

shindaiwa[®]

SPECIFICATIONS

DGW500DM/ANZ

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CHAPTER 1: GENERAL

1. Applications

- (1) Arc Welding
- (2) Gouging
- (3) Power Source

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

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: 57dB(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		DGW500DM		
Generating Method		Rotating Field		
Welding Generator	OPERATION		SINGLE	DUAL
	CC MODE	Rated Current (A)	480	230
		Rated Voltage (V)	39.2	29.2
		Duty Cycle (%)	60	80
		Current Adj. Range (A)	60 – 500	30 – 280
		Welding Rod (φ)	2.6 – 8.0	2.0 – 6.0
	CV MODE	Gouging Rod (φ)	3.2 – 9.5	3.2 – 5.0
		Rated Current (A)	480	230
		Rated Voltage (V)	39.0	22.5
		Duty Cycle (%)	60	80
		Voltage Adj. Range (V)	14 – 40	14 – 29
Welding Wire (φ)		0.6 – 2.4	0.6 – 2.0	
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)		240	415
	Power Factor		1.0	0.8
	Rated Output (kVA)		10.8	15
	Rating		Continuous	
Engine	Model		Kubota V1505	
	Type		Vertical, Water-Cooled 4-Cycle Diesel Engine	
	Displacement (L)		1.498	
	Rated Output (kW/min ⁻¹)		29.0 / 3600 (Gross Intermittent)	
	Fuel		ASTM No.2 Diesel Fuel or Equivalent	
	Lubricant Oil		API Class CD or Higher	
	Lubrication Oil Volume (L)		6.0 (Effective 2.0)	
	Cooling Water Volume (L)		5.6 (Sub Tank Capacity 0.8 L included)	
Starting Method		Starter Motor		
Battery		75D31R		
Fuel Tank Capacity (L)		63		
Dimension	Length (mm)		1680	
	Width (mm)		700	
	Height (mm)		950	
Dry Weight (kg)		613		

*Specifications subject to change without notice.

CHAPTER 3: EQUIPMENT AND FEATURE

1. Equipment

(1) Generator

AC Output Receptacle	
1-Phase Receptacle (240V)	3 pcs
3-Phase Receptacle (415V)	1 pc
Main Breaker	1 pc
Earth Leakage Circuit Breaker (ELCB)	1 pc.
1-Phase Breaker	1 pc
3-Phase Breaker	1 pc

(2) Welder

Output Adjusting Dial	2 pcs.
Welding Mode Selector Switch (CV/CC Mode)	1 pc.
Arc Control Dial	1 pc.
Output Pre-Setting Dial	1 pc.
Welding Rod Capacity	
Single Operation	Φ2.6~8.0
Dual Operation	Φ2.0~6.0

(3) Safety Device

Emergency Stop Switch	1 pc.
VRD (Voltage Reduction Device)	1 pc.
Battery Isolator	1 pc.

(4) Other

Starter Switch	1 pc.
Operation Mode Selector (with key lock system)	1 pc.
Idle Control Switch (Auto/High)	1 pc.
Wire Feeder Output Control	1 pc.
Monitor Lamp	1 set
• Water Temp.	
• Battery Charge	
• Oil Pressure	
• Overheat	
Error Code Display	1 set
Fuel Meter	1 pc.
Hour Meter	1 pc.

2. Feature

(1) Feature

- Sound Level 57dB(A) at 7m distance under no load
- Generating Performance 1-phase & 3-Phase
- 2 Way Drive Control Low/High Speed
- Environmental Low Noise Level and Slow-Down Function
- Fuel Tank Capacity 63 Liters
- Dry Weight 613 kg
- Dimensions (LxWxH) 1680 x 700 x 950 mm

(2) Protection Device

Item	Engine Shut-Down
Water Temp.	✓
Battery Charge	✓
Oil Pressure	✓
Overheat	-

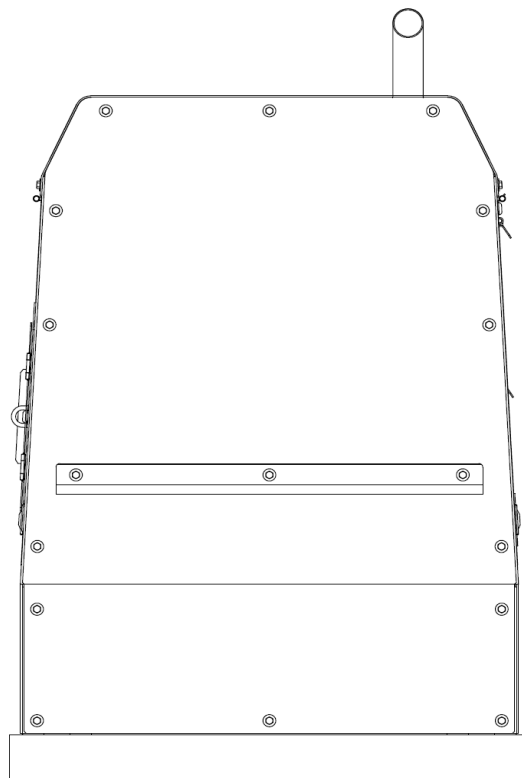
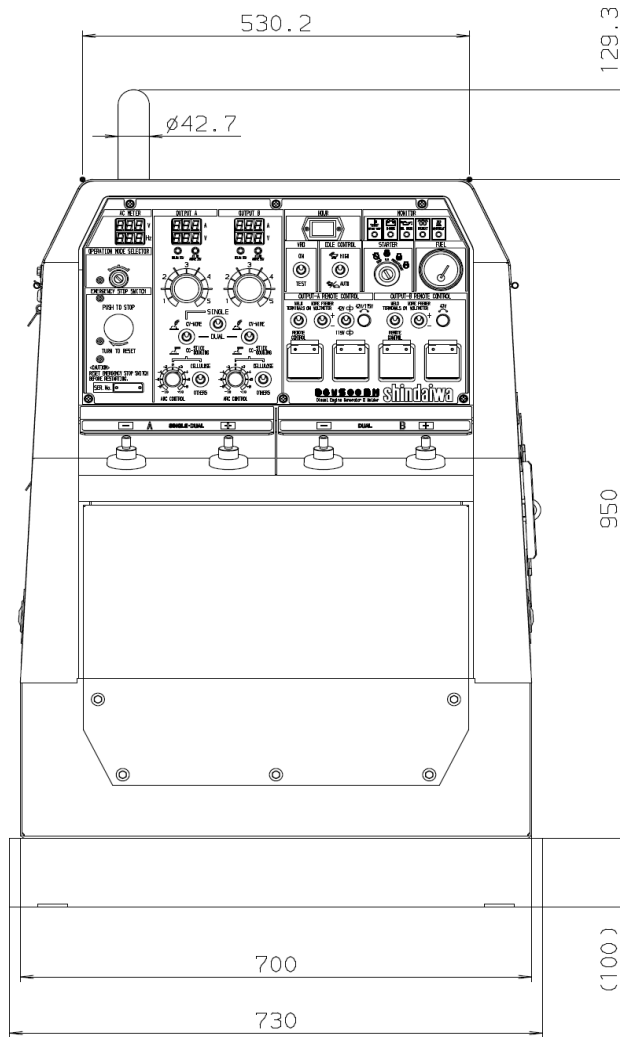
(3) Fuel Economy & Operating Hour

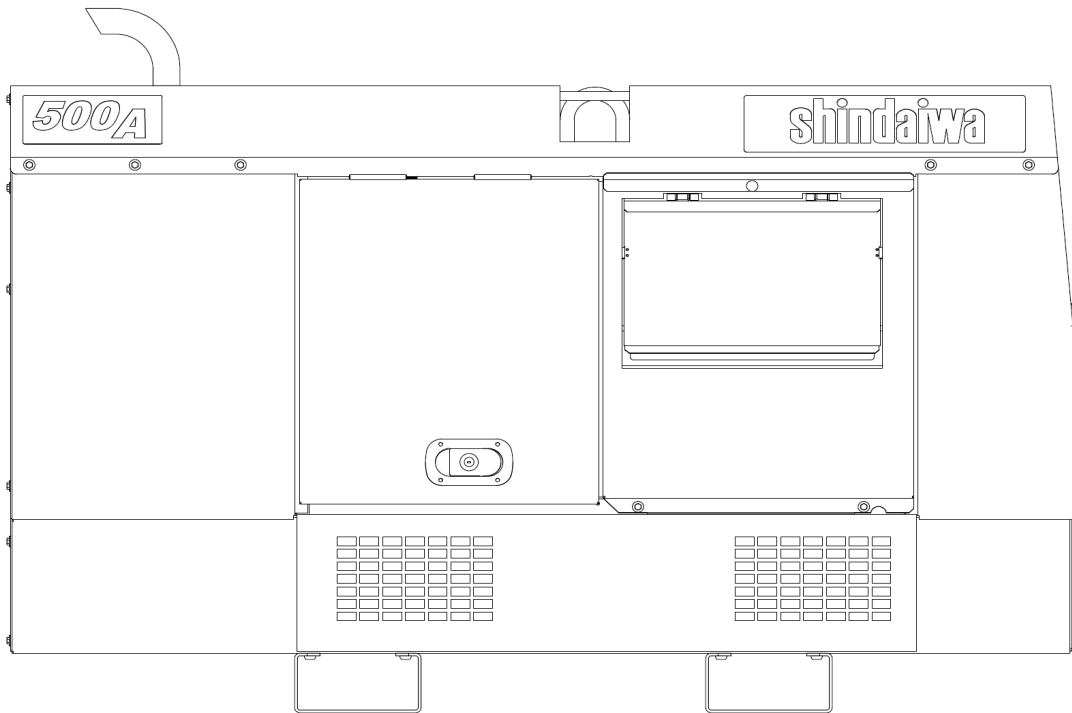
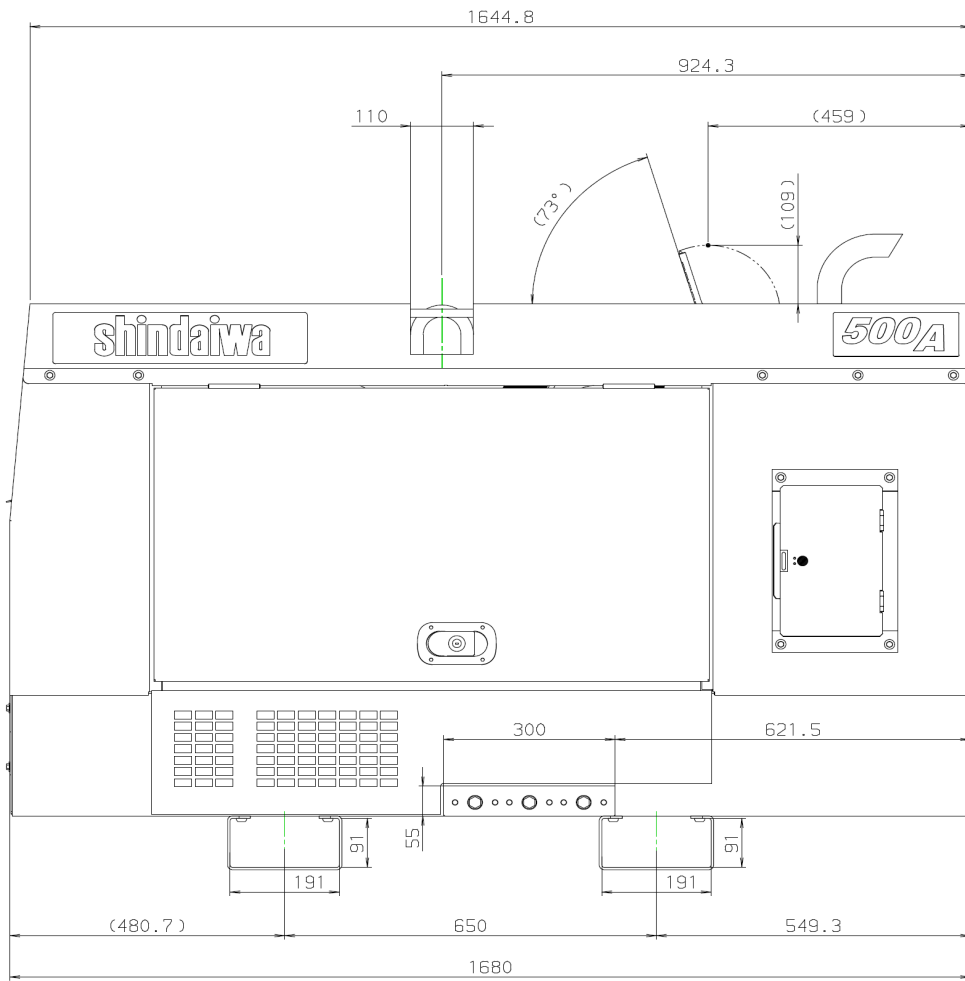
	Criteria	Fuel Consumption	Continuous Operating Hrs
Welding			
No Load	Idle Control at low	1.4L/hr. (0.37 gal./hr)	43.9
		<Duty Cycle: 60%>	
Loaded	Rated Current at 480A (Single Use)	5.2L/hr. (1.37 gal./hr)	12.0
		<Duty Cycle: 80%>	
	Rated Current at 230A x 1 (Dual Use)	3.8L/hr (1.00 gal./hr)	16.4
		<Duty Cycle: 80%>	
	Rated Current at 200A x 2 (Dual Use simultaneously)	4.7L/hr. (1.24 gal./hr)	13.3
Generating		<Power Factor 0.8>	
Loaded	415V 15kVA (3-Phase)	5.3L/hr. (1.40 gal./hr)	11.6
		<Power Factor 1.0>	
	240V 10.8VA (1-Phase)	5.1L/hr. (1.35 gal./hr)	12.1

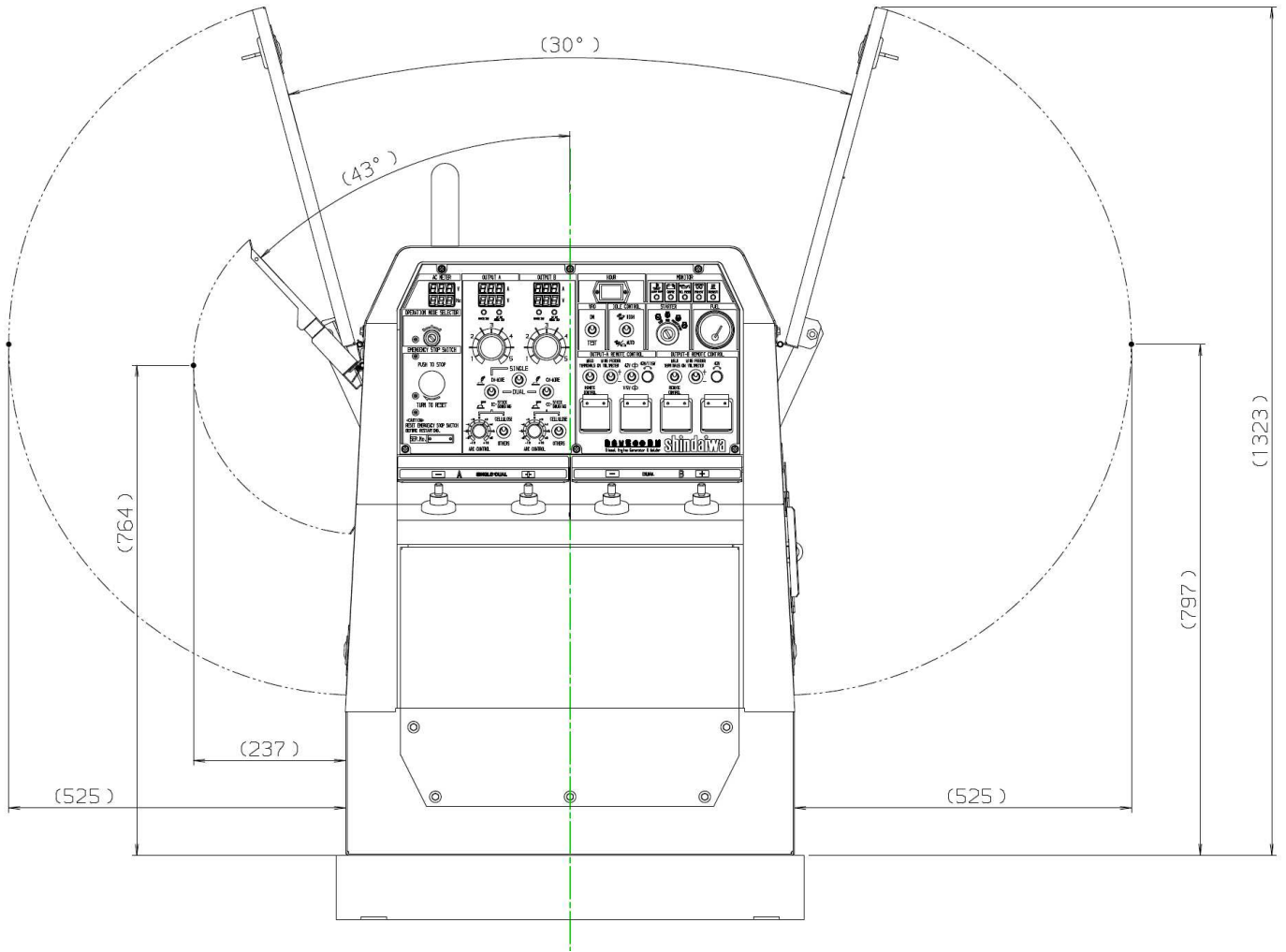
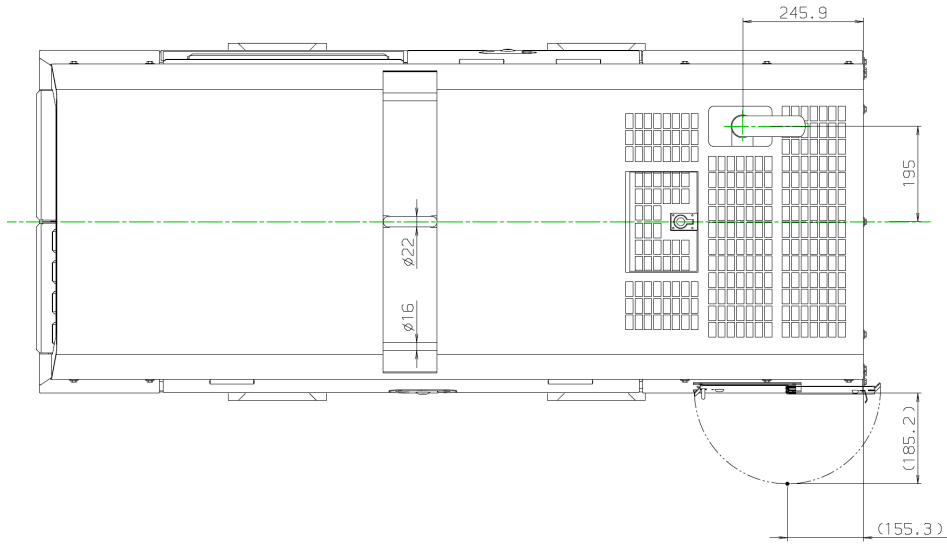
(4) Accessories

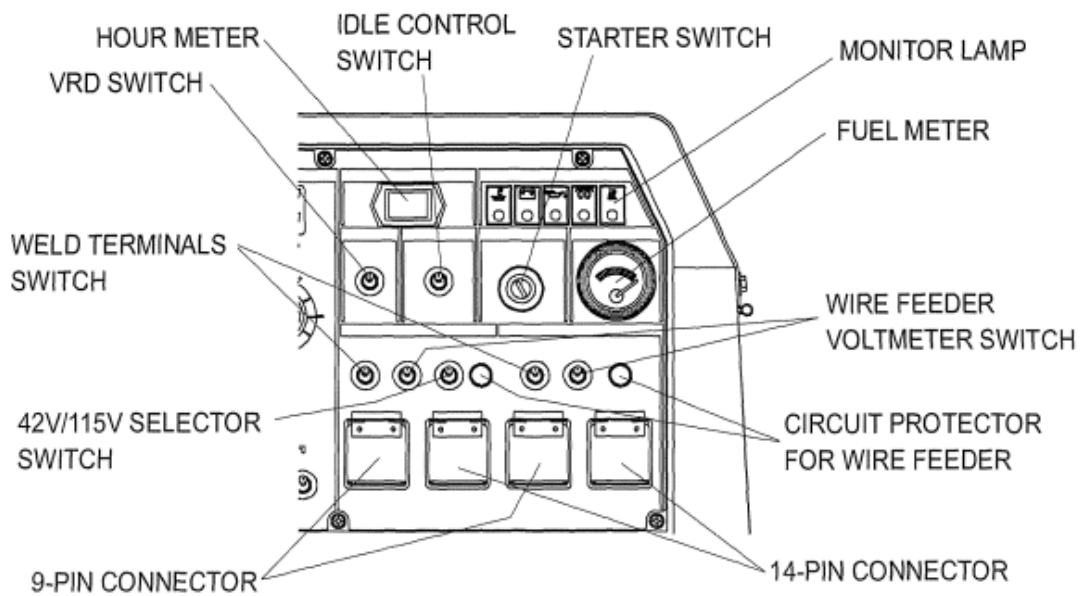
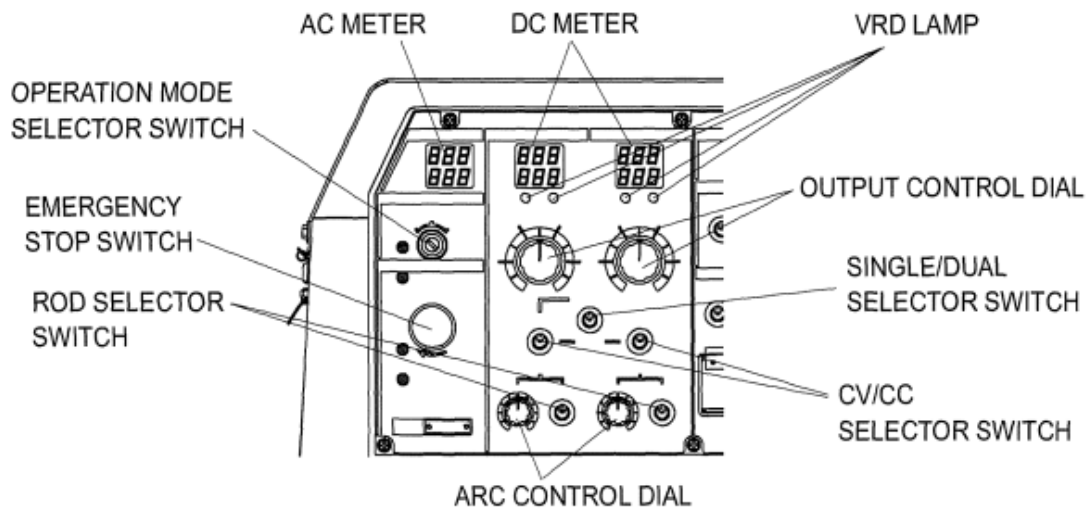
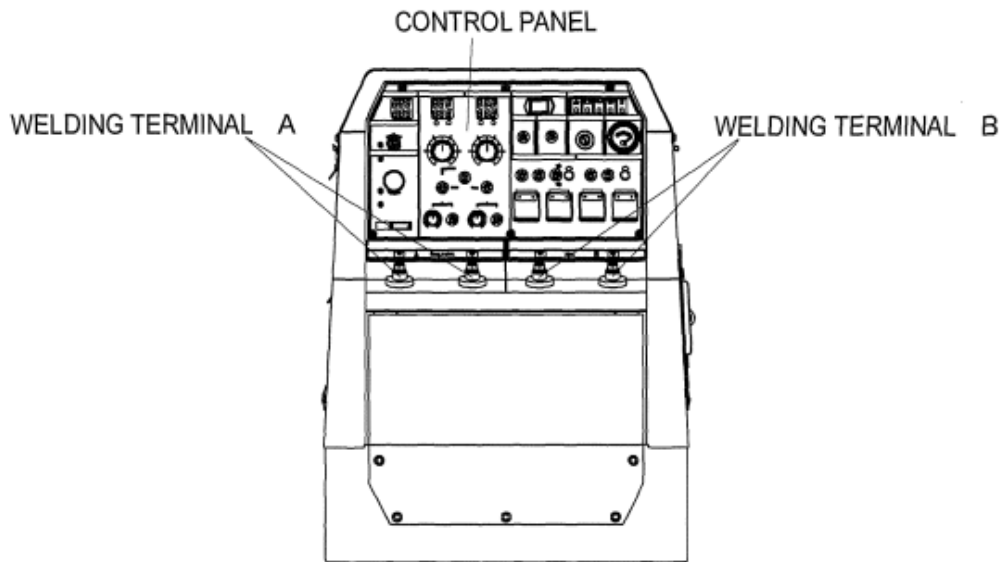
Owner's & Operator's Manual	1 copy
Starter Key	1 pair
Mode Selector Key	1 pair
Door Key	1 pair
Tail Pipe (with band)	1 set

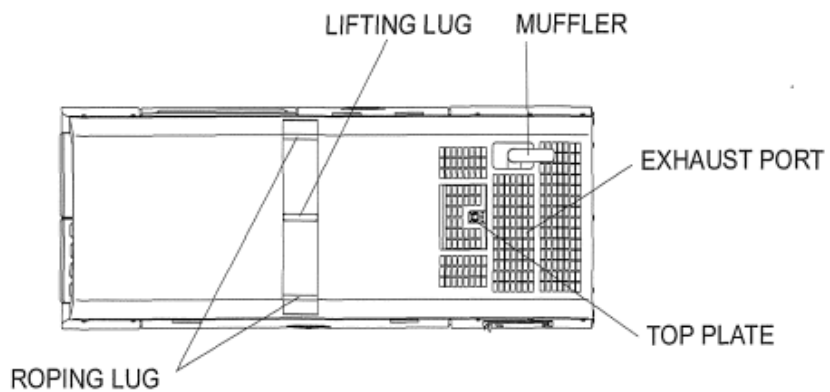
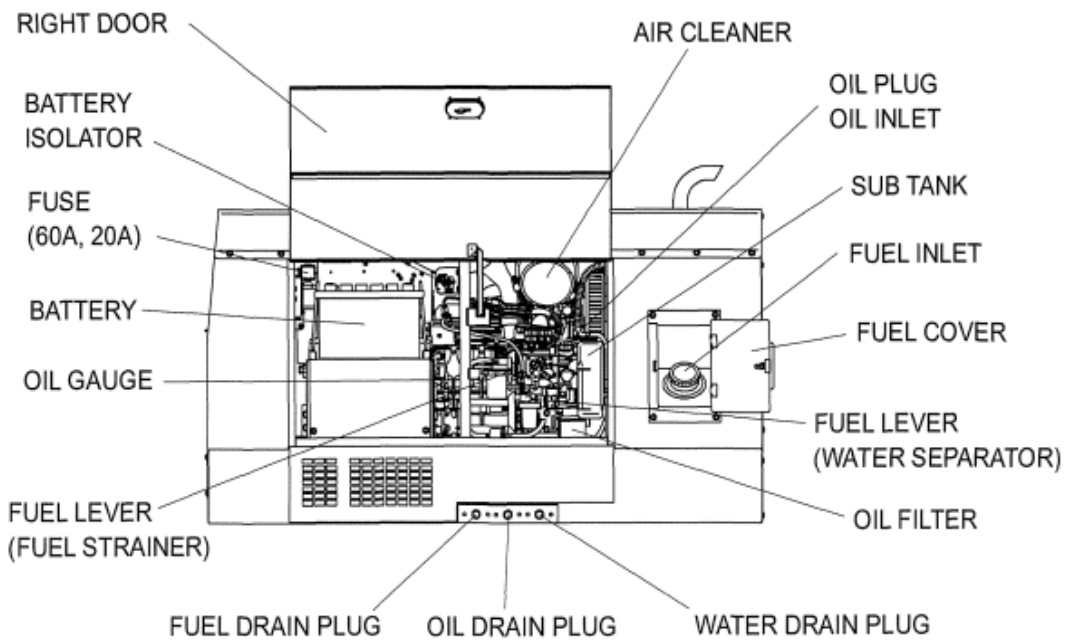
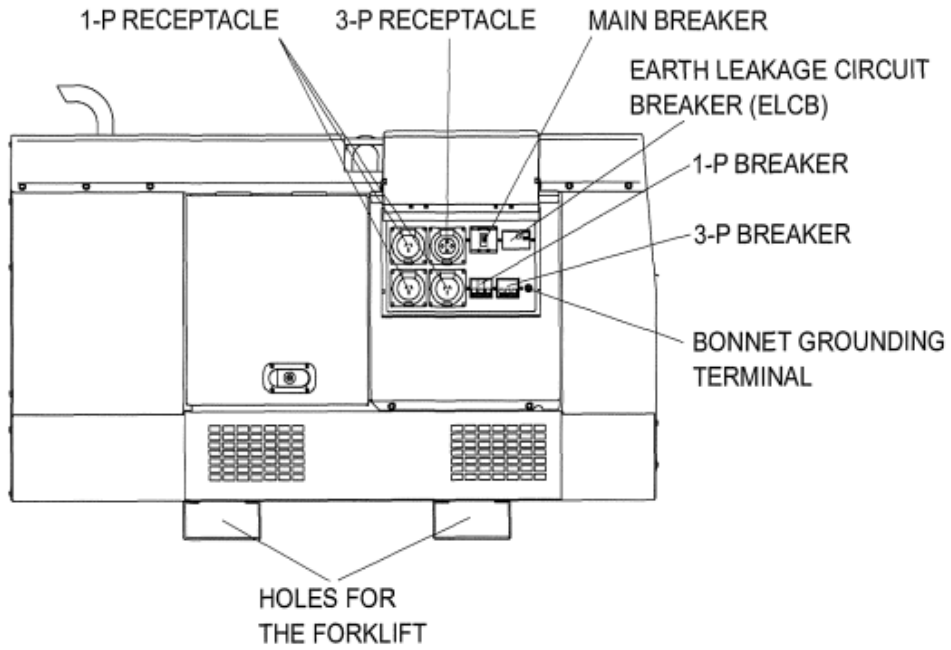
CHAPTER 4: APPEARANCE











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