MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-016A, 3 kW, 60 Hz, GASOLINE ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 3 kW @ 0.8 power factor, 60 Hz, 120 V, 240 V, 120/208 V.

Model:	MEP-016A	Type:	I (tactical)
NSN:	6115-00-017-8237	Class:	2 (utility)
Spec:	MIL-G-52732/6	Mode:	III (60 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figure 6 on page 42.

Weight: 285 lbs (129.3 kg).

Mobility: Mounted on skid base (tubular frame). Lifting and tie-down attachment provided.

Engine: Gasoline. Standard: MS39299. Horsepower: 6 @ 3600 RPM. No. of cyl: 4. Cycle: 4. Air cooled. Rope start. Operating speed: 3600 RPM. Fuel tank capacity: 3.6 gallon (approx 4 hrs at rated load). Fuel pump lift: 3 ft.

Fuel:
Primary: MIL-G-3056 and VV-G-76 Automotive gasoline.
Emergency fuel: MIL-G-5572, Grades 80/87, 100/130 and 115/145 Aviation gasolines.

Electrical:
Drip proof generator enclosure. Fungus and moisture treatment.
Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection: 120 V, 2 wire, 1 phase. 240 V, 2 wire, 1 phase.
120 V, 3 wire, 3 phase. 120/208 V, 4 wire, 3 phase.

Protective Devices: Short circuit protection.

Instrumentation: Voltmeter. Frequency meter. Percent-of-load meter (ammeter). Hourmeter.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failure (MTBF): 250 hours (specified)

Fuel Consumption: 0.84 gph at rated load.

Electromagnetic Interference: Suppressed to MII-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	2% Bandwidth	1% Bandwidth
Long Term (4 hours)	2% Bandwidth	2% Bandwidth
Transient Performance		
Application of rated load	30% Dip	3% Undershoot
recovery	2 Sec	4 Sec
Rejection of rated load	30% Rise	5% Overshoot
recovery	2 Sec	6 Sec

Waveform			
Maximum Deviation factor	(single phase)	6%	
	(three phase)	5%	
Individual Harmonic	(single phase)	3%	
	(three phase)	3%	
Regulation:		4%	3%
(for 240 V, 2 wire)		5%	3%

Adjustment Range for Standard Voltage Connections
120/208 v Corm: 197 to 218 V. 140 V Corm: 228 to 252 V.
120 V, 1 phase Corm: 114 to 126 v. 120 V, 3 phase Conn: 114 to 126 V.

ENVIRONMENTAL DATA

Power Output at Environmental Conditions

3 kW, 60 Hz, Sea Level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
3 kW, 60 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
3 kW, 60 Hz, 8000 feet: Minus 25° F (-31.7° C) to plus 95° F (+35.0° C)
Winterization system extends lower ambient temperature limit to -65° F (-53.9° C).

Shock and Rough Handling: 10 mph railroad impact. 3 foot drop. Vibration.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 79 dbA @ 25 feet (estimate).

OPTIONAL EQUIPMENT

See 4.4.1 of MIL-STD-633 for additional information on optional equipment.

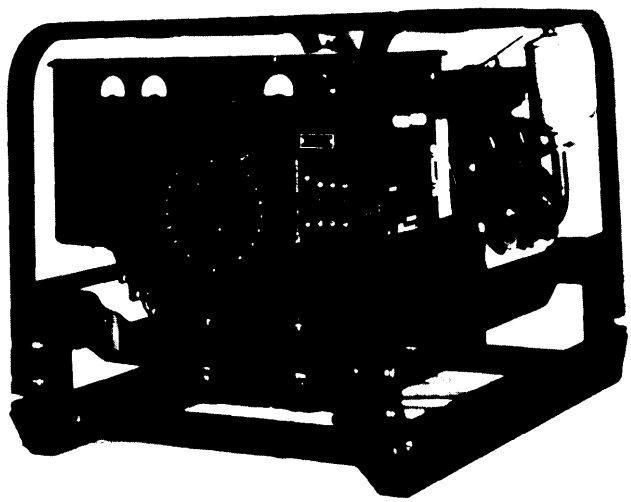
Description	NSN	Weight lbs (kg)	Effect on Dim
Spark Arrester Kit	2990-01-032-7384		None
Winterization Kit			
Canvas Cover	6115-00-960-2703	6 (2.7)	Negligible
Torch	4520-00-710-4341		

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	TO		NAVFAC
5-6115-271-14	35C2-3-386-l		
5-6115-271-24P	35C2-3-386-4	SL-4-05926A	
5-2805-203-14	38G2-90-1		
5-2805-203-24P	38G2-90-14	SL-4-03522B	P-8-613E-24P

LO
5-2805-20 3-12



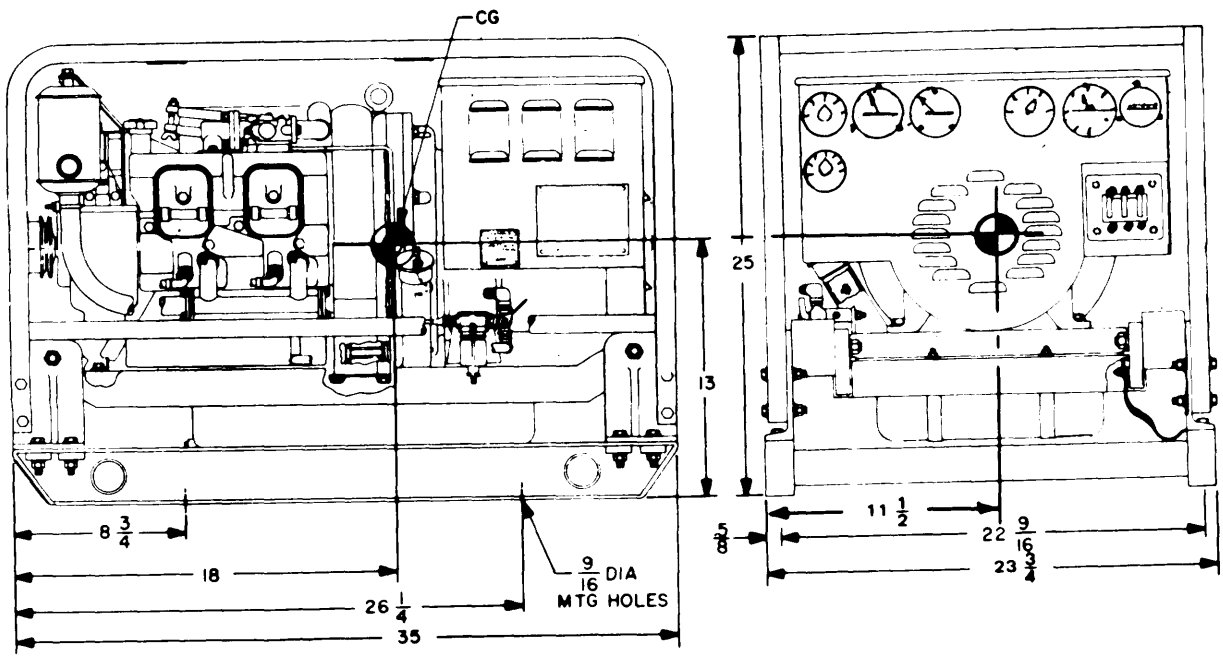


FIGURE 6. MEP-016A (3.0 kw, 60 Hz, GED).

x-3542

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-003A, 10 kW, 60 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 10 kW @ 0.8 power factor, 60 Hz, 120 V, 240 V, 120/208 V

Model:	MEP-003A	Type:	I (tactical)
NSN:	6115-00-465-1030	Class:	2 (utility)
Spec:	MIL-G-52889/2	Mode:	III (60 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figures 14 and 15 on pages 71 and 72.

Weight: 1240 lbs (562.5 kg).

Mobility: Mounted on skid base. Lifting, towing and tie-down attachments provided. Fork lift provision.

Engine: Diesel. Std: MIL-STD-1410. Horsepower: 20 @ 1800 RPM. No. of cyl: 4. Cycle: 4. Air cooled. 24 VDC electric start. Operating speed: 1800 RPM. Fuel tank capacity: 12.5 gallons (approx 8 hours at rated load). Fuel pump lift: 6 feet.

Fuel:
Primary: VV-F-800; Diesel Fuel Oil, types DF-1, DF-2 and DF-A.
Emergency fuel: MIL-T-5624, Aviation Turbine Fuels, grade JP-4

Electrical:
Drip proof generator enclosure. Fungus and moisture treatment.
Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection: 120 V, 1 phase, 2 wire. 120/240 V, 1 phase, 3 wire, 120/208 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overload protection. Low oil pressure cut-off switch. High temperature cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Oil pressure gage. Battery charging ammeter.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failures (MTBF): 500 hours (specified)

Fuel Consumption: 1.09 gph at rated load.

Electromagnetic Interference: Suppressed to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	2% Bandwidth	2% Bandwidth
Long Term (4 hours)	4% Bandwidth	3% Bandwidth
Transient Performance		
Application of rated load	20% Dip	3% Undershoot
recovery	3 Sec	3 Sec
Rejection of rated load	20% Rise	4% Overshoot
recovery	3 Sec	3 Sec
Application of simulated motor load	35% Dip	
recovery	5 Sec	
Waveform		
Maximum Deviation Factor (single phase)	6%	
(three phase)	5%	
Individual Harmonic (single phase)	3%	
(three phase)	2%	
Regulation:	3%	3%

Adjustment Range for Standard Voltage Connections
120/208 V Corm: 205 to 220 V. 120/240 V Corm: 228 to 252 V.
120 V, 1 phase Corm: 114 to 126 V.

Frequency Adjustment Range: 60 Hz: ±3%

ENVIRONMENTAL DATA

Power Output at Environmental Conditions
10 kW, 60 Hz, Sea Level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
10 kW, 60 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
9 kW, 60 Hz, 8000 feet: Minus 25° F (-31.7° C) to plUS 95° F (+35.0° C)
Winterization system extends lower temperature limit to -65° F (-53.9° C).

Shock and Rough Handling: 10 mph railroad impact. 12 inch drop. 12 inch end drop. Truck and trailer transportation.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 77 dbA @ 25 feet.

OPTIONAL EQUIPMENT

See 4.4.2 of MIL-STD-633 for additional information on optional equipment.

Description	NSN	Weight lbs (kg)	Effect on Dim
Winterization Kits			
Aux, Fuel Burning	To be determined	350 (158.8) Max	Aux: (41X40X26)
Slave Receptacle Assembly (MS3506)	5935-00-549-4690		Int
Slave Receptacle Assembly (MS75058)	5935-00-295-6403		Int

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	TO		NAVFAC
5-6115-585-12	35C2-3-455-1	TM-05684C-12	P-8-623-12
5-6115-585-34	35C2-3-455-2	TM-05684C-34	P-8-623-34
5-6115-585-24P	35C2-3-455-4	SL-4-05684C	P-8-623-24P

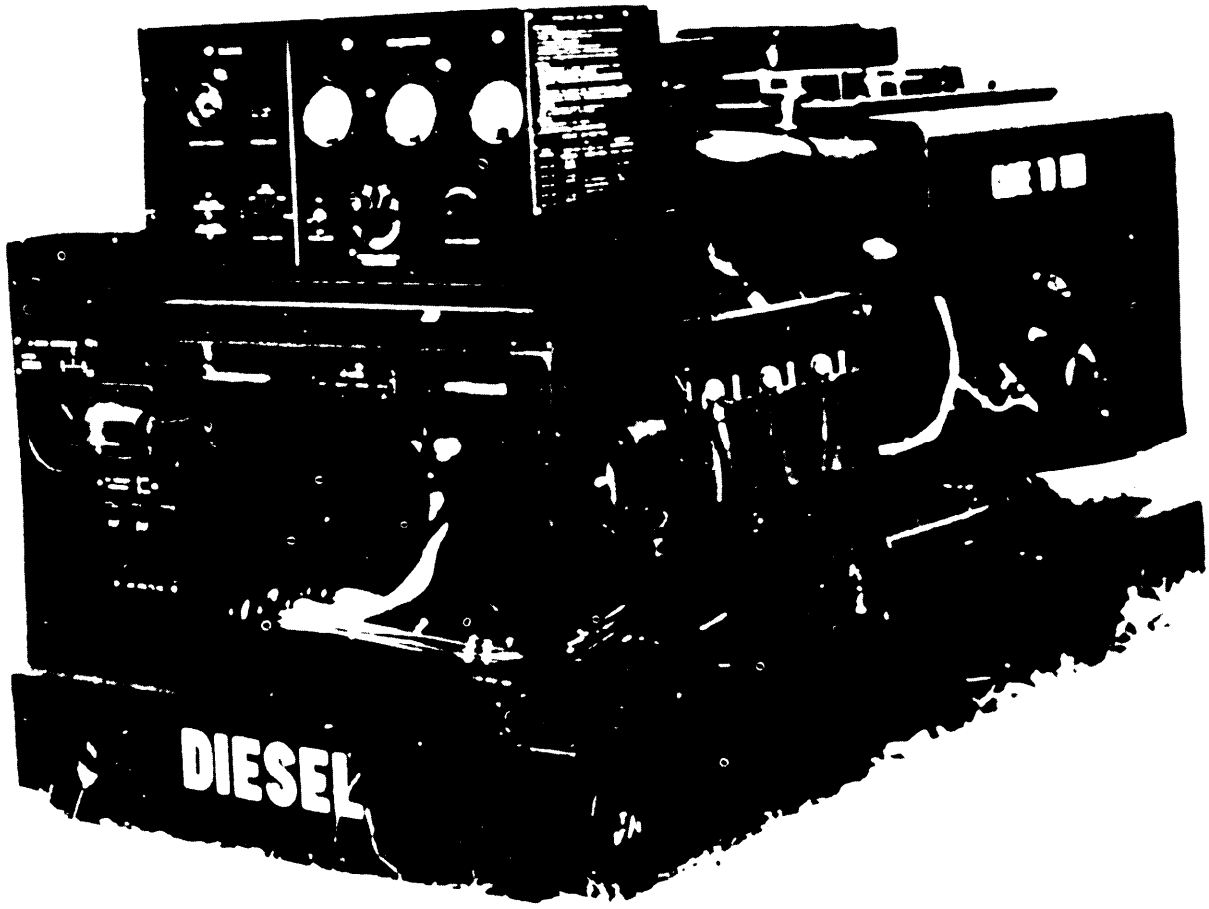


FIGURE 14. MEP-003A (10 kW, 60 Hz, DED).

X-3549

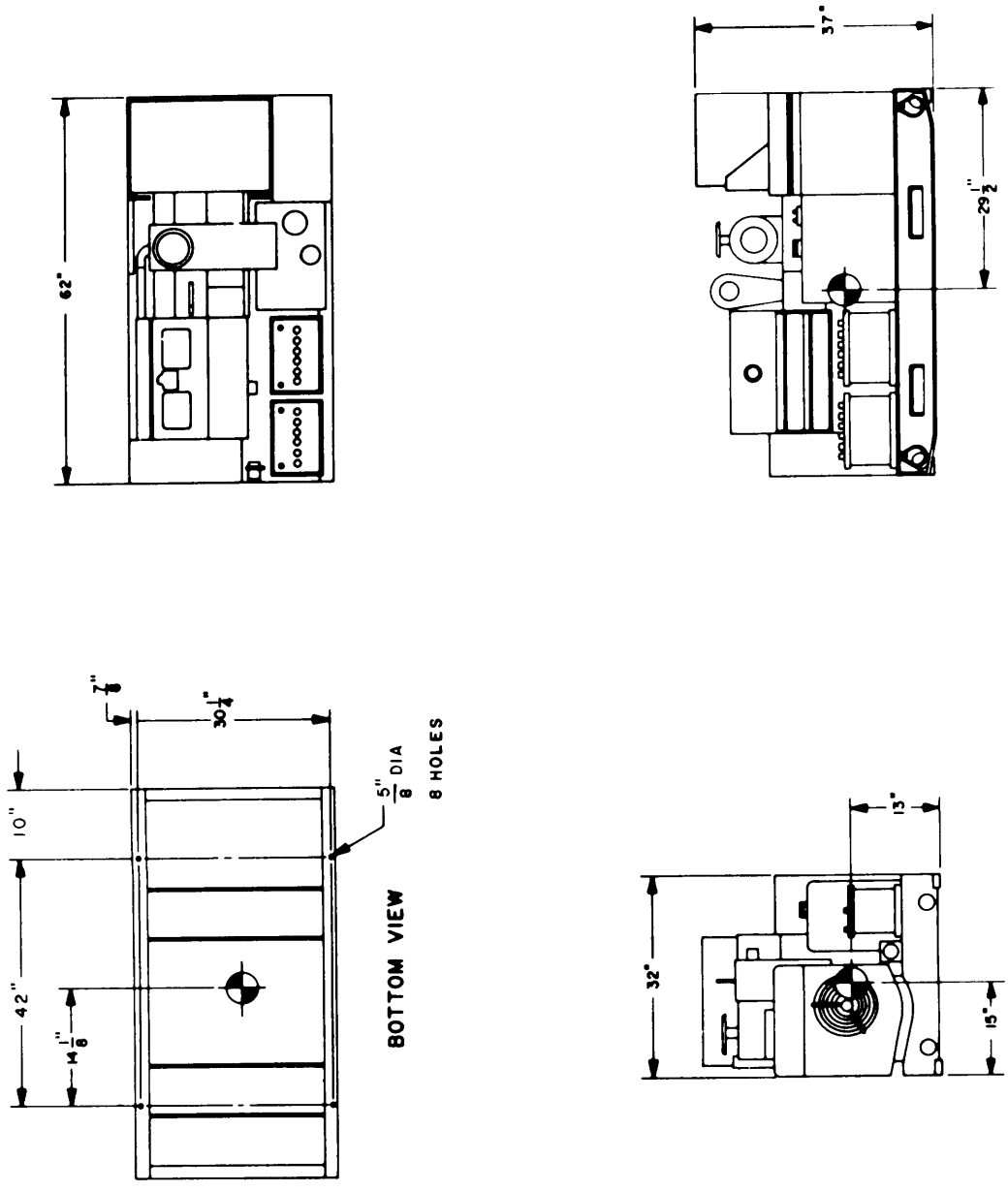


FIGURE 15. MEP-003A (10 kw, 60 Hz, DED).

X-3550

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-112A, 10 kW, 400 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 10 kW @ 0.8 power factor, 400 Hz, 120 V, 240 V, 120/208 V

Model:	MEP-112A	Type:	I (tactical)
NSN:	6115-00-465-1027	Class:	2 (utility)
Spec:	PD, 13 Jul 77	Mode:	II (400 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figures 19 and 20 on pages 85 and 86.

Weight: 1325 lbs (601 kg).

Mobility: Mounted on skid base. Lifting, towing and tie-down attachments provided. Fork lift provision.

Engine: Diesel. Std: MIL-STD-1410. Horsepower: 20 minimum @ 2000 RPM. No. of Cyl: 4. Cycle: 4. Air cooled. 24 VDC electric start. Operating speed:2000 RPM. Fuel tank capacity: 12.5 gallons (approx 8 hours at rated load). Fuel pump lift: 6 feet.

Fuel:
Primary: VV-F-800; Diesel Fuel Oil, typed DF-1, DF-2 and DF-A.
Emergency fuel: MIL-T-5624, Aviation Turbine Fuels, grade JP-4.

Electrical:
Drip proof generator enclosure. Fungus and moisture treatment.
Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection: 120 V, 1 phase, 2 wire. 120/240 V, 1 phase, 3 wire.
120/208 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overload protection. Low oil pressure cut-off switch. High temperature cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Oil pressure gage. Battery charging ammeter.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failures (MTBF): 500 hours (specified)

Fuel Consumption: 1.09 gph at rated load.

Electromagnetic Interference: Suppressed to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	2% Bandwidth	2% Bandwidth
Long Term (4 hours)	4% Bandwidth	3% Bandwidth
Transient Performance		
Application of rated load	20% Dip	3% Undershoot
recovery	3 Sec	3 Sec
Rejection of rated load	20% Rise	4% Overshoot
recovery	3 Sec	3 Sec
Application of simulated motor load	35% Dip	
recovery	5 Sec	
Waveform		
Maximum Deviation Factor (single phase)	6%	
(three phase)	5%	
Individual Harmonic (single phase)	3%	
(three phase)	2%	
Regulation:	3%	3%

Adjustment Range for Standard Voltage Connections
120/208 v Corm: 205 to 220 V. 120/240 V Corm: 228 to 252 V.
120 V, 1 phase Corm: 114 to 126 V.

Frequency Adjustment Range: 400 Hz: ±5$

ENVIRONMENTAL DATA

Power Output at Environmental Conditions

10 kW, 400 Hz, Sea Level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
10 kW, 400 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
8 kW, 400 Hz, 8000 feet: Minus 25° F (-31.7° C) to plus 95° F (+53.9° C)
Winterization system extends lower temperature limit to -65° F (-53.9° C)

Shock and Rough Handling: 10 mph railroad impact. 12 inch drop. 12 inch end drop. Truck and trailer transportation.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 77 dbA @ 25 feet (estimated).

OPTIONAL EQUIPMENT

See 4.4.2 of MIL-STD-633 for additional information on optional equipment

Description	NSN	Weight lbs (kg)	Effect on Dim (ins)
Winterization Kit Aux, Fuel Burning	To be determined	350 (158.8) max	Aux: (41x40x26)
Slave Receptacle Assembly (MS3506)	5935-00-549-4690		Int
Slave Receptacle Assembly (MS75058)	5935-00-295-6403		Int

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	TO		NAVFAC
5-6115-585-12	35C2-3-455-1	TM-05684C-12	P-8-623-12
5-6115-585-34	35C2-3-455-2	TM-05684C-34	P-8-623-34
5-6115-585-24P	35C2-3-455-4	SL-4-05684C	P-8-623-24P

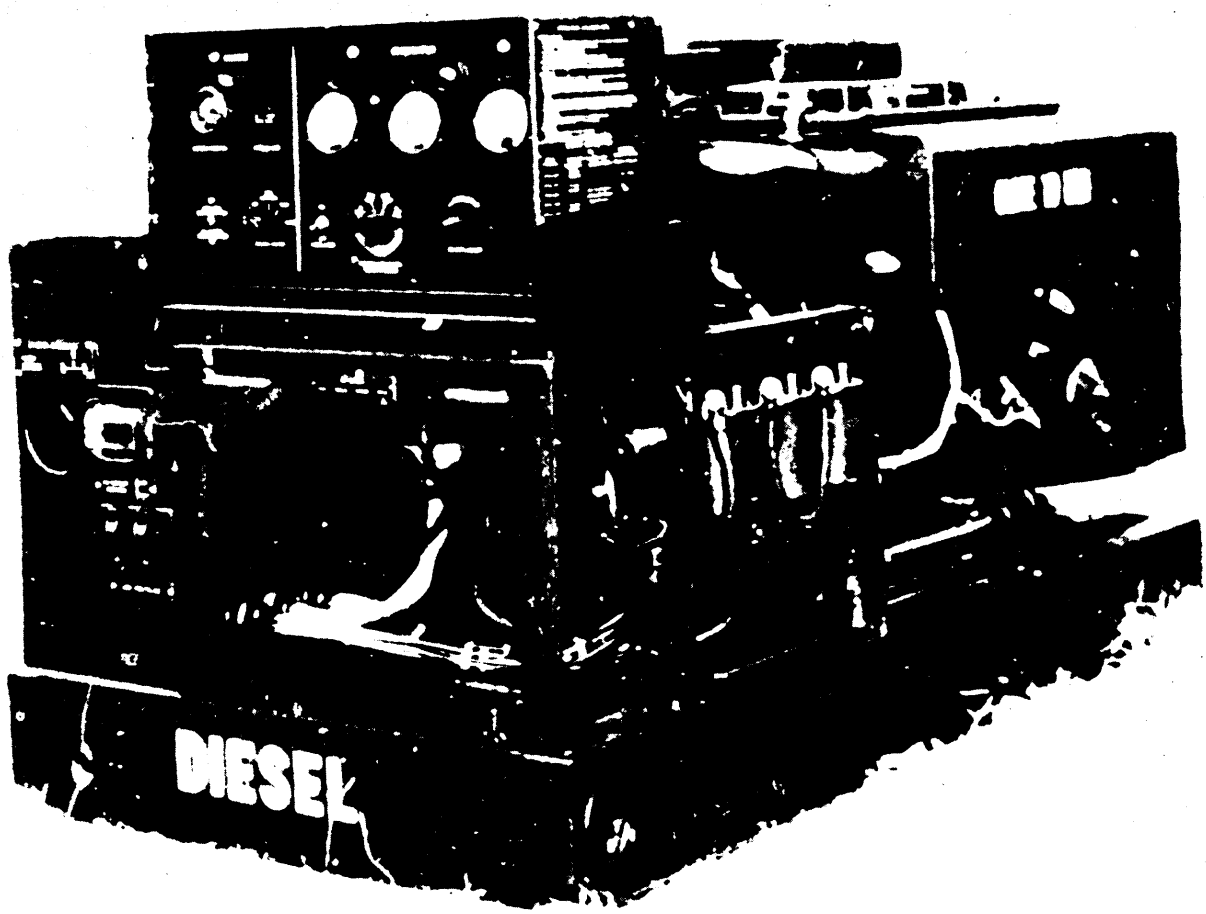


FIGURE 19. MEP-112A (10 kW, 400 Hz, DED).

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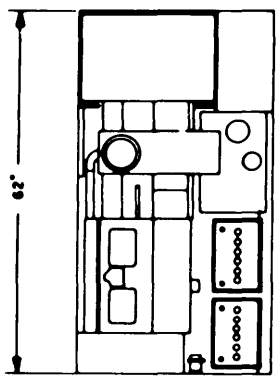
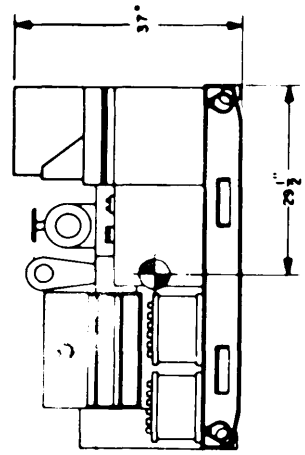
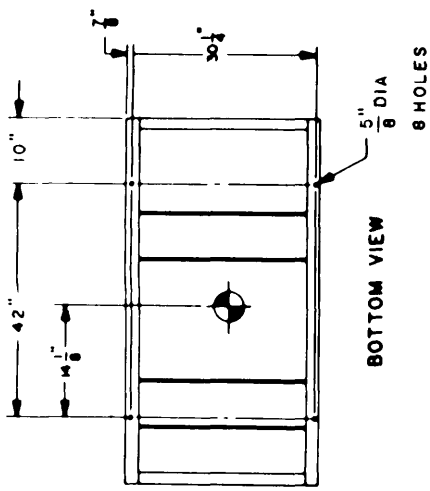
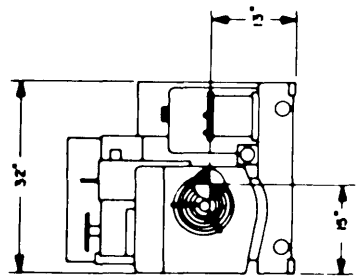








X-3554

FIGURE 20. MEP-112A (10 kW, 400 Hz, DED).

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-005A, 30 kW, 50-60 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 30 kW @ 0.8 power factor, 50/60 Hz, 120/208 V, 240/416 V

Model: MEP-005A	Type: I (tactical)
NSN: 6115-00-118-1240	Class: 2 (utility)
Spec: MIL-G-52884/5	Mode: I (50/60 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figures 29 and 30 on pages 110 and 111.

Weight: 2850 lbs (1293 kg).

Mobility: Fully housed. Mounted on skid base. Lifting and tie-down attachments provided. Fork lift provision.

Engine: Diesel. Std: MIL-STD-1410. Horsepower: 57 @ 1800 RPM. No. of cyl: 6. Cycle: 4. Liquid cooled. 24 VDC electric start. Operating speed: 50 Hz: 1500 RPM, 60 Hz: 1800 RPM. Fuel tank capacity: 26 gallons (approx 8 hours at rated load). Fuel pump lift: 12 feet.

Fuel:
Primary: VV-F-800: Diesel Fuel Oil, types DF-1, DF-2 and DF-A.
Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 an JP-5.

Electrical:
Drip proof generator enclosure. Capable of parallel operation. Fungus and moisture treatment. Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection: 60 Hz: 120/208 V, 3 phase, 4 wire. 240/416 V, 3 phase, 4 Wire. 50 Hz: 120/208 V, 3 phase, 4 wire. 240/416 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overvoltage protection. Overload protection. Reverse power protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Wattmeter (% load). Oil pressure gage. Battery charging ammeter (% current). Fault indicating system. Coolant temperature indicator. Fuel level.

FUNCTIGNAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failures (MTBF): 670 hours (specified).

Fuel Consumption: 3 gph at rated load.

Electromagnetic Interference: Suppression to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	2% Bandwidth	2% Bandwidth
Long Term (4 hours)	4% Bandwidth	3% Bandwidth
Transient Performance		
Application of rated load	20% Dip	3% Undershoot
recovery	3 Sec	3 Sec
Rejection of rated load	20% Rise	4% Overshoot
recovery	3 Sec	3 Sec
Application of simulated motor load	40% Dip	
recovery	5 Sec	
Waveform		
Maximum Deviation Factor	5%	
Individual Harmonic	2%	
Regulation	3%	2-3% (Adjustable)

Adjustment Range for Standard Voltage Connections

120/208 V Corm: 60 Hz: 197 to 240 V. 50 Hz: 190 to 213 v.
240/416 V Corm: 60 Hz: 395 to 480 V. 50 Hz: 380 to 426 V.

Frequency Adjustment Range: 58 to 62 Hz. 48 to 52 Hz.

ENVIRONMENTAL DATA

Power Output at Environmental Conditions:

30 kW, 60 Hz, sea level:	Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
30 kW, 60 Hz, 5000 feet:	Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
25 kW, 50 Hz, Sea level:	Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
25 kW, 50 hz, 5000 feet:	Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)

Winterization system extends lower temperature limit to minus 65° F (-53.9° C)

Shock and Rough Handling: 10 mph railroad impact. 12 inch end drop. Truck and trailer transportation.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 82 dbA @ 25 feet.

OPTIONAL EQUIPMENT

SEe 4.4.3 of MIL-STD-633 for additional information on optional equipment.

Description	NSN	Weight lbs(KG)	Effect on Dim (ins)
Wntzn Kit (Fuel burning)		45 (20.4)	Int
Wntzn Kit (Electric)		40 (18.1)	Int
Wntzn Kit, Aux, Fuel burning		350 (158.8)	Aux: (41x40x26)
Wntzn Kit, Aux, Elect		260 (117.9)	Aux: (36x27x19)
Remote Control box		8 (3.6)	Int
Load Bank			Ext: L+9
Wheel Mounting Kit		564 (255.8)	Ext: L+8,W+32,H+9
Panel, Auto, Load Transfer, 60 Hz		825 (374.2)	Aux: (44x19x42)
Paralleling Cable		4 (1.8)	Ext: (L-25 ft)
Relay Assemble, Precise			Int
Spark Arrester Kit		7.5 (3.4)	

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	TO		NAVFAC
5-6115-465-12	35C2-3-446-1	TM-06858B/065859D-12	P-8-625-12
5-6115-465-34	35C-3-446-2	TM-06958B/06859D-34	P-8-625-34
5-6115-465-24P	35C-446-4	SL-4-06858B/06859P	P-8-625-24P
LO			
5-6115-465-12		LO-06858A-06859A-12	

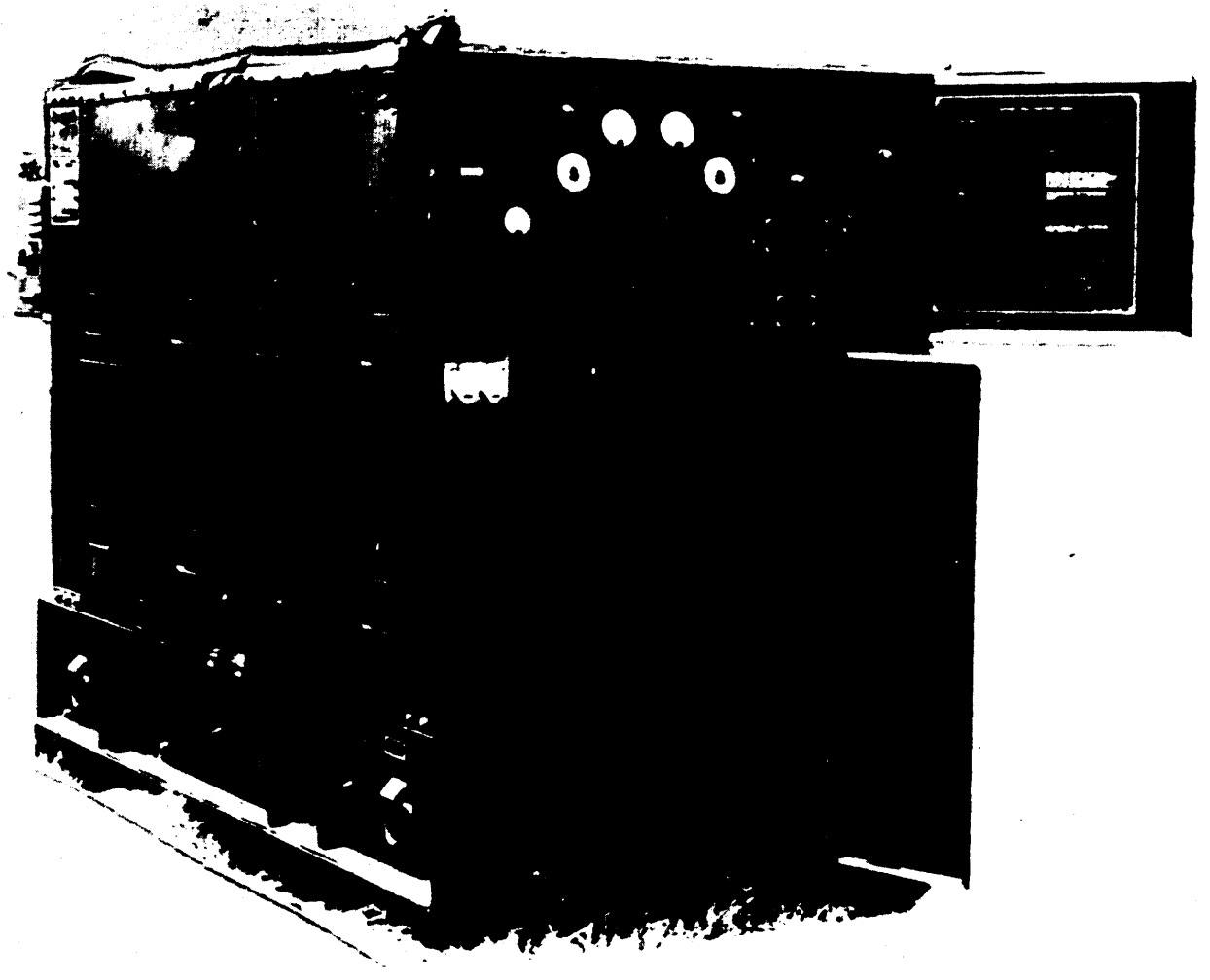


FIGURE 29. MEP-005A (30 kW, 50/60 Hz, DED).

X-3563

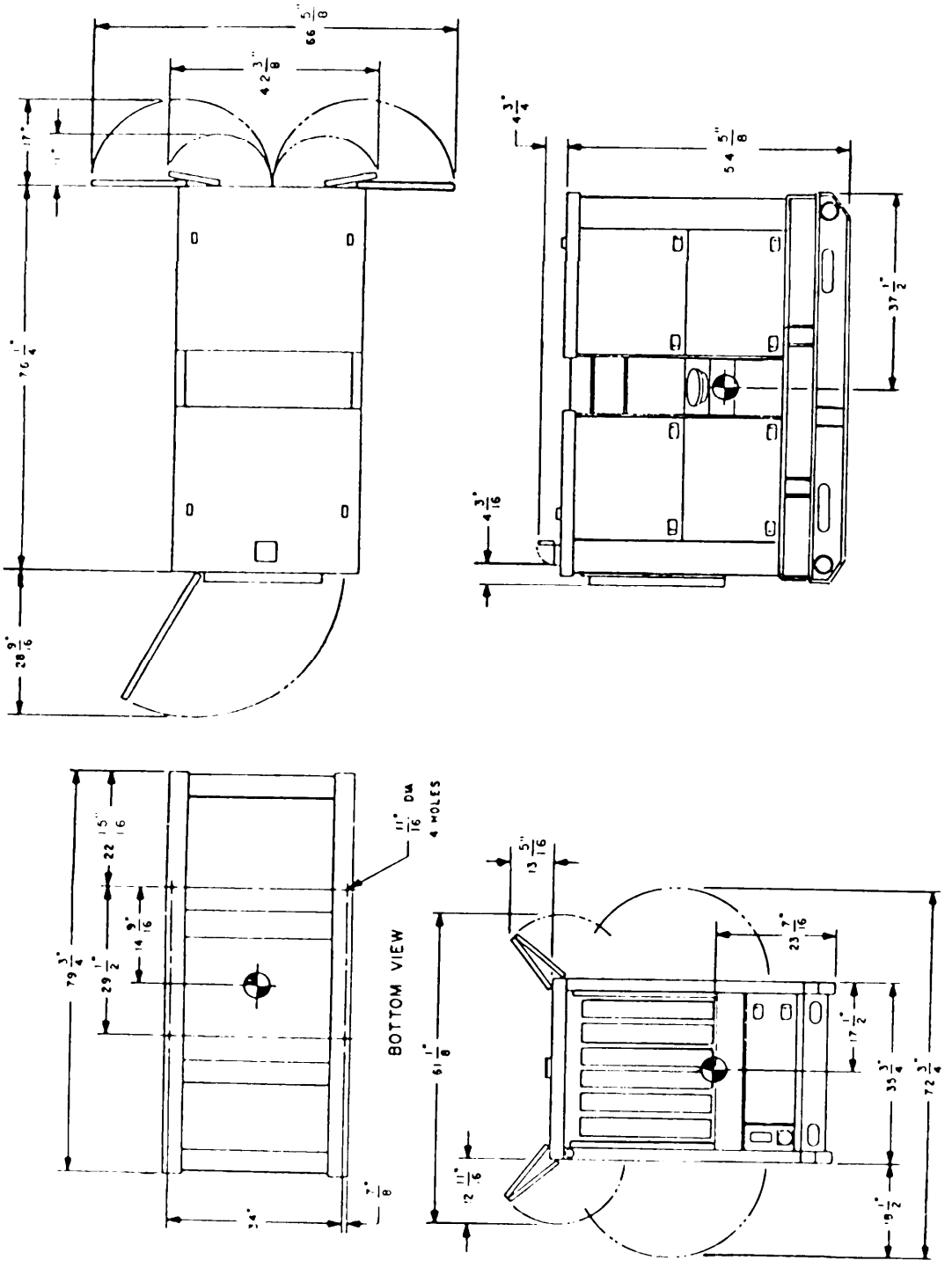


FIGURE 30. MEP-005A (30 kW, 50/60 Hz, DED).

X-35564A

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-104A, 30 kW, 50-60 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 30 kW @ 0.8 power factor, 50/60 Hz, 120/208 V, 240/416 V

Model: MEP-104A	Type: I (tactical)
NSN: 6115-00-118-1247	Class: 1 (precise)
Spec: MIL-G-52884/4	Mode: I (50/60 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figures 31 and 32 on pages 115 and 116.

Weight: 2850 lbs (1293 kg).

Mobility: Fully housed. Mounted on skid base. Lifting and tie-down attachments provided. Fork lift provision.

Engine: Diesel. Std: MIL-STD-1410.Horsepower: 57 1800 RPM. No. of cyl: 6. Cycle 4. Liquid cooled. 24 VDC electric start. Operating speed: 50 Hz: 1500 RPM, 60 Hz: 1800 RPM. Fuel tank capacity: 26 gallons (approx 8 hours at rated load). Fuel pump lift: 12 feet.

Fuel:
Primary: VV-F-800: Diesel Fuel Oil, types DF-1, DF-2 and DF-A.
Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.

Electrical:
Drip proof generator enclosure. Capable of parallel operation. Fungus and moisture treatment. Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection:
60 Hz: 120/208 v, 3 phase, 4 Wire. 240/416 V, 3 phase, 4 wire.
50 Hz: 120/208 v, 3 phase, 4 wire. 240/416 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overvoltage protection. Overload protection. Reverse power protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Wattmeter (% load). Oil pressure gage. Battery charging ammeter (% current). Fault indicating system. Coolant temperature indicator. Fuel level.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failures (MTBF): 370 hours (specified).

Fuel Consumption: 3 gph at rated load.

Electromagnetic Interference: Suppression to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	1% Bandwidth	0.5% Bandwidth
Long Term (4 hours)	2% Bandwidth	1% Bandwidth
Transient Performance		
Application of rated load	15% Dip	1.5% Undershoot
recovery	0.5 Sec	1 Sec
Rejection of rated load	15% Rise	1.5% Overshoot
recovery	0.5 Sec	1 Sec
Application of simulated motor load	30% Dip	
recovery	0.7 Sec	
Waveform		
Maximum Deviation Factor	5%	
Individual Harmonic	2%	
Regulation	1%	0.25%

Adjustment Range for Standard Voltage Connections

120/208 v Corm: 60 Hz: 197 to 240 V. 50 Hz: 190 to 213 v.
240/416 V Corm: 60 Hz: 395 to 480 V. 50 Hz: 380 to 426 V.

Frequency Adjustment Range:
58 to 62 Hz. 48 to 52 Hz.

ENVIRONMENTAL DATA

Power Output at Environmental Conditions:

30 kW, 60 Hz, Sea level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
30 kW, 60 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° c)
25 kW, 50 Hz, Sea level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
25 kW, 50 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
Winterization system extends lower temperature limit to minus 65° F (-53.9° C).

Shock and Rough Handling: 10 mph railroad impact. 12 inch end drop. Truck and trailer transportation.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 82 dbA @ 25 feet.

OPTIONAL EQUIPMENT

See 4.4.3 of MIL-STD-633 for additional information on optional equipment.

Description	NSN	Weight lbs (kg)	Effect on Dim (ins)
Wntzn Kit (Fuel burning)	6115-00-463-9083	45 (20.4)	Int
Wntzn Kit (Electric)	6115-00-463-9085	110 (18.1)	Int
Wntzn Kit, Aux, Fuel burning	6115-00-463-9098	350 (158.8)	Aux: (41x40x26)
Wntzn Kit, Aux, Elect.	6115-00-463-9099	260 (117.9)	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8 (3.6)	Int
Load Bank	6115-00-463-9088		Ext: L+9
Wheel Mounting Kit	6115-00-463-9094	564 (255.8)	Ext: L+8,W+32,H+9
Panel, Auto, Load Transfer, 60 Hz	6115-00-477-7932	825 (374.2)	Aux: (44x19x42)
Spark Arrester Kit	2990-01-032-0756	7.5 (304)	Ext: L+12

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	TO		NAVFAC
5-6115-465-12	35C2-3-446-1	TM-06858B/065859D-12	P-8-625-12
5-6115-465-34	35C2-3-446-2	TM-06958B/06859D-34	P-8-625-34
5-6115-465-24P	35C2-3-446-4	SL-4-06858B/06859p	P-8-625-24P
LO			
5-6115-465-12		LO-06858A-06859A-12	

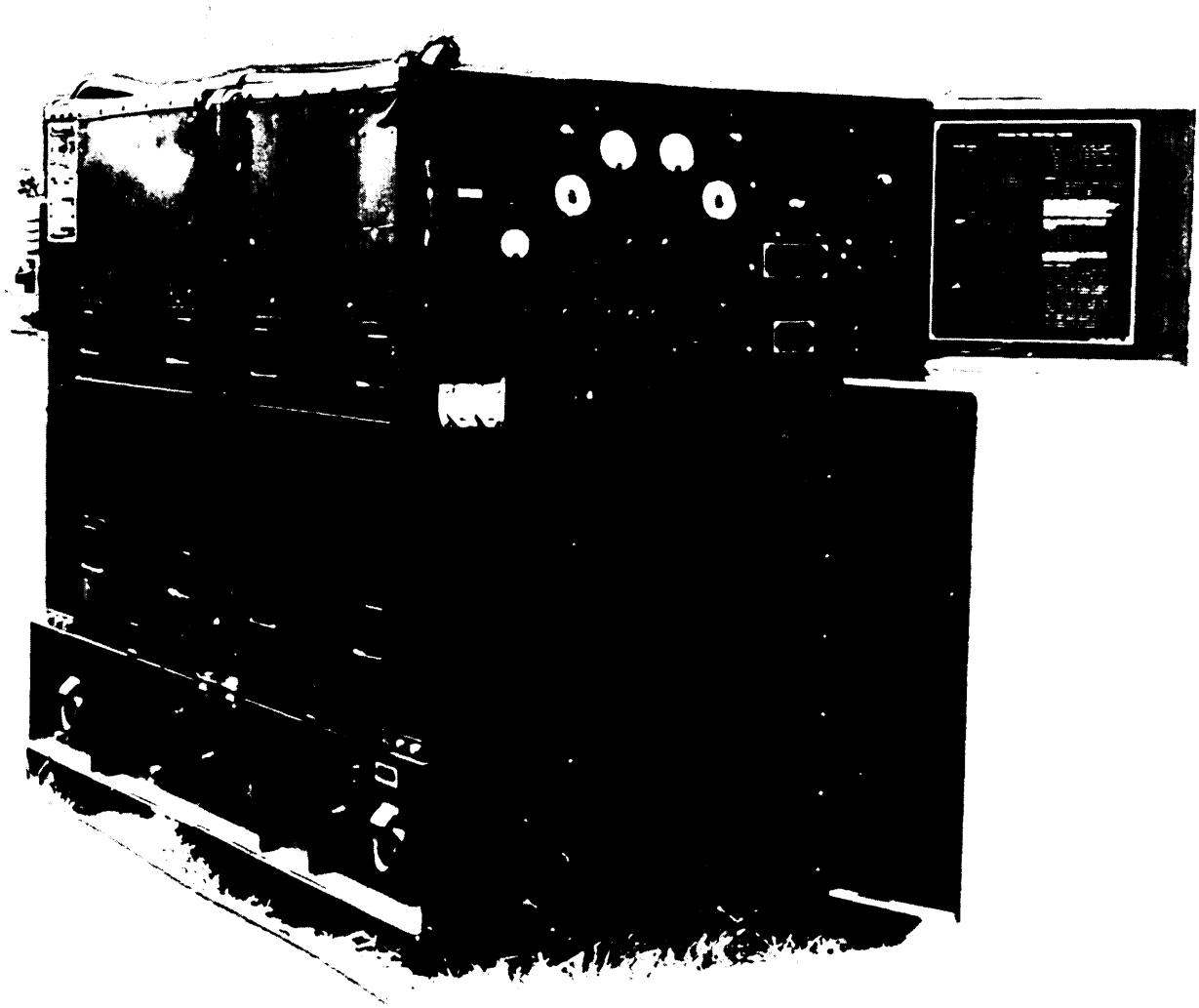
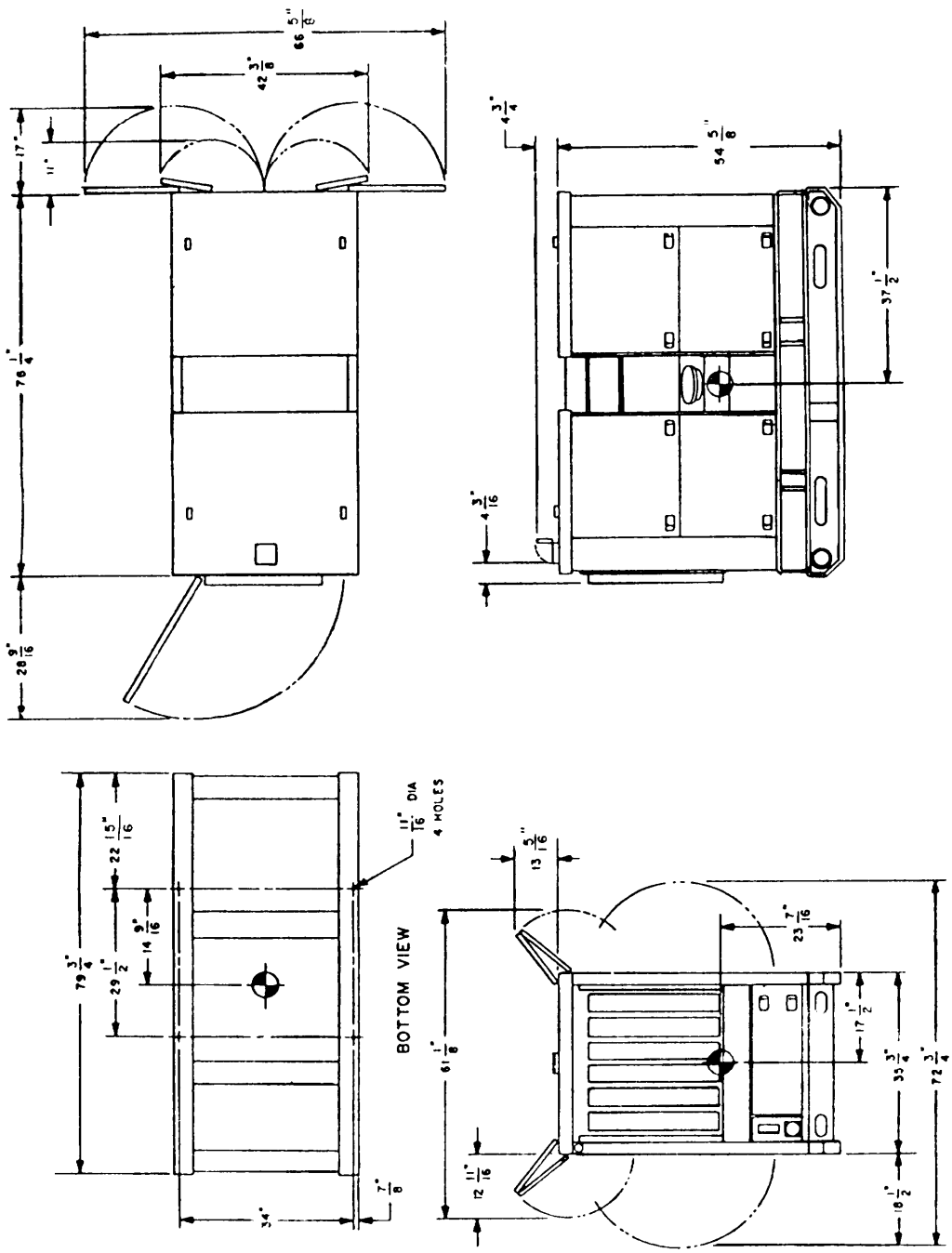


FIGURE 31 MEP-104A (30 kW, 50/60 Hz, DED).

X-3565



X-3566A

FIGURE 32. MEP-104A (30 kW, 50/60 Hz, DED).

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-114A, 30 kW, 400 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 30 kW @ 0.8 power factor, 400 Hz, 120/208 V, 240/416 V

Model:	MEP-114A	Type:	I (tactical)
NSN:	6115-00-118-1248	Class:	1 (precise)
Spec:	MIL-G-52884/6	Mode:	II (400 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figures 33 and 34 on pages 120 and 121.

Weight: 3000 lbs (1360.8 kg).

Mobility: Fully housed. Mounted on skid base. Lifting and tie-down attachments provided. Fork lift provision.

Engine: Diesel. Std: MIL-STD-1410. Horsepower: 64 @ 2000 RPM. No. of : 6. Cycle: 4. Liquid cooled. 24 VDC electric start. Operating speed: 400 Hz: 2000 RPM. Fuel tank capacity: 26 gallons (approx 8 hours at rated load) . Fuel pump lift: 12 feet.

Fuel:
Primary: VV-F-800; Diesel Fuel Oil, types DF-1, DF-2 and DF-A.
Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.

Electrical:
Drip proof generator enclosure. Capable of parallel operation. Fungus and moisture treatment. Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection:
400 Hz: 120/208 V, 3 phase, 4 wire. 240/416 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overvoltage protection. Overload protection. Reverse power protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Wattmeter (% load). Oil pressure gage. Battery charging ammeter (% current). Fault indicating system. Coolant temperature indicator. Fuel level.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failure (MTBF): 170 hours (specified).

Fuel Consumption: 3 gph at rated load.

Electromagnetic Interference: Suppression to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	1% Bandwidth	0.5% Bandwidth
Long Term (4 hours)	2% Bandwidth	1% Bandwidth
Transient Performance		
Application of rated load	12% Dip	1.5% Undershoot
recovery	0.5 Sec	1 Sec
Rejection of rated load	12% Rise	1.5% Overshoot
recovery	0.5 Sec	1 Sec
Application of simulated motor load	25% Dip	
recovery	0.7 See	
Waveform		
Maximum Deviation Factor	5%	
Individual Harmonic	2%	
Regulation	1%	0.25%

Adjustment Range for Standard Voltage Connections

120/208 v Corm: 60 Hz: 197 to 229 V.
240/416 V Corm: 60 Hz: 395 to 458 V.

Frequency Adjustment Range: 390 to 420 Hz.

ENVIRONMENTAL DATA

Power Output at Environmental Conditions:

30 kW, 400 Hz, Sea level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
30 kW, 400 HZ, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
Winterization system extends lower temperature limit to -65° F (-53.9° C).

Shock and Rough Handling: 10 mph railroad impact. 12 inch end drop. Truck and trailer transportation.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 82 dbA @ 25 feet.

OPTIONAL EQUIPMENT

See 4.4.3 of MIL-STD-633 for additional information on optional equipment.

Description	NSN	Weight lbs (kg)	Effect on Dim (ins)
Wntzn Kit (Fuel burning)	6115-00-463-9083	45 (20.4)	Int
Wntzn Kit (Electric)	6115-00-463-9085	40 (18.1)	Int
Wntzn Kit, Aux, Fuel burning	6115-00-463-9098	350 (158.8)	Aux: (41x40x26)
Wntzn Kit, Aux, Elect.	6115-00-463-9099	260 (117.9)	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8 (3.6)	Int
Load Bank	6115-00-463-9088		Ext: L+9
Wheel Mounting Kit	6115-00-463-9094	564 (255.8)	Ext: L+8,W+32,H+9
Panel, Auto Standby, 400 Hz	6115-00-463-9096	12 (5.4)	Int:
Spark Arrester Kit	2990-01-032-0756	7.5 (3.4)	Ext: L+12

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	TO		NAVFAC
5-6115-465-12	35C2-3-446-l	TM-06858B/065859D-12	P-8-625-12
5-6115-465-34	35C2-3-446-2	TM-06958B/06859D-34	P-8-625-34
5-6115-465-24P	35C2-3-446-4	SL-4-06858B/06859P	P-8-625-24P
LO			
5-6115-465-12		LO-06858A-06859A-12	

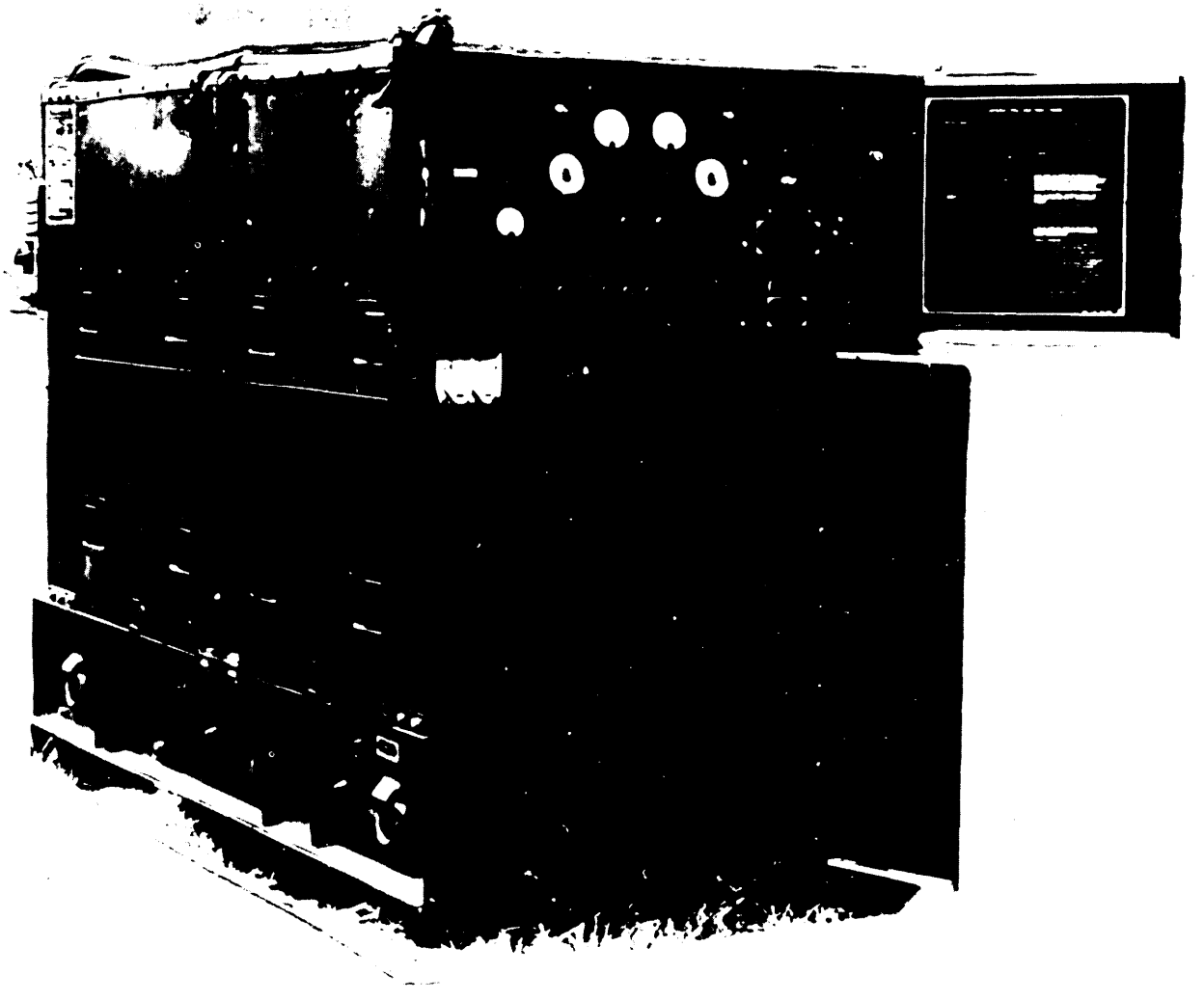


FIGURE 33. MEP-114A (30 kW, 400 Hz, DED).

LX-3567

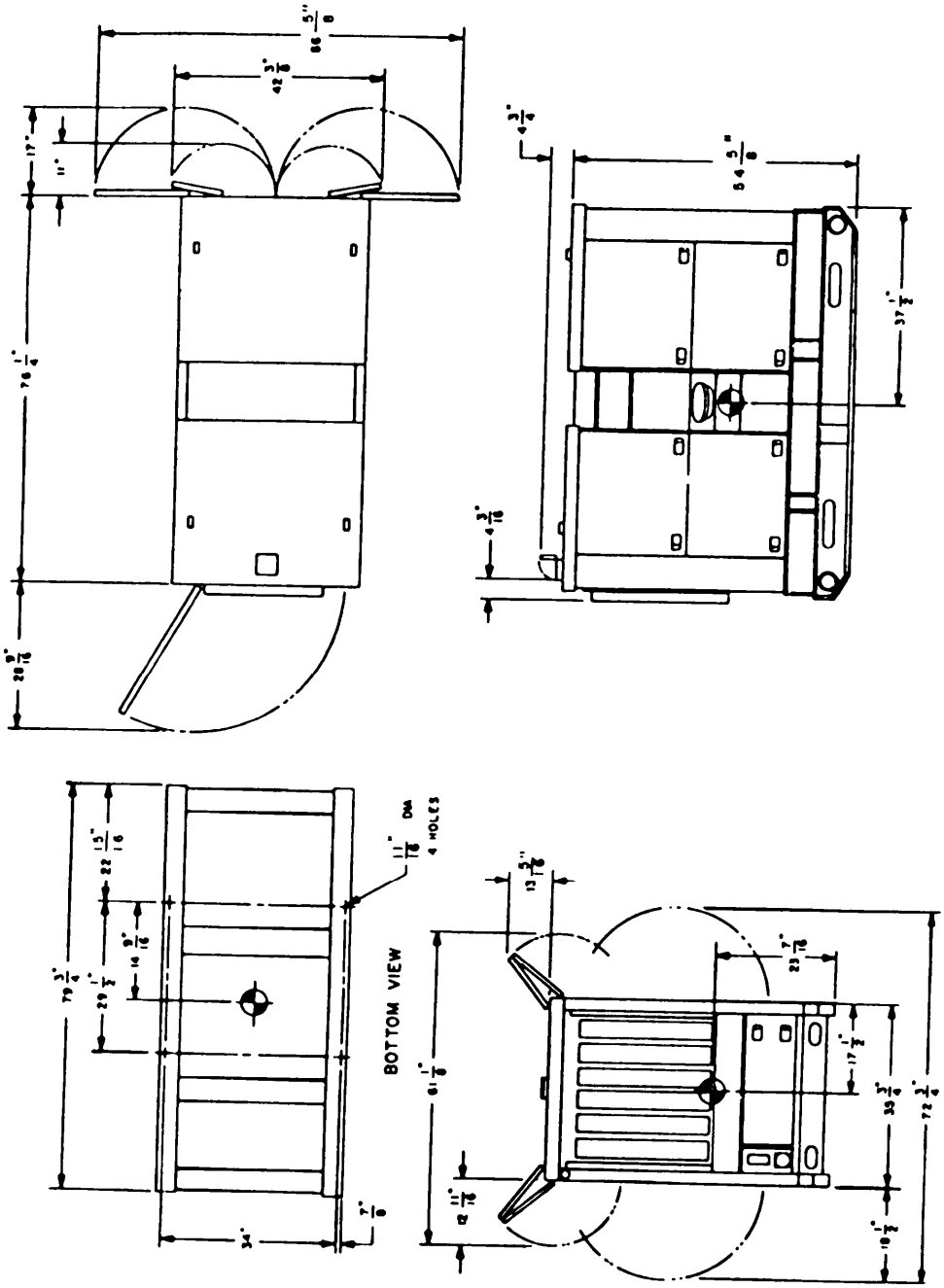


FIGURE 34. MEP-114A (30 kW, 400 Hz, DED).

X-3568A

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-006A, 60 kW, 50-60 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 60 kW @ 0.8 power factor, 50/60 Hz, 120/208 V, 240/416 V

Model:	MEP-006A	Type:	I (tactical)
NSN:	6115-00-118-1243	Class:	2 (utility)
Spec:	MIL-G-52884/8	Mode:	I (50/60 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figures 35 and 36 on pages 125 and 126.

Weight: 4240 lbs (1923 kg).

Mobillty: Fully housed. Mounted on skid base. Lifting and tie-down attachments provided. Fork lift provision.

Engine: Diesel. Std: MIL-STD-1410. Horsepower: 167 @ 1800 RPM. No. of Cyl: 6. Cycle 4. Liquid cooled. 24 VDC electric start. Operating speed: 50 Hz: 1500 RPM, 60 Hz: 1800 RPM. Fuel tank capacity: 55 gallons (approx 8 hours at rated load). Fuel pump lift: 12 feet.

Fuel:
Primary: VV-F-800; Diesel Fuel Oil, types DF-1, DF-2 and DF-A.
Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.

Electrical:
Drip proof generator enclosure. Capable of parallel operation. Fungus and moisture treatment. Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection:

60 Hz:	120/208 V, 3 phase, 4 wire.	240/416 V, 3 phase, 4 wire.
50 Hz:	120/208 V, 3 phase, 4 wire.	240/416 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overvoltage protection. Overload protection. Reverse power protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Wattmeter (% load). Oil pressure gage. Battery charging ammeter (% current). Fault indicating system. Coolant temperature indicator. Fuel level.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failures (MTBF): 500 hours (specified).

Fuel Consumption: 6 gph at rated load.

Electromagnetic Interference: Suppression to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	2% Bandwidth	2% Bandwidth
Long Term (4 hours)	4% Bandwidth	3% Bandwidth
Transient Performance		
Application of rated load	20% Dip	3% Undershoot
recovery	3 Sec	3 Sec
Rejection of rated load	20% Rise	4% Overshoot
recovery	3 Sec	3 Sec
Application of simulated motor load	40% Dip	
recovery	5 Sec	
Waveform		
Maximum Deviation Factor	5%	
Individual Harmonic	2%	
Regulation	3%	2-3% (Adjustable)

Adjustment Range for Standard Voltage Connections

120/208 v Corm:	60 Hz:	197 to 240 V.	50 Hz:	190 tO 213 v.
240/416 V Corm:	60 Hz:	395 to 480 V.	50 Hz:	380 to 425 V.

Frequency Adjustment Range: 58 to 62 Hz. 48 to 52 Hz.

ENVIRONMENTAL DATA

Power Output at Environmental Conditions:

60 kW, 60 Hz, Sea Level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
60 kW, 60 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
50 kW, 50 Hz, Sea Level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
50 kW, 50 HZ, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
Winterization system extends lower temperature limit to minus 65° F (-53.9° C).

Shock and Rough Handling: 10 mph railroad impact 12 inch end drop. Truck and trailer transportation.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 86 dbA @ 25 feet.

OPTIONAL EQUIPMENT

See 4.4.3 of MIL-STD-633 for additional information on optional equipment.

Description	NSN	Weight lbs (kg)	Effect on Dim (ins)
Wntzn Kit (Fuel burning)	6115-00-407-8314	45 (20.4)	Int
Wntzn Kit (Electric)	6115-00-455-7693	40 (18.1)	Int
Wntzn Kit, Aux, Fuel burning	6115-00-463-9098	350 (158.8)	Aux: (41x40x26)
Wntzn Kit, Aux, Elect.	6115-00-463-9099	260 (117.9)	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8 (3.6)	Int
Load Bank	6115-00-407-8322	272 (123.4)	Ext: H+15
Wheel Mounting Kit	6115-00-463-9092	564 (255.8)	Ext: L+8,W+32,H+9
Panel, Auto, Load Transfer, 60 Hz	6115-00-477-7932	825 (374.2)	Aux: (44x19x42)
Paralleling Cable	6140-00-197-4934	4 (1.8)	Ext: (L=25 ft)
Relay Assembly, Precise	6115-00-276-7622		Int

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	TO		NAVFAC
5-6115-545-12	35C2-3-444-1	TM-00038G-12	P-8-626-12
5-6115-545-34	35C2-3-444-2	TM-00038G-35	P-8-626-34
5-6115-545-24P	35C2-3-444-4	SL-00038G	P-8-626-24P
LO			
5-6115-545-12			

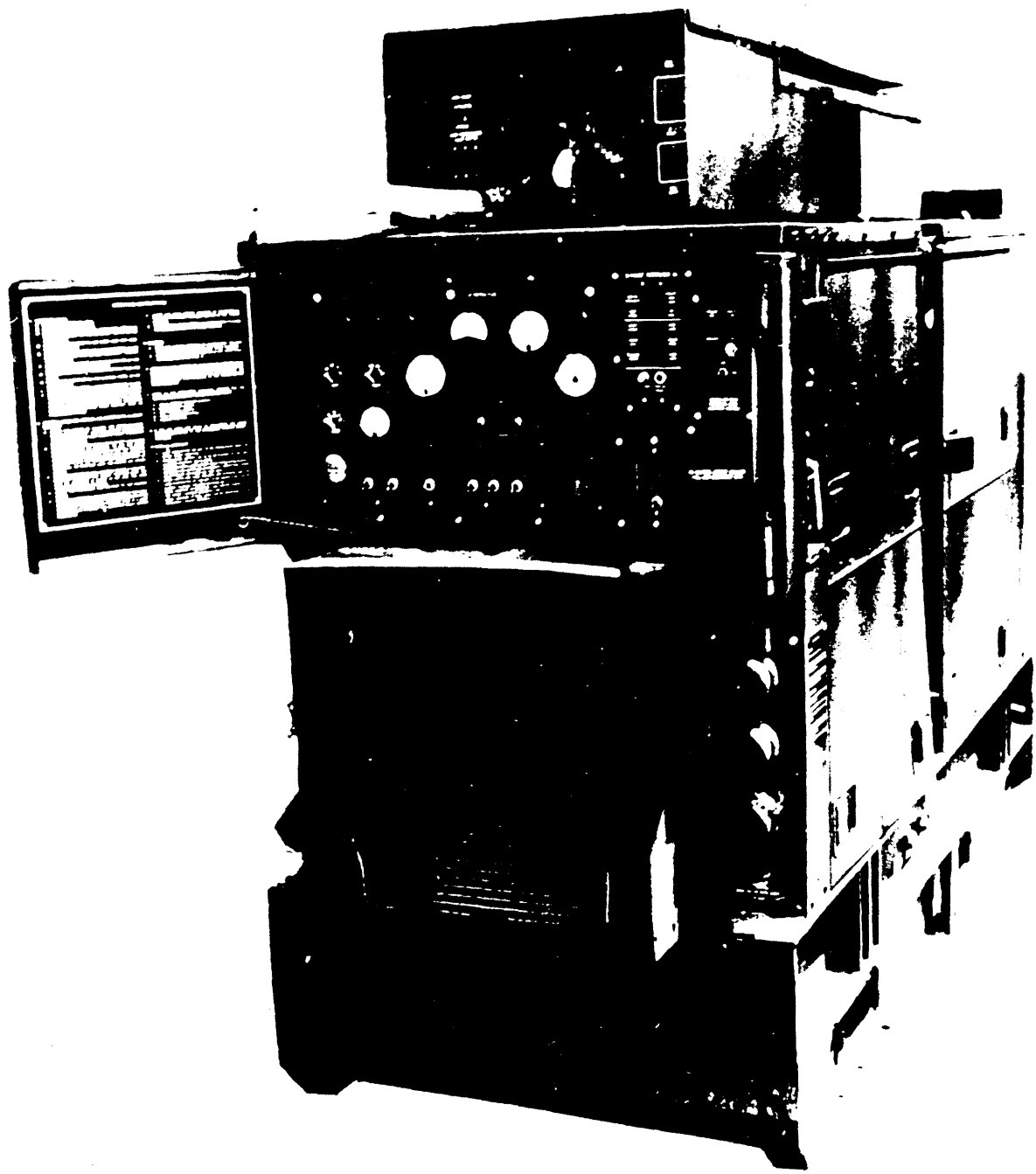
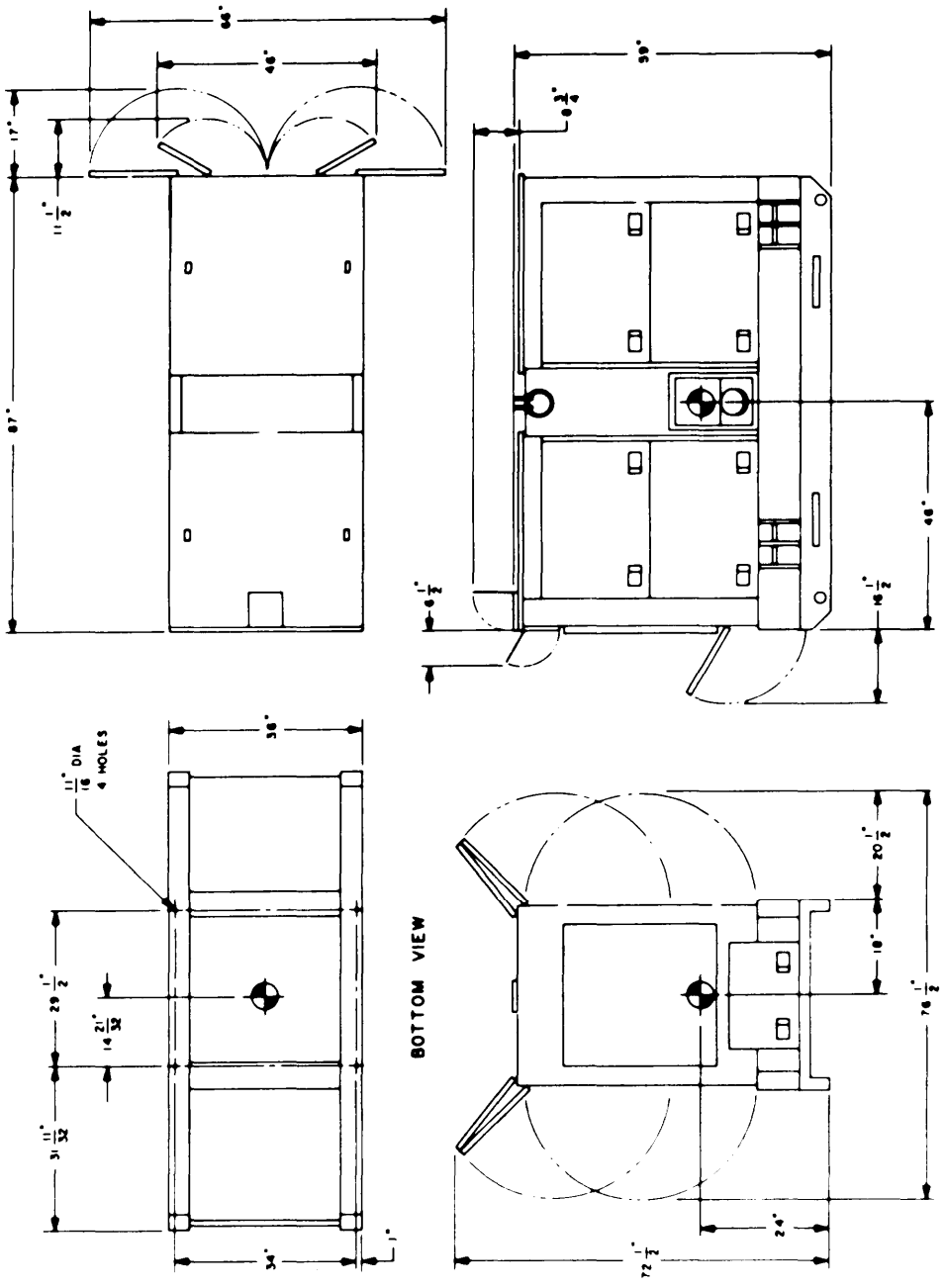


FIGURE 35. MEP-006A (60 kW, 50/60 Hz, DED).

X-3569



X-3570

FIGURE 36. MEP-006A (60 kW, 50/60 Hz, DED).

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-105A, 60 kW, 50-60 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 60 kW @ 0.8 power factor, 50/60 Hz, 120/208 v, 240/416 v.

Model:	MEP-105A	Type:	I (tactical)
NSN:	6115-00-118-1252	Class:	1 (precise)
Spec:	MIL-G-52884/7	Mode:	I (50/60 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See figures 37 and 38 on pages 130 and 131.

Weight: 4300 lbs (1950 kg).

Mobility: Fully housed. Mounted on skid base. Lifting and tie-down attachments provided. Fork lift provision.

Engine; Diesel. Std: MIL-STD-1410. Horsepower: 167 @ 1800 RPM. No. of Cyl: 6. Cycle: 4. Liquid cooled. 24 VDC electric start. Operating speed: 50 Hz: 1500 RPM, 60 Hz: 1800 RPM. Fuel tank capacity: 55 gallons (approx 8 hours at rated load). Fuel pump lift: 12 feet.

Fuel:
Primary: VV-F-800; Diesel Fuel Oil, types DF-1, DF-2 and DF-A.
Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.

Electrical:
Drip proof generator enclosure. Capable of parallel operation. Fungus and moisture treatment. Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection:
60 Hz: 120/208 V, 3 phase, 4 wire. 240/416 V, 3 phase, 4 wire.
50 Hz: 120/208 V, 3 phase, 4 wire. 240/416 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overvoltage protection. Overload protection. Reverse power protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Wattmeier (% load). Oil pressure gage. Battery charging ammeter (% current). Fault indicating system. Coolant temperature indicator. Fuel level.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failure (MTBF) 120 hours (specified).

Fuel Consumption: 6 gph at rated load.

Electromagnetic Interference: Suppression to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	1% Bandwidth	0.5% Bandwidth
Long Term (4 hours)	2% Bandwidth	1% Bandwidth
Transient Performance		
Application of rated load	15% Dip	1.5% Undershoot
recovery	0.5 Sec	1 Sec
Rejection of rated load	15% Rise	1.5% Overshoot
recovery	0.5 Sec	1 Sec
Application of simulated motor load	30% Dip	
recovery	0.7 Sec	
Waveform		
Maximum Deviation Factor	5%	
Individual Harmonic	2%	
Regulation	1%	0.25%

Adjustment Range for Standard Voltage Connections:

120/208 V Corm: 60 Hz: 197 to 240 V. 50 Hz: 190 tO 213 v.
240/416 V Corm: 60 Hz: 395 to 480 V. 50 Hz: 380 to 426 V.

Frequency Adjustment Range: 58 to 62 Hz. 48 to 52 Hz.

ENVIRONMENTAL DATA

Power Output at Environmental Conditions:

60 kW, 60 Hz, Sea Level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
60 kW, 60 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
50 kW, 50 Hz, Sea Level: Minus 25° F (-31.7° C) to PIUS 125° F (+51.7° C)
50 kW, 50 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
Winterization system extends lower temperature limit to minus 65° F (-53.9° C).

Shock and Rough Handling: 10 mph railroad impact. 12 inch end drop. Truck and trailer transporation.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 86 dbA @ 25 feet.

OPTIONAL EQUIPMENT

See 4.4.3 of MIL-STD-633 for additional information on optional equipment.

Description	NSN	Weight lbs (kg)	Effect on Dim (ins)
Wntzn Kit (Fuel burning)	6115-00-407-8314	45 (20.4)	Int
Wntzn Kit (Electric)	6115-00-455-7693	40 (18.1)	Int
Wntzn Kit, Aux, Fuel burning	6115-00-463-9098	350 (158.8)	Aux: (41x40x26)
Wntzn Kit, Aux, Elect.	6115-00-463-9099	260 (117.9)	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8 (3.6)	Int
Load Bank	6115-00-407-8322	272 (123.4)	Ext: H+15
Wheel Mounting Kit	6115-00-463-9092	564 (255.8)	Ext: L+8,W+32,H+9
Panel, Auto, Load Transfer, 60 Hz	6115-00-477-7932	825 (374.2)	Aux: (44x19x42)

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	TO		NAVFAC
5-6115-545-12	35C2-3-444-1	TM-00038G-12	P-8-626-12
5-6115-545-34	35C2-3-444-2	TM-00038G-35	P-8-626-34
5-6115-545-24P	35C2-3-444-4	SL-00038G	P-8-626-24P
LO			
5-6115-545-12			

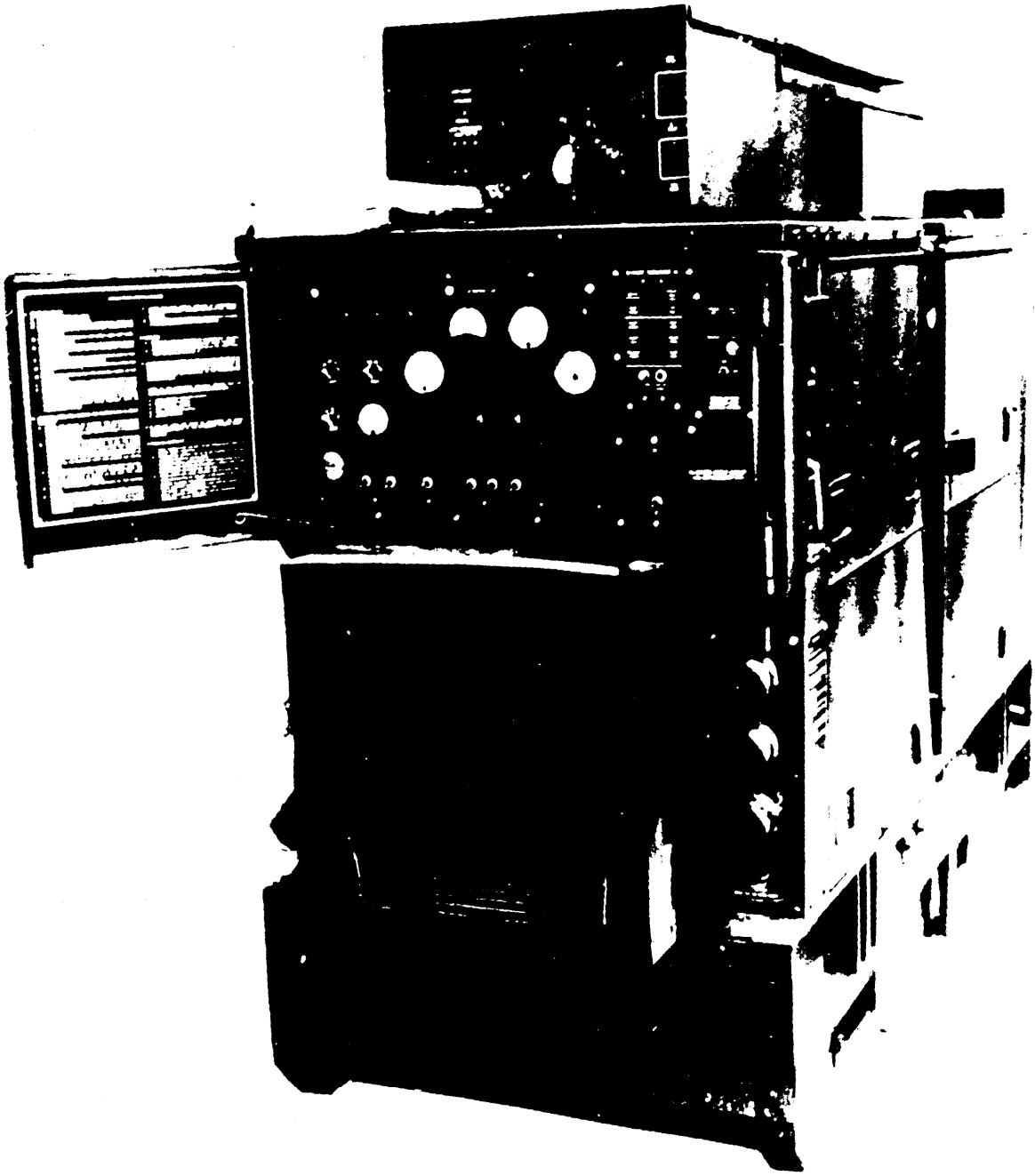


FIGURE 37. MEP-105A(60 kw, 50/60 Hz, DED).

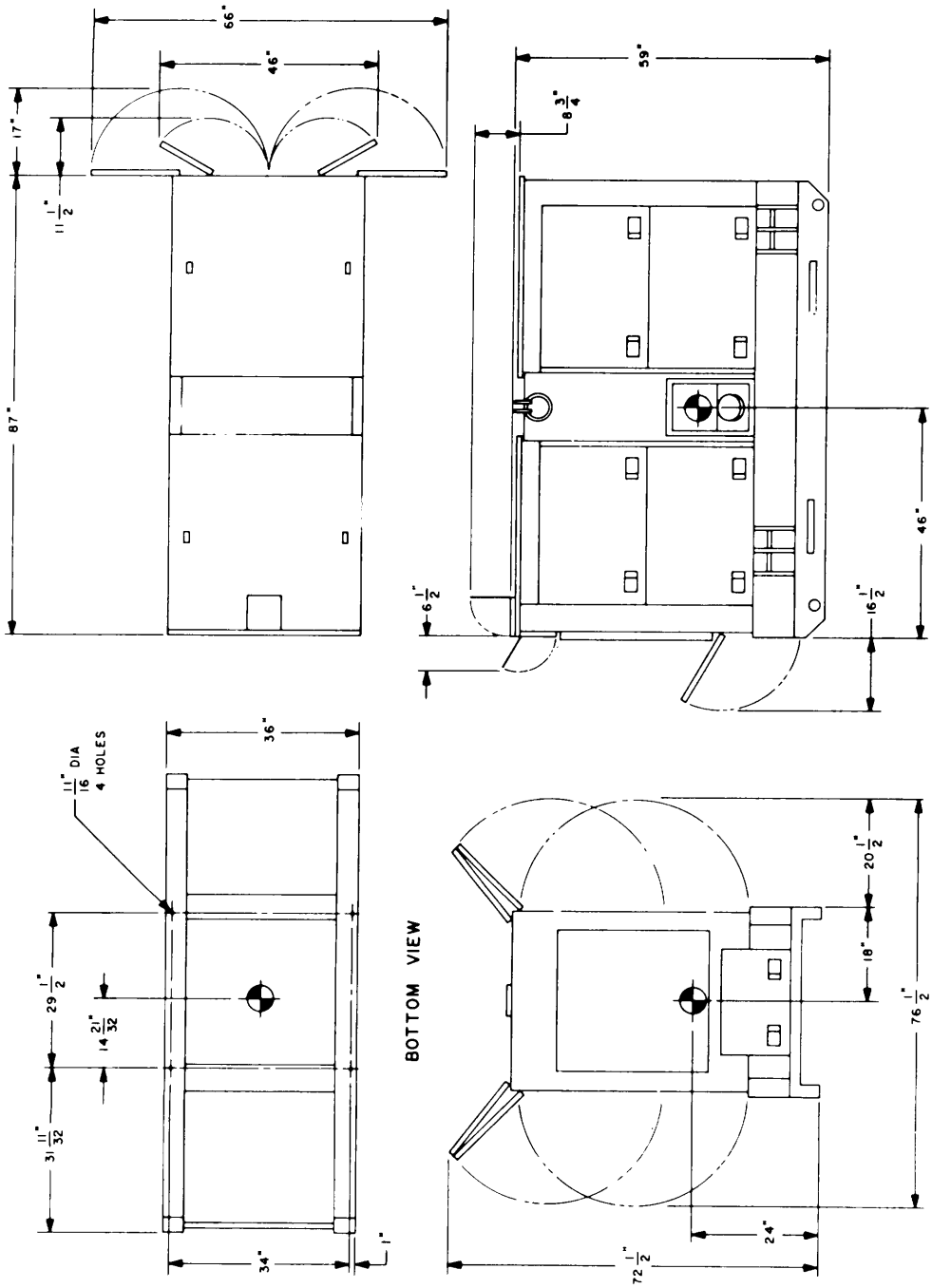


FIGURE 38. MEP-105A (60 kW, 50/60 Hz, DED). X-3572

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-115A, 60 kW, 400 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 60 kW @ 0.8 power factor, 400 Hz, 120/208 V, 240/416 V

Model:	MEP-115A	Type:	I (tactical)
NSN:	6115-00-118-1253	Class:	1 (precise)
Spec:	MIL-G-52884/9	Mode:	II (400 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figures 39 and 40 on pages 135 and 136.

Weight: 4400 lbs (1996 kg).

Mobility: Fully housed. Mounted on skid base. lifting and tie-down attachments provided. Fork lift provision.

Engine: Diesel. Std: MIL-STD-1410. Horsepower: 180 @ 2000 RPM. of cyl: 6. Cycle: 4. Liquid cooled. 24 VDC electric start. Operating speed: 400 Hz: 2000 RPM. Fuel tank capacity: 55 gallons (approx 8 hours at rated load). Fuel pump lift: 12 feet.

Fuel:
Primary: VV-F-800; Diesel Fuel Oil, types DF-1, DF-2 and DF-A.
Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.

Electrical:
Drip proof generator enclosure. Capable of parallel operation. Fungus and moisture treatment. Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection: 400 Hz: 120/208 V, 3 phase, 4 wire.
240/416 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overvoltage protection. Overload protection. Reverse power protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Wattmeter (% load). Oil pressure gage. Battery charging ammeter (% current). Fault indicating system. Coolant temperature indicator. Fuel level.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failures (MTBF): 450 hours (specified).

Fuel Consumption: 6 gph at rated load.

Electromagnetic Interference: Suppression to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	1% Bandwidth	0.5% Bandwidth
Long Term (4 hours)	2% Bandwidth	1% Bandwidth
Transient Performance:		
Application of rated load	12% Dip	1.5% Undershoot
recovery	0.5 Sec	1 Sec
Rejection of rated load	12% Rise	1.5% Overshoot
recovery	0.5 Sec	1 Sec
Application of simulated. motor load	25% Dip	
recovery	0.7 Sec	
Waveform		
Maximum Deviation Factor	5%	
Individual Harmonic	2%	
Regulation	1%	0.25%

Adjustment Range for Standard Voltage Connections

120/208 v Corm:	400 Hz:	197 to 229 V.
240/416 V Corm:	400 Hz:	395 to 458 v.

Frequency Adjustment Range: 390 to 420 Hz.

ENVIRONMENTAL DATA

Power Output at Environmental Conditions:

60 kW, 400 Hz, Sea Level: Minus 25° F (-31.7 C) to plus 125° F (+51.7° C)
60 kW, 400 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
Winterization system extends lower temperature limit to minus 65° F (-53.9° C)

Shock and Rough Handling: 10 mph railroad impact. 12 inch end drop. Truck and trailer tranportation.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 90 dbA @ 25 feet.

OPTIONAL EQUIPMENT

See 4.4.3 of MIL-STD-633 for additional information on optional equipment.

Description	NSN	Weight lbs (kg)	Effect on Dim (ins)
Wntzn Kit (Fuel burning)	6115-00-407-8314	45 (20.4)	Int
Wntzn Kit (Electric)	6115-00-455-7693	40 (18.1)	Int
Wntzn Kit, Aux, Fuel burning	6115-00-463-9098	350 (158.8)	Aux: (41x40x26)
Wntzn Kit, Aux, Elect.	6115-00-463-9099	260 (117.9)	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8 (3.6)	Int
Load Bank	6115-00-407-8322	272 (123.4)	Ext: H+15
Wheel Mounting Kit	6115-00-463-9092	564 (255.8)	Ext: L+8,W+32,H+9
Panel, Auto Standby, 400 Hz	6115-00-463-9096	825 (374.2)	Aux: (44x19x42)

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	To		NAVFAC
5-6115-545-12	35C2-3-444-l	TM-00038G-12	P-8-626-12
5-6115-545-34	35C2-3-444-2	TM-00038G-35	P-8-625-34
5-6115-545-24P	35C2-3-444-4	SL-00038G	P-8-626-24P
LO			
5-6115-545-12			

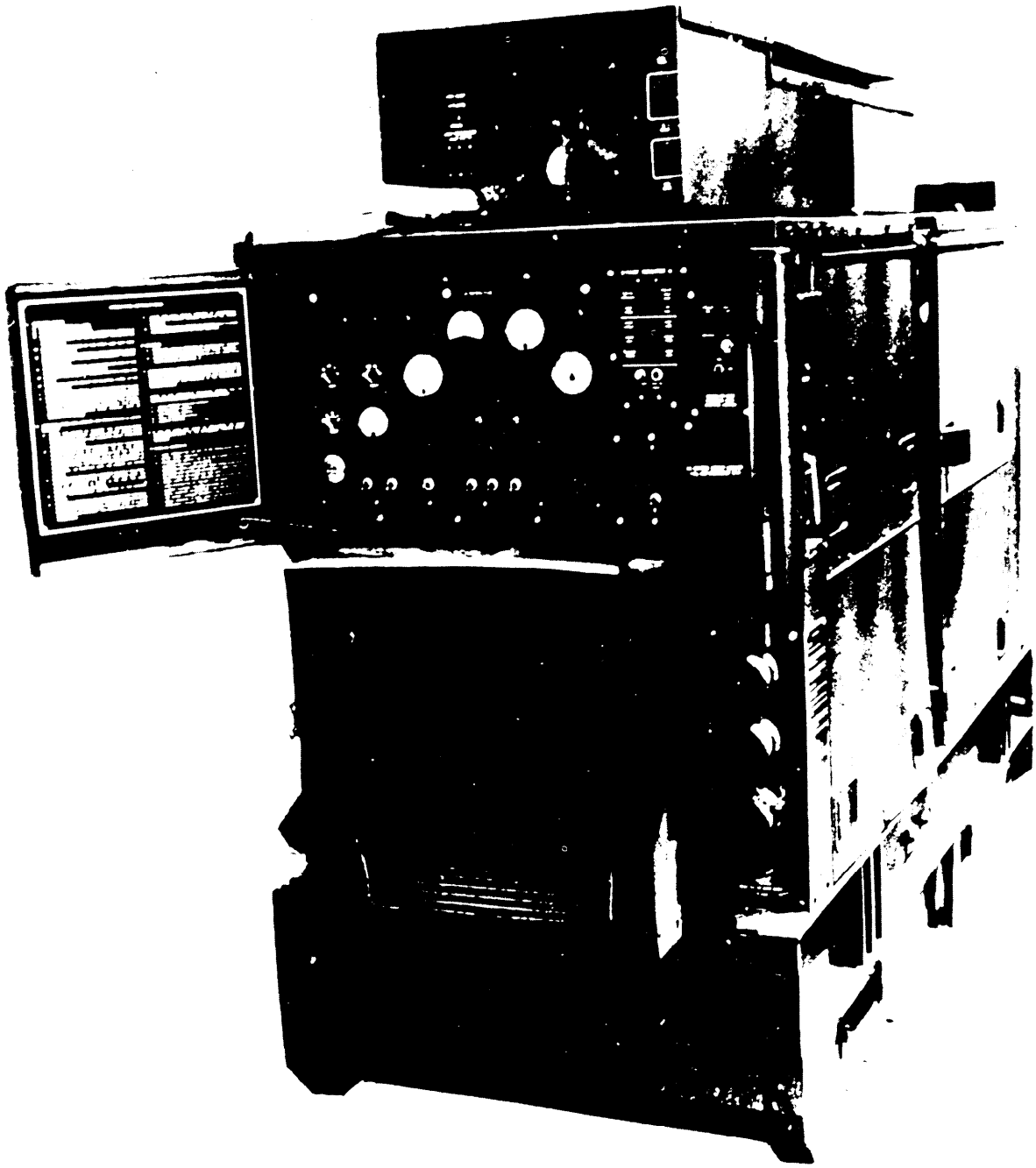


FIGURE 39. MEP-115A (60 kW, 400 Hz, DED).

X-3573

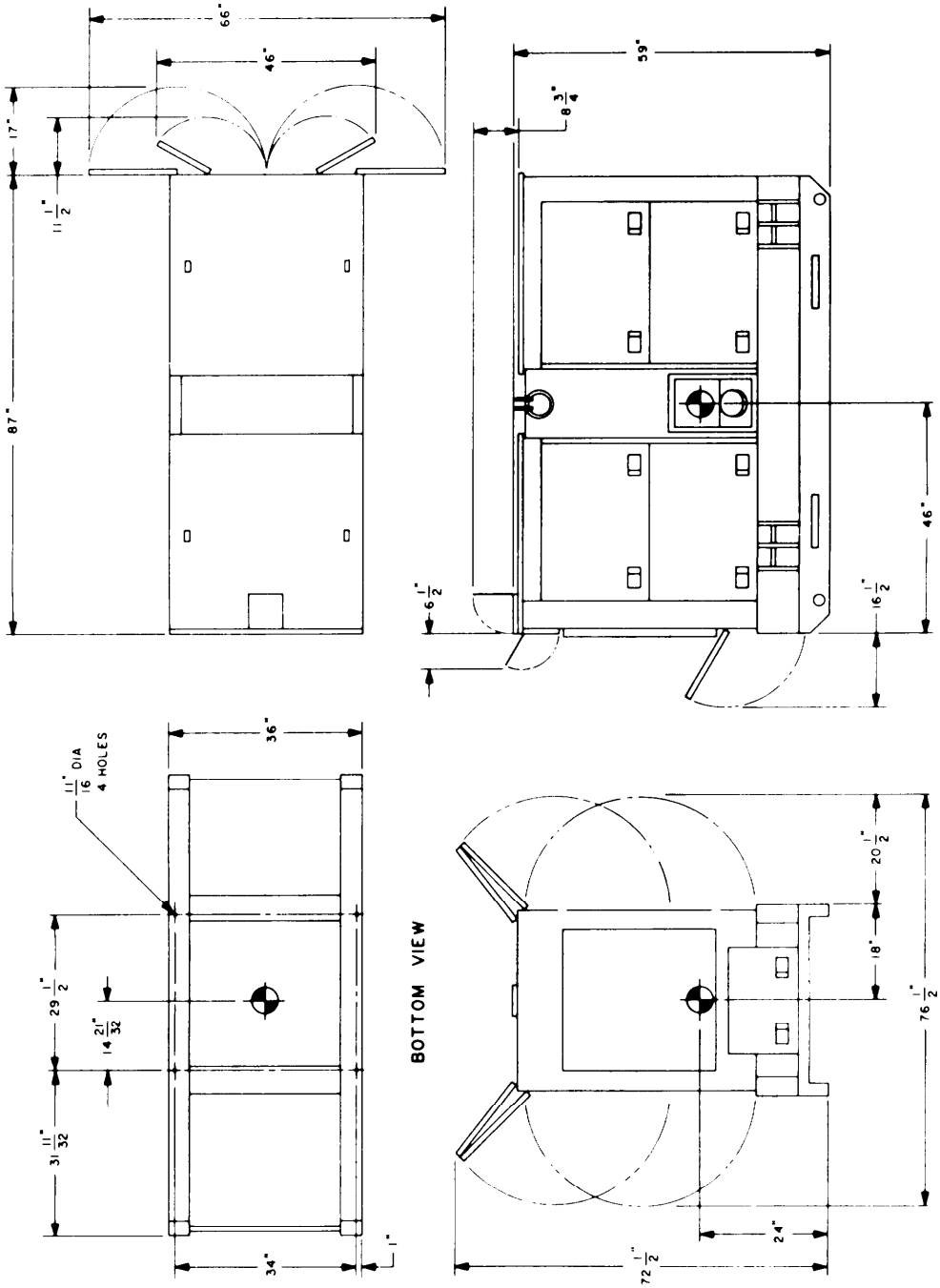


FIGURE 40. MEP-115A (60 kW, 400 Hz, DED). X-3574

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-007B, 100 kW, 50-60 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 100 kW @ 0.8 power factor, 50/60 Hz, 120/208 V, 240/416 V

Model:	MEP-007B	Type:	I (tactical)
NSN:	6115-01-036-6374	Class:	
Spec:	PD, 17 Mar 78	Mode:	I (50/60 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figures 47 and 48 on pages 155 and 156.

Weight: 7000 lbs (3175 kg).

Mobility: Fully housed. Mounted on skid base. Lifting and tie-down attachments provided. Fork lift provision.

Engine: Diesel. Std:MIL-STD-1410. Horsepower: 217min @ 1800 RPM No. of cyl: 6. Cycle: Liquid cooled. 24 VDC electric start. Operating speed: 50 Hz: 1500 RPM, 60 Hz: 1800 RPM. Fuel tank capacity: 90 gallons (approx 8 hours at rated load). Fuel pump lift: 12 feet.

Fuel:

Primary: VV-F-800; Diesel Fuel Oil, types DF-1, DF-2 and DF-A.
Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.

Electrical

Drip proof generator enclosure. Capable of parallel operation. Fungus and moisture treatment. Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection:

60 Hz: 120/208 V, 3 phase, 4 wire. 240/416 V, 3 phase, 4 wire.
50 Hz: 120/208 V, 3 phase, 4 wire. 240/416 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overvoltage protection. Overload protection. Reverse power protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Wattmeter (% load). Oil pressure gage. Battery charging ammeter (% current). Fault indicating system. Coolant temperature indicator. Fuel level.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failures (MTBF): 580 hours (specified).

Fuel Consumption: 8.5 gph at rated load.

Electromagnetic Interference: Suppression to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 see)	1% Bandwidth	0.5% Bandwidth
Long Term (4 hours)	2% Bandwidth	1% Bandwidth
Transient Performance		
Application of rated load	15% Dip	*4% Undershoot
recovery	0.5 Sec	2 Sec
Rejection of rated load	15% Rise	*4% Overshoot
recovery	0.5 Sec	2 Sec
Application of simulated motor load	30% Dip	
recovery	0.7 Sec	
		*Frequency performance at 75% of rated load.
Waveform		
Maximum Deviation Factor	5%	
Individual Harmonic	2%	
Regulation	1%	0.3% adjustable

Adjustment Range for Standard Voltage Connections

120/208 V Corm: 60 Hz: 197 to 240 V. 50 Hz: 190 tO 213 v.
240/416 V Corm: 60 Hz: 395 to 480 V. 50 Hz: 380 to 426 V.

Frequency Adjustment Range: 58 to 62 Hz. 48 to 52 Hz.

ENVIRONMENTAL DATA

Power Output at Environmental Conditions:

100 kW, 60 Hz, Sea Level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C).
100 kW, 60 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
83.3 kW, 50 Hz, Sea Level: Minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
83.3 kW, 50 Hz, 5000 feet: Minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
Winterization system extends lower temperature limit to minus 65° F (-53.9° C).

Shock and Rough Handling: 10 mph railroad impact. 12 inch end drop. Truck and trailer transportation.

Attitude: Operate with base level or inclined no more than 15 degrees from level.

Noise Level: 85 dbA @ 25 feet.

OPTIONAL EQUIPMENT

See 4.4.3 of MIL-STD-633 for additional information on optional equipment.

Descrirption	NSN	Weight lbs (kg)	Effect on Dim (ins)
Wntzn Kit (Fuel burning)	To be determined		Int
Wntzn Kit (Electric)	To be determined		Int
Wntzn Kit, Aux, Fuel burning	6115-00-463-9098	350 (158.8)	Aux: (41x40x26)
Wntzn Kit, Aux, Elect	6115-00-463-9099	260 (117.9)	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8 (3.6)	Int
Load Bank	6115-00-463-9086	370 (167.8)	Ext: H+19
Wheel Mounting Kit	6115-00-463-9089	580 (263)	Ext: H+13,L+9,W+30
Panel, Auto, Load Transfer, 60 Hz	6115-00-477-7932	825 (374.2)	Aux: (44X19X42)

REFERENCE DOCUMENTS

Technical Manuals: To be published.

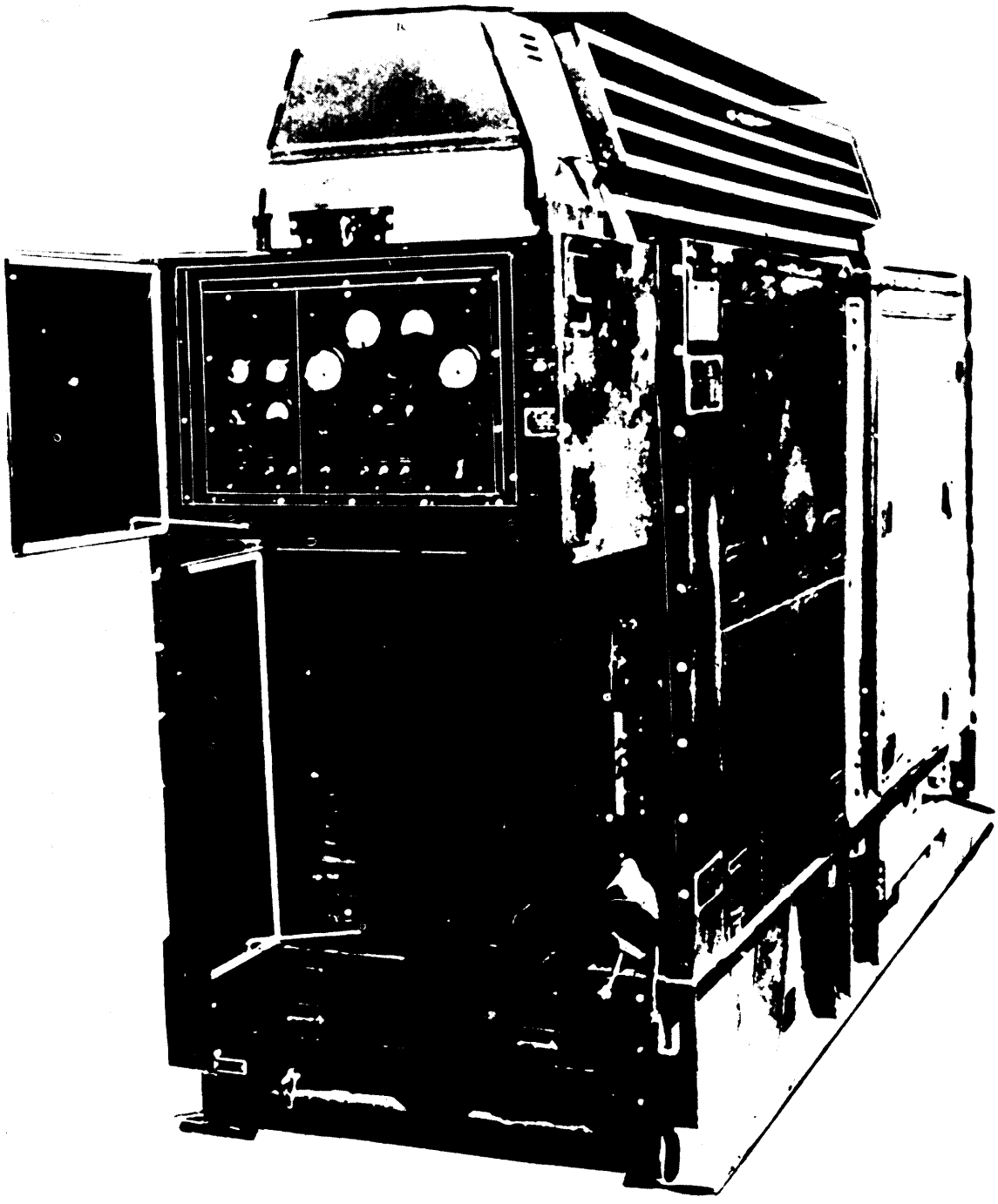


FIGURE 47. MEP-007B (100 kW, 50/60 Hz, DED).

X-3579

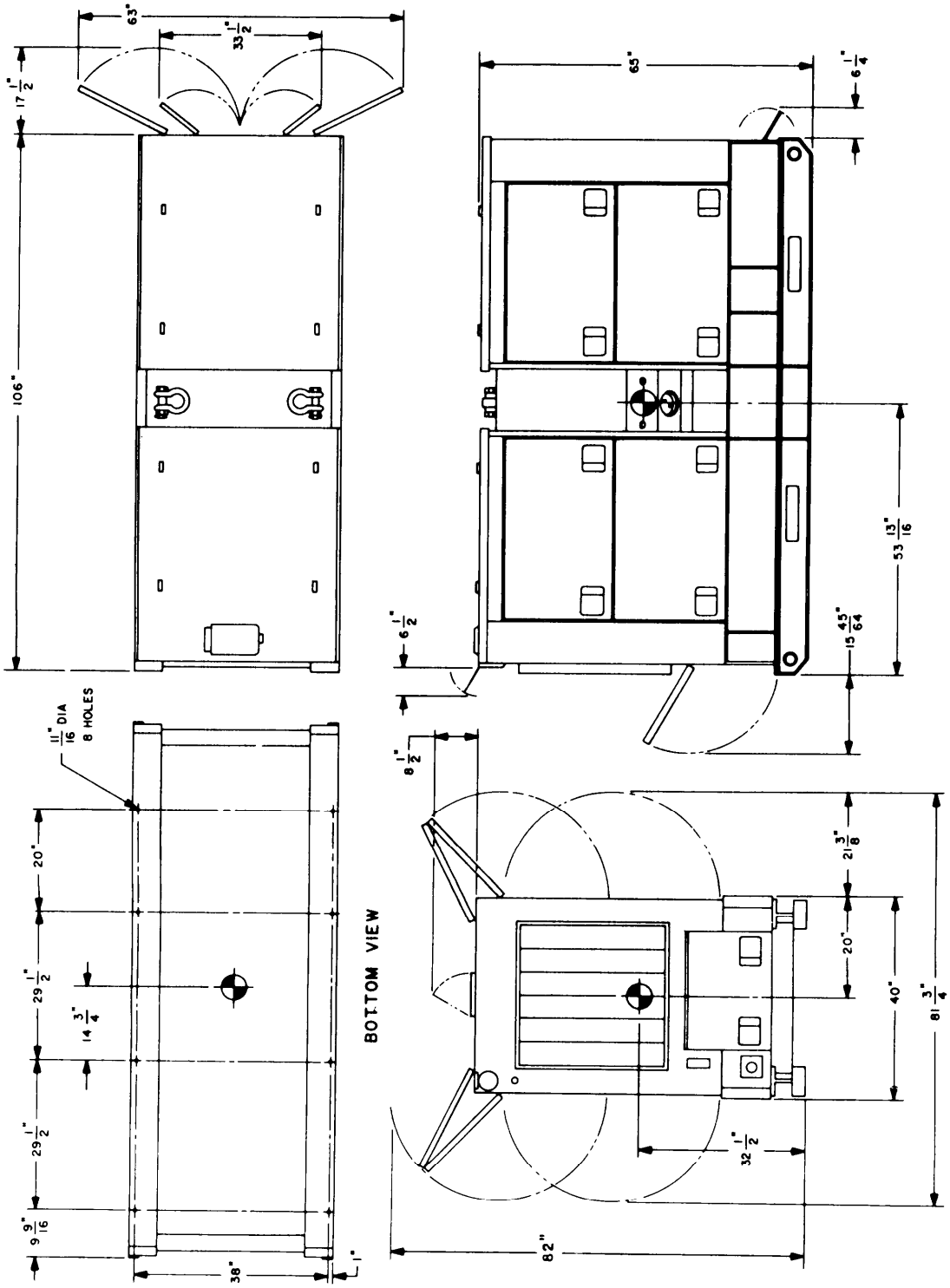


FIGURE 48. MEP-007B (100 kW, 50/60 Hz, DED). X-3580

MILITARY STANDARD
MOBILE ELECTRIC POWER
ENGINE GENERATOR STANDARD FAMILY
MEP-007A, 100 kW, 50-60 Hz, DIESEL ENGINE-DRIVEN GENERATOR SET
CHARACTERISTICS DATA SHEET

CLASSIFICATION

Description: 100 kW @ 0.8 power factor, 50/60 Hz, 120/280 V, 240/416 V

Model:	MEP-007A	Type:	I (tactical)
NSN:	6115-01-133-9101	Class:	2 (utility)
Spec:	MIL-G-52884/11	Mode:	I (50/60 Hz)

PHYSICAL CHARACTERISTICS

Dimensions: See Figures 57 and 58 on pages 186 and 187.

Weight: 6680 lbs (3030 kg).

Mobility: Fully housed. Mounted on skid base. Lifting and tie-down attachments provided. Fork lift provision.

Engine: Diesel, Std: MIL-STD-1410. Horsepower: 170 min @ 1800 RPM. No. of : 6. Cycle: 4. Liquid cooled. 24 VDC electric start. Operating speed: 50 Hz: 1500 RPM, 60 Hz: 1800 RPM. Fuel tank capacity: 90 gallon (approx 8 hours at rated load). Fuel pump lift: 12 feet.

Fuel:
Primary: VV-F-800; Diesel Fuel Oil, types DF-1, DF-2 and DF-A.
Emergency Fuel: MIL-T-5624, Aviation Turbine Fuels, grades JP-4 and JP-5.

Electrical:
Drip proof generator enclosure. Capable of parallel operation. Fungus and moisture treatment.
Solid state voltage regulator. Brushless rotary exciter.

Voltage Connection: 60 Hz: 120/208 v, 3 phase, 4 wire. 240/416 V, 3 phase, 4 wire.
50 Hz: 120/208 V, 3 phase, 4 wire. 240/416 V, 3 phase, 4 wire.

Protective Devices: Short circuit protection. Overvoltage protection. Reverse power protection. Low oil protection. Low oil pressure cut-off switch. High temperature cut-off switch. Low fuel level cut-off switch. Overspeed cut-off switch.

Instrumentation: Voltmeter. Frequency meter. Ammeter. Hourmeter. Wattmeter (% load). Oil pressure gage. Battery charging ammeter (% current). Fault indicating system. Coolant temperature indicator. Fuel level.

FUNCTIONAL/OPERATIONAL CHARACTERISTICS

Reliability: Mean Time Between Failures (MTBF): 800 hours (specified).

Fuel Consumption: 8.5 gph at rated load.

Electromagnetic Interference: Suppression to MIL-STD-461 limits.

	Voltage	Frequency
Steady State Stability (variation)		
Short Term (30 See)	2% Bandwidth	2% Bandwidth
Long Term (4 hours)	4% Bandwidth	3% Bandwidth
Transient Performance		
Application of rated load	20% Dip	3% Undershoot
recovery	3 Sec	3 Sec
Rejection of rated load	20% Rise	4% Overshoot
recovery	3 Sec	3 Sec
Application of simulated motor load	40% Dip	
recovery	5 Sec	
Waveform		
Maximum Deviation Factor	5%	
Individual Harmonic	2%	
Regulation	3%	2-3% Adjustable

Adjustment Range for Standard Voltage Connections

120/208 V Corm: 60 Hz: 197 to 240 V. 50 Hz: 190 to 213 V.
240/416 V Corm: 60 Hz: 395 to 480 V. 50 Hz: 380 to 426 V.

Frequency Adjustment Range: 58 to 62 Hz. 48 to 52 Hz.

ENVIRONMENTAL DATA

Power Output at Environmental Conditions:

100 kW, 60 Hz: Sea level, minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
5000 feet, minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
83.3 kW, 50 Hz: Sea level, minus 25° F (-31.7° C) to plus 125° F (+51.7° C)
5000 feet, minus 25° F (-31.7° C) to plus 107° F (+41.7° C)
Winterization system extends lower temperature limit to minus 65° F (-53.9° C)

Shock and Rough Handling: 10 mph railroad impact. 12 inch end drop. Truck and trailer transportation.

Attitude: Operate with base level or inclined to more than 15 degrees from level.

Noise Level: 88 dbA @ 25 feet.

OPTIONAL EQUIPMENT

See 4.4.3 of MIL-STD-633 for additional information on optional equipment.

Description	NSN	Weight lbs (kg)	Effect on Dim (ins)
Wntzn Kit (Fuel Burning)	6115-00-463-9082	45 (20.4)	Int
Wntzn Kit (Electric)	6115-00-463-9084	40 (18.1)	Int
Wntzn Kit, Aux, Fuel Burning	6115-00-463-9098	350 (158.8)	Aux: (41x40x26)
Wntzn Kit, Aux, Elect.	6115-00-463-9099	260 (117.9)	Aux: (36x27x19)
Remote Control Box	6115-00-420-8490	8 (3.6)	Int
Load Bank	6115-00-463-9086	370 (167.8)	Ext: H+19
Wheel Mounting Kit	6115-00-463-9089	580 (263)	Ext: H+13,L+9,W+30
Panel, Auto, Load Transfer, 60 Hz	6115-00-477-7932	825 (374.2)	Aux: (44x19x42)
Paralleling Cable	6140-00-197-4934	4 (1.8)	Ext: L=300
Relay Assembly, Precise	6140-00-199-1616		Int

REFERENCE DOCUMENTS

Technical Manuals:

Army	Air Force	Marine Corps	Navy
TM	TO		NAVFAC
5-6115-457-12	35C2-3-442-l	TM-07464A-12	P-8-627-12
5-6115-457-24P	35C2-3-442-4	SL-4-07464A	P-8-627-24P
5-6115-457-34	35C2-3-442-2	TM-07464A-35	P-8-627-34

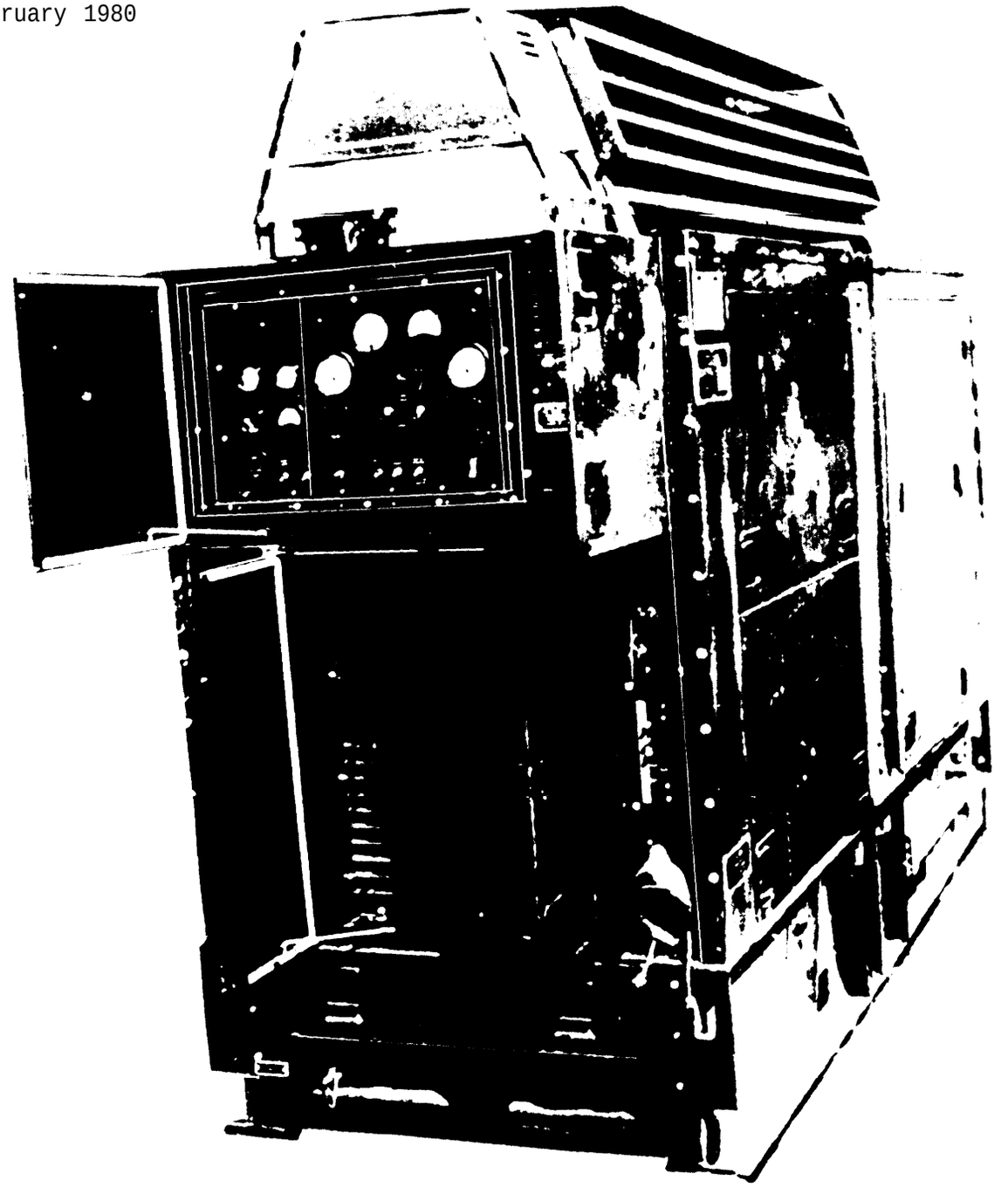


FIGURE 57. MEP-007A (100 kW, 50/60 Hz, DED). X-3585

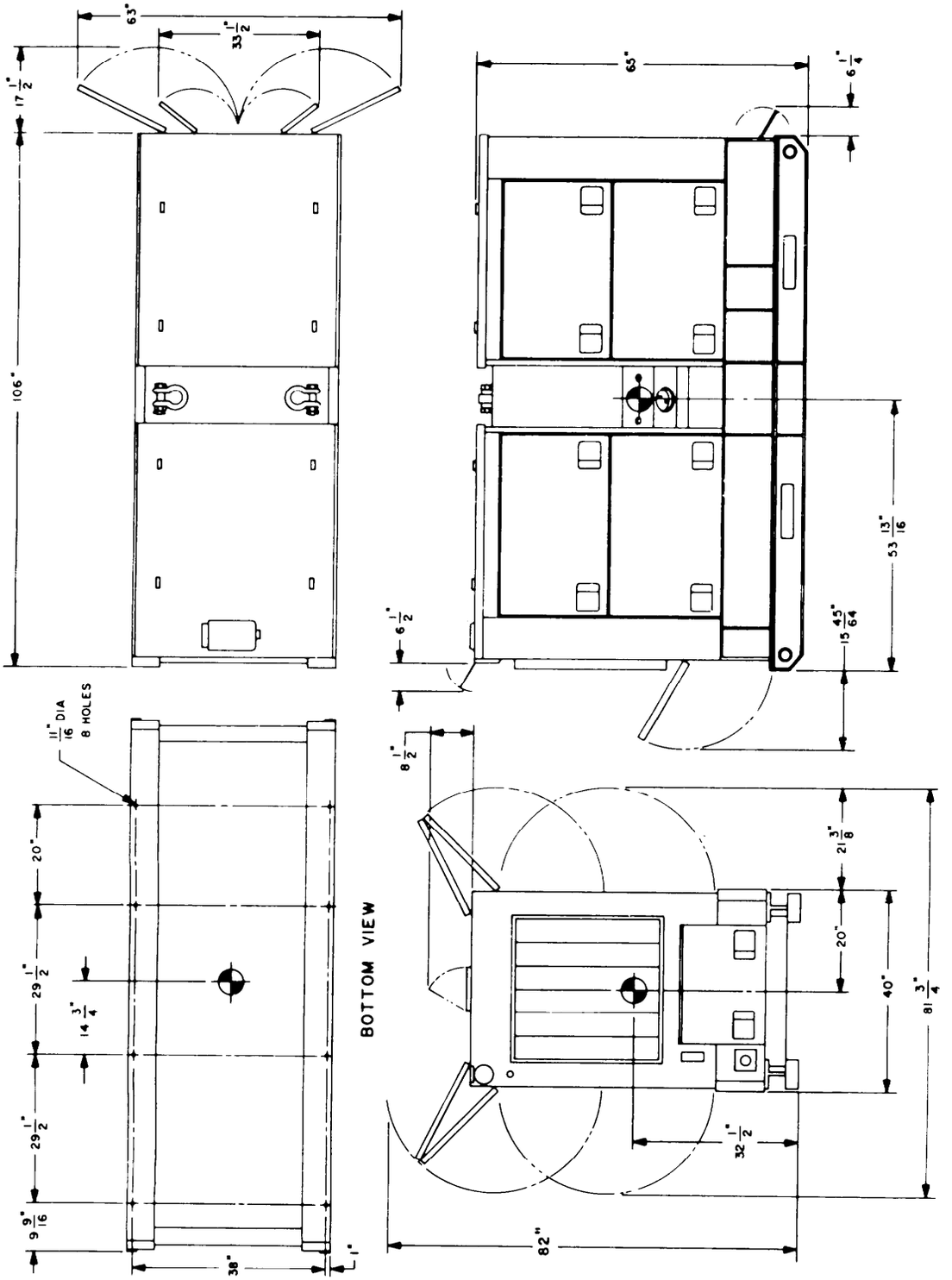


FIGURE 58. MEP-007A (100 kW, 50/60 Hz, DED).

X-3586