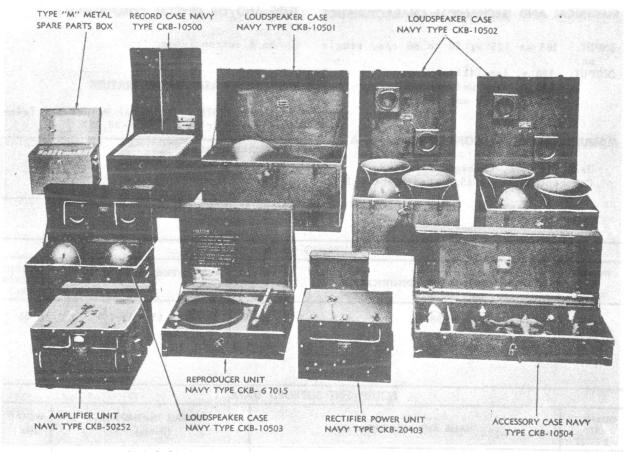
March 1957

# PORTABLE SOUND REPRODUCING EQUIPMENT

PR



Model PR Portable Sound Reproducing Equipment, Components

#### **FUNCTIONAL DESCRIPTION**

The PR is designed for use in connection with activities at Naval and Marine Corps Shore Stations and provides a loudspeaker system for voice, electrical transcriptions, and radio programs.

No field changes in effect at time of preparation (17 August 1956).

#### RELATION TO OTHER EQUIPMENT

Equipment Required but not Supplied: (1) Radio Receiving Equipment (optional) RBO or similar, (1) Power Input Cable, Speaker Cable.

## ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE: 50 to 8000 cps.

AMPLIFIER OUTPUT: 60 W.

OUTPUT IMPEDANCE: 2.5, 4, 8, 15, 30 and 50 ohms.

INPUT IMPEDANCE

MICROPHONE 1, 2, 3: 50/230/500 ohm.

RADIO: 600 ohm.

MISCELLANEOUS: 5000/500,000 ohms.

OPERATING POWER: 115 v, 50 to 60 cps.

#### MANUFACTURER'S OR CONTRACTOR'S DATA

Hoffman Radio Corporation, Los Angeles, Calif.

Contract NXsr-83353, dated 14 December 1944.

#### TUBE AND/OR CRYSTAL COMPLEMENT

(6) 6J7

(1) 6SL7GT

(2) 6V6

(4) 6L6

(3) 5U4G

Total Tubes: (16)

PR

# PORTABLE SOUND REPRODUCING EQUIPMENT

March 1957

## REFERENCE DATA AND LITERATURE

NAVSHIPS 900,741: Technical Manual for Portable Sound Reproducing Equipment PR. TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.

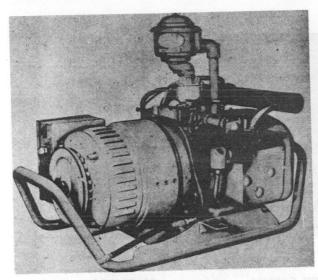
	SHIPPING DATA			
OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Amplifier Unit NT-50252	9.45	22 X 27 X 27-1/2	168
1	Rectifier Power Unit-NT-20403 1 Plug-Input Power	9.45	22 X 27 X 27-1/2	183
1	Record Carrying Case NT-10500	14.5	27-1/2 X 28-3/4 X 21-1/4	202
1	Reproducer Unit-NF67015	10.8	18 X 30 X 34-1/2	155
1	Speaker Carrying Case NT-10501 containing:	21.5	28 X 30 X 44-1/2	259
	2 Reflex Trumpet Type Loudspeakers NT-491030 2 Speaker Mounting Brackets	608.03	Hetal enclosures Speaker carrying case NT-	
2	Speaker Carrying Case-NT-10502 containing: Loudspeakers-NT-49971	16.2	26 X 32-3/4 X 33-1/4	208
1 57	Speaker Carrying Case NT-10503 containing Loudspeakers-NT-49971	12.0	22 X 26 X 36-1/2	151
1	Accessories Carying Case NT-10504 containing: Microphones-NT-51096	10.4	16-1/2 X 22-3/4 X 49-1/4	160
	Microphone Stand (floor type) NT-10516	type NF- type NT- with F	z Microphone Stance, Desk	
	Microphone Stand (Desk Type) NT—10515	Plugs	i caple, reproducer Power,	
	Set Cables with plugs	9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 caples, Microphone, with	1
1	Spare Parts	3.2	15-1/2 X 17 X 21-1/2	97

EQUIPMENT SUPPLIED DATA			
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
) <b>1</b> .	Amplifier Unit-NT-50252	14-3/4 X 19-1/8 X 21-3/4	91
	and 2 Technical Manuals		1
1	Rectifier Power Unit-NT-20403		
	1 Plug-Input Power (attached to		
	Input Receptacle)	14-3/4 X 19-1/8 X 21-3/4	106
1	Record Carrying Case NT-10500	21-1/2 X 22 X 25-3/4	99
1	Reproducer Unit NT-67015	10-7/8 X 23 X 30	70
	Including:		

# PORTABLE SOUND REPRODUCING EQUIPMENT

PR

PER EQUIPT	NAME AND NOMENCLATURE	o 1   15   a	OYERALL DIMENSIONS (inches)	WEIGHT (lbs.)
	1 Speed—Change Sleeve			
	1 Partial Set Operating Spare Parts:		v	
	1 Allen Wrench #8			
	1 Phonograph Needle			020441
	10 Fuses-5 amp-		CONTENTS AND IDENTIFICAT	10
(-1(1)	Speaker Carrying Case NT-10501		21-3/8 X 22-1/8 X 39	123
	containing the following:		Ammilities with Wissors	1
	2 Reflex Trumpet Type Loudspeakers		Osor-Tu-sing tower original	
	NT-491030		newed Jugat-pul9 I	
	2 Speaker Mounting Brackets			
2	Speaker Carrying Case-NT-10502		19 X 238-3/4 X 28-3/4	96
	containing the following:		Speaker Carrylor Care NY-10	
	4 Eight-inch Permanent Magnet		containin	
	Type Loudspeakers-NT-49971 in		2 Rafflex Trumpet Term	
	Metal enclosures		1- 1/0 × 10 × 00	60
1	Speaker Carrying Case NT-10503		17-1/8 X 19 X 32	100
	containing the following:		Speaker Carryin (asc-WT-119	8
	2 Eight-inch permanent Magnet		containes	
	Type Loudspeaker NT-49971 in		Louder cakers	
	Metal enclosures		10-1/4 X 18 X 45-1/4	72
1	Accessory Carrying Case NT-10504		-siessessus gainieuro	1
	containing the following:		Accessories carring care sta	1
	2 Microphones NT-51096		ignici, Joob	
	complete with plugs 1 Microphone Stand, floor type NT-10516		Hi c Luphanas-hi-s Luar	
	2 Microphone Stand, 17001 type NT-10515		Mittensons trans (Migu.	
	1 Cable, reproducer Power, with Plugs		61 %0 t-1/w	
	1 Cable, radio Power, with Plugs		Microprove stred (Dirk L	
	2 Cables, Microphone, with Plugs		PT-2051.5	
	1 Cable, reproducer Audio, with Plugs		Senta with Seigus ges	
	1 Cable, Audio extension with Plugs		Spare Parts	1 2
	1 Cable, Amplifier Power with Plugs			
	1 Cable, Radio Audio, with Plugs		PHICO.	
1	Partial Set Operating Spare Parts in		11.5 %	
WEIGHT	Type "M" Metal Spare Parts Box		12 X 12-1/2 X 18-1/2	42



Power Unit PU-1/CRN-2

# RELATION TO OTHER EQUIPMENT

Equipment Required but not Supplied: (2) Battery BB-57.

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

ENGINE

TYPE: 4-cycle.

TYPE CYLINDER HEAD: L.

NUMBER CYLINDER: 2.

BORE: 2-3/4 in.

SPEED: 1800 rpm.

# TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

# FUNCTIONAL DESCRIPTION

The PU-1/CRN-2 is designed to supply 115 v, single ph, AC and 12 v DC at 60 cycle per second. Rated capacity is 1500 va at unity factor and 250 w DC. A radio set can utilize the output of power unit PU-1/CRN-2 for operation of the radio's various switch and control.

No field changes in effect at time of preparation (14 March 1957).

# REFERENCE DATA AND LITERATURE

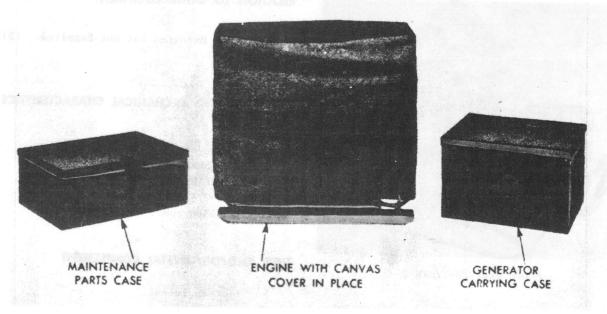
AN16-35PU1-2: Technical Manual for Power Unit PU-1/CRN-2.

TYPE CLASSIFICATION
DESIGN COGNIZANCE
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED	DATA	20.130.284.20
NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
The survey of th	16 × 21-3/4 × 32	226
	NAME AND NOMENCLATURE	

Radio-Auxiliary

PU-116/U



Power Unit PP-116/U:

## **FUNCTIONAL DESCRIPTION**

The PU-116/U is a portable power plant which supplies primary power for electrical, communications, or radar equipments requiring up to a maximum of four kilowatts of power at 115 v, single ph, 60 cycle.

No field changes in effect at time of preparation (12 March 1957).

## **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

POWER OUTPUT: 4 kva, 85%.pf. FREQUENCY STABILITY: 60 ±2 cps.

VOLTAGE REGULATION: ±5% of nominal voltage which may be set at any point between 110 and 120 v.

# MANUFACTURER'S OR CONTRACTOR'S DATA

Homelite Corp, Port Chester, N.Y.

Contract NXss-30264. Contract N5sr-11794.

## TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

# REFERENCE DATA AND LITERATURE

NAVSHIPS 900,902: Technical Manual for Power Unit PU-116/U.

TYPE CLASSIFICATION

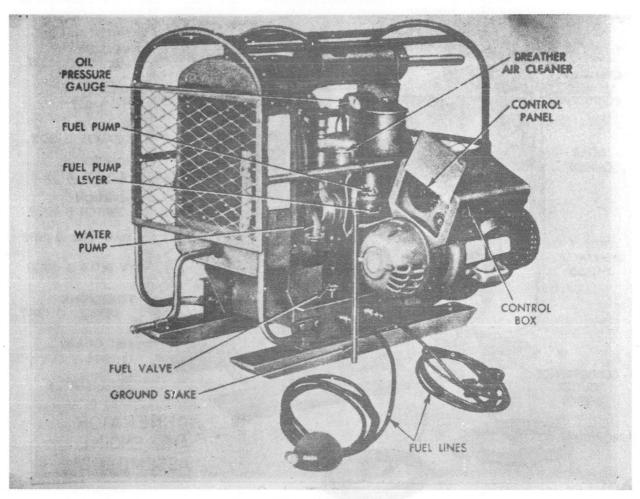
DESIGN COGNIZANCE TASSA

PROCUREMENT COGNIZANCE

STOCK NO.

# PU-116/U

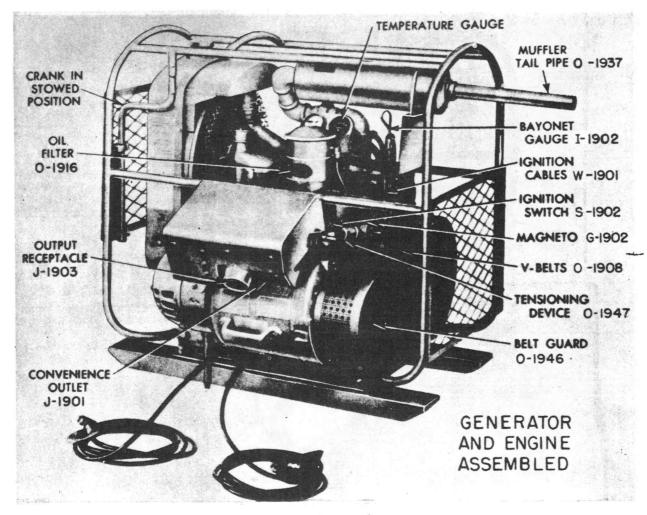
# POWER UNIT



Power Unit PU-116/U

	EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	HAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)		
1	Engine (with guard rail)	19-5/8 X 29-1/2 X 38-3/4	372		
1	Generator	13 X 15-1/2 X 21-1/2	164		
1	Generator Carrying Case	14-1/2 X 20 X 24	50		
1	Maintenane Parts Case	9-1/2 X 19 X 24	50		

## PU-116A/U



Power Unit PU-116A/U

#### **FUNCTIONAL DESCRIPTION**

The PU-116A/U is a portable power plant which supplies power for electrical, communications, or radar equipments requiring up to a maximum of four kilowatts of power at 115 v, single ph, 60 cycles.

Data on this sheet reflects the following field changes, FC1 (12 March 1957).

#### RELATION TO OTHER EQUIPMENT

The PU-116A/U is basically the same as PU-116/U; except that a weather proof output power receptacle is used on PU-116A/U.

#### ELECTRICAL AND MECHANICAL CHARACTERISTICS

POWER OUTPUT: 4 kva, 85% pf. FREQUENCY STABILITY: 60 ±2 cps.

VOLTAGE REGULATION: ± 5% of nominal voltage which may be set at any point between 110 and 120 v.

#### MANUFACTURER'S OR CONTRACTOR'S DATA

Hazeltine Electronics Corp, Little Neck. N.Y.

Contract NObsr-42428, dated 30 June

Approximate Cost: \$1500 with Equipment spares.

Radio-Auxiliary

PU-116A/U

# POWER UNIT

# TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

## REFERENCE DATA AND LITERATURE

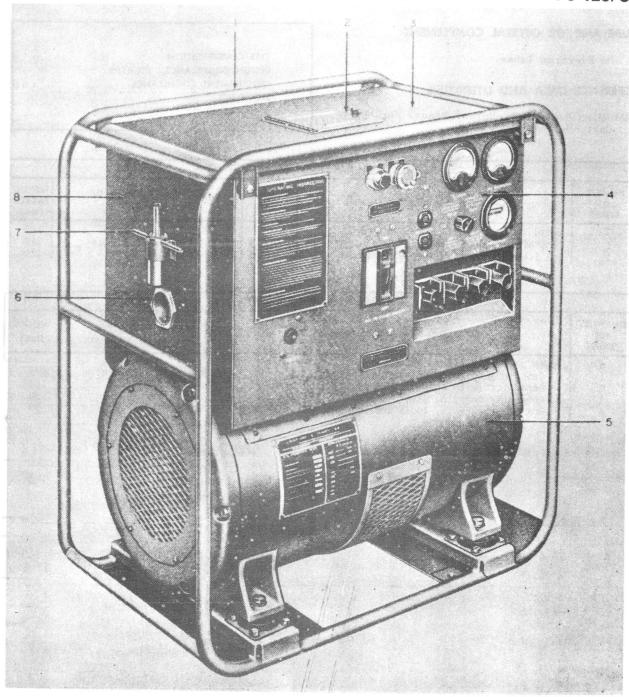
NAVSHIPS 91380: Technical Manual for Power Unit PU-116A/U.

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.

	SHIPPING DATA				
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)	
1 1 1	Gascline Engine Generator in Steel Box Box Standby Parts, Tools, Accessories	8.3	26-3/4 × 37 × 42 18-1/2 × 25-1/4 × 30-3/4 13-1/4 × 21-1/2 × 27	490 240 120	

	EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)		
1 1 1 1	Power Unit PU-116A/U consists of: Gasoline Engine (with guard rail) Generator (with control box and Mtg brackets Generator Carrying Case Box Standby Parts, Tools and Accessories	20-3/8 × 32-1/2 × 35-1/8 15-1/8 × 19 × 22 15-1/2 × 21-3/8 × 25-1/2 9-3/8 × 19-5/8 × 23-1/2	372 164 50 50		

# MOTOR GENERATOR SET



Motor Generator Set PU-126/U

- 1 Frame
  2 Lifting eye access door
  3 Control box cover
  4 Instrument and control panel
  5 Motor generator
  6 Input bushing
  7 Socket wrench
  8 Control Box

Motor Generator Set

## PU-126/U

## MOTOR GENERATOR SET

## **FUNCTIONAL DESCRIPTION**

The PU-126/U is a transportable rotary converter that converts three phase, 60 cycle, 208 v to 400 cycle, 120/208 v, single or three-phase power.

No field changes in effect at time of preparation (12 March 1957).

#### **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

**MOTOR** 

POLES: 4.
PHASE: 3.
VOLTAGE: 208.
CYCLE: 60

SPEED FULL LOAD: 1735 rpm. NO LOAD: 1790 rpm.

AMPERE RATING: 52.5 amp per leg. TEMPERATURE RISE: 40 deg C max.

GENERATOR

TYPE: permanent magnet.

POLES: 28.

PHASE: 1 to 3. VOLTAGE: 120/208.

CYCLE: 400.

POWER FACTOR: 0.8.

AMPERE RATING: 104 amp, 1 ph; 43.5 amp

per leg, 3 ph.

## TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

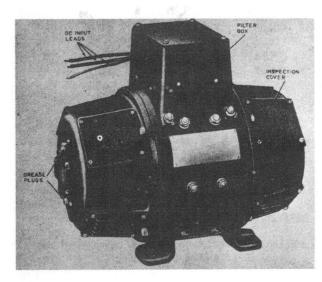
#### REFERENCE DATA AND LITERATURE

TM11-910: Technical Manual for Motor Generator Set PU-126/U.

TYPE CLASSIFICATION
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

SHIPPING DATA					
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)	
1	Motor Generator Set PU-126/U	23	25-1/4 × 35-3/4 × 43-1/2	980	

	EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)		
1	Motor Generator Set PU-126/U consists of:	19 × 32-1/2 × 34-1/4	800		
1	Motor Generator	16 × 16-1/4 × 27-3/4	587		
1	Control Box	16-1/4 × 18-3/4 × 25-3/4	175		
1	Frame	19 × 32-1/2 × 34-1/4	38		
1	Set Tools	Return Syrveries Shigs/U			



Rotary Converter PU-134/U

## **FUNCTIONAL DESCRIPTION**

The PU-134/U is a rotating-armature unit designed to convert 230 v DC to 110 v, 60 cps, single phase alternating current. It has a stationary DC field and a dual wound, ball bearing supported rotary armature. The unit is fan-ventilated, semi-enclosed and it includes a filter unit.

The principal application of the equipment is on shipboard where 230 v DC is available and where 110 v, 60 cycle, single phase current is needed to power equipment in which the AC requirements do not exceed 600 volt amperes at about 85 per cent power factor.

No field changes in effect at time of preparation (25 February 1957).

#### ELECTRICAL AND MECHANICAL CHARACTERISTICS

INPUT VOLTS: 230 v DC.

OUTPUT VOLTS: 110 v, 60 cps, single ph. INPUT CURRENT: 4.1 amp. OUTPUT CURRENT: 5.45 amp. OUTPUT IN VOLT AMPERES: 600 va.

INPUT DC LINE FUSE: 30 amp.

NORMAL TEMPERATURE RISE: 40°C.

ARMATURE SPEED: 1800 rpm. ARMATURE BEARINGS: ball.

DC BRUSH SUPPRESSION: . 1 ur (brush to frame). DC INPUT LINE SUPPRESSION: .5 uf on each con-

ductor (line to frame) after iron core

choke coils.

AC BRUSH SUPPRESSION: .lur(brush to frame).
AC LINE SUPPRESSION FILTER: .01 uf from each conductor to frame before r-f choke coils. .3 uf from each conductor to frame after r-f choke coils.

### MANUFACTURER'S OR CONTRACTOR'S DATA

Gothard Mfg. Co. Springfield, Illinois Model DL-42F. Sig Corp Order No. 14140-Ph-48.

## TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

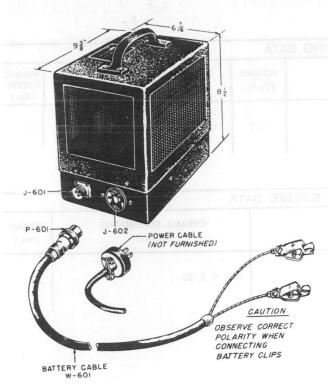
#### REFERENCE DATA AND LITERATURE

TM11-487E: Dept of Army Directory of Signal Corps Equipments, Power Equipment.

TYPE CLASSIFICATION DESIGN COGNIZANCE TASSA PROCUREMENT COGNIZANCE STOCK NO.

1000	SHIPPING DATA				
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)	
1	Rotary Converter PU-134/U		51091 145	150	

	EQUIPMENT SUPPLIED DATA					
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)			
1	Rotary Converter PU-134/U	9-3/4 × 13 × 15-3/4	122			



Rotary Converter PU-151/U

## **FUNCTIONAL DESCRIPTION**

The PU-151/U is used to supply single-phase AC power at 105 to 125 volts, 60 cps, at locations where other sources of AC power are not available. The converter requires a 12 volt DC source for its operation. The source may be a 12 volt storage battery, the 12 volt DC circuit in an airplane or truck, or any other similar source. The output of the converter is 100 Watts at unity power factor for continuous operation. Twenty-five percent overloading is permissible when a duty cycle of five minutes on, fifteen minutes off is observed.

The converter comprises the motor-generator type converter, input and output filter circuits for suppression of RF interference originating within the converter which will limit noise in accordance with the requirements of Navy spec 16E4(RE), connectors for input and output power and a detachable power cable.

No field changes in effect at time of preparation (25 July 1956).

# RELATION TO OTHER EQUIPMENT

The PU-151/U was supplied in other procurements as a unit of Modification Kit MX-910/U for Noise-Field Intensity Meter TS-587/U and TS-587A/U.

Equipment Required but not Supplied: (1) Storage Batteries or equivalent source of 12 volts at 17 amp, (1) Output Power Cable.

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

FULL LOAD INPUT: 17 amp at 12 v DC. CONTINUOUS OUTPUT: 100 W at 115 v. 60 cps, single ph, unity power factor. BATED SPEED: 3600 rpm.

VOLTAGE REGULATION: Noload to full load, 33%.
TEMPERATURE RISE: 50 °C for continuous opera-

MAX PERMISSIBLE AMBIENT TEMPERATURE: 40°C for continuous operation without immediate relubrication.

INTERNAL FILTER: Input and output connections are filtered to minimize converter-caused RF interference within the range of 150 kc to above 400 mc.

POWER SOURCE REQUIRED: (2) 6 v, 175 amp hr lead-acid storage batteries (series connected) such as NT-6 v-SBMD-175AH or equivalent.

HEAT DISSIPATION: 104 W.

CONSTRUCTION: The converter unit is enclosed in a black-finished brass housing mounted on a sheet-metal base. The sides of the housing are perforated for ventilation and a carrying handle is mounted on its top.

MOUNTING: The converter must be set firmly on a solid base with the top of its housing level so that the machine shaft is horizontal and rotates without end thrust.

## MANUFACTURER'S OR CONTRACTOR'S DATA

Stoddart Aircraft Radio Co., Hollywood, California. Contract NObsr 43213, dated 28 July 1949. Approximate cost \$200 w/equipment spares.

# TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

# REFERENCE DATA AND LITERATURE

NAVSHIPS 91226: Technical Manual for Rotary Converter-PU-151/U.

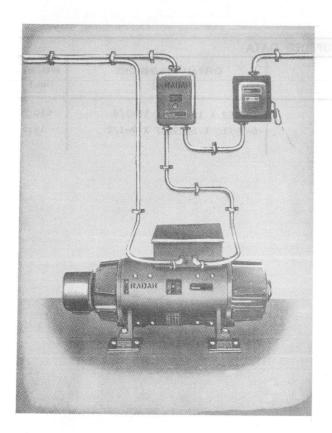
TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE CS-728 (NAVY)
STOCK NO.

1 barl	SHIPPING DATA					
OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)		
1	Rotary Converter with Stoddart—10078 Input Cable (5'5") 2 Technical Manuals	1.5	12 X 12 X 18	35		

OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
X 9 X 10	20
X	Va

December 1956

# MOTOR GENERATOR MOTOR STARTER PU-163/U,SA-166/U



Motor Generator Motor Starter PU-163/U,SA-166/U

#### **FUNCTIONAL DESCRIPTION**

The PU-163/U is a compact, constantspeed, continuous-duty, electric-generating sets designed to supply 115 volt, 60 cycle, single phase alternating current for shipborne radar navigation systems. It consists of a DC electric motor and an AC generator within a single frame. A speed regulating mechanism is contained in a separate housing attached to the motor end of the unit. The PU-163/U operates from a 230 volt DC power source.

The SA-166/U is a motor starter provided with the PU-163/U for starting and stopping the motor-generator.

No field changes in effect at time of preparation (2 August 1956).

# RELATION TO OTHER EQUIPMENT

Similar to PU-164/U except for power source.

#### ELECTRICAL AND MECHANICAL CHARACTERISTICS

MOTOR

HORSEPOWER: 4.

INPUT VOLTAGE: 115 v DC at 24 amp.

SPEED: 1800 rpm.

**GENERATOR** 

VOLTAGE RATING: 115 v AC. CURRENT RATING: 17.4 amp.

OUTPUT RATING: 1.8 kw (2 kva).

CYCLES: 60.

POWER FACTOR: 90% SPEED: 1800 rpm.

EXCITOR VOLTS: 115 v DC.

PHASE: single.

TEMPERATURE RISE: 40°C.

MOTOR STARTER SA-166/U

VOLTS: 230 DC. CURRENT: 20 amps.

HORSEPOWER: 5.

HEATING ELEMENT CURRENT: 13.3 to 15.2

amps.

#### MANUFACTURER'S OR CONTRACTOR'S DATA

Radio Marine Corp. of America, New York, N.Y.

Contract NObsr-52358, dated 26 March 1951

PU-163/U Electric Specialty Corp. Boston, Mass. Model No. FBC54/FBC54.

SA-166/U General Electric Co., Schs-nectady, N.Y. Model No-CR-4052-AIL. Approximate Cost: PU-163/U-No Cost

Approximate Cost: SA-166/U-\$100.00 with equipment spares

# TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes

#### REFERENCE DATA AND LITERATURE

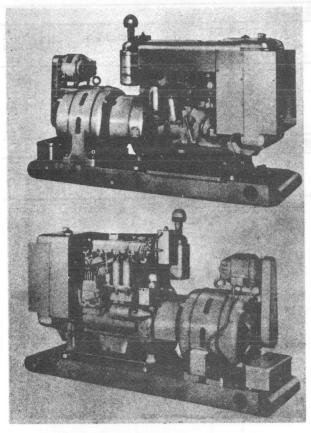
TM11-5510: Dept of Army Technical Manual for Motor Generator-PU-164/U, Motor Starter-SA-167/U and Motor Generator-PU-163/U, Motor Starter-SA-166/U.

TYPE CLASSIFICATION DESIGN COGNIZANCE BUSHIPS PROCUREMENT COGNIZANCE 71-2507 (ARMY) STOCK NO.

# PU-163/U,SA-166/U MOTOR GENERATOR MOTOR STARTER

December 1956

EQUIPMENT SUPPLIED DATA			
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1 1	Motor Generator PU-163/U Motor Starter SA-166/U	14-1/2 X 18-1/8 X 35-7/8 6-13/16 X 6-29/32 X 9-1/2	450 13.5



Power Unit PU-19/FRC, Right and Left Views

## **FUNCTIONAL DESCRIPTION**

The PU-19/FRC is a portable, self-contained power plant consisting of a Diesel engine and an AC generator, which are connected by a mechanical coupling. It is designed to supply single phase AC for fixed radio installations. The unit is mounted on a skid base of electrically welded heavystructural steel. A system of safety controls provide protection during operation.

No field changes in effect at time of preparation (15 March 1957).

## ELECTRICAL AND MECHANICAL CHARACTERISTICS

ENGINE

CYCLE: 4

TYPE CYLINDER HEAD: Over-head valve.

CYLINDERS: 4.

BORE: 4.4 in.

STROKE: 5.5 in.

PISTON DISPLACEMENT: 334.5 cu. in.

COMPRESSION RATIO

DIESEL CYCLE: 14.2 to 1.

GASOLINE CYCLE: 6 to 1.

ENGINE SPEED

REGULAR FULL LOAD: 1200 rpm.

OVERSPEED STOP: 1320 rpm.

HORSEPOWER: 45.5 at 1200 rpm.

BATTERY VOLTAGE AND CAPACITY: 3-cell,

heavy-duty, 6 v.

**GENERATOR** 

RATING: 20 kw (25 kva).

CURRENT: 104 amp. VOLTAGE: 120/240 v. POWER FACTOR: 80%. SPEED: 1200 rpm.

## TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

#### REFERENCE DATA AND LITERATURE

TM11-986: Technical Manual for Power Unit PU-19/FRC.

TYPE CLASSIFICATION DESIGN COGNIZANCE TASSA PROCUREMENT COGNIZANCE STOCK NO.

SHIPPING DATA						
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)		
1	Power Unit PU-19/FRC	31	7 X 67 X 140	6400		

EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
1	Power Unit PU-19/FRC	32 X 58-1/2 X 96	4430	
1	Engine	28-1/16 X 52 X 52-7/8	1950	
1	Alternator W/Exciter	30-7/16 X 37-3/8 X 38	1375	
1	Control Panel	10-5/8 X 16-5/8 X 24-1/4	80	
1	Base	6-1/2 X 26-3/8 X 96	575	
1	Accessories, less exhaust material	5 212 N 20-5/10 N 30	300	

PU-239/G

#### FUNCTIONAL DESCRIPTION

Generator Set, Diesel Engine PU-239/G is a completely self-contained, mobile power supply. It is a general purpose unit, mounted on a standard 1-1/2 ton, 2 wheel trailer, intended for operation as an independent power source for various electronic equipments requiring 60 cycle ac.

No field changes in effect at time of preparation (3 December 1959).

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

ENGINE

MAKE: Detroit Diesel Div, General Motor

Corp.

MODEL: GM-2-71.

TYPE: 2 stroke cycle.

NUMBER OF CYLINDERS: 2.

SPEED: 1200 rpm.

HORSEPOWER: 47 brake.

TYPE OF COOLING: Water.

ELECTRICAL STARTING SYSTEM.

BATTERY: (2) 6 v.

AC GENERATOR

ALTERNATOR

MAKE: Kato Engineering Company.

MODEL: 53ETS6.

TYPE: 2356.

RATING: 20 kw, 120/208 v.

FREQUENCY: 60 cps.

PHASE: 3, 4-wire.
POWER FACTOR: 0.80.

EXCITER

MAKE: Kato Engineering Co.

RATING: 125 v, 5 amp.

## MANUFACTURER'S OR CONTRACTOR'S DATA

Libby Welding Co. Inc., Kansas City, Mo. Contract NOm-60469.

## TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

#### REFERENCE DATA AND LITERATURE

Nomenclature Card for GENERATOR SET, DIESEL ENGINE PU-239/G.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE SPEC: MIL-G16262 (MC)

STOCK NO.

	EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)		
1	Generator Set, Diesel Engine PU-239/G	86 X 92 X 160			

PU-239A/G

#### FUNCTIONAL DESCRIPTION

Generator Set, Diesel Engine PU-239A/G is a completely self-contained, mobile power supply. It is a general purpose unit, mounted on a standard 1-1/2 ton, 2 wheel trailer, intended for operation as an independent power source for various electronic equipments requiring 60 cycle A.C.

No field changes in effect at time of preparation (3 December 1959).

## ELECTRICAL AND MECHANICAL CHARACTERISTICS

ENGINE .bear alasayadaa

MAKE: General Motors Corp.

MODEL: GM-2-71.

TYPE: Diesel.

NUMBER OF CYLINDERS: 2.

AIR CLEANER: Oil-bath type.

ELECTRICAL STARTING SYSTEM

GENERATOR, BATTERY CHARGING: 24 v belt

driven.

STARTING MOTOR: 24 v.

BATTERIES: (1) 12 v, Spec MIL-B-11188.

AC GENERATOR

ALTERNATOR

MAKE: Kato Engineering Company.

MODEL: 53ETS6.

TYPE: 2356.

RATING: 20 kw, 120/208 v.

FREQUENCY: 60 cps at 1200 rpm.

PHASE: 3, 4-wire.

POWER FACTOR: 0.80.

EXCITER SELECTION OF THE SELECTION OF TH

MAKE: Kato Engineering Company.

RATING: 125 v, 5 amp.

#### MANUFACTURER'S OR CONTRACTOR'S DATA

West Coast Engine and Equipment Company, Berkeley, California.

#### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

#### RELATION TO OTHER EQUIPMENT

Nomenclature Card for GENERATOR SET, DIESEL ENGINE PU-239A/G.

TYPE CLASSIFICATION (NAVY)

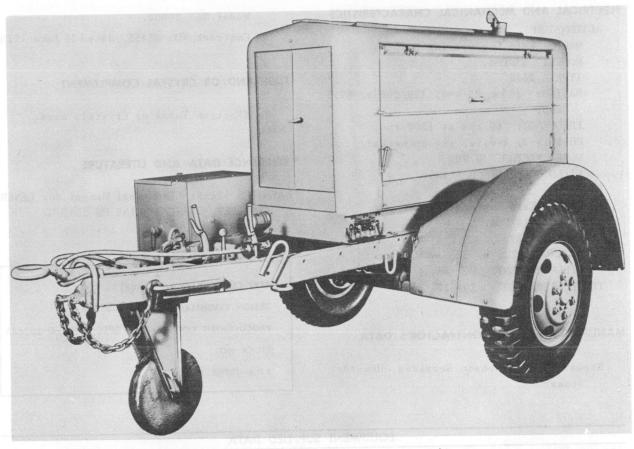
DESIGN COGNIZANCE USN. BUSHIPS

PROCUREMENT COGNIZANCE SPEC:

STOCK NO.

MIL-G-16262A(MC)

EQUIPMENT SUPPLIED DATA						
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	BRUTAJO	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)		
1	Generator Set, Diesel Engine PU-239A/G		84 X 84 X 163	4,200		



Generator Set, Diesel Engine PU-239B/G

#### FUNCTIONAL DESCRIPTION

Generator Set, Diesel Engine PU-239B/G is a completely self-contained, mobile power supply. It is a general purpose unit, mounted on a standard 1-1/2 ton, 2 wheel trailer, intended for operation as an independent power source for various electronic equipments requiring 60 cycle A. C.

No field changes in effect at time of preparation (3 December 1959).

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

**ENGINE** 

MAKE: Detroit Diesel Div., General Motors

Corp.

MODEL: 2055. TYPE: Diesel.

NUMBER OF CYLINDERS: 2.

BORE: 4-1/4 in.

STROKE: 5 in.

TOTAL DISPLACEMENT: 142 cubic in. DIRECTION OF CRANKSHAFT ROTATION: CW.

SPEED RANGE: 350 rpm to 1800 rpm.

HORSEPOWER: 30.

COMPRESSION RATIO: 16 to 1.

COMPRESSION PRESSURE AT 400 RPM: 450 lbs/

sq. in.

FIRING ORDER: 1-2.

INJECTOR RATING: 60 cubic millimeters.

LUBRICATION SYSTEM CAPACITY: 11 qts.

TYPE OF COOLING: Water.

RADIATOR CAPACITY: 16.5 qts.

AIR CLEANER: Oil-bath type.

FUEL TANK CAPACITY: 16 gal.

ELECTRICAL STARTING SYSTEM

GENERATOR, BATTERY CHARGING: 24 v belt

driven.

STARTING MOTOR: 24 v solenoid oper-

BATTERIES: (2) 12 v, Spec MIL-B-11188.

AC GENERATOR

# PU-239B/G

# GENERATOR SET, DIESEL ENGINE

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

ALTERNATOR

MAKE: Kato Engineering Company.

MODEL: 55MPS6.

TYPE: 2518.

RATING: 20 kw, 25 kva, 120/208 v, 69.5

amp.

FREQUENCY: 60 cps at 1200 rpm.

PHASE: 3, 4-wire, wye-connected.

POWER FACTOR: 0.80.

FIELD CURRENT: 0.7 amp.

EXCITER

MAKE: Kato Engineering Company.

MODEL: 14XUGA.

TYPE: 1639.

RATING: 87.5 w, 125 v, 0.7 amp.

FIELD CURRENT: 0.7 amp.

TEMPERATURE RISE: 104° F.

# MANUFACTURER'S OR CONTRACTOR'S DATA

Stewart and Stevenson Services, Houston, Texas.

Model No. 20900.

Contract NOm-65455, dated 26 June 1953.

## TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

# REFERENCE DATA AND LITERATURE

NAVSHIPS 92455: Technical Manual for GENER-ATOR SET, DIESEL ENGINE PU-239B/G.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE SPEC: MIL-G-16262A

(MC)

STOCK NO.

	EQUIPMENT SUPPLIED	DATA	
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Generator Set, Diesel Engine PU-239B/G	80 X 88-1/2 X 164	5108

PU-239C/G

## FUNCTIONAL DESCRIPTION

Generator Set, Diesel Engine PU-239C/G is a completely self-contained, mobile power supply. It is a general purpose unit, mounted on a standard 1-1/2 ton, 2 wheel trailer, intended for operation as an independent power source for various electronic equipments requiring 60 cycle ac.

No field changes in effect at time of preparation (3 December 1959).

## ELECTRICAL AND MECHANICAL CHARACTERISTICS

ENGINE

MAKE: Detroit Diesel Div, General Motors

Corp.

MODEL: 2055.

SERIES: 2-71.

TYPE: Diesel.

NUMBER OF CYLINDERS: 2.

BORE: 4-1/4 in. STROKE: 5 in.

TOTAL DISPLACEMENT: 142 cubic in.

DIRECTION OF CRANKSHAFT ROTATION: Clock-

SPEED RANGE: 350 rpm to 1800 rpm.

HORSEPOWER: 30.

COMPRESSION RATIO: 16 to 1.

COMPRESSION PRESSURE AT 400 RPM: 450

lbs/sq. in.

FIRING ORDER: 1-2.

INJECTION RATING: 60 cubic millimeters.

LUBRICATION SYSTEM CAPACITY: 11 qts.

TYPE OF COOLING: Water.

RADIATOR CAPACITY: 16.5 qts.

AIR CLEANER: Oil-bath type.

FUEL TANK CAPACITY: 16 gal.

ELECTRICAL STARTING SYSTEM

GENERATOR, BATTERY CHARGING: 24 v

belt driven.

STARTING MOTOR: 24 v solenoid oper-

BATTERIES: (2) 12 v, Spec MIL-B-11188.

AC GENERATOR

ALTERNATOR

MAKE: Kato Engineering Company.

MODEL: 53MPS6.

TYPE: 0 3201. 25 201 3212 40 201 60 80 8

RATING: 20 kw, 120/208 v.

FREQUENCY: 60 cps.

PHASE: 3, 4-wire.

POWER FACTOR: 0.80.

## MANUFACTURER'S OR CONTRACTOR'S DATA

Stewart Steel Products Inc., Brooklyn, New York.

Contract NOm-66246, dated 20 April 1954.

#### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

# REFERENCE DATA AND LITERATURE

Nomenclature Card for GENERATOR SET, DIESEL ENGINE PU-239C/G.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE SPEC:

MIL-G-16262B(MC)

EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
1	Generator Set, Diesel Engine PU-239C/G	80 X 92 X 160	6,000	

PU-239D/G

#### FUNCTIONAL DESCRIPTION

Generator Set, Diesel Engine PU-239D/G is a completely self-contained, mobile power supply. It is a general purpose unit, mounted on a standard 1-1/2 ton, 2 wheel trailer, intended for operation as an independent power source for various electronic equipments requiring 60 cycle ac.

No field changes in effect at time of preparation (3 December 1959).

# **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

#### **ENGINE**

MAKE: Detroit Diesel Div, General Motors Corp.

MODEL: 2055 (diesel 2 cyc engine).

TYPE: 2 stroke cycle.

NUMBER OF CYLINDERS: 2.

SPEED: 1800 rpm.

HORSEPOWER: 42 brake.

TYPE OF COOLING: Water.

ELECTRICAL STARTING SYSTEM.

GENERATOR, BATTERY CHARGING: 24 v

belt driven.

STARTING MOTOR: 24 v solenoid operated.

BATTERIES: (2) 12 v, spec MIL-B-11188;

or (1) 24 v.

## AC GENERATOR

#### ALTERNATOR

MAKE: Kato Engineering Co.

MODEL: M53M5X4.

TYPE: 3432.

RATING: 20 kw, 120/208 v, or 240/416 v.

FREQUENCY: 60 cps.

PHASE: 1 and 3, 4-wire or 3-wire.

POWER FACTOR: 0.80.

#### EXCITER

MAKE: Kato Engineering Co.

MODEL: 26XUG1.

TYPE: 3784.

RATING: 87.5 W, 125 v, 0.7 amp.

# MANUFACTURER'S OR CONTRACTOR'S DATA

Consolidated Diesel Electric Corp, Stamford, Conn.

Model No. 4009.

Contract NOm-67700, dated 17 June 1955.

## TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

# REFERENCE DATA AND LITERATURE

Nomenclature Card for Generator Set, Diesel Engine PU-239D/G.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

EQUIPMENT SUPPLIED DATA				
PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
1	Generator Set, Diesel Engine PU-239D/G	23		
(HSEW)	SMSHAPER CHO LINE NA CO		THIMAUD FEE	

PU-239E/G

#### FUNCTIONAL DESCRIPTION

Generator Set, Diesel Engine PU-239E/G is a completely self-contained, mobile power supply. It is a general purpose unit, mounted on a standard 1-1/2 ton, 2 wheel trailer, intended for operation as an independent power source for various electronic equipments requiring 60 cycle ac.

No field changes in effect at time of preparation (3 December 1959).

## **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

#### ENGINE

MAKE: Detroit Diesel Div, General Motors

MODEL: 2913. Teatherland 100MTe 291H2AAV

TYPE: 2 stroke cycle.

NUMBER OF CYLINDERS: 2.

SPEED: 1800 rpm.

HORSEPOWER: 42 brake.

TYPE OF COOLING: Water.

ELECTRICAL STARTING SYSTEM

GENERATOR, BATTERY CHARGING: 24 v

belt driven. May 30MAXIM500 MSM330

STARTING MOTOR: 24 v solenoid oper-

ated.

BATTERIES: (2) 12 v, spec MIL-B-11188;

or (1) 24 v.

#### AC GENERATOR

#### ALTERNATOR

MAKE: Kato Engineering Company.

MODEL: M53M5X4.

TYPE: 5320.

RATING: 20 kw, 120/208 v, 240/416 v.

FREQUENCY: 60 cps.

PHASE: 1 and 3, 4 wire or 3 wire.

POWER FACTOR: 0.80.

#### EXCITER

MAKE: Kato Engineering Company.

MODEL: 26XUG1.

TYPE: 3784.

RATING: 87.5 W, 125 v, 0.7 amp.

#### MANUFACTURER'S OR CONTRACTOR'S DATA

Libby Welding Co. Inc., Kansas City, Mo. Model No. LW20.

## TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

## REFERENCE DATA AND LITERATURE

Nomenclature Card for GENERATOR SET, DIESEL ENGINE PU-239E/G.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

SPEC:

STOCK NO.

MIL-G-18050(MC)

EQUIPMENT SUPPLIED DATA					
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)		
1	Generator Set, Diesel Engine PU—239E/G	A			

### Radio-Auxiliary

## GENERATOR SET, DIESEL ENGINE

PU-239F/G

#### FUNCTIONAL DESCRIPTION

Generator Set, Diesel Engine PU-239F/G is a completely self-contained, mobile power supply. It is a general purpose unit, mounted on a standard 1-1/2 ton, 2 wheel trailer, intended for operation as an independent power source for various electronic equipments requiring 60 cycle ac.

No field changes in effect at time of preparation (3 December 1959).

## ELECTRICAL AND MECHANICAL CHARACTERISTICS

ENGINE

MAKE: Detroit Diesel Div, General Motors
Corp.

MODEL: 2913.

SERIES: 2-71.

ELECTRICAL STARTING SYSTEM

GENERATOR, BATTERY CHARGING: 24 v.
STARTING MOTOR: 24 v solenoid oper-

ated.

BATTERY: (1) 24 v.

AC GENERATOR

ALTERNATOR

MAKE: American Marc Incorporated.

MODEL: KBA 620.

RATING: 20 kw, 120/208 v to 240/416 v.

FREQUENCY: 60 cps.

PHASE: 3, 3-wire, delta.

# MANUFACTURER'S OR CONTRACTOR'S DATA

Stewart and Stevenson Services Inc.,
Houston, Texas.
Model No. 27800.
Contract NOm-70194.

POWER FACTOR: 0.80.

## TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

#### REFERENCE DATA AND LITERATURE

NAVSHIPS 93400: Preliminary Data Sheet for GENERATOR SET, DIESEL ENGINE, TRAILER MOUNTED, PU-239F/G.

TYPE CLASSIFICATION (NAVY)

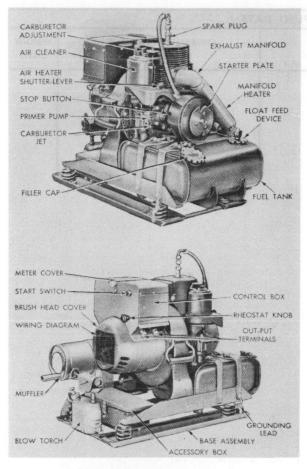
DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE SPEC:

STOCK NO.

MIL-G-18050A(MC)

EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAMĘ AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
1 molaw	Generator Set, Diesel Engine, Trailer Mounted PU-239F/G	BASE AND HOMESH	2600	



Motor-Generator PU-250/U

### **FUNCTIONAL DESCRIPTION**

The PU-250/U consists of a single-cylinder, air-cooled, two-cycle gasoline engine directly connected to a self-excited, direct current generator. A control box, mounted on the generator yolk, contains a voltmeter, ammeter shunt, automatic voltage regulator, reverse current cutout, calibrating, rheostat, radio suppression filter and two output terminals.

An air heater permits engine operation at temperatures down to -65 deg F, and a blowtorch is provided to preheat the engine for starting at temperatures below -20 deg F. A float-feed device provides the means for using a gravity-feed auxiliary fuel tank. The generator set can be started manually with a starting rope or by use of a 24 volt storage battery.

No field changes in effect at time of preparation (26 December 1957).

#### RELATION TO OTHER EQUIPMENT

The PU-250/U is identical to the Homelite Corp Generator Set Model 24D28-23A.

Equipment Required but not Supplied: v batt for other than manual starting.

#### **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

GENERATOR OUTPUT: 28 v DC, 1-1/2 kw.

GASOLINE ENGINE: 3600 to 3700 rpm (governed) directly coupled to generator.

OPERATING TEMP RANGE: Down to -65 deg F.

TYPE GROUND SYSTEM: Neg.

FEATURES: Entire set shielded and filtered to suppress radio interference.

FUEL MIXTURE: 3/4 pt SAE-30 motor oil per

POWER SOURCE REQUIRED: None. A 24 v storage batt may be employed for starting.

MTG DATA: Shock mounted.

#### MANUFACTURER'S OR CONTRACTOR'S DATA

Homelite Corp, Port Chester, N.Y.

#### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals.

#### REFERENCE DATA AND LITERATURE

NAVSHIPS 91731, Technical Manualfor Homelite Generator Set Model 24D28-23A.

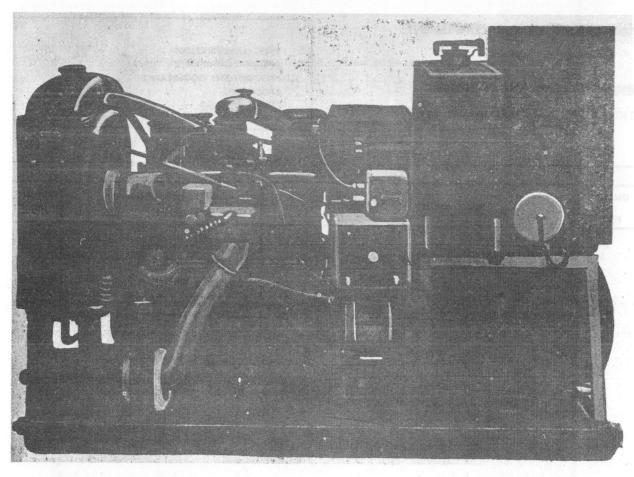
TYPE CLASSIFICATION BUSHIPS DESIGN COGNIZANCE PROCUREMENT COGNIZANCE STOCK NO.

FULL MIXTURM: 3/4 pt SAR-30 meter oil per

## **MOTOR-GENERATOR**

April 1958

To suit 2 de 2007 de segundo EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	400	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Motor-Generator PU-250/U			
1	Auxiliary Fuel Line			
1 1 2000	Auxiliary Fuel Line Starting Rope			
1	Dieuters Model Isbom and Totals Had Grov			-
1	Canvas Cover			
1	Service Kit (Tools)			



Power Unit PU-26/11

#### **FUNCTIONAL DESCRIPTION**

The PU-26/U may be used to furnish electricity to operate radio equipment, signal systems, lights, motors, heating units, and other appliances where commercial power service is not available, or upon failure of such power.

No field changes in effect at time of preparation (15 March 1957).

## RELATION TO OTHER EQUIPMENT

Equipment Required but not Supplied: (1) Battery.

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

ENGINE

TYPE: L-head.

CYLINDERS: 4.

BORE: 3-1/8 in.

STROKE: 4-3/8 in.

PISTON DISPLACEMENT: 134.2 cu. in.

COMPRESSION RATIO: 6.48 to 1.

HORSEPOWER (MAX, BRAKE): 35 wt, 1800 rpm.

COMPRESSION: 111 psi at 185 rpm.

GENERATOR -

RATING: 12.5 kw at 80% pf. or 15.6 kva

at unity pf.

OUTPUT

4-WIRF: 120/208 or 240/416 v, 3 ph,

60 cps.

3-WIRE: 120/240, 3 ph.

SPEED: 1800 rpm.

PU-26/U

# **POWER UNIT**

# TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

# REFERENCE DATA AND LITERATURE

TM11-976: Technical Manual for Power Unit PU-26/U.

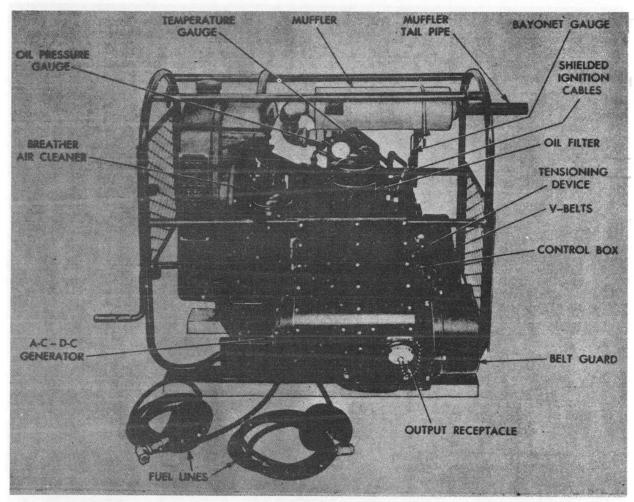
TYPE CLASSIFICATION
DESIGN COGNIZANCE USAF
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA			
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Power Unit PU-26/U	24 x 50 x 58-1/8	1164
1	Engine Component	24 x 33-1/2 x 35-1/2	579
1	[ ] [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [	22-1/2 × 24 × 50	587
1	Generator Component	24 x 30 x 30-3/4	457
1	Engine W/Accessories		382
1	Generator W/Exciter	16 x 16-1/8 x 25-1/8	
1	Battery	7-1/8 x 9-3/8 x 10-3/8	53.5

October 1957

# MOTOR-GENERATOR SET AND GASOLINE ENGINE-GENERATOR SET

Radio-Auxiliary
PU-262/U,263/U



Gasoline Engine-Generator Set PU-263/U

### **FUNCTIONAL DESCRIPTION**

The PU-262/U is a complete power plant consisting of two main components, an AC motor and an AC, DC generator. The generator is driven by the motor through 3 v-belts. The power plant is intended to supply primary power for electrical communications or radar equipment requiring up to a max. of 4.25 kw of power at 115 v, single ph, 400 cps and 750 w at 27 v DC.

The PU-263/U is a manual-starting, self-contained power plant mounted on wooden skids. It consists essentially of a gasoline engine and a generator. The generator is driven through 3 v-belts. The power plant is intended to supply primary power for electrical communications or radar equipment requiring up

to a max. of 4.25 kw of power at 115 v, single ph, 400 cps, and 750 w at 27 v DC.

No field changes in effect at time of preparation (20 March 1957).

#### **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

POWER OUTPUT

AC: 115 v, 4250 w, 400 cps, single ph, two wires, 0.95 pf.

DC: 27 v, 27.8 amp.

FREQUENCY STABILITY: 400 ±16 cps.

VOLTAGE REGULATION.

DC: 22 to 30 v.

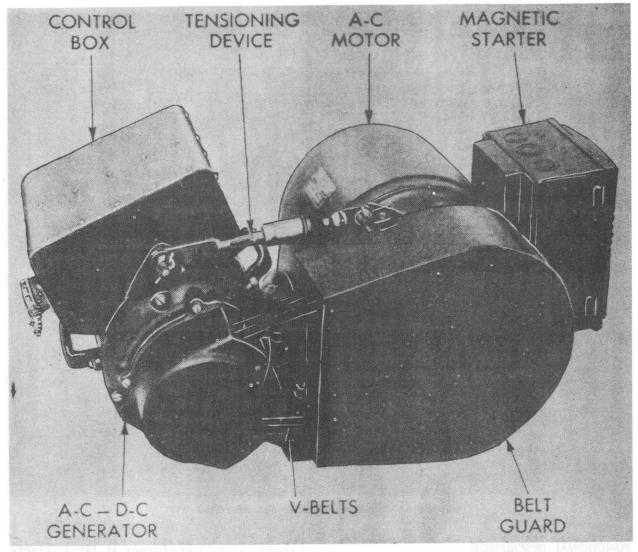
AC: 115 ±5.8 v.

POWER SUPPLY CHARACTERISTIC

PU-262/U: 220 v, 3 ph at 60 cps.

# MOTOR-GENERATOR SET AND GASOLINE ENGINE-GENERATOR SET

October 1957



Motor-Generator Set PU-262/U

#### MANUFACTURER'S OR CONTRACTOR'S DATA

Homelite Corp, Port Chester, N.Y.
Contract NObsr-57338, dated 25 June 1952.
Approximate Cost: \$1660.00 with equipment spares (PU-262/U).
Approximate Cost: \$2780.00 with equip-

#### TUBE AND/OR CRYSTAL COMPLEMENT

ment spares (PU-263/U).

No Electron Tubes.

## REFERENCE DATA AND LITERATURE

NAVSHIPS 91937: Technical Manual for Motor-Generator Set PU-262/U Gasoline Engine-Generator Set PU-263/U.

TYPE CLASSIFICATION

DESIGN COGNIZANCE BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

# MOTOR-GENERATOR SET AND GASOLINE ENGINE-GENERATOR SET

Radio-Auxiliary PU-262/U,263/U

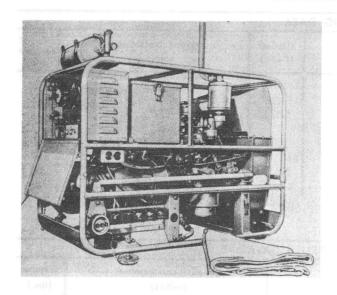
SHIPPING DATA				
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
PU-262/U 1 1	Motor (with framework) Generator (in—carrying case)	13.25 7.1	23-1/2 X 30-1/2 X 32 18-7/8 X 24-1/2 X 26-1/2	345 250
PU-263/U 1 1 1	Gasoline Engine Generator in Steel Carrying Case Maintenance Parts Case	24 7.1 4.5	26-3/4 X 37 X 42 18-7/8 X 24-1/2 X 26-1/2 13-1/4 X 21-1/2 X 27	490 250 120

EQUIPMENT SUPPLIED DATA			
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OYERALL DIMENSIONS (inches)	WEIGHT (lbs.)
PU-262/U 1	AC Motor (with framework)	17-1/2 X 24 X 25-3/4	258
1	AC, DC Generator (with control box and mounting bracket) Generator Carrying Case	13-1/2 X 18 X 18-3/4 14-7/8 X 21-1/4 X 22-1/4	140 56
PU-263/U 1 1	Gasoline Engine (with guard rail) Generator (with control box and mounting bracket) Generator Carrying Case Maintenance Parts	20-1/4 X 32-9/16 X 35-1/4 13-1/2 X 18 X 18-3/4 14-7/8 X 21-1/4 X 22-1/4 9-3/8 X 19-5/8 X 23-1/2	362 140 56 80

# GASOLINE ENGINE **GENERATOR SET**

Radio-Auxiliary

PU-286/G



Gasoline Engine Generator Set PU-286/G

#### **FUNCTIONAL DESCRIPTION**

The PU-286/G is intended primarily as a source of power for Radio Set AN/CRD-2, Radio Set AN/TRC-24, and Radar Monitoring Set AN/DPN-14. The unit may be used also to supply power to any other equipment if the load demand of the equipment does not exceed the rated capacity of the unit.

No field changes in effect at time of preparation (14 March 1957).

## **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

ENGINE

TYPE: 4 - stroke cycle. SPEED: 1800 rpm.

HORSEPOWER: 13.3 BATTERY: 6 v. HEAD: L. CYLINDER: 4. BORE: 2-5/8 in. STROKE: 3 in.

COMPRESSION: 6.7 to 1. DISPLACE MENT: 65 cu. in.

ALTERNATOR

TYPE: Rotating field.

POLES: 4. WIRES: 2. DRIVE: direct. SPEED: 1800 rpm. PHASE: single. CYCLE: 60. OUTPUT: 120 v AC. POWER FACTOR: 0.8.
CURRENT RATING: 52.2 amp.

KILOWATT RATING: 5. EXCITER

TYPE: rotating armature.
DRIVE: direct.
SPEED: 1800 rpm.
OUTPUT: 50 v (full load).

CURRENT RATING: 0.10 amp. (max).

# TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

### REFERENCE DATA AND LITERATURE

TM11-940A: Technical Manual for Gasoline Engine Generator Set PU-286/G.

TYPE CLASSIFICATION

DESIGN COGNIZANCE TASSA PROCUREMENT COGNIZANCE

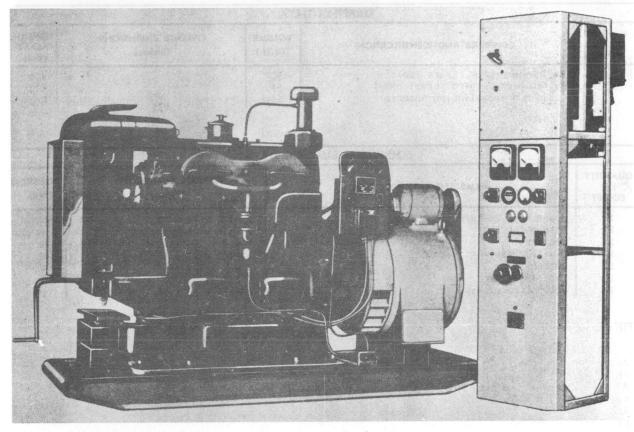
STOCK NO.

## EQUIPMENT SUPPLIED DATA

	EGOT MENT SOTTED DATA			
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
1 1 1 1 1	Gasoline Engine Generator Set PU-286/G consists of: Engine Generator Condenser and Blower w/Shroud Control Box Tubular Frame Battery Set of Tools Set Installation Equipment Set Spare Parts Set Miscellaneous Equipment	22 × 31 × 44 20-25/32 × 21-35/64 × 24-9/16 13-7/8 × 13-7/8 × 17-9/32 12-1/2 × 19-3/4 × 28 8-5/16 × 11-5/16 × 17-15/16 22 × 31 × 44 7 × 8-1/4 × 10-9/32	725 259.5 183 40.5 34 63.5 36	

October 1957

## POWER UNIT



Power Unit PU-30/F

### **FUNCTIONAL DESCRIPTION**

The PU-30/F is a gasoline-engine-driven electrical generating set with an output of 15 kw, 18.75 kva, 80% pf 120/240 v, 60 cycles. The generator is directly connected to the engine and both engine and generator operate at a speed of 1200 rpm. The entire assy including engine, generator, radiator, starting battery, and engine instrument panel, is mounted on a structural steel base.

No field changes in effect at time of preparation (12 March 1957).

## **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

ENGINE

TYPE: four-cylinder, four cycle, vertical.

CYLINDER BORE: 4-5/8 in.

STROKE: 6 in. HORSEPOWER: 60.

GOVERNED SPEED: 12000 rpm.

ALTERNATOR

OUTPUT: 15 kw, 18.75 kva, 120/240 v, 78

amp, single phase, 60 cycle.

POWER FACTOR: 80%.

TEMPERATURE RISE: 40 deg C.

#### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

## REFERENCE DATA AND LITERATURE

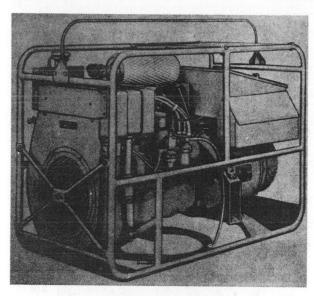
TM11-944: Technical Manual for Power Unit PU-30/F.

TYPE CLASSIFICATION
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

October 1957

SHIPPING DATA				
OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1 1	Engine—generator, Spare Tools Switchboard (control panel assy)	150 36		4650 500
1	Cable and Installation Material	16		650

EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
1	Power Unit PU-30/F	26-1/2 × 61 × 90	3600	
1	Alternator	23-3/4 x 25-1/4 x 26	969	
1	Exciter	9 x 9 x 15-3/4	84	
1	Radiator Assy	20-1/2 x 22-1/4 x 35-3/4	218	
1	Battery	7 × 8-1/2 × 16	84	
1	Base Assy	6 x 26-1/4 x 90	380	
1	Control Panel Assy	18-1/4 × 20 × 76	310	



Power Unit PU-32/C

#### FUNCTIONAL DESCRIPTION

The PU-32/C is a complete electric generating plant. It consists of a gasoline engine and an alternating current generator, with the necessary accessories and controls, all mounted in a tubular metal frame with a skid base. The generator delivers 5 kw at 60 cps AC.

No field changes in effect at time of preparation (13 March 1957).

# **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

ENGINE

TYPE: Four-cylinder, L-head, water-cooled HORSEPOWER: 13.5.

OPERATING SPEED: 1800 rpm.

FUEL CONSUMPTION: 1-1/4 gal per hour.

GENERATOR

OUTPUT: 120 v, single ph, two wires; 208 or 120 v, three ph, three or four wire. RATED CAPACITY: 5 kw (6.25 kva at 0.8 power factor).

# TUBE AND/OR CRYSTAL COMPLEMENT

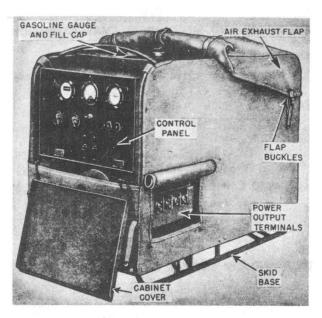
No Electron Tubes.

#### REFERENCE DATA AND LITERATURE

TM11-960: Technical Manual for Power Unit PU-32/C.

TYPE CLASSIFICATION
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA			
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Power Unit PU-32/C	23-3/4 × 35 × 44	600
11011W	Engine w/Accessories	19-1/2 × 24-3/4 × 26	240
1	Generator w/Adapter Ring	14 × 14-1/4 × 17	220
1	Control Panel Assy	11-3/4 × 17-3/4 × 21	35
1	Radiator Assy	10 × 10 × 19-1/2	19
2	Tool and Spare Parts Box	5 x 7-3/4 x 15-3/4	5
1	Frame and Cover	22 × 35 × 45	54



Power Unit PU-35/U

#### FUNCTIONAL DESCRIPTION

The PU-35/U is a complete 120 v, combination 60 and 400 cycle electric generating plant. It consists of an engine and two AC generators with the necessary controls.

No field changes in effect at time of preparation (18 March 1957).

#### **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

**ENGINE** 

TYPE: 4 cycle.

CYLINDER: 4.

HEAD: L.

SPEED: 1714 rpm. HORSEPOWER: 14.

PISTON DISPLACEMENT: 64.9 cu. in.

BORE: 2-5/8 in. STROKE: 3 in.

ALTERNATOR

PHASE: Single.

TYPE: 400 cycle, permanent magnet and 60

cycle, self-excited.

RATED: 2-1/2 kva. VOLT: 120 v.

VOL1: 120 V.

### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

#### REFERENCE DATA AND LITERATURE

TM11-975: Technical Manual for Power Unit PU-35/U.

TYPE CLASSIFICATION

DESIGN COGNIZANCE

TASSA

PROCUREMENT COGNIZANCE

STOCK NO.

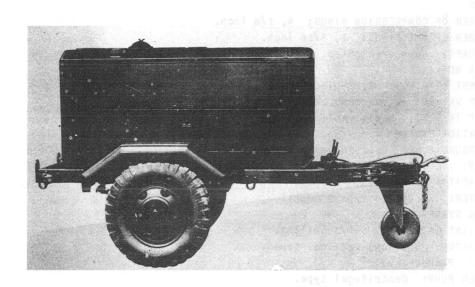
	EQUIPMENT SUPPLIED DATA					
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)			
1	Power Unit PU-35/U	21 X 32-1/2 X 46-1/4	585			

8 January 1962
Cog Service: FSN: GENERATOR SET, DIESEL ENGINE PU-383/M
Functional Class:

USA USN USAF

#### TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Libby Welding Company, Incorporated.



Generator Set, Diesel Engine PU-383/M

#### FUNCTIONAL DESCRIPTION:

The PU-383/M is designed as a complete self-contained mobile power source. It is a general-purpose unit, mounted on a standard 1-1/2 ton, 2-wheel trailer chassis and is intended for operation as an independent power source for various electronic equipment. The generator set provides a 60-cycle alternating current at 0.80 power factor and is rated as follows: (1) 40 kw, 120 and 208 volt, 3 phase, 4 wire (Wye); (2) 40 kw, 240 and 416 volt, 3 phase, 4 wire (Wye); (3) 40 kw, 120 or 240 volt, 3 phase, 3 wire (Delta); (4) 30 kw, 120 or 240 volt, 1 phase, 2 wire.

No field changes in effect at time of preparation (19 July 1961).

#### TECHNICAL CHARACTERISTICS:

ENGINE DATA
MODEL: 3913.

#### PU-383/M GENERATOR SET. DIESEL ENGINE

TYPE: (2-cycle). NUMBER OF CYLINDERS: 3. BORE: 4-1/4 inches. STROKE: 5 inches. TOTAL DISPLACEMENT: 213 cubic inches. DIRECTION OF CRANKSHAFT ROTATION VIEWED FROM FAN END: Clockwise. SPEED RANGE: 350 to 2000 rpm. HORSEPOWER: 65 hp. COMPRESSION RATIO: 17 to 1. COMPRESSION PRESSURE (400 rpm): 450 psi. INJECTOR RATING: 80 cubic millimeters. **PISTONS** NUMBER OF COMPRESSION RINGS: 4, 1/8 inch. NUMBER OF OIL RINGS: 2, 3/16 inch. CRANKSHAFT: Counterweighted. MAIN BEARINGS: 4. THURST BEARINGS: 2. 2-piece washers. EXHAUST VALVES: 2 overhead per cylinder. SEAT INSERTS: Replaceable castings. LUBRICATION SYSTEM PRESSURE PUMP: Gear driven gear type. SUMP: Wet. CAPACITY: 16 quarts. FILTER: Cartridge type element. COOLING SYSTEM COOLANT CAPACITY: 5-1/2 gallons. RADIATOR: Uniflow, vertical tubes. FAN: Pusher type. WATER PUMP: Centrifugal type. AIR INTAKE SYSTEM BLOWER: Roots type, 3-lobed helical rotor. AIR CLEANER: Oil bath type. FUEL SYSTEM TRANSFER PUMP: Gear type. STRAINER: Full flow, cartridge type element. FILTER: Full flow, cartridge filter type element. TANK CAPACITY: 32 gallons. GOVERNOR: Constant speed isochronous, hydraulic type. MANUFACTURER: Massey Machine Co. MODEL: Type E. ELECTRICAL (DC) SYSTEM: 24 volt. GENERATOR, BATTERY CHARGING: 24 v, belt driven. STARTING MOTOR: 24 v solenoid operated. BATTERIES: 2, 12 v, series connected. ALTERNATING CURRENT GENERATOR MANUFACTURER: Kato Engineering Company. ALTERNATOR MODEL: 57 MPX4. TYPE: 5327.

RATING: 40 kw, 50 kva.

FREQUENCY: 60 cps at 1800 rpm.

POWER FACTOR: 0.80% Pf.

EXCITER

MODEL: 30XUG1. TYPE: 5089.

FIELD WINDING: Shunt.

TEMPERATURE RISE: 104 deg F (40 deg C).

MAXIMUM AMBIENT OPERATING TEMPERATURE: 120 deg F (49 deg C).

RELATION TO OTHER EQUIPMENT: None.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

#### MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Generator Set, Diesel Engine		82-1/4 × 82-1/2 × 163	3500
	PU-383/M consists of:			
3	Ammeter			
1	Air Cleaner			
1	Circuit Breaker			-
1	0il Pressure Gauge			
1	Water Temperature Gauge			
1	Generator			
. 1	Battery Charger (24 V DC)			
1	Engine Governor			
1	Frequency Meter			
1	Muffler			
1	Voltmeter ac			
1	Radiator			
1	Voltage Regulator dc			
1	Voltage Regulator ac			

### REFERENCE DATA AND LITERATURE:

NAVSHIPS 93020: Technical Manual for Generator Set, Diesel Engine PU-383/M.

### TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

PU-383/M GENERATOR SET, DIES	EL ENGINE				
	SHIPPING DATA				NATINGS
PKGS	VOLUME (CU FT)	. માલુગા છેલી કેટ . ૧૧			WEIGHT (LE
	PROCUREMENT DAT	ΓΑ			MODIL: TYPE: FILLD W
PROCURING SERVICE: SPEC &/OR DWG: MIL-G-18050	. (3 geo 92' i pat 0\$; ·	DESIGN COG:	Marine		MA HUNIXON
CONTRACTOR	LOCATION		RACT OR ER NO.	ga kant Bi dan b	APPROX UNIT CO
Libby Welding Co., Incorp.  Model LW 40 A	Kansas City, Mo.	N Om—6	59495		

10 January 1962 Cog Service:

FSN: 6115-474-0370

GENERATOR SET, DIESEL ENGINE PU-383A/M Functional Class:

USA

USN

USAF

#### TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Stewart & Stevenson Services Incorporated.

(No Illustration Available)

#### FUNCTIONAL DESCRIPTION:

The Generator Set, Diesel Engine PU-383A/M is a completely self-contained mobile power source. It is a general-purpose unit, mounted on a standard 1-1/2 ton. 2-wheel trailer chassis and is intended for operation as an independent power source for various electronic equipment. The generator set provides a 60-cycle alternating current at 0.80 power factor and is rated as follows: (1) 40 kw, 120 and 208 volt, 3 phase, 4 wire (Wye); (2) 40 kw, 240 and 416 volt, 3 phase, 4 wire (Wye); (3) 40 kw, 120 and 240 volt, 3 phase, 3 wire (Delta); (4) 30 kw, 120 and 240 volt, 1 phase, 2 wire.

No field changes in effect at time of preparation (24 July 1961).

#### TECHNICAL CHARACTERISTICS:

TYPE OF MOUNTING: Trailer mounted.

ENGINE DATA

NUMBER OF CYLINDERS: 3.

BORE: 4-1/4 inches.

STROKE: 5 inches.

TOTAL DISPLACEMENT: 213 cubic inches.

DIRECTION OF CRANKSHAFT ROTATION VIEWED FROM FAN END: Clockwise.

SPEED RANGE: 350 to 2000 rpm.

HORSE POWER: 65 hp.

COMPRESSION RATIO (NOMINAL): 17 to 1.

COMPRESSION PRESSURE (400 RPM): 450 psi.

INJECTION RATING: 80 cubic millimeters.

PISTONS

NUMBER OF COMPRESSION RINGS: 4, 1/8 inch.

NUMBER OF OIL RINGS: 2, 3/16 inch.

CRANKSHAFT: Counterweighted.

MAIN BEARINGS: 4.

THRUST BEARINGS: 2, 2-piece washers.

EXHAUST VALVES: 2 overhead per cylinder.

SEAT INSERTS: Replaceable castings.

LUBRICATION SYSTEM

PRESSURE PUMP: Gear driven, gear type.

SUMP: Wet.

CAPACITY: 16 quarts.

FILTER: Cartridge element.

COOLING S.YSTEM

COOLING CAPACITY: 5-1/2 gallons.

#### PU-383A/M GENERATOR SET, DIESEL ENGINE

RADIATOR: Uniflow, vertical tubes.

FAN: Pusher type.

WATER PUMP: Centrifugal type.

AIR INTAKE SYSTEM

BLOWER: Roots type, 3-lobed helical rotor.

AIR CLEANER: Oil bath type.

FUEL SYSTEM

TRANSFER PUMP: Gear type.

STRAINER: Full flow, cartridge type element.

FILTER: Full flow, cartridge filter type.

TANK CAPACITY: 32 gallons.

GOVERNOR: Constant speed isochronous, hydraulic type.

MANUFACTURER: Massey Machine Company.

MODEL: Type E.

ELECTRICAL (DC) SYSTEM: 24 volt.

GENERATOR, BATTERY CHARGING: 24 volt, belt driven.

STARTING MOTOR: 24 volt solenoid operated.

BATTERIES: 2, 12 v.

### ALTERNATING-CURRENT GENERATOR

ALTERNATOR

MODEL: 57MPX4.

TYPE: 5327.

RATING: 40 kw, 50 kva.

FREQUENCY: 60 cps at 1800 rpm.

POWER FACTOR: 0.80.

EXCITER

MODEL: 30XUG1.

TYPE: 5089.

FIELD WINDING: Shunt.

#### RELATION TO OTHER EQUIPMENT:

The PU-383A/M is electrically and mechanically interchangeable with PU-383/M, except manufacturer's parts differ.

### EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

#### MAJOR COMPONENTS

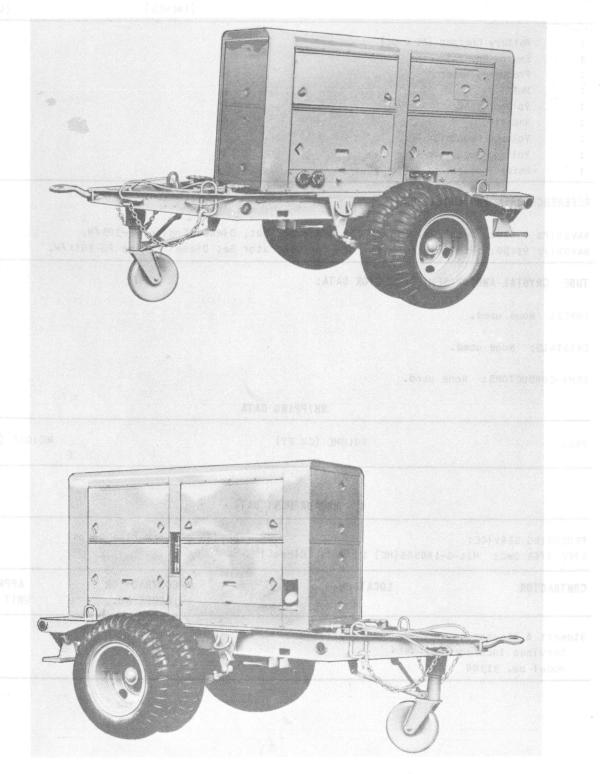
QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHI
1	Generator Set, Diesel Engine PU-383A/M consists of:	- 1 Te	82-1/4 × 82-1/2 × 163	3500
3	Ammeter			
1	Air Cleaner			
1	Circuit Breaker			
1	0il Pressure Gauge			
1	Generator			

	No. of				GEN	ERATOR SI	ET, DIE	SEL E	NGINE	PU-3	83A / M
QTY ITE	М	SMI	SEL ENC	STOCK NUMB	ERS	DIMENSI (INCHE					E IGHT
1	Battery	Charger (24 v o	ic)								
1	Engine G	overnor									
1	Frequenc	y Meter									
1	Muffler										
1	Voltmete	r AC									
1	Rad iator										
1	Voltage	Regulator DC									
1	Voltage	Regulator AC									
1	Water Te	mperature Gaug	Э								
REFERENC	DATA A	ND LITERATURE									
	03 02 0 •	Technical Ma	nual for G	enerator Se	t. Dies	sel Engir	e PU-38	83 /M.	45		
NAVSHIPS NAVSHIPS	93400:	Preliminary	Data Form	for Generat	or Set	Diesel E	ngine I	PU-3 83	3A/M.		
NAVSHIPS	93400:	Preliminary D/OR SEMI-CON	Data Form	for Generat	or Set	Diesel E	ngine I	PU-3 83	3A/M.		-Tg;
NAVSHIPS	93400: YSTAL AN	Preliminary  D/OR SEMI-CON	Data Form	for Generat	or Set	Diesel E	ngine I	PU-3 83	3A/M.	Signal Control of the	-Tg:
TUBE, CR TUBES: CRYSTALS	93400: YSTAL AN None used: None	Preliminary  D/OR SEMI-CON  d.  used.	Data Form	for Generat	or Set	Diesel E	ngine I	PU-3 83	3A/M.		- Tg :
TUBE, CR TUBES: CRYSTALS	93400: YSTAL AN None used: None	Preliminary  D/OR SEMI-CON  d.  used.	Data Form	for Generat	or Set	Diesel E	ngine I	PU-3 83	3A/M.		- 7 3 2
TUBE, CR	93400: YSTAL AN None used: None	Preliminary  D/OR SEMI-CON  d.  used.	Data Form  DUCTOR DAT	for Generat	or Set	Diesel E	ngine I	PU-3 83		IGHT	(LBS)
TUBE, CR TUBES: CRYSTALS SEMI-CON	93400: YSTAL AN None used: None	Preliminary  D/OR SEMI-CON  d.  used.	Data Form  DUCTOR DAT	for Generat  A:  SHIPPING DA  E (CU FT)	ATA	Diesel E	ngine	PU-3 83		IGHT	(LBS)
TUBE, CR TUBES: CRYSTALS SEMI-CON	93400: YSTAL AN None used: None	Preliminary  D/OR SEMI-CON  d.  used.	Data Form  DUCTOR DAT	for Generat  A:  SHIPPING DA	ATA	Diesel E	ngine	PU-3 83		IGHT	(LBS)
TUBE, CR TUBES: CRYSTALS SEMI-CON PKGS	93400: YSTAL AN None used: None DUCTORS:	Preliminary  D/OR SEMI-CON  d.  used.  None used.	Data Form  DUCTOR DAT  VOLUME	FOR GENERAL  SHIPPING DA  (CU FT)  ROCUREMENT I	ATA	Diesel E			WE	IGHT	(LBS)

Services Incorporated Model no. 31300

# GENERATOR SET, DIESEL ENGINE

PU-390/G



Generator Set, Diesel Engine PU-390/G

### PU-390/G

# GENERATOR SET, DIESEL ENGINE

#### **FUNCTIONAL DESCRIPTION**

Generator Sets, Diesel Engine PU-390/G is a completely self-contained, mobile, automatic starting source of electrical power for standby or emergency use.

No field changes in effect at time of preparation (21 January 1960).

#### ELECTRICAL AND MECHANICAL CHARACTERISTICS

**ENGINE** 

MAKE: Detroit Diesel Div General Motors Corp.

MODEL: 4913, series 4-71.

TYPE: Diesel (2 cy).

NUMBER OF CYLINDERS: 4.

BORE: 4-1/4 in. STROKE: 5 in.

TOTAL DISPLACEMENT: 283.7 cu. in.

CRANKSHAFT ROTATION VIEWED FROM FAN END:

Clockwise.

SPEED RANGE: 350 to 2000 rpm.

H.P. CONTINUOUS-1800 RPM: 93 hp. COMPRESSION RATIO: 17 to 1 (nominal).

COMPRESSION PRESSURE AT 400 RPM: 420 psi.

FIRING ORDER: 1-3-4-2.

INJECTOR PUMP: Unit injector combined with plunger and spray nozzle for each cylinder.

INJECTOR RATING: 80 cu. millimeters.

LUBRICATION SYSTEM

PRESSURE PUMP: Gear driven, Gear type.

SUMP: Wet.

CAPACITY: 17 qts.

FILTER: By pass, cartridge type ele-

AC GENERATOR

MAKE: American MARC Inc.

MODEL: KBA 660.

ALTERNATOR

TYPE: 60-cy, 60 kw.

RATING: 240 or 416 v line to line.

EXCITER: Static type. TEMPERATURE RISE:  $104^{\circ}$  F  $(40^{\circ}$  C).

AMBIENT TEMPERATURE: 125° F (51.7° C)

VOLTAGE REGULATOR: American MARC No. 102550.

COOLING SYSTEM

WATER CAPACITY: 8 gal.

FAN: Pusher type.

WATER PUMP: Centrifugal type.

AIR INTAKE SYSTEM

BLOWER: Rotor type, three-lobed helical rotor.

AIR CLEANER: Oil bath type.

FUEL SYSTEM.

TRANSFER PUMP: Gear type.

TANK CAPACITY: 53 gal.

FULL LOAD RUNNING TIME: 8 hr.

GOVERNOR: Constant speed isochronous hydraulic, Massey Machine type E. ELECTRICAL SYSTEM (DC)

GENERATOR, BATTERY CHARGING: 24 v belt-

driven.

STARTING MOTOR: 24 v solenoid operated.

#### MANUFACTURER'S OR CONTRACTOR'S DATA

Stewart and Stevenson Services Inc., Houston, Texas. Model No. 26800. Contract NOm-70708.

### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

#### REFERENCE DATA AND LITERATURE

NAVSHIPS 93308: Technical Manual for 60KW-AC Generator Set Diesel-Engine PU-390/G.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

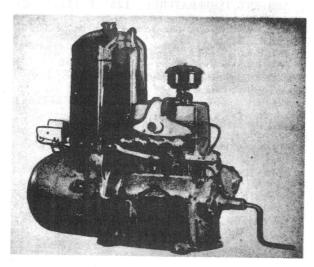
PROCUREMENT COGNIZANCE SPEC: MIL-G-10327(CE) TYPE II, CLASS A

STOCK NO.

R.D.B. IDENT. NO.

EQUIPMENT SUPPLIED DATA					
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)		
1	Generator Set, Diesel Engine PU-390/G Includes:	89 X 93 X 163-1/8	7160		
1	Trailer	40 X 93 X 163-1/8	2340		
1	Generator Set	36 X 60 X 101	4820		

PU-41/G



Power Unit PU-41/G

### **FUNCTIONAL DESCRIPTION**

The PU-41/G is an electric generating set consisting of a 4 cylinder, 4 cycle, valvein-head, liquid-cooled, manual-starting gasoline engine directly connected to an AC generator of the revolving armature type.

No field changes in effect at time of

preparation (5 April 1957).

#### GENERATOR

TYPE: AC revolving armature.

RATING: 1.5 kw. VOLTAGE: 110 v. CURRENT: 13.6 amp. CYCLE: 60 cps. PHASE: Single. POWER FACTOR: 100%.

WIRES: 2.

SPEED: 1200 rpm. DRIVE: Direct.

### MANUFACTURER'S OR CONTRACTOR'S DATA

Kohler Co, Kohler, Wis.

### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

### REFERENCE DATA AND LITERATURE

TM11-223: Technical Manual for Signal Equipment Directory, Power Units.

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE: 4 cycle. CYLINDERS: 4. BORE: 2 in. STROKE: 3 in.

HEAD: Valve-in-head.

HORSEPOWER: 4.25 at 1200 rpm. COMPRESSION RATIO: 5.5 to 1.

SPEED: 1200 rpm. FUEL USED: Gasoline. STARTING: manual (crank).

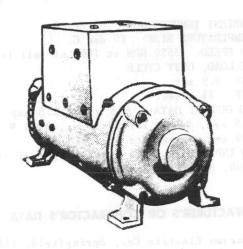
IGNITION: Magneto.

TYPE CLASSIFICATION DESIGN COGNIZANCE TASSA PROCUREMENT COGNIZANCE STOCK NO.

	SHIPPING DATA						
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)			
740-11	Power Unit PU-41/G			880			

	EQUIPMENT SUPPLIED D	ATA	THUS
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Power Unit PU-41/G	16 × 36 × 45	497

# MOTOR-GENERATOR



Notor Generator PJ-477/SQ

### FUNCTIONAL DESCRIPTION

The PU-477/SQ is used in place of motor generator PU-445. It is designed to provide field excitation voltage for motor generators PU-478/SQ and PU-479/SQ and PU-461/SQ.

No field changes in effect at time of preparation (22 August 1960).

### RELATION TO OTHER EQUIPMENT

The PU-477/SQ is designed as part of the AN/SQS-28.

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

TEMPERATURE DATA AMBIENT TEMPERATURE: 50 deg C.

TEMPERATURE RISE: 60 deg C. PULSE LOAD, DUTY CYCLE: 1.9 sec 10 amp load; 10.1 sec 5 amp load.

RATED SPEED: 3550 rpm at 100% of full load. RATED OUTPUT DATA: 200 v dc, 10 amp for 1.9 sec, 5 amp for 10.1 sec, 2000 W for 1.9 sec, 100 W for 10.1 sec.

RATED INPUT DATA: 440 vac, 4.5 amp, 60 cps, 3 ph, 3420 kva, 3-wires.

### MANUFACTURER'S OR CONTRACTOR'S DATA

Sangamo Electric Co., Springfield, Illinois. Part/Spec No. 825887. Contract NObsr-81269.

# TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes and/or Crystals used.

### REFERENCE DATA AND LITERATURE

NAVSHIPS 93624: Technical Manual for Transmitter Power Supply including: Motor Generators; PU-444/SQ, PU-445/SQ, PU-461/SQ, PU-477/SQ, PU-478-SQ, PU-479/SQ, and PU-485/SQ.

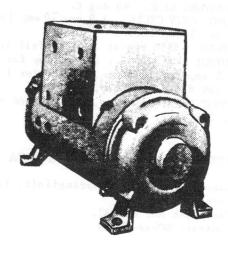
TYPE CLASSIFICATION (NAVY) DESIGN COGNIZANCE NAVY BUSHIPS PROCUREMENT COGNIZANCE STOCK NO. R.D.B. IDENT. NO.

SHIPPING DATA					
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLÚME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)	
1	Motor-Generator PU-477/SQ	8.7	17 × 22 × 40	245	

	EQUIPMENT SUPPLI	ED DATA	
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Motor-Generator PU-477/SQ	11-1/2 x 16-3/16 x 34-7/8	120

#### MOTOR-GENERATOR

PU-478/SQ



Motor-Generator PU-478/SQ

#### FUNCTIONAL DESCRIPTION

The PU-478/SQ is designed as a screen voltage generator. It supplies voltage to the screen circuit of a sonar transmitter. Two machines are used in each installation.

No field changes in effect at time of preparation (22 August 1960).

### RELATION TO OTHER EQUIPMENT

The PU-478/SQ is designed as part of the Sonar Detecting-Ranging Set AN/SQS-23.

### ELECTRICAL AND MECHANICAL CHARACTERISTICS

TEMPERATURE DATA

AMBIENT TEMPERATURE: 50 deg C. TEMPERATURE RISE: 60 deg C.

RATED SPEED: 3550 RPM at 100% of full load. PULSE LOAD, DUTY CYCLE

ON: 0.9 sec.

OFF: 11.1 sec.

RATED OUTPUT DATA: 875 v DC, 2.5 amp for 0.9 sec, 0 amp for 11.1 sec, 2188 W for 0.9 sec, 0-watt for 11.1 sec.

RATED INPUT DATA: 440 v AC, 4.5 amp, 60 cps, 3 ph, 3420 kva, 3-wires.

# MANUFACTURER'S OR CONTRACTOR'S DATA

Sangamo Electric Co., Springfield, Illinois. Part/Spec No. 825888. Contract NObsr-81269.

# TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes and/or Crystals used.

### REFERENCE DATA AND LITERATURE

NAVSHIPS 93624: Technical Manual for Transmitter Power Supply including: Motor Generators: PU-444/SQ, PU-445/SQ, PU-461/SQ, PU-477/SQ, PU-478/SQ, PU-479/SQ, and PU-485/SQ.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE NAVY BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
E.D.B. IDENT. NO.

SHIPPING DATA					
OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)	
1	Motor-Generator PU-478/SQ	8.7	17 x 22 x 40	245	

PU-478/SQ

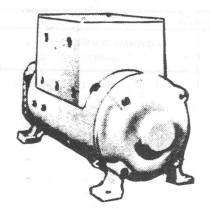
# MOTOR-GENERATOR

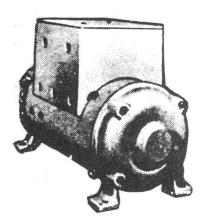
	EQUIPMENT SUPPLIED D	ATA	-
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
2 2	Motor-Generator PU-478/SQ	11-1/2 × 16-3/16 × 34-7/8	120

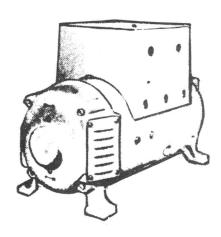
Code 0.0 - 199

#### MOTOR-GENERATOR

PU-479/SQ







Notor Generator PU-479/SQ

#### FUNCTIONAL DESCRIPTION

The PU-479/SQ is designed as a P325 volt Direct Current (DC) generator that is used in conjunction with motor generator PU-478/SQ to form the screen and P325 volt supplies of a sonar transmitter. It is used in later installations in place of the PU-444/SQ motor generator.

No field changes in effect at time of preparation (22 August 1960).

#### RELATION TO OTHER EQUIPMENT

The PU-479/SQ is designed as part of the Sonar Detecting-Ranging Set AN/SQS-23.

The PU-479/SQ is designed to be used with the PU-478/SQ motor generator.

### ELECTRICAL AND MECHANICAL CHARACTERISTICS

TEMPERATURE DATA

AMBIENT TEMPERATURE: 50 deg C.

TEMPERATURE RISE: 60 deg C.

PULSE LOAD, DUTY CYCLE

ON: 0.9 sec.

OFF: 11.1 sec.

RATED SPEED: 3550 rpm at 100% of full load.

RATED OUTPUT DATA: 325 v dc, 3 amp for 0.9

sec, 1 amp for 11.1 sec, 975 W for 0.9

sec, 325 W for 11.1 sec.

RATED INPUT DATA: 440 v ac, 60 cps, 4.5 amp,

S ph, 3420 kva, 3-wires.

#### MANUFACTURER'S OR CONTRACTOR'S DATA

Sangamo Electric Co. Springfield, Illinois.

Part/Spec No. 825889.

Contract NObsr-81269.

### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes and/or Crystals used.

PU-479/SQ

### MOTOR-GENERATOR

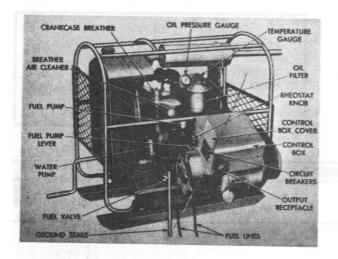
### REFERENCE DATA AND LITERATURE

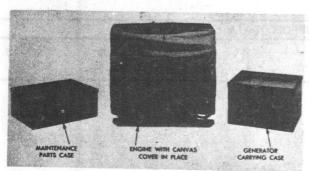
NAVSHIPS 93624: Technical Manual for Transmitter Power Supply including: Motor-Generators: PU-444/SQ, PU-445/SQ, PU-461/SQ, PU-477/SQ, PU-478/SQ, PU-479/SQ and PU-485/SQ.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE NAVY BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

SHIPPING DATA				
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Motor-Generator PU-479/SQ	8.7	17 × 22 × 40	245

EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
2	Motor-Generator PU-479/SQ	11-1/2 × 16-3/16 × 34-7/8	120	





Power Unit PU-51/TPS-1B

#### **FUNCTIONAL DESCRIPTION**

The PU-51/TPS-1B is a self-contained power plant consisting of two main components, a gasoline engine and a generator mounted for operation on two wooden skids.

No field changes in effect at time of preparation (15 March 1957).

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

**ENGINE** 

TYPE: 4-cycle, liquid-cooled.

SPEED: 1800 rpm.

HEAD: L.

CYLINDERS:

BORE: 2-5/8 in.

STROKE: 3 in.

DISPLACEMENT: 64.9 cu. in.

GENERATOR

TYPE: Inductor

POLES: 4.

RATING

4500 w, 400 cycle. 500 w, 28 v DC. AC:

DC:

# MANUFACTURER'S OR CONTRACTOR'S DATA

Homelite Corp, Port Chester, N.Y. Approximate Cost: \$900.00 with equipment spares.

# TUBE AND/OR CRYSTAL COMPLEMENT

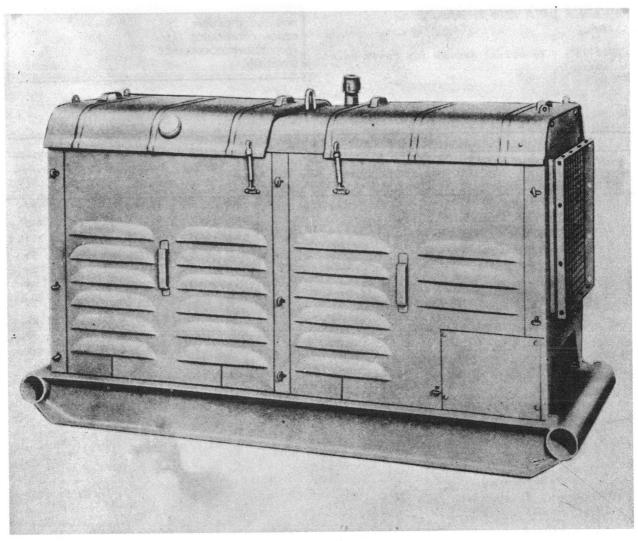
No Electron Tubes.

# REFERENCE DATA AND LITERATURE

NAVSHIPS 95211: Technical Manual for Power Unit PU-51/TPS-1B.

TYPE CLASSIFICATION DESIGN COGNIZANCE BUSHIPS PROCUREMENT COGNIZANCE STOCK NO.

EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT	
1	Power Unit PU-51/TPS-1B consist of: Engine (with guard rail) Generator Generator Carrying Case Maintenance Parts Case	19-5/8 × 29-1/2 × 38-3/4 13 × 19 × 30-3/8 13-1/2 × 19-3/4 × 22-3/4 9-1/2 × 19 × 24	341 133.5 50 50	



Power Unit PU-58/G

#### **FUNCTIONAL DESCRIPTION**

The PU-58/G is a complete, 120/240 v, 60 cps, electric generating plant. It consists of an engine and a generator with the necessary accessories and controls, all mounted in a metal housing which also serves as a skid frame.

No field changes in effect at time of preparation (15 March 1957).

### **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

ENGINE CYCLE: 4

TYPE CYLINDER HEAD: L. CYLINDERS: 4.

BORE: 3-1/8 in.

STROKE: 4-3/8 in.

PISTON DISPLACEMENT: 134.2 cu. in.

HORSEPOWER: 15.63.

COMPRESSION RATIO: 6.48 to 1.

BATTERY: 6 v, 100 amp hours.

GENERATOR

RATING: 6.25 kwa at 80% pf, 120/240 w, 60 cps at 1200 rpm.

#### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

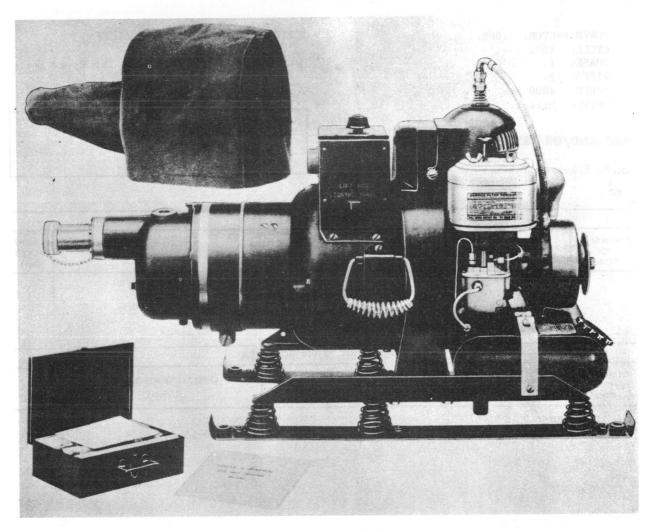
October 1957

#### REFERENCE DATA AND LITERATURE

TM11-980: Technical Manual for Power Unit PU-58/G.

TYPE CLASSIFICATION
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
1	Power Unit PU-58/G	28-1/4 X 41 X 69-1/4	1586	
1	Engine W/Accessories	22-1/2 X 27 X 30-1/2	413	
1	Generator W/Adapter Ring	19 X 19-1/2 X 29-3/4	564	
1	Radiator Assembly	8-1/2 X 20 X 23-1/2	35	
1	Battery	7 X 9 X 10	48	
1	Fuel Tank	11-3/4 X 14 X 24-1/2	20	
1	Tool Box	6-1/4 X 8-1/4 X 22-1/4	111	
1	Control Panel Assembly	5-1/2 X 16-1/2 X 20-1/4	31	
1	Auxiliary Control Assembly	8 X 9-1/2 X 24-1/4	30	
1	House and Skid Base	28 - 1/4 X 41 X 69-1/4	434	



Power Unit- PU-6/TPS-1

#### **FUNCTIONAL DESCRIPTION**

The PU-6/TPS-1 is a compact, self-contained, portable electric generating set consisting of a 1-cylinder, 2 cycle, aircooled, manual-starting (rope) gasoline engine directly connected to an AC, DC generator of the dual-winding type. A waterproof canvas cover is furnished with this power unit.

The PU-6/TPS-1 is used to furnish power for the operation of test sets AN/MPN-7, AN/MPM-11, AN/MPM-15, AN/MPM-20, Radio Set AN/TPS-3 and Transmitting Set AN/TPT-1.

No field changes in effect at time of preparation (15 March 1957).

#### **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

ENGINE

RATED: 4.5 hp at 4000 rpm.

CYLINDER: 1.

BORE: 2-3/8 in. STROKE: 2-1/2 in.

COMPRESSION RATIO: 5.85 to 1.

CYCLE: 2.

HEAD: Valveless.

SPEED: 4000 rpm.

FUEL USED: Gasoline and oil mixed.

GENERATOR

TYPE: AC/DC, dual winding.

RATING

DC: 0.4 kw (400 w), 27.0 v, 14 amp.

AC: 1.4 kw (1400 w), 120 v, 12 amp.

### PU-6/TPS-1

### **POWER UNIT**

POWER FACTOR: 100%.

CYCLE: 400.
PHASE: 1.
WIRES: 2.

SPEED: 4000 rpm.
DRIVE: Direct.

# TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

### REFERENCE DATA AND LITERATURE

TM11-933: Technical Manual for Power Unit PU-6/TPS-1.

TYPE CLASSIFICATION

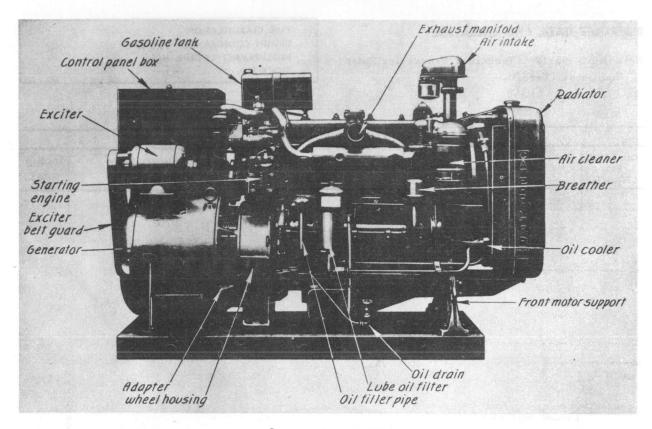
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE

STOCK NO.

SHIPPING DATA				
OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Power Unit PU-6/TPS-1 Tool Box	12	21-1/2 X 23-1/8 X 40	235

. EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
1 1	Power Unit PU-6/TPS-1 Tool Box	17 X 21 X 35 3-3/4 X 8-1/4 X 12-1/4	128 16	

### POWER EQUIPMENT



Power Unit PU-66/U

#### **FUNCTIONAL DESCRIPTION**

The PU-66/U is arranged for mounting in a covered truck and one engine has a puller type and one engine has a pusher type fan.

No field changes in effect at time of preparation (18 March 1957).

#### **ELECTRICAL AND MECHANICAL CHARACTERISTICS**

DIESEL ENGINE

MODEL: 4-stroke cycle, water cooled.

CYLINDER: 4.

BORE: 3-3/4 in.

STROKE: 5 in.

HORSEPOWER, FULL LOAD: 27.5.

STARTING ENGINE

MODEL: 4-stroke cycle, water cooled,

spark ignition.

CYLINDER: 2.

BORE: 2-3/4 in.

STROKE: 3 in.

BRAKE HORSEPOWER: 10 at 3000 rpm.

#### ALTERNATOR

RATED: 14 kw, 88% pf.

SPEED: 1200 rpm.

VOLTS: 120 v at full load

PHASE: single.

WIRE: 3.

CYCLE: 60.

EXCITER

RATED: 1.5 kw, 23.4 amp, 64 v.

#### MANUFACTURER'S OR CONTRACTOR'S DATA

Duplex Truck Co, Lansing, Mich

Contract Nxss-29812.

Approximate Cost: \$5000.00 with equipment spares.

### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

PU-66/U

### POWER EQUIPMENT

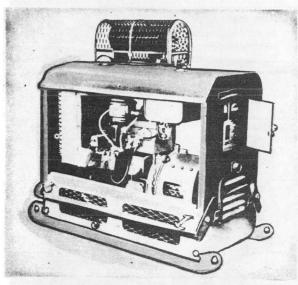
#### REFERENCE DATA AND LITERATURE

NAVSHIPS - 95212: Technical Manual for Power Equipment PU-66/U.

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA				
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)	
1	Power Equipment PU-66/U	26 × 52-3/8 × 79-1/8		





Power Unit PU-8/TTQ-1

#### **FUNCTIONAL DESCRIPTION**

The PU-8/TTQ-1 is an electric generating set consisting of a 2 cylinder, 4 cycle, L head, liquid-cooled, manual starting, gasoline engine, directly connected to an AC generator of the self-exciting type.

No field changes in effect at time of preparation (4 April 1957).

# ELECTRICAL AND MECHANICAL CHARACTERISTICS

**ENGINE** 

TYPE: 4 cycle.

TYPEHEAD: L.

CYLINDERS: 2.

BORE: 3 in.

STROKE: 2-3/4 in.

HORSEPOWER: 7 hp at 1800 rpm.

COMPRESSION RATIO: 5.5 to 1.

SPEED: 1800 rpm. FUEL: Gasoline.

STARTING: Manual, crank.

GENERATOR

TYPE: AC, 4 pole, self-excited.

RATING: 3 kw.

VOLTAGE: 115 v.

CURRENT: 27 amp.

CYCLE: 60 cps.

DILAGR. 00 Cps.

PHASE: Single.

POWER FACTOR: 80%.

WIRES: 2.

SPEED:" 1800 rpm.

DRIVE! Direct.

### TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

### REFERENCE DATA AND LITERATURE

TM11-223: Technical Manual for Signal Equipment Directory, Power Units.

TYPE CLASSIFICATION
DESIGN COGNIZANCE
TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA					
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)		
1	Power Unit PU-8/TTQ-1	22 × 33 × 44	583		