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H5-164

SIGNAL EQUIPMENT

DIRECTORY,

POWER UNITS NCLASSIFIED-WD CIR 366,1945

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SIGNAL EQUIPMENT DIRECTORY

POWER UNITS



WAR DEPARTMENT.

APRIL 1945

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United States Government Printing Office
Washington: 1945

WAR DEPARTMENT WASHINGTON 25, D. C., 30 April 1945

TM 11-223, Signal Equipment Directory, Power Units, is published for the information and guidance of all concerned.

[AG 300.7 (11 Apr 45)]

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FOREWORD

SIGNAL EQUIPMENT DIRECTORY, POWER UNITS

This directory presents in condensed loose-leaf form the essential information on Signal Corps power units. In each case, a general description and an illustration of the power unit are presented on the front of the sheet, and detailed characteristics of engine and generator are shown on reverse side of the sheet.

Nomenclature of power units is displayed prominently, with type numbers running consecutively. The alphabetical and numerical sequence of type numbers simplify location of the description of any power unit covered in the directory. To simplify the addition of new sheets to the directory, or the withdrawal of old sheets, there are no page numbers.

Note. All information in this directory is based on the latest data available 1 March 1945.

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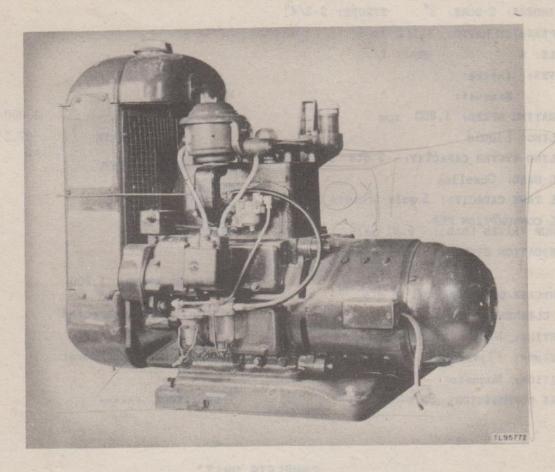
STATUS:

SEE BELOW *

POWER UNIT

ONAN-W3M-13

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT ONAN-W3M-13

Power Unit ONAN-W3M-13 is an electric generating set consisting of a 2-cylinder, 4-cycle, L-head, liquid-cooled, manual-starting (crank) gasoline engine, directly connected to an a-c generator, self-excited.

The engine is rated 7 horsepower at 1,800 revolutions per minute, and consumes approximately 0.81 gallon of fuel per hour at rated load.

The generator is rated 3 kilowatts; 60 cycles, single phase, 115 volts, 27.3 amperes at 100 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue. No more to be procured.

POWER UNIT ONAN-W3M-13

ENGINE CHARACTERISTICS

MAKE: D. W. Onan & Sons (gasoline)

MODEL: W3M

RATED: 7 HP @ 1,800 rpm

CYLINDERS: 2 BORE: 3" STROKE: 2-3/4"

COMPRESSION RATIO: 5-1/2 to 1 CYCLE: 4 HEAD: L

VALVES: Intake:

Exhaust:

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 9 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gals (remote tank)

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.81 gals

LUBRICATION SYSTEM: Pressure and spray

CRANKCASE OIL CAPACITY: 6 qts

AIR CLEANER: Oil-bath

STARTING: Manual (crank)

GOVERNOR: Flyweight IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D. W. Onan & Sons

MODEL: W2C

TYPE OF GENERATOR: A-c

RATING:

3 KW

3,000 WATTS

115 VOLTS

27.3 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 1, Hoover

INSULATION: -----

COMPLETE UNIT

LENGTH: 35" WIDTH: 16"

HEIGHT: 30-1/2"

WRIGHT: (NET) 450 lb

WEIGHT: (CRATED) 630 lb

INSTRUCTIONAL LITERATURE

Instruction Book, Stock No. 3H4512.3/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4512.3

STATUS: Limited standard

POWER UNIT

DATE APPROVED: 5 May 38

PE-HC-43



POWER UNIT PE-HC-43

Power Unit PE-HC-43 is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope) gasoline engine directly connected to a d-c generator of the 4-pole, shunt-wound self-excited type.

The engine is rated at 1-1/2 horsepower at 2,350 revolutions per minute, and consumes approximately 0.2 gallon of fuel per hour at rated load.

The generator is rated at 550 watts, 32 volts, 17.2 amperes direct current.

The principal application of this power unit is the furnishing of power for Charging Set SCR-169.

POWER UNIT PE-HC-43

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: AP - No. 25466 Signal Corps Type

RATED: 1-1/2 HP @ 2,350 rpm

CYLINDERS: 1 BORE: 2-1/4 STROKE: 2-1/4

COMPRESSION RATIO: to 1

CYCLE: 4 HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silicon

OPERATING SPEED: 2,350 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.2 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1-1/2 qts

AIR CLEANER: Oil-bath

STARTING: Manual (rope)

GOVERNOR: Mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Pioneer Gen-E-Motor

MODEL: GN-39-C

TYPE OF GENERATOR: 4-pole, shunt-wound,

self-excited

RATING:

0.55 KW

550 WATTS .

32 VOLTS

17.2 AMPERES

POWER FACTOR: -----

CYCLE: ----

PHASE: ____

WIRES:

OPERATING SPEED: 2.350

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 20-1/2"

WIDTH: 22-1/2"

HEIGHT: 24"

WEIGHT: (NET) 133 lb

WEIGHT: (CRATED) 153 lb

INSTRUCTIONAL LITERATURE

SECURITY CLASSIFICATION OF THIS EQUIPMENT:

TM 11-302

RESPONSIBLE AGENCY:

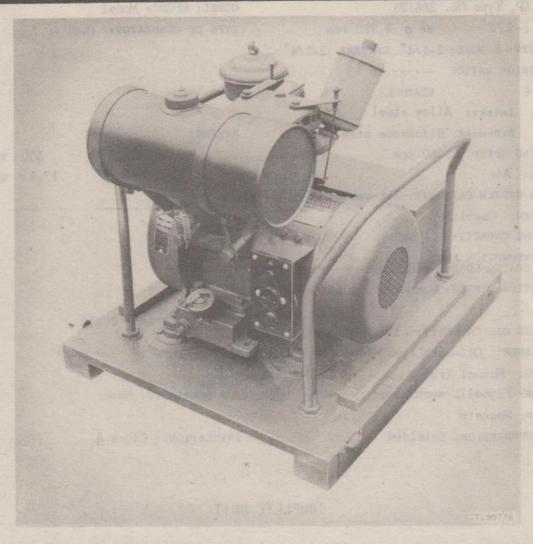
Signal Corps Ground Signal Agency

STOCK NO. 3H4543.2

STATUS: Limited standard

POWER UNIT

PE-HD-HE-HF-HG-HH-43



POWER UNIT PE-HD-43, -HE-43, -HF-43, -HG-43, -HH-43

Power Unit PE-HD-43, -HE-43, -HF-43, -HG-43, -HH-43 is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine directly connected to a d-c generator.

The engine is rated at 1.75 horsepower at 2,350 revolutions per minute and consumes approximately 0.2 gallon of fuel per hour at rated load.

The generator is rated at 550 watts, 32 volts, 17.5 amperes direct current.

The principal application of this power unit is the furnishing of power for Charging Set SCR-169.

POWER UNITS PE-HD-43,-HE-43,-HF-43,-HG-43,-HH-43

ENGINE CHARACTERISTICS

GENERATOR CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: AP. Type No. 208126

RATED: 1-1/2

HP @ 2,350 rpm

CYLINDERS: 1 BORE: 2-1/4" STROKE: 2-1/4"

COMPRESSION RATIO: ---- to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 2,350 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.2 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1-1/2 qts

AIR CLEANER: Oil-bath type

STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

MAKE: Pioneer Gen-E-Motor Corp

MODEL: MFGR's Model

TYPE OF GENERATOR: D-C

RATING:

.55 KW

550 WATTS

32 VOLTS

17.5 AMPERES

POWER FACTOR: -----

CYCLE: -----

PHASE: ----

WIRES: 2

OPERATING SPEED: 2.350

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 22-5/8"

WIDTH:

20-3/8"

HEIGHT: 22"

WEIGHT: (NET) 137 lb

WEIGHT: (CRATED) 161 lb

TYPE OF HOUSING:

INSTRUCTIONAL LITERATURE

PE-HD-43; HE-43; HF-43; HG-43:

TM 11-302

PE-HH-43: TM 11-302H

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

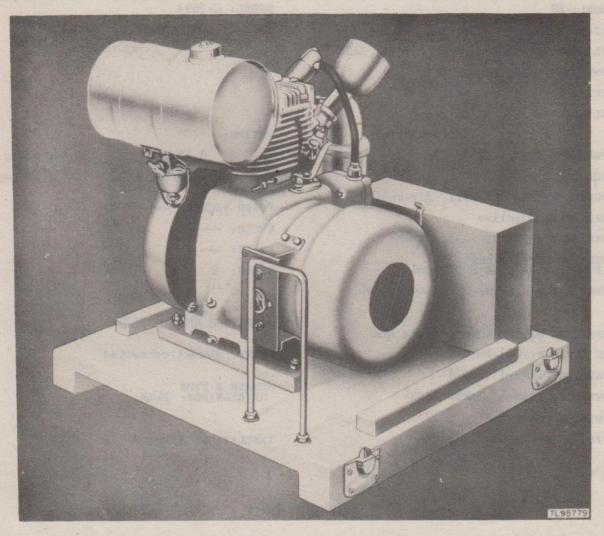
Signal Corps Ground Signal Agency

STOCK NO.3H4543.3,4,5,6,7

STATUS: Limited standard

POWER UNIT

PE-HJ-43



POWER UNIT PE-HJ-43

Power Unit PE-HJ-43 is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator.

The engine is rated 2.85 horsepower at 2,350 revolutions per minute and consumes approximately 0.5 gallon of fuel per hour at rated load.

The generator is rated at 550 watts, 22 volts, 17.5 amperes direct current.

The principal application of this power unit is the furnishing of power for Charging Set SCR-169.

POWER UNIT PE-HJ-43

ENGINE CHARACTERISTICS

MAKE: Wisconsin (gasoline)

MODEL: AB

RATED: 2.85

HP € 2,350 rpm

CYLINDERS: 1 BORE: 2-1/2" STROKE: 2-3/4"

COMPRESSION RATIO: 5.1 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 2,350 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1-1/4 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.5 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1-3/4 qts

AIR CLEANER: Oil-bath type

STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Pioneer Gen E Motor Corp

MODEL: G-3594

TYPE OF GENERATOR: D-c

RATING:

0.55 KW

550 WATTS

32 VOLTS

17.5 AMPERES

POWER FACTOR: ----

CYCLE: ----

PHASE: ----

WIRES: 2

OPERATING SPEED: 2,350

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 22-5/8"

WIDTH: 23-1/2"

HEIGHT: 24-1/4"

WEIGHT: (NET) 129-1/2 lb

WEIGHT: (CRATED) 175 lb

INSTRUCTIONAL LITERATURE

TM 11-302

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

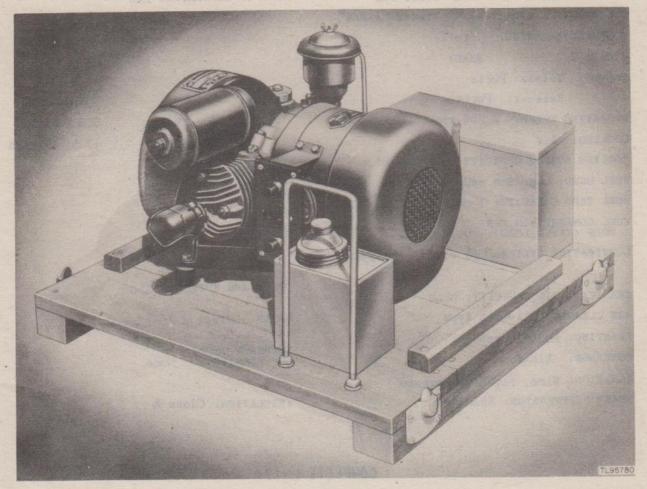
STOCK NO. 3H4543.9

STATUS: Limited standard

POWER UNIT

PE-43-HK

(NOTE: THIS POWER UNIT ALSO ISSUED AS PE-HK-43)



POWER UNIT PE-43-HK

Power Unit PE-43-HK (also issued as PE-HK-43) is an electric generating set, consisting of a 1-cylinder, 2-cycle, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator.

The engine is rated 1.35 horsepower, at 2,350 revolutions per minute, and consumes 0.3 gallon of fuel per hour at rated load.

The generator is rated at 550 watts, 32 volts, 17.5 amperes direct current.

The principal application of this power unit is furnishing of power for Charging Set SCR-169.

POWER UNIT PE-43-HK (ALSO ISSUED AS PE-HK-43)

ENGINE CHARACTERISTICS

MAKE: Jacobsen Mfg Co

MODEL: J-150

RATED: 1.35 HP @ 2,350 rpm

CYLINDERS: 1 BORE: 2-1/4" STROKE: 1-3/4"

COMPRESSION RATIO: to 1 CYCLE: 2 HEAD:

VALVES: Intake: Ports

Exhaust: Ports

OPERATING SPEED: 2,350 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled FUEL USED: Gasoline and oil mixed

FUEL TANK CAPACITY: 1 ggl

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.3 gal

LUBRICATION SYSTEM: Oil mixed with gas

CRANKCASE OIL CAPACITY: None

AIR CLEANER: Oil-bath type

STARTING: Manual (rope) GOVERNOR: Air-vane

IGNITION: Wico, flywheel magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Pioneer Gen-E-Motor Corp

MODEL: G-3594

TYPE OF GENERATOR: D-c

RATING:

0.55 KW

550 WATTS

32 VOLTS

17.5 AMPERES

POWER FACTOR: ----

CYCLE: ----

PHASE: -----

WIRES: 2

OPERATING SPEED: 2.350

DRIVE: Direct

NUMBER & TYPE OF BEARINGS:

None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 22-5/8"

WIDTH: 23-1/2"

HEIGHT: 24-1/4"

WEIGHT: (NET) 98-1/2 lb WEIGHT: (CRATED) 138-3/4 lb

INSTRUCTIONAL LITERATURE

TM 11-302K

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

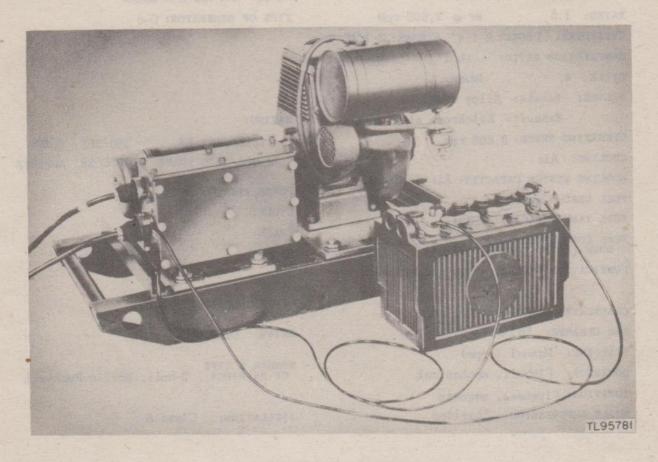
STOCK NO. 3H4543.10

STATUS: Obsolete

POWER UNIT

DATE APPROVED: 17 Oct 43

PE-49-A



POWER UNIT PE-49-A

Power Unit PE-49-A is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator of the dual-voltage type.

The engine is rated 1.5 horsepower at 3,600 revolutions per minute and consumes approximately 0.25 gallon of fuel per hour at rated load.

The generator has two windings; 350 watts at 1,000 volts,0.35 amperes direct current, and 365 watts at 14.6 volts, 25 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-177 and SCR-188 at the higher voltage, and for the charging of storage batteries at the lower voltage.

NOTE: The generator serves as a starting motor for the engine when battery power is applied.

POWER UNIT PE-49-A

ENGINE CHARACTERISTICS

MAKE: Lauson Engine Co (gasoline)

MODEL: RAY-866

RATED: 1.5 HP @ 3,600 rpm

CYLINDERS: 1 BORE: 2-1/4" STROKE: 2-1/4"

COMPRESSION RATIO: to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 3,600 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.25 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1 qt

AIR CLEANER: Oil-bath type

STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Continental Electric Co

MODEL: PM-632-G-M-20204

TYPE OF GENERATOR: D-c

RATING:

.350/.365 KW

350/365 WATTS

1,000/14.6 VOLTS

0.35/25 AMPERES

POWER FACTOR:

CYCLE:

PHASE:

WIRES:

OPERATING SPEED: 3,600

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2-ball, Marlin Rockwell

INSULATION: Class A

COMPLETE UNIT

LENGTH: 35"

WIDTH: 16" HEIGHT: 21"

WEIGHT: (NET) 156 lb

WEIGHT: (CRATED) 185 lb

INSTRUCTIONAL LITERATURE

Instruction Book, Stock

No. 3H4549A/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

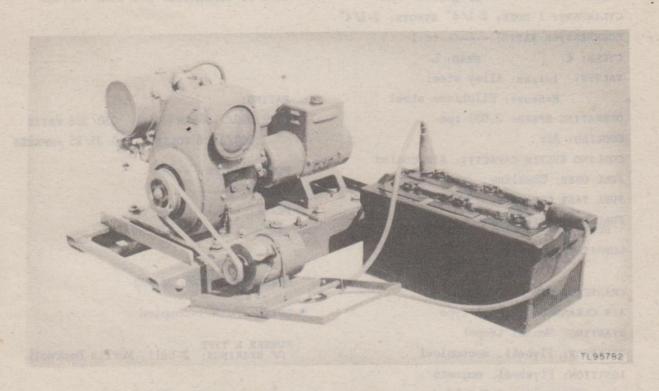
STOCK NO. 3H4549-A

STATUS: Obsolete

POWER UNIT

DATE APPROVED: 17 Oct 43

PE-49-B



POWER UNIT PE-49-B

Power Unit PE-49-B is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator of the dual-voltage type.

The engine is rated 1.5 horsepower at 3,600 revolutions per minute and consumes approximately 0.25 gallon of fuel per hour at rated load.

The generator has two windings; 350 watts at 1,000 volts, 0.35 amperes, and 365 watts at 14.6 volts, 25 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-177 and SCR-188 at the higher voltage, and for the charging of storage batteries at the lower voltage.

NOTE: The generator serves as a starting motor for the engine when battery power is applied.

POWER UNIT PE-49-B

ENGINE CHARACTERISTICS

MAKE: Lauson Engine Co (gasoline)

MODEL: RAY-873

RATED: 1.5

HP @ 3,600 rpm

CYLINDERS: 1 BORE: 2-1/4" STROKE: 2-1/4"

COMPRESSION RATIO: ---- to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 3,600 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.25 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1 qt

AIR CLEANER: Oil-bath type

STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Continental Electric Co

MODEL: DMFL-632-G

TYPE OF GENERATOR: D-c dual-voltage

RATING:

0.350/0.365 KW

350/365 WATTS

1,000/14.6 VOLTS

0.35/25 AMPERES

POWER FACTOR: -----

CYCLE: -----

PHASE: -----

WIRES: -----

OPERATING SPEED: 3,600

DRIVE: Direct-coupled

NUMBER & TYPE OF BEARINGS: 2-ball, Marlin Rockwell

INSULATION: Class A

COMPLETE UNIT

LENGTH: 35" WIDTH: 16" HEIGHT: 23"

WEIGHT: (NET) 172 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book, Stock

No. 3H4549B/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

STOCK NO. 3H4549B

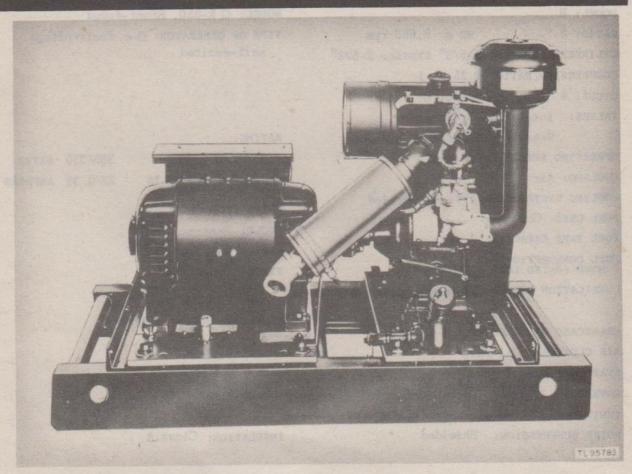


STATUS: Standard

DATE APPROVED: 30 Apr 44

POWER UNIT

PE-49-C



POWER UNIT PE-49-C

Power Unit PE-49-C is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator of the dual-voltage type.

The engine is rated 2.7 horsepower at 2,650 revolutions per minute and consumes approximately 0.25 gallon of fuel per hour at rated load.

The generator has two windings; 350 watts at 1,000 volts, 0.35 amperes direct current, and 365 watts at 14.6 volts, 25 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-177 and SCR-188 at the higher voltage, and for the charging of storage batteries at the lower voltage.

NOTE: The generator serves as a starting motor for the engine when battery power is applied.

POWER UNIT PE-49-C

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: B

HP @ 2,650 rpm RATED: 2.7

CYLINDERS: 1 BORE: 2-5/8" STROKE: 2-5/8"

COMPRESSION RATIO: 4.25 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy Steel

Exhaust: Silchrome

OPERATING SPEED: 2,650 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.25 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1-1/2 qts

AIR CLEANER: Oil-bath

STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Pioneer Gen E Motor Corp

MODEL: C K-350, Shunt-wound

TYPE OF GENERATOR: D-c, dual-voltage

self-excited

RATING:

0.365/0.350 KW

365/350 WATTS

14.6/1.000 VOLTS

25/0.35 AMPERES

POWER FACTOR: ----

CYCLE: -----

PHASE: ----

WIRES: -----

OPERATING SPEED: 2.650

DRIVE: Direct

NUMBER & TYPE OF BEARINGS:

Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 36"

WIDTH: 19"

HEIGHT: 26"

WEIGHT: (NET) 225 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-920 Revised (when published)

Instruction Book, Stock

No. 3H4549C/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

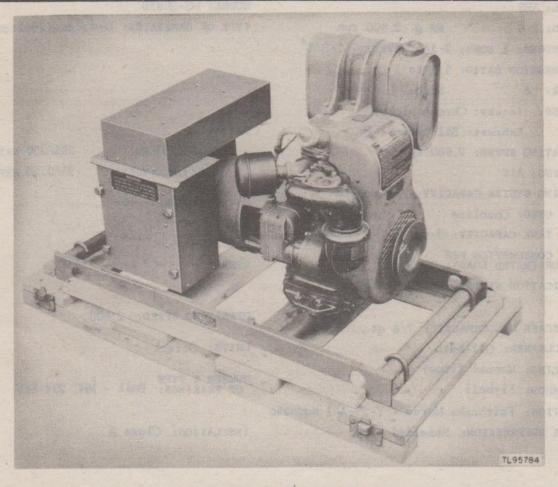
STOCK NO. 3H4549-C

STATUS: Standard

POWER UNIT

DATE APPROVED: 30 Apr 44

PE-49-D



POWER UNIT PE-49-D

Power Unit PE-49-D is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator of the dual-voltage type.

The engine is rated 3.6 horsepower at 2,800 revolutions per minute and consumes approximately 0.25 gallon of fuel per hour at rated load.

The generator has two windings; 350 watts at 1,000 volts, 0.35 amperes direct current, and 365 watts at 14.6 volts, 25 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-177 and SCR-188 at the higher voltage, and for the charging of batteries at the lower voltage.

NOTE: The generator serves as a starting motor for the engine when battery power is applied.

RESTRICTED 17

POWER UNIT PE-49-D

ENGINE CHARACTERISTICS

MAKE: Wisconsin (gasoline)

MODEL: ABS

HP @ 2,800 rpm RATED: 3.6

CYLINDERS: 1 BORE: 2-1/2" STROKE: 2-3/4"

COMPRESSION RATIO: 5.1 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Chrome nickel

Exhaust: Silchrome - B

OPERATING SPEED: 2,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Casoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.25 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 7/8 qt

AIR CLEANER: Oil-bath

STARTING: Manual (rope)

GOVERNOR: Flyball

IGNITION: Fairbanks Morse - Y-35-A-1 magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Continental Electric Co

MODEL: MS-28876

TYPE OF GENERATOR: D-c, dual-voltage

RATING:

0.365/0.350 KW

365/350 WATTS

14.6/1,000 VOLTS

25/0.35 AMPERES

POWER FACTOR: -----

CYCLE: -----

PHASE: -----WIRES: -----

OPERATING SPEED: 2,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: Ball - MPC 204-SFF

INSULATION: Class A

COMPLETE UNIT

LENGTH: 42-1/2"

WIDTH: 23-1/4"

HEIGHT: 27"

WEIGHT: (NET) 228 lb.

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-920 Revised (when published)

Instruction Book, Stock No. 3H4549D/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

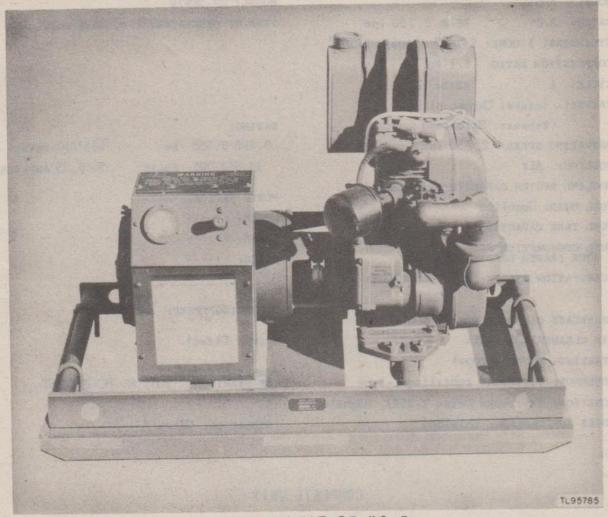
STOCK NO. 3H4549-D

STATUS: Standard

POWER UNIT

DATE APPROVED: 30 Apr 44

PE-49-F



POWER UNIT PE-49-F

Power Unit PE-49-F is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator of the dual-voltage type.

The engine is rated 3.6 horsepower at 2,750 revolutions per minute and consumes approximately 0.25 gallon of fuel per hour at rated load.

The generator has two windings; 350 watts at 1,000 volts, 0.35 amperes direct current, and 365 watts at 14.6 volts, 25 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-177 and SCR-188 at the higher voltage, and for the charging of batteries at the lower voltage.

NOTE: The generator serves as a starting motor for the engine when battery power is applied.

POWER UNIT PE-49-F

ENGINE CHARACTERISTICS

MAKE: Wisconsin (gasoline)

MODEL: ABS

RATED: 3.6

HP @ 2,750 rpm

CYLINDERS: 1 BORE: 2-1/2" STROKE: 2-3/4"

COMPRESSION RATIO: 5.1 to 1 HEAD: L CYCLE: 4 VALVES: Intake: Chrome nickel

Exhaust: Silchrome

OPERATING SPEED: 2,750 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.25 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 7/8 qt

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Flywheel, centrifugal-type

IGNITION: Fairbanks Morse Y-35Al, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Continental Electric Co

MODEL: MS-28876

TYPE OF GENERATOR: D-c, dual-voltage

RATING:

0.365/0.350 KW

365/350 WATTS

14.6/1,000 VOLTS

25/0.35 AMPERES

POWER FACTOR: -----

CYCLE: -----

PHASE: -----

WIRES: -----

OPERATING SPEED: 2,700

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: Ball M. RC-20 4SFFF

INSULATION: Class A

COMPLETE UNIT

LENGTH: 42-1/2"

WIDTH: 23-1/4"

HEIGHT: 27"

WEIGHT: (NET) 257 lb

WEIGHT: (CRATED) 310 1b

INSTRUCTIONAL LITERATURE

TM 11-920

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

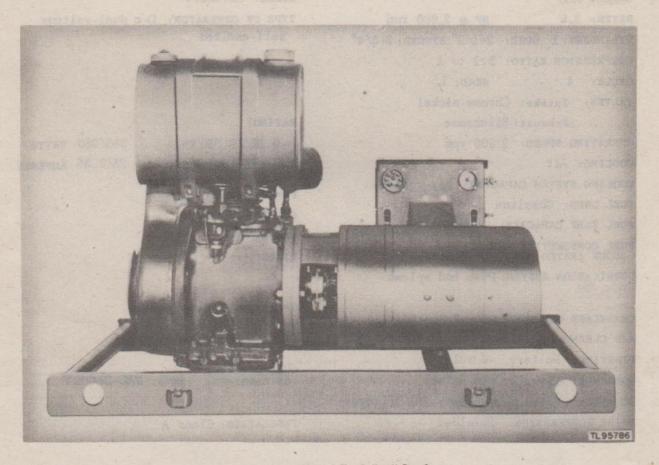
STOCK NO. 3H4549-F

STATUS: Standard

POWER UNIT

DATE APROVED: 30 Apr 44

PE-49-G



POWER UNIT PE-49-G

Power Unit PE-49-G is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator of the dual-voltage type.

The engine is rated 3.6 horsepower at 2,800 revolutions per minute and consumes approximately 0.25 gallon of fuel per hour at rated load.

The generator has two windings; 350 watts at 1,000 volts, 0.35 amperes direct current, and 365 watts at 14.6 volts, 25 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-177 and SCR-188 at the higher voltage, and for the charging of storage batteries at the lower voltage.

NOTE: The generator serves as a starting motor for the engine when battery power is applied.

POWER UNIT PE-49-G

ENGINE CHARACTERISTICS

MAKE: Wisconsin (gasoline)

MODEL: ABS

RATED: 3.6

HP @ 2,800 rpm

CYLINDERS: 1 BORE: 2-1/2" STROKE: 2-3/4"

COMPRESSION RATIO: 5.1 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Chrome nickel

Exhaust: Silchrome

OPERATING SPEED: 2,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.25 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 7/8 gt

AIR CLEANER: Oil-bath

STARTING: Battery, -6 volts GOVERNOR: Flyball, mechanical

IGNITION: Fairbanks Morse Y-35A-1, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Continental Electric Co

MODEL: MS-28876

TYPE OF GENERATOR: D-c dual-voltage

self-excited

RATING:

0.365/0.350 KW

365/350 WATTS

14.6/1,000 VOLTS

25/0.35 AMPERES

POWER FACTOR: ----

CYCLE: -----

PHASE: -----

WIRES: -----

OPERATING SPEED: 2,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS:

Ball, MAC-204-SFF

INSULATION: Class A

COMPLETE UNIT

LENGTH: 36"

WIDTH: 22-1/2"

HEIGHT: 17"

WEIGHT: (NET) 230 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-920G

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

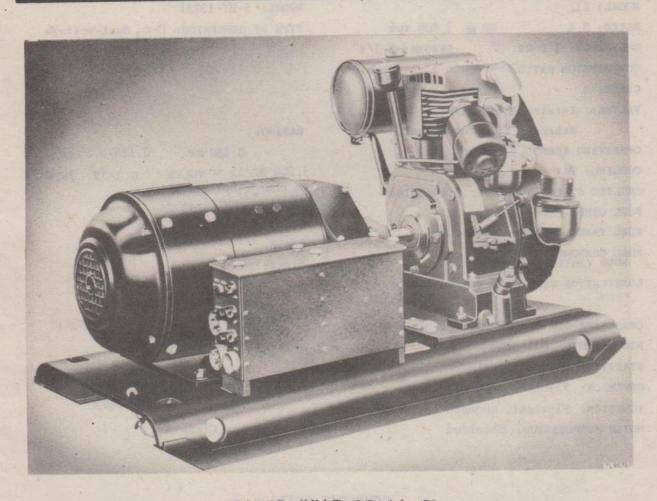
Signal Corps Ground Signal Agency

STOCK NO. 3H4549-G

STATUS: Obsolete

POWER UNIT

PE-AA-50



POWER UNIT PE-AA-50

Power Unit PE-AA-50 is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator of the dual-voltage type.

The engine is rated 3.4 horsepower at 1,800 revolutions per minute and consumes approximately 0.7 gallon of fuel per hour at rated load.

The generator has two windings; 500 watts at 15 volts, 32 amperes direct current, and 1,250 volts, 0.1 ampere direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Set SCR-AA-197, at the higher voltage, and for the charging of storage batteries at the lower voltage.

POWER UNIT PE-AA-50

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: ZL

HP @ 1,800 rpm RATED: 3.4

CYLINDERS: 1 BORE: 3" STROKE: 3-1/4"

COMPRESSION RATIO: ---- to I

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1.25 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.7 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 2-1/2 qt

AIR CLEANER: Oil-bath

STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL: 5-BY-132Al

TYPE OF GENERATOR: D-c, dual-voltage

RATING:

0.480 KW 0.125/0.5 WATTS

1, 250 dc/15 dc volts 0.1/32 AMPERES

To charge batteries

POWER FACTOR: ----

CYCLE: -----

PHASE: -----

WIRES: -----

OPERATING SPEED: 1,800

DRIVE: Direct-connected

NUMBER & TYPE 2-ball-SKF-5205A-&

" -6502

INSULATION: Class A

COMPLETE UNIT

LENGTH: 40"

WIDTH: 20"

HEIGHT: 27-1/8"

WEIGHT: (NET) 365 1b

WEIGHT: (CRATED) 388 lb

INSTRUCTIONAL LITERATURE

Instruction Book Stock No. 3H4550/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4550

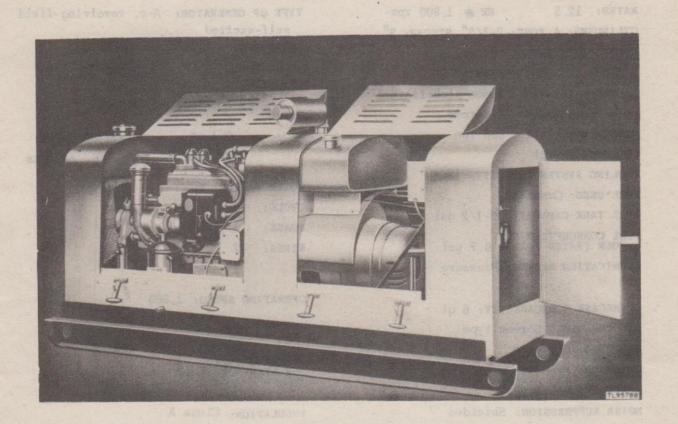
R&V-HKGS

STATUS: Obsolete

POWER UNIT

PE-52

DATE APPROVED: 6 Feb 45



POWER UNIT PE-52

Power Unit PE-52 is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving-field type.

The engine is rated 12.5 horsepower at 1,800 revolutions per minute, and consumes approximately 0.7 gallon of fuel per hour at rated load.

The generator is rated 2.4 kilowatts, 60 cycles, single phase, 115 volts, 26 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of current for the operation of Armored Forces, repair trucks and communication equipment in radio intelligence units.

POWER UNIT PE-52

ENGINE CHARACTERISTICS

MAKE: Hercules Engine Co (gasoline)

MODEL: ZXA

HP @ 1,800 rpm RATED: 12.5

CYLINDERS: 4 BORE: 2-1/2" STROKE: 3"

COMPRESSION RATIO: 6 to 1 HEAD: L CYCLE: 4

VALVES: Intake: Chrome nickel, steel

Exhaust: Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 16 qt

FUEL USED: Gasoline

FUEL TANK CAPACITY: 3-1/2 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.7 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 6 qt

AIR CLEANER: Screen type

STARTING: Electric

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Fidelity Electric Co

MODEL: LAEB

TYPE OF GENERATOR: A-c, revolving -field

self-excited

RATING:

2, 400 WATTS 2.4 KW

> 115 VOLTS 26 AMPERES

POWER FACTOR: 80%

CYCLE: 60

1 PHASE:

WIRES:

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 66" WIDTH: 22" HEIGHT: 40"

WEIGHT: (NET) 900 lb

WEIGHT: (CRATED) 1, 100 1b

INSTRUCTIONAL LITERATURE

Instruction Book Stock No. 3H4552/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

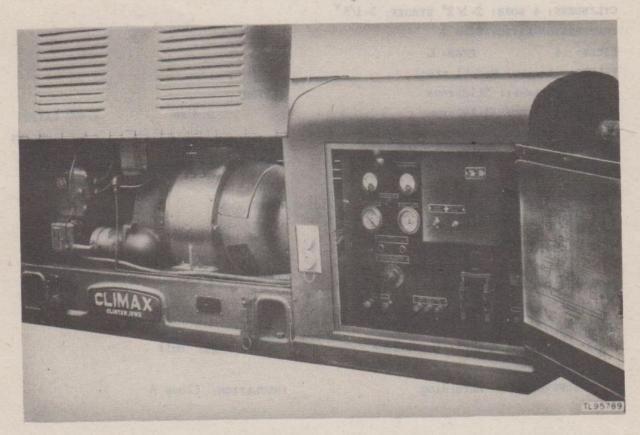
STOCK NO. 3H4552

STATUS: Obsolete

POWER UNIT

DATE APPROVED: 6 Feb 45

PE-52-A



POWER UNIT PE-52-A

Power Unit PE-52-A is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving-field type.

The engine is rated 13.5 horsepower at 1,800 revolutions per minute and consumes approximately 0.7 gallon of fuel per hour at rated load.

The generator is rated at 2.4 kilowatts, 60 cycles, single phase, 115 volts, 26 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Armored Forces, repair trucks and communication equipment in radio intelligence units.

POWER UNIT PE-52-A

ENGINE CHARACTERISTICS

MAKE: Waukesha Engine Co (gasoline)

MODEL: ICK

RATED: 13.5 HP @ 1,800 rpm

CYLINDERS: 4 BORE: 2-1/2" STROKE: 3-1/8"

CYCLE: 4 HEAD: L
VALVES: Intake: Nickel steel

Exhaust: Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 8 qt

FUEL USED: Gasoline

FUEL TANK CAPACITY: 3 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.7 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4 qt

AIR CLEANER: Screen STARTING: Electric

GOVERNOR: Waukesha, centrifugal-type

IGNITION: Magneto

NOISE SUPPRESSION: Shielding

GENERATOR CHARACTERISTICS

MAKE: Marble Card Co

MODEL: Frame 7 Gladstone, Mich.

TYPE OF GENERATOR: A-c, revolving-field

RATING:

2.4 KW

2,400 WATTS

115 VOLTS

26 AMPERES

POWER FACTOR: 80%

CYCLE: 60 PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 75"

WIDTH: 18-1/4"

HEIGHT: 46-5/8"

WEIGHT: (NET) 1, 200 lb

WEIGHT: (CRATED) 1,450 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No. 3H4552A/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4552A

RESTRICTED

STATUS: Obsolete

POWER UNIT

DATE APPROVED: 6 Feb 45

PE-52-B



POWER UNIT PE-52-B

Power Unit PE-52-B is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving-field type.

The engine is rated 12.5 horsepower at 1,800 revolutions per minute, and consumes approximately 0.7 gallon of fuel per hour at rated load.

The generator is rated at 2.4 kilowatts, 60 cycles, single phase, 115 volts, 26 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of communication equipment in radio intelligence units.

POWER UNIT PE-52-B

ENGINE CHARACTERISTICS

MAKE: Hercules Engine Co (gasoline)

MODEL: ZXA

RATED: 12.5 HP @ 1,800 rpm

CYLINDERS: 4 BORE: 2-1/2" STROKE: 3"

COMPRESSION RATIO: 6 to 1 HEAD: L CYCLE: 4

VALVES: Intake: Chrome nickel steel

Exhaust: Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 16 qt

FUEL USED: Gasoline

FUEL TANK CAPACITY: 3-1/2 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.7 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4

AIR CLEANER: Screen STARTING: Electric

GOVERNOR: Flyball IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Fidelity Electric Co

MODEL: LAEB-Lancaster, Pa

TYPE OF GENERATOR: A-c, revolving-field

RATING:

2.4 KW 2,400 WATTS

115 VOLTS

26 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS:

Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 66"

WIDTH: 22"

HEIGHT: 40"

WEIGHT: (NET) 900 lb WEIGHT: (CRATED) 1,200 lb

INSTRUCTIONAL LITERATURE

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4552B

STATUS: Obsolete

POWER UNIT

DATE APPROVED: 6 Feb 45

PE-52-C



POWER UNIT PE-52-C

Power Unit PE-52-C is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving-field type.

The engine is rated 13.5 horsepower at 1,800 revolutions per minute, and consumes approximately 0.8 gallon of fuel per hour at rated load.

The generator is rated at 2.4 kilowatts, 60 cycles, single phase, 115 volts, 26 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Armored Forces, repair trucks and communication equipment in radio intelligence units.

RESTRICTED 31

POWER UNIT PE-52-C

ENGINE CHARACTERISTICS

MAKE: Waukeska Engine Co (gasoline)

MODEL: ICK

RATED: 13.5 HP @ 1,800 rpm

CYLINDERS: 4 BORE: 2-1/2" STROKE: 3-1/8"

CYCLE: 4 HEAD: L

VALVES: Intake: Nickel steel 0.005

Exhaust: Silchrome 0.007

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 8 qt

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.8 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4 qt

AIR CLEANER: Screen STARTING: Electric

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Marble Card Co

MODEL: Frame 6

TYPE OF GENERATOR: A-c, revolving-field

RATING:

2.4 KW 2,400 WATTS

115 VOLTS 26 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE Ball #205 - 207

INSULATION: Class A

COMPLETE UNIT

LENGTH: 80"

WIDTH: 20-1/2"

HEIGHT: 30"

WEIGHT: (NET) 1, 200 lb

WEIGHT: (CRATED) 1,450 1b

INSTRUCTIONAL LITERATURE

Instruction Book, stock No. 3H4552C/l

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4552C

STATUS: Obsolete

POWER UNIT

DATE APPROVED: 6 Feb 45

PE-52-D-E-F



POWER UNIT PE-52-D, -E, -F

Power Unit PE-52-D, -E, -F is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator, self-excited.

The generator is rated at 2.4 kilowatts, 60 cycles, single phase, 115 volts, 26 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Armored Forces repair trucks and communication equipment in radio intelligence units.

POWER UNIT PE-52 -D,-E,-F

ENGINE CHARACTERISTICS

MAKE: Wankesha Engine Co (gasoline)

MODEL: ICK

RATED: 13.5 HP @ 1,800 rpm

CYLINDERS: 4 BORE: 2-1/2" STROKE: 3-1/8"

COMPRESSION RATIO: 6 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Nickel steel

Exhaust: Silchrome steel

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 8 qt

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.8 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4 qt

AIR CLEANER: Oil-bath

STARTING: Electric, 6 volts

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Marble Card Co

MODEL: Frame 6

TYPE OF GENERATOR: A-c, self-excited

RATING:

2.4 KW

2, 400 WATTS

115 VOLTS

26 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2-ball #205 & 207

INSULATION: Class A

COMPLETE UNIT

LENGTH: 80"

WIDTH: 20-1/2"

HEIGHT: 30"

WEIGHT: (NET) 1, 200 1b

WEIGHT: (CRATED) 1,460 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No. 3H4552D/1 for PE-52-D Instruction Book, stock No. 3H4552E/1 for PE-52-E

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

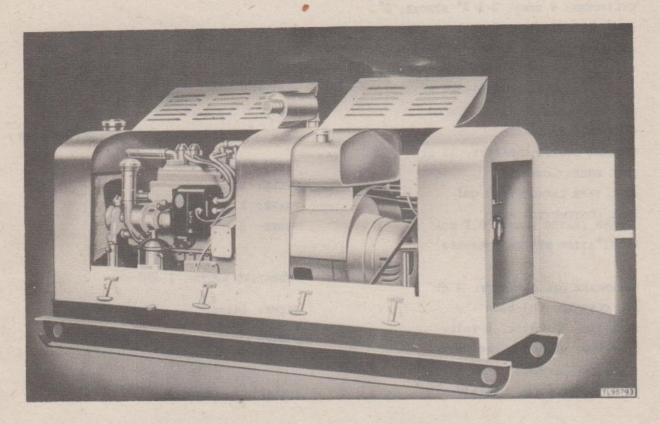
STOCK NO. 3H4552-D, E, F for PE-52-D, E, F

STATUS: Limited standard

POWER UNIT

DATE APPROVED: 17 Oct 42

PE-53



POWER UNIT PE-53

Power Unit PE-53 is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to a self-exciting, a-c generator.

The engine is rated 11.2 horsepower at 1,500 revolutions per minute, and consumes approximately 0.7 gallon of fuel per hour at rated load.

The generator is rated at 2.4 kilowatts, 25 cycles, single phase, 115 volts, 26 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps radio sets in the Panama Canal Zone only.

POWER UNIT PE-53

ENGINE CHARACTERISTICS

MAKE: Hercules Engine Co (gasoline)

MODEL: ZXA

HP @ 1,500 rpm RATED: 11.2 CYLINDERS: 4 BORE: 2-1/2" STROKE: 3"

COMPRESSION RATIO: 6 to 1 HEAD: L CYCLE: 4

VALVES: Intake: Chrome nickel steel

Exhaust: Silchrome steel

OPERATING SPEED: 1,500 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 16 qt

FUEL USED: Gasoline

FUEL TANK CAPACITY: 3 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.7 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4 qt

AIR CLEANER: Oil-bath

STARTING: Electric, 6 volts GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Fidelity Electric Co

MODEL: LAMB Drawing 3139-16-A-17

TYPE OF GENERATOR: A-c self exciting

RATING:

2.4 KW

2,400 WATTS

115 VOLTS

26 AMPERES

POWER FACTOR: 80%

CYCLE: 25

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,500

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2-ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 66"

WIDTH: 22"

HEIGHT: 40"

WEIGHT: (NET) 900 lb WEIGHT: (CRATED) 1,200 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No. 3H4552/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

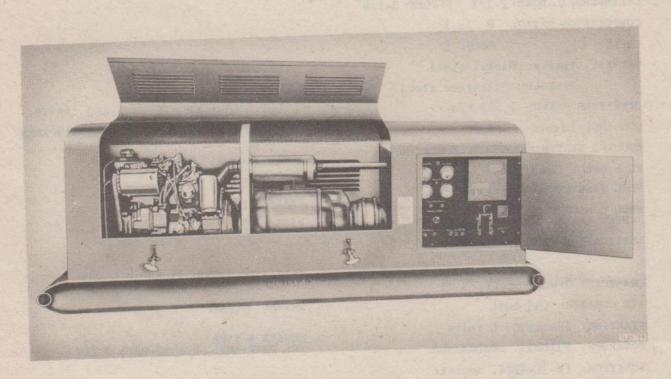
STOCK NO. 3H4553

STATUS: Limited standard

POWER UNIT

DATE APPROVED: 17 Oct 42

PE-53-A



POWER UNIT PE-53-A

Power Unit PE-53-A is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator.

The engine is rated 11.5 horsepower at 1,500 revolutions per minute, and consumes approximately 0.8 gallon of fuel per hour at rated load.

The generator is rated at 2.4 kilowatts, 25 cycles, single phase, 115 volts, 26 amperes at 80 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps radio communication equipment in the Panama Canal Zone.

POWER UNIT PE-53-A

ENGINE CHARACTERISTICS

MAKE: Waukesha (gasoline)

MODEL: ICK

RATED: 11.5 HP @ 1,500 rpm

CYLINDERS: 4 BORE: 2-1/2 " STROKE: 3-1/8"

COMPRESSION RATIO: 6 to 1
CYCLE: 4 HEAD: L
VALVES: Intake: Nickel steel

Exhaust: Silchrome steel

OPERATING SPEED: 1,500 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 8 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.8 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4 qt

AIR CLEANER: Oil-bath

STARTING: Electric, 6 volts
GOVERNOR: Flyball, mechanical
IGNITION: FM-JE-4B26, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Marble Card Co

MODEL: Frame 6

TYPE OF GENERATOR: A-C

RATING:

2.4 KW 2,400 WATTS

115 VOLTS 26 AMPERES

POWER FACTOR: 80%

CYCLE: 25
PHASE: 1
WIRES: 2

OPERATING SPEED: 1,500

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2-ball-#205 & 207

INSULATION: Class A

COMPLETE UNIT

LENGTH: 80"

WIDTH: 20-1/2"

HEIGHT: 30"

WEIGHT: (NET) 1,200 lb

WEIGHT: (CRATED) 1,450 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No.

3H4553A/1P

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

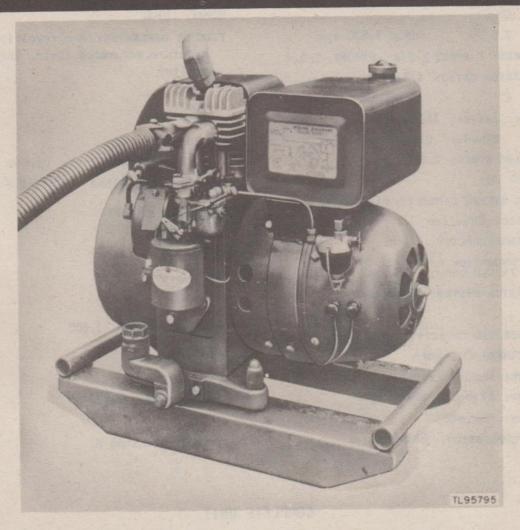
Signal Corps Ground Signal Agency

STOCK NO. 3H4553A

STATUS: Limited standard

POWER UNIT

PE-56-A



POWER UNIT PE-56-A

Power Unit PE-56-A is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine directly connected to an a-c generator of the revolving-armature, saturated-field type, with integral self-exciter.

The engine is rated 2.5 horsepower at 1,800 revolutions per minute, and consumes approximately 0.5 gallon of fuel per hour at rated load.

The generator is rated at 1.25 kilowatts, 60 cycles, single phase, 110 volts, 13.6 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Set SCR-197-A.

ENGINE CHARACTERISTICS

MAKE: D. W. Onans & Sons (gasoline)

MODEL: 10-L

RATED: 2.5 HP @ 1,800 rpm

CYLINDERS: 1 BORE: 2-3/4 STROKE: 2-3/4

CYCLE: 4 HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 2 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.5 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 2-1/2 qts

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D. W. Onens & Sons

MODEL: 10-L

TYPE OF GENERATOR: A-c, revolving-armature, saturated field. Integral-

exciter

RATING:

1.25 KW

1,250 WATTS

110 VOLTS

13.6 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 21-1/2"

WIDTH: 21-1/2"

HEIGHT: 16"

WEIGHT: (NET) 215 lb

WEIGHT: (CRATED) 275 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No.

3H4556A/1

40

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

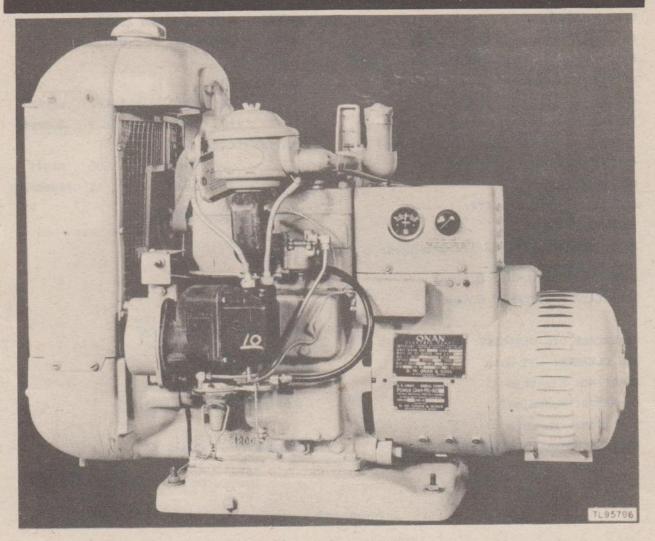
STOCK NO. 3H4556-A

STATUS: Obsolete

POWER UNIT

DATE APPROVED: 6 Feb 45

PE-60-A



POWER UNIT PE-60-A

Power Unit PE-60-A is an electric generating set consisting of a 2-cylinder, 4-cycle, L-head, air-cooled electric-starting gasoline engine, directly connected to an a-c, d-c generator, self-excited.

The engine is rated 5 horsepower at 1,800 revolutions per minute, and consumes approximately 0.4 gallon of fuel per hour at rated load.

The generator has two windings; 1.4kilowatts at 110 volts, 12.7 amperes, 60 cycles, single phase and 600 watts at 14 volts, 42 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets AN/CRN-2 and AN/MRN-2; and Instrument Landing Equipment SCR-241 at the higher voltage; and for the charging of storage batteries at lower voltage.

POWER UNIT PE-60-A

ENGINE CHARACTERISTICS

MAKE: Stever Mfg & Engine Co (gasoline)

MODEL: DVA-2

RATED: 5 HP @ 1,800 rpm

CYLINDERS: 2 BORE: 2-1/2" STROKE: 2-3/4"

COMPRESSION RATIO: ---- to 1

CYCLE: 4 HEAD: L

VALVES: Intake: Alloy nickel steel

Exhaust: Alloy nickel steel

OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: -----

FUEL USED: Gasoline

FUEL TANK CAPACITY: 2-1/2 gals (remote tank)

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.4 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 1-1/2 qts

AIR CLEANER: Oil-bath

STARTING: Electric
GOVERNOR: Mechnical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D. W. Onan & Sons

MODEL: W-2S-13 Frame 12605

TYPE OF GENERATOR: A-C d-c, self-

excited

RATING (AC):

1.4 KW 1,400 WATTS

110 VOLTS 12.7 AMPERES

RATING (DC):

.6 KW 600 WATTS

14 VOLTS 42 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE

OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 28"

WIDTH: 18"

HEIGHT: 23"

WEIGHT: (NET) 380 lb

WEIGHT: (CRATED) 435 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No.

3H4560A/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

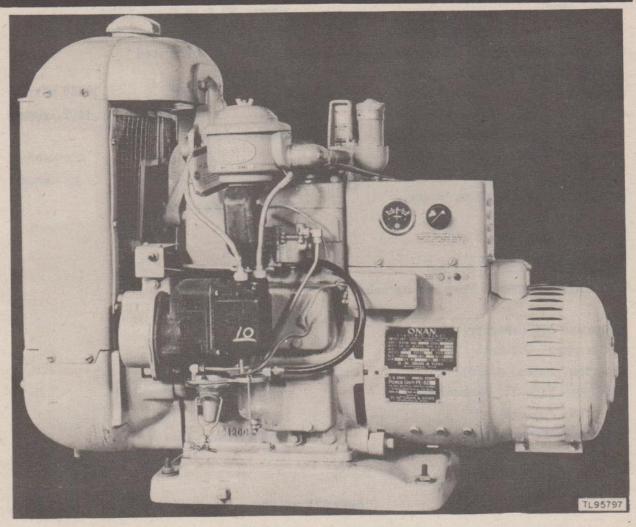
STOCK NO. 3H456OA

STATUS: Obsolete

DATE APPROVED: 6 Feb 45

POWER UNIT

PE-60-B



POWER UNIT PE-60-B

Power Unit PE-60-B is an electric generating set consisting of a 2-cylinder, 4-cycle, L-head, liquid-cooled, manual-starting (rope), gasoline engine, directly connected to an a-c-d-c generator of the revolving-field, self-exciting type.

The engine is rated at 5.1 horsepower at 1,800 revolutions per minute, and consumes approximately 0.5 gallon of fuel per hour at rated load.

The generator has two windings; 1.4 kilowatts at 110 volts, 12.7 amperes, 60 cycles, single phase, operating at 100 percent power factor and 600 watts at 14 volts, 42 amperes direct current.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Sets AN/CRN-5 and AN/MRN-2.

POWER UNIT PE-60-B

ENGINE CHARACTERISTICS

MAKE: D.W. Onan & Sons (gasoline)

MODEL: W2S

HP @ 1,800 rpm RATED: 5.1

CYLINDERS: 2 BORE: 3" STROKE: 2-3/4"

COMPRESSION RATIO: -----to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 9 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.5 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 6 qts

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D.W. Onan & Sons

MODEL: W2-S-13 Frame 12605

TYPE OF GENERATOR: A-c & d-c, revolving-

field, self-excited

RATING (AC):

1.4 KW

1,400 WATTS

110 VOLTS

12.7 AMPERES

RATING (DC):

0.6 KW

600 WATTS

14 VOLTS

42 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1, No. 1261

INSULATION: Class A

COMPLETE UNIT

LENGTH: 35"

WIDTH: 16"

HEIGHT: 30-1/2"

WEIGHT: (NET) 435 lb WEIGHT: (CRATED) 598 lb

INSTRUCTIONAL LITERATURE

Instruction book, stock No. 3H4560B/Bl

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4560B

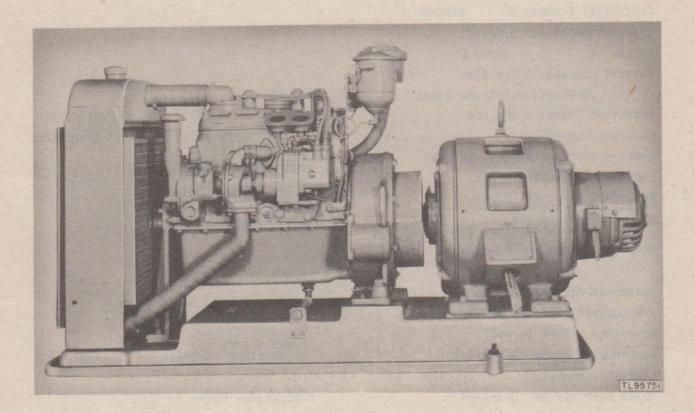
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STATUS: SEE BELOW *

POWER UNIT

PE-63-H

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-63-H

Power Unit PE-63-H is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, manual starting (crank) gasoline engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 16 horsepower at 1,200 revolutions per minute, and consumes approximately 1.1 gallons of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, single phase, 120 volts, 52 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Limited supply available for issue. No more to be procured. (Power Unit PE-63-H has been superseded by Power Unit PU-58/G.)

POWER UNIT PE-63-H

ENGINE CHARACTERISTICS

MAKE: Hercules Engine Co (gasoline)

MODEL: IXA-5

RATED: 16 HP € 1,200 rpm

CYLINDERS: 4 BORE: 3" STROKE: 4"

CYCLE: 4 HEAD: L
VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 12 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.1 gals LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 6 qts
AIR CLEANER: Airmaze ID-OB
STARTING: Manual (crank)
GOVERNOR: Flyball mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Fidelty Electric Co

MODEL: LAEB 802

TYPE OF GENERATOR: A-c. revolving field

RATING:

5 KW 5,000 WATTS

120 VOLTS

52 AMPERES

POWER FACTOR: 80%

CYCLE: 60 PHASE: 1 WIRES: 2

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 63-1/2"

WIDTH: 22"

HEIGHT: 34-3/8"

WEIGHT: (NET) 1,175 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction book, Stock No. 3H4563H/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

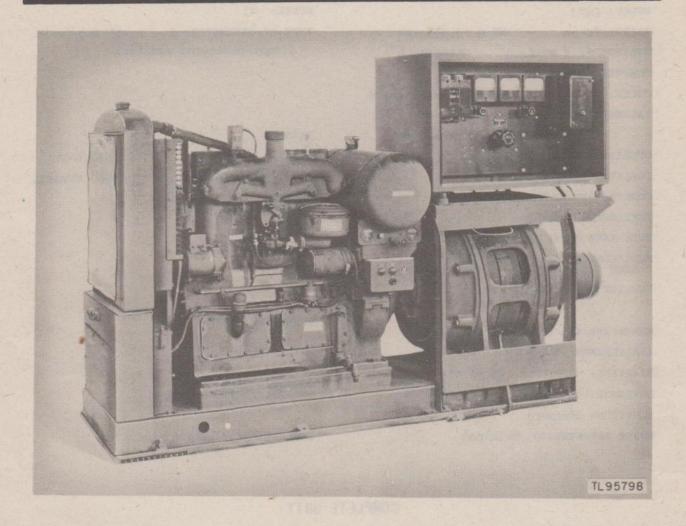
Plant Engineering Agency

STOCK NO. 3H4563H

STATUS: Standard

POWER UNIT

PE-74-A-B



POWER UNIT PE-74-A, -B

Power Unit PE-74-A, -B is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator with direct-connected exciter.

The engine is rated 70 horsepower at 1,200 revolutions per minute, and consumes approximately 4 gallons of fuel per hour at rated load.

The generator is rated at 25 kilowatts, 60 cycles, 3 phase, 120/208 volts, 150/87 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-270, SCR-271, and SCR-515.

POWER UNIT PE-74-A, -B

ENGINE CHARACTERISTICS

MAKE: Le-Roy Engine Co (gasoline)

MODEL: D471

RATED: 70 HP @ 1,200 rpm CYLINDERS: 4 BORE: 5" STROKE: 6"

COMPRESSION RATIO: 5.8

CYCLE: 4 HEAD: Valve-in-head

VALVES: Intake: Alloy nickel steel

Exhaust: Alloy nickel steel

OPERATING SPEED: 1, 200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 34 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 15 gal or remote supply

FUEL CONSUMPTION PER HOUR (RATED LOAD): 4 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 15 qts

AIR CLEANER: Oil-bath

STARTING: Electric, 12 volts GOVERNOR: Woodward, hydraulic

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Westinghouse Electric & Mfg Co

MODEL: G

TYPE OF GENERATOR: A-c, revolving-field,

direct-connected exciter.

RATING:

25 KW 25,000 WATTS

120/208 VOLTS 150/87 AMPERES

POWER FACTOR: 80%

CYCLE: 60 PHASE: 3

WIRES: 4

OPERATING SPEED: 1, 200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2-ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 115-3/4"

WIDTH: 32"

HEIGHT: 63-1/4"

WEIGHT: (NET)

WEIGHT: (CRATED) 4,460 lb

INSTRUCTIONAL LITERATURE

TM 11-909

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

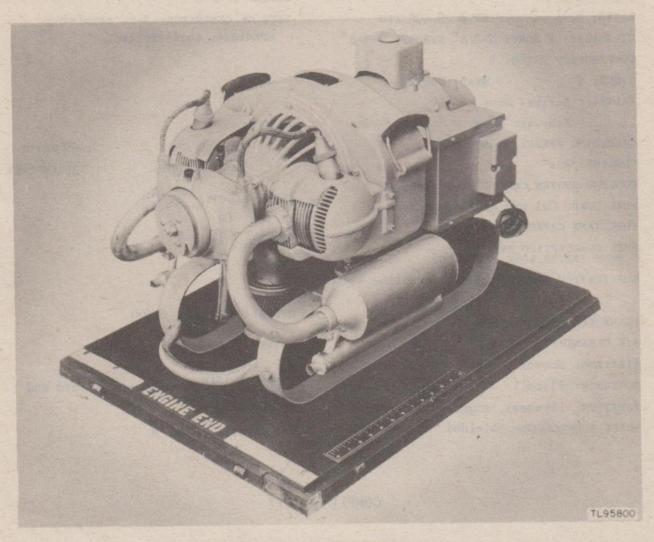
STOCK NO. 3H4574()

STATUS: Obsolete

POWER UNIT

DATE APPROVED: 22 May 44

PE-75-A-B



POWER UNIT PE-75-A, -B

Power Unit PE-75-A, -B is an electric generating set consisting of a 2-cylinder, 2-cycle, ported-head, air-cooled, manual-starting (rope) gasoline engine, directly connected to an a-c generator of the revolving armature, self-exciting type.

The engine is rated 3.35 horsepower at 3,600 revolutions per minute, and consumes approximately 0.6 gallon of fuel per hour at rated load.

The generator is rated at 2.5 kilowatts, 60 cycles, single phase, 120 volts, 22 amperes at 100 percent power factor.

Power Unit PE-75-A, -B was used with Signal Corps Radio Sets SCR-188-A and SCR-197; and Telephone Central Office Set TC-1. As indicated above Power Unit PE-75-A, -B is now obsolete.

POWER UNIT PE-75-A, -B

ENGINE CHARACTERISTICS

MAKE: Homelite Corp (gasoline)

MODEL: H T R

RATED: 3.35 HP @ 3,600 rpm

CYLINDERS: 2 BORE: 2-3/8" STROKE: 2-1/8"

COMPRESSION RATIO: 6

CYCLE: 2

HEAD: Ported

VALVES: Intake: None

Exhaust: None

OPERATING SPEED: 3,600 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled FUEL USED: Oil and gasoline mixed

FUEL TANK CAPACITY: 2 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.6 gal

LUBRICATION SYSTEM: Oil and gasoline mixed

CRANKCASE OIL CAPACITY: None

AIR CLEANER: Air-maze

STARTING: Manual (rope)

GOVERNOR: Flyball

IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Homelite Corp

MODEL: H T R

TYPE OF GENERATOR: A-c, revolving-

armature, self-excited

RATING:

2.5 KW

2,500 WATTS

120 VOLTS

22 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 3,600

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1-ball on outboard end

of generator

INSULATION: Class A

COMPLETE UNIT

LENGTH: 25-1/2"

WIDTH: 24-1/2"

HEIGHT: 32"

WEIGHT: (NET)

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

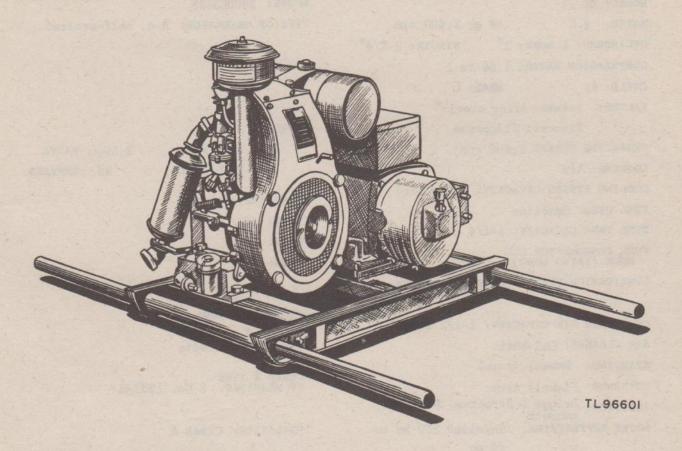
Signal Corps Ground Signal Agency

STOCK NO. 3H4575A, -B

STATUS: Standard

POWER UNIT

PE-75-C;D;J;K:P;-S;T:U,-AA;AC;AD



POWER UNIT PE-75-C,-D,-J,-K,-P,-S,-T,-U,-AA,-AC,-AD

Power Unit PE-75-C, -D, -J, -K, -P, -S, -T, -U, -AA, -AC, -AD is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine with an a-c, self-excited generator, belt-driven.

The engine is rated 6.5 horsepower at 2,400 revolutions per minute and consumes approximately 0.65 gallon of fuel per hour at rated load.

The generator is rated at 2.5 kilowatts, 60 cycles, single-phase 120 volts, 22 amperes at 100 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Sets SCR-188; SCR-197; SCR-624; SCR-636; AN/TRC-1; Radio Terminal Set AN/TRC-3; Radio Relay Sets AN/TRC-4 and AN/TRC-9; Spotting Set AN/TVQ-1; Telephone Central Office Sets TC-1; TC-2; TC-10 and TC-20; Auxiliary Telephone Central Equipment AN/GTA-1 and TC-5; Telegraph Central Office Set TC-3; Telephone Terminal Set TC-21; Public Address Set AN/UIQ-1 and Mobile Meteorological Station SCM-1.

Note: Some of the above models have a flexible exhaust pipe .

POWER UNIT PE-75-C, -D, -J, -K, -P, -S, -T, -U, -AA, -AC, -AD

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: ZZ

RATED: 6.5

HP @ 2,400 rpm

CYLINDERS: 1 BORE: 3" STROKE: 3-1/4"

COMPRESSION RATIO: 4.84 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel 3

Exhaust: Silchrome

OPERATING SPEED: 2,400 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1-1/4 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.65

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1-1/2 qts

AIR CLEANER: Oil-bath

STARTING: Manual (rope)

GOVERNOR: Flyball type

IGNITION: Briggs & Stratton, Flywheel

magneto

NOISE SUPPRESSION; Shielded 550 kc to

40 mc

GENERATOR CHARACTERISTICS

MAKE: Leland Electric

MODEL: 9900E3625

TYPE OF GENERATOR: A-c, self-excited

RATING:

2.5 KW

2,500 WATTS

120 VOLTS

22 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 1

WIRES:

OPERATING SPEED: 1,800

DRIVE: 2 vee belts

NUMBER & TYPE OF BEARINGS: 2 No. 1232-H

INSULATION: Class A

COMPLETE UNIT

LENGTH: 36"

WIDTH: 19-1/2"

HEIGHT: 26-1/2"

WEIGHT: (NET) 290 lb

WEIGHT: (CRATED) 440 lb

*NOTE: Power Unit PE-75-AD has Stellite exhaust valve and valve seat, and an Austenetic intake valve.

INSTRUCTIONAL LITERATURE

TM 11-900

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4575C-D-J-K-S-T-U-AA-AC-AD

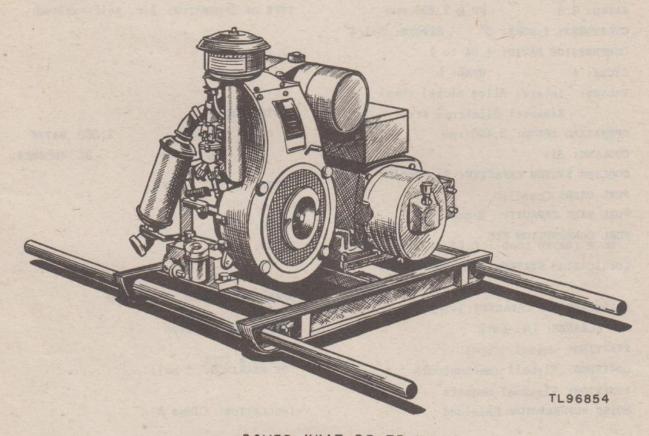
RESTRICTED

52

STATUS: Standard

POWER UNIT

PE-75-W



POWER UNIT PE-75-W

(Above Illustration Differs Somewhat From The Actual Appearance of Generator).

Power Unit PE-75-W is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, with an a-c, self-excited generator, belt-driven.

The engine is rated 6.5 horsepower, at 2,400 revolutions per minute and consumes approximately 0.65 gallon of fuel per hour at rated load.

The generator is rated at 2.5 kilowatts, 60 cycles, single-phase, 120 volts, 22 amperes at 100 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Sets SCR-188; SCR-197; SCR-624; SCR-636; AN/TRC-1; Radio Terminal Set AN/TRC-3; Radio Relay Sets AN/TRC-4 and AN/TRC-9; Spotting Set AN/TVQ-1; Telephone Central Office Sets TC-1; TC-2; TC-10; and TC-20; Auxiliary Telephone Central Equipment AN/GTA-1 and TC-5; Telegraph Central Office Set TC-3; Telephone Terminal Set TC-21; Public Address Set AN/UIQ-1 and Mobile Meteorological Station SCM-1.

RESTRICTED 53

POWER UNIT PE-75-W

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: ZZ

RATED: 6.5

HP @ 2,400 rpm

CYLINDERS: 1 BORE: 3" STROKE: 3-1/4"

COMPRESSION RATIO: 4.84 to 1
CYCLE: 4 HEAD: L

VALVES: Intake: Alloy nickel steel

Exhaust: Silchrome steel

OPERATING SPEED: 2,400 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.65

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1-1/2 qts

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Flyball (mechanical)

IGNITION: Flywheel magneto NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Kurz & Root Co

MODEL: Type Al02

TYPE OF GENERATOR: A-c, self-excited

RATING (AC):

2.5 KW 2,500 WATTS
120 VOLTS 22 AMPERES

POWER FACTOR: 100%

CYCLE: 60
PHASE: 1
WIRES: 2

OPERATING SPEED: 1,800 rpm

DRIVE: Belt-driven

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 36"

WIDTH: 19-1/2"

HEIGHT: 26-1/2"

WEIGHT: (NET) 324 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-900

SECURITY CLASSIFICATION

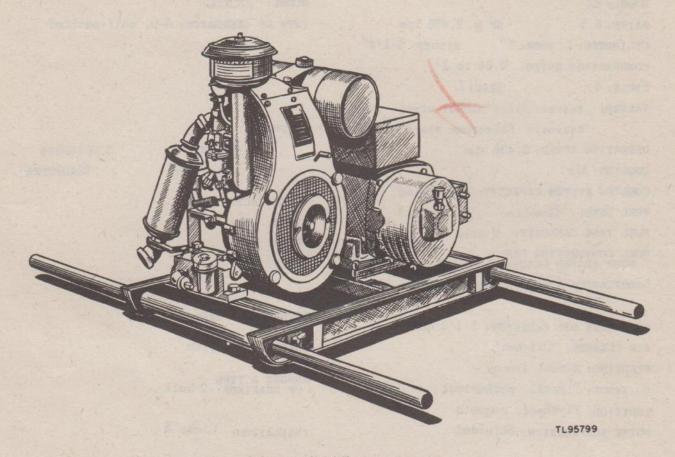
OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4575W

POWER UNIT
PE-75-AB



POWER UNIT PE-75-AB

(Above Illustration Differs Somewhat From The Actual Appearance of Generator).

Power Unit PE-75-AB is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine with an a-c, self-excited generator, belt-driven.

The engine is rated 6.5 horsepower at 2,400 revolutions per minute and consumes approximately 0.65 gallon of fuel per hour at rated load.

The generator is rated at 2.5 kilowatts, 60 cycles, single-phase, 120 volts, 22 amperes at 100 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Sets SCR-188; SCR-197; SCR-624; SCR-636; AN/TRC-1; Radio Terminal Set AN/TRC-3; Radio Relay Sets AN/TRC-4; and AN/TRC-9; Spotting Set AN/TVQ-1; Telephone Central Office Sets TC-1; TC-2; TC-10; and TC-20; Auxiliary Telephone Central Equipment AN/GTA-1 and TC-5; Telegraph Central Office Set TC-3; Telephone Terminal Set TC-21; Public Address Set AN/UIO-1 and Mobile Meteorological Station SCM-1.

RESTRICTED 55

POWER UNIT PE-75-AB

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: ZZ

RATED: 6.5 HP @ 2,400 rpm

CYLINDERS: 1 BORE: 3" STROKE: 3-1/4"

COMPRESSION RATIO: 4.84 to 1 HEAD: L CYCLE: 4

VALVES: Intake: Alloy nickel steel

Exhaust: Silchrome steel

OPERATING SPEED: 2,400 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.65 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1-1/2 qts

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Westinghouse Electric & Mfg Co

MODEL: 28CX212

TYPE OF GENERATOR: A-c, self-excited

RATING:

2.5 KW

2.500 WATTS

120 VOLTS

22AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Belt-drive

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 36"

WIDTH: 19-1/2"

26-1/2" HEIGHT:

WEIGHT: (NET) 324 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-900

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4575AB

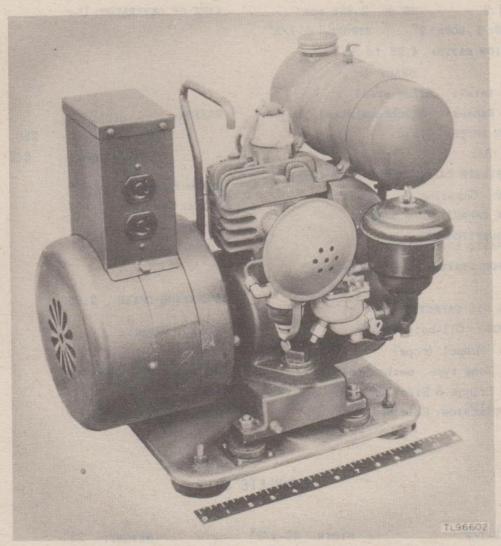
RESTRICTED

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STATUS: Standard

POWER UNIT

PE-77-A-B-C



POWER UNIT PE-77-A, -B, -C

Power Unit PE-77-A, -B, -C is an electric generating set consisting of a 1-cylinder 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c generator.

The engine is rated 1.3 horsepower at 2,650 revolutions per minute and consumes approximately 0.2 gallon of gasoline per hour at rated load.

The generator is rated at 250 watts, 115 volts, 2.2 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Telegraph Printer EE-97 and EE-98: Teletypewriter Sets EE-97-A, EE-98-A, and EE-102.

POWER UNIT PE-77-A, -B, -C

ENGINE CHARACTERISTICS

GENERATOR CHARACTERISTICS

MAKE: Briggs & Stratton Engine Co (gasoline) MAKE: Pioneer Gen-E-Motor Corp

MODEL: IL

RATED: 1.3

HP @ 2,650 rpm

CYLINDERS: 1 BORE: 2" STROKE: 1-1/2"

COMPRESSION RATIO: 4.26 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 2,650

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 0.5 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.2 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 3/4 qt

AIR CLEANER: Oil-bath type

STARTING: Manual (rope)

GOVERNOR: Vane type, mechanical

IGNITION: Briggs & Stratton magneto Flywheel

NOISE SUPPRESSION: Shielded

MODEL: 77

TYPE OF GENERATOR: D-C

RATING:

.25 KW

250 WATTS

115 VOLTS

2.2 AMPERES

POWER FACTOR: -----

CYCLE: ----

PHASE: -----

WIRES: ----

OPERATING SPEED: 2.650

DRIVE: Direct

NUMBER & TYPE

OF BEARINGS: None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 21-1/2"

WIDTH: 16-1/2"

22" HEIGHT:

WEIGHT: (NET) 90 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-903

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

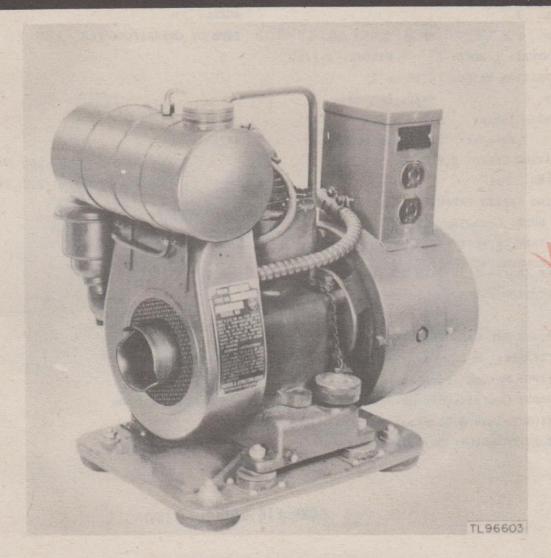
Signal Corps Ground Signal Agency

STOCK NO. 3H4577-A-B-C

STATUS: Standard

POWER UNIT

PE-77-D,-E



POWER UNIT PE-77-D-E

Power Unit PE-77-D-E is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to a d-c self-excited generator.

The engine is rated 1.3 horsepower at 2,650 revolutions per minute, and consumes approximately 0.2 gallon of fuel per hour at rated load.

The generator is rated at 250 watts, 115 volts, 2.2 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Telegraph Printer EE-97 and EE-98; Teletypewriter Sets EE-97-A, EE-98-A, and EE-102.

POWER UNIT PE-77-D, -E

ENGINE CHARACTERISTICS

GENERATOR CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: I

RATED: 1.3 HP @ 2,650 rpm

CYLINDERS: 1 BORE: 2" STROKE: 1-1/2"

COMPRESSION RATIO: 4.26 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 2,650 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 0.5 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.2 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 3/4 qt

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Centrifugal, Automatic type

IGNITION: Briggs & Stratton magneto, flywheel

NOISE SUPPRESSION: Shielded

MAKE: Pioneer-Gen-E-Motor Corp

MODEL: 77

TYPE OF GENERATOR: D-C.

RATING:

0.25 KW

250 WATTS

115 VOLTS

2.2 AMPERES

POWER FACTOR: ----

CYCLE: ----

PHASE: -----

WIRES: 2

OPERATING SPEED: 2,650

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 21-1/2"

WIDTH: 16-1/2" HEIGHT: 22"

WEIGHT: (NET) 92 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-903

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

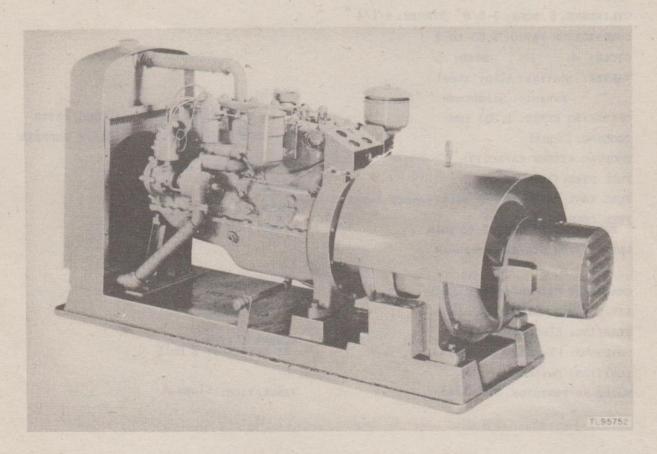
STOCK NO. 3H4577-D-E

STATUS: SEE BELOW *

POWER UNIT

PE-78-F.-G.-H

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-78-F, -G, -H

Power Unit PE-78-F, -G, -His an electric generating set consisting of a 6-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 37 horsepower at 1,200 revolutions per minute, and consumes approximately 2.65 gallons of fuel per hour at rated load.

The generator is rated at 10 kilowatts, 60 cycles, single phase, 120/240 volts, 104/52 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

*Available and preferred for issue.

POWER UNIT PE-78-F, G, H

ENGINE CHARACTERISTICS

MAKE: Hercules Engine Co (gasoline)

MODEL: JXB

HP @ 1,200 rpm RATED: 37

CYLINDERS: 6 BORE: 3-5/8" STROKE: 4-1/4"

COMPRESSION RATIO: 5.85 to 1 CYCLE: 4 HEAD: L

VALVES: Intake: Alloy steel Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 17 gts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10 gals (remote tank)

FUEL CONSUMPTION PER HOUR (RATED LOAD): 2.65 gals LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 7 qts

AIR CLEANER: Oil-bath STARTING: Electric GOVERNOR: Flyball IGNITION: Battery

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Columbia Electric Co MODEL: Frame No. 20-14-5

TYPE OF GENERATOR: A-c, revolving field

RATING:

10,000 WATTS 10 KW 104/52 AMPERES 120/240 VOLTS

POWER FACTOR: 80%

CYCLE: 60 PHASE: 1 WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 84" WIDTH: 25-3/4" HEIGHT: 40-1/2"

WEIGHT: (NET) 2050 1b

WEIGHT: (CRATED) 3060 1b

INSTRUCTIONAL LITERATURE

TM 11-911

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

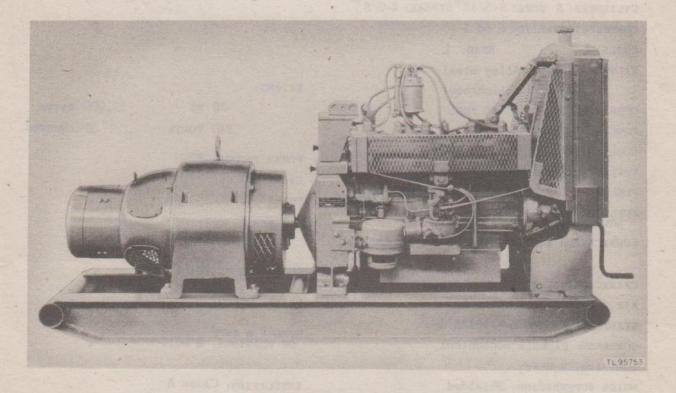
STOCK NO. 3H4578F, G, H

STATUS: SEE BELOW *

PF-79-F

POWER UNIT

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-79-F

Power Unit PE-79-F is an electric generating set consisting of a 6-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 26.3 horsepower at 1,200 revolutions per minute, and consumes approximately 2 gallons of fuel per hour at rated load.

The generator is rated at 10 kilowatts, 60 cycles, 3-phase, 240 volts, 30 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

RESTRICTED 63

POWER UNIT PE-79-F

ENGINE CHARACTERISTICS

MAKE: Continental (gasoline)

MODEL: F266

RATED: 26.3 HP @ 1,200 rpm

CYLINDERS: 6 BORE: 3-5/16 "STROKE: 4-3/8"

COMPRESSION RATIO: 6 to 1

CYCLE: 4

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 16 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10 gals (remote tank)

FUEL CONSUMPTION PER HOUR (RATED LOAD): 2 gals

LUBRICATION SYSTEM: Force-feed & splash

CRANKCASE OIL CAPACITY: 11 qts

AIR CLEANER: Oil-bath

STARTING: Electric 6-volts d-c

GOVERNOR: Flyball mechanical

IGNITION: Battery

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Westinghouse

MODEL: AC Type G Frame 6-15-6

TYPE OF GENERATOR: A-c. revolving field

RATING:

10 KW

10,000 WATTS

240 VOLTS

30 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 81-3/4"

WIDTH: 26"

HEIGHT: 43-1/2"

WEIGHT: (NET) 1,680 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-912-F

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

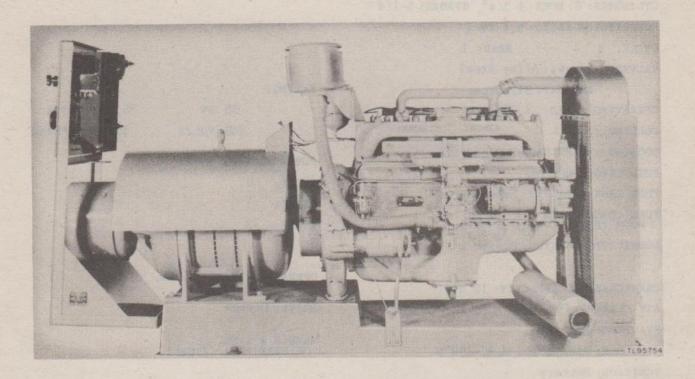
STOCK NO. 3H4579F

STATUS: SEE BELOW .

POWER UNIT

PE-81-F

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-81-F

Power Unit PE-81-F is an electric generating set consisting of a 6-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 83 horsepower at 1,200 revolutions per minute and consumes approximately 8 gallons of fuel per hour at rated load.

The generator is rated at 35 kilowatts, 60 cycles, 3-phase, 240 volts, 105.3 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* No more to be procured but limited supply available for issue.

POWER UNIT PE-81-F

ENGINE CHARACTERISTICS

MAKE: Hercules (gasoline)

MODEL: RXID

RATED: 83 HP @ 1,200 rpm

CYLINDERS: 6 BORE: 4-3/4" STROKE: 5-1/4"

COMPRESSION RATIO: 5.4 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 48 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 8 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 10 qts

AIR CLEANER: Oil-bath

STARTING: Electric

GOVERNOR: Pierce No. M.A. - 1007B

IGNITION: Battery

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Columbia Electric Co

MODEL: Frame 2216-6.75

TYPE OF GENERATOR: A-c, revolving field

RATING:

35 KW

35,000 WATTS

240 VOLTS

105.3 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

3 WIRES:

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE
OF BEARINGS: 2 Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 100-1/4"

WIDTH: 31"

HEIGHT: 49-3/8"

WEIGHT: (NET) 3,705 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book, stock No.

3H4581F/B1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

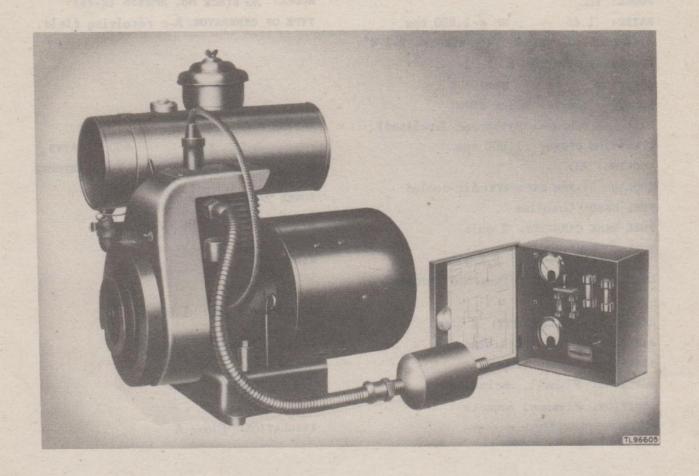
STOCK NO. 3H4581F

STATUS: Obsolete

POWER UNIT

DATE APPROVED: 6 Nov 44

PE-8*2*-E



POWER UNIT PE-82-E

Power Unit PE-82-E is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 1.45 horsepower at 1,800 revolutions per minute, and consumes, approximately 0.2 gallon of fuel per hour at rated load.

The generator is rated at 500 watts, 60 cycles, single phase, 110 volts, 5.6 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Aircraft Warning Service equipment.

POWER UNIT PE-82-E

ENGINE CHARACTERISTICS

MAKE: Lauson Co (gasoline)

MODEL: TLC

RATED: 1.45 HP @ 1,800 rpm

CYLINDERS: 1 BORE: 2-1/4" STROKE: 2-1/4"

COMPRESSION RATIO: 6 to 1

CYCLE: 4 HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome (stelited)

OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.2 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 2 qts

AIR CLEANER: Oil-bath type

STARTING: Manual (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Flywheel magneto

NOISE SUPPRESSION: -----

GENERATOR CHARACTERISTICS

MAKE: Marathon Electric Mfg Corp

MODEL: AG stock No. 3H2456 (2-76)

TYPE OF GENERATOR: A-c revolving field.

RATING:

0.5 KW 500 WATTS

110 VOLTS 5.6 AMPERES

POWER FACTOR: 80%

CYCLE: 60 PHASE: 1

WIRES: 2

OPERATING SPEED: 1.800

DRIVE: Direct

NUMBER & TYPE
OF BEARINGS: None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 22"

WIDTH: 20-3/4"

HEIGHT: 15-3/4"

WEIGHT: (NET) 149 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-928

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

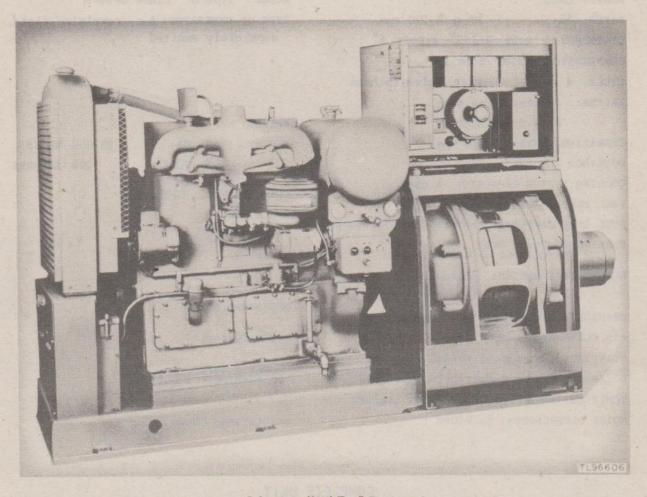
RESPONSIBLE AGENCY:

STOCK NO. 3H4582-E

STATUS: Standard

POWER UNIT

PE-84-A



POWER UNIT PE-84-A

Power Unit PE-84-A is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving field, separately excited type.

The engine is rated 55 horsepower at 1,200 revolutions per minute and consumes approximately 4 gallons of fuel per hour at rated load.

The generator is rated at 20 kilowatts 60 cycles, single phase, 120 volts, 208 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-268 and SCR-296; and Radio Compass SCR-269.

POWER UNIT PE-84-A

ENGINE CHARACTERISTICS

MAKE: LeRoi Co (gasoline)

MODEL: D382

RATED: 55 HP @ 1,200 rpm CYLINDERS: 4 BORE: 4-1/2" STROKE: 6"

COMPRESSION RATIO: 6 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 9 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 15 gals or remote supply

FUEL CONSUMPTION PER HOUR (RATED LOAD): 4 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 28 qts

AIR CLEANER: Oil-bath type

STARTING: Electric 12 volts

GOVERNOR: Woodward Hydraulic Type SG

IGNITION: Bosch Type MJB4A-314, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Westinghouse Electric & Mfg Co

MODEL: Type G Frame 6-24-6

TYPE OF GENERATOR: A-c, revolving-field,

separately excited

RATING:

20 KW

20,000 WATTS

120 VOLTS

208 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 110-3/8" or 111-3/4" WIDTH: 32" or 35"

HEIGHT: 58-3/16" or 64-1/8"

WEIGHT: (NET) 4900 lb WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-915

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

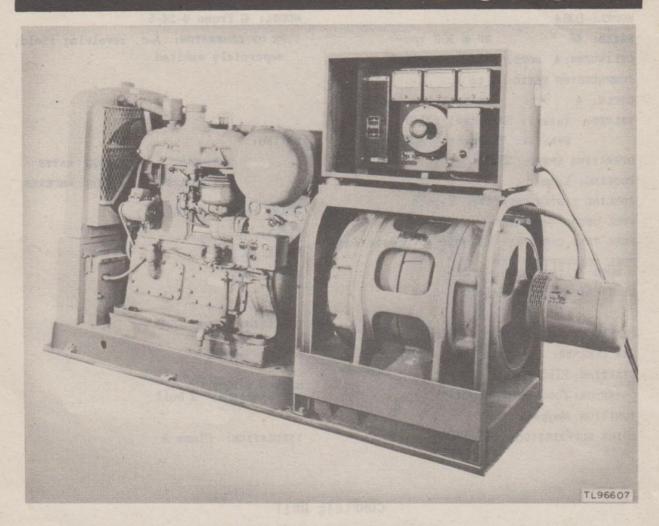
Signal Corps Ground Signal Agency

STOCK NO. 3H4584-A

STATUS: Standard

POWER UNIT

PE-84-C-D



POWER UNIT PE-84-C, -D

Power Unit PE-84-C, -D is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving field type, separately excited.

The engine is rated 46 horsepower at 900 revolutions per minute, and consumes approximately 4 gallons of fuel per hour at rated load.

The generator is rated at 20 kilowatts, 60 cycles, single phase, 120 volts, 208 amperes at 80 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Sets SCR-268, SCR-296, and SCR-516.

RESTRICTED 71

POWER UNIT PE-84-C, -D

ENGINE CHARACTERISTICS

MAKE: LeRoi Co (gasoline)

MODEL: D384

HP @ 900 rpm RATED: 46 CYLINDERS: 4 BORE: 4-1/2" STROKE: 6"

COMPRESSION RATIO: 6 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: SAE-Steel #3140

Exhaust: Thompson - XCR

OPERATING SPEED: 900

COOLING: Liquid

COOLING SYSTEM CAPACITY: 9 gals

FUEL USED: Gasoline

FUEL TANK CAPACITY: 15 gals or remote supply

FUEL CONSUMPTION PER HOUR (RATED LOAD): 4 gals

LUBRICATION SYSTEM: Forced-feed

CRANKCASE OIL CAPACITY: 28 qts

AIR CLEANER: Oil-bath type, Model 37U-OBF

STARTING: Electric 12 volts

GOVERNOR: Woodward Hydraulic

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Westinghouse Electric & Mfg Co

MODEL: G Frame 8-24-6

TYPE OF GENERATOR: A-c, revolving field,

separately excited

RATING:

20 KW

20.000 WATTS

120 VOLTS

208 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 900

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 111-3/4"

WIDTH: 35"

HEIGHT: 64-1/8"

WEIGHT: (NET) 5,000 lb

WEIGHT: (CRATED)

Airmaze

INSTRUCTIONAL LITERATURE

TM 11-915

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

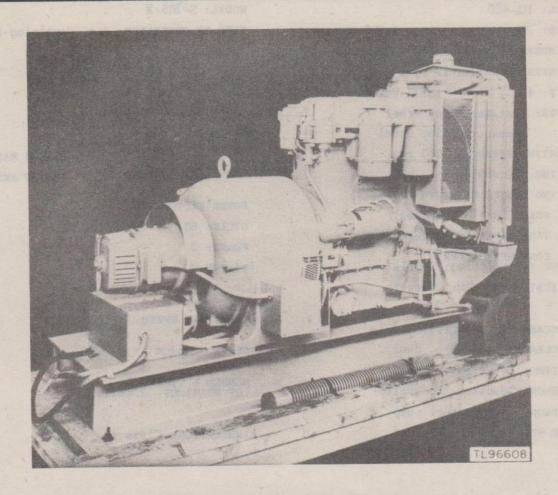
RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4584-C-D

POWER UNIT

PE 85-A:B:C:D:F



POWER UNIT PE-85-A,- b,- C,- D,- F

Power Unit PE-85-A, -B, -C, -D, -F is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting, full-Diesel engine, directly connected to an a-c generator of the revolving-field type.

The engine is rated 60-horsepower at 1,200 revolutions per minute, and consumes approximately 3 gallons of fuel per hour at rated load.

The generator is rated at 25 kilowatts, 60 cycles, 3-phase, 120/208 volts, 150/87 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Set SCR-270, SCR-271, and SCR-615.

POWER UNIT PE-85-A,-B,-C,-D,-F

ENGINE CHARACTERISTICS

MAKE: Cummins Engine Co (Diesel)

MODEL: HI-400

RATED: 60 HP @ 1,200 rpm

CYLINDERS: 4 BORE: 4-7/8" STROKE: 6"

COMPRESSION RATIO: 17 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Alloy steel

Exhaust: Alloy steel

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 11 gals.

FUEL USED: Fuel oil (Diesel)

FUEL TANK CAPACITY: Underground

FUEL CONSUMPTION PER HOUR (RATED LOAD): 3 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 30 qts

AIR CLEANER: Oil-bath, dual

STARTING: Electric, 32 volts

GOVERNOR: Woodward (Hydraulic)

IGNITION: Cummins fuel pump

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Continental Electric Co

MODEL: S-105-X

TYPE OF GENERATOR: A-c, revolving-field

RATING:

25 KW

25,000 WATTS

120/208 VOLTS

150/87 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

WIRES: 4

OPERATING SPEED: 1 200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 95"

WIDTH: 38-1/2"

HEIGHT: 62"

WEIGHT: (NET) 5300 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book, stock No. 3H4585A/1 for PE-85-A, -B, -C, -D.

Instruction Book, stock No. 3H4585F/Bl for PE-85-F

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

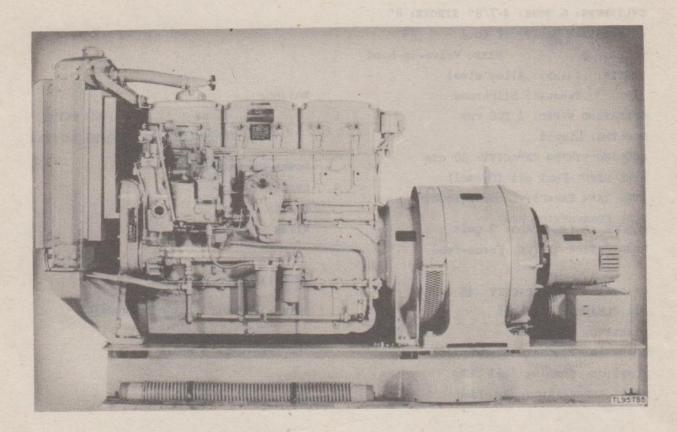
STOCK NO. 3H4585A, B, C, D, & F

STATUS: SEE BELOW *

POWER UNIT

PE-85-G

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-85-G

Power Unit PE-85-G is an electric generating set consisting of a 6-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting full-Diesel engine, directly connected to an a-c generator.

The engine is rated 150 horsepower at 1,200 revolutions per minute, and consumes approximately 3 gallons of fuel per hour at rated load.

The generator is rated at 25 kilowatts, 60 cycles, 3-phase, 120/208 volts, 150/87 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Fixed Plant Communication Equipment exclusively.

* Limited supply available for issure. No more to be procured.

POWER UNIT PE-85-G

ENGINE CHARACTERISTICS

MAKE: Cummins Electric Co (Diesel)

MODEL: HI-600

RATED: 150 HP @ 1,200 rpm CYLINDERS: 6 BORE: 4-7/8" STROKE: 6"

COMPRESSION RATIO: 17 to 1

CYCLE: 4 HEAD: Valve-in-head

VALVES: Intake: Alloy steel Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 60 qts FUEL USED: Fuel oil (Diesel) FUEL TANK CAPACITY: Underground

FUEL CONSUMPTION PER HOUR (RATED LOAD): 3 gals LUBRICATION SYSTEM: Force-feed

CRANKCASE OIL CAPACITY: 48 qts.

AIR CLEANER: Oil-bath STARTING: Electric

GOVERNOR: Woodward (hydraulic)
IGNITION: Cummins fuel pump
NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Continental Electric Co

MODEL: S-105-X

TYPE OF GENERATOR: S-105-X - A-C

RATING:

25 KW 25,000 WATTS

120/208 VOLTS 150/87 AMPERES

POWER FACTOR: 80%

CYCLE: 60
PHASE: 3
WIRES: 4

OPERATING SPEED: 1,200

DRIVE: Direct, flexible coupling

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 107"

WIDTH: 35"

HEIGHT: 63"

WEIGHT: (NET) 5,300 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book, stock No. 3H4585G/B1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

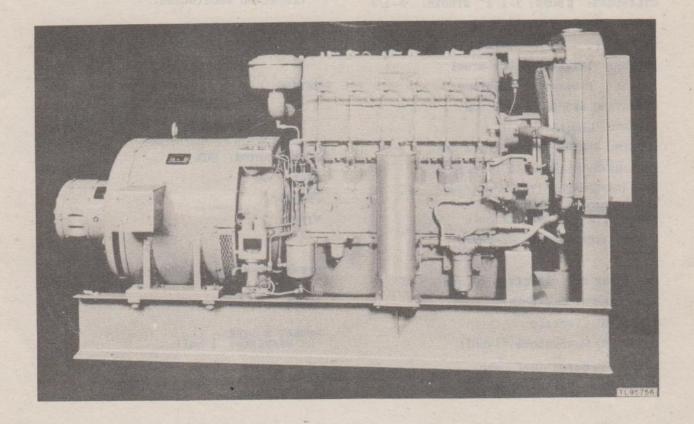
STOCK NO. 3H4585G

STATUS: SEE BELOW *

POWER UNIT

PE-85-L

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ON LY



POWER UNIT PE-85-L

Power Unit PE-85-L is an electric generating set consisting of a 6-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting full-Diesel engine, directly connected to an a-c generator, with direct connected exciter.

The engine is rated 44-horsepower at 1,200 revolutions per minute, and consumes approximately 3 gallons of fuel per hour at rated load.

The generator is rated at 25 kilowatts, 60 cycles, 3-phase, 230 volts, 79 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

POWER UNIT PE-85-L

ENGINE CHARACTERISTICS

MAKE: Hill Diesel MODEL: Hill 6 R

RATED: 44 HP @ 1,200 rpm

CYLINDERS: G BORE: 3-1/2" STROKE: 5-1/2"

COMPRESSION RATIO: 17 to 1.

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 32 qts FUEL USED: Fuel oil (Diesel) FUEL TANK CAPACITY: Underground

FUEL CONSUMPTION PER HOUR (RATED LOAD): 3 gals LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 40 qts

AIR CLEANER: Oil-Bath STARTING: Electric

GOVERNOR: Mechanical flyball IGNITION: Bosch fuel pump NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Rogers Diesel & Aircraft Corp

MODEL: S 110

TYPE OF GENERATOR: A-c, with direct

connected excitation.

RATING:

25 KW

25,000 WATTS

230 VOLTS

79 AMPERES

POWER FACTOR: 80%

CYCLE: 60 PHASE: 3 WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 95"

WIDTH: 38-1/2"

HEIGHT: 62"

WEIGHT: (NET) 5,300 lbs

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-916L (when published)

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

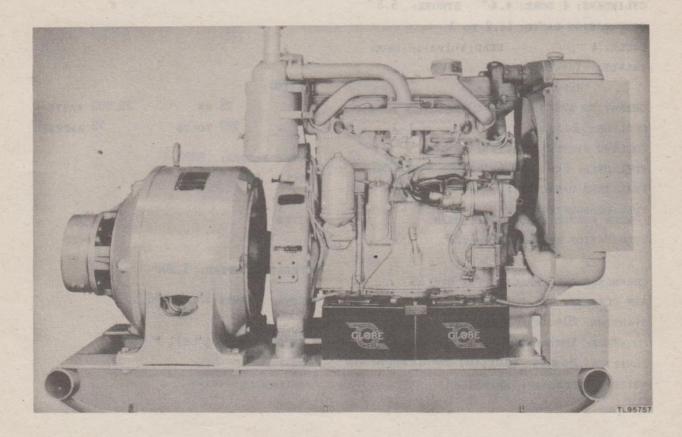
STOCK NO. 3H4585L

STATUS: SEE BELOW *

POWER UNIT

PE-85-M

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-85-M

Power Unit PE-85-M is an electric generating set consisting of a 4-cylinder, 4-cycle, liquid-cooled, (electric-starting on gasoline) Diesel engine, directly connected to an a-c generator.

The engine is rated 45.5 horsepower at 1,200 revolutions per minute and consumes approximately 2.28 gallons of fuel per hour at rated load.

The generator is rated at 25 kilowatts, 60 cycles, 3-phase, 230 volts, 79 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

RESTRICTED 79

POWER UNIT PE-85-M

ENGINE CHARACTERISTICS

MAKE: International Harvester Co (Diesel)

MODEL: U D-9

RATED: 45.5 HP @ 1,200 rpm

CYLINDERS: 4 BORE: 4.4" STROKE: 5.5"

COMPRESSION RATIO: 14.2 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: -----

Exhaust: -----

OPERATING SPEED: 1, 200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 52 qts

FUEL USED: Fuel oil (gasoline starting)

FUEL TANK CAPACITY: -----

FUEL CONSUMPTION PER HOUR (RATED LOAD): 2.28 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 11 qts

AIR CLEANER: Oil-bath

STARTING: Electric (gasoline)

GOVERNOR: Mechanical

IGNITION: Magneto starting compression run

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Continental Electric Co

MODEL: S-105-X

TYPE OF GENERATOR: A-C

RATING:

25 KW

25,000 WATTS

230 VOLTS

79 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: ----

COMPLETE UNIT

LENGTH: 88-3/4"

WIDTH: 34-3/8"

HEIGHT: 60-1/2"

WEIGHT: (NET)

WEIGHT: (CRATED) 5,400 lb

INSTRUCTIONAL LITERATURE

TM 11-916-M (when published)

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

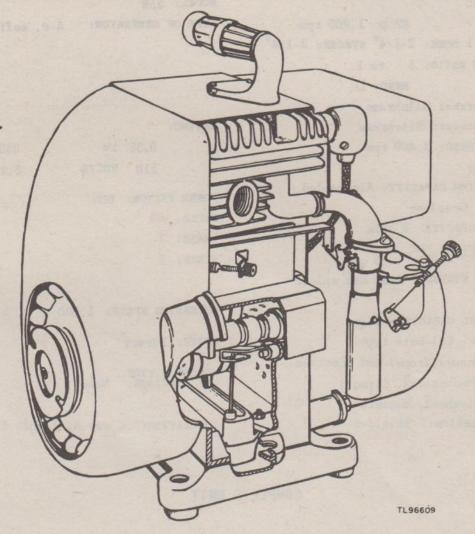
STOCK NO. 3H4585M

STATUS: Substitute standard

POWER UNIT

DATE APPROVED: 28 Oct 43

PE-88 & PE-88-A



POWER UNIT PE-88; PE-88-A

Power Unit PE-88, PE-88-A is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual- (rope) and electric-starting, gasoline engine, directly connected to an a-c self-exciting generator.

The engine is rated 1 horsepower at 1,800 revolutions per minute, and consumes approximately 0.15 gallon of fuel per hour at rated load.

The generator is rated at 350 watts, 60 cycles, single phase, 110 volts, 3.2 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Marker Beacon Set AN/MRN-3; Transmitting Equipment AN/TRW-1; and Target Control Transmitting Equipment RC-56.

POWER UNIT PE-88: PE-88-A

ENGINE CHARACTERISTICS

MAKE: D.W. Onan & Sons (gasoline)

MODEL: 358-S

RATED: 1 HP @ 1,800 rpm

CYLINDERS: 1 BORE: 2-1/4" STROKE: 2-1/4"

COMPRESSION RATIO: 5 to 1 HEAD: L

CYCLE: 4

VALVES: Intake: Silchrome

Exhaust: Silchrome OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.15 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1 gt

AIR CLEANER: Oil-bath type

STARTING: Manual (rope) and electric

GOVERNOR: Mechanical, flyball IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D.W. Onan & Sons

MODEL: 358

TYPE OF GENERATOR: A-c, self-excited

RATING:

0.35 KW

350 WATTS

110 VOLTS

3.2 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: None

INSULATION: Class A, douple dip.

COMPLETE UNIT

LENGTH: 15-1/2"

WIDTH: 9-1/2" HEIGHT: 14-1/2"

WEIGHT: (NET) 118 lb

WEIGHT: (CRATED) -----

INSTRUCTIONAL LITERATURE

Instruction Book

SECURITY CLASSIFICATION

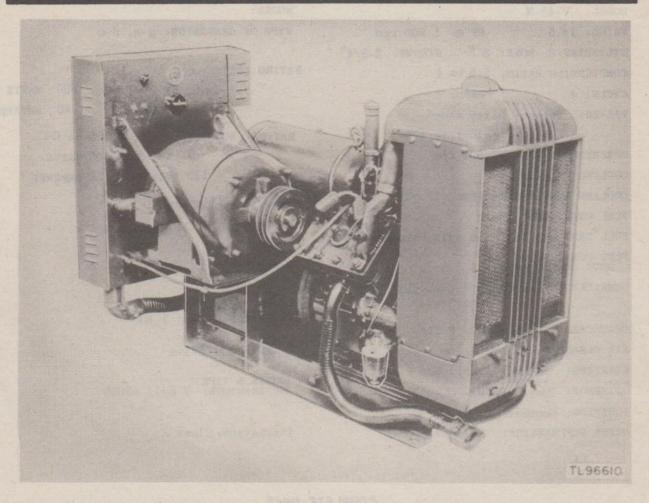
OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4588.1 (For PE-88)

PE-90-A-B-C-D



POWER UNIT PE-90-A, -B, -C, -D

Power Unit PE-90-A, -B, -C, -D is an electric generating set consisting of a V-type, 4-cylinder, 4-cycle, L-head, liquid-cooled, manual-(crank) and electric-starting, gasoline engine with an a-c and d-c generator, belt-driven, This unit is provided with an electric motor for driving the generators in place of the gasoline engine when commercial power is available.

The engine is rated 14.5 horswpower at 1,800 revolutions per minute, and consumes approximately 1.1 gallons of fuel per hour at rated load.

The generator has two windings; 3 kilowatts, 400 cycles, single phase, 115 volts, 26 amperes at 100 percent power factor; and 600 watts at 14 volts, 40 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-277-A, B, C, D.

POWER UNIT PE-90-A, -B, -C, -D

ENGINE CHARACTERISTICS

MAKE: D. W. Onans & Sons (gasoline)

MODEL: V-45-M

HP @ 1,800 rpm RATED: 14.5

CYLINDERS: 4 BORE: 3 " STROKE: 2-3/4"

COMPRESSION RATIO: 5.5 to 1

CYCLE: 4 HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 17 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gals (remote tank)

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.1 gals

LUBRICATION SYSTEM: Pressure and spray

CRANKCASE OIL CAPACITY: 8 qts

AIR CLEANER: Oil-bath type

STARTING: Manual (crank) and electric, 12

GOVERNOR: Pierce Model- CC-413

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D. W. Onans & Sons

MODEL:

TYPE OF GENERATOR: a-c, d-c

RATING (DC):

.6 KW

600 WATTS

14 VOLTS

40 AMPERES

RATING (AC):

4,000 on ENG.

3 KW 3,000 WATTS

115 VOLTS 26 AMPERES

POWER FACTOR: 100%

CYCLE: 400

PHASE: 1

WIRES: 2

OPERATING SPEED: 1.800

DRIVE: Belt-drive

NUMBER & TYPE
OF BEARINGS: 2 ball #5055

INSULATION: Class A

COMPLETE UNIT

LENGTH: 51"

WIDTH: 37"

35" HEIGHT:

WEIGHT: (NET) 1,200 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book, \$tock No. 3H459OA/1 for PE-90-A.

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

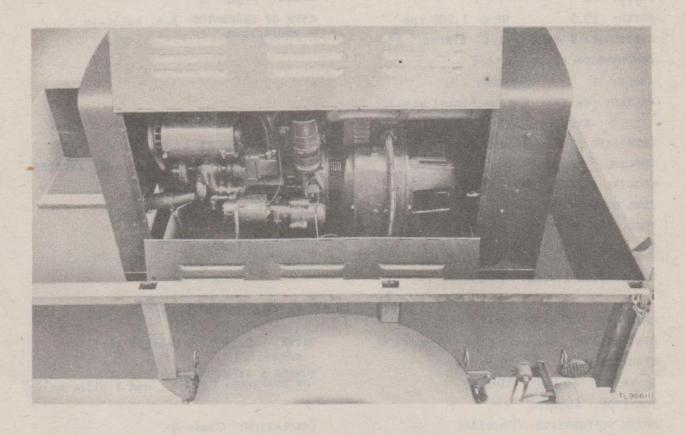
STOCK NO. 3H4590-A, B,-C,-D

STATUS: Obsolete

DATE APPROVED: 2 Nov 44

POWER UNIT

PE-92-A-B



POWER UNIT PE-92-A, -B

Power Unit PE-92-A, -B is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the integral-exciter type.

The engine is rated 19.5 horsepower at 1,200 revolutions per minute, and consumes approximately 1.5 gallons of fuel per hour at rated load.

The generator is rated at 6 kilowatts, 60 cycles, single phase, 110 volts, 68 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps mobile radio repair shops.

POWER UNIT PE-92-A, -B

ENGINE CHARACTERISTICS

MAKE: Waukesha Motor Co (gasoline)

MODEL: FC

RATED: 19.5 HP @ 1,200 rpm CYLINDERS: 4 BORE: 3-1/4" STROKE: 4"

COMPRESSION RATIO: 6 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Chrome nickel steel

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 20 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 12 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.5 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 8 qts

AIR CLEANER: Oil-bath type (Vortox Co)

STARTING: Electric, 12 Volts GOVERNOR: Waukesha Flyball

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Marble Card Co

MODEL: Frame 8

TYPE OF GENERATOR: A-c, built-in

excitation

RATING:

6 KW 6,000 WATTS

110 VOLTS

68 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1.200

DRIVE: Direct (3 bearing set)

connected

NUMBER & TYPE OF BEARINGS: 1 ball, and 1 pilot ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 64"

WIDTH: 21-1/2"p HEIGHT: 38-1/2"

WEIGHT: (NET) 1,560 lb

WEIGHT: (CRATED) 1,940 lb

INSTRUCTIONAL LITERATURE

TM 11-905 for PE-92-B

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

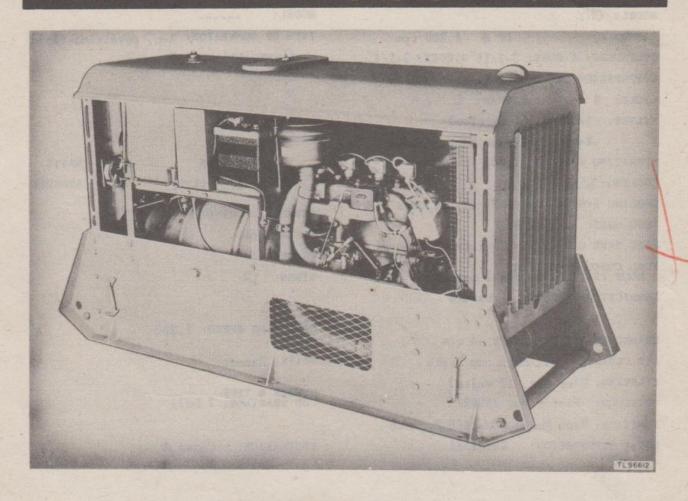
RESPONSIBLE AGENCY:

STOCK NO. 3H4592A and B

STATUS: Standard

POWER UNIT

PE-95-A-B-C



POWER UNIT PE-95-A, -B, -C

Power Unit PE-95-A, -B, -C is an electric generating set consisting of a 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator of the revolving-field, self-excited type.

The engine is rated 20 horsepower at 1,200 revolutions per minute, and consumes approximately 1.2 gallons of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, single phase, 115 volts, 54.8 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-292, SCR-299, SCR-399, SCR-499, SCR-696, SCR-698, AN/TRC-5, AN/TRC-6, AN/FRC-2; Radio Direction Finder Central TC-8; Radio Intercept Central TC-9; Wire Repair Station AN/MTM-1, AN/MTM-2, and AN/MTM-3; Radio Control Central AN/TRQ-1.

RESTRICTED 87

POWER UNIT PE-95-A, -B, -C

ENGINE CHARACTERISTICS

MAKE: Ford Motor Co (gasoline)

MODEL: ONY

RATED: 20 HP @ 1,200 rpm

CYLINDERS: 4 BORE: 3-3/16"STROKE: 3-1/4"

COMPRESSION RATIO: 6.1 to 1 CYCLE: 4 HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Chrome nickel Alloy

OPERATING SPEED: 1,200

COOLING: Liquid

COOLING SYSTEM CAPACITY: 4-1/4 gals

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10.5 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.2 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4 qts

AIR CLEANER: Oil-bath cap 2 pts STARTING: Electric, 12 volts

GOVERNOR: Pierce No. 75862

IGNITION: Wico Model JEM-1460 Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D. W. Onan & Sons

MODEL:

TYPE OF GENERATOR: A-c. revolving-field,

self-excited

RATING:

5 KW

5.000 WATTS

115 VOLTS

54.8 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE
OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 72-1/2"

WIDTH: 27-1/2"

HEIGHT: 38-1/2"

WEIGHT: (NET) 1,497 lb

WEIGHT: (CRATED) 1,700 lb

INSTRUCTIONAL LITERATURE

TM 11-904

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4595-A,-B,-C

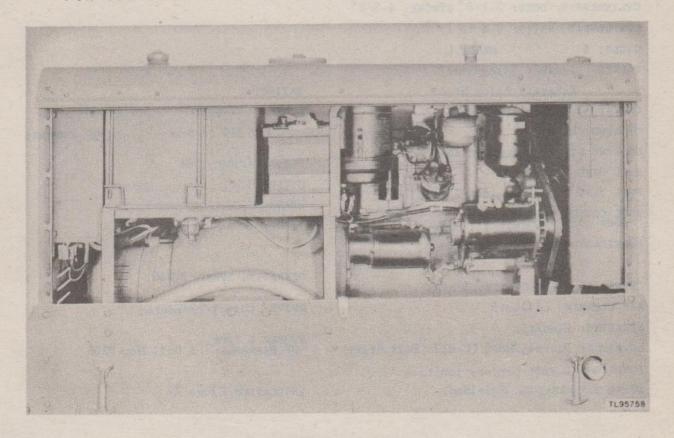
RESTRICTED

STATUS: SEE BELOW *

POWER UNIT

PE-95-F

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-95-F

Power Unit PE-95-F is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 24 horsepower at 1,200 revolutions per minute, and consumes approximately 1.1 gallons of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, single phase, 120/240 volts, 52/26 amperes at 80 percent power factor.

NOTE: This power unit was issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

Power Unit PE-95-F has been superseded by Power Unit PU-58/G.

* No more to be procured. None available for issue.

POWER UNIT PE-95-F

ENGINE CHARACTERISTICS

MAKE: Willys-Overland Motors (gasoline)

MODEL: MB-441

HP € 1,200 rpm RATED: 24

CYLINDERS: 4 BORE: 3-1/8" STROKE: 4-3/8"

COMPRESSION RATIO: 6.5 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Alloy Steel

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 15-1/2 gts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10-1/2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.1 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 5 qts

AIR CLEANER: Oil-bath

STARTING: Electric

GOVERNOR: Pierce Model CC-417. Belt drive

IGNITION: 6-volt battery ignition

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D. W. Onan & Sons

MODEL: JWC-7507

TYPE OF GENERATOR: A-c, revolving field

RATING:

5 KW

5,000 WATTS

120/240 VOLTS

52/26 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE

OF BEARINGS: 1 ball No. 7306

INSULATION: Class A

COMPLETE UNIT

LENGTH: 72-1/2"

WIDTH: 28-1/2"

HEIGHT: 38-1/2"

WEIGHT: (NET), 1545 1b

WEIGHT: (CRATED), 1765 1b

INSTRUCTIONAL LITERATURE

TM 11-904, REVISED (when published

Instruction Book, Stock No.

6D7800B14F

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

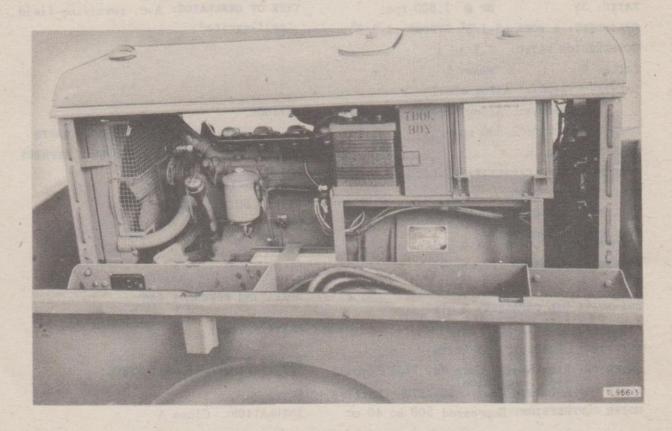
STOCK NO. 3H4595F

STATUS: Standard

POWER UNIT

DATE APPROVED: 30 Apr 44

PE-95-G-H



POWER UNIT PE-95-G, -H

Power Unit PE-95-G, -H is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving-field, self-exciting type.

The engine is rated 35 horsepower at 1,800 revolutions per minute and consumes approximately 1.8 gallons of fuel per hour at rated load.

The generator is rated at 10 kilowatts, 60 cycles, single phase, 120/240 volts, and 104/52 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-292, SCR-299, SCR-399, SCR-499, SCR-696, SCR-698, AN/TRC-5, AN/TRC-6, AN/FRC-2; Radio Direction Finder Gentral TC-8; Radio Intercept Central TC-9; Wire Repair Station AN/MTM-1, AN/MTM-2, and AN/MTM-3; Radio Control Central AN/TRQ-1.

POWER UNIT PE-95-G, -H

ENGINE CHARACTERISTICS

GENERATOR CHARACTERISTICS

MAKE: Willys Overland Motors (gasoline) MAKE: D. W. Onans & Sons

MODEL: JP 441

RATED: 35 HP @ 1,800 rpm

CYLINDERS: 4 BORE: 3-1/8" STROKE: 4-3/8"

COMPRESSION RATIO: 6.5 to 1 CYCLE: 4 HEAD: L VALVES: Intake: Alloy steel

Exhaust: Alloy steel

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 15-1/2 gts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10-1/2 qts

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.8 gals LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 5 qts AIR CLEANER: Oil-bath type STARTING: Electric, 12 volts

GOVERNOR: King-Seeley Corp No. 7433 Flyball

IGNITION: type mechanical IG-4070L, battery 12 volts

NOISE SUPPRESSION: Supressed 500 kc 40 mc

MODEL: OS-10

TYPE OF GENERATOR: A-c, revolving-field,

self-excited

RATING:

10 KW 10,000 WATTS 120/240 VOLTS 104/52 **AMPERES**

POWER FACTOR: 80%

CYCLE: 60 PHASE: 1 WIRES: 3

OPERATING SPEED: 1.800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 ball #7306

INSULATION: Class A

COMPLETE UNIT

LENGTH: 67-1/2"

WIDTH: 27-1/4"

HEIGHT: 38-1/2"

WEIGHT: (NET) 1,556 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-904G and TM 11-904H

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

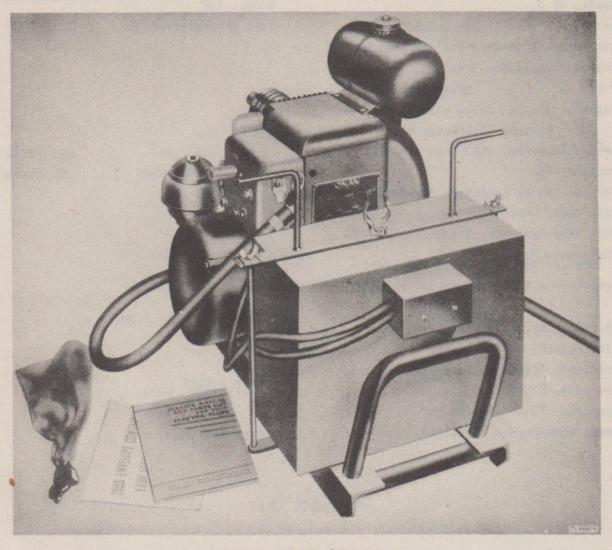
Signal Corps Ground Signal Agency

STOCK NO. 3H4595-G and -H

STATUS: Standard

POWER UNIT

PE-96-A



POWER UNIT PE-96-A

Power Unit PE-96-A is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, electric-starting, gasoline engine, directly connected to a d-c generator of the revolving-field type, with inherent excitation.

The engine is rated 1 horsepower at 1,800 revolutions per minute and consumes approximately 0.12 gallon of fuel per hour at rated load.

The generator is rated at 400 watts, 14 volts, 28 amperes direct current.

The principal application of this power unit is the furnishing of current for the operation of Signal Corps Radio Set SCR-586 and Target Control Transmitting Equipment RC-56.

POWER UNIT PE-96-A

ENGINE CHARACTERISTICS

MAKE: D. W. Onans & Sons (gasoline)

MODEL: 48 S

RATED: 1

HP @ 1,800 rpm

CYLINDERS: 1 BORE: 2-1/4" STROKE: 2-1/4"

COMPRESSION RATIO: 5 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.12 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1 qt AIR CLEANER: Oil-bath type STARTING: Electric, 12 volts

GOVERNOR: Flyball

IGNITION: Flywheel magneto NOISE SUPPRESSION: Shielded GENERATOR CHARACTERISTICS

MAKE: D. W. Onans & Sons

MODEL: 485

TYPE OF GENERATOR: D-c

RATING:

0.40 KW

400 WATTS

14 VOLTS

28 AMPERES

POWER FACTOR: -----

CYCLE: ----

PHASE: -----

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 15-1/2"

WIDTH: 9-1/2" HEIGHT: 14-1/2"

WEIGHT: (NET) 90 lb

WEIGHT: (CRATED) 119 lb

INSTRUCTIONAL LITERATURE

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

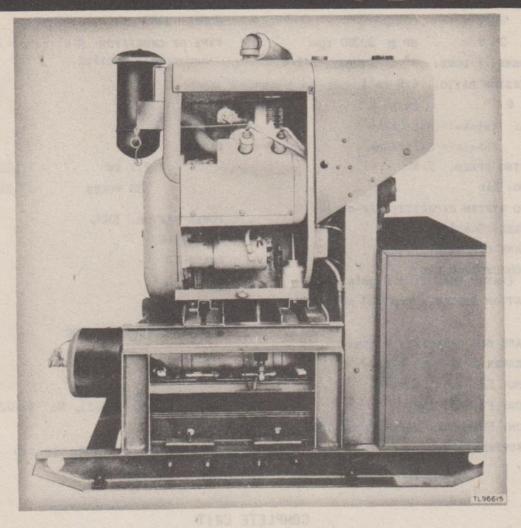
STOCK NO. 3H4596-A

STATUS: Limited standard

POWER UNIT

DATE APPROVED: 19 Jul 44

PE-99-A



POWER UNIT PE-99-A

Power Unit PE-99-A is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, air-cooled, V-type electric-starting gasoline engine, with a belt-driven a-c generator of the revolving field, separately excited type.

The engine is rated 20.5 horsepower at 2,200 revolutions per minute, and consumes approximately 1.8 gallons of fuel per hour at rated load.

The generator is rated at 7.5 kilowatts, 60 cycles, 3-phase, 120 volts, 36 amperes at 100 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps v-h-f equipment; Radio Control Net Systems SCS-2 and SCS-3; Radio Sets SCR-632, SCR-633, SCR-634, SCR-643, and SCR-645; and Control Set SCR-642.

POWER UNIT PE-99-A

ENGINE CHARACTERISTICS

MAKE: Wisconsin Motors Corp (gasoline)

MODEL: VE-4

RATED: 20.5

HP @ 2,200 rpm

CYLINDERS: 4 BORE: 3" STROKE: 3-1/4"

COMPRESSION RATIO: 4.6 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Silchrome

Exhaust: Silchrome

OPERATING SPEED: 2,200 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 7 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD):

1.8 gals

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 4 qts

AIR CLEANER: Oil-bath type

STARTING: Electric, 6 volts

GOVERNOR: Flyball type

IGNITION: Fairbanks Morse Type, JE4B Magneto

NOISE SUPPRESSION: -----

GENERATOR CHARACTERISTICS

MAKE: American Custom Built Motors

MODEL: 1280

TYPE OF GENERATOR: A-c, revolving field

separately excited.

RATING:

7.5 KW

7,500 WATTS

120 VOLTS

36 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 3

WIRES: 3

OPERATING SPEED: 1.800

DRIVE: Belt

NUMBER & TYPE OF BEARINGS: 2 Ball, No. 6210Z & 6308Z

INSULATION: Form-var, one dip

COMPLETE UNIT

LENGTH: 50"

WIDTH: 28"

HEIGHT: 55"

WEIGHT: (NET) 1,150 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

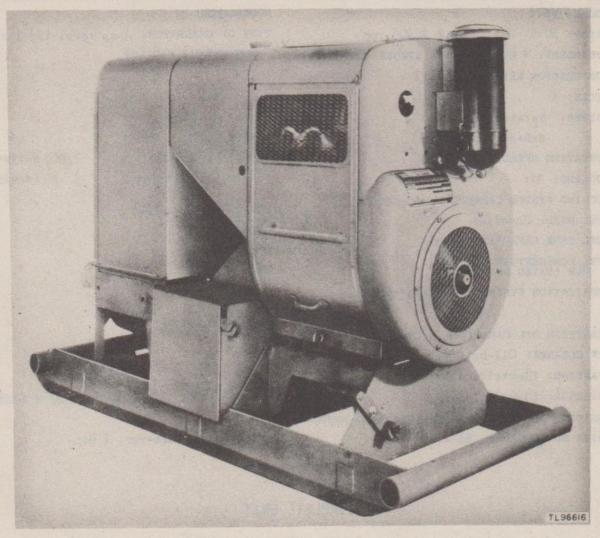
STOCK NO. 3H4599A.1

STATUS: Limited standard

POWER UNIT

DATE APPROVED: 19 Jul 44

PE-99-B-C



POWER UNIT PE-99-B, -C

Power Unit PE-99-B,-C is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, air-cooled, V-type electric-starting gasoline engine, with a belt-driven a-c generator of the revolving field, separately excited type.

The engine is rated 20.5 horsepower at 2,200 revolutions per minute, and consumes approximately 1.8 gallons of fuel per hour at rated load.

The generator is rated at 7.5 kilowatts, 60 cycles, 3-phase, 120 volts, 36 amperes at 100 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps v-h-f equipment; Radio Control Net Systems SCS-2 and SCS-3; Radio Sets SCR-632, SCR-633, SCR-634, SCR-643, SCR-644, and SCR-645; and Control Set SCR-642.

POWER UNIT PE-99-B, -C

ENGINE CHARACTERISTICS

MAKE: Wisconsin Motors Corp (gasoline)

MODEL: VE-4

RATED: 20.5

HP @ 2.200 rpm

CYLINDERS: 4 BORE: 3" STROKE: 3-1/4"

COMPRESSION RATIO: 4.6 to 1 HEAD: L CYCLE: 4

VALVES: Intake: Silchrome

Exhaust: Silchrome

OPERATING SPEED: 2,200 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 7 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.8

LUBRICATION SYSTEM: Pump and spaash

CRANKCASE OIL CAPACITY: 4 qts

AIR CLEANER: Oil-bath type STARTING: Electric, 12 volts

GOVERNOR: Flyball type

IGNITION: Fairbanks Morse type JE4B magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: American Custom Built Motors

MODEL: 1280

TYPE OF GENERATOR: A-c, revolving field,

separately excited

RATING:

7.5 KW

7,500 WATTS

120 VOLTS

36 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 3

WIRES: 3

OPERATING SPEED: 1,800

DRIVE: Belt

NUMBER & TYPE OF BEARINGS: 2-ball, No. 6210Z & 6308Z

INSULATION: Form-var, 1 dip

COMPLETE UNIT

LENGTH: 60"

WIDTH: 28"

HEIGHT: 41"

WEIGHT (NET) POWER UNIT PE-99-B: 1,140 lb

WEIGHT: (CRATED)

WEIGHT (NET) POWER UNIT PE-99-C; 1,080 lb

INSTRUCTIONAL LITERATURE

TM 11-923B for PE-99-B TM 11-923C for PE-99-C SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

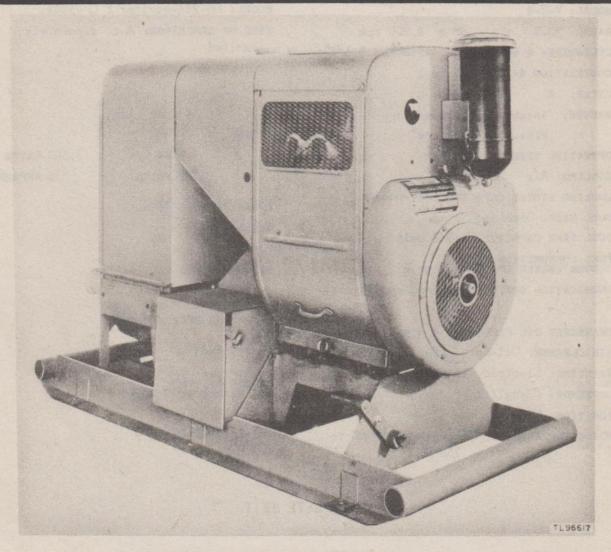
STOCK NO. 3H4599B and 3H4599C

STATUS: Limited standard

DATE APPROVED: 19 Jul 44

POWER UNIT

PE-99-D-E



POWER UNIT PE-99-D, -E

Power Unit PE-99-D, -E is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, air-cooled, V-type electric-starting, gasoline engine with belt-driven a-c generator of separately excited type.

The engine is rated 20.5 horsepower at 2,200 revolutions per minute and consumes approximately 1.8 gallons of fuel per hour at rated load.

The generator is rated at 7.5 kilowatts, 60 cycles, 3-phase, 120 volts, 36 amperes at 100 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps v-h-f equipment; Radio Control Net Systems SCS-2 and SCS-3; Radio Sets SCR-632, SCR-633, SCR-634, SCR-643, SCR-644, and SCR-645; and Control Set SCR-642.

POWER UNIT PE-99-D, -E

ENGINE CHARACTERISTICS

MAKE: Wisconsin Motor Corp (gasoline)

MODEL: V-E-4

RATED: 20.5 HP @ 2,200 rpm

CYLINDERS: 4 BORE: 3" STROKE: 3-1/4"

COMPRESSION RATIO: 4.6 to 1 CYCLE: 4

VALVES: Intake: Silchrome

Exhaust: Silchrome OPERATING SPEED: 2,200 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 9-3/4 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.8 gals

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 4 qts

AIR CLEANER: Oil-bath type STARTING: Electric, 12 volts

GOVERNOR: Flyball type

IGNITION: Magneto

NOISE SUPPRESSION: Suppressed 550 KC to

150 MC

GENERATOR CHARACTERISTICS

MAKE: Continental Electric Co

MODEL: DS-284-exciter F O -5604

TYPE OF GENERATOR: A-c, separately

excited

RATING:

7.5 KW

7,500 WATTS

120 VOLTS

36 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 3

WIRES: 3

OPERATING SPEED: 1,800

DRIVE: Belt

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 60"

WIDTH: 28"

HEIGHT: 42"

WEIGHT (NET) POWER UNIT PE-99-D: 1,140 1b

WEIGHT (NET) POWER UNIT PE-99-E: 1,085 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction book for PE-99-D TM-923E for PE-99-E

SECURITY CLASSIFICATION

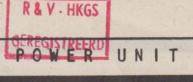
OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

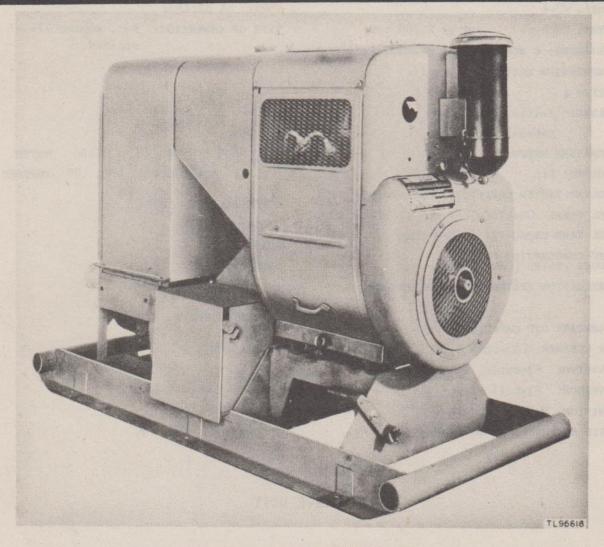
Signal Corps Ground Signal Agency

STOCK NO. 3H4599D and 3H4599E

STATUS: Limited standard



PE-99-F



POWER UNIT PE-99-F

Power Unit PE-99-F is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, air-cooled, V-type electric-starting gasoline engine, with a belt-driven, a-c generator of the separately excited type.

The engine is rated 20.5 horsepower, at 2,200 revolutions per minute, and consumes approximately 1.8 gallons of fuel per hour at rated load.

The generator is rated at 7.5 kilowatts, 60 cycles, 3-phase, 120 volts, 36 amperes at 100 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps v-h-f equipment; Radio Control Net Systems SCS-2 and SCS-3; Radio Sets SCR-632, SCR-633, SCR-634, SCR-643, SCR-644, and SCR-645; and Control Set SCR-642.

RESTRICTED 101

POWER UNIT PE-99-F

ENGINE CHARACTERISTICS

MAKE: Wisconsin Motor Corp (gasoline)

MODEL: VE-4

CYCLE: 4

HP @ 2,200 rpm **RATED: 20.5**

CYLINDERS: 4 BORE: 3" STROKE:3-1/4"

HEAD: L

COMPRESSION RATIO: 4.6 to 1

VALVES: Intake: Silchrome

Exhaust: Silchrome

OPERATING SPEED: 2,200 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 9-3/4 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD):

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 4 qts AIR CLEANER: Oil-bath type

STARTING: Electric, 12 volts

GOVERNOR: Flyball type

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL: 5A B254A21

TYPE OF GENERATOR: A-c, separately

excited.

RATING:

7.5 KW 7.500 WATTS

120 VOLTS

36 AMPERES

POWER FACTOR: 100%

CYCLE: 60

3 PHASE:

WIRES: 3

OPERATING SPEED: 1,800

DRIVE: Belt

NUMBER & TYPE OF BEARINGS:

2-ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 59"

WIDTH: 28"

HEIGHT: 42"

WEIGHT: (NET) 1,015 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-923F

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

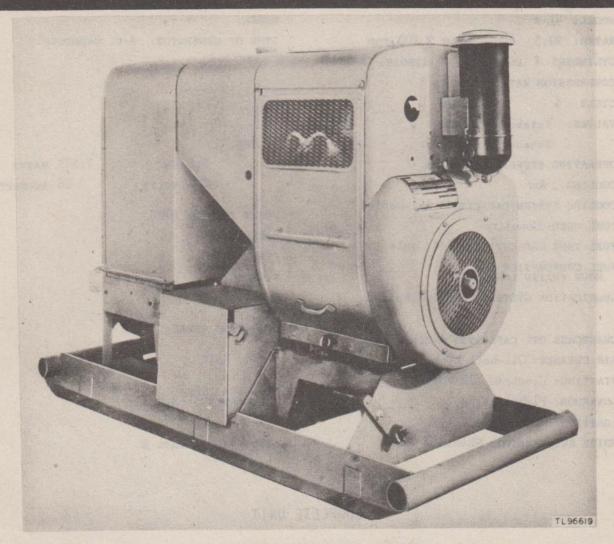
Signal Corps Ground Signal Agency

STOCK NO. 3H4599F

STATUS: Limited standard

POWER UNIT

PE-99-G



POWER UNIT PE-99-G

Power Unit PE-99-G is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, air-cooled, V-type Electric-starting gasoline engine with a belt-driven a-c generator, separately excited.

The engine is rated 20.5 horsepower at 2,200 revolutions per minute and consumes approximately 1.8 gallons of fuel per hour at rated load.

The generator is rated at 7.5 kilowatts, 60 cycles, 3-phase, 120 volts, 36 amperes at 100 percent power factor.

The principal application of this power unit is the furnishing of power tor the operation of Signal Corps v-h-f equipment; Radio Control Net Systems SCS-2 and SCS-3; Radio Sets SCR-632, SCR-633, SCR-634, SCR-643, SCR-644, and SCR-645; and Control Set SCR-642.

POWER UNIT PE-99-G

ENGINE CHARACTERISTICS

MAKE: Wisconsin Motor Corp (gasoline)

MODEL: VE-4

RATED: 20.5

HP @ 2,200 rpm

CYLINDERS: 4 BORE: 3" STROKE: 3-1/4"

COMPRESSION RATIO: 4.6 to 1 CYCLE: 4

VALVES: Intake: Silchrome

Exhaust: Silchrome

OPERATING SPEED: 2,200 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 9-3/4 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.8

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 4 qts AIR CLEANER: Oil-bath type

STARTING: Electric, 12 volts

GOVERNOR: Flyball type

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: F & S Electric Co

MODEL:

TYPE OF GENERATOR: A-c, separately

excited

RATING:

7.5 KW

7,500 WATTS

120 VOLTS

36 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 3

WIRES: 3

OPERATING SPEED: 1,800

DRIVE: Belt

NUMBER & TYPE OF BEARINGS: 2-ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 60"

WIDTH: 28"

HEIGHT: 41"

WEIGHT: (NET) 1,080 1b

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-923G

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

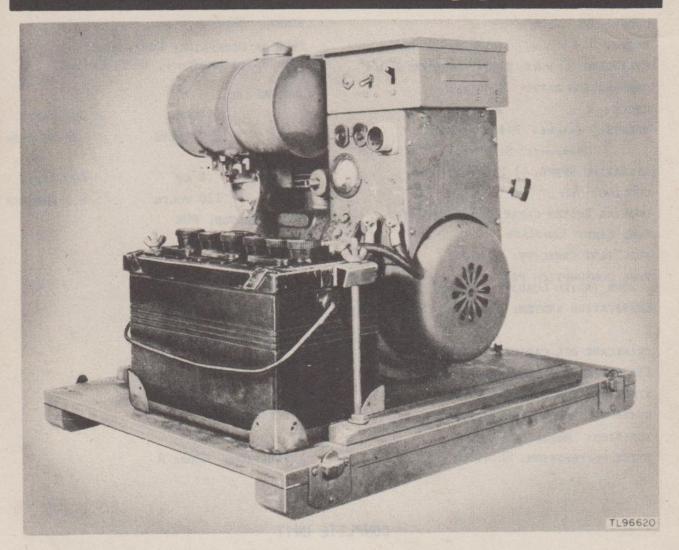
RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4599G

POWER UNIT

PE-108-A-B-C



POWER UNIT PE-108-A, -B, -C

Power Unit PE-108-A, -B, -C is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, electric-starting, gasoline engine directly connected to a dual-wound generator of the rotating armature type, with integral self-excitation.

The engine is rated 1.4 horsepower at 1,800 revolutions per minute, and consumes approximately 0.25 gallons of fuel per hour at rated load.

The generator has two windings; 600 watts, 60 cycles, single phase, 110 volts, 6.5 amperes at 80 percent power factor, and 300 watts at 12.5 volts, 24 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Set SCR-543-A.

RESTRICTED 105

POWER UNIT PE-108-A, -B, -C

ENGINE CHARACTERISTICS

MAKE: Wisconsin Motor Corp (gasoline)

MODEL: AA

RATED: 1.4 HP @ 1,800 rpm

CYLINDERS: 1 BORE: 2-1/4" STROKE: 2-3/4"

COMPRESSION RATIO: 4.4 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.25 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1 qt

AIR CLEANER: Oil-bath type

STARTING: Electric, 12 volts

GOVERNOR: Mechanical, flyball

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Pioneer Gen-E Motor

MODEL: BA-6

TYPE OF GENERATOR: Dual-wound, rotating armature, self-excited

.3 KW

300 WATTS

12.5 VOLTS

24 AMPERES

RATING (AC):

RATING (DC):

. 6 KW

600 WATTS

110 VOLTS

6.5 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS:

INSULATION: Class A

COMPLETE UNIT

LENGTH: 24"

WIDTH: 28"

HEIGHT: 23-3/4"

WEIGHT: (NET) 350 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-927

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

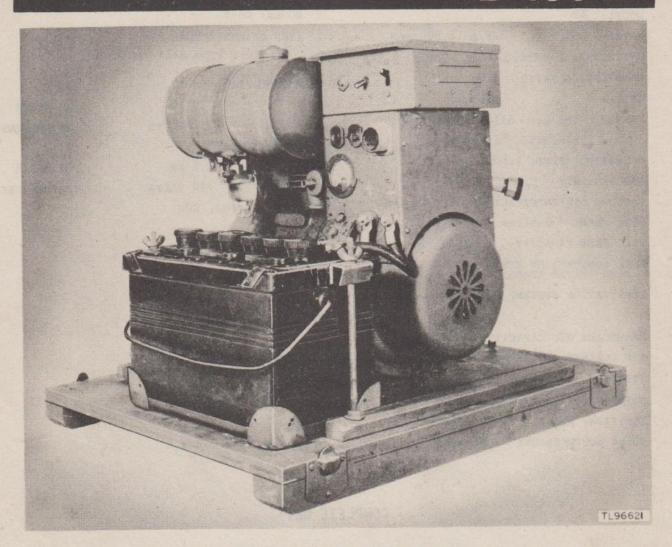
RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H46001Q8A, B&C

POWER UNIT

PE-108-E



POWER UNIT PE-108-E

Power Unit PE-108-E is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, electric-starting, gasoline engine, directly connected to an a-c, d-c generator of the rotating-armature, dual-winding type.

The engine is rated 2.3 horsepower at 1,800 revolutions per minute, and consumes approximately 0.25 gallon of fuel per hour at rated load.

The generator has two windings; 600 watts, 60 cycles, single phase, 110 volts, 6.5 amperes at 80 percent power factor, and 300 watts at 12.5 volts, 24 amperes direct current.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Set SCR-543-A.

POWER UNIT PE-108-E

ENGINE CHARACTERISTICS

MAKE: Wisconsin Motor Corp (gasoline)

MODEL: AB

HP @ 1,800 rpm RATED: 2.3

CYLINDERS: 1 BORE: 2-1/2 STROKE: 2-3/4

COMPRESSION RATIO: 4.6

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.25 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1 qt

AIR CLEANER: Oil-bath type

STARTING: Electric, 12 volts

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Suppressed

GENERATOR CHARACTERISTICS

MAKE: Pioneer Gen-E Motor

MODEL: BA-6

TYPE OF GENERATOR: A-c - d-c, rotating

armature type, self-excited.

RATING (DC):

.3 KW

300 WATTS

12.5 VOLTS

24 AMPERES

RATING (AC):

. 6 KW

600 WATTS

110 VOLTS

6.5 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS:

None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 24"

WIDTH: 28"

HEIGHT: 23-3/4"

WEIGHT: (NET) 320 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-927

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

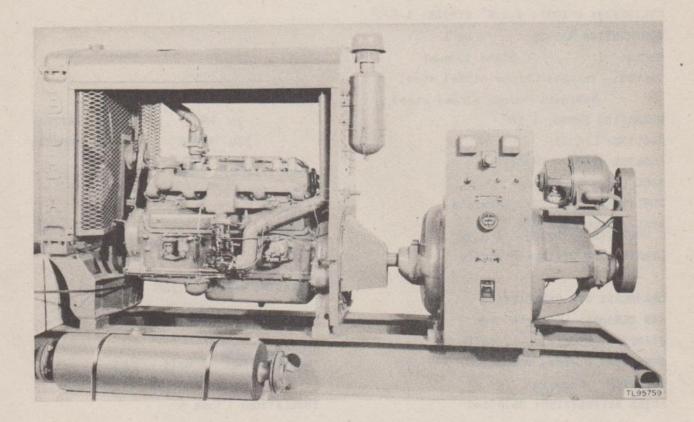
RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4600-108E

STATUS: SEE BELOW * POWER UNIT PE-113-B

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY.



POWER UNIT PE-113-B

Power Unit PE-113-B is an electric generating set consisting of a 6-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator.

The engine is rated 63.5 horsepower at 1,200 revolutions per minute, and consumes approximately 4 gallons of fuel per hour at rated load.

The generator is rated at 25 kilowatts, 60 cycles, 3-phase, 240 volts, 75 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue. No more to be procured.

POWER UNIT PE-113-B

ENGINE CHARACTERISTICS

MAKE: Buda & Equipment Co (gasoline)

MODEL: K-428

RATED: 63.5

HP @ 1,200 rpm

CYLINDERS: 6 BORE: 4-3/8" STROKE: 4-3/4"

COMPRESSION RATIO:

to 1

CYCLE: 4

HEAD: L-head

VALVES: Intake: Chrome nickel steel

Exhaust: Chrome nickel steel

OPERATING SPEED: 1,200

COOLING: Liquid

COOLING SYSTEM CAPACITY:

FUEL USED: Gasoline

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 4 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY:

AIR CLEANER: Oil-bath type.

STARTING: Electric, 12 volts

GOVERNOR: Pierce, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Wooley (rebuilt)

MODEL: Frame-O MT-336, O MT-536 or 654C

TYPE OF GENERATOR: A-C

RATING:

25 KW

25,000 WATTS

240 VOLTS

75 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

WIRES: 4

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTHI

WIDTH:

HEIGHT:

WEIGHT: (NET)

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book, Stock No.

3H4600-113B/B1

TM 11-917 (when published)

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4600113B

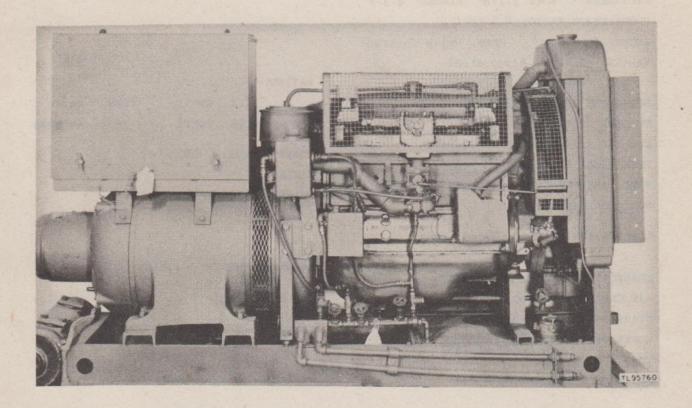
RESTRICTED

STATUS: SEE BELOW *

POWER UNIT

PE-127-B

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-127-B

Power Unit PE-127-B is an electric generating set consisting of a 6-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric starting gasoline engine, directly connected to an a-c generator.

The engine is rated 34 horsepower at 1,200 revolutions per minute, and consumes approximately 1.9 gallons of fuel per hour at rated load.

The generator is rated at 7.5 kilowatts, 60 cycles, single phase, 120 volts, 78.1 amperes at 80 percent power factor.

NOTE: This power unit was issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* No more to be procured. None available for issue.

RESTRICTED

POWER UNIT PE-127-B

ENGINE CHARACTERISTICS

GENERATOR CHARACTERISTICS

MAKE: Continental (gasoline)

MODEL: OS. 202

RATED: 34

HP @ 1,200 rpm

CYLINDERS: 6 BORE: 3-1/8" STROKE: 4-3/8"

COMPRESSION RATIO: 6.5 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 24 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 7.2 gals or remote supply

FUEL CONSUMPTION PER HOUR (RATED LOAD):

1.9 gals

LUBRICATION SYSTEM: Forced feed

CRANKCASE OIL CAPACITY: 6 qts

AIR CLEANER: Oil-bath type

STARTING: Electric 6 volts

GOVERNOR: Pierce No. D-10010 (Duplex No.)
Or, Model MA-1452

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

MAKE: Century Electric Co

MODEL: APC-365Y

TYPE OF GENERATOR: A-c

RATING:

7.5

7,500 WATTS

KW 120 VOLTS

78.1 AMPERES

80% POWER FACTOR:

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 76-1/4"

WIDTH: 26"

HEIGHT: 45"

WEIGHT: (NET) 2,400

WEIGHT: (CRATED) 2,600 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No. 3H4600-127-B/B1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

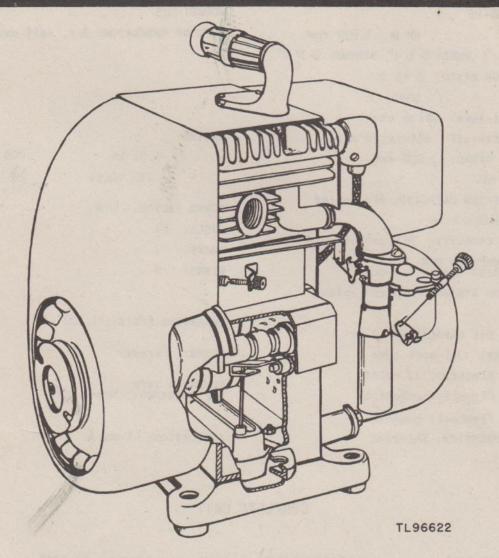
RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4600-127B

POWER UNIT

PE-129-A



POWER UNIT PE-129-A

Power Unit PE-129-A is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the self-exciting type.

The engine is rated 1 horsepower at 1,800 revolutions per minute, and consumes approximately 0.2 gallon of fuel per hour at rated load.

The generator is rated at 350 watts, 60 cycles, single phase, 110 volts, 4 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Test Equipment I-109, and Signal Corps Radio Set SCR-515.

RESTRICTED 113

POWER UNIT PE-129-A

ENGINE CHARACTERISTICS

MAKE: D. W.Onan & Sons (gasoline)

MODEL: 358-RS

RATED: 1

HP @ 1,800 rpm

CYLINDERS: 1 BORE: 2-1/4" STROKE: 2-1/4"

CYCLE: 4 HEAD: L

VALVES: Intake: Alloy steel
Exhaust: Silchrome steel

OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: Air-cooled

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.2 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1 qt
AIR CLEANER: Oil-bath type
STARTING: Electric, 12 volts
GOVERNOR: Flyball, mechanical
IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D. W. On an & Sons

MODEL: 385

TYPE OF GENERATOR: A-c, self-excited

RATING:

0.35 KW

350 WATTS

110 VOLTS

4 AMPERES

POWER FACTOR: 80%

CYCLE: 60
PHASE: 1
WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 15-1/2"

WIDTH: 9-1/2"

HEIGHT: 14-1/2"

WEIGHT: (NET) 105 lb

WEIGHT: (CRATED) 184 1b

INSTRUCTIONAL LITERATURE

Instruction Book

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: RESTRICTED

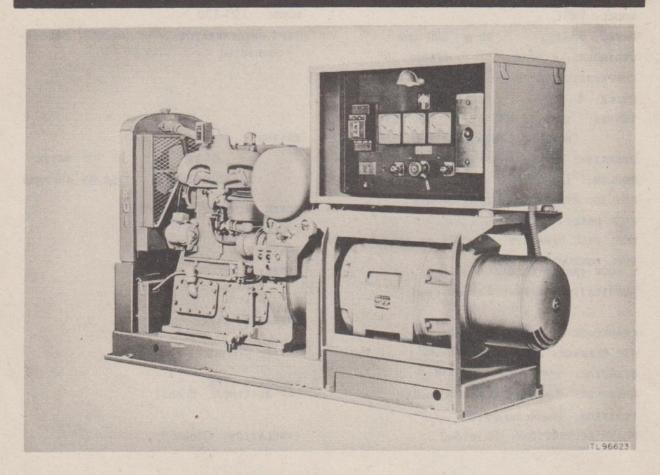
RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4600-129A

POWER UNIT

PE-137-A



POWER UNIT PE-137-A

Power Unit PE-137-A is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator with exciter direct-connected.

The engine is rated 54 horsepower at 900 revolutions per minute, and consumes approximately 4 gallons of fuel per hour at rated load.

The generator is rated at 25 kilowatts, 120/208 volts, 150/87 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-527, SCR-615, and SCR-627.

RESTRICTED 115

POWER UNIT PE-137-A

ENGINE CHARACTERISTICS

MAKE: LeRoi Co (gasoline)

MODEL: D471

RATED: 54

HP @ 900 rpm

CYLINDERS: 4 BORE: 5" STROKE: 6"

COMPRESSION RATIO: 6 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: SAE steel, No. 3140

Exhaust: Thompson, XCR

OPERATING SPEED: 900 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 36 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 15 gals or remote supply

FUEL CONSUMPTION PER HOUR (RATED LOAD): 4 gals

LUBRICATION SYSTEM: Forced-feed

CRANKCASE OIL CAPACITY: 28 qts

AIR CLEANER: Air Maze-27U-OBF

STARTING: Electric, 12 volts

GOVERNOR: Woodward SGX, Hydraulic

IGNITION: Bosch magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL: 12G-130

TYPE OF GENERATOR: A-c, exciter direct-

connected

RATING:

25 KW

25.000 WATTS

120/208 VOLTS

150/87 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE:

4 WIRES:

OPERATING SPEED: 900

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 115-1/2"

WIDTH: 32"

HEIGHT: 63-1/4"

WEIGHT: (NET) 4,665 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-921

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4600-137A

STATUS: Standard

POWER UNIT

PE-141-A

NO PHOTOGRAPH OR DRAWING AVAILABLE

POWER UNIT PE-141-A

Power Unit PE-141-A is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving field, self-exciting type.

The engine is rated 13.5 horsepower at 1,800 revolutions per minute, and consumes approximately 0.7 gallon of fuel per hour at rated load.

The generator is rated at 3 kilowatts, 60 cycles, single phase, 115 volts, 33 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-591, AN/CRN-2, and AN/CRN-5; and Instrument Landing Equipment SCR-241.

POWER UNIT PE-141-A

ENGINE CHARACTERISTICS

MAKE: Waukesha (gasoline)

MODEL: 1CK

RATED: 13.5

HP @ 1,800 rpm

CYLINDERS: 4 BORE: 2-1/2" STROKE: 3-1/8"

COMPRESSION RATIO: 6 to 1

CYCLE: 4 HEAD: L

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VALVES: Intake: Nickel steel

OPERATING SPEED: 1,800 rpm

Exhaust: Silchrome

COOLING: Liquid

COOLING SYSTEM CAPACITY: 8 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 3 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.7 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 3 qts

AIR CLEANER: Screen

STARTING: Electric 6 volts GOVERNOR: Waukesha - Flyball

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Marble Card Co

MODEL: GA-SLX-1-10

TYPE OF GENERATOR: A-c, revolving field,

self-excited

RATING:

3 KW

3,000 WATTS

115 VOLTS

33 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 48-3/4"

WIDTH: 20-3/4"

HEIGHT: 36-1/4"

WEIGHT: (NET) 800 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

STOCK NO. 3H4600-141A

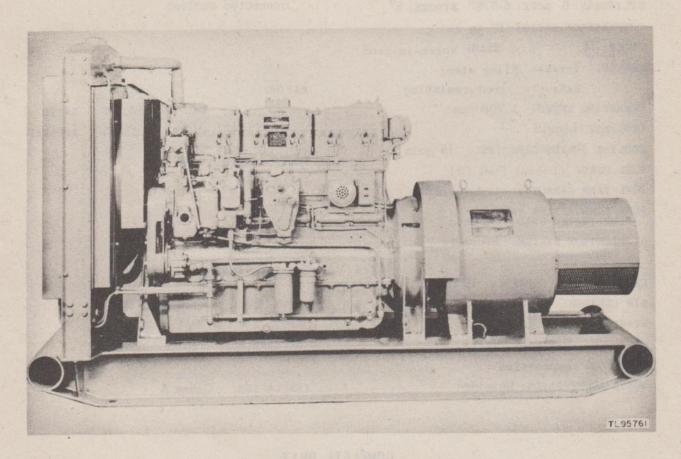
RESTRICTED

STATUS: SEE BELOW *

POWER UNIT

PE-142-D.E

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-142-D, E

Power Unit PE-142-D₇E is an electric generating set consisting of a 6-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting Diesel engine, directly connected to an a-c generator, with direct connected exciter.

The engine is rated 90 horsepower at 1,200 revolutions per minute, and consumes approximately 5 gallons of fuel per hour at rated load.

The generator is rated at 50 kilowatts, 60 cycles, 3-phase, 240 volts, 150.5 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

Power Unit PE-142-E is equipped with frequency meter and speed control that will enable this unit to be operated at 50 cps. When operated at 50 cps maximum output is 40KW.

* Available and preferred for issue.

POWER UNIT PE-142-D, -E

ENGINE CHARACTERISTICS

MAKE: Cummins (Diesel)

MODEL: HI 600

RATED: 90 HP @ 1,200 rpm CYLINDERS: 6 BORE: 4-7/8" \$TROKE: 6"

COMPRESSION RATIO: 17 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Alloy steel

Exhaust: Heat-resisting

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 15 gals

FUEL USED: Diesel Fuel Oil
FUEL TANK CAPACITY: Underground

FUEL CONSUMPTION PER HOUR (RATED LOAD): 5 gals
LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 12 gals

AIR CLEANER: Oil-bath

STARTING: Electric
GOVERNOR: Woodward

IGNITION: Compression

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Electric Machinery Co

MODEL: AC-6

TYPE OF GENERATOR: A-c with directly

connected exciter

RATING:

50 kW 50,000 WATTS 240 VOLTS 150.5 AMPERES

POWER FACTOR: 80%

CYCLE: 60
PHASE: 3
WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 1 Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 11'

WIDTH: 4' 2"

HEIGHT: 7'

WEIGHT: (NET) 6,300 lb

WEIGHT: (CRATED) 7,300 lb

INSTRUCTIONAL LITERATURE

TM 11-942D for PE-142-D TM 11-942E for PE 142-E SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

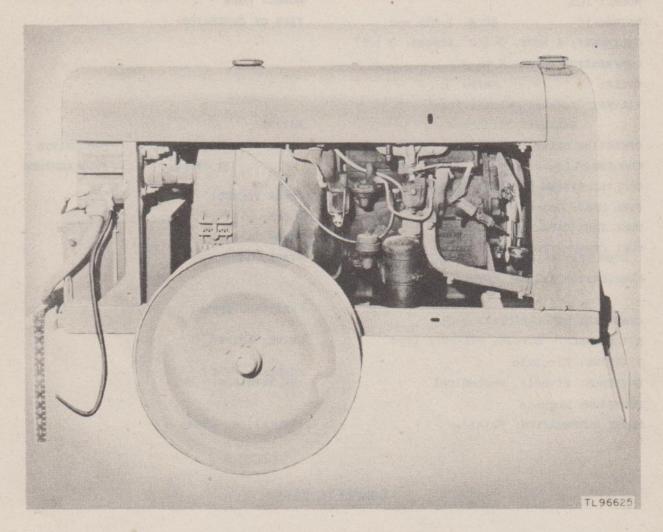
STOCK NO. 3H4600-142D-142E

STATUS: Standard

POWER UNIT

DATE APPROVED: 30 Oct 43

PE-143-B-C



POWER UNIT PE-143-B, -C

Power Unit PE-143-B, -C is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to a d-c generator.

The engine is rated 12 horsepower, at 1,800 revolutions per minute, and consumes approximately 1.2 gallons of fuel per hour at rated load.

The generator is rated at 500 watts, 28.5 volts, 17.5 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Test Equipment IE-13, IE-50 and Radio Set SCR-521.

POWER UNIT PE-143-B, -C

ENGINE CHARACTERISTICS

MAKE: Waukesha Motor Co (gasoline)

MODEL: ICK

HP @ 1,800 rpm RATED: 12

CYLINDERS: 4 BORE: 2-1/2" STROKE: 3-1/8"

COMPRESSION RATIO: 6 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Nickel steel

Exhaust: Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 8 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.2 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4 qts

AIR CLEANER: Screen, oil-bath type

STARTING: Electric

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Kurz-Root Co

MODEL: None

TYPE OF GENERATOR: D-C

RATING:

5 KW

500 WATTS

28.5VOLTS

17.5 AMPERES

POWER FACTOR: -----

CYCLE: ----

PHASE: ----

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE

OF BEARINGS: Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 80"

WIDTH: 30"

HEIGHT: 34"

WEIGHT: (NET) 542 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book, Stock No.

3H4600-143B/B1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

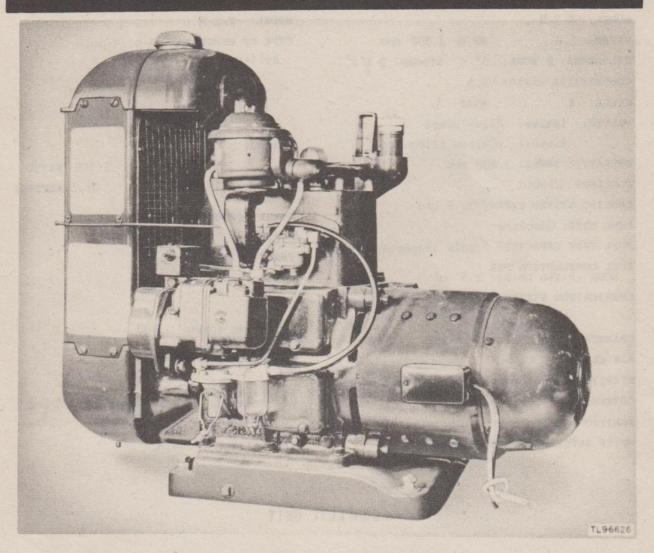
STOCK NO.

3H4600-143-B-C

STATUS:

POWER UNIT

PE-144



POWER UNIT PE-144

Power Unit PE-144 is an electric generating set consisting of a 2-cylinder, 4-cycle, L-head, liquid-cooled, manual (crank), and electric-starting gasoline engine, directly connected to an a-c generator of the 4-pole, self-exciting type.

The engine is rated 5.1 horsepower at 1,800 revolutions per minute and consumes approximately 0.5 gallon of fuel per hour at rated load.

The generator is rated at 1.5 kilowatts, 60 cycles, single phase, 115 volts, 17.5 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-621 and SCR-641.

POWER UNIT PE-144

ENGINE CHARACTERISTICS

GENERATOR CHARACTERISTICS

MAKE: D. W. Onan & Sons (gasoline)

MODEL: W-2-M

RATED: 5.1 HP @ 1,800 rpm

CYLINDERS: 2 BORE: 3" STROKE: 2-3/4"

COMPRESSION RATIO: 5.5

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Chrome alloy steel

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 9 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gals (separate)

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.5 gal

LUBRICATION SYSTEM: Pressure and spray

CRANKCASE OIL CAPACITY: 6 qts

AIR CLEANER: Oil-bath type

STARTING: Manual (crank) and electric, 12-volt

GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

MAKE: D. W. Onan & Sons

MODEL: W-2-M

TYPE OF GENERATOR: A-c, 4-pole,

self-excited.

RATING:

1.5 KW

1,500 WATTS

115 VOLTS

17.5 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 ball, on outboard end

of generator

INSULATION: Class A

COMPLETE UNIT

LENGTH:

WIDTH:

HEIGHT:

WEIGHT: (NET)

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book, stock No.

3H4512/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4512

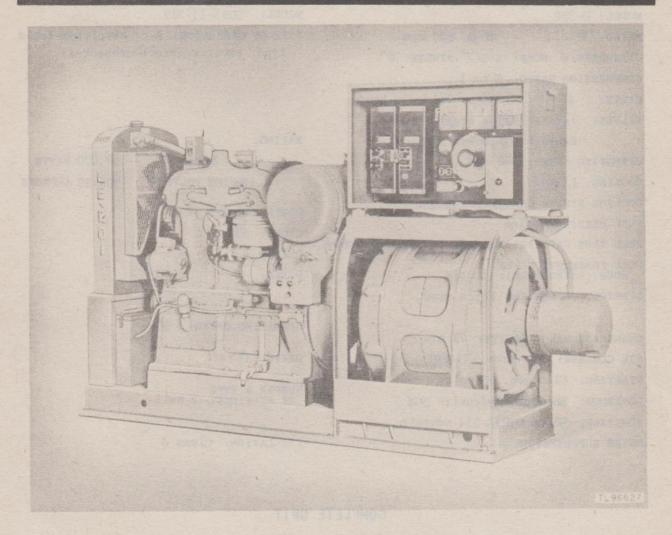
124

RESTRICTED

STATUS: Standard

POWER UNIT

PE-145-A



POWER UNIT PE-145-A

Power Unit PE-145-A is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator of the revolving-field type with exciter direct-connected.

The engine is rated 48 horsepower at 900 revolutions per minute and consumes approximately 4 gallons of fuel per hour at rated load.

The generator is rated at 20 kilowatts, 60 cycles, single phase, 120/208 volts, and 208/90 amperes at 80 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Set SCR-545-A.

POWER UNIT PE-145-A

ENGINE CHARACTERISTICS

MAKE: LeRoi Co (gasoline)

MODEL: D-382

RATED: 48 HP @ 900 rpm

CYLINDERS: 4 BORE: 4-1/2" STROKE: 6"

COMPRESSION RATIO: 6 to 1

CYCLE: 4 HEAD: valve-in-head

VALVES: Intake: Alloy steel

Exhaust: Thompson XCR

OPERATING SPEED: 900 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 36 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 15 gals or remote supply

FUEL CONSUMPTION PER HOUR (RATED LOAD): 4 gals

LUBRICATION SYSTEM: Force feed

CRANKCASE OIL CAPACITY: 28 qts

AIR CLEANER: Air maze 37U-OBF

STARTING: Electric, 12 volts

GOVERNOR: Woodward-Hydraulic SGX

IGNITION: Bosch MJB4A-314 magneto

NOISE SUPPRESSION: -----

GENERATOR CHARACTERISTICS

MAKE: Westinghouse Flectric & Mfg Co

MODEL: S085-11-380

TYPE OF GENERATOR: A-c. revolving-field

type, exciter direct-connected

RATING:

20 KW

20,000 WATTS

120/208 VOLTS

208/90 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES:

OPERATING SPEED: 900

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 111-3/4"

WIDTH: 32"

HEIGHT: 63-7/8"

WEIGHT: (NET) 4,945 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-929

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4600-145A

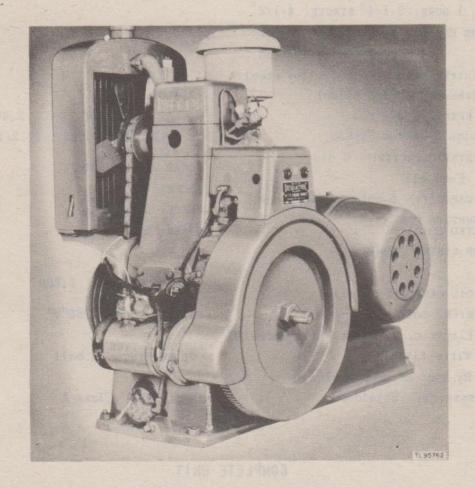
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STATUS: SEE BELOW *

POWER UNIT

PE-148-A

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-148-A

Power Unit PE-148-A is an electric generating set consisting of a single cylinder, 4-cycle, valve-in-head, liquid-cooled, (Thermo-syphon) electric-starting Diesel engine, with an a-c generator of the self-exciting type, belt-driven.

The engine is rated 4 horsepower at 1,200 revolutions per minute, and consumes 0.278 gallon of fuel per hour at rated load.

The generator is rated at 2.4 kilowatts, 60 cycles, single phase, 110/220 volts and 27.2/13.6 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

POWER UNIT PE-148-A

ENGINE CHARACTERISTICS

MAKE: Witts Engine Works (Diesel)

MODEL: VD-11

RATED: 4 HP @ 1200 rpm

CYLINDERS: 1 BORE: 3-1/4" STROKE: 4-1/2"

COMPRESSION RATIO: 19 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Heat-treated alloy steel

Exhaust: Chrome nickel

OPERATING SPEED: 1,200 rpm

COOLING: Liquid Thermo-Syphon

COOLING SYSTEM CAPACITY: 8 qts

FUEL USED: Fuel oil

FUEL TANK CAPACITY: 5 gals (remote tank)

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.278

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 5 qts

AIR CLEANER: Oil-bath

STARTING: Electric, 12 volts, Witte Model AD

GOVERNOR: Witte flyball

IGNITION: By heat of compression

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Kato Engineering Co

MODEL: 33AD

TYPE OF GENERATOR: A-c, self-excited

RATING:

2.4 KW 2,400 WATTS

110/220 VOLTS 27.2/13.6 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 3

OPERATING SPEED: 1,800

DRIVE: Belted 2B60"V"

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 37-3/8"

WIDTH: 23-1/2"

HEIGHT: 36-1/2"

WEIGHT: (NET) 900 lb

WEIGHT: (CRATED) 1130

INSTRUCTIONAL LITERATURE

Instruction Book (Witte Model VD-11) stock No. 3H4512.3-1/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

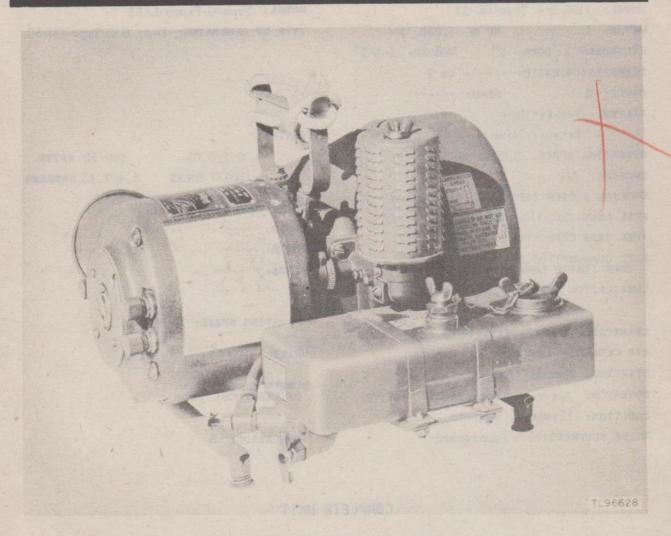
STOCK NO. 3H4512.3-1

STATUS: Standard

POWER UNIT

DATE APPROVED: 24 Oct 44

PE-162



POWER UNIT PE-162

Power Unit PE-162 is an electric generating set consisting of a 1-cylinder, 2-cycle, air-cooled, manual-starting (rope) gasoline engine, directly-connected to a d-c generator of the revolving-magnet type.

The engine is rated 1 horsepower, at 3,000 revolutions per minute, and consumes approximately 0.15 gallon of fuel per hour at rated load.

The generator has two windings, 200 watts at 500 volts, 0.4 amperes direct current and 50 watts at 7 volts, 7.5 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets AN/TRC-2 (modified SCR-694), SCR-284.

POWER UNIT PE-162

ENGINE CHARACTERISTICS

MAKE: Jacobsen Mfg Co (gasoline)

MODEL: J100 S C Type GE-12

HP @ 3,000 rpm

CYT.INDERS: 1 BORE: 2" STROKE: 1-1/2"

COMPRESSION RATIO: ---- to 1

CYCLE: 2

HEAD: ----

VALVES: Intake: None

Exhaust: None

OPERATING SPEED: 3,000 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline and oil

FUEL TANK CAPACITY: 0.3 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.15 gal

LUBRICATION SYSTEM: Gas and oil mixed

CRANKCASE OIL CAPACITY: None

AIR CLEANER: Dry type

STARTING: Manual (rope)

GOVERNOR: Air-vane, mechanical

IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Suppressed

GENERATOR CHARACTERISTICS

MAKE: Leland Electric Co

MODEL: Type-G-Frame-L-55

TYPE OF GENERATOR: D-c, S C Type GN-50

RATING:

0.2/0.05 200/50 WATTS

500/7 VOLTS 0.4/7.15 AMPERES

POWER FACTOR: -----

CYCLE: -----

PHASE: -----

WIRES: -----

OPERATING SPEED: 3,000

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: None

INSULATION: A

COMPLETE UNIT

LENGTH: 16-1/4"

WIDTH: 18-1/2"

HEIGHT: 11"

WEIGHT: (NET) 42 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-971 (when published)

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

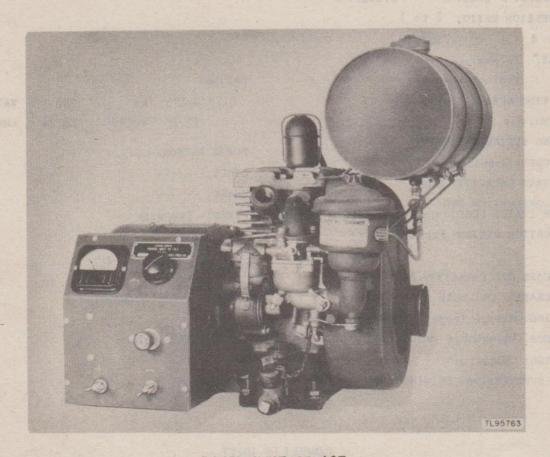
STOCK NO. 3H4600-162

STATUS: SEE BELOW *

POWER UNIT

PE-167

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-167

Power Unit PE-167 is an electric generating set consisting of a single-cylinder, 4-cycle, L-head, air-cooled, manual (rope) starting gasoline engine, directly connected to a d-c generator.

The engine is rated 1.4 horsepower at 2,350 revolutions per minute and consumes approximately 0.06 gallon of fuel per hour at rated load.

The generator has two outputs, 350 watts at 12 volts, 28 amperes direct current, and 175 watts at 6 volts 24 amperes direct current.

This power unit is used for battery charging.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment.

* Available and preferred for issue.

POWER UNIT PE-167

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: NP

RATED: 1.4 HP @ 2,350 rpm TYPE OF GENERATOR: D-c

CYLINDERS: 1 BORE: 2" STROKE: 2"

COMPRESSION RATIO: 5 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: -----

Exhaust: -----

OPERATING SPEED: 2,350 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: -----

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): approximately 0.06 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 1 pt

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Adjustable mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Atlas Aircraft Products Corp.

MODEL: 3DP2

RATING:

0.35/0.175 KW 350/175 WATTS

> 28/24 AMPERES 12/6 VOLTS

POWER FACTOR: ----

CYCLE: -----

PHASE: -----

WIRES: Two-wire

OPERATING SPEED: 2,350

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: None

INSULATION: ----

COMPLETE UNIT

LENGTH: 18" (Approx) WIDTH: 12-1/2" (Approx) HEIGHT: 15-1/2" (Approx)

WEIGHT: (NET) 75 lb

WEIGHT: (CRATED) 108 lb

INSTRUCTIONAL LITERATURE

TM 11-946

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

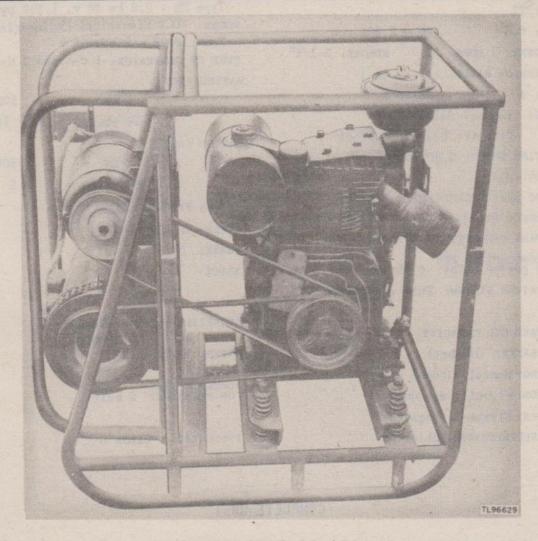
RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4600-167

RESTRICTED

DATE: Standard POWER UNIT PE-173



POWER UNIT PE-173

Power Unit PE-173 is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, belt driven a-c and d-c generators.

The engine is rated 6.5 horsepower at 2,800 revolutions per minute and consumes approximately 0.65 gallon of fuel per hour at rated load.

The generators are rated; 600 watts, 1,200 cycles, single phase, 80 volts, 7.5 amperes at 100 percent power factor and 500 watts, 28 volts, 18 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Transmitting Set AN/TPT-1, and Radio Set SCR-602.

POWER UNIT PE-173

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: ZZ

RATED: 6.5 HP @ 2,800 rpm

CYLINDERS: 1 BORE: 3" STROKE: 3-1/4"

COMPRESSION RATIO: ---- to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 2.800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: -----

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1.25 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.65 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1-1/2 qts

AIR CLEANER: Oil-bath

STARTING: Manual, (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: (AC) Small Electric Motor Co Type SS - 0.6 kw 80 v, 1,200 cycle

MODEL: (DC) Electrical Engineering Co

Type 18928 - 5 kw. 28 v

TYPE OF GENERATOR: 1 a-c and 1 d-c

RATING (DC):

.5 KW

500 WATTS

28 VOLTS

18 AMPERES

RATING (AC):

.6 KW

600 WATTS

80 VOLTS

7.5 AMPERES

POWER FACTOR: 100%

CYCLE: 1,200

PHASE: 1

WIRES: 4

OPERATING SPEED: 2770 A-C

3300 D-C

DRIVE: Belt

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH:

WIDTH:

WEIGHT: (NET)

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: RESTRICTED

TM 11-1326

TM 11-1426

TM 11-1526 (when published)

RESPONSIBLE AGENCY:

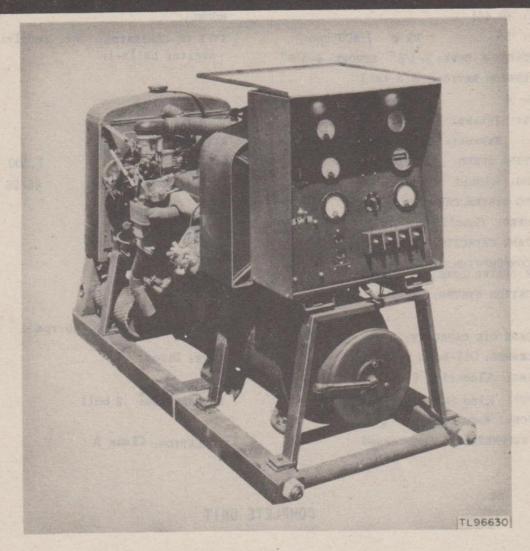
Signal Corps Ground Signal Agency

STOCK NO. 3H4600A

RESTRICTED

POWER UNIT

PE-182



POWER UNIT PE-182

Power Unit PE-182 is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly-connected to an a-c generator of the revolving-field type.

The engine is rated 35 horsepower at 1,800 revolutions per minute and consumes 1.4 gallons of fuel per hour at rated load.

The generator is rated at 7.5 kilowatts, 60 cycles, 3-phase, 120/208 volts, 46/26 amperes at 80 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Set SCR-682.

30 April 1945

POWER UNIT PE-182

ENGINE CHARACTERISTICS

MAKE: Willys Overland Motor Co (gasoline)

MODEL: JP 441

HP @ 1,800 rpm RATED: 35

CYLINDERS: 4 BORE: 3-1/8" STROKE: 4-3/8"

COMPRESSION RATIO: 6.5 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Alloy steel -Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 20 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10-1/2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.4 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 5 qts

AIR CLEANER: Oil-bath type

STARTING: Electric, 6 volt

GOVERNOR: King Seeley No. 267 10-326

IGNITION: Wico magneto

NOISE SUPPRESSION: Suppressed

GENERATOR CHARACTERISTICS

MAKE: Hobart Brothers

MODEL:

TYPE OF GENERATOR: A-c, revolving-field,

exciter built-in

RATING:

7.5 KW

7,500 WATTS

120/208 YOLTS

46/26 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

WIRES: 4

OPERATING SPEED: 1,800 rpm

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 59"

WIDTH: 24" HEIGHT: 40"

WEIGHT: (NET) 1,125 1b

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-939

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

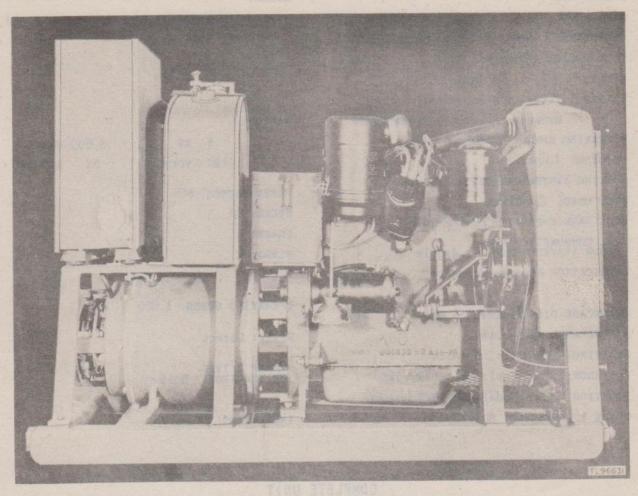
STOCK NO. 3H4600-182

STATUS: Substitute standard

POWER UNIT

DATE APPROVED: 26 Nov 43

PE-183-A



POWER UNIT PE-183-A

Power Unit PE-183-A is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator of the revolving-field type with integral excitation.

The engine is rated 35 horsepower at 1,800 revolutions per minute and consumes approximately 1.4 gallons of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, single phase, 120 volts, 52 amperes at 80 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Set SCR-682.

POWER UNIT PE-183-A

ENGINE CHARACTERISTICS

The Color of the C

MAKE: Willys Overland Motor Co (gasoline)

MODEL: 442

RATED: 35 HP @ 1,800 rpm

CYLINDERS: 4 BORE: 3-1/8" STROKE: 4-3/8"

COMPRESSION RATIO: 6.5 to 1

CYCLE: 4 HEAD: L VALVES: Intake: Alloy steel

Exhaust: Alloy steel-silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 20 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10-1/2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.4 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 5 qts

AIR CLEANER: Oil-bath

STARTING: Electric, 6 volts

GOVERNOR: King Seely No. 26710-326
IGNITION: Wico Model JEM 1677 magneto

NOISE SUPPRESSION: Shielded

MAKE: Hobart Brothers

MODEL:

TYPE OF GENERATOR: A-c, revolving-field,

GENERATOR CHARACTERISTICS

exciter built-in

RATING:

5 KW 5,000 WATTS
120 VOLTS 52 AMPERES

POWER FACTOR: 80%

CYCLE: 60 PHASE: 1 WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 59"

WIDTH: 24"

HEIGHT: 38"

WEIGHT: (NET) 1,115 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-937

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

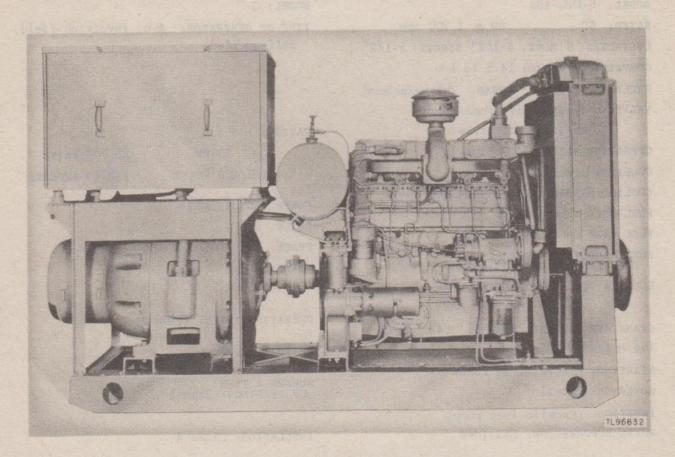
RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4600-183A

POWER UNIT

PE-185-A-B



POWER UNIT PE-185-A, -B

Power Unit PE-185-A, -B is an electric generating set consisting of a 6-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting, full Diesel engine directly connected to an a-c generator of the revolving-field, self-exciting type.

The engine is rated 60 horsepower at 1,200 revolutions per minute and consumes approximately 3 gallons of fuel per hour at rated load.

The generator is rated at 25 kilowatts, 60 cycles, 3-phase, 120/208 volts, and 150/87 amperes at 80 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Sets SCR-270, SCR-271, SCR-615, SCR-627, SCR-527 and SCR-516.

POWER UNIT PE-185-A-B

ENGINE CHARACTERISTICS

MAKE: Buda Model 6-DTG-468 (Diesel)

MODEL: 6-DIG-468

HP @ 1,200 rpm RATED: 60

CYLINDERS: 6 BORE: 4-1/4" STROKE: 5-1/2"

COMPRESSION RATIO: 14.5 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Silchrome

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 44 qts

FUEL USED: Diesel fuel

FUEL TANK CAPACITY: 15 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 3 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 31 qts

AIR CLEANER: Oil-bath

STARTING: Electric, 24 volts

GOVERNOR: Excello

IGNITION: (Excello fuel pump) NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Westinghouse Electric and Mfg Co

MODEL: G

TYPE OF GENERATOR: A-c, revolving-field,

self-excited

RATING:

25 KW

25,000 WATTS

120/208 VOLTS

150/87 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

WIRES: 4

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE
OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 115-1/2"

WIDTH: 33-1/8"

HEIGHT: 63-1/4"

WEIGHT: (NET) 5,785 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-925 for PE-185-A TM 11-925B for PE-185-B SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

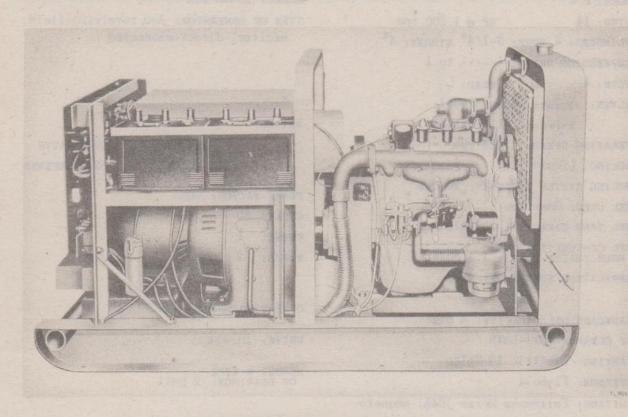
RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4600-185A, and B

POWER UNIT

PE-195-A



POWER UNIT PE-195-A

Power Unit PE-195-A is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator of the revolving field type, with exciter direct-connected.

The engine is rated 14 horsepower at 1,200 revolutions per minute, and consumes approximately 1.1 gallons of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, single phase, 120 volts, 52.5 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for British model WT stations.

POWER UNIT PE-195-A

ENGINE CHARACTERISTICS

MAKE: Waukesha Motor Co (gasoline)

MODEL: F C

RATED: 14 HP @ 1,200 rpm CYLINDERS: 4 BORE: 3-1/4" STROKE: 4"

COMPRESSION RATIO: ---- to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Alloy steel

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 20 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.1 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4 qts

AIR CLEANER: Oil-bath

STARTING: Electric 12 Volts

GOVERNOR: Flyball

IGNITION: Fairbanks Morse JE4A, magneto

NOISE SUPPRESSION: Shielded INSULATION: Class A

GENERATOR CHARACTERISTICS

MAKE: Marble Cord Co

MODEL: 28XCX-232

TYPE OF GENERATOR: A-c, revolving-field,

exciter, direct-connected

RATING:

5 KW

5,000 WATTS

120 VOLTS

52.5 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

COMPLETE UNIT

LENGTH: 74"

WIDTH: 30"

HEIGHT: 38-1/2"

WEIGHT: (NET) 1,900 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

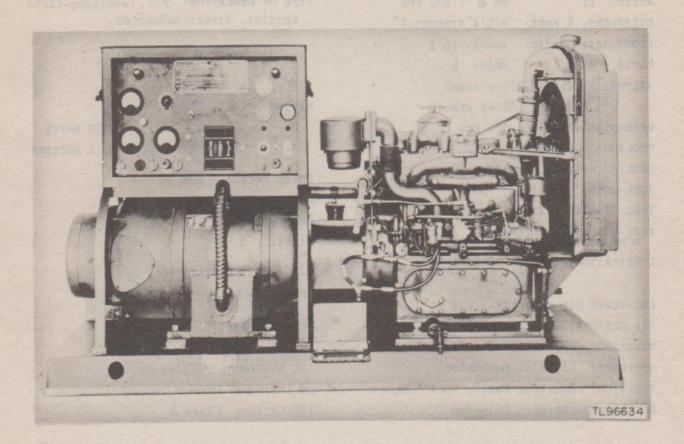
STOCK NO. 3H4600-195A

STATUS: Limited standard

POWER UNIT

DATE APPROVED: 19 Jul 44

PE-196-A



POWER UNIT PE-196-A

Power Unit PE-196-A is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 14 horsepower, at 1,200 revolutions per minute and consumes approximately 0.8 gallon of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, single phase, 120 volts, 52.5 amperes at 80 percent power factor.

The principal application of this power unit is to furnish power for the operation of Signal Corps Radio Sets SCR-582 and SCR-682.

POWER UNIT PE-196-A

ENGINE CHARACTERISTICS

MAKE: Waukesha Motor Co (gasoline)

MODEL: FC

RATED: 14 HP @ 1,200 rpm CYLINDERS: 4 BORE: 3-1/4"STROKE: 4"

COMPRESSION RATIO: ---- to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Alloy steel

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 20 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.8 gal

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 0.4 qt

AIR CLEANER: Oil-bath type

STARTING: Electric, 12 volts

GOVERNOR: Flyball, mechanical

IGNITION: American Bosch, MJC4C magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: American Custom Built

MODEL: Frame - 1326

TYPE OF GENERATOR: A-c, revolving-field

exciter, direct-connected.

RATING:

5 KW

5,000 WATTS

120 VOLTS

52.5 AMPERES

POWER FACTOR: 80%

CYCLE:

1 PHASE:

WIRES: 2

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS:

Roller

EXCITATION: Direct-connected

INSULATION: Class A

COMPLETE UNIT

LENGTH: 72"

WIDTH: 30"

HEIGHT: 41-1/2"

WEIGHT: (NET) 1,800 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

Instruction Book

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: RESTRICTED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

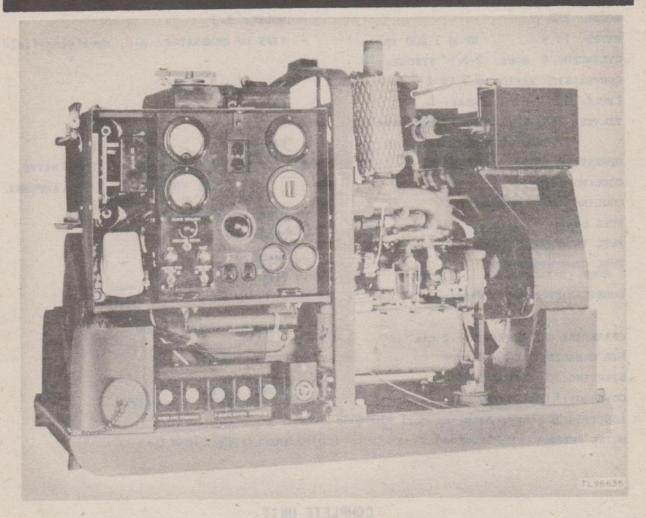
STOCK NO. 3H4600-196A

STATUS: Standard

POWER UNIT

DATE APPROVED: 19 Jul 44 .

PE-197



POWER UNIT PE-197

Power Unit PE-197 is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator of the revolving-field type.

The engine is rated 13.5 horsepower at 1,800 revolutions per minute and consumes approximately 1.2 gallons of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, single phase, 120 volts, 52.5 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-573, SCR-575, and SCR-643; and Control Sets SCR-572 and SCR-642.

POWER UNIT PE-197

ENGINE CHARACTERISTICS

MAKE: Hercules Motors Corp (gasoline)

MODEL: ZXB

RATED: 13.5

HP @ 1,800 rpm

CYLINDERS: 4 BORE: 2-5/8" STROKE: 3"

COMPRESSION RATIO: 6.3 to 1 CYCLE: 4 HEAD: L

VALVES: Intake: Crome nickel steel

Exhaust: Austemite

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY:

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.2 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 4 qts

AIR CLEANER: Oil-bath type STARTING: Electric, 6 volts

GOVERNOR: King Seeley

IGNITION: Battery. Autolite coil #IG-4065

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Hobart Brothers

MODEL: 5-J

TYPE OF GENERATOR: A-c, revolving-field

RATING:

5 KW

5,000 WATTS

120 VOLTS

52.5 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: Single ball

INSULATION: Class C

COMPLETE UNIT

LENGTH: 44"

WIDTH: 22"

HEIGHT: 31-1/4"

WEIGHT: (NET) 785 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-940

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

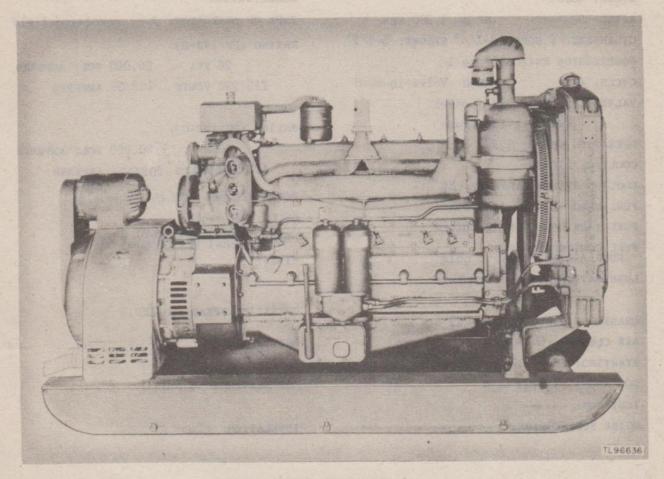
RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4600-197

POWER UNIT

PE-198-B-C



POWER UNIT PE-198-B, -C

Power Unit PE-198-B, -C is an electric generating set consisting of a 6-cylinder 4-cycle, valve-in-head, liquid-cooled, gasoline and electric-starting (24 to 32 volts), Diesel engine, directly connected to an a-c generator of the revolving-field type.

The engine is rated at 53 horsepower at 1,200 revolutions per minute, and consumes approximately 3 gallons of fuel per hour at rated load.

The generator is made in two styles. In the PE-198-B, the generator is rated at 20 kilowatts, 60 cycles, 3-phase, 115/230 volts 112/56 amperes at 90 percent power factor. In the PE-198-C, the generator is rated at 20 kilowatts, 60 cycles, single phase, 110/220 volts, 202/101 amperes at 90 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Set SCR-588.

POWER UNIT PE-198-B, -C

ENGINE CHARACTERISTICS

MAKE: Caterpillar Tractor Co (Diesel)

MODEL: 4600

HP @ 1,200 rpm RATED: 53

CYLINDERS: 6 BORE: 4-1/4" STROKE: 5-1/2"

COMPRESSION RATIO: 17 to 1

HEAD: Valve-in-head CYCLE: 4

VALVES: Intake: Alloy steel

Exhaust: Silchrome OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 56 qts

FUEL USED: Diesel fuel oil

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 3 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 22 qts

AIR CLEANER: Oil-bath

STARTING: Gasoline and electric (24 to 32 volts)
NUMBER & TYPE

GOVERNOR: Flyball

IGNITION: -----

NOISE SUPPRESSION: -----

GENERATOR CHARACTERISTICS

MAKE: Louis Allis Co

MODEL: -----

TYPE OF GENERATOR: A-c, revolving-field

RATING (PE-198-B):

20 KVA

20,000 VOLT AMPERES

112/56 AMPERES 115/230 VOLTS

RATING (PE-198-C):

20,000 VOLT AMPERES 20 KVA

110/220 VOLTS 202/101 AMPERES

POWER FACTOR: 90% (both models)

CYCLE: 60 cycle

PHASE: (Model PE-198-B) 3 Model PE-198-C) 1

WIRES: 9

OPERATING SPEED: 1,200

DRIVE: Direct

OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 99-1/24 WIDTH: 32" HEIGHT: 49"

WEIGHT: (NET) 4,520 lb WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-936 (when published)

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

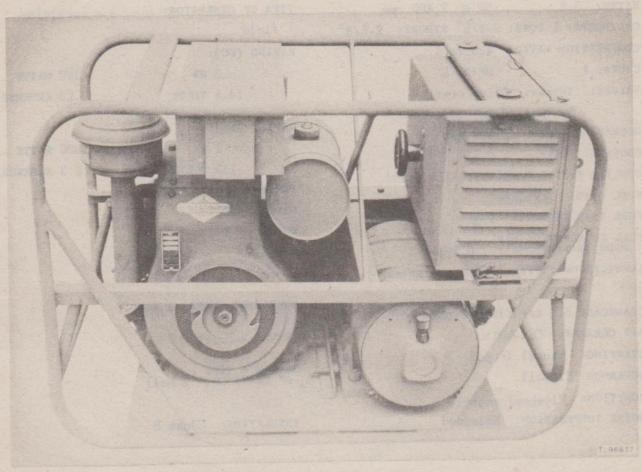
STOCK NO. 3H4600-198B-C

STATUS: Limited standard

POWER UNIT

DATE APPROVED: 3 Mar 45

PE-201-A-B-C



POWER UNIT PE-201-A, -B, -C

Power Unit PE-201-A, -B, -C is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine with an a-c, d-c generator of the revolving-field, dual-winding type, belt-driven.

The engine is rated 3.3 horsepower at 2,400 revolutions per minute, and consumes approximately 0.5 gallon of fuel per hour at rated load.

The generator has two windings; 1 kilowatt, 60 cycles, single phase, at 115 volts, 8.3 amperes at 80 percent power factor; and 300 watts at 14.5 volts, 20 amperes direct current.

The principal application of the power unit is the furnishing of power for the operation of telephone carrier systems, including Telephone Terminal Set TC-21: Telephone Terminal CF-1 and Telegraph Terminal CF-2.

POWER UNIT PE-201-A, -B, -C

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: B

HP @ 2,400 rpm RATED: 3.3

CYLINDERS: 1 BORE: 2-5/8" STROKE: 2-5/8"

COMPRESSION RATIO: 4.5 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome steel

OPERATING SPEED: 2,400 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD):

0.5 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 3 pts

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Flyball

IGNITION: Flywheel, magneto NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Leland Electric Co

MODEL: A-50

TYPE OF GENERATOR: a-c, d-c revolving-

field

RATING (DC):

.3 KW

300 WATTS

14.5 VOLTS

20 AMPERES

RATING (AC):

1 KW

1000 WATTS

115 VOLTS

8.3 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE:

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: V-belts

NUMBER & TYPE
OF BEARINGS: 2 ball

INSULATION: Class B

COMPLETE UNIT

LENGTH: 36"

WIDTH: 19"

HEIGHT: 24"

WEIGHT: (NET) 300 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-914 for PE-201-A & B

TM 11-914C for PE-201-C

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4600-201A, B & C

RESTRICTED

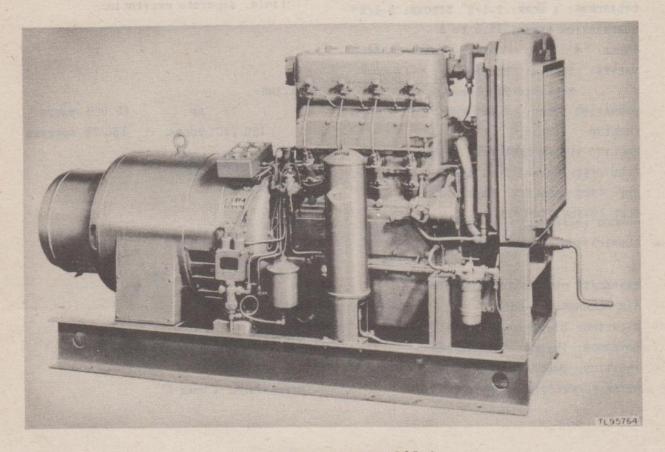
STATUS:

SEE BELOW *

POWER UNIT

PE-205-A

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-205-A

Power Unit PE-205-A is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting full Diesel engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 34 horsepower at 1,200 revolutions per minute and consumes approximately 1.6 gallons of fuel per hour at rated load.

The generator is rated at 15 kilowatts, 60 cycles, single phase, 120/240 volts, 156/78 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

RESTRICTED . 151

POWER UNIT PE-205-A

ENGINE CHARACTERISTICS

MAKE: Hill Diesel Engine Co (Diesel)

MODEL: 4R

HP @ 1,200 rpm RATED: 34

CYLINDERS: 4 BORE: 3-1/2" STROKE: 5-1/2"

COMPRESSION RATIO: 15.5 to 1

HEAD: Valve-in-head CYCLE: 4

VALVES: Intake: Silchrome

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 28 qts.

FUEL USED: Diesel fuel oil FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.6 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 30 qts.

AIR CLEANER: Oil-bath

STARTING: Electric 24 Volts GOVERNOR: Pierce - Mechanical IGNITION: Bosch - pump, fuel

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL: 21G342, Frame - 944-E

TYPE OF GENERATOR: A-c, revolving field, separate excitation.

RATING:

15 KW 15,000 WATTS

156/78 AMPERES 120/240 VOLTS

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1 WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 92" WIDTH: 30" HEIGHT: 51"

WEIGHT: (NET) 3,000 lb

WEIGHT: (CRATED) 4,469 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No. 3H4600-205A/B1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

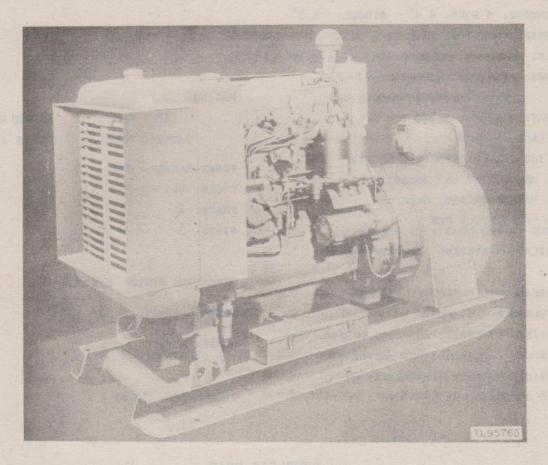
STOCK NO. 3H4600-205A

STATUS: SEE BELOW .

POWER UNIT

PE-205-B

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-205-B

Power Unit PE-205-B is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting, full-Diesel engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 46 horsepower at 1,200 revolutions per minute and consumes approximately 1.6 gallons of fuel per hour at rated load.

The generator is rated at 15 kilowatts, 60 cycles, single phase, 120/240 volts, 156/78 amperes at 80 percent power factor.

NOTE: This power unit was issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* None available for issue.

POWER UNIT PE-205-B

ENGINE CHARACTERISTICS

MAKE: International Harvester Co (Diesel)

MODEL: UD-9

HP @ 1,200 rpm RATED: 46

CYLINDERS: 4 BORE: 4.4" STROKE: 5.5"

COMPRESSION RATIO: 14.2 to 1

CYCLE: 4 HEAD: Valve-in-head

VALVES: Intake: Nickel steel

Exhaust: Silchrome steel

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 52 qts

FUEL USED: Fuel oil (gasoline to start)

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD):

1.6 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 11 gts

AIR CLEANER: Oil-bath

STARTING: Electric, 12 volts on gasoline

GOVERNOR: International Harvester

IGNITION: Magneto (for starting)

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL: ASI, Frame -944E, form HA

TYPE OF GENERATOR: A-c revolving field

RATING:

15 KW

15,000 WATTS

120/240 VOLTS

156/78 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE
OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 85-1/4"

WIDTH: 28"

58" HEIGHT:

WEIGHT: (NET) 3,770 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-970

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4600-205B

RESTRICTED

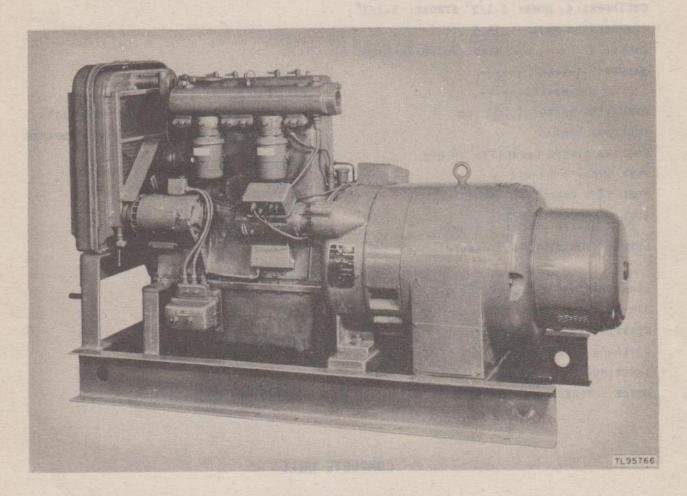
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STATUS: SEE BELOW *

POWER UNIT

PE-207-A

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-207-A

Power Unit PE-207-A is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting Diesel engine, directly connected to an a-c generator.

The engine is rated 34 horsepower at 1,200 revolutions per minute, and consumes approximately 1.6 gallons of fuel per hour at rated load.

The generator is rated at 15 kilowatts, 60 cycles, three phase, 120/208 volts, 90/52 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

POWER UNIT PE-207-A

ENGINE CHARACTERISTICS

MAKE: Hill (Diesel)

MODEL: 4R

RATED: 34 HP @ 1,200 rpm

CYLINDERS: 4 BORE: 3-1/2" STROKE: 5-1/2"

COMPRESSION RATIO: 15.5 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: -----

Exhaust: -----

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 28 qts

FUEL USED: Fuel oil

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.6 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 30 qts

AIR CLEANER: Oil-bath

STARTING: Electric 24 volt

GOVERNOR: Mechanical

IGNITION: Compression

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL: 12G342

TYPE OF GENERATOR: A-C

RATING:

15 KW

15,000 WATTS

120/208 VOLTS

90/52 AMPERES

POWER FACTOR: 80%

CYCLE: 60

3 PHASE:

WIRES: 4

OPERATING SPEED: 1.200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 92"

WIDTH: 30"

·HEIGHT: 51"

WEIGHT: (NET) 3,000 lb WEIGHT: (CRATED) 4,000 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No.

3H4600-207A/B1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4600-207A

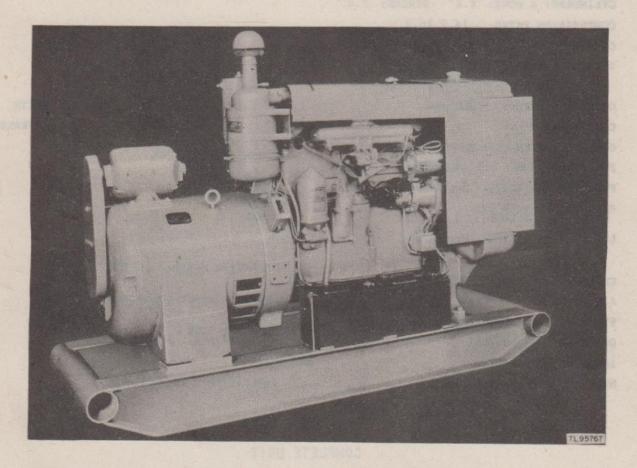
STATUS:

SEE BELOW *

POWER UNIT

PE-207-B

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-207-B

Power Unit PE-207-B is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting (on gasoline) Diesel engine, directly connected to an a-c generator.

The engine is rated 46 horsepower at 1,200 revolutions per minute, and consumes approximately 1.75 gallons of fuel per hour at rated load.

The generator is rated at 15 kilowatts, 60 cycle, 3-phase, 200 volts, 54 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

POWER UNIT PE-207-B

ENGINE CHARACTERISTICS

MAKE: International Harvester (Diesel)

MODEL: UD-9

RATED: 46 HP @ 1.200 rpm

CYLINDERS: 4 BORE: 4.4" STROKE: 5.5"

COMPRESSION RATIO: 14.2 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Nickel steel

Exhaust: Silchrome steel

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 52 qts

FUEL USED: Fuel oil (gasoline-starting)

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.75 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 11 qts

AIR CLEANER: Oil-bath

STARTING: Electric-starting, on gasoline

GOVERNOR: Mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL: 12 G 668

TYPE OF GENERATOR: A-c

RATING:

15 KW

15.000 WATTS

200 VOLTS

54 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 83"

WIDTH: 30"

HEIGHT: 61"

WEIGHT: (NET) 3,867 lb WEIGHT: (CRATED) 5,900 lb

INSTRUCTIONAL LITERATURE

TM 11-970, Revised (when published)

Instruction Book, stock No.

3H4600-207B/B1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4600-207B

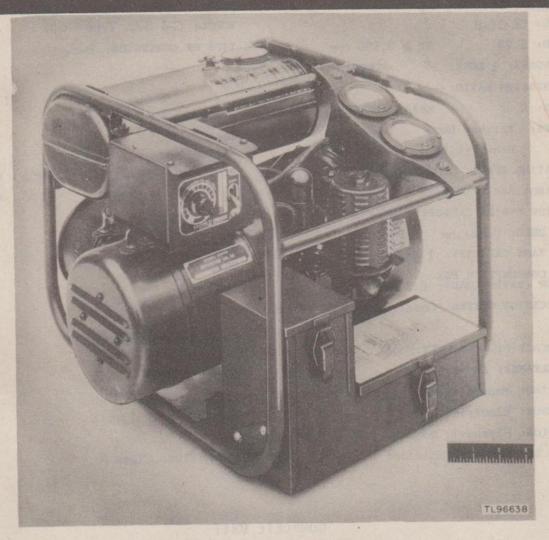
RESTRICTED

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STATUS: Standard

POWER UNIT

PE-210-B



POWER UNIT PE-210-B

Power Unit PE-210-B is an electric generating set consisting of a 1-cylinder, 2-cycle, air-cooled, manual-starting (rope), gasoline engine directly connected to a d-c generator of the shunt-wound, open, 4-pole type.

The engine is rated 1.25 horsepower at 3,600 revolutions per minute and consumes approximately 0.2 gallon of fuel per hour at rated load.

The generator is rated at 450 watts, 15 volts, 30 amperes direct current, and can be used to charge 6- or 12-volt storage batteries.

While the principal application of this power unit is the furnishing of power for charging storage batteries, it may also be incorporated as an aid in starting larger units in subzero temperatures.

POWER UNIT PE-210-B

ENGINE CHARACTERISTICS

MAKE: Jacobsen Mfg Co (gasoline)

MODEL: GE-12-B

RATED: 1.25

HP @ 3,600 rpm

CYLINDERS: 1 BORE: 2" STROKE: 1-1/2"

COMPRESSION RATIO: -----

CYCLE: 2

HEAD: Ported

VALVES: Intake: None

Exhaust: None

OPERATING SPEED: 3,600 rpm

COOLING: Air-cooled

COOLING SYSTEM CAPACITY: -----

FUEL USED: Gasoline

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.2 gal

LUBRICATION SYSTEM: Gasoline and oil mixed

CRANKCASE OIL CAPACITY: None

AIR CLEANER: Dry-type

STARTING: Manual (rope)

GOVERNOR: Electric

IGNITION: Flywheel, magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Electric Motors & Specialty Co

MODEL: G-1 S.C. Type GN-52

TYPE OF GENERATOR: D-C,

RATING:

0.450 KW

450 WATTS

15 VOLTS

30 AMPERES

30 April 1945

POWER FACTOR: -----

CYCLE: ----

PHASE: ----

WIRES: 2

OPERATING SPEED: 3,600

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 17-3/4"

WIDTH: 13-374"

HEIGHT: 12-13/16"

WEIGHT: (NET) 61 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-947

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

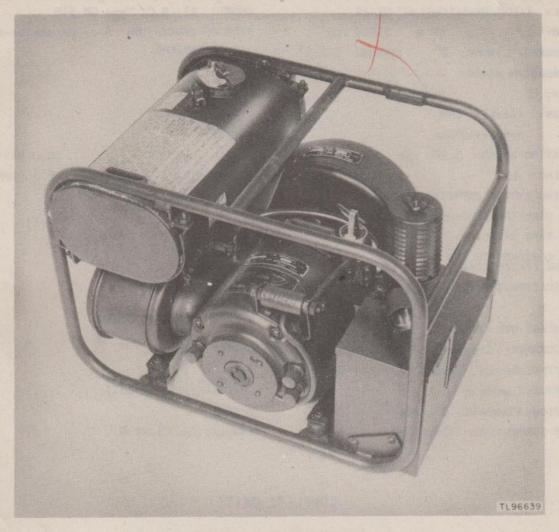
STOCK NO. 3H4600-210-()

RESTRICTED

160

STATUS: Standard POWER · UNIT

PE-214-B



POWER UNIT PE-214-B

Power Unit PE-214-B is an electric generating set consisting of a 1-cylinder, 2-cycle, air-cooled, manual-starting (rope), gasoline engine, directly connected to an a-c generator of the permanent magnet, self-exciting type.

The engine is rated 1 horsepower at 3,600 revolutions per minute and consumes approximately 0.15 gallon of fuel per hour at rated load.

The generator is rated at 300 watts, 60 cycles, single phase, 120/240 volts, 2.6/1.3 amperes at 100 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets SCR-237, SCR-634, and SCR-648; Radio Transmitting Equipment AN/CRN-8; and Public Address Set AN/TIQ-3.

RESTRICTED 161

POWER, UNIT PE-214-B

ENGINE CHARACTERISTICS

MAKE: Jacobsen Mfg Co (gasoline)

MODEL: J-100 (Modified) SC-GE-12

HP @ 3,600 rpm RATED: 1

CYLINDERS: 1 BORE: 2" STROKE: 1-1/2"

COMPRESSION RATIO: -----

CYCLE: 2

HEAD:

VALVES: Intake: None

Exhaust: None

OPERATING SPEED: 3,600 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: None

FUEL USED: Gasoline and oil, mixed

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.15 gal

LUBRICATION SYSTEM: Oil mixed with gas

CRANKCASE OIL CAPACITY: None

AIR CLEANER: Staynew

STARTING: Manual, (rope)

GOVERNOR: Electric

IGNITION: Flywheel, magneto NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Electric Motors & Specialty Co

MODEL: Al; S.C. Type GN-51B

TYPE OF GENERATOR; A-c. permanent-magnet.

self-excited

RATING:

0.3 KW

300 WATTS

120/240 VOLTS

2.6/1.3 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: Single

WIRES: 2

OPERATING SPEED: 3,600

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 18-5/16"

WIDTH: 14"

HEIGHT: 10-7/8"

WEIGHT: (NET) 39-3/4 lb

WEIGHT: (CRATED) 86-3/4 lb

TYPE OF HOUSING: Open

INSTRUCTIONAL LITERATURE

TM 11-945

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

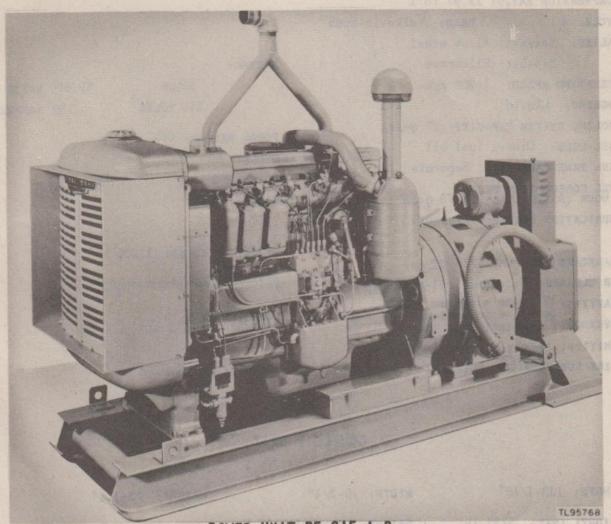
STOCK NO. 3H4600-214B

STATUS: SEE BELOW *

POWER UNIT

PE-215-A-B

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-215-A-B

Power Unit PE-215-A, -B is an electric generating set consisting of a 6-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting (on gasoline) Diesel engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 76 horsepower at 1,200 revolutions per minute, and consumes approximately 4.79 gallons of fuel per hour at rated load.

The generator is rated at 50 kilowatts, 60 cycles, 3-phase, 240 volts, 150 amperes at 80 percent power factor.

NOTE; This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

POWER UNIT PE-215-A, -B

ENGINE CHARACTERISTICS

MAKE: International Harvester (Diesel)

MODEL: UD18

RATED: 76 HP @ 1,200 rpm

CYLINDERS: 6 BORE: 4-3/4" STROKE: 6-1/2"

COMPRESSION RATIO: 13.67 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 27 gals

FUEL USED: Diesel fuel oil

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 4.79 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 22 qts

AIR CLEANER: Donaldson oil-bath type

STARTING: 12 volts electric, with

GOVERNOR: Fly-weight type (Bosch)

IGNITION: Magneto, starting only

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL: ATI: Frame 953E Form HA 12-G-308

TYPE OF GENERATOR: A-c revolving field

separately excited

RATING:

50 KW

50,000 WATTS

240 VOLTS

150 AMPERES

POWER FACTOR: 80%

CYCLE: 60

3 PHASE:

WIRES: 4

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 133-1/16"

WIDTH: 40-3/4"

HEIGHT: 73-1/4"

WEIGHT: (NET) 5731 lb

WEIGHT: (CRATED) 8925 lbs

INSTRUCTIONAL LITERATURE

Instruction Book for PE-215-A TM 11-941 for PE-215-B (when published)

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

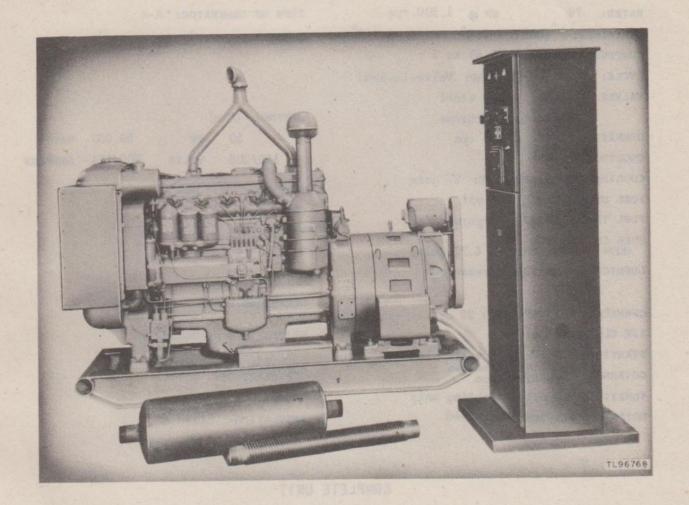
RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4600-215-A and 215-B

POWER UNIT

PE-215-C



POWER UNIT PE-215-C

Power Unit PE-215-C is an electric generating set consisting of a 6-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting (with gasoline injection) Diesel engine directly connected to an a-c generator.

The engine is rated 76 horsepower at 1,200 revolutions per minute and consumes approximately 4.79 gallons of fuel per hour at rated load.

The generator is rated at 50 kilowatts, 60 cycles, 3-phase, 120/208 volts, 300/174 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Set AN/CPS-1.

POWER UNIT PE-215-C

ENGINE CHARACTERISTICS

MAKE: International Harvester Co.

MODEL: UD-18

RATED: 76

HP @ 1,200 rpm

CYLINDERS: 6 BORE: 4-3/4" STROKE: 6-1/2"

COMPRESSION RATIO: 13.67 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 27 gals

FUEL USED: Diesel fuel oil

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD):

4.79 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 22 qts

AIR CLEANER: Cil-bath

STARTING: Electric, 12 volts with gasoline injection GOVERNOR: Flyweight type

IGNITION: Magneto, starting only

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: International Harvester Co.

UD-18 MODEL:

TYPE OF GENERATOR: A-c

RATING: (A-c)

50 KW 50,000 WATTS

120/208 VOLTS 300/174 AMPERES

POWER FACTOR: 80%

CYCLE: 60

3 PHASE:

WIRES:

OPERATING SPEED: 1,200 rpm

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 133-1/16"

WIDTH: 40-3/4"

HEIGHT: 73-1/4"

WEIGHT: (NET) 5,731 lb

8,925 lb WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-941C

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

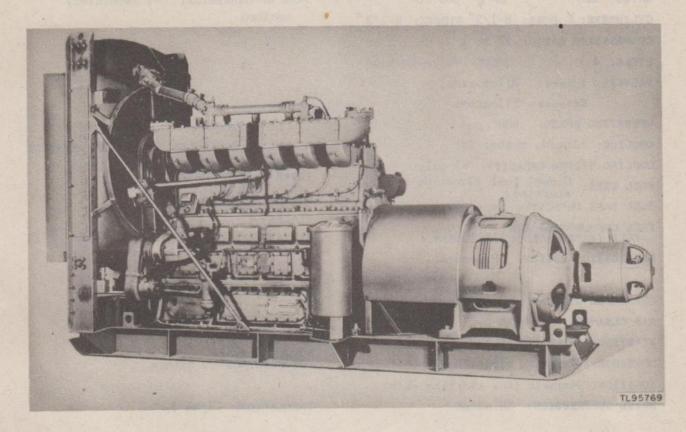
STOCK NO. 3H4600-215C

STATUS: SEE BELOW *

POWER UNIT

PE-220-A-B

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-220-A, -B

Power Unit PE-220-A, -B is an electric generating set consisting of a 6-cylinder, 4-cycle, valve-in-head, liquid-cooled, gasoline-engine-starting semi-Diesel engine, directly connected to an a-c generator of the separately excited type.

The engine is rated 225 horsepower at 900 revolutions per minute, and consumes approximately 12.2 gallons of fuel per hour at rated load.

The generator is rated at 100 kilowatts, 60 cycles, 3-phase, 240 volts, 300 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Limited supply available for issue. No more to be procured.

POWER UNIT PE-220-A, -B

ENGINE CHARACTERISTICS

MAKE: Waukesha. Hesselman (Semi-Diesel)

MODEL: 6L FIHU

RATED: 225 HP @ 900 rpm

CYLINDERS: 6 BORE: 8-1/2" STROKE: 8-1/2"

COMPRESSION RATIO: 17 to 1

HEAD: Valve-in-head CYCLE: 4

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 900 rpm

COOLING: Liquid, pusher fan

COOLING SYSTEM CAPACITY: 65 gals FUEL USED: Diesel fuel (Gasoline for starting)

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 12.2 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 37 gals

AIR CLEANER: Oil-bath

STARTING: Gasoline engine

GOVERNOR: Waukesha centrifugal

IGNITION: Magneto (for starting only)

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Westinghouse Electric Co MODEL: G-Type. Frame 28-10-S

TYPE OF GENERATOR: A-c separately

excited

RATING:

100 KW

100,000 WATTS

240 VOLTS

300 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

WIRES: 3

OPERATING SPEED: 900

DRIVE: Direct

NUMBER & TYPE
OF BEARINGS: 2 sleeve

INSULATION: Class A

COMPLETE UNIT

LENGTH: 192-7/8"

WIDTH: 62-5/8"

HEIGHT: 107"

WEIGHT: (NET) 18,670 lb WEIGHT: (CRATED) 19,300 lb

INSTRUCTIONAL LITERATURE

Instruction Book

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

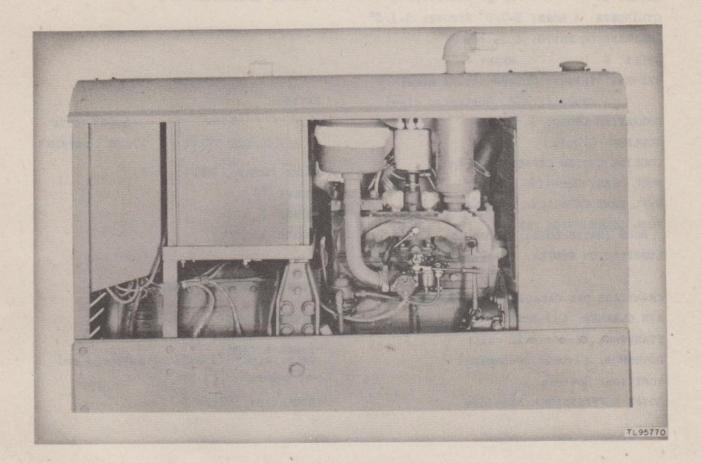
STOCK NO. 3H4600-220A and 220B

STATUS: SEE BELOW *

POWER UNIT

PE-235-A

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-235-A

Power Unit PE-235-A is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator.

The engine is rated 17 horsepower at 1,800 revolutions per minute, and consumes approximately 1.3 gallon of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, single phase, 110/220 volts, 57/28.5 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

*Limited supply available for issue. No more to be procured.

POWER UNIT PE-235-A

ENGINE CHARACTERISTICS

MAKE: Continental Engine Co (gasoline)

MODEL: Y-91

RATED: 17 HP @

HP ● 1,800 rpm

CYLINDERS: 4 BORE: 2-7/8" STROKE: 3-1/2"

CYCLE: 4 HEAD: L

VALVES: Intake: Chrome nickel steel

Exhaust: XCA Austentic steel

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 12 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 6 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.3 gals

LUBRICATION SYSTEM: Pressure feed

CRANKCASE OIL CAPACITY: 4-1/2 qts

AIR CLEANER: Oil-bath type STARTING: Electric 12 volts GOVERNOR: Flyball mechanical

IGNITION: Battery

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: D.W. Onan & Sons

MODEL: 261

TYPE OF GENERATOR: A-c

RATING:

5 KW

5,000 WATTS

110/220 VOLTS

57/28.5 AMPERES

POWER FACTOR: 80%

CYCLE: 60 PHASE: 1

WIRES: 3

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 ball on outboard end

of generator

INSULATION: Class A

COMPLETE UNIT

LENGTH: 49-1/2"

WIDTH: 22-1/2"

HEIGHT: 36-1/4"

WEIGHT: (NET) 1,500 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-972

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4600-235-A

STATUS:

SEE BELOW *

POWER UNIT

PE-236-A

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PE-236-A

Power Unit PE-236-A is an electric generating set consisting of a single-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope) gasoline engine, directly connected to an a-c generator of the adjustable-voltage, integral-exciter type.

The engine is rated 2.0 horsepower at 1,800 revolutions per minute and consumes approximately 0.5 gallon of fuel per hour at rated load.

The generator is rated at 750 watts, 60 cycles, single phase, 115 volts, 6.5 amperes at 100 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

POWER UNIT PE-236-A

ENGINE CHARACTERISTICS

MAKE: Briggs & Stratton (gasoline)

MODEL: BP

RATED: 2.0 HP @ 1,800 rpm

CYLINDERS: 1 BORE: 2-5/8" STROKE: 2-5/8"

COMPRESSION RATIO:

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,800 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gals (remote tank)

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.5 gals

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1-1/2 qts

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Adjustable mechanical

IGNITION: Flywheel type magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Atlas Aircraft Products Co

MODEL: (741)

TYPE OF GENERATOR: A-c, adjustable

voltage, integral

exciter

RATING:

0.75 KW

750 WATTS

115 VOLTS

6.5 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: 1

WIRES: 2

OPERATING SPEED: 1,800

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: None

INSULATION: Class A

COMPLETE UNIT

LENGTH: 20"

WIDTH: 14-5/8"

HEIGHT: 21-3/4"

WEIGHT: (NET) 141 lb

WEIGHT: (CRATED) 225 lb

INSTRUCTIONAL LITERATURE

Instruction Book, stock No. 3H4600-236A/1

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

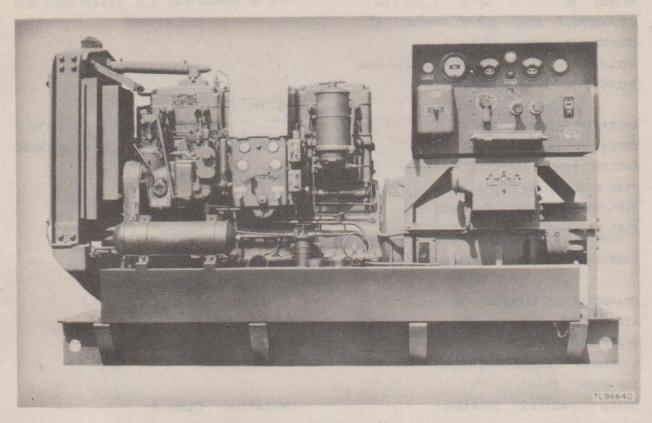
RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4511-236-A

RESTRICTED

POWER UNIT STATUS:



POWER UNIT PE-245-A

Power Unit PE-245-A is an electric generating set consisting of a 6-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting, full-Diesel engine, directly connected to an a-c generator of the revolving field type.

The engine is rated 90 horsepower at 1,200 revolutions per minute, and consumes approximately 3 gallons of fuel per hour at rated load.

The generator is rated at 25 kilowatts, 60 cycles, 3-phase, 120/208 volts, 150/87 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Set SCR-615.

642816 O - 45 - 12

RESTRICTED 173

POWER UNIT PE-245-A

ENGINE CHARACTERISTICS

MAKE: Cummins Engine Co (Diesel)

MODEL: HI600

RATED: 90 HP @ 1,200 rpm

CYLINDERS: 6 BORE: 4-7/8" STROKE: 6"

COMPRESSION RATIO: 17 to 1

CYCLE: 4 HEAD: Valve-in-head

VALVES: Intake: Alloy steel

Exhaust: Silchrome

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 24 gals

FUEL USED: Diesel fuel

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 3 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 20 qts

AIR CLEANER: Oil-bath
STARTING: Electric

GOVERNOR: Woodward Hydraulic

IGNITION: None

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Rogers-Diesel & Aircraft Corp

MODEL: 5-110

TYPE OF GENERATOR: A-c, revolving-field

RATING:

25 KW 25,000 WATTS

120/208 VOLTS 150/87 AMPERES

POWER FACTOR: 80%

CYCLE: 60 PHASE: 3

WIRES: 4

OPERATING SPEED: 1,200

DRIVE: Direct

NUMBER & TYPE OF BEARINGS:

INSULATION: Class A

COMPLETE UNIT

LENGTH: 104"

WIDTH: 36-1/2"

HEIGHT: 62-1/2"

WEIGHT: (NET) 5,900 lb

WEIGHT: (CRATED) 6,750 lb

INSTRUCTIONAL LITERATURE

TM 11-930

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

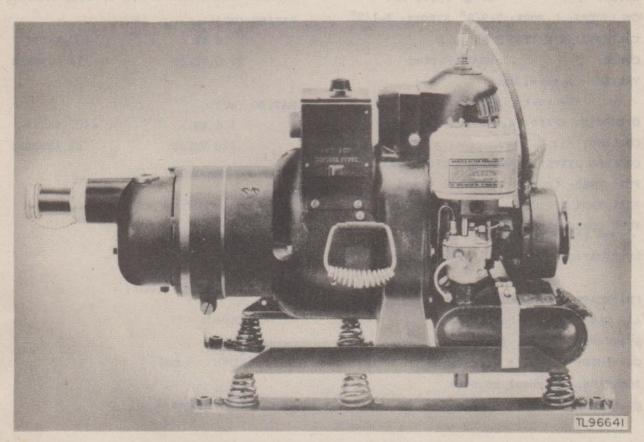
RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4600-245A

POWER UNIT

PU-6/TPS-1



POWER UNIT PU-6/TPS-1

Power Unit PU-6/TPS-1 is an electric generating set consisting of a 1-cylinder, 2-cycle, air-cooled, manual-starting (rope), gasoline engine, directly connected to an a-c, d-c generator of the dual-winding type.

The engine is rated 4.5 horsepower at 4,000 revolutions per minute, and consumes approximately 0.6 gallon of fuel per hour at rated load.

The generator has two windings; 1.4 kilowatts at 400 cycles, single phase, 120 volts, 12 amperes, 100% power factor and 400 watts at 27 volts 14 amperes direct current.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets AN/CPN-2, AN/TPS-1, and AN/TPS-3; and Transmitting Set AN/TPT-1.

RESTRICTED 175

POWER UNIT PU-6/TPS-1

ENGINE CHARACTERISTICS

MAKE: Homelite Corp (gasoline)

MODEL: HHU-AD

RATED: 4.5 HP @ 4,000 rpm

CYLINDERS: 1 BORE: 2-3/8" STROKE: 2-1/2"

COMPRESSION RATIO: 5.85 to 1

CYCLE: 2

HEAD: Ported

VALVES: Intake: None

Exhaust: None

OPERATING SPEED: 4,000 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline and oil mixed

FUEL TANK CAPACITY: 1 gal

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.6 gal

LUBRICATION SYSTEM: Oil and gasoline mixed

CRANKCASE OIL CAPACITY: None

AIR CLEANER: Oil-bath type

STARTING: Manual, (rope)

GOVERNOR: Flyball, mechanical

IGNITION: Flywheel magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Homelite Corp

MODEL: Dual-voltage

TYPE OF GENERATOR: A-c,d-c, dual-winding

RATING (DC):

.4 KW

400 WATTS

27.0 VOLTS

14 AMPERES

RATING (AC):

1.4 KW

1400 WATTS

120 VOLTS

12 AMPERES

POWER FACTOR: 100%

CYCLE: 400

PHASE: 1

WIRES: 2

OPERATING SPEED: 4,000

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH:

WIDTH:

HEIGHT:

WEIGHT: (NET) 135 lb WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-933

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO.

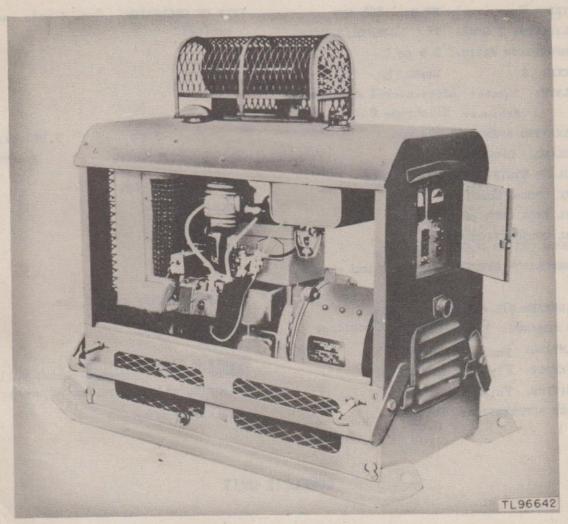
RESTRICTED

176

STATUS: Limited standard

POWER UNIT

PU-8/TTQ-1



POWER UNIT PU-8/TTQ-1

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

The engine is rated 7 horsepower, at 1,800 revolutions per minute, and consumes approximately 0.5 gallon of fuel per hour at rated load.

The generator is rated at 3 kilowatts, 60 cycle, single phase, 115 volts, 27 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Operations Center AN/TTQ-1.

POWER UNIT PU-8/TTO-1

ENGINE CHARACTERISTICS

GENERATOR CHARACTERISTICS

MAKE: D.W.Onom & Sons (gasoline)

MODEL: W-3-M-18

RATED: 7 HP @ 1,800 rpm

CYLINDERS: 2 BORE: 3" STROKE: 2-3/4"

COMPRESSION RATIO: 5.5 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy nickel steel 0.008

Exhaust: Silchrome 0.010

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 9 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 3 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.5 gal

LUBRICATION SYSTEM: Pressure and spray

CRANKCASE OIL CAPACITY: 6 qts

AIR CLEANER: Oil-bath type (Donaldson Model 2XB-415)

STARTING: Manual, (crank)

GOVERNOR: Flyball, mechanical

IGNITION: Fairbanks Morse

NOISE SUPPRESSION: Shielded

MAKE: D.W.Onan & Sons

MODEL: W-3-M-18

TYPE OF GENERATOR: A-c, 4-pole, self-

excited

RATING:

3 KW

3,000 WATTS

115 VOLTS

27 AMPERES

POWER FACTOR: 80%

CYCLE: 60

1 PHASE:

WIRES: 2

OPERATING SPEED: 1,800 rpm

DRIVE: Direct

NUMBER & TYPE
OF BEARINGS: 1 grease-sealed ball

bearing on outboard end of generator

INSULATION: Class A

COMPLETE UNIT

LENGTH: 44"

WIDTH: 22"

HEIGHT:

WEIGHT: (NET) 583 lb

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-932

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4512.3

POWER UNIT

PU-9/TPS-2



POWER UNIT PU-9/TPS-2

Power Unit PU-9/TPS-2 is an electric generating set consisting of a 1-cylinder, 4-cycle, L-head, air-cooled, manual-starting (rope), gasoline engine, with a belt-driven, a-c generator of the revolving-field, permanent-magnet type.

The engine is rated 1.9 horsepower at 2,500 revolutions per minute and consumes approximately 0.5 gallon of fuel per hour at rated load.

The generator is rated at 800 watts, 115 volts, 8.7 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Set AN/TPS-2.

POWER UNIT PU-9/TPS-2

ENGINE CHARACTERISTICS

MAKE: Lauson Co (gasoline)

MODEL: TLC-351

HP @ 2,500 rpm RATED: 1.9

CYLINDERS: 1 BORE: 2-1/4" STROKE: 2-1/4"

COMPRESSION RATIO: 5 to 1 HEAD: L. CYCLE: 4

VALVES: Intake: Chrome steel

Exhaust: Stelite faced

OPERATING SPEED: 2,500 rpm

COOLING: Air

COOLING SYSTEM CAPACITY: Air-cooled

FUEL USED: Gasoline

FUEL TANK CAPACITY: 2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.5 gal

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 1 qt

AIR CLEANER: Oil-bath STARTING: Manual (rope)

GOVERNOR: Build-in, (centrifugal)

IGNITION: Flywheel

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL:

TYPE OF GENERATOR: A-c, revolving-field,

permanent-magnet

RATING:

.8 KW

800 WATTS

115 VOLTS

8.7 AMPERES

POWER FACTOR: 80%

400 CYCLE:

1 PHASE:

WIRES: 2

OPERATING SPEED: 8,000

DRIVE: Belt

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class B

COMPLETE UNIT

LENGTH: 21"

WIDTH: 10"

HEIGHT: 20"

WEIGHT: (NET) 66 lb WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-1339, TM 11-1439, and

TM 11-1539

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO. 3H4531-9

STATUS: SEE BELOW *

S.C.T.C. MEETING NO.

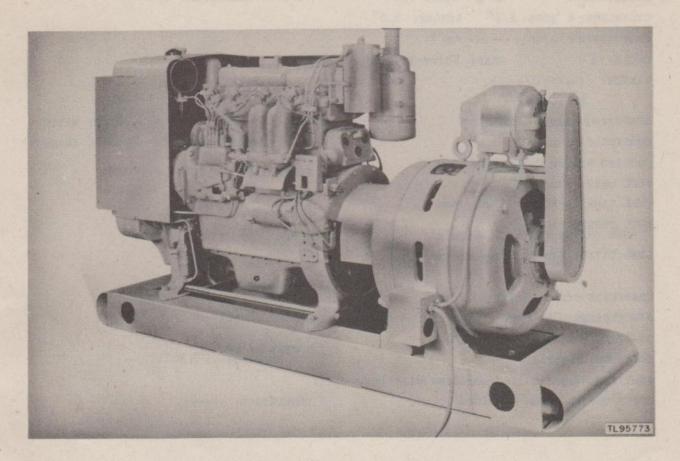
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DATE:

POWER UNIT

PU-19 / FRC

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PU-19/FRC

Power Unit PU-19/FRC is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, (magneto for gasoline starting) Diesel engine, directly connected to an alternating current generator.

The engine is rated 45.5 horsepower at 1,200 revolutions per minute, and consumes approximately 2.26 gallons of fuel per hour at rated load.

The generator is rated at 20 kilowatts, 60 cycles, single phase, 120/240 volts, 208/104 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue. No more to be procured.

POWER UNIT PU-19/FRC

ENGINE CHARACTERISTICS

MAKE: International Harvester (Diesel)

MODEL: UD-9

RATED: 45.5

HP @ 1,200 rpm

CYLINDERS: 4 BORE: 4.4" STROKE: 5.5"

COMPRESSION RATIO: ---- to 1.

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: ----

Exhaust: -----

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 52 qts

FUEL USED: Fuel oil

FUEL TANK CAPACITY: Underground

FUEL CONSUMPTION PER HOUR (RATED LOAD): 2.26 gals

LUBRICATION SYSTEM: Pump and splash

CRANKCASE OIL CAPACITY: 11 qts

AIR CLEANER: Oil-bath

STARTING: Gasoline

GOVERNOR: Flyball

IGNITION: Magneto (for gasoline starting)

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Ideal Electric Mfg Co

MODEL: 2BC

TYPE OF GENERATOR: A-c

RATING:

20 KW

20,000 WATTS

120/240 VOLTS

209/104 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1 WIRES: 3

OPERATING SPEED: 1,206

DRIVE: Direct

NUMBER & TYPE OF BEARINGS:

2 Ball

INSULATION: -----

COMPLETE UNIT

LENGTH: 96"

WIDTH: 32"

HEIGHT: 58-1/2"

WEIGHT: (NET) 4,200 lb

WEIGHT: (CRATED) 5,957 lb

INSTRUCTIONAL LITERATURE

TM 11-986 (when published)

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

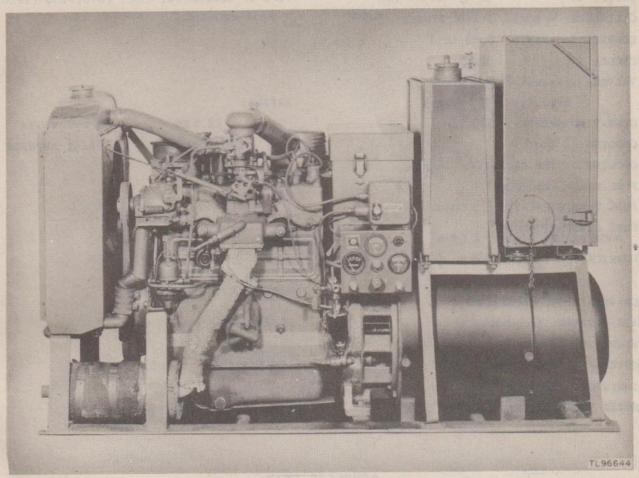
Plant Engineering Agency

STOCK NO. 3H4531-19F

RESTRICTED

POWER UNIT

PU-26 / U



POWER UNIT PU-26/U

Power Unit PU-26/U is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator of the revolving-field type, self-excited.

The engine is rated at 35 horsepower at 1,800 revolutions per minute, and consumes approximately 2 gallons of fuel per hour at rated load.

The generator is rated at 12.5 kilowatts, 60 cycle, 3-phase, 120/208 volts, and 75/44 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radio Sets AN/CPS-1, SCR-615-B; Radar Set AN/MPG-1.

POWER UNIT PU-26/U

ENGINE CHARACTERISTICS

MAKE: Willys Overland Motor Co

MODEL: JP 441

RATED: 35 HP @ 1,800 rpm

CYLINDERS: 4 BORE: 3-1/8" STROKE: 4-3/8"

COMPRESSION RATIO: 6.48 to 1

CYCLE: 4 HEAD: L

VALVES: Intake: R M C steel
Exhaust: R M C steel

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 13 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 2 gals

LUBRICATION SYSTEM: Force-feed

CRANKCASE OIL CAPACITY: 4

AIR CLEANER: Oil-bath

STARTING: Electric

GOVERNOR: Flyball mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: F-S-Electric Co

MODEL: JCC-1

TYPE OF GENERATOR: A-c, revolving-field,

self-excited

RATING:

12.5 KW

12,500 WATTS

120/208 VOLTS

75/44 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 3

WIRES: 4

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE
OF BEARINGS: 2 ball

INSULATION: Heavy form-var

COMPLETE UNIT

LENGTH: 65"

WIDTH: 45"

HEIGHT: 32"

WEIGHT: (NET)

WEIGHT: (CRATED) 1,700 1b

INSTRUCTIONAL LITERATURE

TM 11-976

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

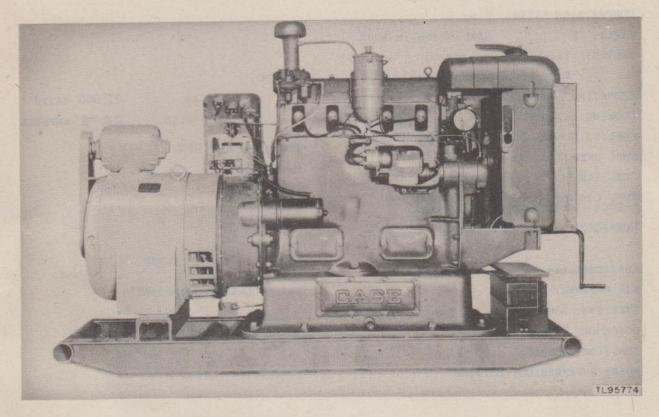
STOCK NO. -----

STATUS: SEE BELOW *

POWER UNIT

PU-30/F

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PU-30/F

Power Unit PU-30/F is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator with belt-driven exciter.

The engine is rated 65 horsepower at 1,200 revolutions per minute, and consumes approximately 3.5 gallons of fuel per hour at rated load.

The generator is rated at 15 kilowatts, 60 cycles, single phase, 120/240 volts, 156/78 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

* Available and preferred for issue.

POWER UNIT PU-30/F

ENGINE CHARACTERISTICS

MAKE: J.I.Case Company (gasoline)

MODEL: LAE

RATED: 65 HP @ 1,200 rpm CYLINDERS: 4 BORE: 4-5/8" STROKE: 6"

COMPRESSION RATIO: 6 to 1

CYCLE: 4

HEAD: Valve-in-head

VALVES: Intake: Chrome nickel

Exhaust: Chrome silicon

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 61 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: Separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 3.5 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 10 gals

AIR CLEANER: Oil-bath STARTING: Electric

GOVERNOR: Flyball mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: General Electric Co

MODEL: ASI

TYPE OF GENERATOR: A-c with belt-

driven exciter

RATING:

15 KW

15,000 WATTS

120/240 VOLTS

156/78 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 2 Ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 90" Approx

WIDTH: 26-1/4" Approx HEIGHT: 60-7/8" Approx

WEIGHT: (NET) 3,600 lb

WEIGHT: (CRATED) 4,650 lb

INSTRUCTIONAL LITERATURE

TM 11-944

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

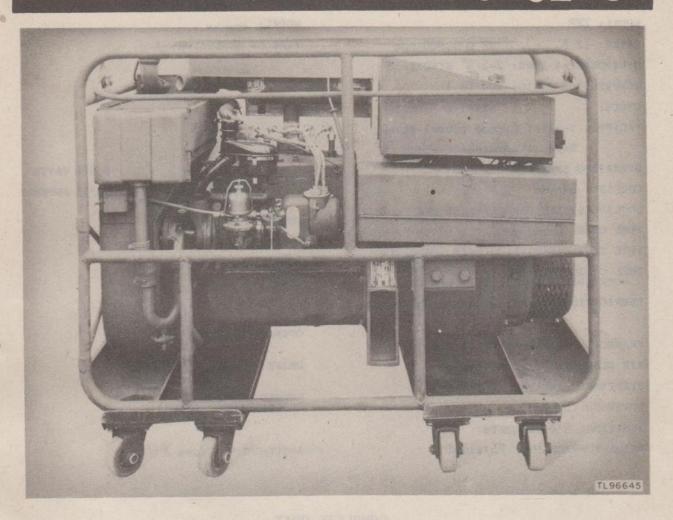
RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4531-30/F

POWER UNIT

PU-32/C



POWER UNIT PU-32/C

Power Unit PU-32/C is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to an a-c generator.

The engine is rated 13.5 horsepower at 1,800 revolutions per minute, and consumes approximately 1.2 gallons of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, 3-phase, 120/208 volts, 52/23 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Radio Set AN/CPS-4.

POWER UNIT PU-32/C

ENGINE CHARACTERISTICS

MAKE: Hercules Motor Corp (gasoline)

MODEL: ZXB

HP @ 1,800 rpm RATED: 13.5

CYLINDERS: 4 BORE: 2-5/8" STROKE: 3"

COMPRESSION RATIO: 6.3 to 1 CYCLE: 4 HEAD: L

VALVES: Intake: Chrome nickel steel

Exhaust: Austemite steel

OPERATING SPEED: 1,800 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 16 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gals (separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.2 gals

LUBRICATION SYSTEM: Pressure and spray

CRANKCASE OIL CAPACITY: 5 qts AIR CLEANER: Oil-bath type STARTING: Electric, 6 volts

GOVERNOR: Flyball

IGNITION: Wico Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: O'Keefe & Merritt

MODEL: ----

TYPE OF GENERATOR: A-C

RATING:

5 KW 5,000 WATTS

120/208 VOLTS

52/23 AMPERES

POWER FACTOR: 80%

CYCLE: 60 PHASE: 3

WIRES: 4

OPERATING SPEED: 1,800

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 2 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 44"

WIDTH: 30"

HEIGHT: 22"

WEIGHT: (NET) 500 lb WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-960

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

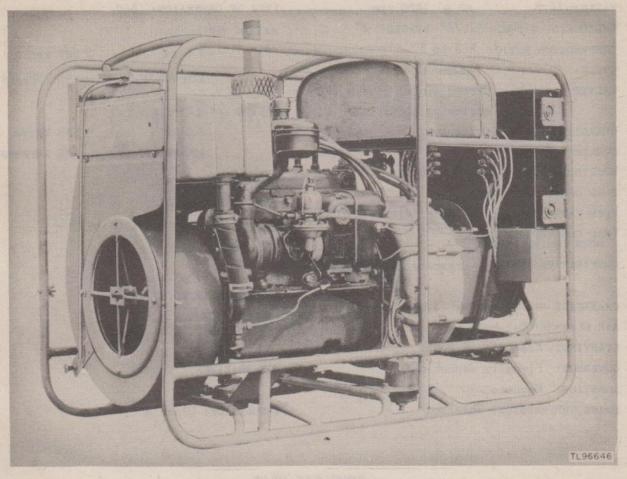
STOCK NO.

STATUS: Standard

POWER UNIT

DATE APPROVED: 20 May 44

PU-35/U



POWER UNIT PU-35/U

Power Unit PU-35/U is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting, gasoline engine, directly connected to two a-c generators.

The engine is rated 13.5 horsepower at 1,800 revolutions per minute and consumes approximately 1.3 gallons of fuel per hour at rated load.

The generators are rated as follows: 2.5 kilowatts, 60 cycles, single phase, 120 volts, 26 amperes at 80 percent power factor; 2.5 kilowatts at 400 cycles, single phase, 120 volts, 26 amperes at 80 percent power factor.

The principal application of this power unit is the furnishing of power for the operation of Signal Corps Radar Set AN/TPL-1.

POWER UNIT PU-35/U

ENGINE CHARACTERISTICS

MAKE: Hercules Motors Corp (gasoline)

MODEL: ZXB

RATED: 13.5 HP @ 1800 rpm

CYLINDERS: 4 BORE: 2-5/8" STROKE: 3"

COMPRESSION RATIO: 6.3 to 1
CYCLE: 4 HEAD: L

VALVES: Intake: Chrome nickel steel

Exhaust: Austemite steel

OPERATING SPEED: 1,714 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 16 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 5 gals (also separate

FUEL CONSUMPTION PER HOUR (RATED LOAD): 1.3

LUBRICATION SYSTEM: Pressure and spray

CRANKCASE OIL CAPACITY: 5 qts

AIR CLEANER: Oil-bath

STARTING: Electric, 6 volts GOVERNOR: Flyball, mechanical

IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Carson and Leland

MODEL: ----

TYPE OF GENERATOR: A-c

RATING (60-CYCLE):

2.5 KW 2,500 WATTS

120 VOLTS

26 AMPERES

RATING (400-CYCLE):

2.5 KW

2,500 WATTS

120 VOLTS

26 AMPERES

POWER FACTOR: 80% CYCLE: 60 and 400

PHASE: 2 single-phase units

WIRES: 2

OPERATING SPEED: 1,714

DRIVE: Direct

NUMBER & TYPE OF BEARINGS: 1 babl

INSULATION: Class A

COMPLETE UNIT

LENGTH:

WIDTH:

HEIGHT:

WEIGHT: (NET)

WEIGHT: (CRATED)

INSTRUCTIONAL LITERATURE

TM 11-975

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Signal Corps Ground Signal Agency

STOCK NO.

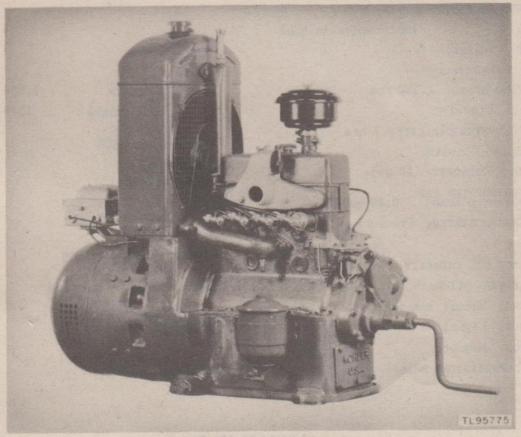
STATUS:

SEE BELOW *

POWER UNIT

PU-41/G

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PU-41/G

Power Unit PU-41/G (Kohler Model 1M21A) is an electric generating set consisting of a 4-cylinder, 4-cycle, valve-in-head, liquid-cooled, manual-starting (crank) gasoline engine directly connected to an a-c generator of the revolving armature type.

The engine is rated 4.25 horsepower at 1,200 revolutions per minute, and consumes approximately 0.45 gallon of fuel per hour at rated load.

The generator is rated at 1.5 kilowatts, 60 cycles, single phase, 110 volts, 13.6 amperes at 100 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

This power unit was also issued as Kohler Model 1M21-A.

* Available and preferred for issue.

POWER UNIT PU-41/G (KOHLER MODEL 1M21A)

ENGINE CHARACTERISTICS

MAKE: Kohler Company (gasoline)

MODEL: IM21-A

RATED: 4.25 HP @ 1,200 rpm

CYLINDERS: 4 BORE: 2" STROKE: 3"

COMPRESSION RATIO: 5.5 to 1

CYCLE: 4 HEAD: valve-in-head

VALVES: Intake: -----

VALVES: Intake: ----

Exhaust: -----

OPERATING SPEED: 1,200 rpm

COOLING: Liquid
COOLING SYSTEM CAPACITY: 7 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): 0.45 gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 7 qts

AIR CLEANER: Oil-bath

STARTING: Manual (crank)

GOVERNOR: Flyball IGNITION: Magneto

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: Kohler Company

MODEL: 1M21A

TYPE OF GENERATOR: A-c revolving

armature

RATING:

1.5 KW

1,500 WATTS

110 VOLTS

13.6 AMPERES

POWER FACTOR: 100%

CYCLE: 60

PHASE: Single

WIRES: 2

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 45"

WIDTH: 16"

HEIGHT: 36"

WEIGHT: (NET) 497 lb

WEIGHT: (CRATED) 880 lb

INSTRUCTIONAL LITERATURE

TM 11-935

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

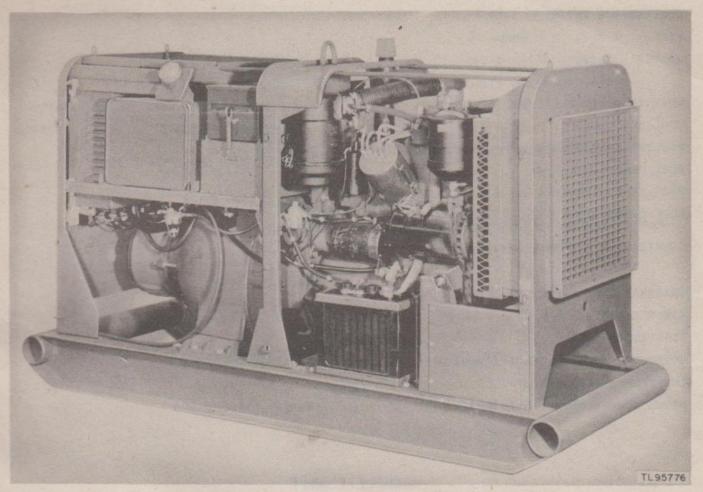
STOCK NO. 3H4524-1M21A

STATUS: SEE BELOW *

POWER UNIT

PU-58/G

FOR USE WITH FIXED PLANT COMMUNICATION EQUIPMENT ONLY



POWER UNIT PU-58/G WITH COVER REMOVED

Power Unit PU-58/G is an electric generating set consisting of a 4-cylinder, 4-cycle, L-head, liquid-cooled, electric-starting gasoline engine, directly connected to an a-c generator.

The engine is rated 22 horsepower at 1,200 revolutions per minute, and consumes approximately 1.25 gallons of fuel per hour at rated load.

The generator is rated at 5 kilowatts, 60 cycles, single phase, 120/240 volts, 52/26 amperes at 80 percent power factor.

NOTE: This power unit is issued as project material only and is for use with Signal Corps Fixed Plant Communication Equipment exclusively.

Power Unit PU-58/G supercedes and replaces Power Units PE-63-H, PE-95-F and PE-235-A.

* Available and preferred for issue.

POWER UNIT PU-58/G

ENGINE CHARACTERISTICS

MAKE: Willys Overland (gasoline)

MODEL: MB-441

RATED: 22

HP @ 1,200 rpm

CYLINDERS: 4 BORE: 3-1/8" STROKE: 4-3/8"

COMPRESSION RATIO: 6.5 to 1

CYCLE: 4

HEAD: L

VALVES: Intake: Alloy steel

Exhaust: Alloy steel

OPERATING SPEED: 1,200 rpm

COOLING: Liquid

COOLING SYSTEM CAPACITY: 15-1/2 qts

FUEL USED: Gasoline

FUEL TANK CAPACITY: 10-1/2 gals

FUEL CONSUMPTION PER HOUR (RATED LOAD): Approx 1.25. gals

LUBRICATION SYSTEM: Pressure

CRANKCASE OIL CAPACITY: 5 qts

AIR CLEANER: Oil bath

STARTING: Electric

GOVERNOR: Wirshing Centrifugal

IGNITION: Battery, 6 volt

NOISE SUPPRESSION: Shielded

GENERATOR CHARACTERISTICS

MAKE: O'Keefe & Merritt Co

MODEL: PU/58G #10751-12

TYPE OF GENERATOR: A-c

RATING:

5 KW 5,000 WATTS

120/240 VOLTS

52/26 AMPERES

POWER FACTOR: 80%

CYCLE: 60

PHASE: 1

WIRES: 3

OPERATING SPEED: 1,200

DRIVE: Direct-connected

NUMBER & TYPE OF BEARINGS: 1 ball

INSULATION: Class A

COMPLETE UNIT

LENGTH: 69-1/2"

WIDTH: 28-5/8"

HEIGHT: 40-1/2"

WEIGHT: (NET) 1,690 Approx WEIGHT: (CRATED) 2,300 lb Approx

INSTRUCTIONAL LITERATURE

TM 11-980

SECURITY CLASSIFICATION

OF THIS EQUIPMENT: UNCLASSIFIED

RESPONSIBLE AGENCY:

Plant Engineering Agency

STOCK NO. 3H4531-58