

shindaiwa®

SPECIFICATIONS

Diesel Engine Generator
DGK7F

CONTENTS

CHAPTER 1: GENERAL.....1

- 1. Standard**
- 2. Design Condition**
- 3. Test and Check**
- 4. Painting**
- 5. Structure**

CHAPTER 2: SPECIFICATIONS.....2

CHAPTER 3: EQUIPMENT AND FEATURE.....3

1. Equipment

- (1) Generator**
- (2) Safety Device**
- (3) Protective Device**
- (4) Equipment.....4**

2. Feature.....4

- (1) Feature**
- (2) Protection Device5**
- (3) Fuel Economy**
- (4) Accessory**

CHAPTER 4: APPEARANCE.....6

CHAPTER 1: GENERAL

1. Standard

Design and production are in conformity with:

- (1) Japan Industrial Standards (JIS)
- (2) Low Noise Type Construction Machinery Standard
- (3) Emission Regulations for non-road engines by EPA Tier 4 Final.

2. Design Condition

- (1) Installation Place: Outside Only.
- (2) Ambient Temperature: 5 to 104° F (-15 to 40°C)
- (3) Humidity: Less than 85%
- (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: 63 dB(A) @7m distance under no load.
- (3) Fuel Tank
A steel fuel tank is equipped and incorporated with the electrical level gauge.

CHAPTER 2: SPECIFICATIONS

	Model	Unit	DGK7F
Alternator	Generator Type	-	Revolving Field Brushless
	Armature Connection	-	ZigZag-W
	Rated Frequency	Hz	60
	Rated Output (Prime)	kVA	6.5
		kW	6.5
	Standby Output	kVA	7.2
		kW	7.2
	Rated Voltage	V	240/120
	Rated Current	A	27/54
	Power Factor	-	1.0
	Insulation	-	F
Excitation	-	Self-Excitation (brushless)	
No. of Pole	-	2	
Engine	Type	-	Vertical Water-Cooled 4-Cycle Diesel
	Model (Manufacturer)	-	Z482 Tier 4 Final (KUBOTA)
	No. of Cylinder (bore × stroke)	mm	2 (67x68)
	Rated Output (continuous)	hp	11.3
	Rated Speed	rpm	3,600
	Displacement	cu.in./liters	29/0.479
	Combustion System	-	Indirect Injection
	Cooling Method	-	Water Cooled
	Starting Method	-	Electric
	Fuel	-	No.2-D,S15 EPA Regulation
	Lubricating Oil	-	API Service-Type CD Class
	Fuel Tank Capacity	gal./liters	9.5/36
	Lubricant Volume	gal./liters	0.69/2.6
	Coolant Volume	gal./liters	0.69/2.6 (including sub-tank 0.16/0.6)
	Starting Motor Capacity	V-kW	12-0.95
Charging Alternator Capacity	V-W	12-150	
Battery Capacity	V-Ah	12-36	
Unit	Length	in./mm	43/1,095
	Width	in./mm	25/640
	Height	in./mm	35/895
	Dry Weight	lbs./kg	739/335
	Net Weight	lbs./kg	827/375

*Specifications are subject to change without notice.

CHAPTER 3: EQUIPMENT AND FEATURE

1. Equipment

(1) Generator

Voltage Meter	1 pc.
GFCI Receptacle (120V-20A).....	1 pcs.
Twist Lock Receptacle (120V-30A)	1 pcs.
Twist Lock Receptacle (240/120V-30A).....	1 pcs.
Twist Lock Receptacle (240/120V-50A).....	1 pcs.

(2) Safety Device

Circuit Breaker (120V-20A)	1 pc.
Circuit Breaker (120V-30A)	1 pc.
Circuit Breaker (240/120V-30A)	1 pc.
Circuit Breaker (240/120V-50A)	1 pc.
Neutral Bonding (Grounding)	STD.

(3) Protective Device

Protective Monitor	1 set
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●Engine will automatically shut down:

- 1) When water temp. exceeds standard.
- 2) When oil pressure exceeds standard.
- 3) When engine speeds exceeds standard.
- 4) When the battery charge falls to a low level.
- 5) When the spill containment exceeds.

●Warning light illuminates:

- 1) When water temp. exceeds standard.
- 2) When oil pressure exceeds standard.
- 3) When engine speeds exceeds standard.
- 4) When the battery charge falls to a low level.
- 5) When a liquid level in the spill containment exceeds.
- 6) When failed the engine starting up.

The front panel, right door, fuel cover and terminal cover are featured to lock with padlock*.

*Padlock: option.

(4) Equipment

● Selector Switch for:

- 1-Phase Output (U-W)..... 1 pc.
- 1-Phase Output (U-N) 1 pc.
- 1-Phase Output (W-N)..... 1 pc.

● Display

- Available Output..... 1 pc.
- Engine Speed..... 1 pc.
- Fuel Level (with on/off feature)..... 1 pc.

- Voltage Regulator 1 pc.
- Frequency Selector Switch 1 pc.
- Electric Starting 1 pc.
- Spill Containment..... 1 pc.
- Drain Plug (Oil/Coolant/Fuel) 1 pc. ea.
- Battery 1 pc.
- Hour Meter 1 pc.
- Auto Starter* Receptacle..... 1 pc.
- Low Noise Air Flow SystemSTD.

*The auto starter is option.

2. Feature

(1) Feature

- Sound Level 63dB(A) at 7m distance under no load.
- Generating Performance 1-Phase
- Environmental Low sound system and spill Containment. Comply with EPA phase 4 final emission standard.
- Fuel Tank Capacity 9.5 gal. (36 Liters)
- Dry Weight 739 lbs. (335 kg)
- Dimensions (LxWxH) 43" x 25" x 35" (1,095 x 640 x 895 mm)

(2) Protection Device

Item	Set Value	Engine Shut-Down	Warning Lamp Flashing
Battery Charge	when not charging	✓	✓
High Water Temp.	239° F/115°C	✓	✓
Low Oil Pressure	14 psi/98 kPa	✓	✓
Engine Over Speed	4,140 min ⁻¹	✓	✓
Spill Containment	Fluid exceeds 3.4 gal. (13 liters)	-	✓
Spill Containment	Fluid exceeds 11.4 gal. (43 liters)	✓	✓
Over Cranking	when fails to the engine starting up.	✓	✓

(3) Fuel Economy

Criteria	Fuel Consumption	Continuous Operation
Full load	0.71 gal./hr (2.7 L/hr.)	13 hrs.
3/4 load	0.55 gal./hr (2.1 L/hr.)	17 hrs.
1/2 load	0.48 gal./hr (1.8 L/hr.)	20 hrs.
1/4 load	0.37 gal./hr. (1.4 L/hr.)	26 hrs.

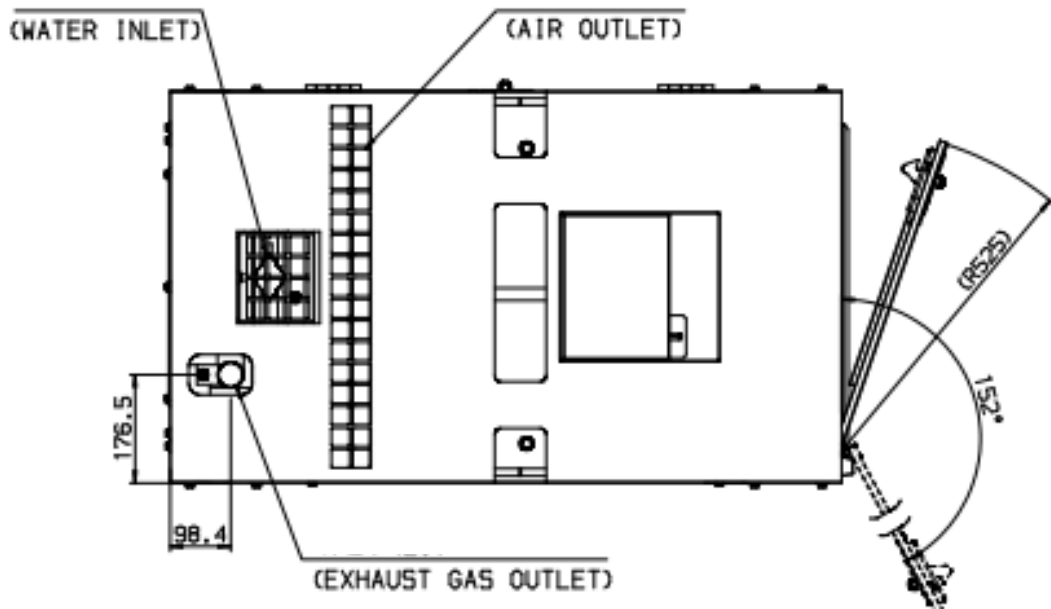
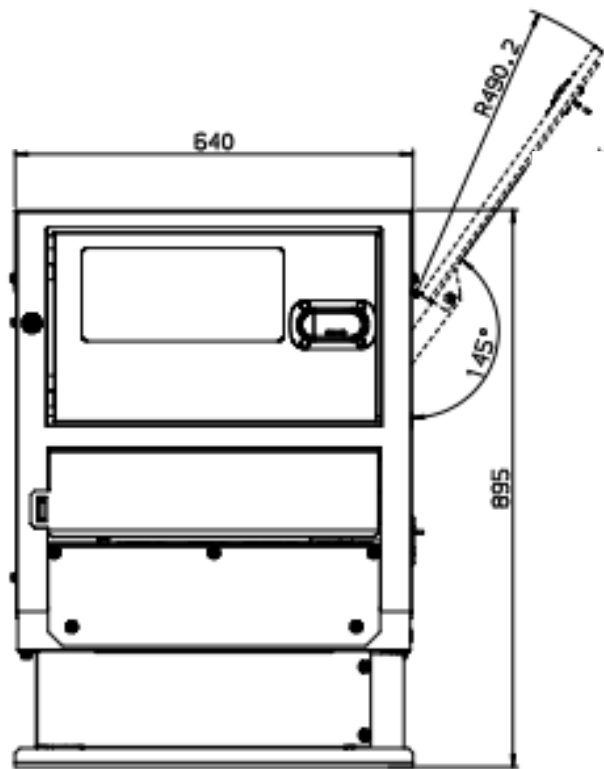
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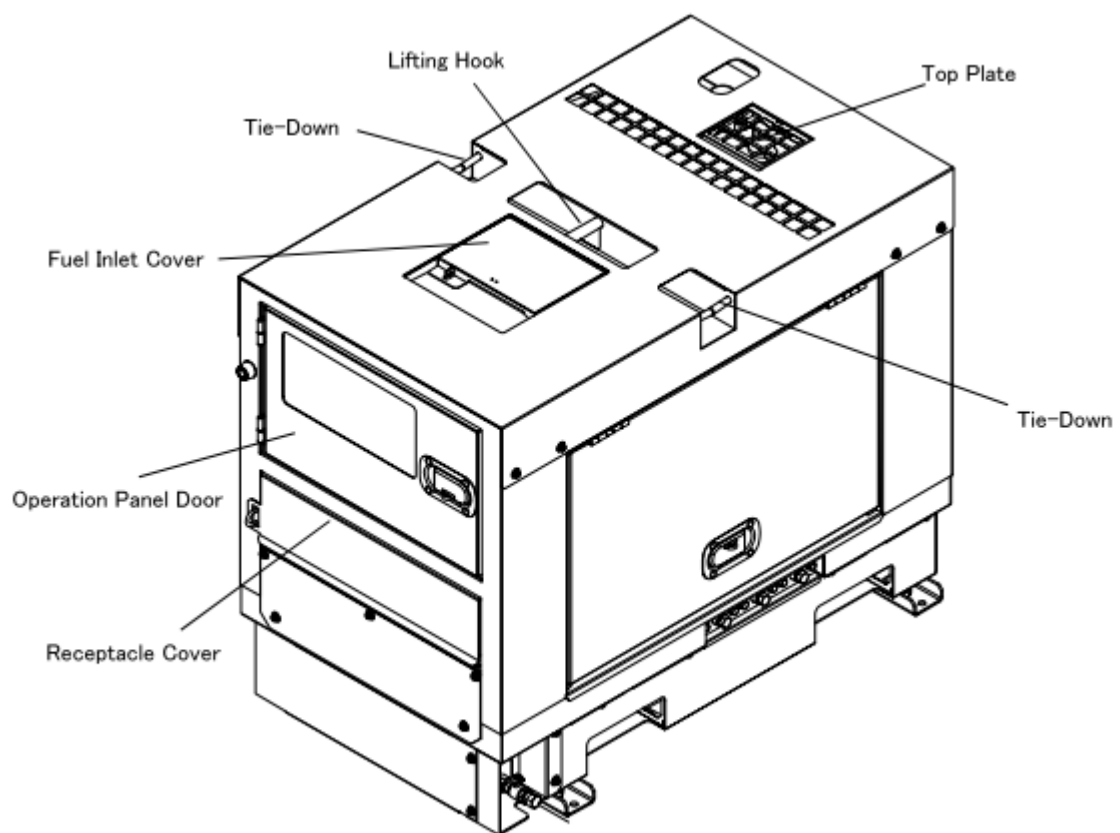
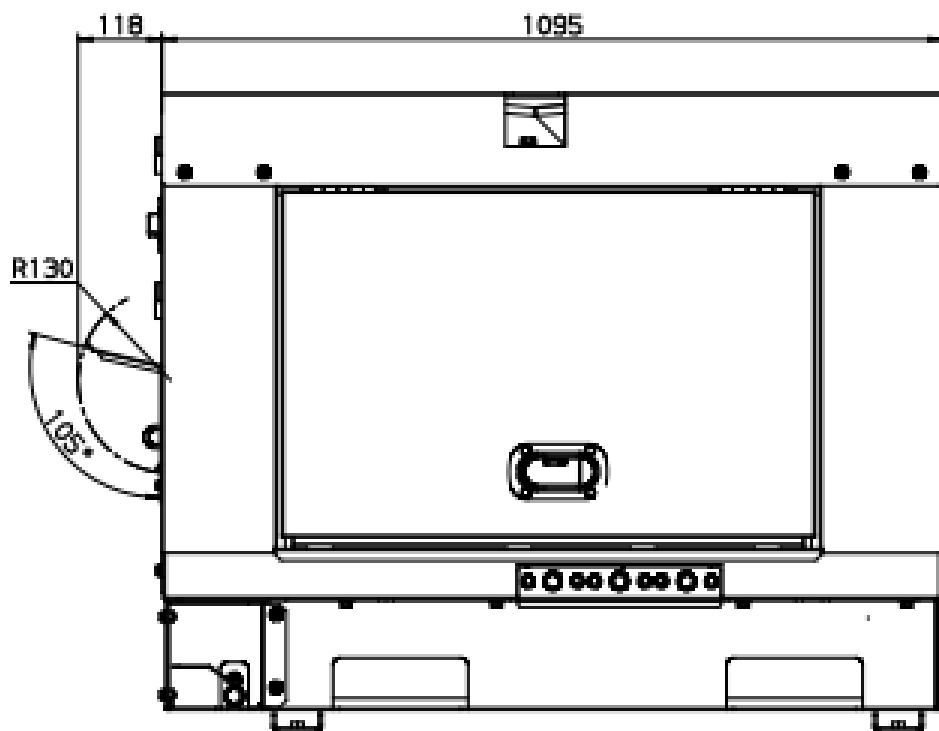
Note: Fuel consumption and operation hrs. would differ. per condition for use.

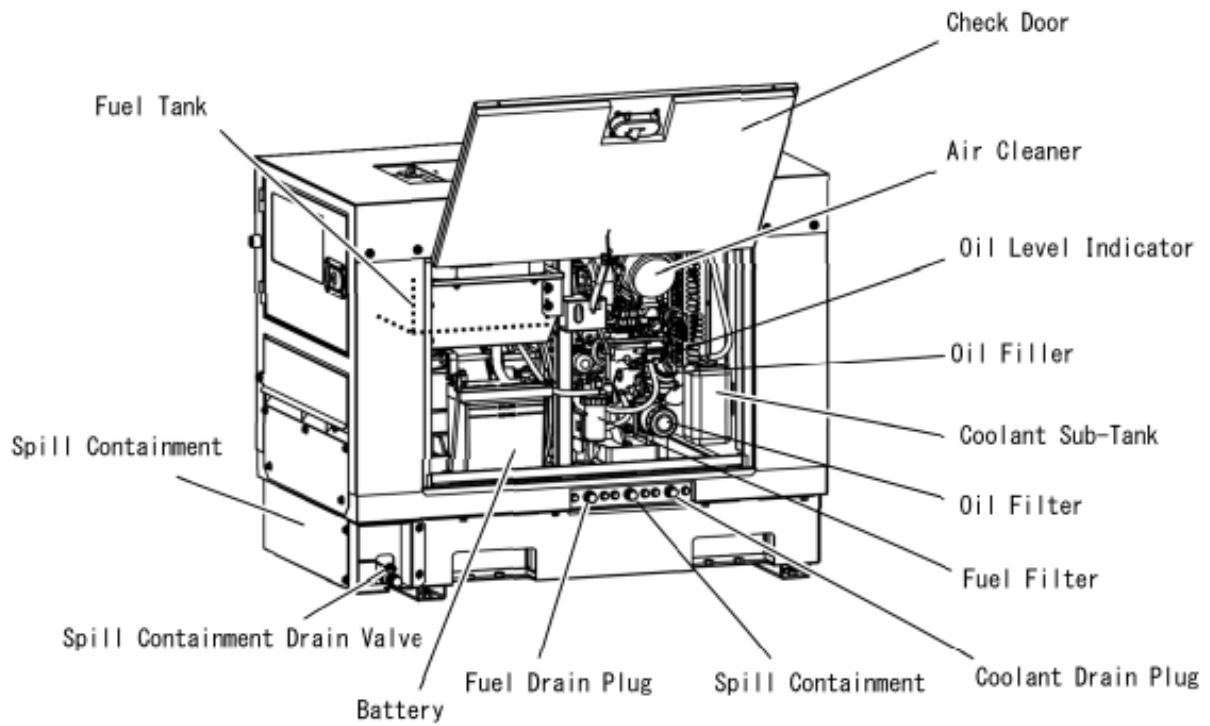
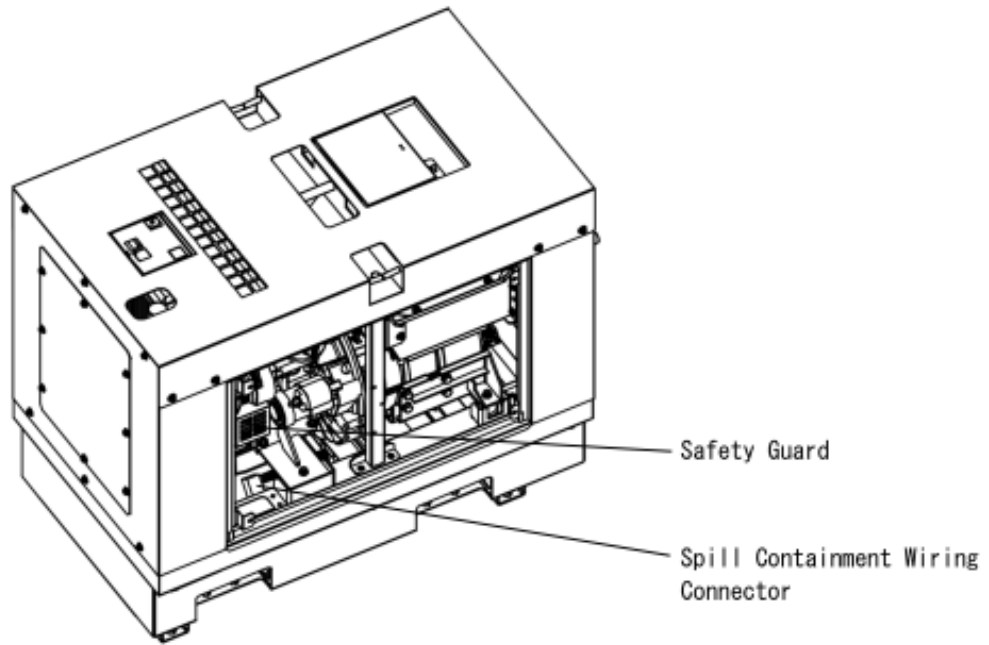
(4) Accessory

Operator's manual	1 copy
Engine warranty manual	1 copy

CHAPTER 4: APPEARANCE







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