

shindaiwa[®]

SPECIFICATIONS

Diesel Engine Generator & Welder

DGW400DMK-D4CSV

CONTENTS

CHAPTER 1: GENERAL.....1

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

CHAPTER 2: SPECIFICATIONS.....2

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

1. Equipment

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

2. Feature.....4

- (1) Feature**
- (2) Protection Device**
- (3) Fuel Economy**
- (4) Accessories**

CHAPTER 4: APPEARANCE.....5

CHAPTER 1: GENERAL

1. Applications

- (1) Shielded Metal Arc Welding
- (2) Semi-Auto Arc Welding (MIG, MAG, Self-Shielded)
- (3) Gouging
- (4) Scratch Start TIG
- (5) Power Sourcing for light, electric tools and appliances.

2. Standard

Design and production are in conformity with:

- (1) Japan Industrial Standards: JIS C 9300-1
- (2) Low Noise Type Construction Machinery Standard
- (3) Construction Machinery Gas Emission Regulation Standard by Ministry of Construction (Phase 3)
- (4) International Protection (classified by IEC standard 60529)

3. Design Condition

- (1) Installation Place: Outside Only.
- (2) Ambient Temperature: -15 to +40°C
- (3) Humidity: Less than 85%
- (4) Altitude: Less than 300 meters above sea level

4. Test and Check

Test shall be done 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

5. Painting

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

6. 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: 64dB(A) @7m distance under no load. (50Hz)
65dB(A) @7m distance under no load. (60Hz)
- (3) Fuel Tank
A steel fuel tank is equipped and incorporated with the electrical level gauge.

CHAPTER 2: SPECIFICATIONS

Model		DGW400DMK-D4CSV		
Generating Method		Rotating Field		
Welding Generator	Operation	Single	Dual	
	CC DROOP	Rated Current (A)	370	180
		Rated Voltage (V)	34.8	27.2
		Duty Cycle (%)	60	100
		Current Adj. Range (A)	95 – 390	50 – 200
		Welding Rod (φ)	2.6 – 8.0	2.0 – 4.0
		Gouging Rod (φ)	3.2 – 8.0	3.2 – 5.0
	CV	Rated Current (A)	330	180
		Rated Voltage (V)	31.5	20.0
		Duty Cycle (%)	100	100
		Voltage Adj. Range (V)	14 – 34.5	14 – 21
Welding Wire (φ)		0.6 – 2.0	0.6 – 1.6	
Rated Speed (min ⁻¹)		3000		
No Load Voltage (V)		MAX 85		
AC Generator	Rated Frequency (Hz)	50		
	Rated Speed (min ⁻¹)	3000		
	Phase	1 Phase	3 Phase	
	Rated Voltage (V)	220	380	
	Rated Output (kVA)	9.6	12.0	
	Power Factor	1.0	0.8	
	Rating	Continuous		
Engine	Model	Kubota D902		
	Type	Vertical, Water-Cooled 4-Cycle Diesel Engine		
	Displacement (L)	0.898		
	Rated Output (kW/min ⁻¹)	15.0 / 3000		
	Fuel	ASTM No.2-D Diesel Fuel or Equivalent		
	Lubricant Oil	API Class CD or better		
	Lubrication Oil Volume (L)	3.6 (Effective 1.7)		
	Cooling Water Volume (L)	4.0 (Sub Tank Capacity 0.6 L included)		
Starting Method	Starter Motor			
Battery		46B24L (Japanese Industrial Standard)		
Fuel Tank Capacity (L)		37		
Dimension	Length (mm)	1435		
	Width (mm)	700		
	Height (mm)	848		
Dry Weight (kg)		453		

*Specifications subject to change without notice.

CHAPTER 3: EQUIPMENT AND FEATURE

1. Equipment

(1) Generator

3-Phase Receptacle (380V)	1 pc.
1-Phase Receptacle (220V)	3 pcs.
Main Breaker	1 pc.
Earth Leakage Circuit Breaker (ELCB)	1 pc.
Circuit Protector	3 pcs.
Single/Dual Selector	1 pc.

(2) Welder

Output Control Dial (with pre-setting function)	2 pcs.
Welding Mode Selector Switch (CV/DROOP/CC Mode)	2 pcs.
Arc Control Dial	2 pcs.
Welding Rod Capacity	
Single Operation.....	Φ2.6~8.0
Dual Operation	Φ2.0~4.0
ECO Welding	1 pc.

(3) Safety Device

Emergency Stop Switch	1 pc.
VRD (Voltage Reduction Device)	1 pc.
Guard (to prevent access to the rotating part)	1 pc.
Earth Leakage Circuit Breaker	1 pc.
Welding Terminal Cap Cover (Red/Black)	1 pc. ea.
Earth Leakage Circuit Breaker (ELCB)	3 pcs.
Bonnet Grounding Terminal.....	1 pc.
Front Panel Cover/Fuel Inlet Cover (with locking feature)	1 pc.
Right Door (with a key locking system)	1 pc.
Wire Feeder Output Control.....	1 pc.
Auto Engine Shut-Down Function (water temp., oil pressure & battery charge)	

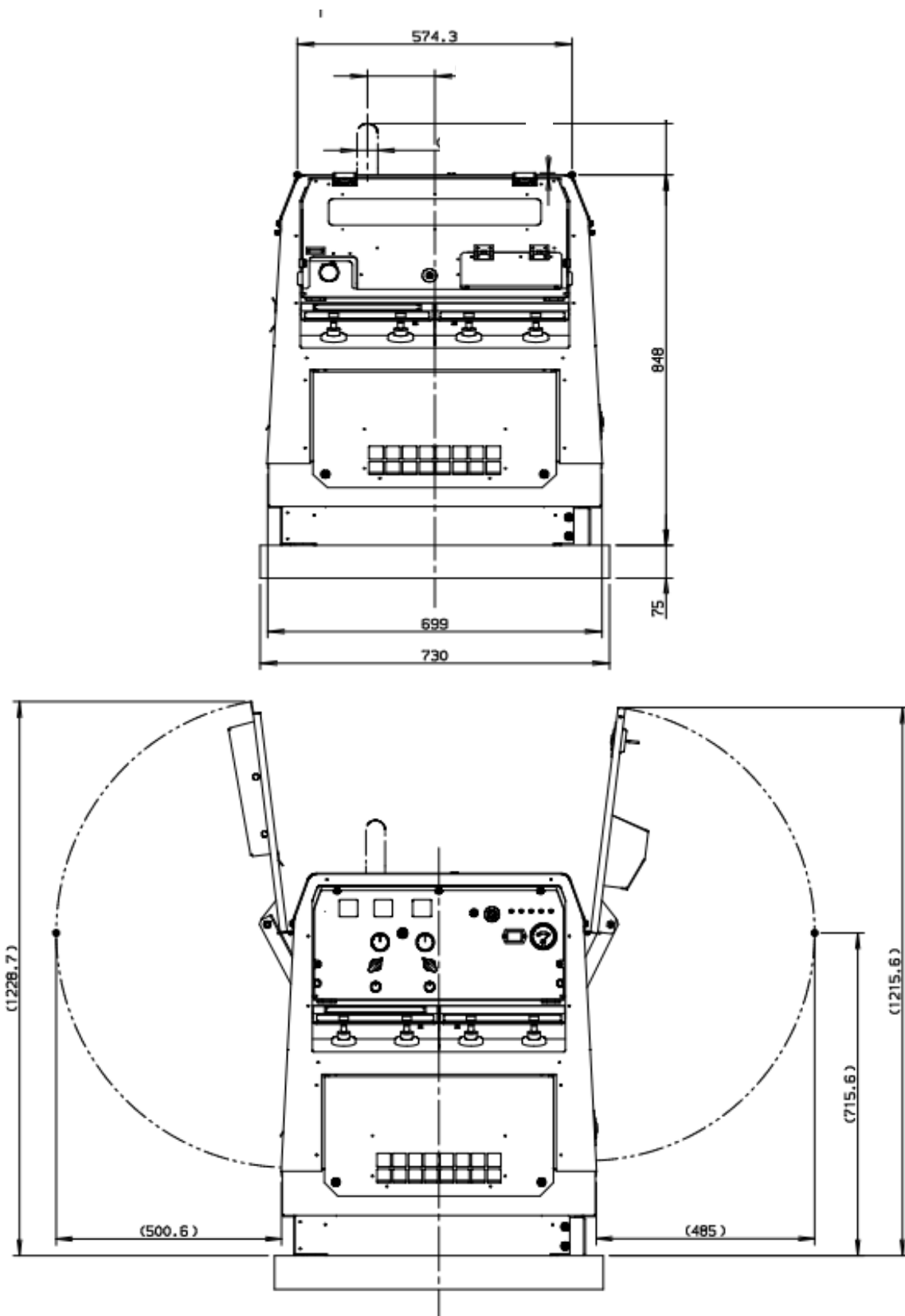
(4) Equipment

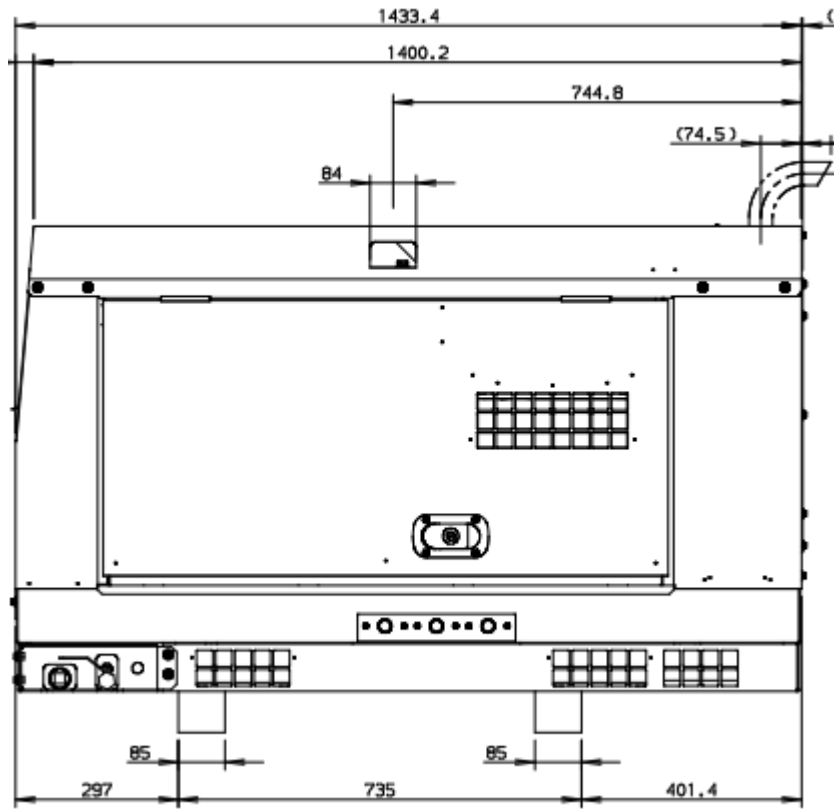
Spill Containment.....	1 pc.
Idle Control Switch (ECO/Auto/High)	1 pc.
Front Panel Cover.....	1 pc.
Digital Display (Voltage/Current/Frequency)	1 pc.
Starter Switch.....	1 pc.
Monitor Lamp.....	1 set
• Water Temp.	
• Battery Charge	
• Oil Pressure	
• Spill Containment	
Error Code Display.....	1 set

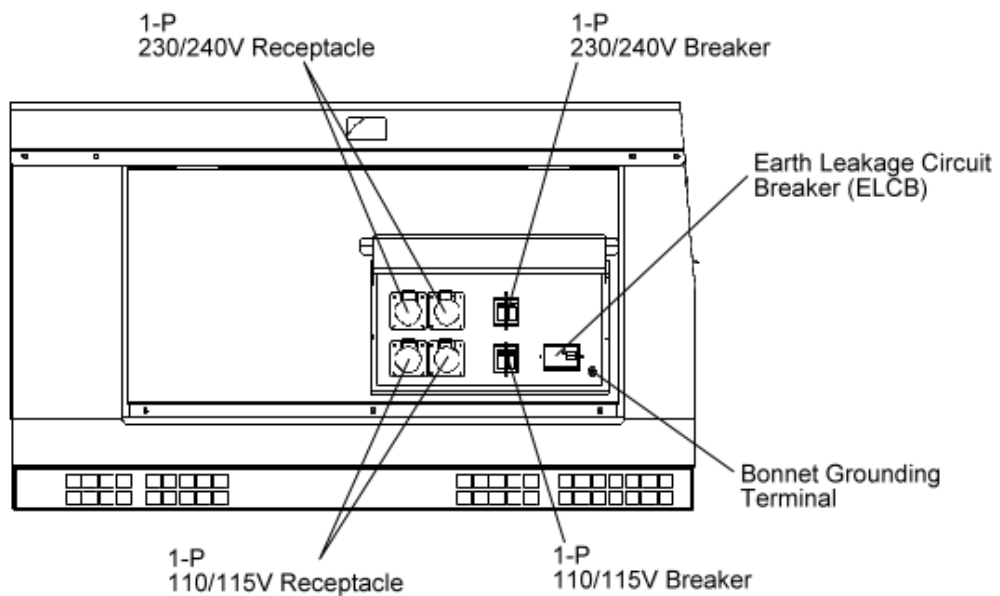
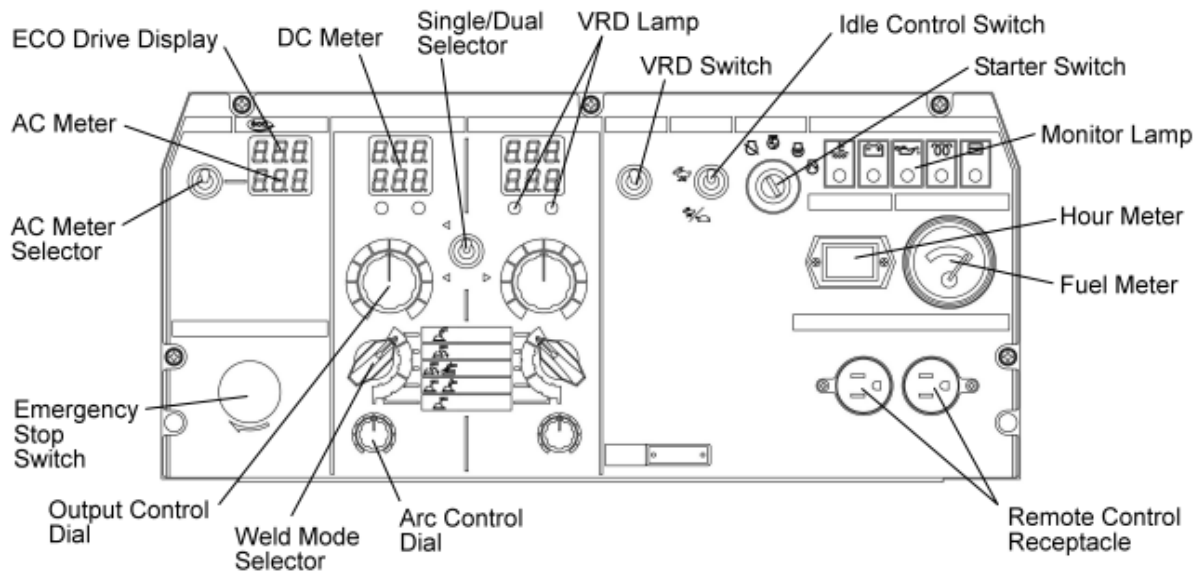
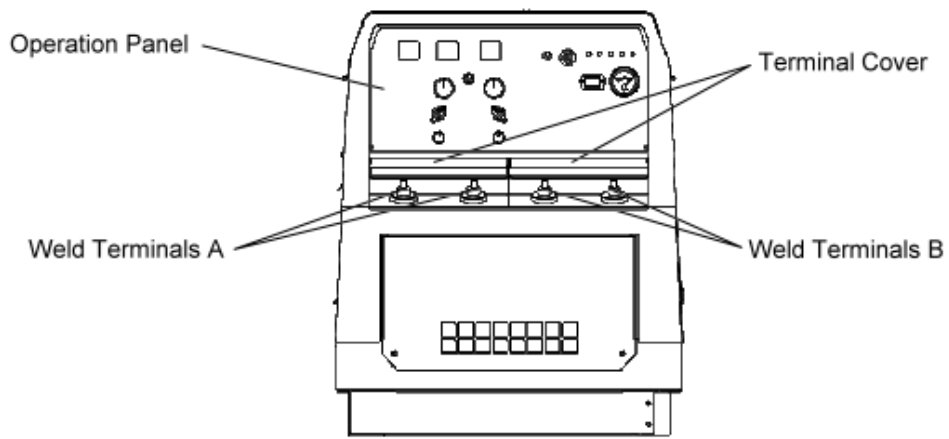
Starter Key
Door Key

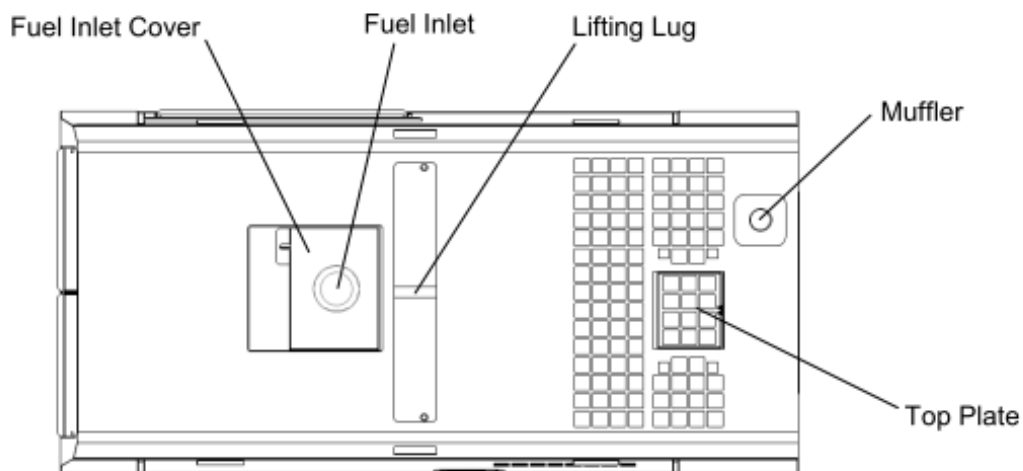
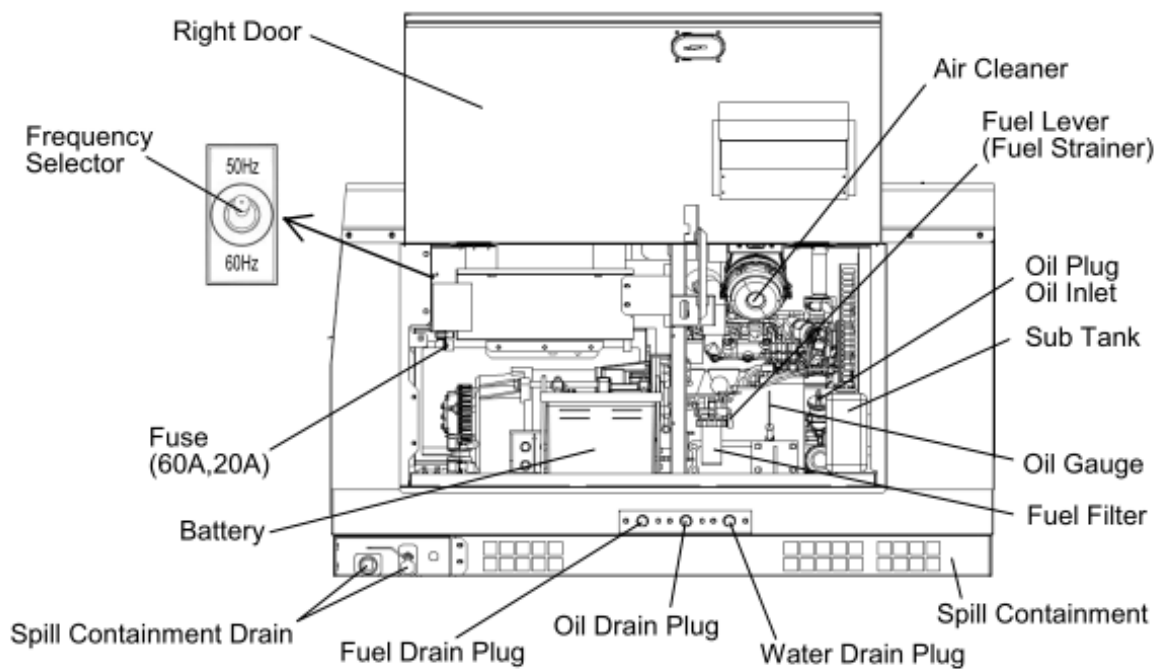
1 pair
1 pair

CHAPTER 4: APPEARANCE









YAMABIKO CORPORATION

**35 SHIN-UJIGAMI, KITA-HIROSHIMA-CHO,
YAMAGATA-GUN, HIROSHIMA 731-1597 JAPAN**

Telephone: (81)826-72-5140

Fax: (81) 826-72-7004

www.yamabiko-corp.co.jp