
- (2) Low Noise
Low noise structure is put in the inside of the bonnet.
Sound Level: 60dB(A) @7m distance at full load.
- (3) Fuel Tank
A steel fuel tank is equipped and incorporated with the electrical level gauge.

CHAPTER 2: SPECIFICATIONS

	Model	Unit	DGK11F
Alternator	Generator Type	-	Revolving Field Brushless
	Armature Connection	-	Zigzag-W
	Rated Frequency	Hz	60
	Rated Output(Prime)	kVA	11
		kW	11
	Standby Output	kVA	12
		kW	12
	Rated Voltage	V	240/120
	Rated Current	A	45.8
	Phase		Single Phase
	Power Factor	-	1.0
	Insulated Classification	-	F
	Excitation	-	Self Excitation (Brushless)
No. of Poles	-	4	
Engine	Type	-	Vertical Water-Cooled 4-Cycle Diesel
	Model (Manufacturer)	-	D1503 (KUBOTA)
	No. of Cylinder (Bore × Stroke)	(in./mm)	3(3.27×3.64/83×92.4)
	Rated Output (Continuous)	HP	19.5
	Rated Speed	rpm	1800
	Displacement	cu.in./liter	91.5/1.499
	Combustion	-	Indirect Injection
	Cooling	-	Radiator
	Lubrication	-	Forced Lubrication
	Starting	-	Electric
	Fuel	-	No.2-D,S15 EPA regulation
	Lubricating Oil	-	CD class or higher
	Fuel Tank Capacity	gal./liter	16/62
	Lubricant Volume	gal./liter	1.9/7.3 (including filter 0.1/0.3)
	Cooling Water Volume	gal./liter	2.3/8.8 (including sub-tank 0.3/1.1)
	Starting Motor Capacity	V-kW	12-1.4
	Charging Alternator Capacity	V-A	12-30
Battery Capacity	V-Ah	12-55	
Unit	Length	in./mm	55/1390
	Width	in./mm	28/704
	Height	in./mm	40/1012
	Dry Weight	lbs./kg	1246/565
	Net Weight	lbs./kg	1411/640

*Specifications are subject to change without notice.

CHAPTER 3: EQUIPMENT AND FEATURE

1. Equipment

(1) Generator

Voltage Meter	1 pc.
Ampere Meter	1 pc.
Frequency Meter	1 pc.
GFCI Receptacle (120V-20A).....	1 pc.
Twist Lock Receptacle (120V-30A)	1 pc.
Twist Lock Receptacle (240V-30A)	1 pc.
Twist Lock Receptacle (120V/240V-50A)	1 pc.
AC Voltage Adjusting Dial.....	1 pc.
Ampere Meter Selector Switch.....	1 pc.
AC Voltage Selector Switch.....	1 pc.

(2) Safety Device

Breaker - with leakage shut off device.....	1 pc.
Protective Monitor	1 set
●Battery Charge (with auto engine shut-down feature)	
●Oil Pressure (with auto engine shut-down feature)	
●Water Temperature (with auto engine shut-down feature)	
●Over Speed (with auto engine shut-down feature)	
●Spill Containment (with auto engine shut-down feature)	
●Air Filter Clogging	

(3) Equipment

Throttle Switch	1 pc.
Fuel Filter	1 pc.
Air Cleaner	1 pc.
Monitor Lamp.....	1 pc.
Fuel Drain Plug	1 pc.
Oil Drain Plug.....	1 pc.
Coolant Drain Hose.....	1 pc.
Spill Containment Drain Plug	1 pc.
Hour Meter	1 pc.
Pilot Lamp	1 pc.
Fuel Meter (Electrically)	1 pc.
Low Noise Air Flow System	

2. Feature

(1) Feature

- Sound Level 60B(A) at 7m distance at full load.
- Generating Performance 1-Phase
- 2 Way Drive Control High/Low Speed
- Environmental Quiet Sound System
- Fuel Tank Capacity 16 gal. (62 Liters)
- Dry Weight 1246 lbs. (565 kg)
- Dimensions (LxWxH) 55" x 28" x 40" (1390 x 704 x 1012 mm)

(2) Protection Device

Item	Set Value	Engine Shut-Down
High Water Temp.	239° F/115°C	✓
Low Battery Charge	1.23	✓
Low Oil Pressure	7 psi/49kPa	✓
Over Speed	2070 rpm/60Hz	✓
Spill Containment	Approx. 6 gal./24 L	✓

(3) Fuel Economy

Criteria	Fuel Consumption	Continuous Operation Hours
Full load	1.08 gal./hr (4.1L/hr.)	15 hrs.
3/4 load	0.81 gal./hr (3.1L/hr.)	20 hrs.
1/2 load	0.63 gal./hr (2.4L/hr.)	26 hrs.
1/4 load	0.44 gal./hr (1.7L/hr.)	36 hrs.

*Above value is for reference only as it may vary depending on the conditions.

(4) Spill Containment and Environmental

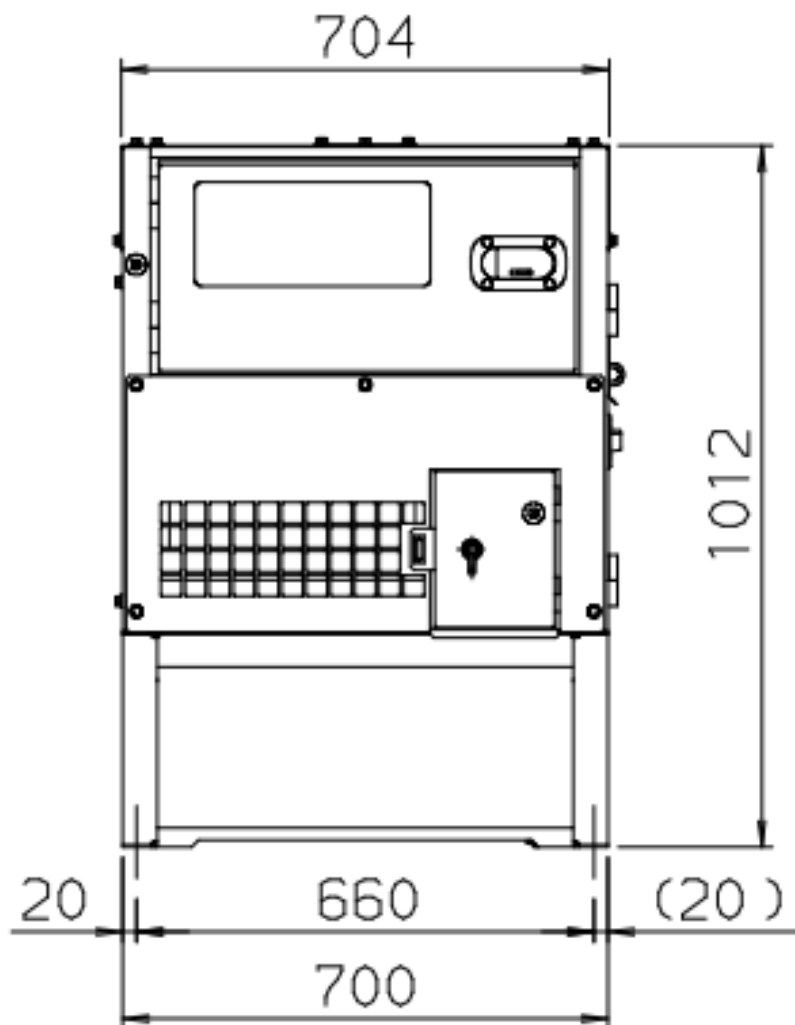
Spill containment device is equipped for the environmental protection. In case inflammable fluid (fuel & oil) and chemical fluid (coolant) leak, fluids are drained to the spill containment and prevent external leak. Volume of the spill containment tank covers more than all fluids in the equipment as shown below.

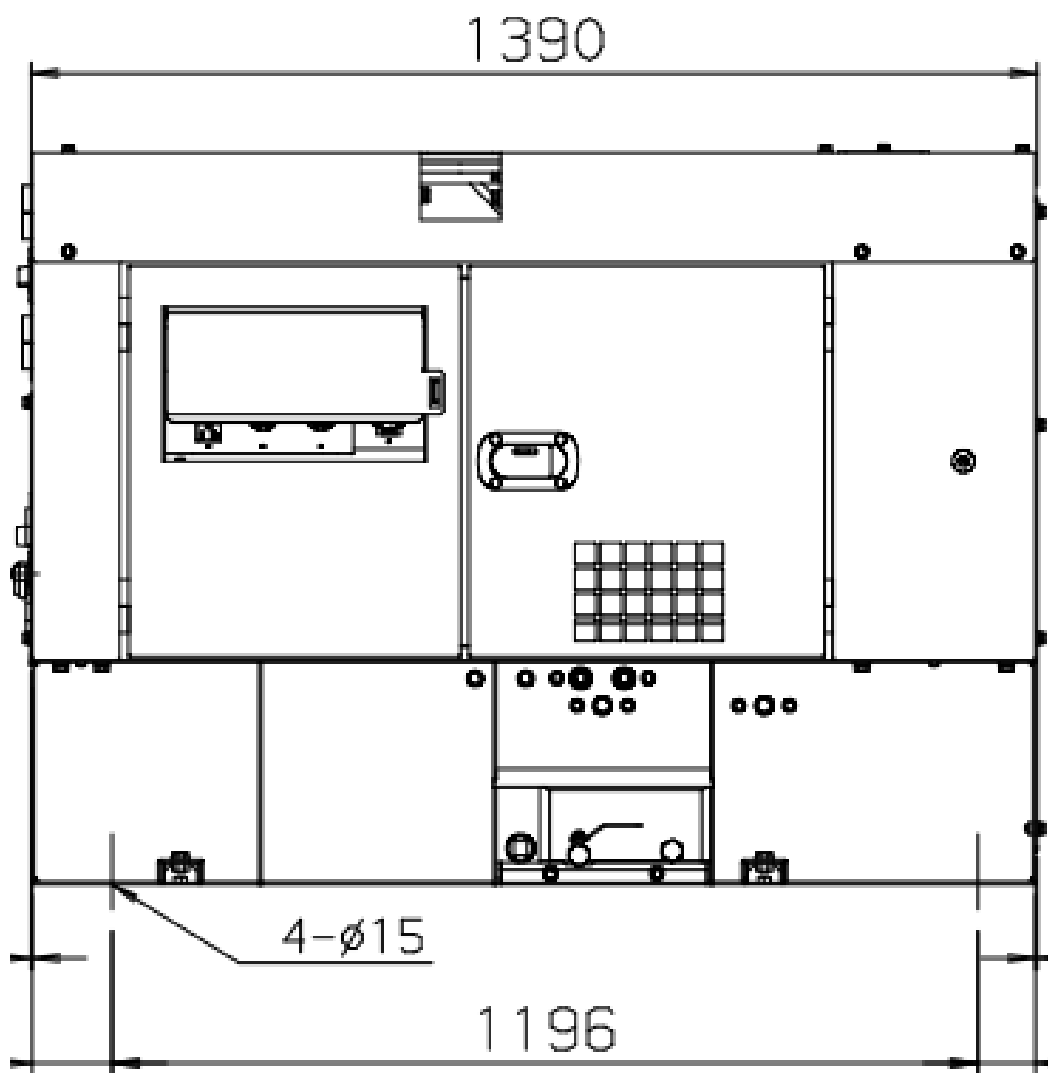
Spill Containment	31 gal.(118L)	Fuel Tank	16 gal.(62L)
		Lubricant Oil	1.9 gal. (7.3L)
		Coolant	2.3 gal.(8.8L)
Total	31 gal.(118L)		20.6 gal.(78.1L)
	150%		100%

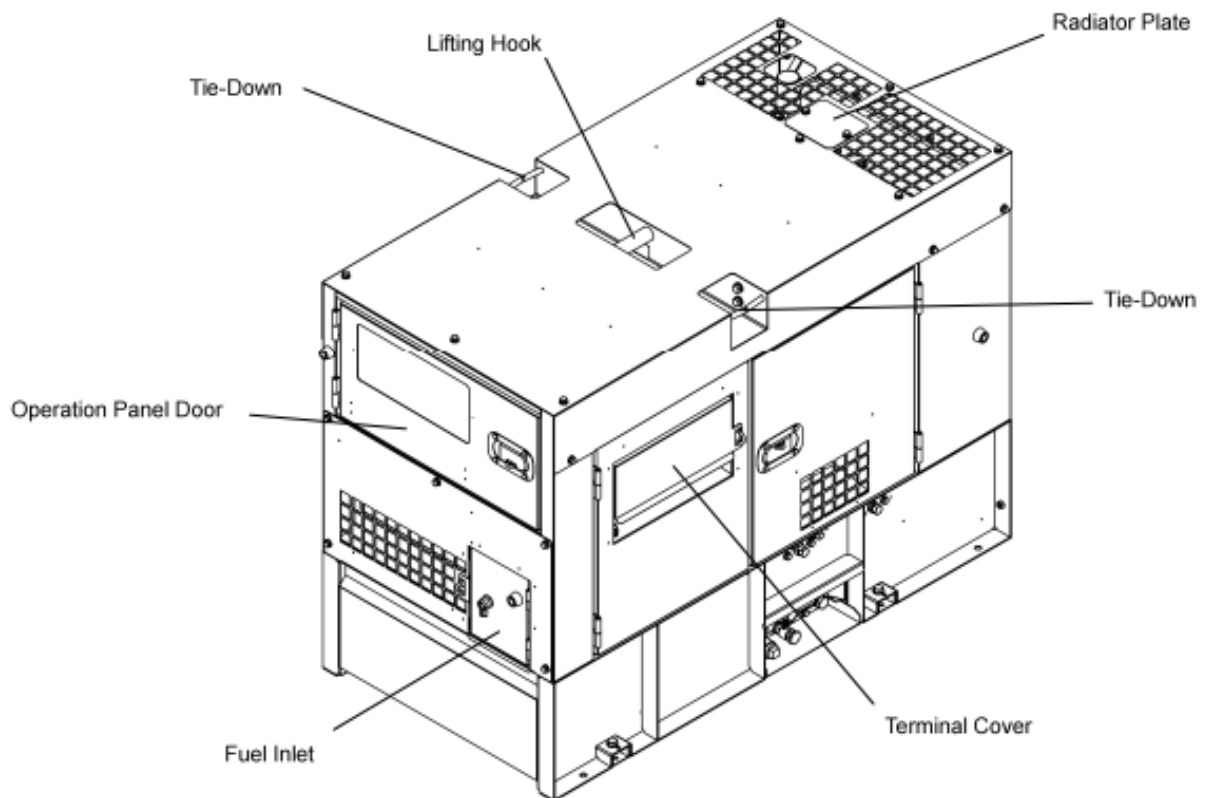
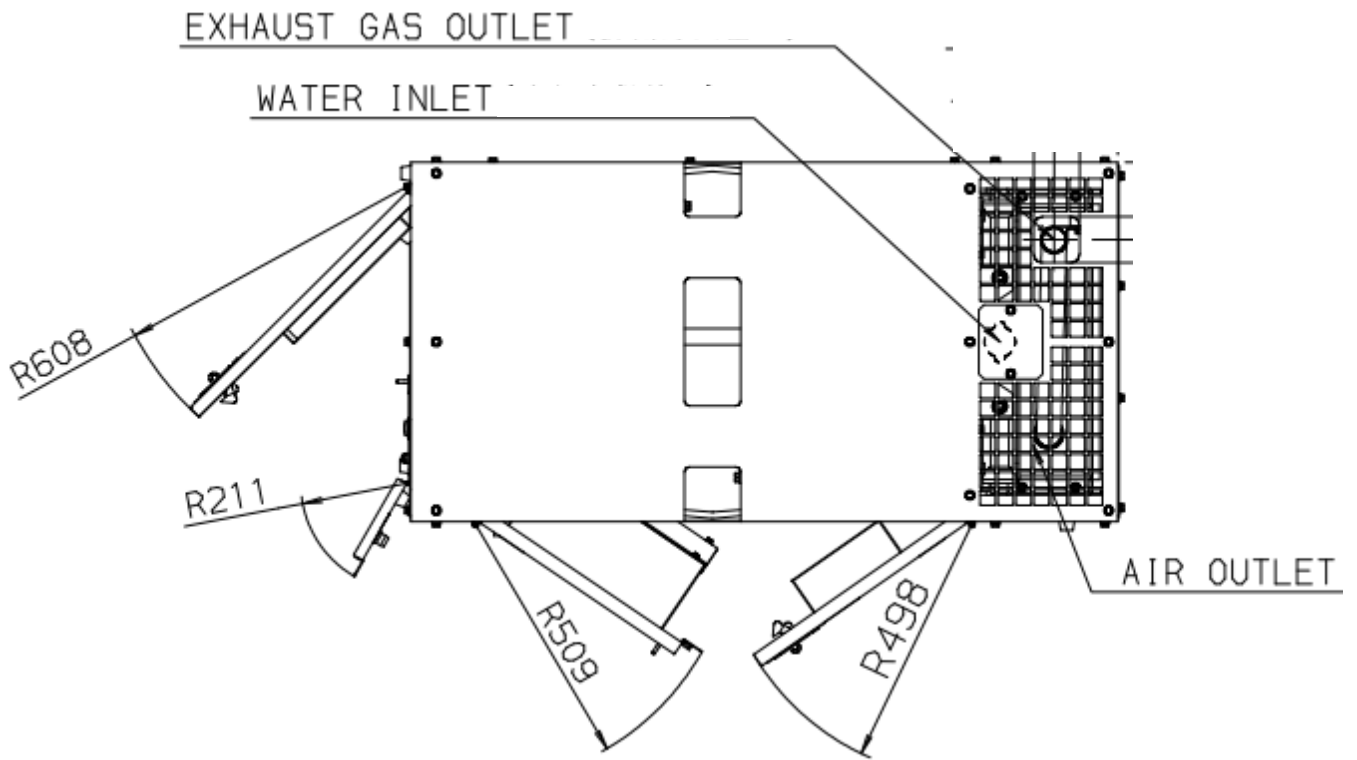
(5) Accessories

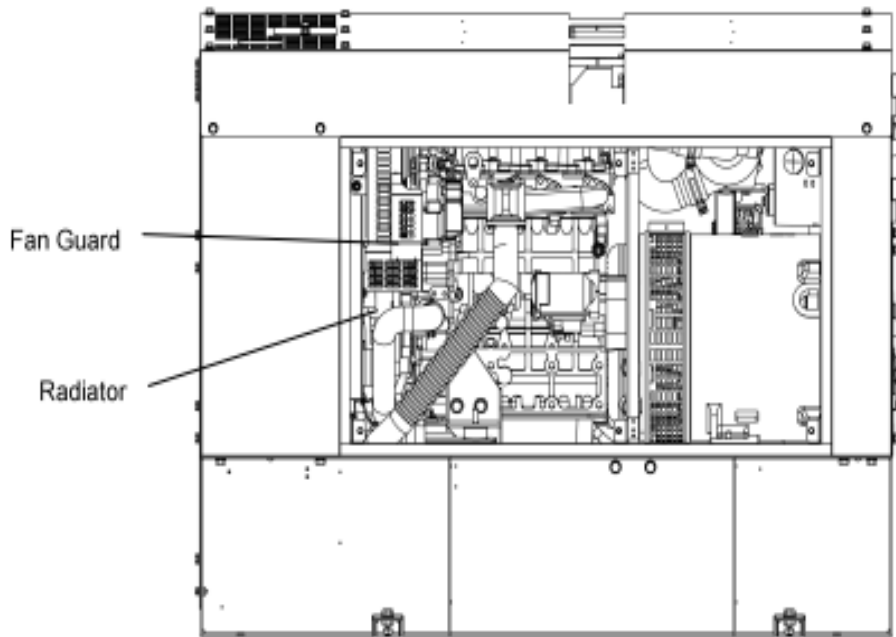
Operator's Manual	1 copy
Engine Warranty Manual	1 copy
Starter Key	2 pcs.

CHAPTER 4: APPEARANCE

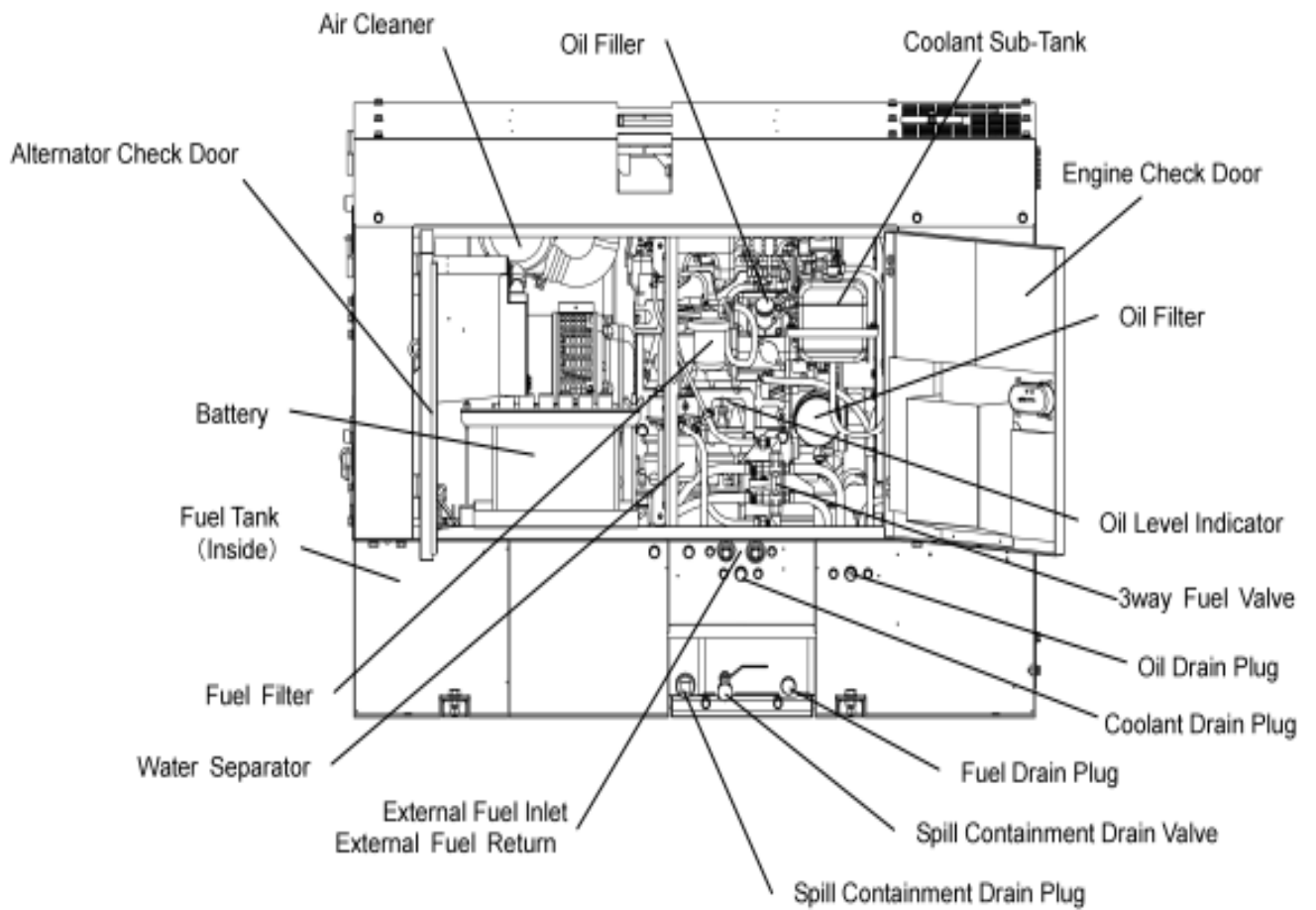








* Shown with side-plate removed.



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