



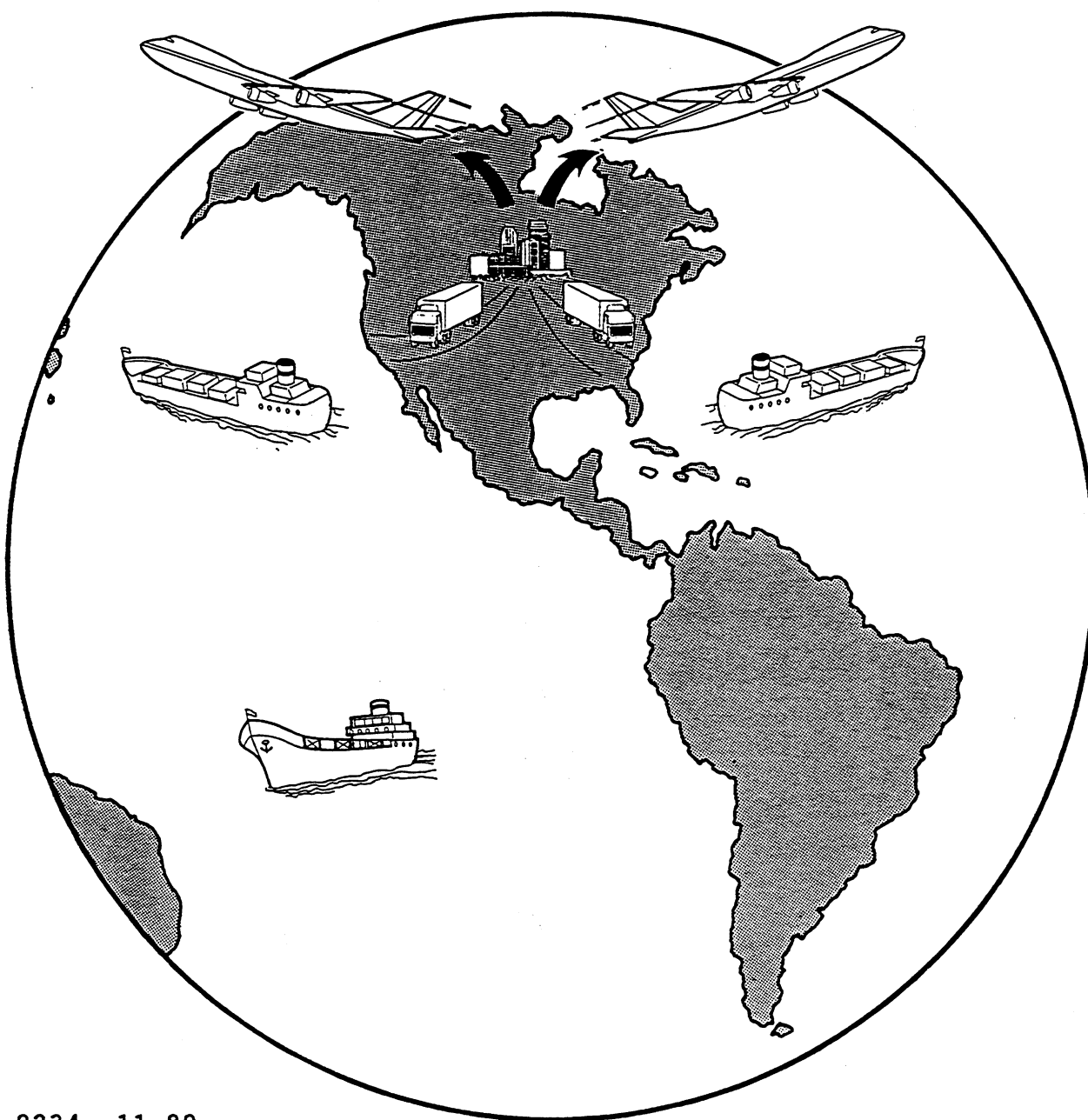
CTA Spec C

DGFA Spec B

Generator Set

Parts Catalog

World Wide Parts & Service



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Printed In U.S.A.

Important Safety Precautions

Read and observe these safety precautions when using or working on electric generators, engines and related equipment. Also read and follow the literature provided with the equipment.

Proper operation and maintenance are critical to performance and safety. Electricity, fuel, exhaust, moving parts and batteries present hazards that can cause severe personal injury or death.

FUEL, ENGINE OIL, AND FUMES ARE FLAMMABLE AND TOXIC

Fire, explosion, and personal injury can result from improper practices.

- Used engine oil, and benzene and lead, found in some gasoline, have been identified by government agencies as causing cancer or reproductive toxicity. When checking, draining or adding fuel or oil, do not ingest, breathe the fumes, or contact gasoline or used oil.
- Do not fill tanks with engine running. Do not smoke around the area. Wipe up oil or fuel spills. Do not leave rags in engine compartment or on equipment. Keep this and surrounding area clean.
- Inspect fuel system before each operation and periodically while running.
- Equip fuel supply with a positive fuel shutoff.
- Do not store or transport equipment with fuel in tank.
- Keep an ABC-rated fire extinguisher available near equipment and adjacent areas for use on all types of fires except alcohol.
- Unless provided with equipment or noted otherwise in installation manual, fuel lines must be copper or steel, secured, free of leaks and separated or shielded from electrical wiring.
- Use approved, non-conductive flexible fuel hose for fuel connections. Do not use copper tubing as a flexible connection. It will work-harden and break.

EXHAUST GAS IS DEADLY

- Engine exhaust contains carbon monoxide (CO), an odorless, invisible, poisonous gas. Learn the symptoms of CO poisoning.
- Never sleep in a vessel, vehicle, or room with a genset or engine running unless the area is equipped with an operating CO detector with an audible alarm.
- Each time the engine or genset is started, or at least every day, thoroughly inspect the exhaust system. Shut down the unit and repair leaks immediately.

- Warning: Engine exhaust is known to the State of California to cause cancer, birth defects and other reproductive harm.

Make sure exhaust is properly ventilated.

- Vessel bilge must have an operating power exhaust.
- Vehicle exhaust system must extend beyond vehicle perimeter and not near windows, doors or vents.
- Do not use engine or genset cooling air to heat an area.
- Do not operate engine/genset in enclosed area without ample fresh air ventilation.
- Expel exhaust away from enclosed, sheltered, or occupied areas.
- Make sure exhaust system components are securely fastened and not warped.

MOVING PARTS CAN CAUSE SEVERE PERSONAL INJURY OR DEATH

- Do not remove any guards or covers with the equipment running.
- Keep hands, clothing, hair, and jewelry away from moving parts.
- Before performing any maintenance, disconnect battery (negative [–] cable first) to prevent accidental starting.
- Make sure fasteners and joints are secure. Tighten supports and clamps, keep guards in position over fans, drive belts, etc.
- If adjustments must be made while equipment is running, use extreme caution around hot manifolds and moving parts, etc. Wear safety glasses and protective clothing.

BATTERY GAS IS EXPLOSIVE

- Wear safety glasses and do not smoke while servicing batteries.
- Always disconnect battery negative (–) lead first and reconnect it last. Make sure you connect battery correctly. A direct short across battery terminals can cause an explosion. Do not smoke while servicing batteries. Hydrogen gas given off during charging is explosive.
- Do not disconnect or connect battery cables if fuel vapors are present. Ventilate the area thoroughly.

DO NOT OPERATE IN FLAMMABLE AND EXPLOSIVE ENVIRONMENTS

Flammable vapor can be ignited by equipment operation or cause a diesel engine to overspeed and become difficult to stop, resulting in possible fire, explosion, severe personal injury and death. **Do not operate diesel equipment where a flammable vapor environment can be created by fuel spill, leak, etc., unless equipped with an automatic safety device to block the air intake and stop the engine.**

HOT COOLANT CAN CAUSE SEVERE PERSONAL INJURY

- Hot coolant is under pressure. Do not loosen the coolant pressure cap while the engine is hot. Let the engine cool before opening the pressure cap.

ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH

- Do not service control panel or engine with unit running. High voltages are present. Work that must be done while unit is running should be done only by qualified service personnel.
- Do not connect the generator set to the public utility or to any other electrical power system. Electrocutation can occur at a remote site where line or equipment repairs are being made. An approved transfer switch must be used if more than one power source is connected.
- Disconnect starting battery (negative [-] cable first) before removing protective shields or touching electrical equipment. Use insulative mats placed on dry wood platforms. Do not wear jewelry, damp clothing or allow skin surface to be damp when handling electrical equipment.
- Use insulated tools. Do not tamper with interlocks.
- Follow all applicable state and local electrical codes. Have all electrical installations performed by a qualified licensed electrician. Tag open switches to avoid accidental closure.
- With transfer switches, keep cabinet closed and locked. Only authorized personnel should have cabinet or operational keys. Due to serious shock hazard from high voltages within cabinet, all service and adjustments must be performed by an electrician or authorized service representative.

If the cabinet must be opened for any reason:

1. Move genset operation switch or Stop/Auto/Handcrank switch (whichever applies) to Stop.
2. Disconnect genset batteries (negative [-] lead first).
3. Remove AC power to automatic transfer switch. If instructions require otherwise, use extreme caution due to shock hazard.

MEDIUM VOLTAGE GENERATOR SETS (601V TO 15kV)

- Medium voltage acts differently than low voltage. Special equipment and training are required to work on or around medium voltage equipment. Operation and maintenance must be done only by persons trained and qualified to work on such devices. Improper use or procedures will result in severe personal injury or death.
- Do not work on energized equipment. Unauthorized personnel must not be permitted near energized equipment. Induced voltage remains even after equipment is disconnected from the power source. Plan maintenance with authorized personnel so equipment can be de-energized and safely grounded.

GENERAL SAFETY PRECAUTIONS

- Do not work on equipment when mentally or physically fatigued or after consuming alcohol or drugs.
- Carefully follow all applicable local, state and federal codes.
- Never step on equipment (as when entering or leaving the engine compartment). It can stress and break unit components, possibly resulting in dangerous operating conditions from leaking fuel, leaking exhaust fumes, etc.
- Keep equipment and area clean. Oil, grease, dirt, or stowed gear can cause fire or damage equipment by restricting airflow.
- Equipment owners and operators are solely responsible for operating equipment safely. Contact your authorized Onan/Cummins dealer or distributor for more information.

KEEP THIS DOCUMENT NEAR EQUIPMENT FOR EASY REFERENCE.

TABLE OF CONTENTS

| | |
|---------------------------------|----|
| MODEL IDENTIFICATION TABLE..... | ii |
|---------------------------------|----|

| | |
|--|---|
| INTRODUCTION & GENERAL INFORMATION | I |
|--|---|

ENGINE SECTION

| | |
|--|-----|
| ENGINE SECTION TABLE OF CONTENTS | 1-1 |
|--|-----|

HOUSING SECTION

| | |
|--|-----|
| HOUSING SECTION TABLE OF CONTENTS..... | 2-1 |
|--|-----|

CONTROL SECTION

| | |
|---|-----|
| CONTROL SECTION TABLE OF CONTENTS | 3-1 |
|---|-----|

GENERATOR SECTION

| | |
|---|-----|
| GENERATOR SECTION TABLE OF CONTENTS | 4-1 |
|---|-----|

SOURCE CODE SECTION

| | |
|--|-----|
| SOURCE CODES FOR MANUFACTURERS & SUPPLIERS | 5-1 |
|--|-----|

MODEL IDENTIFICATION TABLE

| ENGINE MODEL | GENERATOR SET IDENTIFICATION | | NEWAGE | | | BATTERY |
|-----------------------|------------------------------|-------------------|-----------|-------|------|---------|
| | CUMMINS POWER SYSTEM | ONAN POWER SYSTEM | GENERATOR | HERTZ | RPM | VOLTAGE |
| 6CTA8.3-G, SES1174 | 150 CTA61/xxxxx C | 150 DGFA/xxxxx B | UC274G | 60 | 1800 | 24 VDC |
| 6CTA8.3-G, SES1174 | 175 CTA62/xxxxx C | 175 DGFA/xxxxx B | UC274H | 60 | 1800 | 24 VDC |

INTRODUCTION

FORWARD

This Service Parts Catalog provides identification of the Maintenance, Service or Repair parts for the Product(s) identified in the Model Identification Table. The Catalog is divided into sections applicable to the Major Sections of the Product, and Section Table of Contents are provided for your convenience.

ILLUSTRATIONS

The illustrations in the Parts Catalog are arranged in groups of related items, and each part or assembly is identified by a Reference Number shown in the illustration. All parts illustrated are typical, and unless otherwise mentioned in the description column, the parts are interchangeable between models. These typical illustrations are subject to change and reflect only the latest replacement parts arrangement. The RIGHT and LEFT sides of a Generator Set are determined by FACING the FRONT of the Set (Engine Radiator End).

PART NUMBERS

Dual Part Number columns are used. The first column contains the CENTRAL PARTS DISTRIBUTION CENTER Part Number; the second (SOURCE) column provides for identification of an alternate source for the part. The alternate source may be a Manufacturer, Supplier or Subsidiary of this Corporation. The Manufacturer/Supplier is assigned Identifying Letter(s) which are found in the third (CODE) column. A List of Manufacturers and Suppliers with their address, phone numbers, etc. are located in a separate section of this Parts Catalog.

REPLACEMENT ENGINE PARTS

The Models with engines supplied by a separate Engine Manufacturer will have only those external engine components added or modified during the Assembly of these Models. Most General Maintenance Parts and some engine optional features may be identified in this Parts Catalog. For internal engine parts and components not covered herein; refer to the applicable Manufacturer's engine Parts Catalog. The engine Manufacturer will be listed in the Manufacturer & Supplier (SOURCE CODE) Section.

INTRODUCTION

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MODEL IDENTIFICATION

The Model Table provides identification of the Product(s) which this Service Parts Catalog covers. Some Tables may include an Engine Identifier along with the Generator Set Identifier when the Manufacturer of the Engine is a Supplier of Engine Replacement Parts.

SAMPLE ENGINE IDENTIFIERS

| | | |
|--------------|---------------|---------------|
| 4A2.3GS/GC1 | 6CTA8.3GC/GS1 | KTTA50GS/GC1 |
| 6AT3.4GS/GC1 | KTTA19GS/GC1 | NT855GS/GC4 |
| 4BT3.9GS/GC1 | KTA38GS/GC1 | NTTA855GS/GC2 |
| 6CT8.3GS/GC1 | KTA50GS/GC3 | VTA28GS/GC3 |

SAMPLE MODEL IDENTIFIERS

When Engine Identifiers are used, the Model Identifier will also be located on the Nameplate. It is referred to as ID. NO. The sample Nameplate below has an arrow which points to the ID. NO. Location. Normally the MODEL Identifier follows the MODEL on the nameplate.

GEN SET IDENTIFIER SAMPLES

| | | | | |
|------|------|----|--------|---|
| 60 | DGBA | Z | /13756 | A |
| 175 | CTA | 62 | /32476 | C |
| 200 | NT | 4 | /29876 | E |
| 250 | DMBC | / | 1 | B |
| 1250 | KTA | 53 | /32069 | D |

| | |
|--|--|
| Kilowatt Size | Specification Letter |
| Model Ident Letters | Designates Major Changes |
| Voltage Code(s) or Model Ident Numbers | Specification Number: No. 1 is Standard; others designate Variations or Special Features |

AC Generator Set

Model _____

| | | |
|-----------------------------|-----|-------------------|
| kw | kva | pf |
| class of insulation | | amps |
| field amp max | | field voltage max |
| generator model no. | | |
| voltage regulator model no. | | |
| ID no. | | |
| generator set serial no. | | |
| BS5000 | | NEMA |

INTRODUCTION

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PRODUCT SERIAL NUMBER IDENTIFICATION

A Serial number is assigned to all Models or Products and is located on the nameplate for that product. The current Serial Number System of identification is as follows:

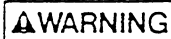
| | | | | | |
|---|---|----|---|--------|-------------------------------|
| Month of Manufacture: A = Jan, B = Feb, etc. | B | 89 | 7 | 123456 | Assigned Six Digit Serial No. |
| Year of Manufacture: 1989 | | | | | Assembly Plant Code Number |

SAFETY PRECAUTIONS

The following symbols are used in Parts Catalogs to alert users to the potentially dangerous conditions relating to maintenance of the equipment and replacement of parts. Please read and observe.



This symbol warns of immediate hazards which will result in severe personal injury or death.



This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

PRODUCT SAFETY PRECAUTIONS:

WARNING

CONTACT WITH USED ENGINE OILS HAS BEEN IDENTIFIED BY A UNITED STATES FEDERAL AGENCY AND SOME USA STATE AGENCIES AS CAUSING CANCER or REPRODUCTIVE TOXICITY. WHEN CHECKING OR CHANGING ENGINE OILS TAKE ALL NECESSARY PRECAUTIONS NOT TO INGEST, BREATHE THE FUMES OR CONTACT THE USED OIL!

WARNING

CONTACT WITH ASBESTOS HAS BEEN IDENTIFIED BY A UNITED STATES FEDERAL AGENCY AND SOME USA STATE AGENCIES AS CAUSING CANCER or REPRODUCTIVE TOXICITY. WHEN HANDLING ENGINE GASKETS TAKE ALL NECESSARY PRECAUTIONS NOT TO INGEST, BREATHE OR CONTACT THE DUST FROM THE GASKETS! USE ADEQUATE VENTILATION AND WEAR PROTECTIVE GLOVES, MASKS AND CLOTHING!

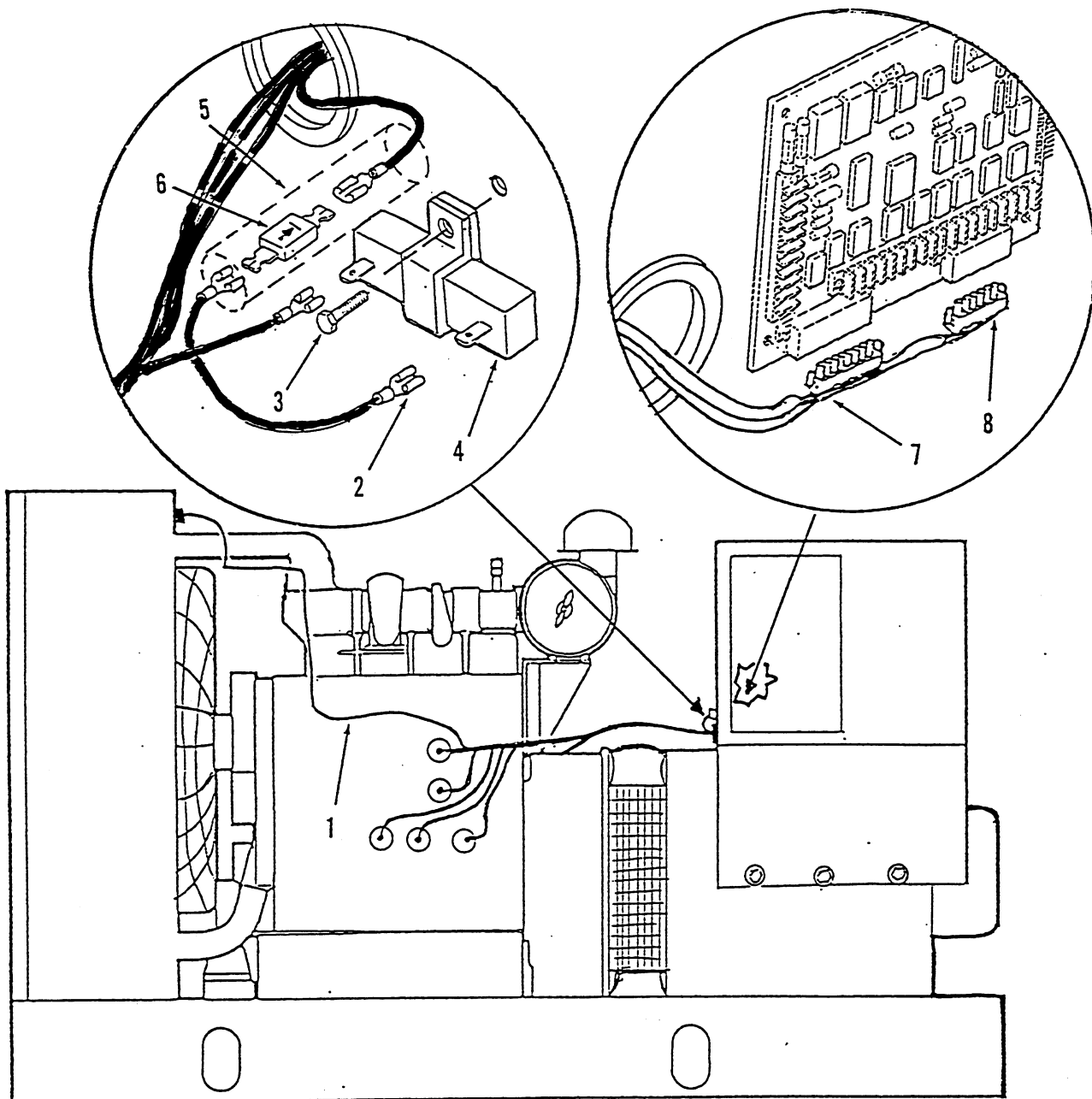
WARNING

CONTACT WITH BENZENE and LEAD, FOUND IN GASOLINES, FUEL ADDITIVES AND SOLVENTS HAS BEEN IDENTIFIED BY A UNITED STATES FEDERAL AGENCY AND SOME USA STATE AGENCIES AS CAUSING CANCER or REPRODUCTIVE TOXICITY. WHEN CHECKING, DRAINING OR ADDING GASOLINE AND FUEL ADDITIVES, OR USING SOLVENTS TAKE ALL NECESSARY PRECAUTIONS NOT TO INGEST, BREATHE THE FUMES, OR CONTACT THE LIQUIDS. USE ADEQUATE VENTILATION AND WEAR PROTECTIVE GLOVES, MASKS AND CLOTHING!

TABLE OF CONTENTS
ENGINE SECTION

| | |
|---|------|
| WIRING HARNESS - ENGINE TO CONTROL..... | 1-2 |
| EXHAUST SYSTEM COMPONENTS | 1-3 |
| STANDARD AIR CLEANER - Installation Of | 1-4 |
| HEAVY DUTY AIR CLEANER - Installation Of | 1-5 |
| ELECTRONIC GOVERNOR - Installation Of | 1-7 |
| EXTERNAL ENGINE COMPONENTS - LEFT SIDE | 1-9 |
| EXTERNAL ENGINE COMPONENTS - RIGHT SIDE | 1-11 |
| RADIATOR COOLING SYSTEM - Installation Of | 1-13 |
| ENGINE COOLANT HEATER - Installation Of | 1-15 |

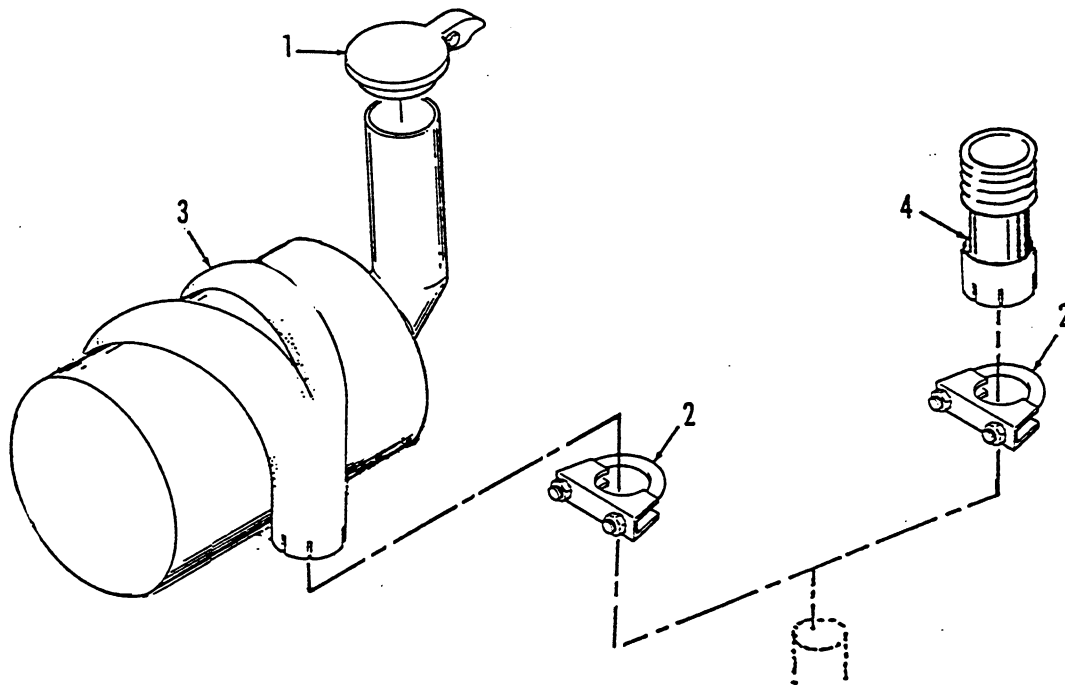
WIRING HARNESS ENGINE TO CONTROL



| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|---------|---------------|-----------------|------------------|----------|--|
| 1 | 338-2282 | | | 1 | Harness, Wiring - Engine to Control (Includes Replaceable Items) |
| 2 | 332-1993 | | | 4 | Terminal, Receptacle |
| 3 | 800-1003 | | | 1 | Screw, Cap - Hex Head (1/4-20 x 1/2") |
| 4 | 353-0094-01 | | | 1 | Resistor, Fixed, Wirewound |
| 5 | NOTE 1 | | | AR | Sleeving, Insulation - Shrinkable, 1/2" ID |
| 6 | 357-0030 | | | 1 | Rectifier, Diode |
| 7 | | | | REF | Connector Housing and Contact Pins |
| | 323-1306 | | | 1 | Housing, Connector - 8 Pin (Less Pins) |
| | 323-1200 | | | 8 | Pin, Contact |
| 8 | | | | REF | Connector Housing and Contact Pins |
| | 323-1304 | | | 1 | Housing, Connector - 6 Pin (Less Pins) |
| | 323-1200 | | | 6 | Pin, Contact |

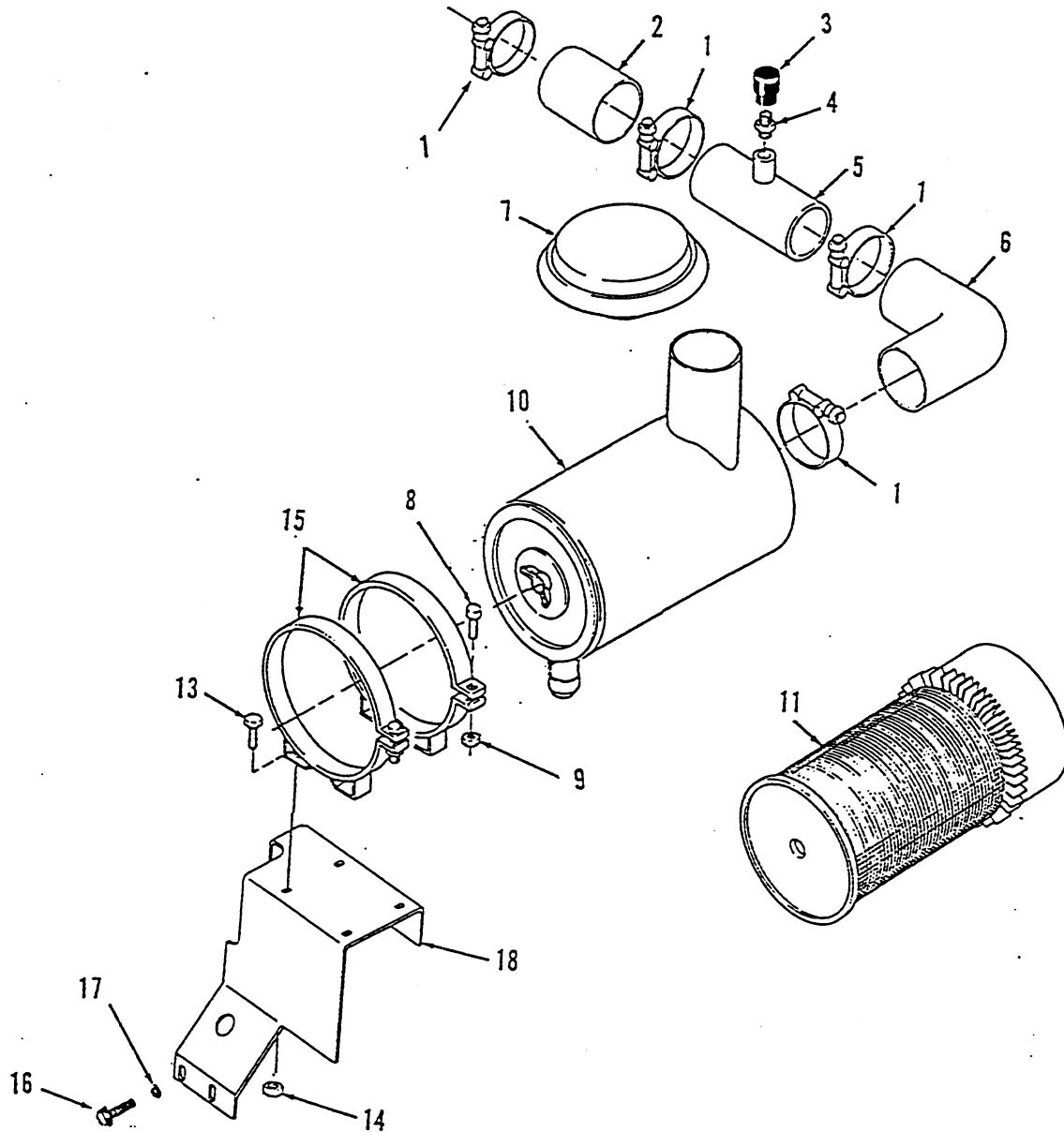
NOTE 1. NOT STOCKED FOR SALE. Consult your Generator Set Distributor or a Electrical Supply vendor.

EXHAUST SYSTEM COMPONENTS



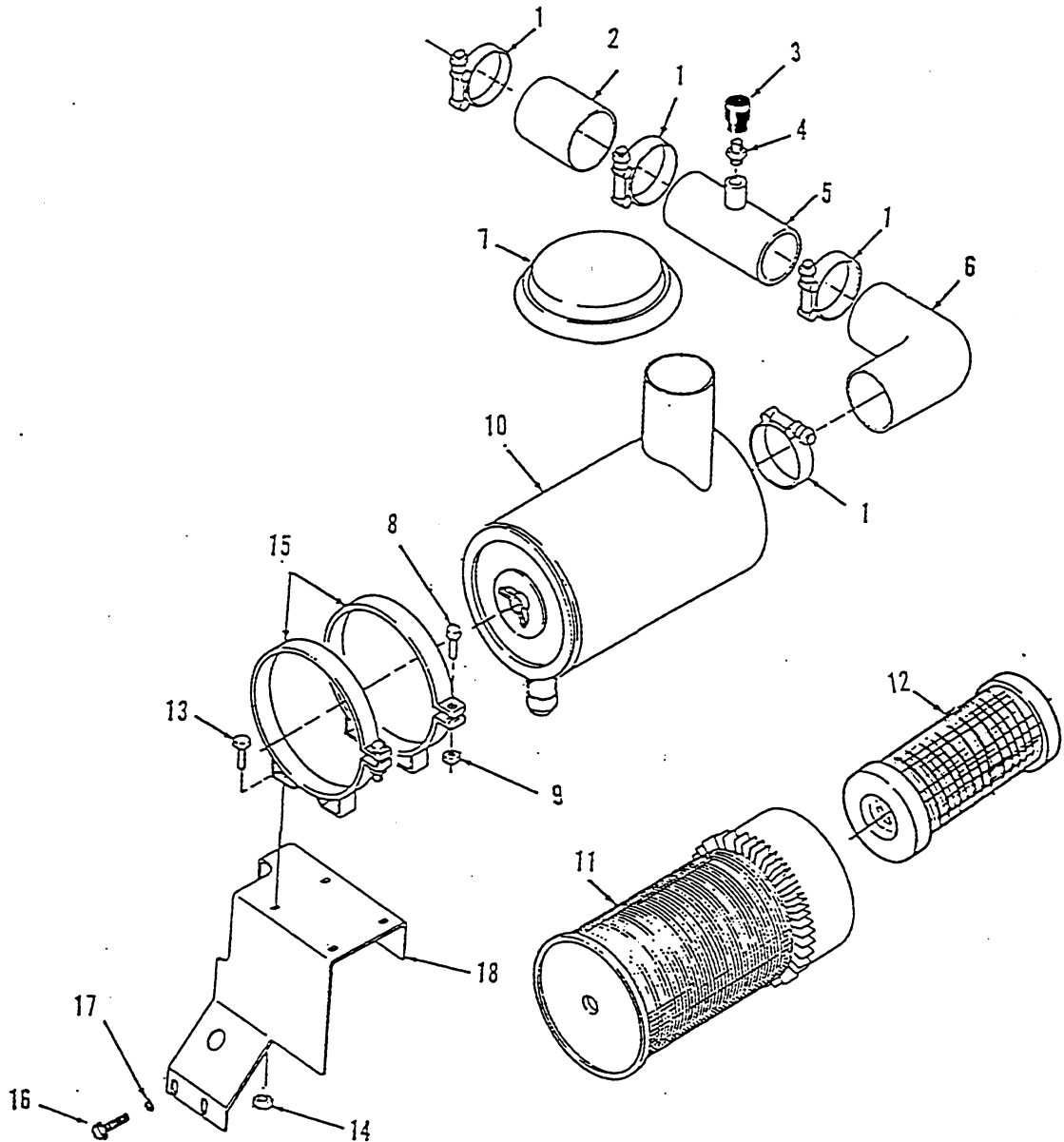
| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---------------------|
| 1 | 155-2062-07 | | | 1 | Cap, Rain |
| 2 | 155-2305 | | | 1 | Clamp, Muffler |
| 3 | 155-2307 | | | 1 | Silencer |
| 4 | 155-2304 | | | 1 | Adapter, Exhaust |

STANDARD AIR CLEANER Installation Of



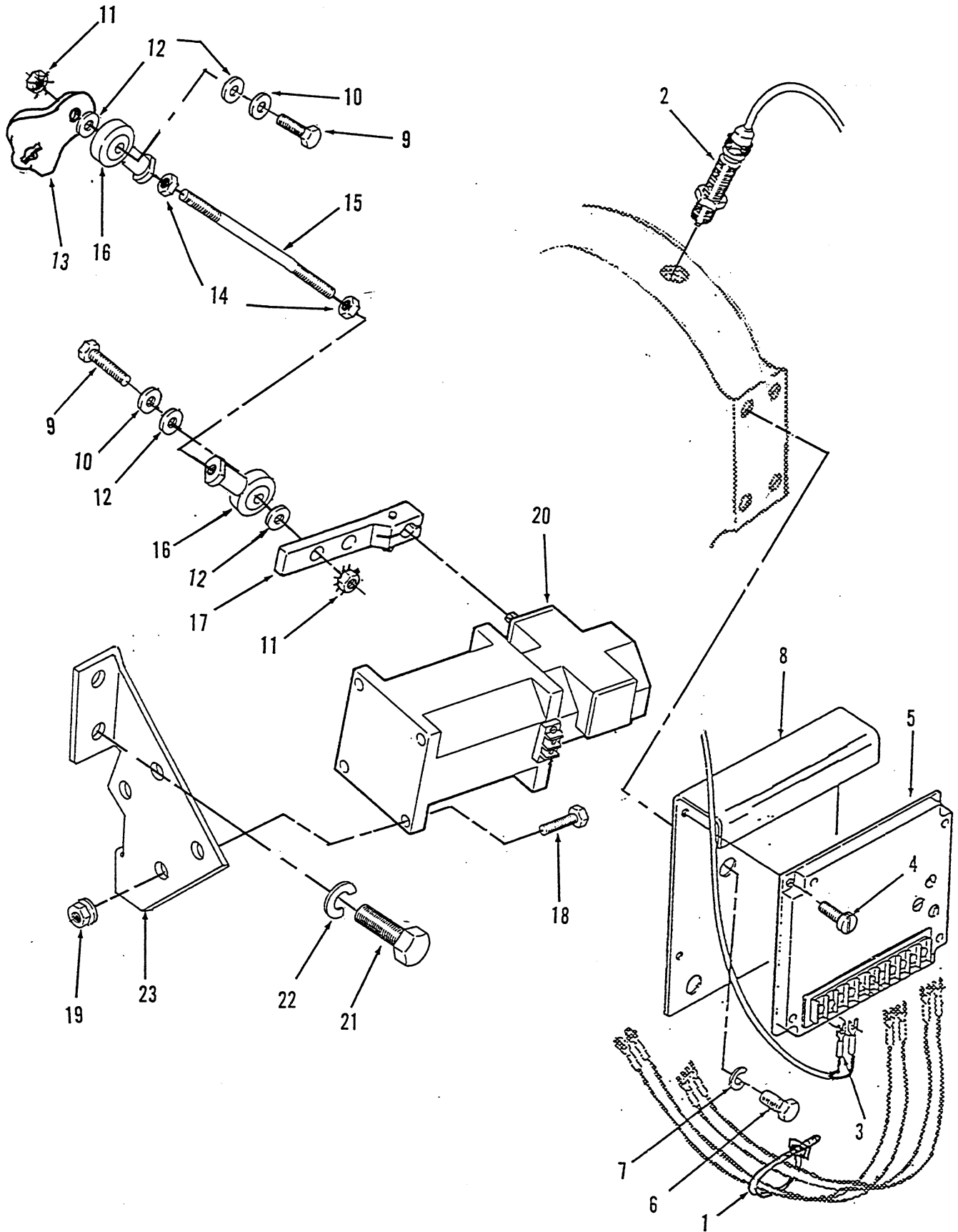
| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 503-0900 | | | 4 | Clamp, Hose |
| 2 | 503-1595 | | | 1 | Hose |
| 3 | 140-1548 | | | 1 | Indicator, Service |
| 4 | 140-1260 | | | 1 | Adapter, Filter - Indicator |
| 5 | 140-2238 | | | 1 | Tube, Inlet - Air |
| 6 | 503-1354 | | | 1 | Elbow, Rubber - Molded |
| 7 | 140-1601 | | | 1 | Hood, Inlet - Air |
| 8 | 815-0115 | | | 2 | Screw, Machine - Fillister Head (1/4-20 x 1") |
| 9 | 863-0002 | | | 2 | Nut, Square (1/4-20) |
| 10 | 140-2240 | | | 1 | Cleaner, Air (Includes Element) |
| 11 | 140-2241 | | | 1 | Element, Air Cleaner |
| 13 | 821-0029 | | | 4 | Screw, Self-locking Washer Head (3/8-16 x 3/4") |
| 14 | 870-0281 | | | 4 | Nut, Lock (3/8-16) |
| 15 | 140-1973 | | | 2 | Band, Mounting |
| 16 | 718-1072 | | | 3 | Screw, Cap - Hex Head (M12 x 1.75 x 20mm) |
| 17 | 850-2012 | | | 3 | Washer, Lock (M12) |
| 18 | 140-2239 | | | 1 | Bracket, Mounting - Air Cleaner |

HEAVY DUTY AIR CLEANER Installation Of



| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 503-0900 | | | 4 | Clamp, Hose |
| 2 | 503-1595 | | | 1 | Hose |
| 3 | 140-1548 | | | 1 | Indicator, Service |
| 4 | 140-1260 | | | 1 | Adapter, Filter - Indicator |
| 5 | 140-2238 | | | 1 | Tube, Inlet - Air |
| 6 | 503-1354 | | | 1 | Elbow, Rubber - Molded |
| 7 | 140-1601 | | | 1 | Hood, Inlet - Air |
| 8 | 815-0115 | | | 2 | Screw, Machine - Fillister Head (1/4-20 x 1") |
| 9 | 863-0002 | | | 2 | Nut, Square (1/4-20) |
| 10 | 140-2251 | | | 1 | Cleaner, Air (Includes Elements) |
| 11 | 140-2241 | | | 1 | Primary (Outer) Air Cleaner Element |
| 12 | 140-2252 | | | 1 | Secondary (Inner) Air Cleaner Element |
| 13 | 821-0029 | | | 4 | Screw, Self-locking - Hex Washer Head (3/8-16 x 3/4") |
| 14 | 870-0281 | | | 4 | Nut, Lock (3/8-16) |
| 15 | 140-1973 | | | 2 | Band, Mounting |
| 16 | 718-1072 | | | 3 | Screw, Cap - Hex Head (M12 x 1.75 x 20mm) |
| 17 | 850-2012 | | | 3 | Washer, Lock (M12) |
| 18 | 140-2239 | | | 1 | Bracket, Mounting - Air Cleaner |

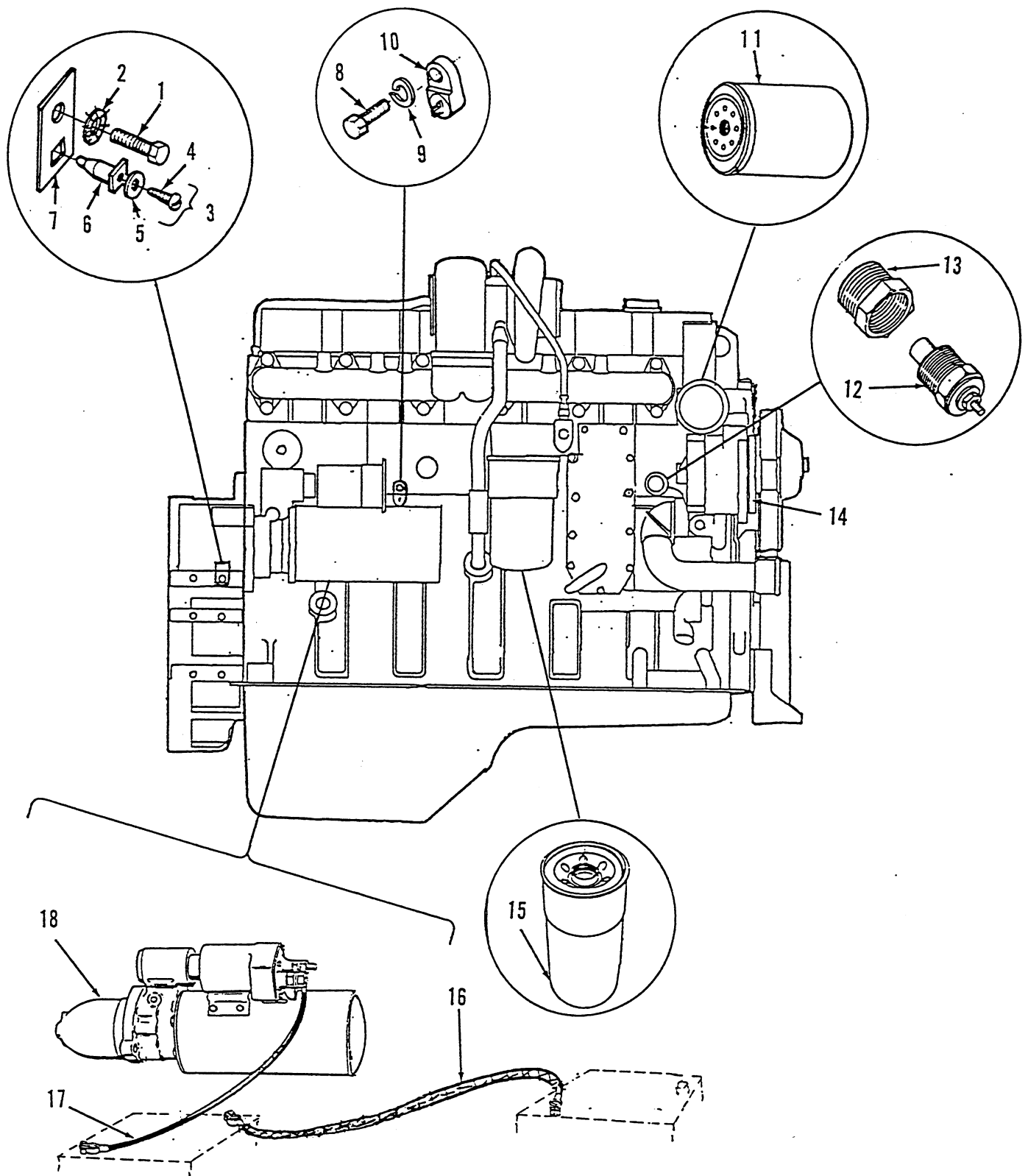
ELECTRONIC GOVERNOR Installation Of



ELECTRONIC GOVERNOR Installation Of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 332-1445 | | | 5 | Tie, Cable |
| 2 | 150-2201 | | | 1 | Sensor, Speed (Includes Electrical Leads, Less Terminals) |
| 3 | 332-1279 | | | 2 | Terminal (Use on Electrical Leads) |
| 4 | 813-0103 | | | 4 | Screw, Machine - Round Head (#10 - 32 x 3/4") |
| 5 | 151-0611 | | | 1 | Control, Governor 24 VDC |
| 6 | 800-2110 | | | 2 | Screw, Cap - Hex Head (M12 x 1.75 x 20mm) |
| 7 | 850-2012 | | | 2 | Washer, Lock (M12) |
| 8 | 150-2007 | | | 1 | Bracket, Controller |
| 9 | 815-0172 | | | 2 | Screw, Machine - Hex Head (#10 - 32 x 1.00") |
| 10 | 526-0327 | | | 2 | Washer, Flat (15/64) |
| 11 | 870-0131 | | | 2 | Nut, Hex W/ET (#10 - 32) |
| 12 | 526-0008 | | | 4 | Washer, Flat (#10) |
| 13 | 150-2237 | | | 1 | Lever, Governor |
| 14 | 870-0053 | | | 2 | Nut, Screw - Hex Head (#10 - 32) |
| 15 | 150-2218-03 | | | 1 | Rod, Governor |
| 16 | 150-2251 | | | 2 | End, Rod |
| 17 | 150-2203 | | | 1 | Lever, Actuator - Governor |
| 18 | 800-0008 | | | 4 | Screw, Cap - Hex Head (1/4 - 20 x 1-1/4") |
| 19 | 870-0212 | | | 4 | Nut, Lock (1/4 - 20) |
| 20 | 151-0625 | | | 1 | Actuator, Governor 24 VDC |
| 21 | 800-2085 | | | 3 | Screw, Cap - Hex Head (M10 x 1.50 x 20mm) |
| 22 | 850-2010 | | | 3 | Washer, Lock (M10) |
| 23 | 150-2238 | | | 1 | Bracket, Governor Actuator |

EXTERNAL ENGINE COMPONENTS LEFT SIDE

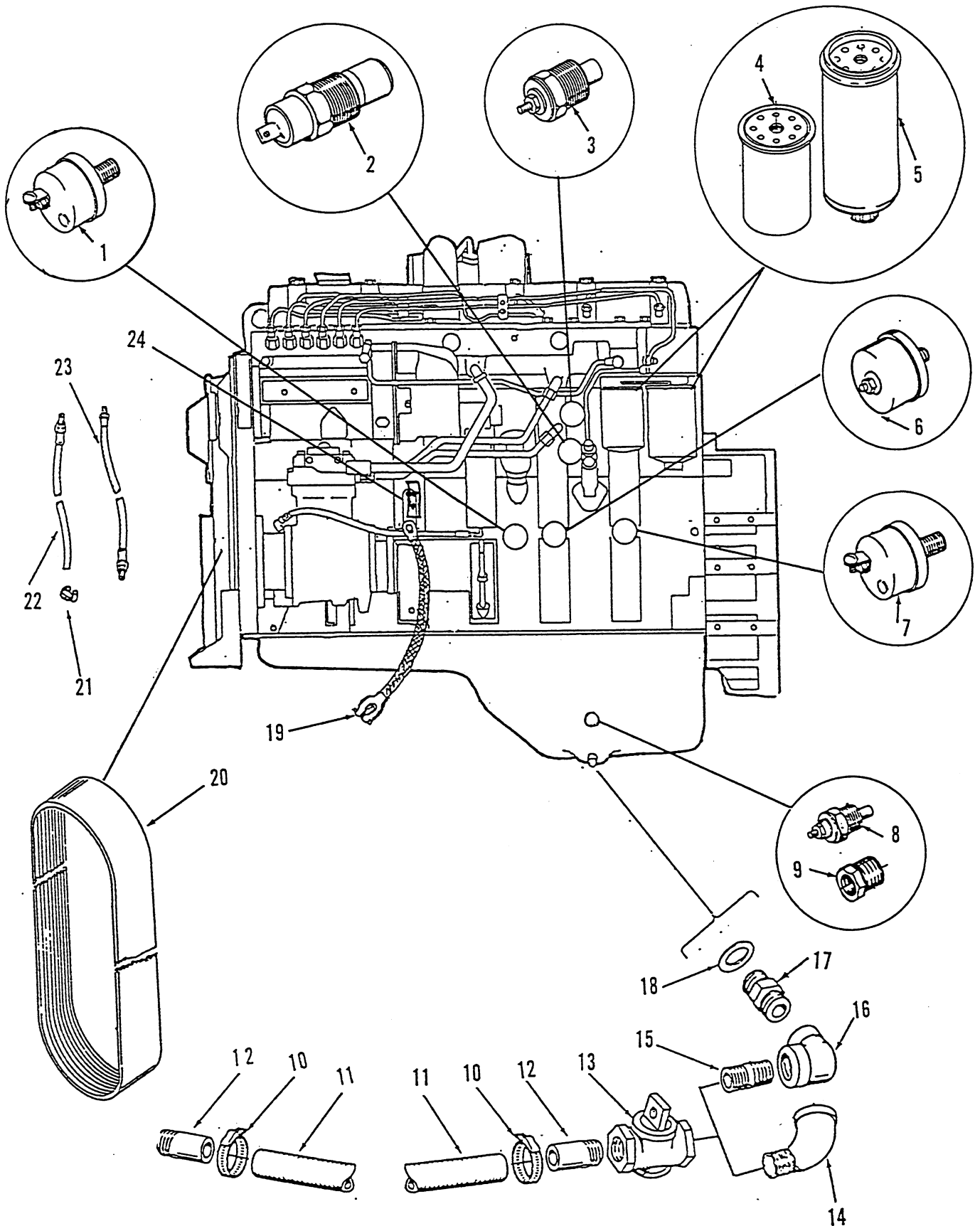


EXTERNAL ENGINE COMPONENTS LEFT SIDE

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 800-2110 | | | 1 | Screw, Cap - Hex Head (M12 x 1.75 x 20mm) |
| 2 | 856-0013 | | | 1 | Washer, Lock - EIT (1/2") |
| 3 | 332-2739 | | | 1 | Terminal Assembly (Includes item 3 thru 7) |
| 4 | 809-0035 | | | 1 | Screw, Tapping - Round Head (#8 x 3/4") |
| 5 | 508-0015 | | | 1 | Washer, Insulating |
| 6 | 870-0196 | | | 1 | Nut, Insulated |
| 7 | 332-2738 | | | 1 | Board, Terminal |
| 8 | 800-2058 | | | 1 | Screw, Cap - Hex Head (M8x1.25 x 25mm) |
| 9 | 850-2008 | | | 1 | Washer, Lock (M8) |
| 10 | 309-0269 | | | 1 | Switch, Thermostatic- Low Engine Temp (S4) Open 85°F, Close 65°F |
| 11 | NOTE 1 | | | | Filter, Water - W/Corrosion Inhibiting Chemical DCA4 |
| | 130-3536 | | | 1 | Service |
| | 130-3539 | | | 1 | Pre-Charging |
| 12 | 309-0554 | | | 1 | Switch, Thermostatic - Engine Coolant Temp (S2) Open 205°F, Close 230°F |
| 13 | 505-0021 | | | 1 | Bushing, Reducer |
| 14 | | | | | Alternator Group Items |
| | | 3904981 | CE | 1 | Fan, Alternator |
| | | 3908560 | CE | 1 | Pulley, Alternator |
| | | 3908563 | CE | 1 | Retainer, Pulley |
| | | 3911462 | CE | 1 | Alternator - 24 VDC (Less Pulley) |
| | | 3911560 | CE | 1 | Belt, Drive - Alternator |
| 15 | 122-0756 | | | 1 | Element - Oil Filter |
| 16 | 416-0923 | | | 1 | Cable, Battery - Jumper |
| 17 | 416-0494 | | | 1 | Cable, Battery |
| 18 | | 3910644 | CE | 1 | Starter, Electrical - 24 VDC |

NOTE: 1. Use Service cartridge recommend in lieu of the Original Engine Factory Installed cartridge which contains a Pre-Charge amount of DCA or DCA4 Chemical. Replacement with Pre-charge Cartridge ONLY when complete Cooling System is drained and refilled!.

EXTERNAL ENGINE COMPONENTS RIGHT SIDE



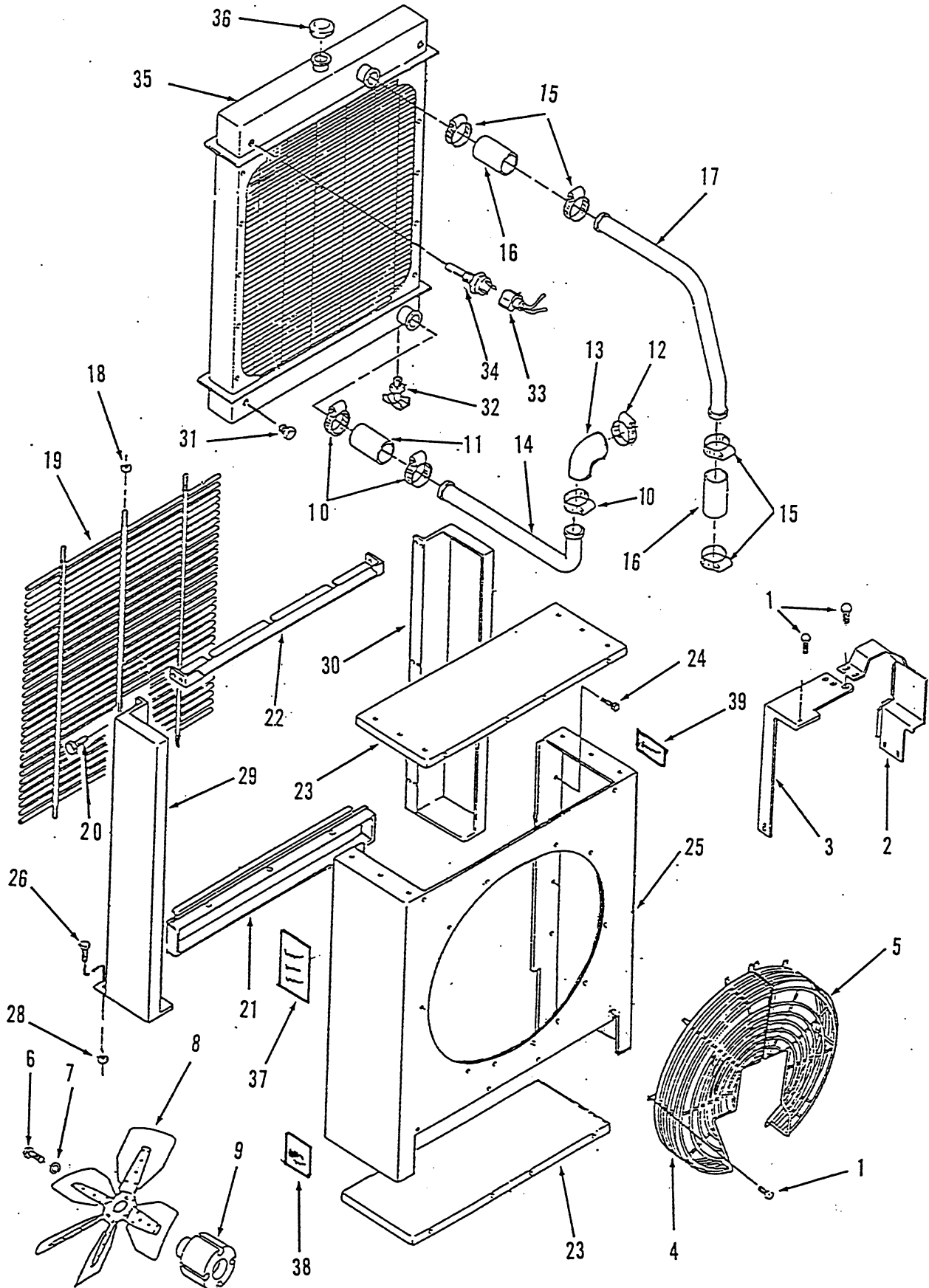
**EXTERNAL ENGINE COMPONENTS
RIGHT SIDE**

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 309-0272 | | | 1 | Switch, Pressure - Oil, Pre Alarm (S5) (One Terminal) Close 20#PSI |
| 2 | 309-0553 | | | 1 | Switch, Thermostatic - Engine Coolant Temp, Pre-Alarm (S6) Open 195°F, Close 220°F |
| 3 | 193-0375 | | | 1 | Sender, Temperature - Engine Coolant (E2) |
| 4 | 149-2251 | | | 1 | Filter, Fuel - Secondary |
| 5 | 149-2250 | | | 1 | Filter, Fuel - Primary |
| 6 | 193-0244 | | | 1 | Sender, Pressure - Oil (E1) |
| 7 | 309-0561 | | | 1 | Switch, Pressure - Oil, Shutdown (S1) (Dual Terminal) Close 14#PSI |
| 8 | 193-0353 | | | 1 | Sender, Temperature - Oil (E4) |
| 9 | 505-1373 | | | 1 | Bushing, Reducer (M22 x 1/8 NPTF) |
| 10 | 503-0197 | | | 2 | Clamp, Hose |
| 11 | 503-1195 | | | 1 | Hose (3/4"ID x 24"LG) |
| 12 | 505-0185 | | | 2 | Nipple, Pipe - Half |
| 13 | 504-0011 | | | 1 | Valve, Shutoff |
| 14 | 505-0248 | | | 1 | Elbow, Pipe - Street, 45 Deg. |
| 15 | 505-0100 | | | 1 | Nipple, Pipe (Note 1) |
| 16 | 505-0040 | | | 1 | Elbow, Pipe - 90 Deg (Note 1) |
| 17 | 102-1237 | | | 1 | Adapter, Drain - Oil |
| 18 | 102-1147 | | | 1 | Gasket, Drain - Oil Pan |
| 19 | 416-0619 | | | 1 | Cable, Battery (18"Lg) |
| | 800-2110 | | | | Attaching Parts for Cable |
| | 856-0013 | | | 1 | Screw, Cap - Hex Head (M12x1.75x20mm) |
| | 850-2012 | | | 1 | Washer, Lock - EIT (1/2") |
| | | | | 1 | Washer, Lock - Spring (M12) |
| 20 | Note 2 | 3911571 | CE | 1 | Belt, Drive - Fan and Alternator |
| 21 | 503-0685 | | | 1 | Clamp, Hose |
| 22 | 501-0480 | | | 1 | Line, Fuel - Flex (Fuel Out) |
| 23 | 501-0441 | | | 1 | Line, Fuel - Flex (Fuel In) |
| 24 | 150-2252 | | | 1 | Bracket - Low Speed Stop Adjustment |
| | | | | | Attaching Parts for Bracket |
| | 718-1021 | | | 2 | Screw, Cap - Hex Head (M6 x 1.0 x 20mm) |
| | 718-1026 | | | 1 | Screw, Cap - Hex Head (M6 x 1.0 x 45mm) |
| | 860-2007 | | | 2 | Nut, Hex (M6 x 1.0) |

NOTES:

- Optional installation of Oil Drain Components uses items 15 and 16 in lieu of item 14, select as applicable.
- Not Stocked for Sale in the Central Parts Distribution Center.

RADIATOR COOLING SYSTEM Installation Of



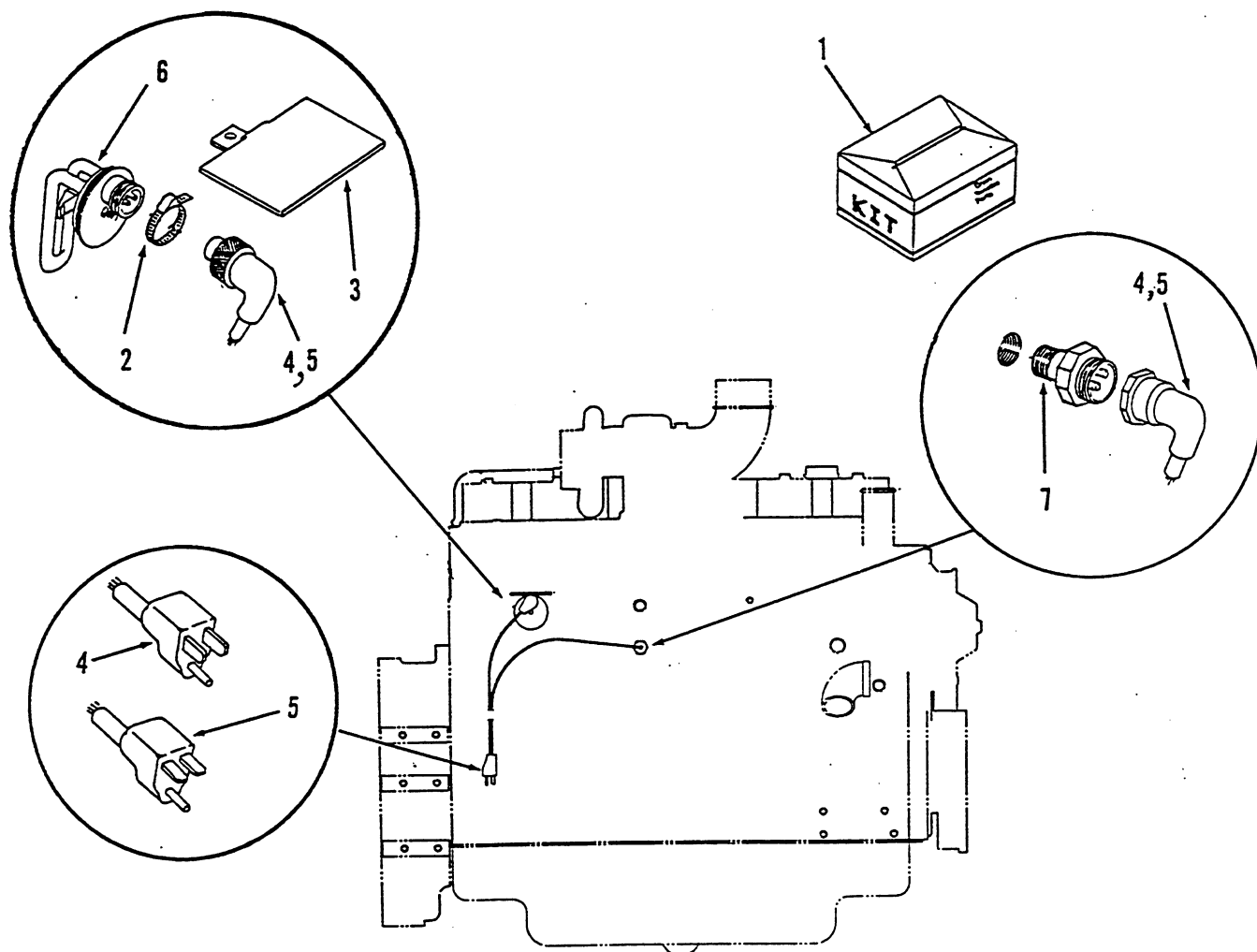
RADIATOR COOLING SYSTEM Installation Of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 821-0018 | | | 36 | Screw, Self-locking - Hex Washer Head (1/4-20 x 5/8") |
| 2 | 130-3218 | | | 1 | Guard, Belt |
| 3 | 130-3217 | | | 1 | Guard, Belt |
| 4 | 130-3209-01 | | | 1 | Guard, Fan |
| 5 | 130-3209-02 | | | 1 | Guard, Fan |
| 6 | 800-2096 | | | 4 | Screw, Cap - Hex Head (M10 x 1.5 x 75mm) |
| 7 | 850-2010 | | | 4 | Washer, Lock - Spring (M10) |
| 8 | 130-3208 | | | 1 | Fan, Radiator |
| 9 | 130-3216 | | | 1 | Spacer, Fan |
| 10 | 503-0365 | | | 3 | Clamp, Hose |
| 11 | 503-1599 | | | 1 | Hose, Radiator |
| 12 | 503-1586 | 43828-D | CE | 1 | Clamp, Hose |
| 13 | Note 1 | 3909389 | CE | 1 | Elbow, Hose |
| 14 | 130-3212 | | | 1 | Tube, Outlet - Radiator |
| 15 | 503-0465 | | | 4 | Clamp, Hose |
| 16 | 503-1379-01 | | | 2 | Hose, Radiator |
| 17 | 130-3211 | | | 1 | Tube, Inlet - Radiator |
| 18 | 870-0281 | | | 6 | Nut, Self-locking - Hex (3/8-16) |
| 19 | 130-3210 | | | 1 | Grille - Radiator |
| 20 | 821-0010 | | | 8 | Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2") |
| 21 | 130-3204 | | | 1 | Support, Grille - Lower |
| 22 | 130-3203 | | | 1 | Support, Grille - Upper |
| 23 | 130-3206 | | | 2 | Shroud - Top/Bottom |
| 24 | 821-0028 | | | 16 | Screw, Self-locking - Hex Washer Head (3/8-16 x 1/2") |
| 25 | 130-3205 | | | 1 | Wrapper, Shroud - Fan |
| 26 | 821-0029 | | | 4 | Screw, Self-Locking - Hex Washer Head (3/8-16 x 3/4") |
| 28 | 870-0281 | | | 4 | Nut, Self-locking - Hex (3/8-16) |
| 29 | 130-3202-01 | | | 1 | Guard, Radiator |
| 30 | 130-3202-02 | | | 1 | Guard, Radiator |
| 31 | 502-0153 | | | 3 | Plug, Pipe - Hex (1/4 NPT) |
| 32 | 504-0003 | | | 1 | Cock, Drain (1/4 NPT) |
| 33 | 338-1919 | | | 1 | Harness, Wiring |
| 34 | 193-0322 | | | 1 | Sender, Level - Coolant |
| 35 | 130-3207 | | | 1 | Radiator (Includes Cap) |
| 36 | 130-1788 | | | 1 | Cap, Radiator - 14 PSI |
| 37 | 98-5393 | | | 2 | Decal - Warning (Rotating Fan) |
| 38 | 98-1003 | | | 2 | Decal - Water Drain |
| 39 | 98-0961 | | | 2 | Decal - Water Level |

NOTES:

1. Not Stocked for Sale In The Central Parts Distribution Center.

ENGINE COOLANT HEATER Installation Of

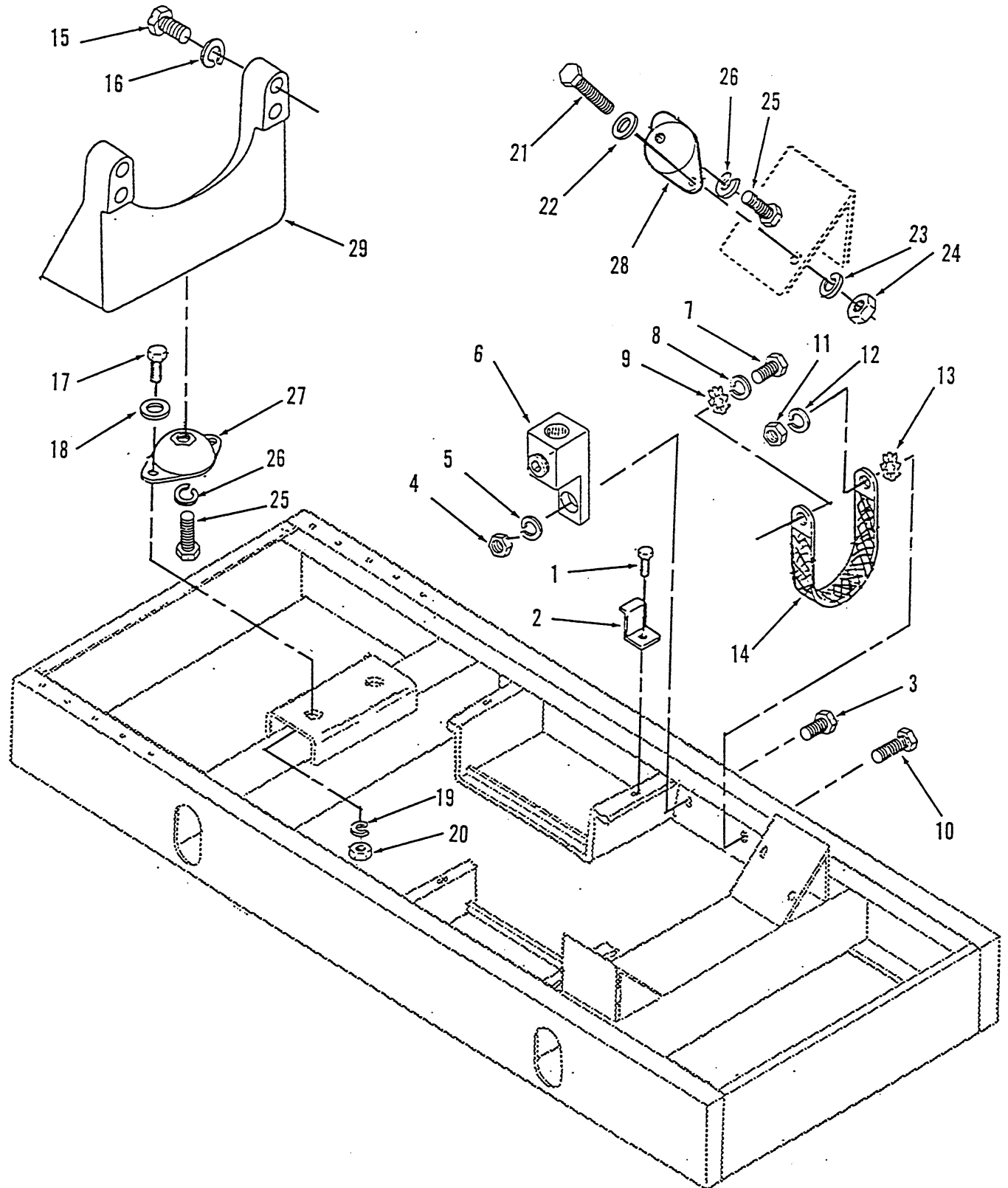


| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 333-0421 | | | 1 | Kit, Heater - Engine Coolant (Includes one each of all items) |
| | 333-0422 | | | 1 | 120 VAC, 1500 Watt |
| | 333-0422 | | | 1 | 240 VAC, 1500 Watt |
| 2 | 503-0185 | | | 1 | Clamp, Hose |
| 3 | 155-2353 | | | 1 | Shield, Heat |
| 4 | 335-0162 | | | 1 | Cord, Electrical - 120 VAC |
| 5 | 335-0163 | | | 1 | Cord, Electrical - 240 VAC |
| 6 | | | | | Heater, Electrical |
| | 333-0391 | | | 1 | 120 VAC, 1500 Watt |
| | 333-0392 | | | 1 | 240 VAC, 1500 Watt |
| 7 | 309-0555 | | | 1 | Switch, Thermostatic |

TABLE OF CONTENTS
HOUSING SECTION

| | |
|--|-----|
| ENGINE/GENERATOR MOUNTING COMPONENTS | 2-3 |
| SET HOUSING COMPONENTS | 2-5 |

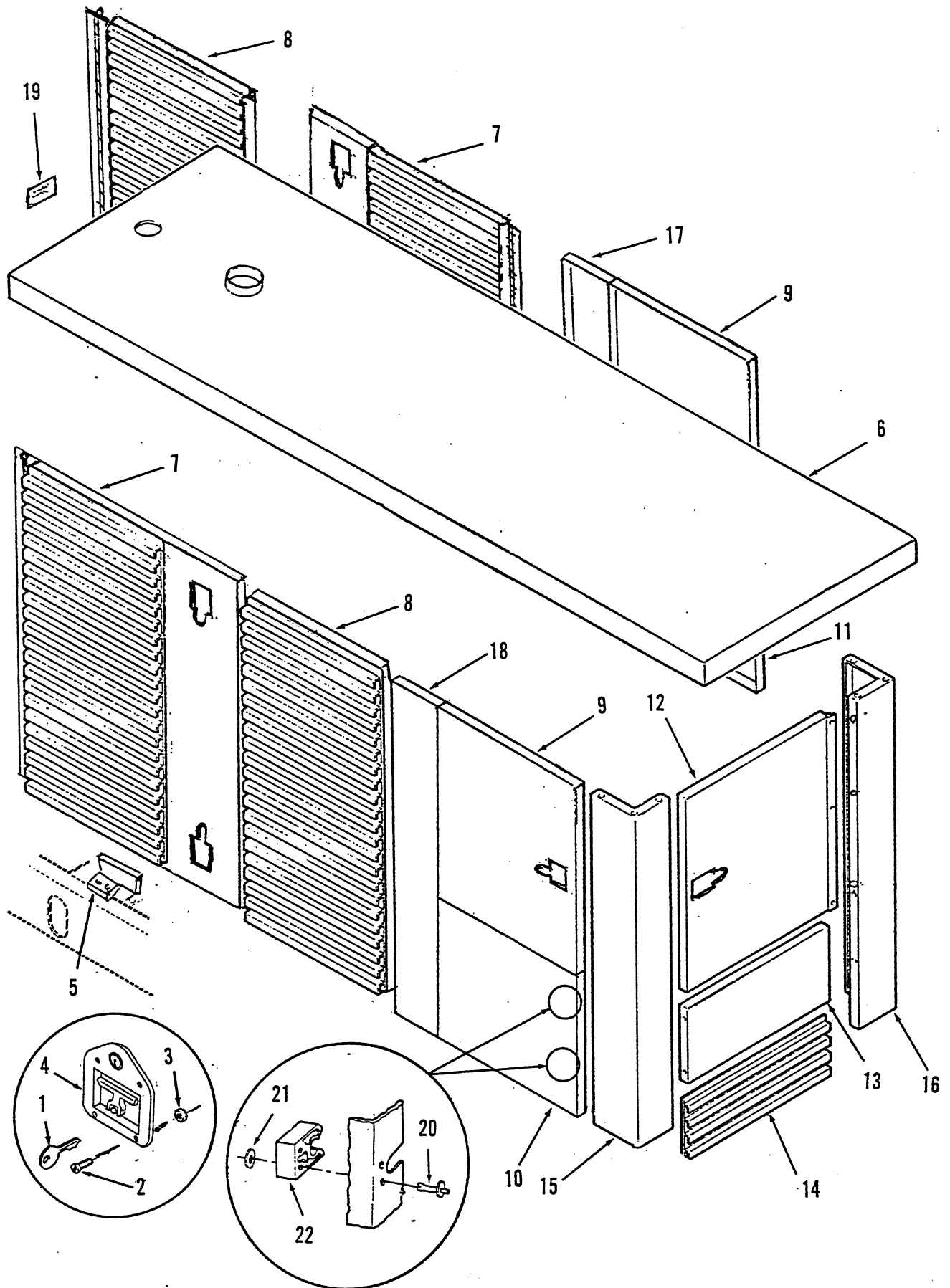
ENGINE/GENERATOR MOUNTING COMPONENTS



ENGINE/GENERATOR MOUNTING COMPONENTS

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 870-0048 | | | 4 | Screw, Cap - Hex Head (3/8-16 x 3/4") |
| 2 | 416-0850 | | | 4 | Bracket, Retaining |
| 3 | 800-0026 | | | 1 | Screw, Cap - Hex Head (5/16-18 x 3/4") |
| 4 | 856-0008 | | | 1 | Washer, Lock - EIT (5/16) |
| 5 | 870-0257 | | | 1 | Nut, Lock (5/16-18) |
| 6 | 332-1473 | | | 1 | Lug, Solderless |
| 7 | 800-2111 | | | 1 | Screw, Cap - Hex Head (M12 x 1.75 x 25mm) |
| 8 | 850-2012 | | | 1 | Washer, Lock - Spring (M12) |
| 9 | 856-0013 | | | 1 | Washer, Lock - EIT (1/2") |
| 10 | 800-0091 | | | 1 | Screw, Cap - Hex Head (1/2-13 x 1-1/4") |
| 11 | 862-0016 | | | 1 | Nut, Hex (1/2-13) |
| 12 | 850-0060 | | | 1 | Washer, Lock - Spring (1/2") |
| 13 | 856-0013 | | | 1 | Washer Lock - EIT (1/2") |
| 14 | 337-0090 | | | 1 | Strap, Electrical |
| 15 | 800-2124 | | | 4 | Screw, Cap - Hex Head (M12 x 1.75 x 90mm) |
| 16 | 850-2012 | | | 4 | Washer, Lock (M12) |
| 17 | 800-0091 | | | 2 | Screw, Cap - Hex Head (1/2-13 x 1-1/4") |
| 18 | 526-0219 | | | 2 | Washer, Flat (1/2") |
| 19 | 850-0060 | | | 2 | Washer, Lock - Spring (1/2") |
| 20 | 862-0016 | | | 2 | Nut, Hex (1/2-13) |
| 21 | 800-0071 | | | 4 | Screw, Cap - Hex Head (7/16-14 x 1") |
| 22 | 526-0219 | | | 4 | Washer, Flat (1/2") |
| 23 | 850-0055 | | | 4 | Washer, Lock - Spring (7/16") |
| 24 | 862-0004 | | | 4 | Nut, Hex (7/16-14) |
| 25 | 800-0520 | | | 3 | Screw, Cap - Hex Head (3/4-10 x 1") |
| 26 | 850-0079 | | | 3 | Washer, Lock - Spring (3/4") |
| 27 | 402-0030 | | | 1 | Mount, Vibration - Engine |
| 28 | 402-0568 | | | 2 | Mount, Vibration - Generator |
| 29 | 403-2690 | | | 1 | Support, Engine |

SET HOUSING COMPONENTS



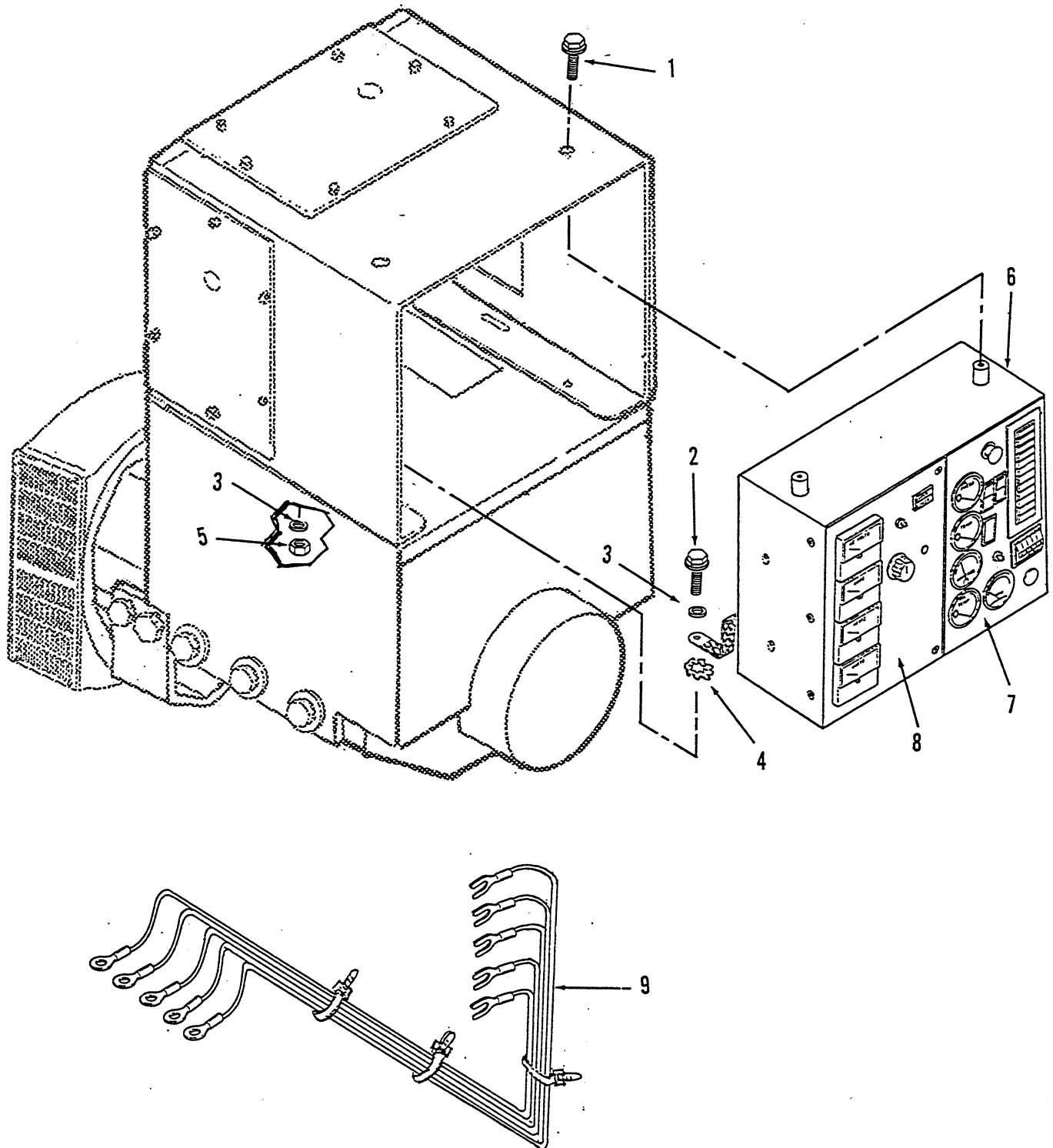
SET HOUSING COMPONENTS

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 406-0639 | | | 1 | Key - Door Handle Lock |
| 2 | 815-0607 | | | 28 | Screw, Machine - Oval Head (#8-32 x 3/8") |
| 3 | 870-0235 | | | 28 | Nut, Self-Locking - Hex (#8 - 32) |
| 4 | 406-0626 | | | 7 | Handle, Door (Includes Key) |
| 5 | 405-3980 | | | 2 | Stop, Door |
| | 821-0018 | | | 4 | Attaching Parts for Stop |
| | 870-0212 | | | 4 | Screw, Self-Locking - Hex Head (1/4-20 x 5/8") |
| 6 | 405-4133 | | | 4 | Nut, Self-Locking - Hex (1/4-20) |
| | 821-0029 | | | 1 | Top, Housing |
| | 870-0281 | | | 14 | Attaching Parts for Top |
| 7 | 405-3962 | | | 14 | Screw, Self-Locking - Hex head (3/8-16 x 3/4") |
| | 819-1102 | | | 14 | Nut, Self-Locking - Hex (3/8 - 16) |
| 8 | 405-3961 | | | 2 | Door, Housing with Grille |
| | 819-1102 | | | 10 | Attaching Parts for Doors |
| 9 | 405-3950 | | | 10 | Screw, Machine - Pan Head (5/16-18 x 1/2") |
| | 819-1083 | | | 2 | Door, Housing with Grille |
| 10 | 405-3984 | | | 10 | Attaching Parts for Doors |
| | 819-1083 | | | 10 | Screw, Machine - Pan Head (5/16-18 x 1/2") |
| 11 | 405-3985 | | | 2 | Door, Housing - Side |
| | 819-1083 | | | 6 | Attaching Parts for Doors |
| 12 | 405-3952 | | | 6 | Screw, Machine - Pan Head (1/4-20 x 7/16") |
| | 819-1083 | | | 1 | Door, Access - Right Side (Includes Door Clips) |
| 13 | 405-3828 | | | 1 | Attaching Parts for Door |
| | 821-0014 | | | 3 | Screw, Machine - Pan Head (1/4-20 x 7/16") |
| 14 | 405-3833 | | | 1 | Door, Access - Left Side (Includes Door Clips) |
| | 821-0014 | | | 1 | Attaching Parts for Door |
| 15 | 405-3859-01 | | | 3 | Screw, Machine - Pan Head (1/4-20 x 7/16") |
| | 821-0029 | | | 1 | Door, Control |
| 16 | 405-3859-02 | | | 3 | Attaching Parts for Door |
| | 821-0029 | | | 3 | Screw, Machine - Pan Head (1/4-20 x 7/16") |
| 17 | 405-4131-02 | | | 1 | Panel, Housing (Rear) |
| | 821-0029 | | | 1 | Attaching Parts for Panel |
| 18 | 405-4131-01 | | | 4 | Screw, Self-Locking - Hex (5/16-18 x 1/2") |
| | 821-0029 | | | 1 | Grille |
| 19 | 98-5429 | | | 4 | Attaching Parts for Grille |
| 20 | 818-0150 | | | 4 | Screw, Self-Locking - Hex (5/16-18 x 1/2") |
| 21 | 526-0003 | | | 1 | Post, Housing (Rear) (RH) |
| 22 | 405-1872 | | | 1 | Attaching Parts for Post |
| | 821-0029 | | | 3 | Screw, Self-Locking - Hex Head (3/8-16 x 3/4") |
| | 870-0281 | | | 3 | Nut, Self-Locking - Hex (3/8 - 16) |
| | 405-3859-02 | | | 1 | Post, Housing (Rear) (LH) |
| | 821-0029 | | | 1 | Attaching Parts for Post |
| | 870-0281 | | | 3 | Screw, Self-Locking - Hex Head (3/8-16 x 3/4") |
| | 405-4131-02 | | | 3 | Nut, Self-Locking - Hex (3/8 - 16) |
| | 821-0029 | | | 1 | Post, Housing (Center) (LH) |
| | 405-4131-01 | | | 1 | Attaching Parts for Post |
| | 821-0029 | | | 2 | Screw, Self-Locking - Hex Head (3/8-16 x 3/4") |
| | 98-5429 | | | 1 | Post, Housing (Center) (RH) |
| | 818-0150 | | | 2 | Attaching Parts for Post |
| | 526-0003 | | | 2 | Screw, Self-Locking - Hex Head (3/8-16 |
| | 405-1872 | | | 2 | Decal "COOLANT FILL" |
| | | | | 8 | Rivet, Drive |
| | | | | 8 | Washer, Flat |
| | | | | 4 | Clip, Door (Non-metallic) |

TABLE OF CONTENTS
CONTROL SECTION

| | |
|---|------|
| GENERATOR SET CONTROL - Installation of | 3-3 |
| ENGINE CONTROL PANEL COMPONENTS | 3-5 |
| TACHOMETER - Installation Of | 3-7 |
| OIL TEMP GAUGE - Installation of | 3-9 |
| EMERGENCY STOP SWITCH - Installation of | 3-11 |
| ENGINE MONITOR BOARD - Installation Of | 3-13 |
| ALARM RELAY MODULES - Installation Of..... | 3-15 |
| RUN RELAYS - Installation of | 3-17 |
| TIME DELAY START/STOP - Installation Of | 3-19 |
| ELECTRONIC OVERSPEED MODULE - Installation of | 3-21 |
| GENERATOR CONTROL PANEL COMPONENTS | 3-23 |
| AMMETER & CURRENT TRANSFORMER - Installation Of | 3-25 |
| WATTMETER - Installation Of | 3-27 |
| VOLTAGE REGULATOR - Installation of | 3-29 |
| CONTROL SPACE HEATER - Installation Of | 3-31 |
| AUX TERMINAL BLOCK - Installation Of | 3-32 |
| CONTROL BOX & MOUNTING COMPONENTS | 3-33 |

GENERATOR SET CONTROL
Installation Of

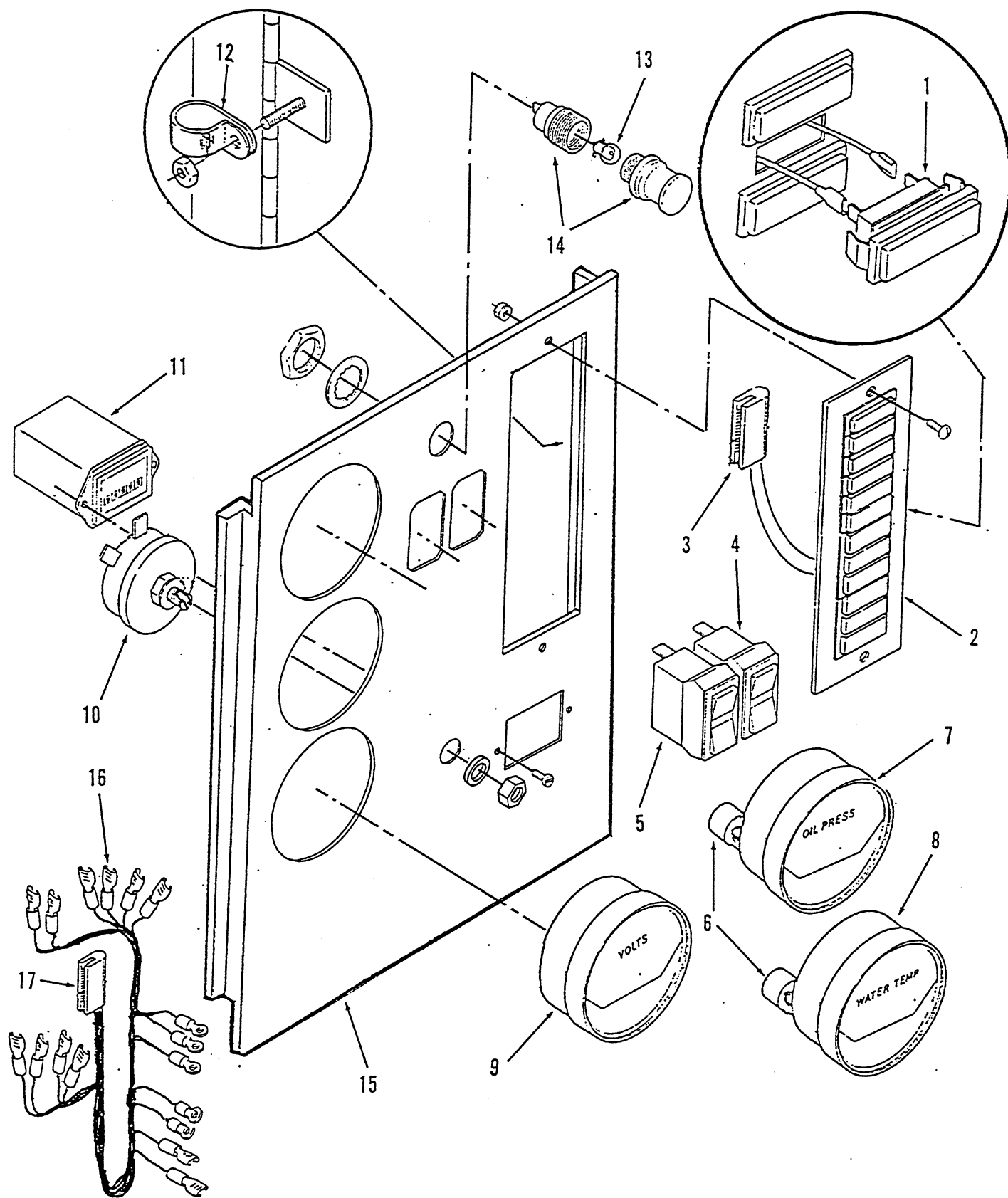


GENERATOR SET CONTROL **Installation Of**

| REF | CPDC | SOURCE | C | QTY | PART |
|-----|----------|----------|---|------|---|
| NO. | PART NO. | PART NO. | O | USED | DESCRIPTION |
| | | | D | | |
| | | | E | | |
| 1 | 821-0014 | | | 1 | Screw, Self-Locking - Hex Washer Head (5/16-18 x 1/2") |
| 2 | 821-0018 | | | 1 | Screw, Self-Locking - Hex Washer Head (1/4-20 x 5/8") |
| 3 | 526-0018 | | | 2 | Washer, Flat (1/4") |
| 4 | 856-0006 | | | 1 | Washer, Lock - EIT (1/4") |
| 5 | 870-0212 | | | 1 | Nut, Self-Locking - Hex (1/4-20) |
| 6 | NOTE 1 | | | REF | Control, Generator Set (See Control Section Illustrations and Parts Lists For Replaceable Components) |
| 7 | NOTE 1 | | | REF | Engine Control Panel (See Separate Illustration for Components) |
| 8 | NOTE 1 | | | REF | Generator Control Panel (See Separate Illustration for Components) |
| 9 | 338-2448 | | | 1 | Harness, Wiring - Generator To Control TB21 |

NOTE 1. Not Stocked For Sale at the Central Parts Distribution Center.

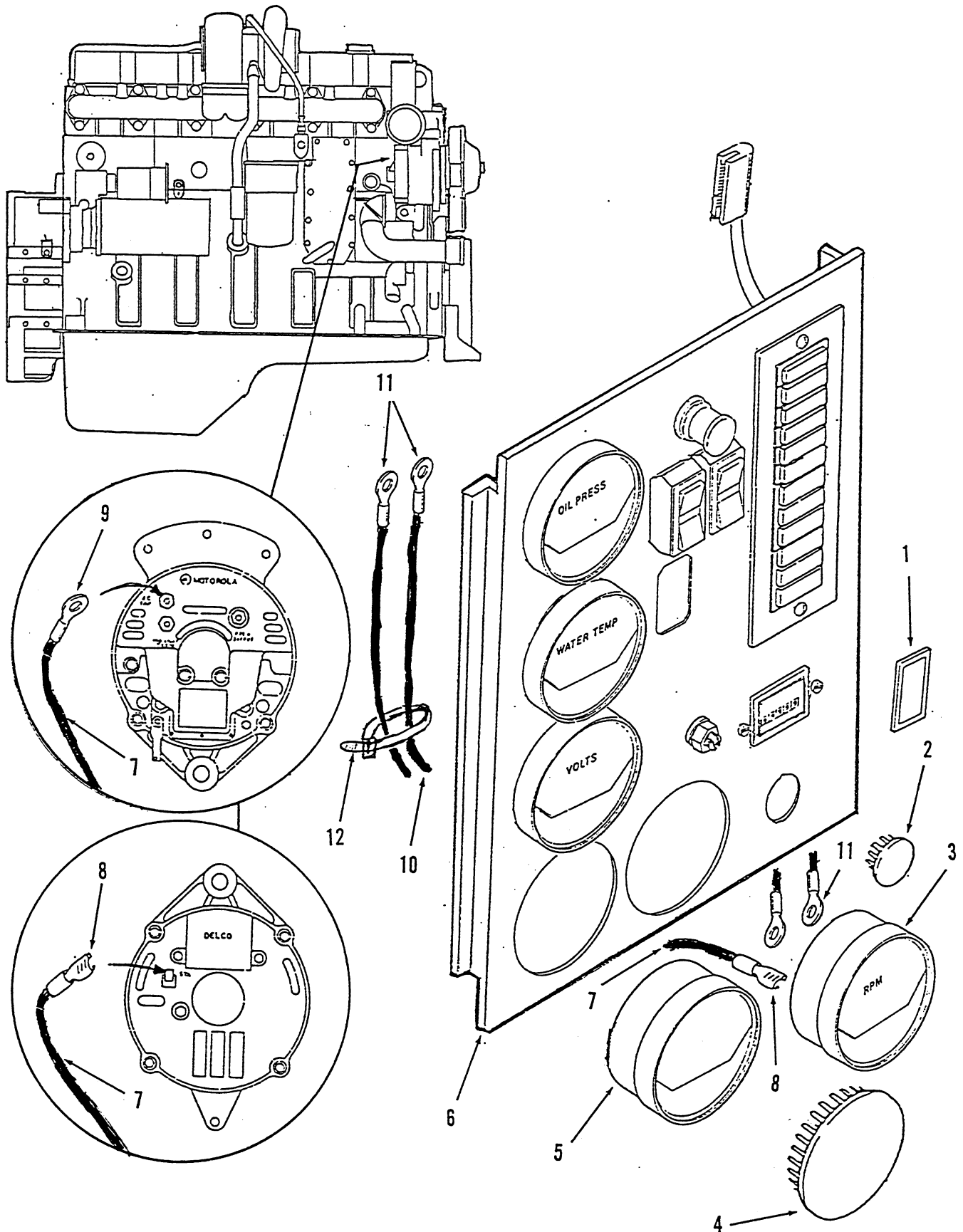
ENGINE CONTROL PANEL COMPONENTS



ENGINE CONTROL PANEL COMPONENTS

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 322-0369-03 | | | 1 | Lamp, Incandescent - 1/3 Watt, 28 Volts DC |
| 2 | | | | | Module, Indicator - Fault (A12) (Includes Connector Housing) |
| | 322-0359-02 | | | 1 | 7 Light Module |
| | 322-0360-02 | | | 1 | 12 Light Module |
| | | | | | Attaching Parts for Fault Module |
| | 815-0385 | | | 2 | Screw, Machine - Round Head (#6 - 32 x 1/2") |
| | 870-0183 | | | 2 | Nut, Self-Locking - ET Hex Washer Head (#6 - 32) |
| 3 | 323-1310 | | | 1 | Housing, Conn - 13 Pin (J3) (Less Contact Pins) |
| | 323-1302 | | | 13 | Contact, Pin |
| 4 | 308-0785 | | | 1 | Switch, Push - Reset/Panel Lamp (S11) |
| 5 | 308-0784 | | | 1 | Switch, Push - Run/Stop/Remote (S12) |
| 6 | 193-0250 | | | 2 | Resistor, Gauge (R12) |
| 7 | 193-0352 | | | 1 | Gauge, Pressure - Oil, 12 VDC (M11) |
| 8 | 193-0351 | | | 1 | Gauge, Temp - Water, 12 VDC (M12) |
| 9 | 302-1642 | | | 1 | Voltmeter, DC (M13) |
| 10 | 151-0402 | | | 1 | Potentiometer - Speed Control (R11) |
| 11 | 302-0885 | | | 1 | Meter, Running Time (M14) |
| | | | | | Attaching Parts for Meter |
| | 815-0385 | | | 2 | Screw, Machine - Round Head (#6 - 32 x 1/2") |
| | 870-0183 | | | 2 | Nut, Self-Locking - ET Hex Washer Head (#6 - 32) |
| 12 | 332-0052 | | | 1 | Clamp, Loop |
| | | | | | Attaching Parts for Clamp |
| | 870-0131 | | | 2 | Nut, Self-Locking - with ET Lockwasher (#10 - 32) |
| 13 | 322-0017 | | | 1 | Lamp, Incandescent - 28 VDC (DS11) |
| 14 | 322-0361 | | | 1 | Holder, Lamp |
| 15 | 301-9055-02 | | | 1 | Panel, Control - 3 Gauge Holes |
| 16 | 338-2277 | | | 1 | Harness Assembly, Wiring - DC (Includes Connector Housing) |
| 17 | 323-1308 | | | 1 | Housing, Conn - 12 Pin (J4) (Less Contact Pins) |
| | 323-1302 | | | 12 | Contact, Pin |
| 18 | 98-5219 | | | 1 | Decal - Panel Front (Not Illustrated) |
| 19 | 98-5220 | | | 1 | Decal - Panel Rear (Not Illustrated) |

TACHOMETER Installation Of



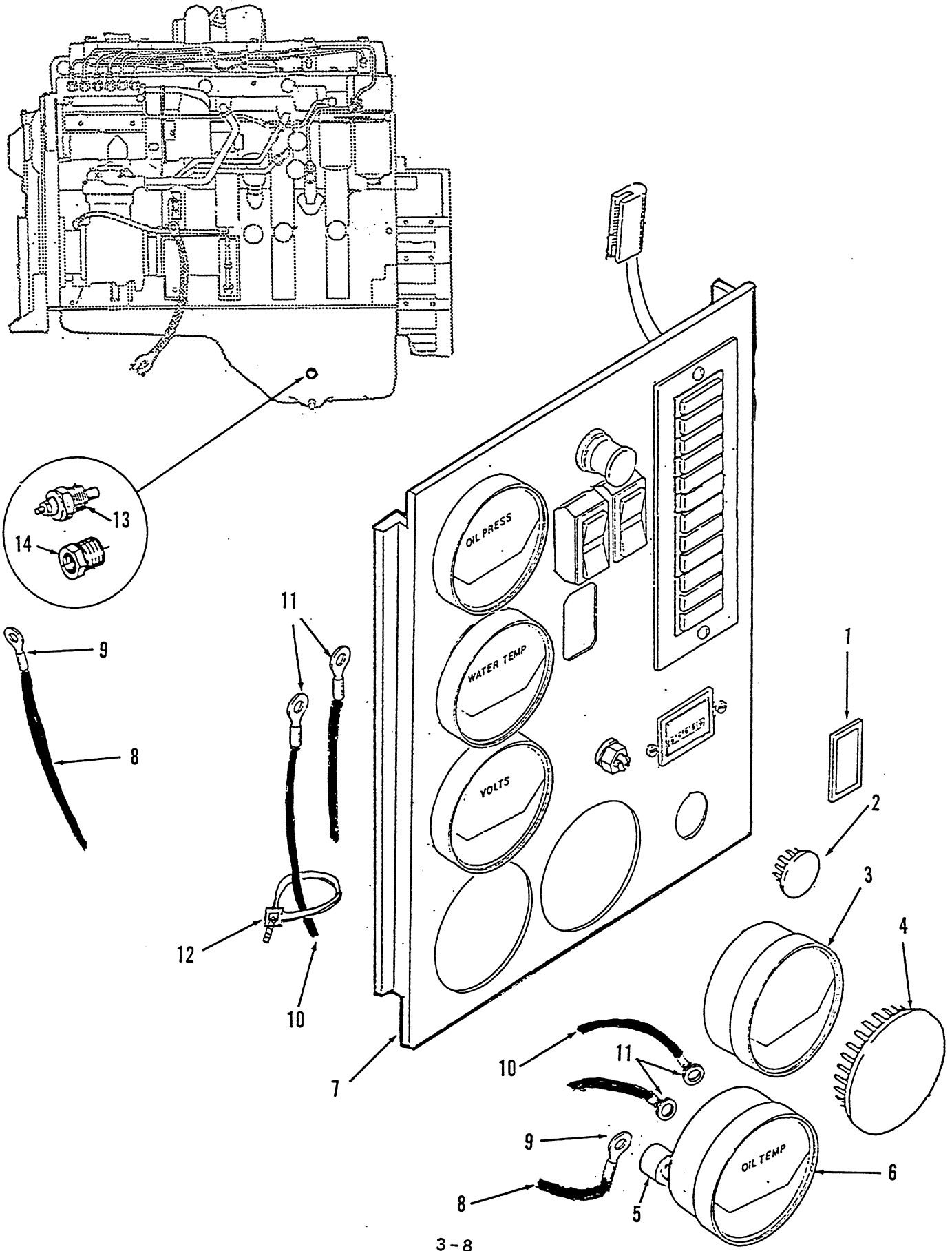
TACHOMETER Installation Of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 301-6257 | | | 1 | Cover - Blank Switch |
| 2 | 517-0137 | | | 1 | Plug, Dot Button |
| 3 | 302-1873-01 | | | 1 | Tachometer (M16) [NOTE 1] |
| 4 | 517-0131 | | | 1 | Plug, Dot Button (Option in lieu of Blank Meter) |
| 5 | 302-1723 | | | 1 | Meter, Blank (Option in lieu of Dot Button Plug) |
| 6 | 301-9055-01 | | | 1 | Panel, Control |
| 7 | NOTE 2 | | | AR | Wire, Electrical - 16 AWG, Insulated |
| 8 | 332-1993 | | | 2 | Terminal, Faston, .25 - 14-16 AWG Gauge Wire |
| 9 | 332-0807 | | | 1 | Terminal, Wire - Ring #10, 16-18 AWG Gauge Wire |
| 10 | NOTE 2 | | | AR | Wire, Electrical - 20 AWG, Insulated |
| 11 | 332-0147 | | | 4 | Terminal, Wire - Ring #10, 18-20 AWG Gauge Wire |
| 12 | 332-1445 | | | 3 | Tie, Cable |
| 18 | 98-5219 | | | 1 | Decal - Panel Front (Not Illustrated) |
| 19 | 98-5220 | | | 1 | Decal - Panel Rear (Not Illustrated) |

NOTES:

1. Tachometer comes with a 12 volt bulb and socket which must be discarded as meter illumination is provide by a front panel light. Caution, correct hookup per instruction sheet is necessary as the tachometer is used on both 12 VDC and 24 VDC electrical systems.
2. Electrical Wire Not Stocked for Sale in Central Distribution Parts Center; Obtain locally as needed.

OIL TEMPERATURE GAUGE Installation Of



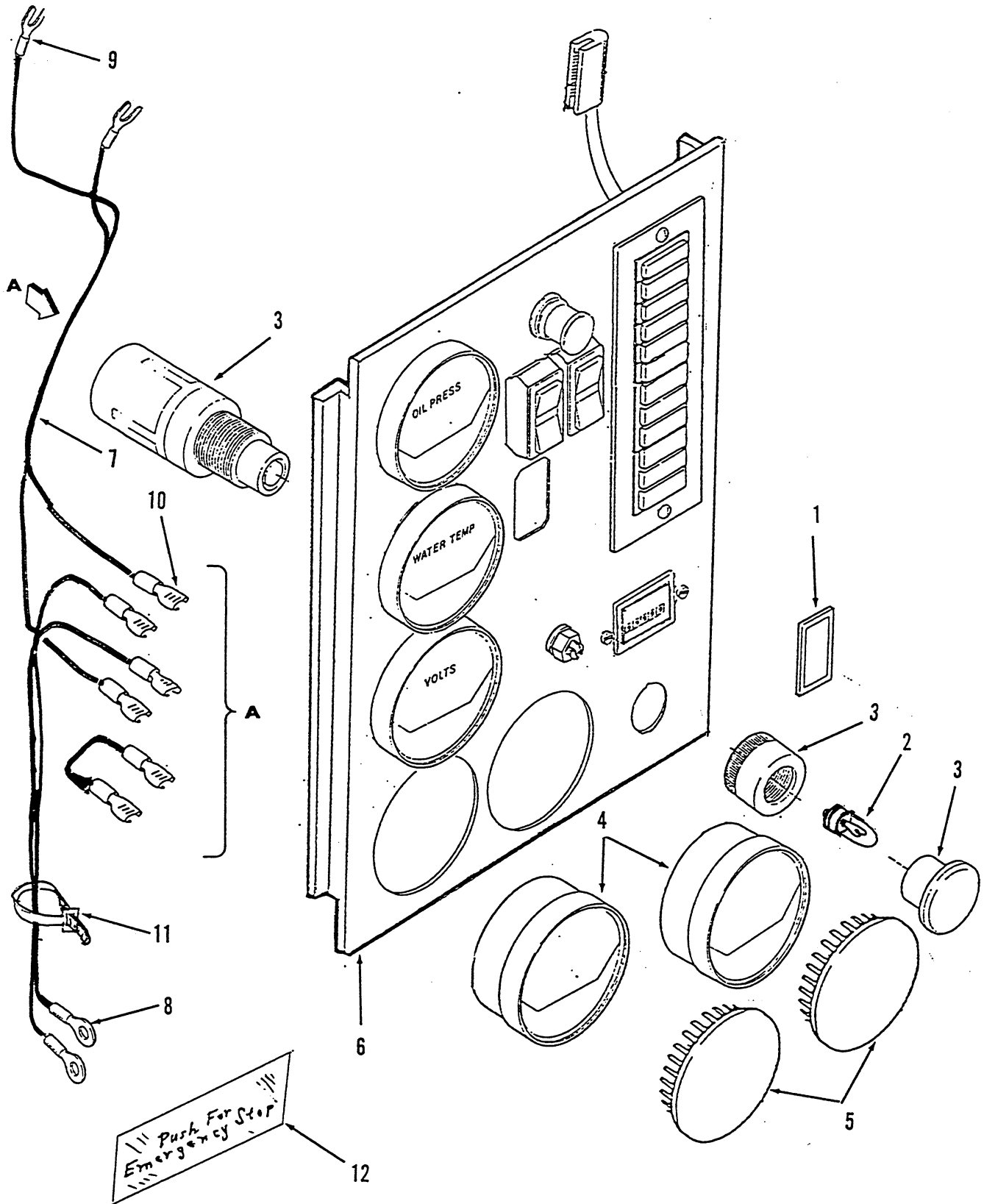
OIL TEMPERATURE GAUGE Installation Of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 301-6257 | | | 1 | Cover - Blank Switch |
| 2 | 517-0137 | | | 1 | Plug, Dot Button |
| 3 | 302-1723 | | | 1 | Meter, Blank (Option in lieu of Dot Button Plug) |
| 4 | 517-0131 | | | 1 | Plug, Dot Button (Option in lieu of Blank Meter) |
| 5 | 193-0250 | | | 1 | Resistor, Gauge |
| 6 | 193-0330 | | | 1 | Gauge - Oil Temperature |
| 7 | 301-9055-01 | | | 1 | Panel, Control |
| 8 | NOTE 1 | | | AR | Wire, Electrical - 16 AWG, Insulated |
| 9 | 332-0807 | | | 2 | Terminal, Wire - Ring #10, 16-18 AWG Gauge Wire |
| 10 | NOTE 1 | | | AR | Wire, Electrical - 20 AWG, Insulated |
| 11 | 332-0147 | | | 4 | Terminal, Wire - Ring #10, 18-20 AWG Gauge Wire |
| 12 | 332-1445 | | | 2 | Tie, Cable |
| 13 | 193-0353 | | | 1 | Sender, Temperature - Oil (E4) |
| 14 | 505-1373 | | | 1 | Bushing, Reducer (M22 x 1/8 NPTF) |
| 18 | 98-5219 | | | 1 | Decal - Panel Front (Not Illustrated) |
| 19 | 98-5220 | | | 1 | Decal - Panel Rear (Not Illustrated) |

NOTES:

1. Electrical Wire Not Stocked for Sale in Central Distribution Parts Center; Obtain locally as needed.

EMERGENCY STOP SWITCH Installation Of



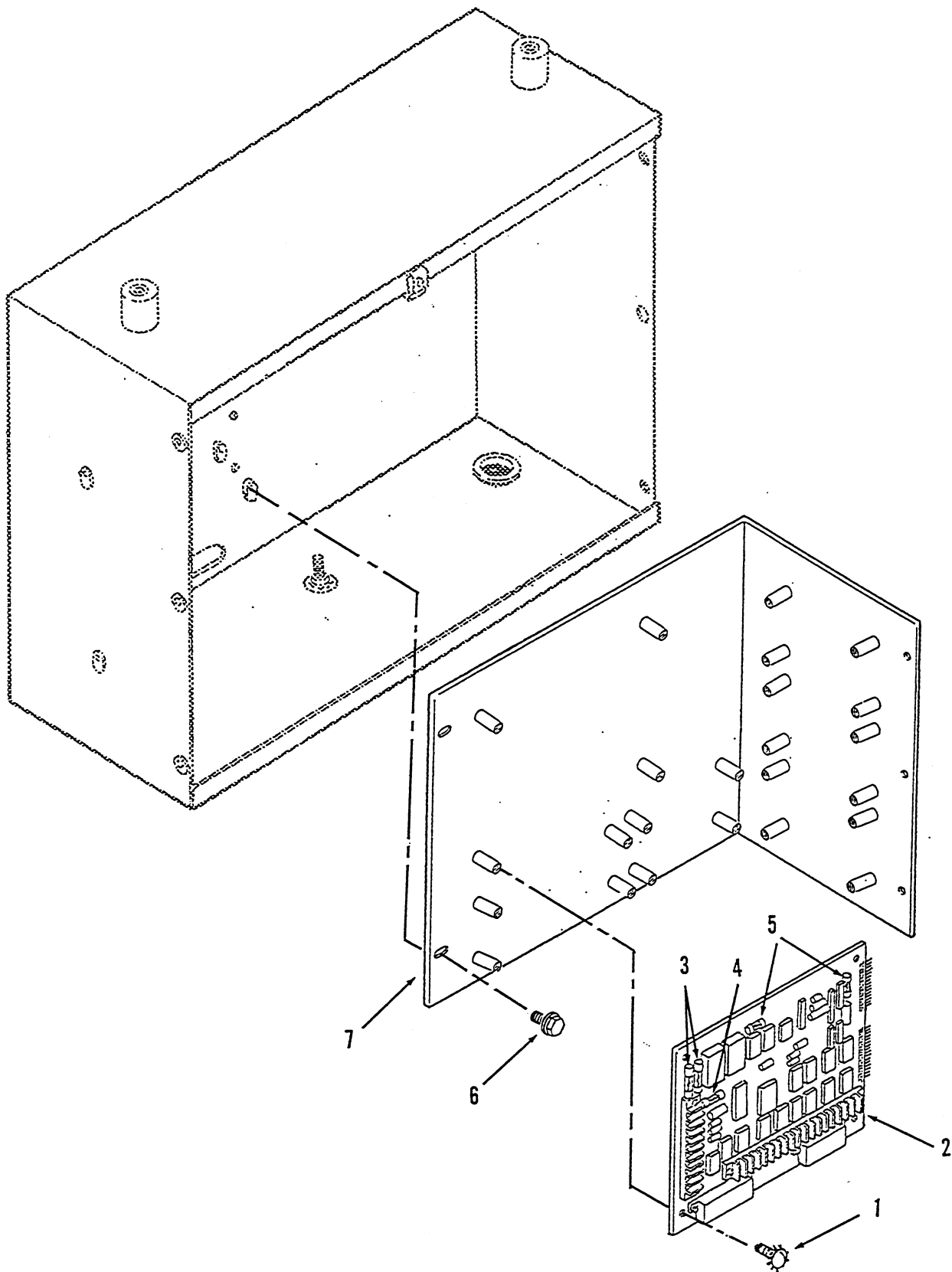
EMERGENCY STOP SWITCH Installation Of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 301-6257 | | | 1 | Cover - Blank Switch |
| 2 | 322-0223 | | | 1 | Lamp, Incandescent - 28 VDC, MSCP .34 |
| 3 | 308-0853 | | | 1 | Switch, Push (Includes replaceable bulb) |
| 4 | 302-1723 | | | 2 | Meter, Blank (Option in lieu of Dot Button Plug) |
| 5 | 517-0131 | | | 2 | Plug, Dot Button (Option in lieu of Blank Meter) |
| 6 | 301-9055-01 | | | 1 | Panel, Control |
| 7 | NOTE 1 | | AR | | Wire, Electrical - 20 AWG, Insulated |
| 8 | 332-0804 | | | 2 | Terminal, Wire - Ring .25, 18-20 AWG Gauge Wire |
| 9 | 332-1673 | | | 2 | Terminal, Wire - Spade, #6, 18-20 AWG Gauge Wire |
| 10 | 332-1477 | | | 6 | Terminal, Wire - Faston, .25, 18-20 AWG Gauge Wire |
| 11 | 332-1445 | | | 4 | Tie, Cable |
| 12 | 98-5662 | | | 1 | Decal "Push For Emergency Stop" |
| 18 | 98-5219 | | | 1 | Decal - Panel Front (Not Illustrated) |
| 19 | 98-5220 | | | 1 | Decal - Panel Rear (Not Illustrated) |

NOTES:

1. Electrical Wire Not Stocked for Sale in Central Distribution Parts Center; Obtain locally as needed.

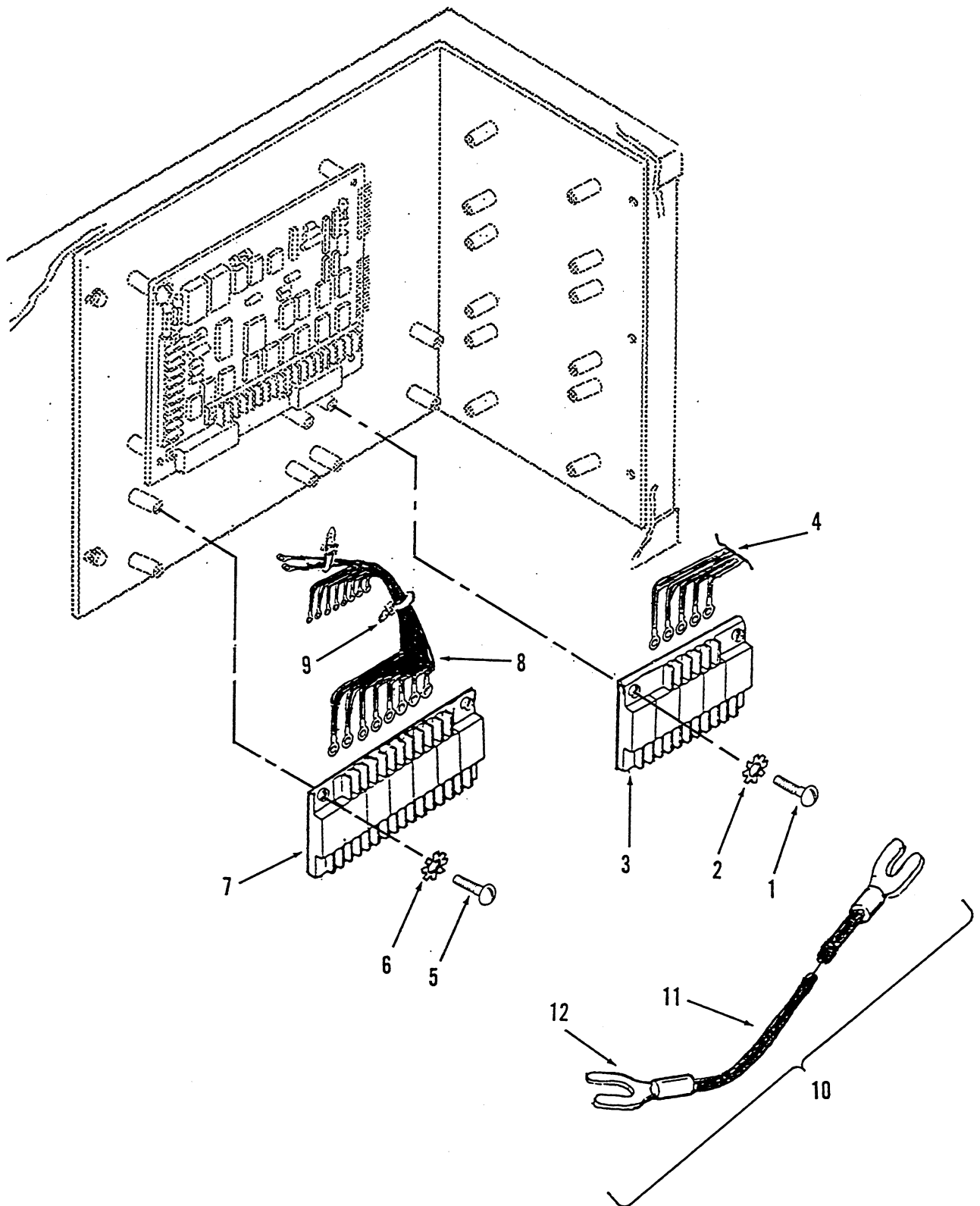
ENGINE MONITOR BOARD
Installation Of



ENGINE MONITOR BOARD Installation Of

| REF | CPDC | SOURCE | C | QTY | PART |
|-----|----------|----------|-------------|------|--|
| NO. | PART NO. | PART NO. | O D E | USED | DESCRIPTION |
| 1 | 815-0544 | | | 4 | Screw, Machine - Round Head With IT Lock Washer (#6-32 x 1/2") |
| 2 | | | | | Board - Engine Monitor (A11) (Includes Fuses) |
| | 300-2810 | | | 1 | 24 VDC, 7 Light |
| | 300-2812 | | | 1 | 24 VDC, 12 Light |
| 3 | 321-0270 | | | 2 | Fuse, Cartridge - 20 Amp (F1, F2) |
| 4 | 321-0231 | | | 1 | Fuse, Cartridge - 15 Amp (F3) |
| 5 | 321-0094 | | | 2 | Fuse, Cartridge - 5 Amp (F4, F5) |
| 6 | 821-0004 | | | 4 | Screw, Self-locking - Hex Washer Head (#10-32 x 5/16") |
| 7 | 301-8851 | | | 1 | Bracket, Mounting |

ALARM RELAY MODULES
Installation Of



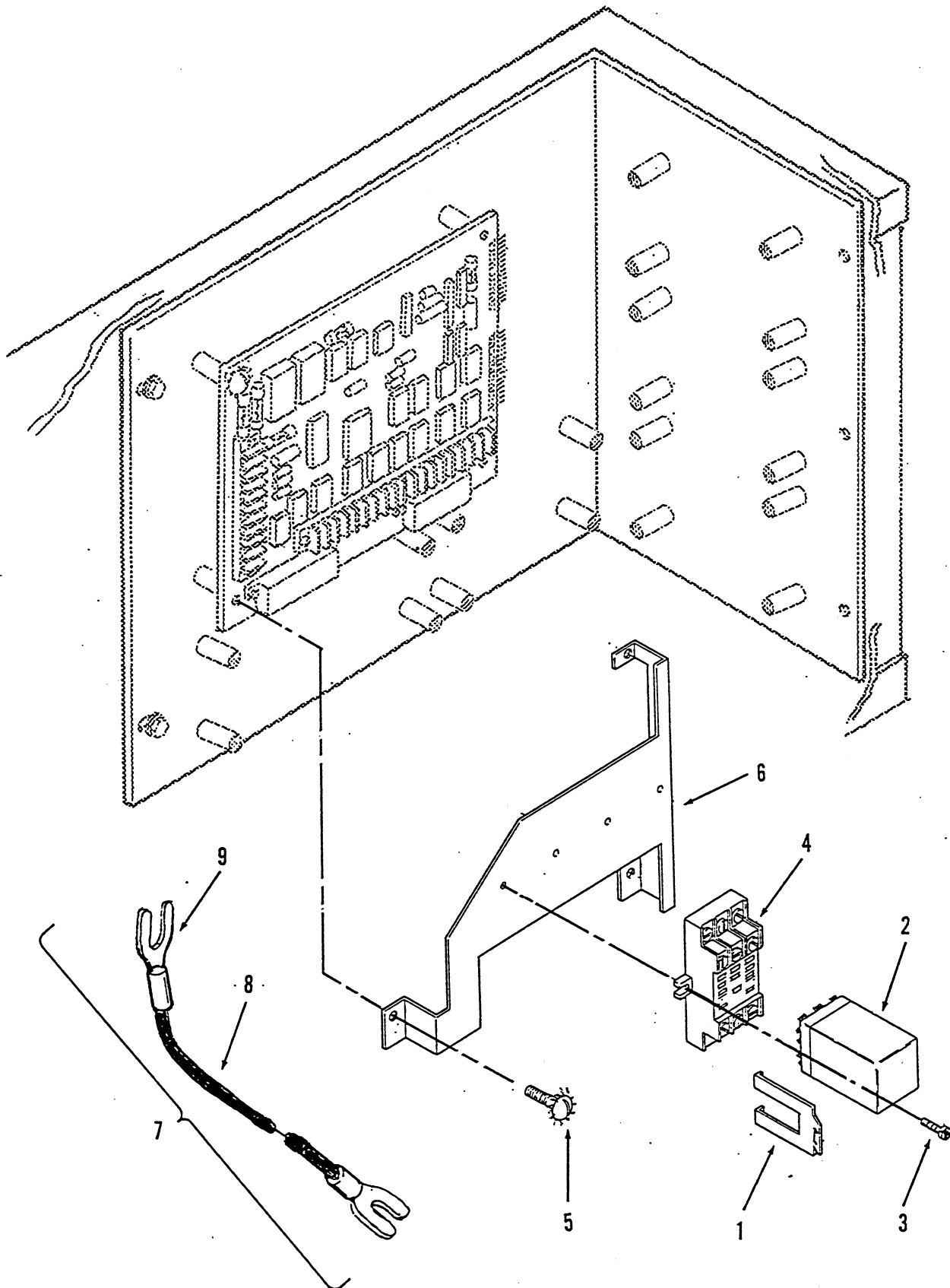
ALARM RELAY MODULES Installation Of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 812-0063 | | | 4 | Screw, Machine - Round Head (#6-32 x 1/2) |
| 2 | 853-0003 | | | 4 | Washer, Lock - External Tooth (#6) |
| 3 | 300-2856 | | | 1 | Module, Alarm Relay - 24 VDC, A14 (5 Relays) |
| 4 | 338-1836 | | | 1 | Harness, Wiring (A14 to A11) |
| 5 | 812-0063 | | | 4 | Screw, Machine - Round Head (#6-32 x 1/2) |
| 6 | 853-0003 | | | 4 | Washer, Lock - External Tooth (#6) |
| 7 | 300-2863 | | | 1 | Module, Alarm Relay - 24 VDC, A13 (7 Relays) |
| 8 | 338-1835 | | | 1 | Harness, Wiring (A13 to A11) |
| 9 | 332-1445 | | | 4 | Tie, Cable |
| 10 | NOTE 1 | | | 1 | Lead, Electrical (A13 to A14) |
| 11 | NOTE 2 | | | AR | Wire, Electrical - 20 AWG, Insulated |
| 12 | 332-1673 | | | 2 | Terminal, Wire - Forked, 18-20 Gauge |

NOTES:

1. Electrical Leads Not Stocked for Sale in Central Parts Distribution Center.
2. Electrical Wire Not Stocked for Sale in Central Distribution Parts Center; Obtain locally as needed.

RUN RELAYS
Installation Of



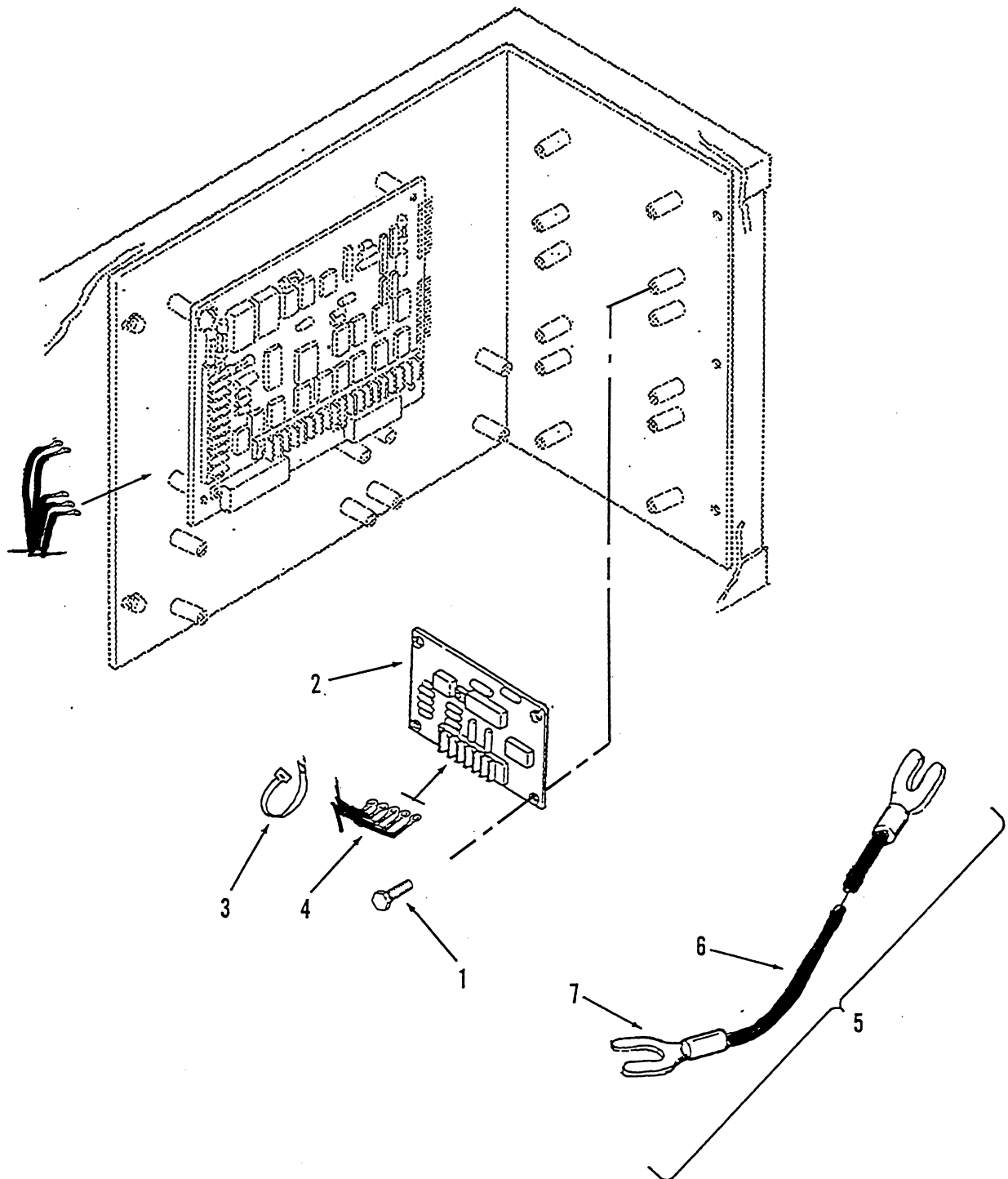
RUN RELAYS Installation Of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 307-1987 | | | 6 | Clip, Relay |
| 2 | 307-1056 | | | 3 | Relay, 24 VDC |
| 3 | 815-0388 | | | 6 | Screw, Machine - Pan Head, Cross-Recessed Drive (#6-32 x 1/2") |
| 4 | 323-0804 | | | 3 | Socket, Relay |
| 5 | 815-0544 | | | 3 | Screw, Machine - Round Head with IT Lock Washer (#6-32 x 1/2") |
| 6 | 319-0447 | | | 1 | Bracket, Mounting - Relay |
| 7 | NOTE 1 | | REF | | Lead(s), Electrical |
| 8 | NOTE 2 | | AR | | Wire, Electrical - 20 AWG, Insulated |
| 9 | 332-1673 | | AR | | Terminal, Wire - Forked, 18-20 Gauge |

NOTES:

1. Electrical Leads Not Stocked for Sale in Central Parts Distribution Center.
2. Electrical Wire Not Stocked for Sale in Central Distribution Parts Center; Obtain locally as needed.

TIME DELAY START/STOP MODULE
Installation Of



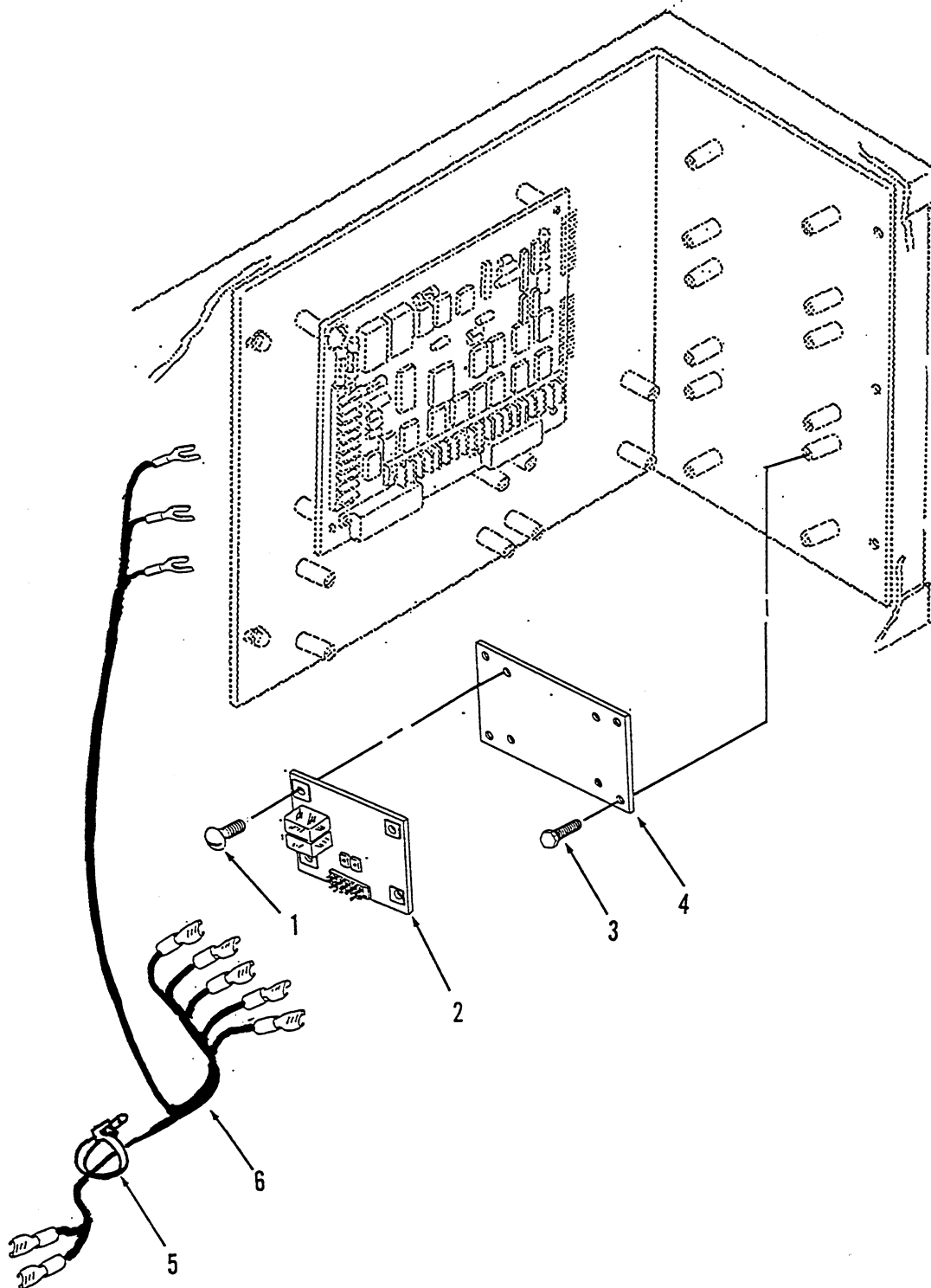
TIME DELAY START/STOP MODULE
Installation Of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 815-0544 | | | 4 | Screw, Cap - Hex Head with ET Lockwasher (#6-32 x 1/2) |
| 2 | 300-2899 | | | 1 | Module, Time Delay Start/Stop - 24 VDC, A15 (5 Relays) |
| 3 | 332-1445 | | | 3 | Tie, Cable |
| 4 | 338-1904 | | | 1 | Harness, Wiring (A15 to A11) |
| 5 | NOTE 1 | | | 1 | Lead, Electrical (A15 to A11) |
| 6 | NOTE 2 | | AR | | Wire, Electrical - 20 AWG, Insulated |
| 7 | 332-1673 | | | 2 | Terminal, Wire - Forked, 18-20 Gauge |

NOTES:

1. Electrical Leads Not Stocked for Sale in Central Parts Distribution Center.
2. Electrical Wire Not Stocked for Sale in Central Distribution Parts Center; Obtain locally as needed.

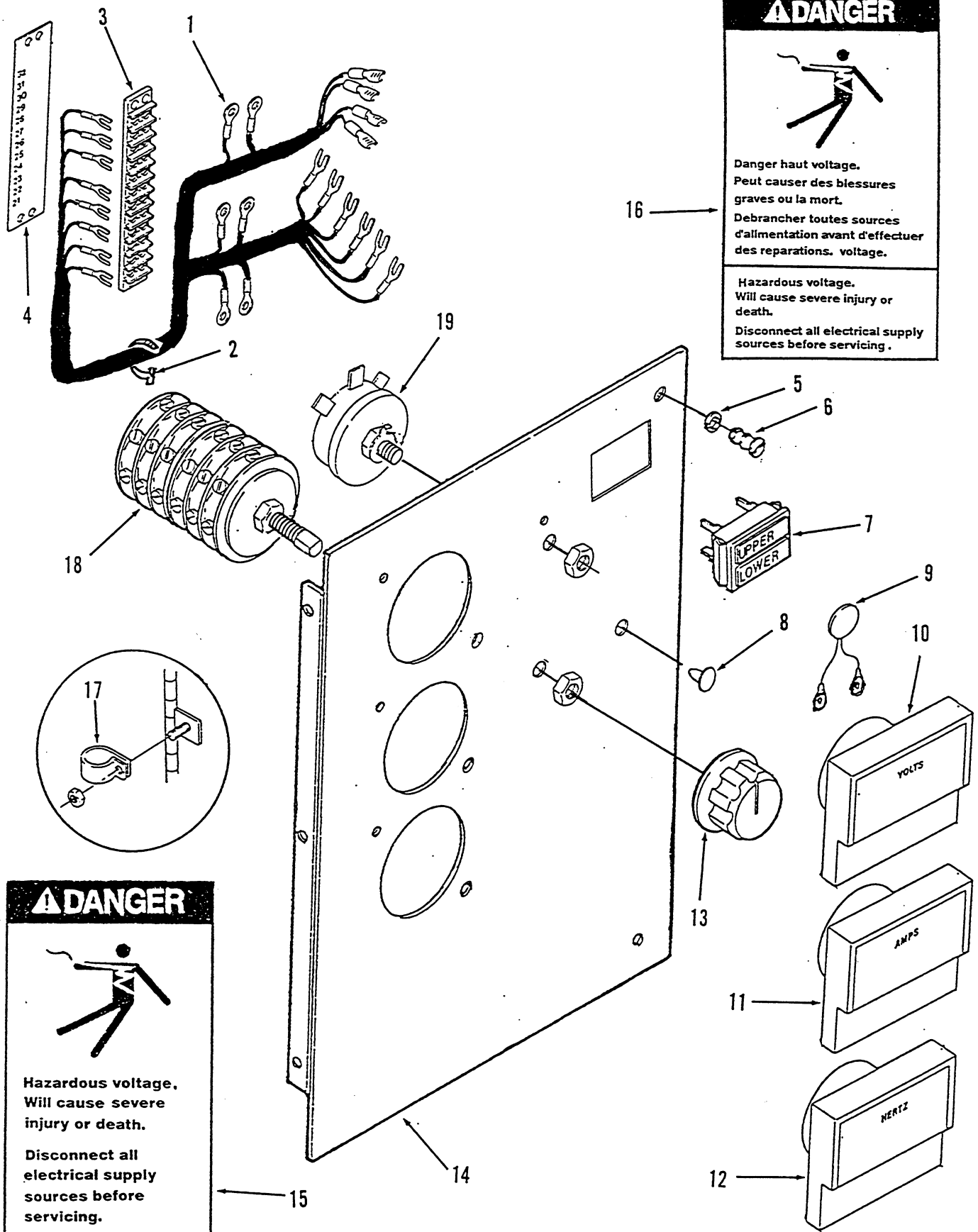
ELECTRONIC OVERSPEED MODULE
Installation Of



ELECTRONIC OVERSPEED MODULE Installation Of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 812-0084 | | | 4 | Screw, Machine - Round Head (#8-32 x 1/2") |
| 2 | 305-0818-02 | E000-21001 | NE | | Module, Overspeed - 24 VDC (Frequency Detection Module) |
| 3 | 815-0544 | | | 4 | Screw, Cap - Hex Head with ET Lockwasher (#6-32 x 1/2) |
| 4 | 319-0754 | | | 1 | Plate, Mounting - Module |
| 5 | 332-1445 | | | 10 | Tie, Cable |
| 6 | 338-2493 | | | 1 | Harness, Wiring (A16 to A11 and AUX-P2,P3) |

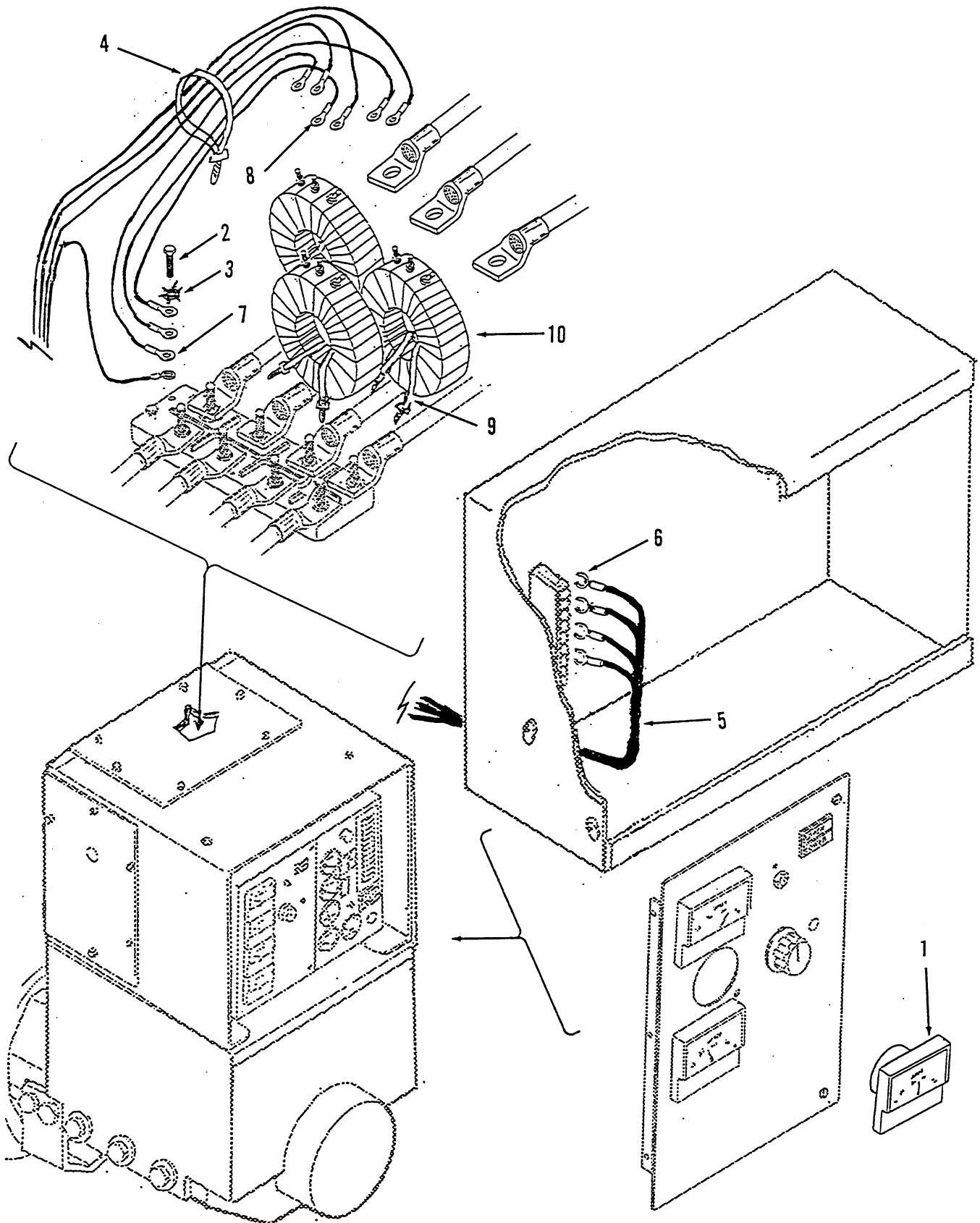
GENERATOR CONTROL PANEL COMPONENTS



GENERATOR CONTROL PANEL COMPONENTS

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 338-2278 | | | 1 | Harness, Wiring - AC (Includes Terminal Block & Cable Ties) [Used only with meters] Attaching Parts for AC Wiring Harness |
| | 812-0065 | | | 2 | Screw, Machine - Round Head (#6-32 x 5/8") |
| 2 | 332-1445 | | | 44 | Tie, Cable (Part of Wiring Harness) |
| 3 | 332-0607 | | | 1 | Block, Terminal (TB1) |
| 4 | 332-2723 | | | 1 | Strip, Marker |
| 5 | 406-0334 | | | 2 | Clip, Retaining - Turnbutton Fastener |
| 6 | 406-0333 | | | 2 | Stud, Fastener - Turnbutton |
| 7 | 322-0363 | | | 1 | Light, Indicator - Dual (DS21, DS22) |
| 8 | 517-0131 | | | 1 | Plug, Dot Button |
| 9 | 355-0093 | | | 1 | Capacitor (Used accross Voltmeter Terminals on some Sets) |
| 10 | | | | | Voltsmeter (M21) |
| | 302-1148 | | | 1 | Dual Scale 0-300/0-600V |
| | 302-1753 | | | 1 | Single Scale 0-750V |
| 11 | | | REF | | Ammeter (M22) See Current Transformer & Ammeter Installation Figure for Parts) |
| 12 | 302-1720 | | | 1 | Meter, Frequency (M23) |
| 13 | 303-0032 | | | 1 | Knob |
| 14 | | | | | Panel, Control (Blank - No Decals) |
| | 301-9054-02 | | | 1 | 3 Meter Holes |
| | 301-9054-03 | | | 1 | No Meter Holes |
| | | | | | Attaching Parts Panel to Control Box |
| | 821-0004 | | | 3 | Screw, Self-Locking-Hex Washer Head (#10-32 x 5/16") |
| 15 | 98-5387 | | | 2 | Decal - Warning (English) Located on Panel Front & Rear |
| 16 | 98-5724 | | | 2 | Decal - Warning (French/English) |
| 17 | 332-0052 | | | 1 | Clamp, Loop |
| | | | | | Attaching Parts for Loop Clamp |
| | 870-0131 | | | 1 | Nut, Self-Locking - with ET Lockwasher (#10-32) |
| 18 | 308-0882 | | | 1 | Switch, Rotary (S21) |
| 19 | | | REF | | Potentiometer (R21) See Voltage Regulator Installation Figure for Parts) |
| 20 | | | | | Decals (Not Illustrated) |
| | 98-5316 | | | 1 | Decal - Panel Front Markings (Control Without Meters) |
| | 98-5298 | | | 1 | Decal - Panel Front Markings (Control With Meters) |
| | 98-5299 | | | 1 | Decal - Panel Rear Markings (All Control Panels) |

AMMETER & CURRENT TRANSFORMER INSTALLATION OF

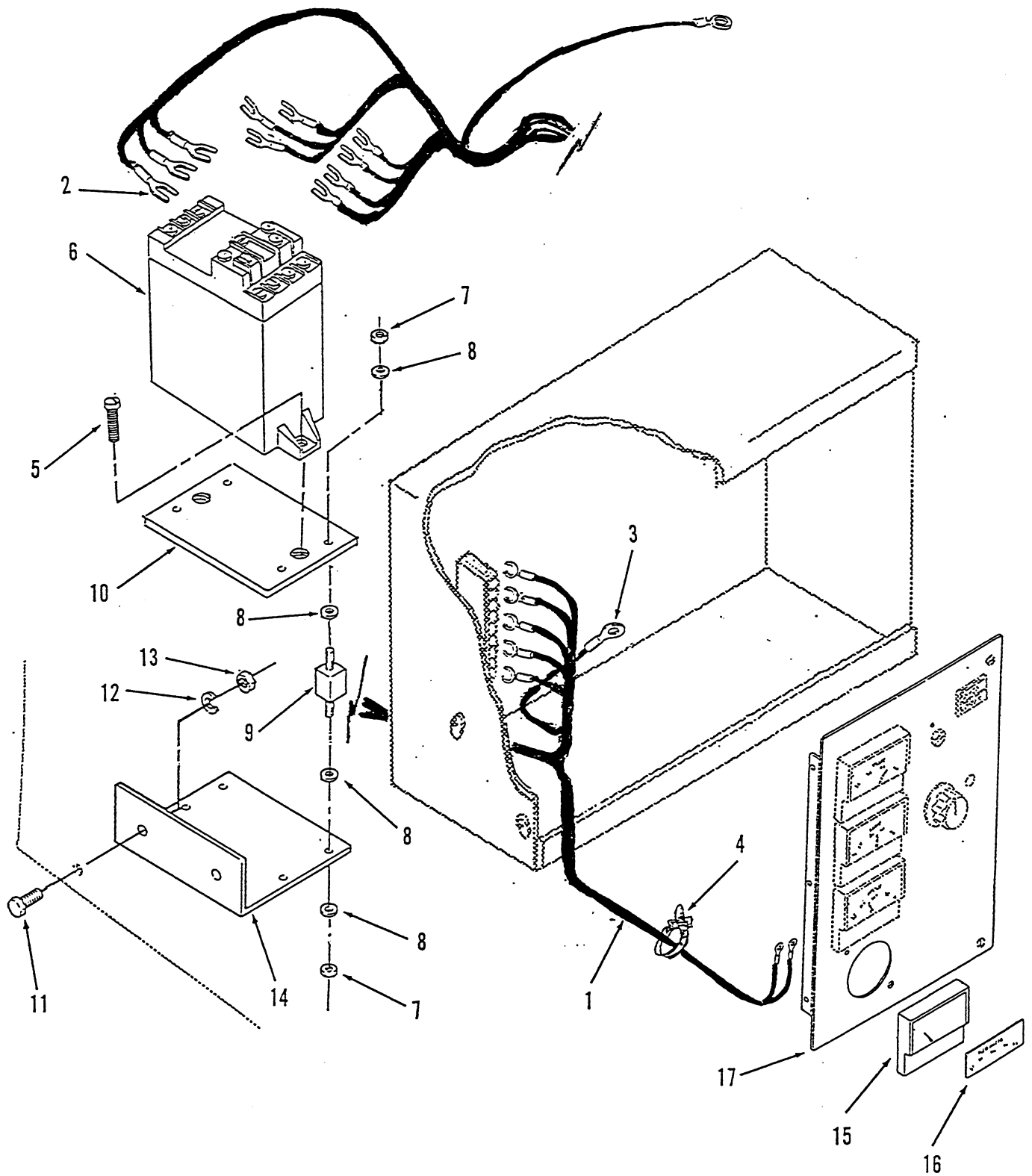


AMMETER & CURRENT TRANSFORMER INSTALLATION OF

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 302-1724 | | | 1 | Ammeter (M22) Scale in Amps as Indicated |
| | 302-1725 | | | 1 | 0-250/0-500 (600VAC Sets) |
| | 302-1725 | | | 1 | 0-375/0-750 (120-480VAC Sets) |
| 2 | 800-2060 | 016-40820 | NE | 1 | Screw, Cap - Hex Head (M8-1.25 x 35MM) |
| 3 | 856-0008 | | | 2 | Washer, Lock - EIT (5/16") |
| 4 | 332-0942 | | | 6 | Tie, Cable |
| 5 | 338-2229 | | | 1 | Harness, Wiring |
| 6 | 332-1279 | | | 4 | Terminal, Lug - Forked (No. 6 Screw) |
| 7 | 332-0151 | | | 4 | Terminal, Lug - Ring (5/16" Screw) |
| 8 | 332-0806 | | | 6 | Terminal, Lug - Ring (No. 8 Screw) |
| 9 | 332-1389 | | | 6 | Tie, Cable |
| 10 | | | | | Transformer, Current (Turn Ratio Listed) |
| | 302-1845-07 | | | 3 | 250/5,500/5 (600VAC Sets) |
| | 302-1845-08 | | | 3 | 375/5,750/5 (120-480VAC Sets) |

NOTE: Phantom Items on Control Panel are Identified in Applicable Generator Control Panel Component Illustration and Phantom Item Associated with Current Transformer are Identified in the Applicable Terminal Block Installation Illustration.

WATTMETER INSTALLATION OF

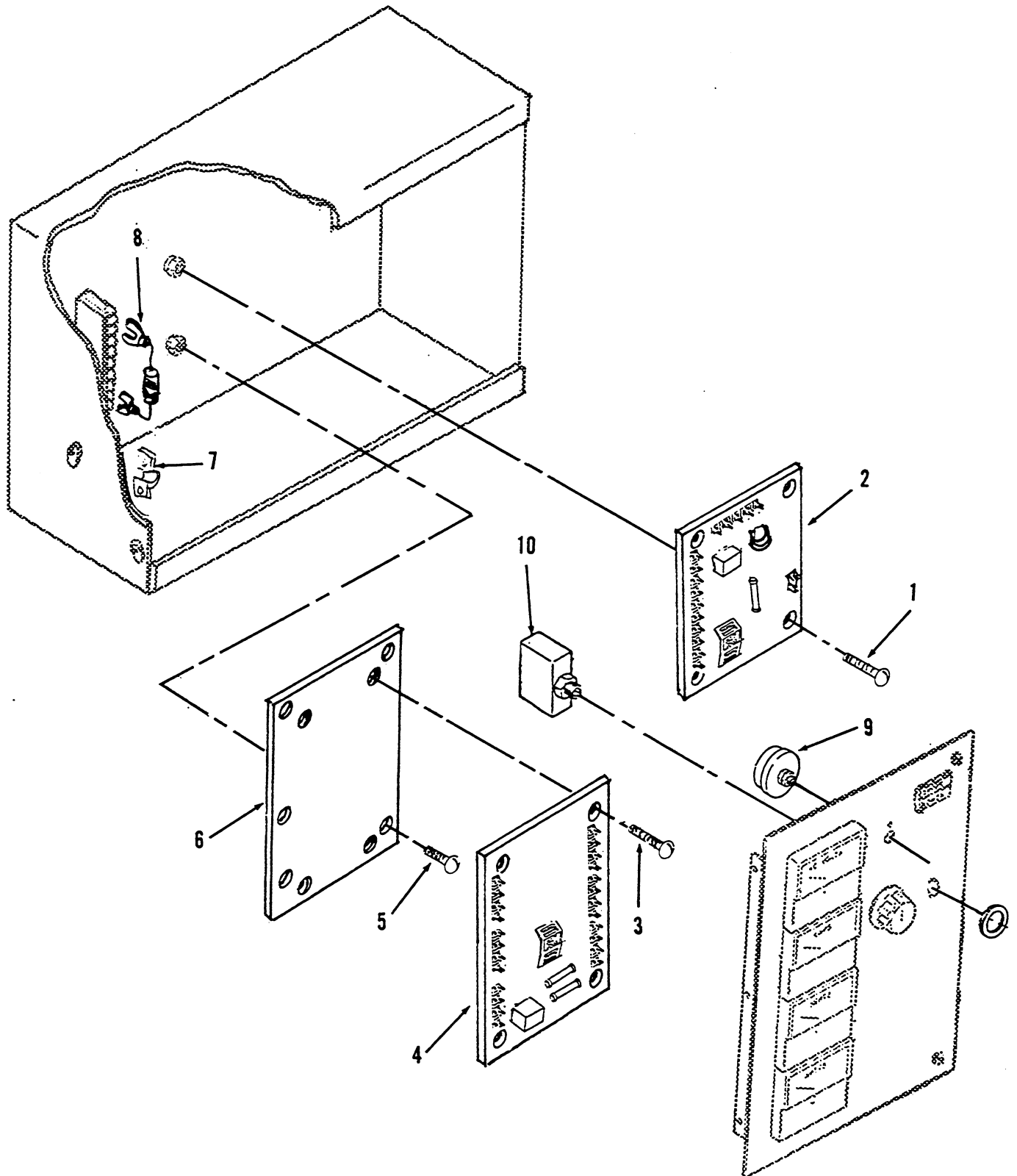


WATTMETER INSTALLATION OF

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | | | | | Harness, Wiring |
| | 338-1936 | | | 1 | Three Phase "WYE" Connected Generators |
| | 338-2479 | | | 1 | Three Phase "DELTA" Connected Generators |
| | 338-2478 | | | 1 | 120/240 VAC "SINGLE PHASE" Connected Generators |
| 2 | 332-1279 | | | 11 | Terminal, Lug - Forked (For No. 6 Screw Mounting) |
| 3 | 332-0897 | | | 4 | Terminal, Lug - Ring (1/4" Screw Mounting) |
| 4 | 332-0942 | | | 14 | Tie, Cable |
| 5 | 813-0102 | | | 2 | Screw, Machine - Round Head (#10-32 x 5/8") |
| 6 | | | | | Transducer, Watt |
| | 302-1833-01 | | | 1 | Three Phase "WYE" Connected Generators |
| | 302-1833-05 | | | 1 | Three Phase "DELTA" Connected Generators |
| | 302-1833-04 | | | 1 | 120/240 VAC "SINGLE Phase" Connected Generators |
| 7 | 860-0008 | | | 8 | Nut, Hex (#8-32) |
| 8 | 856-0002 | | | 16 | Washer, Lock - EIT (#8) |
| 9 | 402-0354 | | | 4 | Mount, Shock |
| 10 | 319-0030 | | | 1 | Plate, Support - Transducer |
| 11 | 821-0017 | | | 2 | Screw, Self-locking - HWH (5/16-18 x 1/2") |
| 12 | 850-0045 | | | 2 | Washer, Lock - Spring (5/16") |
| 13 | 862-0014 | | | 2 | Nut, Hex (5/16-18) |
| 14 | 301-6987 | | | 1 | Bracket, Mounting |
| 15 | 302-1722 | | | 1 | Meter, Watt (Less Dial) |
| 16 | | | | | Dial, Wattmeter |
| | 302-1721-07 | | | 1 | Scale 0-180 kW (150CTA61 Sets) |
| | 302-1721-08 | | | 1 | Scale 0-200 kW (175CTA62 Sets) |
| 17 | 301-9054-01 | | | 1 | Panel, Control |

NOTE: Phantom Items on Control Panel are identified in applicable Generator
Control Panel Component Illustration or applicable Meter Installation Illustration.

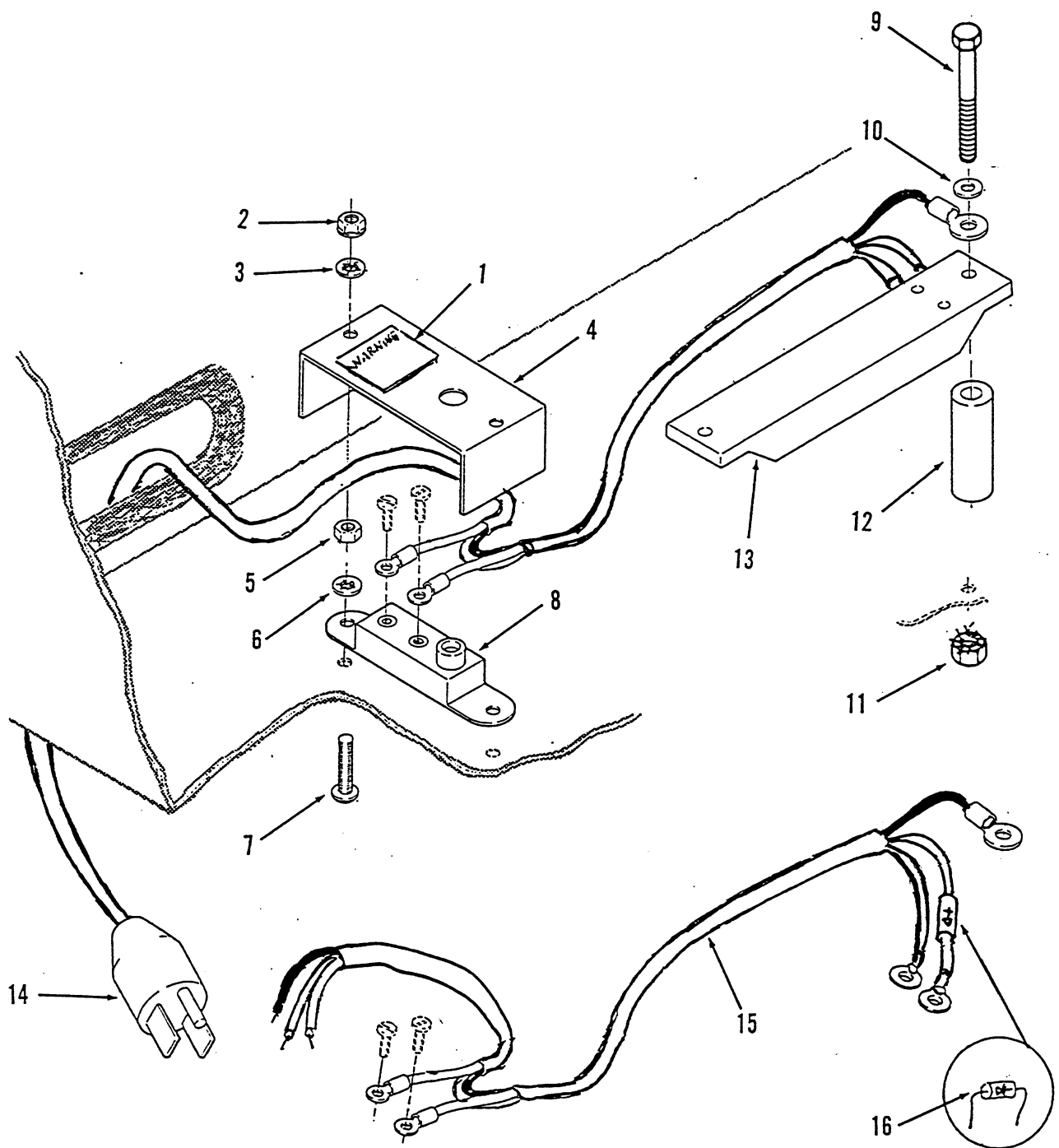
VOLTAGE REGULATOR Installation of



VOLTAGE REGULATOR Installation of

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 812-0084 | | | 4 | Screw, Machine - Round Head (#8-32 x 1") |
| 2 | 305-0824 | E000-24030 | NE | 1 | Regulator, Voltage (Model SX440)[NOT USE WITH PMG GENERATORS] |
| 3 | 815-0218 | | | 4 | Screw, Machine - Round Head (#6-32 x 1") |
| 4 | 305-0823 | E000-23210 | NE | 1 | Regulator, Voltage (Model MX321) [USED WITH PMG GENERATORS] |
| 5 | 815-0544 | | | 6 | Screw, Machine - Round Head (#6-3 x 1/2") |
| 6 | 319-0652 | | | 1 | Plate, Mounting - Voltage Regulator |
| 7 | 331-1043 | | | 1 | Jumper, Terminal |
| 8 | 350-1222 | | | 1 | Resistor and Terminal Assembly |
| | 350-0991 | | | 1 | Resistor, Fixed (1.5K Ohms +5%) |
| | 332-1673 | | | 2 | Terminal, Lug - Forked (No. 6 Spade) |
| 9 | | | | | Potentiometer (Not used on all Sets) |
| | 303-0261 | | | 1 | 1.5K Ohms +10% (Used with SX440 Voltage Regulator) |
| | 303-0285 | | | 1 | 5K Ohms +10% (Used with MX321 Voltage Regulator) |
| 10 | | | | | Circuit Breaker - Field Current (Select as Applicable) |
| | 320-1688-01 | | | 1 | 5 AMP, 240VAC/50VDC |
| | 320-1688-02 | | | 1 | 5 AMP, 240VAC/50VDC, with AUX Terminals |

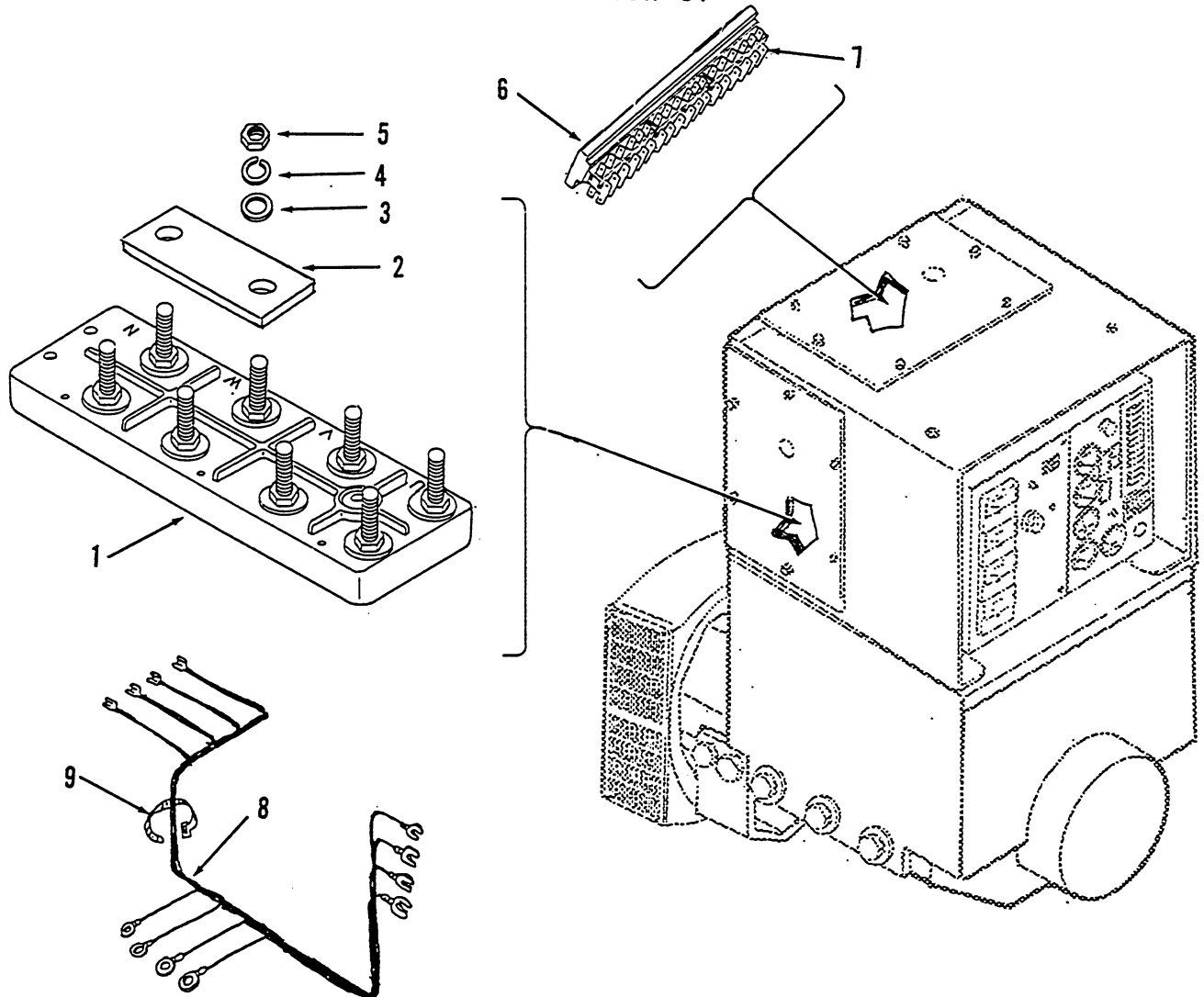
CONTROL SPACE HEATER Installation Of



CONTROL SPACE HEATER Installation Of

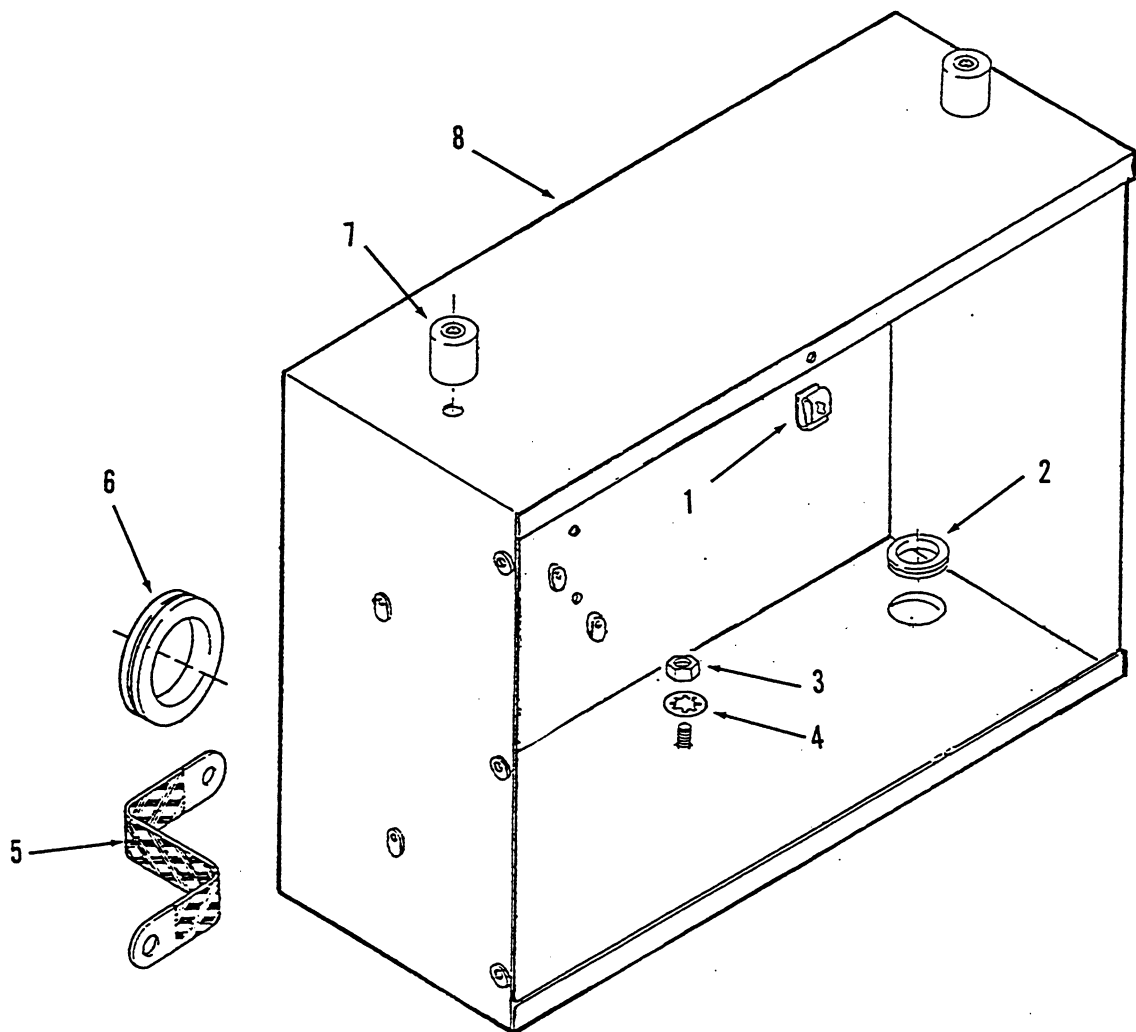
| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|---|
| 1 | 98-3232 | | | 1 | Decal - Warning (Shock Hazard) |
| 2 | 870-0183 | | | 2 | Nut, Self-locking - HEX (#6-32) |
| 3 | 854-0006 | | | 2 | Washer, Lock - IT (#6) |
| 4 | 301-1886 | | | 1 | Cover |
| 5 | 860-0006 | | | 1 | Nut, Hex (#6-32) |
| 6 | 854-0006 | | | 2 | Washer, Lock - IT (#6) |
| 7 | 812-0070 | | | 2 | Screw, Machine - Round Head (#6-32 x 1-1/4") |
| 8 | 309-0128 | | | 1 | Thermostat - Adjustable |
| 9 | 800-0034 | | | 2 | Screw, Cap - Hex Hd (5/16-18 x 2-1/4") |
| 10 | 526-0113 | | | 2 | Washer, Flat (5/16") |
| 11 | 870-0257 | | | 2 | Nut, Self-locking - Hex (5/16-18) |
| 12 | 130-1107 | | | 2 | Spacer |
| 13 | | | | | Heater, Electrical |
| | 333-0151 | | | 1 | 75 Watt, 120 VAC |
| | 333-0378 | | | 1 | 150 Watt, 240 VAC |
| 14 | 335-0161 | | | 1 | Cable, Electrical - 120 VAC Application |
| 15 | 338-2121 | | | 1 | Harness, Wiring with Diode, Less Plug (240 VAC Application) |
| 16 | 357-0013 | | | 1 | Diode |

TERMINAL BLOCK Installation of



| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | | 220-10003 | NE | 1 | Block, Terminal |
| | 800-2060 | 016-40820 | NE | 3 | Attaching Parts for Block |
| | 850-2008 | 028-31507 | NE | 3 | Screw, Cap - Hex Head (M8-1.25 x 35MM) |
| | 526-2100 | 029-61108 | NE | 5 | Washer, Lock - Spring (M8) |
| 2 | | 220-10006 | NE | 4 | Washer, Flat (M8) |
| 3 | 526-2120 | 029-61106 | NE | 8 | Link, Terminal |
| 4 | 850-2010 | 028-31509 | NE | 8 | Washer, Flat (M10) |
| 5 | 860-2009 | 027-41209 | NE | 8 | Washer, Lock - Spring (M10) |
| 6 | | 130-20102 | NE | 1 | Nut, Hex (M10-1.5) |
| 7 | | E00-10005 | NE | 3 | Block, Terminal - AUX |
| | 822-3077 | | | 3 | Attaching Parts for AUX Base & Terminal Blocks |
| | 850-2004 | 028-31505 | NE | 3 | Screw, Machine - Pan Head (M4-0.7 x 25MM) |
| | 860-2005 | 027-41209 | NE | 3 | Washer, Lock - Spring (M4) |
| 8 | 338-2506 | | | 1 | Nut, Hex (M4-0.7) |
| 9 | 332-1445 | | | 4 | Harness, Wiring - AC AUX |
| | | | | 4 | Tie, Cable |

CONTROL BOX & MOUNTING COMPONENTS



| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 406-0332 | | | 2 | Receptacle, Turnbutton Fastener |
| 2 | 508-0001 | | | 1 | Grommet 3/4" DIA |
| 3 | 871-0015 | | | 2 | Nut, Hex (1/4-20) Ground Stud |
| 4 | 853-0013 | | | 2 | Washer, Lock - ET (1/4") Ground Stud |
| 5 | 337-0049 | | | 1 | Strap, Electrical (Ground) |
| | 800-0024 | | | 1 | Attaching Parts for Ground Strap |
| | 856-0008 | | | 1 | Screw, Cap - Hex Head (5/16-18 x 1/2") |
| 6 | 508-0051 | | | 1 | Washer, Lock - EIT (5/16") |
| 7 | 402-0527 | | | 1 | Grommet 2" DIA |
| | | | | 4 | Mount, Vibration |
| | 800-0045 | | | 4 | Attaching Parts for Vibration Mounts |
| | 850-0045 | | | 4 | Screw, Cap - Hex Head (5/16-18 x 3/8") |
| 8 | 301-8065 | | | 4 | Washer, Lock - Spring (5/16") |
| | | | | 1 | Box, Control |

NOTES

TABLE OF CONTENTS
GENERATOR SECTION

| | |
|--|-----|
| GENERATOR TABLE..... | 4-2 |
| PERMANENT MAGNET EXCITER - INSTALLATION OF | 4-3 |
| GENERATOR - INSTALLATION OF - MODEL UC3/UC274 | 4-4 |
| GENERATOR - SERVICEABLE COMPONENTS - Model UC3/UC274 | 4-5 |
| OVERSPEED SWITCH - INSTALLATION OF | 4-6 |

GENERATOR TABLE *

| GENERATOR SET MODEL | ONAN GEN TYPE | NEWAGE | | SAE ADPTR | SAE DISK | VOLT CODE-HOOKUP | 60 HERTZ VOLTAGES | 50 HERTZ VOLTAGE |
|------------------------|---------------------|-------------|----------------------|--------------|-------------|--|--|---------------------------------|
| | | GEN TYPE | WIND- ING CODE | | | R113 SERIES STAR R113 PARALLEL STAR R114 SERIES STAR R115 SERIES STAR | 380-416-440-460-480 190-208-220-230-240 ----- 600 190-208/380-416 | 380-415 190-208 ----- 550 |

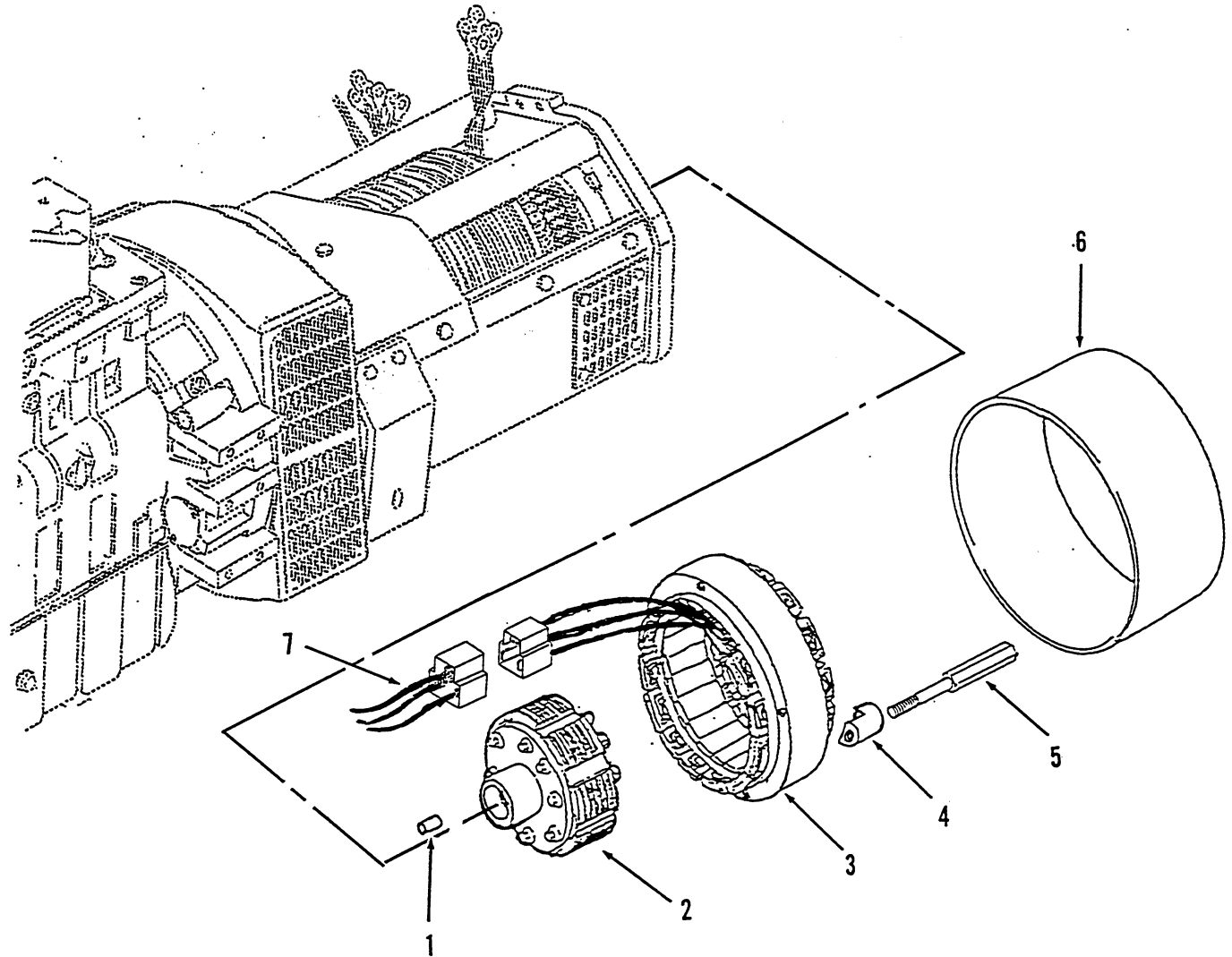
| | | | | | | | | |
|------------|------|--------|-----|---|------|--------------------|-------|-------|
| CTA61/DGFA | UC3G | UC274G | 311 | 2 | 11.5 | R113 SERIES STAR | 150kW | 125kW |
| CTA61/DGFA | UC3G | UC274G | 311 | 2 | 11.5 | R113 PARALLEL STAR | 150kW | 125kW |
| CTA61/DGFA | UC3G | UC274G | 17 | 2 | 11.5 | R114 SERIES STAR | 150kW | 125kW |
| CTA61/DGFA | UC3G | UC274G | 14 | 2 | 11.5 | R115 SERIES STAR | 150kW | 125kW |

| | | | | | | | | |
|------------|------|--------|-----|---|------|--------------------|-------|-------|
| CTA62/DGFA | UC3G | UC274G | 311 | 2 | 11.5 | R113 SERIES STAR | 175kW | ----- |
| CTA62/DGFA | UC3G | UC274G | 311 | 2 | 11.5 | R113 PARALLEL STAR | 175kW | ----- |
| CTA62/DGFA | UC3H | UC274H | 311 | 2 | 11.5 | R113 SERIES STAR | ----- | 150kW |
| CTA62/DGFA | UC3H | UC274H | 311 | 2 | 11.5 | R113 PARALLEL STAR | ----- | 150kW |
| CTA62/DGFA | UC3H | UC274H | 17 | 2 | 11.5 | R114 SERIES STAR | 175kW | 150kW |
| CTA62/DGFA | UC3H | UC274H | 14 | 2 | 11.5 | R115 SERIES STAR | 175kW | 150kW |

| TABLE OF VOLTAGE CODES | |
|------------------------|--|
| R113 | 12 Wire Reconnectible; Hookup at Terminal Board in SERIES or PARALLEL STAR. |
| R114 | 12 Wire Reconnectible; Hookup at Terminal Board in SERIES STAR for specific voltage. |
| R115 | 12 Wire Reconnectible with special stator; Hookup in SERIES STAR for above voltages. |

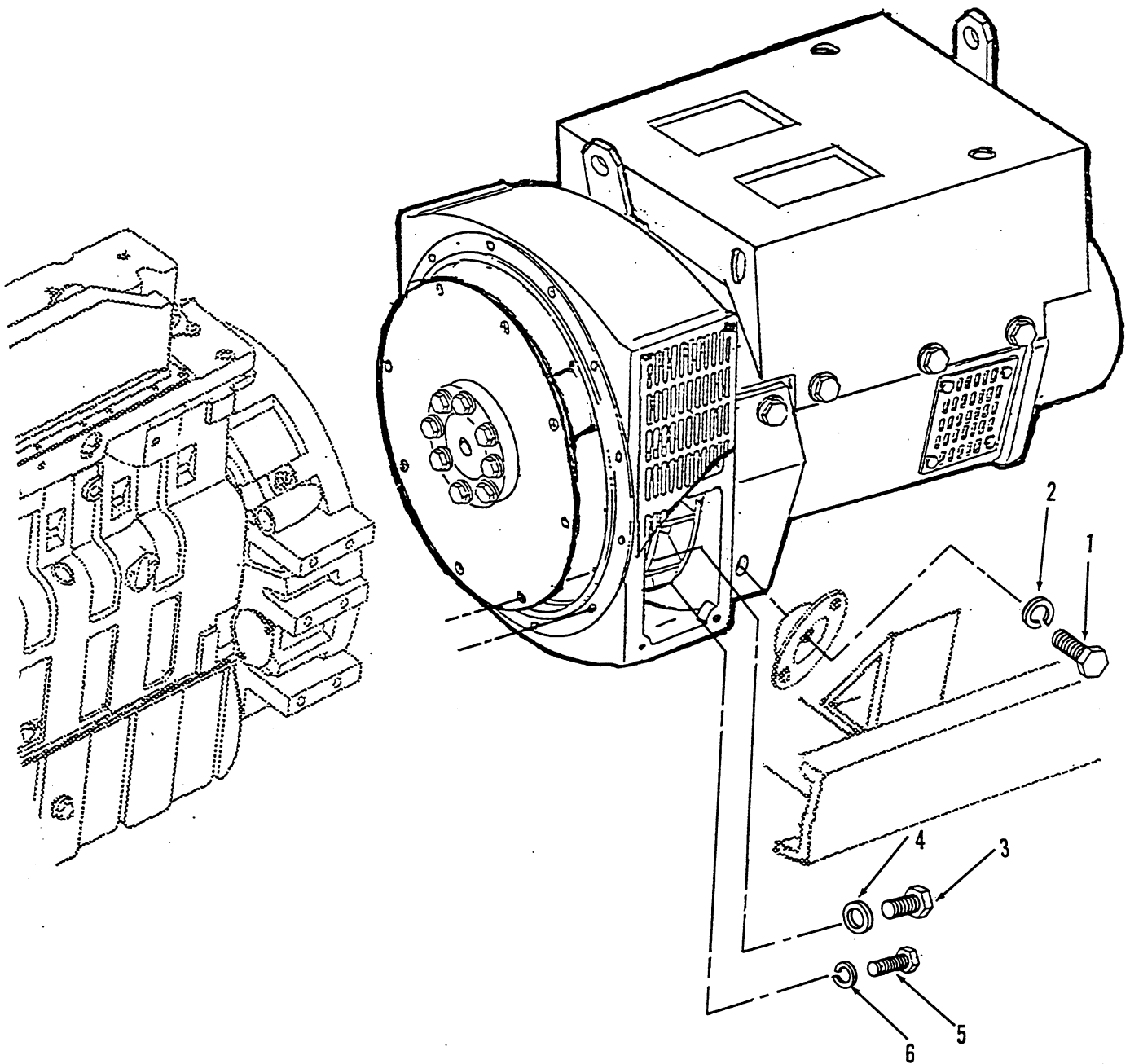
* NOTE: Table is applicable to Generators for 105°C Rise installations (Adder Code B234). Larger or Smaller Generators may be used in the 80°C and 125°C Rise applications.

PERMANENT MAGNET EXCITER Installation Of



| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|---------|---------------|-----------------|------------------|----------|---|
| 1 | 775-0049 | 054-20505 | NE | 1 | Pin, Dowel |
| 2 | 201-3446 | 130-20136 | NE | 1 | Rotor, Exciter |
| | | | | | Attaching Parts for Rotor |
| | 815-0761 | 350-14950 | NE | 1 | Bolt (M10-1.5 x 110mm) |
| | 850-2010 | 028-31509 | NE | 1 | Washer, Lock - Spring (M10) |
| 3 | 220-4233 | 130-1033 | NE | 1 | Stator, Exciter |
| 4 | 232-3511 | 130-20101 | NE | 4 | Clamp, Stator |
| 5 | 232-3462-02 | 450-14370 | NE | 4 | Pillar, Threaded (M5 x 76mm) |
| 6 | 234-0875-02 | 450-14360 | NE | 1 | Cover - PMG |
| | | | | | Attaching Parts for Cover |
| | 800-2008 | 016-40616 | NE | 4 | Screw, Cap - Hex Head (M5-0.8 x 16mm) |
| | 850-2005 | 028-31506 | NE | 4 | Washer, Lock - Spring (M5) |
| 7 | 249-0462 | 450-22000 | NE | 1 | Harness, Wiring - PMG Exciter Stator to Control |

GENERATOR
Installation Of
UC3/UC274 MODELS



| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|--|------------------|--------------------|------------------|-------------|---|
| Generator with SAE 2 Adapter/ SAE 11.5 Drive Disc (See Separate Pages for Servicable Components) | | | | | |
| 1 | 800-0520 | | | 2 | Screw, Cap - Hex Head (3/4-10 x 1") |
| 2 | 850-0079 | | | 2 | Washer, Lock - Spring (3/4") |
| 3 | 805-0015 | | | 8 | Bolt, Piece - Hex Head, Grade 8 (3/8-16 x 3/4") |
| 4 | 526-0154 | | | 8 | Washer, Flat (3/8") |
| 5 | 800-2088 | | | 12 | Screw, Cap - Hex Head (M10 x 1.5 x 35mm) |
| 6 | 850-2010 | | | 12 | Washer, Lock - Spring (M10) |

**GENERATOR
SERVICABLE COMPONENTS
UC3C thru H/UC274C thru H**

| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|--|---------------|-----------------|---------|----------|--|
| GENERATOR STATOR GROUP | | | | | |
| Note 1 | Note 2 | | NE | 1 | Stator Assembly, Generator (No Servicable Components) the top, and bottom covers, adapter ring, End Bell Assembly are removable. |
| Note 1 | Note 2 | | NE | 1 | Stator, Wound - Generator |
| GENERATOR END BELL GROUP | | | | | |
| Note 1 | Note 2 | | NE | 1 | End Bell Assembly |
| | | | | | Attaching Parts End Bell to Generator Stator |
| 800-2087 | 016-40919 | | NE | 6 | Screw, Cap - Hex Head (M10 x 30mm) |
| 850-2010 | 028-31509 | | NE | 6 | Washer, Lock - Spring (M10) |
| -----*----- | | | | | |
| | | | | | Stator, Exciter |
| 220-4242-02 | 230-1001 | | NE | 1 | Used on UC3/UC274 Size C & D |
| 220-4242-03 | 330-1000 | | NE | 1 | Used on UC3/UC274 Size E thru H |
| Attaching Parts for Stator | | | | | |
| 800-2042 | 016-41612 | | NE | 4 | Screw, Cap - Hex Head (M6-1 x 60mm)Used on UC3/UC274C & D |
| 800-2046 | 016-41614 | | NE | 4 | Screw, Cap - Hex Head (M6-1 x 70mm)Used on UC3/UC274E thru H |
| 850-2006 | 028-31507 | | NE | 4 | Washer, Lock - Spring (M6) |
| -----*----- | | | | | |
| Note 1 | Note 2 | | NE | 1 | End Bell, Generator |
| 509-0266-02 | 051-21785 | | NE | 1 | O-Ring |
| GENERATOR ROTOR GROUP | | | | | |
| Note 1 | Note 2 | | NE | 1 | Rotor Assembly, Generator (Wound Rotor, Exciter Rotor, Bearing, Bearing, Varister, etc.) |
| 518-0083 | 050-11042 | | NE | 1 | Ring, Retaining (Circlip) |
| 510-0164 | 051-01049 | | NE | 1 | Bearing, Ball |
| 304-0807 | 073-08059 | | NE | 1 | Varistor |
| Attaching Parts for Varister | | | | | |
| 800-2004 | 016-40614 | | NE | 2 | Screw, Cap - Hex Head (M5-0.8 x 12mm) |
| 850-2005 | 028-31506 | | NE | 2 | Washer, Lock - Spring (M5) |
| -----*----- | | | | | |
| Rotor Assy, Exciter (Includes Rectifier Assemblies, Varister and Wound Rotor) | | | | | |
| 201-3434-02 | Note 2 | | NE | 1 | Used on UC3/UC274 Size C & D |
| 201-3434-03 | Note 2 | | NE | 1 | Used on UC3/UC274 Size E Thru H |
| Note 1 | 210-1067 | | NE | 1 | Rectifier Assembly, Forward (Includes Diodes) |
| Attaching Parts for Forward Rectifier Assembly | | | | | |
| 800-2040 | 016-40723 | | NE | 2 | Screw, Cap - Hex Head (M6-1 x 50mm) Used on UC3/UC274 Size C & D |
| 800-2044 | 015-41614 | | NE | 2 | Screw, Cap - Hex Head (M6-1 x 70mm) Used on UC3/UC275 Size E Thru H |
| 850-2006 | 028-31507 | | NE | 2 | Washer, Lock - Spring (M6) |
| -----*----- | | | | | |
| 357-0089-02 | 210-10142 | | NE | 3 | Diode - Forward (Includes Lead) |
| Note 1 | 210-1068 | | NE | 1 | Rectifier Assembly - Reverse (Includes Diodes) |
| Attaching Parts for Reverse Rectifier Assembly | | | | | |
| 800-2040 | 016-40723 | | NE | 2 | Screw, Cap - Hex Head (M6-1 x 50mm) Used on UC3/UC274 Size C & D |
| 800-2044 | 015-41614 | | NE | 2 | Screw, Cap - Hex Head (M6-1 x 70mm) Used on UC3/UC274 Size E Thru H |
| 850-2006 | 028-31507 | | NE | 2 | Washer, Lock - Spring (M6) |
| -----*----- | | | | | |
| 357-0089-01 | 210-10141 | | NE | 3 | Diode - Reverse (Includes Lead) |
| | | | NE | 1 | Rotor, Wound - Exciter (Less Rectifier Assemblies) |
| Note 1 | 210-1037 | | | | Used on UC3/UC274 Size C & D |
| Note 1 | 310-1028 | | | | Used on UC3/UC274 Size E Thru H |
| Key, Machine | | | | | |
| 515-0298-02 | 050-25619 | | NE | 1 | (6.35mm x 7.93mm x 39mm)Use on UC3/UC274 Size C & D |
| 515-0298-03 | 050-25620 | | NE | 1 | (6.35mm x 7.93mm x 69mm)Use on UC3/UC275 Size E Thru H |
| Note 3 | Note 3 | | NE | 1 | Rotor Wound, Generator |

OVERSPEED GROUP

See Separate page for Servicable Components

PMG GROUP

See Separate page for Servicable Components

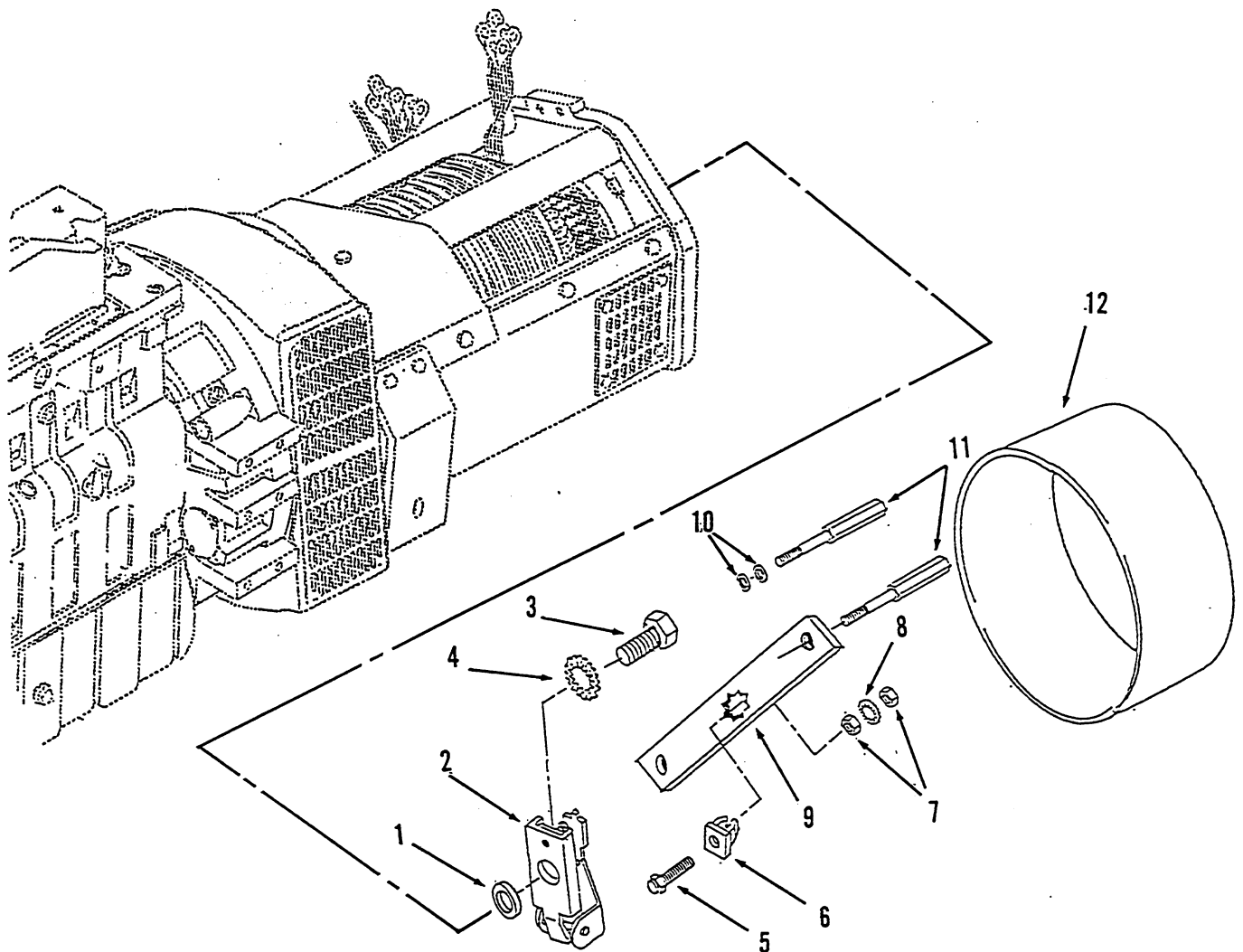
NOTE 1. * NOT STOCKED FOR SALE BY THE CENTRAL PARTS DISTRIBUTION CENTER!

NOTE 2. * NOT STOCKED FOR SALE BY NEWAGE INTERNATIONAL.

NOTE 3. * NOT STOCKED OR SOLD: FOR REPLACEMENT ORDER NEXT HIGHER ASSEMBLY OR A COMPLETE GENERATOR.

* WHEN ORDERING REPLACEMENT ITEMS SUPPLY THE COMPLETE GENERATOR MODEL AND SERIAL NUMBER FROM THE GENERATOR PLATE OR THE GENERATOR SET MODEL IDENTIFICATION NUMBER FROM THE SET IDENTIFICATION PLATE.

OVERSPEED SWITCH Installation Of



| REF NO. | CPDC PART NO. | SOURCE PART NO. | C O D E | QTY USED | PART DESCRIPTION |
|------------|------------------|--------------------|------------------|-------------|--|
| 1 | 526-0240 | | | 1 | Washer, Flat (3/8"ID x 1-1/2"OD x 1/8"THK) |
| 2 | 150-0956 | | | 1 | Switch, Overspeed |
| 3 | 800-2087 | | | 1 | Screw, Cap - Hex Head (M10-1.5 x 30mm) |
| 4 | 856-0010 | | | 1 | Washer, Lock - EIT (3/8") |
| 5 | 150-0723 | | | 1 | Point, Overspeed |
| 6 | 870-0250 | | | 1 | Nut, Insulated |
| 7 | 862-0001 | | | 2 | Nut, Hex (1/4-20) |
| 8 | 853-0013 | | | 1 | Washer, Lock - EIT (1/4") |
| 9 | 150-2309 | | | 1 | Bracket, Overspeed Switch |
| 10 | 526-2080 | | | 4 | Washer, Flat (M6) |
| 11 | 232-3462-01 | | | 4 | Pillar, Threaded (M5 x 55mm) |
| 12 | 234-0875-01 | | | 1 | Cover |
| | | | | | Attaching Parts for Cover |
| | 800-2008 | | | 4 | Screw, Cap - Hex Head (M5-0.8 x 16mm) |
| | 850-2005 | | | 4 | Washer, Lock - Spring (M5) |

TABLE OF CONTENTS
SOURCE CODE SECTION

| | |
|---------------------|-----|
| MANUFACTURERS | 5-2 |
| SOURCES | 5-3 |

MANUFACTURERS

LOCATION

TELEPHONE

CUMMINS/ONAN POWER SYSTEMS
1400 73rd Avenue N.E.
Minneapolis, Minnesota, USA
55432

Telephone: 612-574-5000
Telex: 275477
Fax: 612-574-5298

CUMMINS ENGINE COMPANY, INC.
Columbus, Indiana, USA
47202-3005

NEWAGE ENGINEERS LIMITED
P.O. Box 17
Barnack Road
Stamford, Lincolnshire, England
PE9 2NB

Telephone: 0780-62552
Telex: 32268
Cables: " Newage" Stamford

SOURCES

C
O
D
E

| | <u>LOCATION</u> | <u>TELEPHONE</u> |
|----|---|---|
| CE | CUMMINS ENGINE COMPANY, INC. Columbus, Indiana, USA 47202-3005 | |
| NE | NEWAGE ENGINEERS LIMITED P.O. Box 17 Barnack Road Stamford, Lincolnshire, England PE9 2NB | Telephone: 0780-62552 Telex: 32268 Cables: " Newage" Stamford |
| | NEWAGE ENGINEERS PTY. LIMITED 2A Parkes Street, Thornleigh New South Wales 2120 , Australia | Telephone: Sydney 8751933 Telex: 26686 |
| | NEWAGE EQUIPMENT LIMITED P.O.Box 427, Islington, Onatario, Canada M9A 4X4 | Telephone: 416-259-3741 Telex: 06-967676 |
| | NEWAGE ENGINEERS G.m.b.H. Archenholzstr 69,2000 Hamburg 74, West Germany | Telephone: 040-712-20-44/45 Telex: 2174397 |
| | P.T. NEWAGE ENGINEERS INDONESIA P.O. Box 70/JAT Ji. Pulogadung 21 Kawasan Industri Pilogadung Jakarta 13001 Indonesia | Telephone: 486654 Telex: 49204 NEWIND IA |
| | NEWAGE ITALIA S.r.l. Viale Fulvio Testi 56 20125 Milan, Italy | Telephone: 6420-868/64-36-602 Telex: 330541 |
| | NEWAGE NORGE A/S StaaIfjera 12 Oslo 9, Norway | Telephone: 25-1635 Telex: 18835 |
| | NEWAGE (FAR EAST) PTE LIMITED Ghim Moh P.O. Box 1016 Singapore 1027 | Telephone: 7776203 Telex: 33404 |
| | STAMFORD IBERICA S.A. Paseo de la Castellano 62 Madrid 1, Spain | Telephone: 261-8558/8566 Telex: 43551 |
| | NEWAGE LIMITED P.O. Box 103 3 Independence Court Folcroft Industrial Park Folcroft, Pennsylvania, USA 19032 | Telephone: 215-534-9500 Telex: 845276 |

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