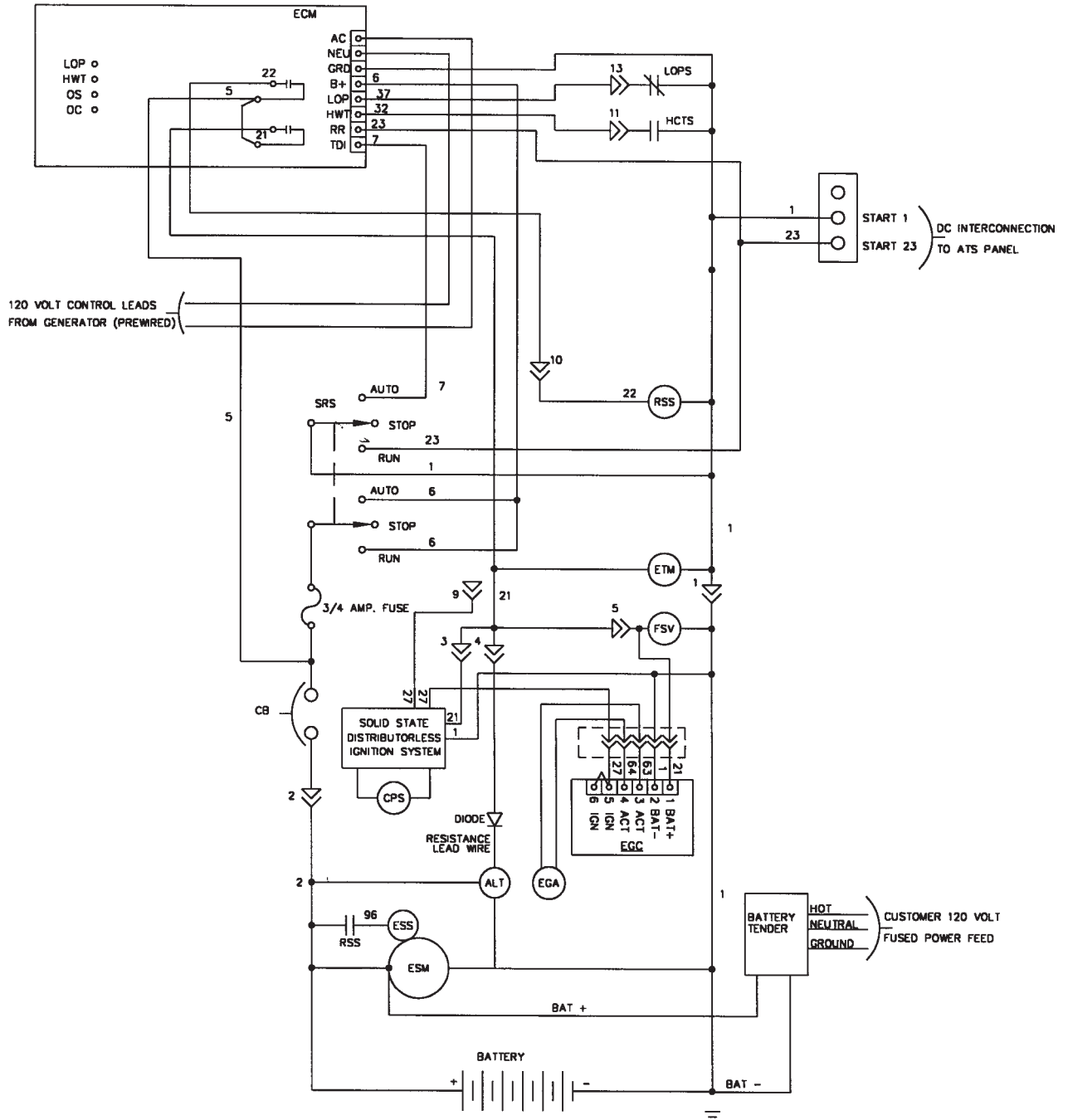


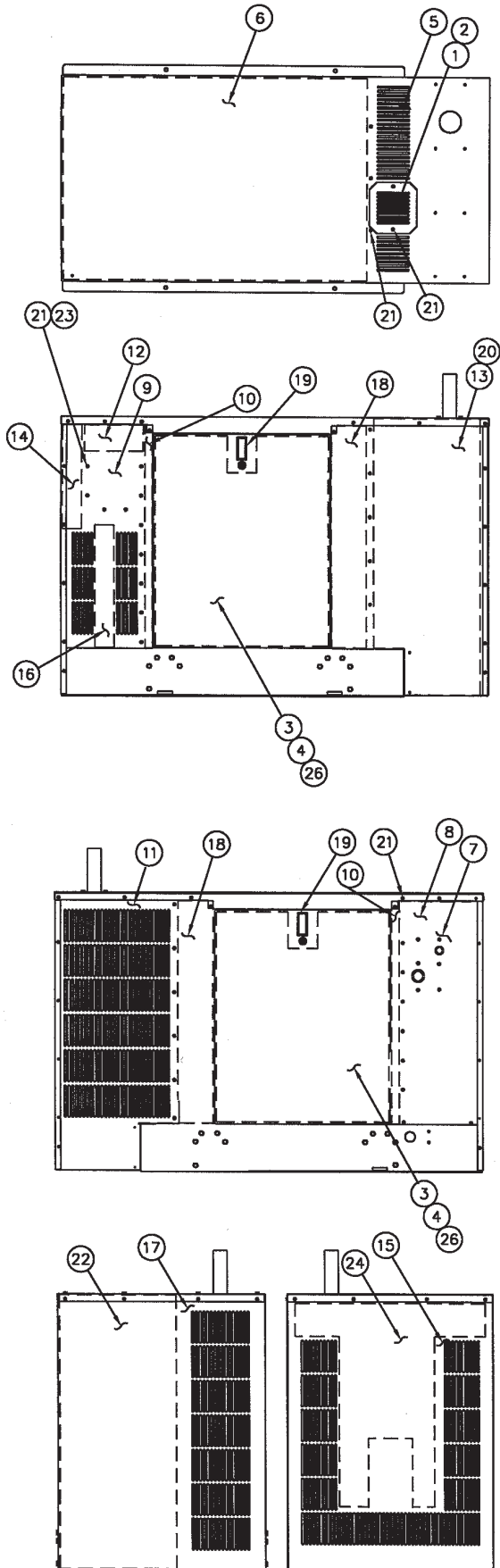
### PSS20000/C

### DC SCHEMATIC

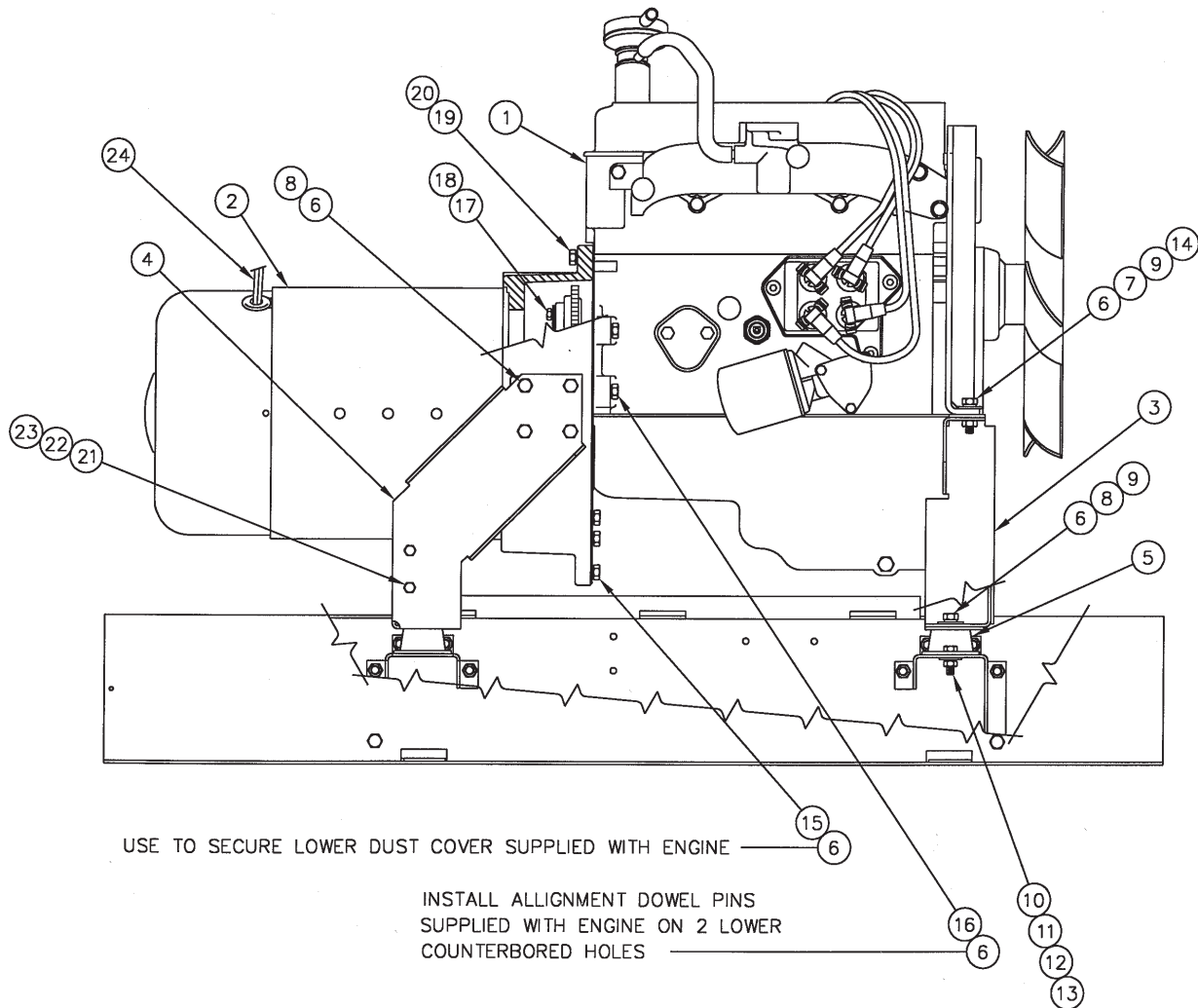
NOTE: L.E.D. FUNCTION LAMPS (REF. ONLY)



# GENERATOR HOUSING AND ACOUSTICAL FOAM



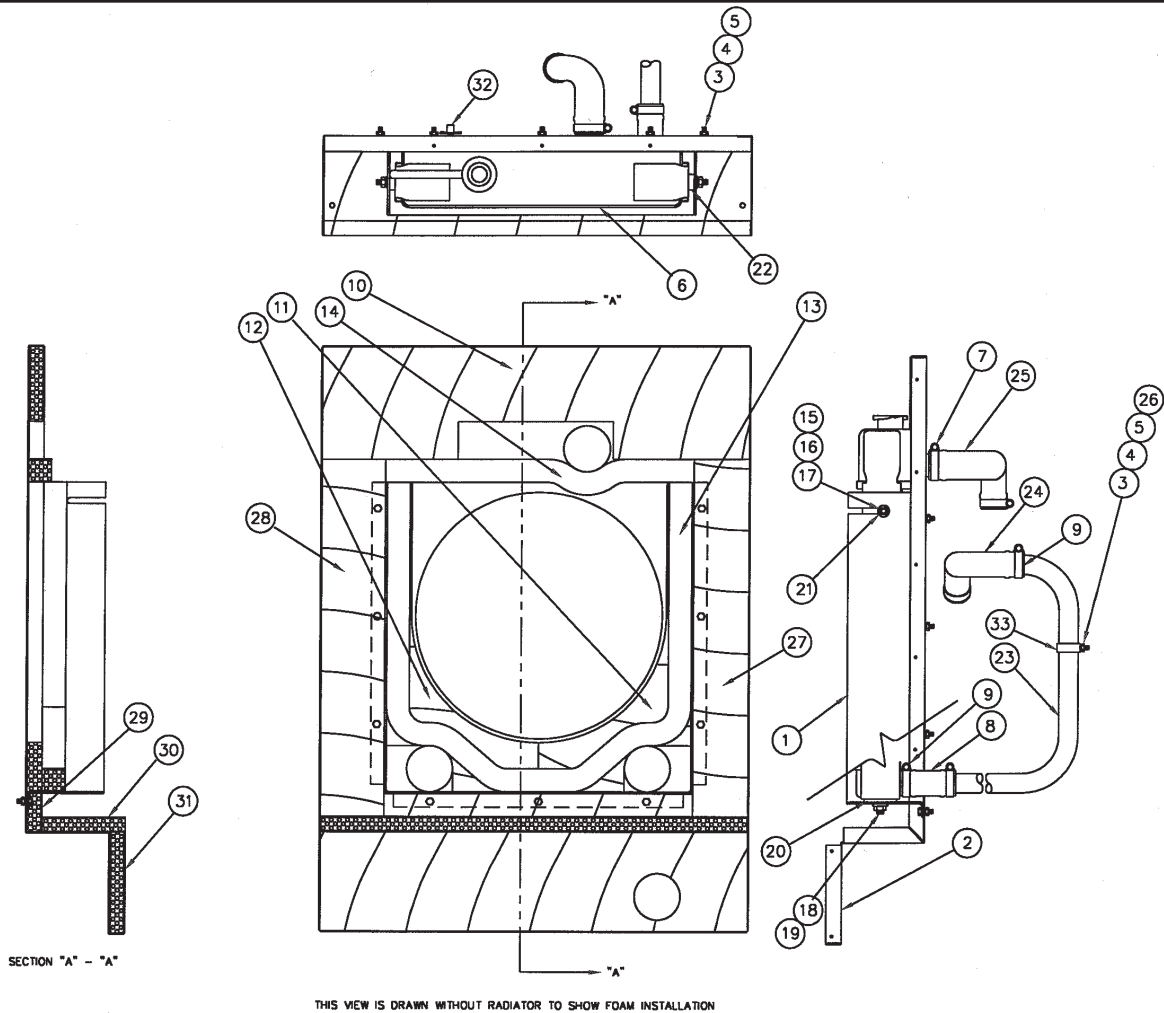
| REF | PART NBR  | QTY | DESCRIPTION                     |
|-----|-----------|-----|---------------------------------|
| 1   | 62026-001 | 1   | Coolant Access Plate            |
| 2   | 62912-000 | 14" | Adhesive Weather Stripping      |
| 3   | 15680-008 | 2   | Door                            |
| 4   | 64656-401 | 2   | Acoustical Foam                 |
| 5   | 62099-001 | 1   | Top Panel                       |
| 6   | 64656-402 | 1   | Acoustical Foam                 |
| 7   | 63712-001 | 1   | Left Rear Side Panel            |
| 8   | 64656-403 | 1   | Acoustical Foam                 |
| 9   | 63712-002 | 1   | Right Rear Side Panel           |
| 10  | 64656-404 | 2   | Acoustical Foam                 |
| 11  | 63748-003 | 1   | Left Front Side Panel           |
| 12  | 64656-405 | 1   | Acoustical Foam                 |
| 13  | 63748-004 | 1   | Right Front Side Panel          |
| 14  | 64656-406 | 1   | Acoustical Foam                 |
| 15  | 63711-002 | 1   | Generator End Panel             |
| 16  | 64656-407 | 1   | Acoustical Foam                 |
| 17  | 63711-003 | 1   | Engine End Panel                |
| 18  | 64656-402 | 2   | Acoustical Foam                 |
| 19  | 95229-004 | 2   | Door Latch                      |
| 20  | 64656-409 | 1   | Acoustical Foam                 |
| 21  | 21698-002 | 100 | #10 X 3/8 Sheet Metal Screw     |
| 22  | 64666-401 | 1   | Acoustical Foam                 |
| 23  | 55440-000 | 10  | 1/4-20 X 1/2 Self Tapping Screw |
| 24  | 64666-402 | 1   | Acoustical Foam                 |
| 26  | 62912-000 | 20' | Adhesive Weather Stripping      |



## ENGINE GENERATOR MOUNTING

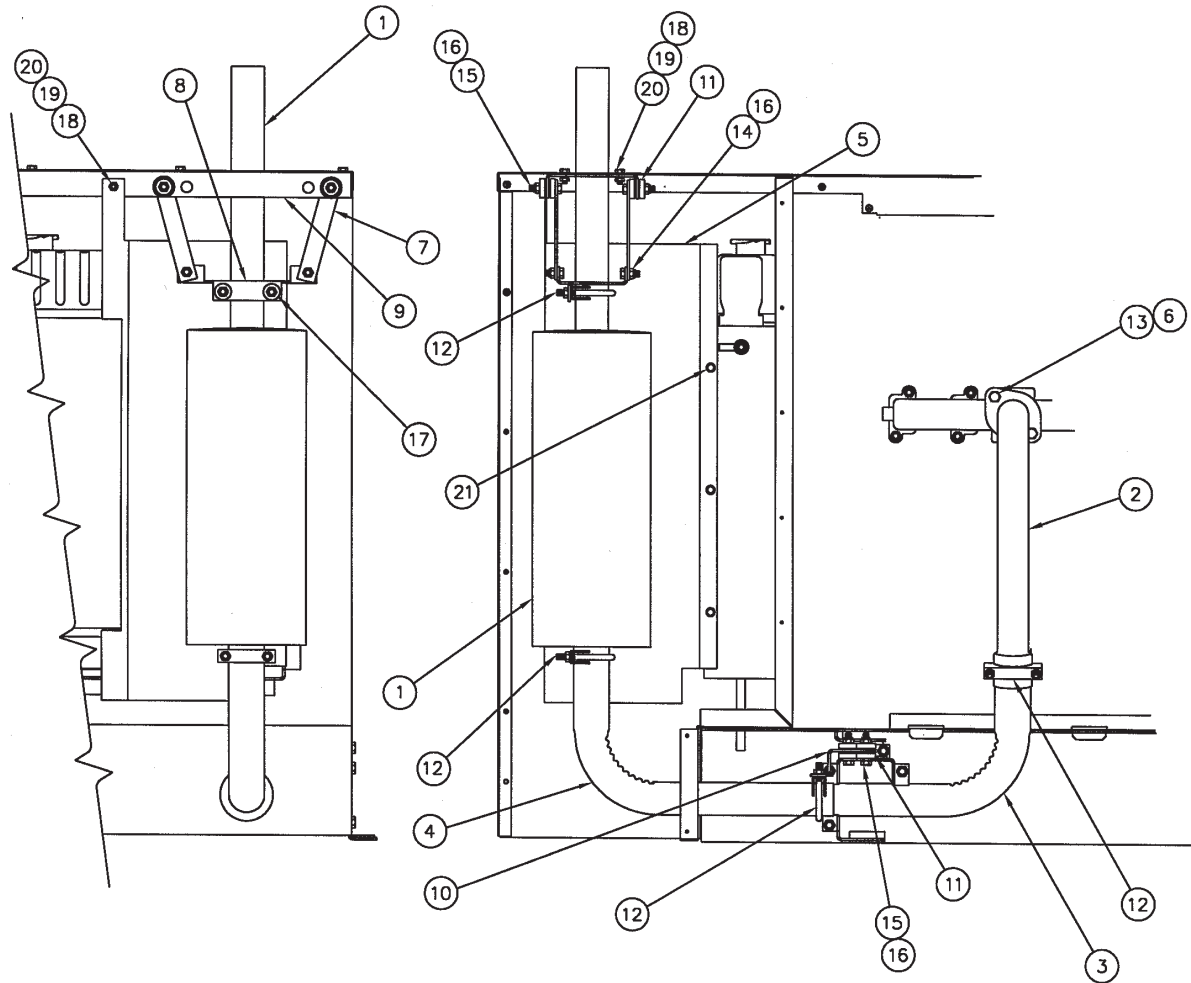


| REF | PART NBR  | QTY | DESCRIPTION             | REF | PART NBR  | QTY | DESCRIPTION                  |
|-----|-----------|-----|-------------------------|-----|-----------|-----|------------------------------|
| 1   | 63803-004 | 1   | Engine - Ford VSG411    | 15  | 464-000   | 3   | 3/8-16 x 3/4 Hex Head Bolt   |
| 2   | 64644-xxx | Ref | Generator Assembly      | 16  | 91658-003 | 4   | 3/8-16 x 1-1/2 Hex Head Bolt |
| 3   | 63797-001 | 1   | Engine Support Assy     | 17  | 96002-016 | 6   | M8 x 1.25 x 16 MM Bolt       |
| 4   | 63793-001 | 1   | Generator Support Brkt  | 18  | 480-001   | 6   | M8 Split Lockwasher          |
| 5   | 99050-000 | 3   | Shockmounts             | 19  | 94282-035 | 2   | M10 x 1.50 x 35 MM Bolt      |
| 6   | 481-000   | 13  | 3/8 Split Lockwasher    | 20  | 93341-010 | 2   | M10 Split Lockwasher         |
| 7   | 92914-000 | 4   | 3/8-16 Hex Nut          | 21  | 476-000   | 4   | 1/4-20 x 5/8 Hex Head Bolt   |
| 8   | 91658-001 | 12  | 3/8-16 x 1 Hex Hd Bolt  | 22  | 479-000   | 4   | 1/4 Split Lockwasher         |
| 9   | 526-000   | 4   | 3/8 Flat Washer         | 23  | 638-000   | 4   | 1/4-20 Hex Nut               |
| 10  | 1116-000  | 6   | 5/16-18 x 1 Hex Hd Bolt | 24  | 64673-xxx | Ref | AC Power Leads               |
| 11  | 480-000   | 6   | 5/16 Split Lockwasher   | NI  | 63666-003 | 1   | Base Rail, Left              |
| 12  | 458-000   | 6   | 5/16-18 Hex Nut         | NI  | 63666-004 | 1   | Base Rail Right              |
| 13  | 526-000   | 10  | 3/8 Flat Washer         | NI  | 63665-001 | 2   | Base Cross Members           |
| 14  | 91658-002 | 1   | 3/8-16 x 1-1/4 Hex Head |     |           |     |                              |



## RADIATOR & BAFFLE ASSEMBLY

| REF | PART NBR  | QTY | DESCRIPTION              | REF | PART NBR  | QTY | DESCRIPTION          |
|-----|-----------|-----|--------------------------|-----|-----------|-----|----------------------|
| 1   | 61550-001 | 1   | Radiator Support Bkt     | 17  | Ford Part | 2   | 5/16-18 Hex Nut      |
| 2   | 61551-001 | 1   | Radiator Support Baffle  | 18  | Ford Part | 2   | 7/16 Carriage Bolt   |
| 3   | 476-000   | 10  | 1/4-20 X 5/8 Hex Hd Bolt | 19  | Ford Part | 2   | 7/17-16 Hex Nut      |
| 4   | 479-000   | 10  | 1/4 Split Lockwasher     | 20  | Ford Part | 1   | Radiator Pad         |
| 5   | 638-000   | 10  | 1/4-20 Hex Nut           | 21  | 526-000   | 2   | 3/8 Flat Washer      |
| 6   | Ford Part | 1   | Radiator                 | 22  | Ford Part | 2   | Aluminum Spacer      |
| 7   | Ford Part | 1   | Clamp                    | 23  | 64606-001 | 1   | Coolant Pipe         |
| 8   | 63823-000 | 1   | Lower Radiator Hose      | 24  | 63822-000 | 1   | Coolant Hose         |
| 9   | 81018-004 | 5   | Hose Clamp               | 25  | Ford Part | 1   | Upper Radiator Hose  |
| 10  | 64646-401 | 1   | Acoustical Foam          | 26  | 512-000   | 1   | 1/4 Flat Washer      |
| 11  | 64646-402 | 1   | Acoustical Foam          | 27  | 64646-404 | 1   | Acoustical Foam      |
| 12  | 64646-403 | 1   | Acoustical Foam          | 28  | 64646-405 | 1   | Acoustical Foam      |
| 13  | 92421-000 | 52" | Acoustical Foam          | 29  | 64646-406 | 1   | Acoustical Foam      |
| 14  | 92421-000 | 21" | Acoustical Foam          | 30  | 64646-407 | 1   | Acoustical Foam      |
| 15  | Ford Part | 2   | 5/16 Carriage Bolt       | 31  | 64646-408 | 1   | Acoustical Foam      |
| 16  | Ford Part | 2   | 5/16 Lockwasher          | 32  | Ford Part | 1   | Petcock              |
|     |           |     |                          | 33  | 97391-008 | 1   | Cushioned Hose Clamp |

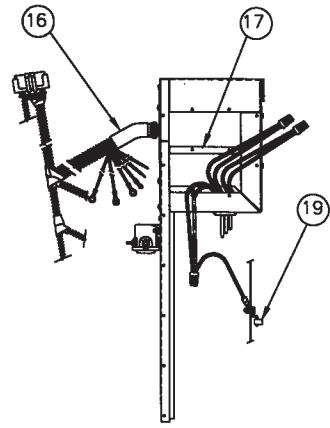
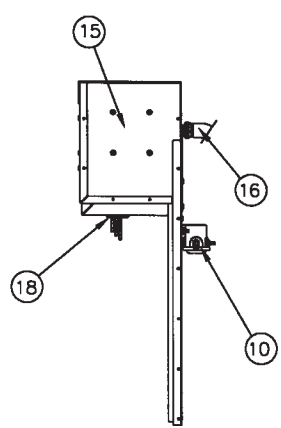
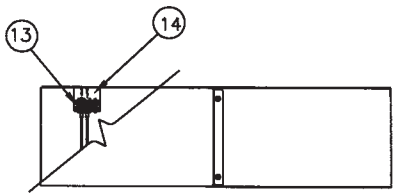
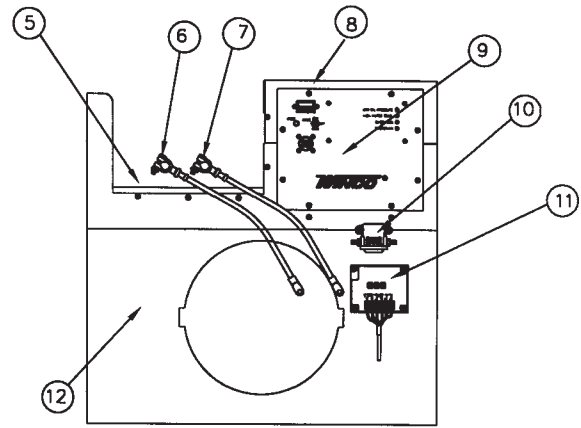
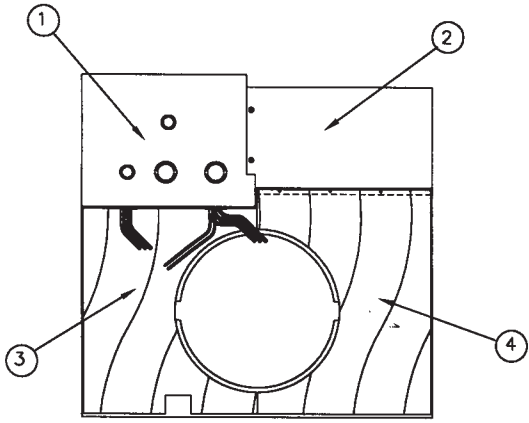


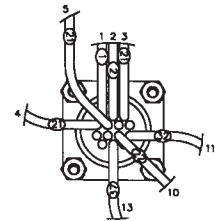
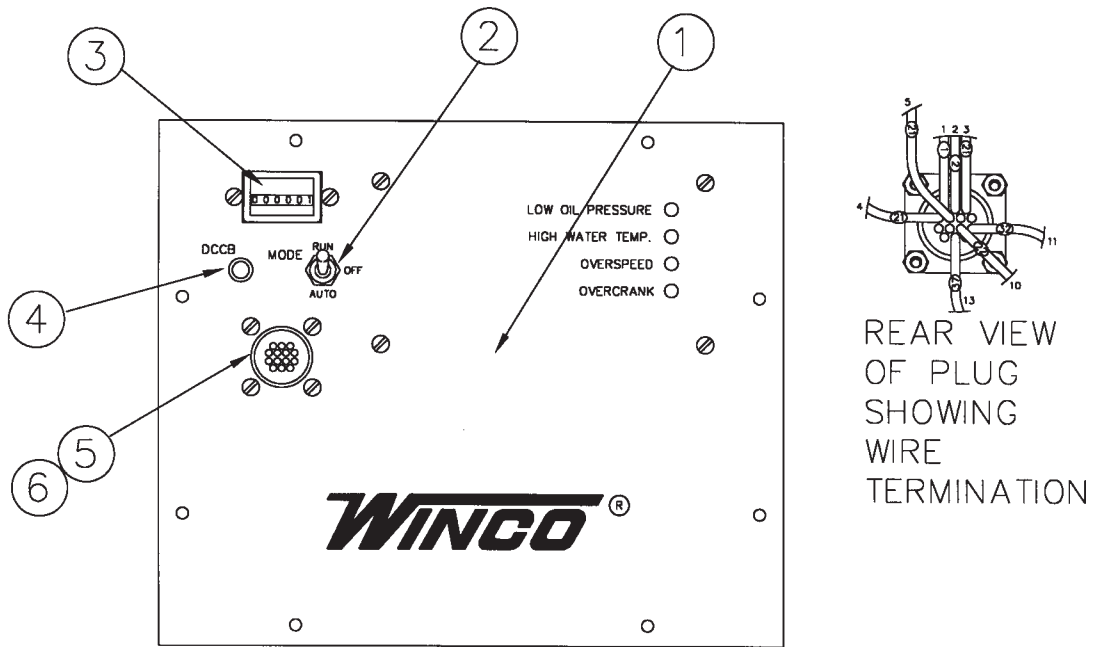
## MUFFLER INSTALLATION

| REF | PART NBR  | QTY | DESCRIPTION                 | REF | PART NBR  | QTY | DESCRIPTION                |
|-----|-----------|-----|-----------------------------|-----|-----------|-----|----------------------------|
| 1   | 61620-001 | 1   | Muffler                     | 11  | 64650-000 | 7   | Exhaust Bracket Bushing    |
| 2   | 63825-004 | 1   | Engine Header Exhaust Pipe  | 12  | 93489-003 | 4   | 2" Exhaust Clamp           |
| 3   | 63825-003 | 1   | Intermediate Exhaust Elbow  | 13  | 96003-030 | 2   | M10 x 1.50 x 30MM Bolt     |
| 4   | 63825-002 | 1   | Muffler Inlet Exhaust Elbow | 14  | 467-000   | 4   | 5/16-18 x .75 Hex HD Bolt  |
| 5   | 64501-001 | 1   | Radiator Air Deflector      | 15  | 91546-005 | 7   | 5/16-18 x 1.75 Hex HD Bolt |
| 6   | 64649-000 | 1   | Engine Exhaust Gasket       | 16  | 47136-000 | 11  | 5/16-18 Self Locking Nut   |
| 7   | 63834-004 | 4   | Exhaust Hanger Straps       | 17  | 526-000   | 2   | 5/16 Flat Washer           |
| 8   | 63834-003 | 1   | Muffler Hanger Bracket      | 18  | 476-000   | 9   | ¼-20 x .625 Hex HD Bolt    |
| 9   | 63834-002 | 1   | Muffler Support Channel     | 19  | 479-000   | 9   | ¼ Split Lockwasher         |
| 10  | 63834-001 | 1   | Exhaust Pipe Support Brkt   | 20  | 638-000   | 9   | ¼-20 Hex Nut               |
|     |           |     |                             | 21  | 55440-000 | 3   | ¼-20 x ½ SelfTapping Screw |

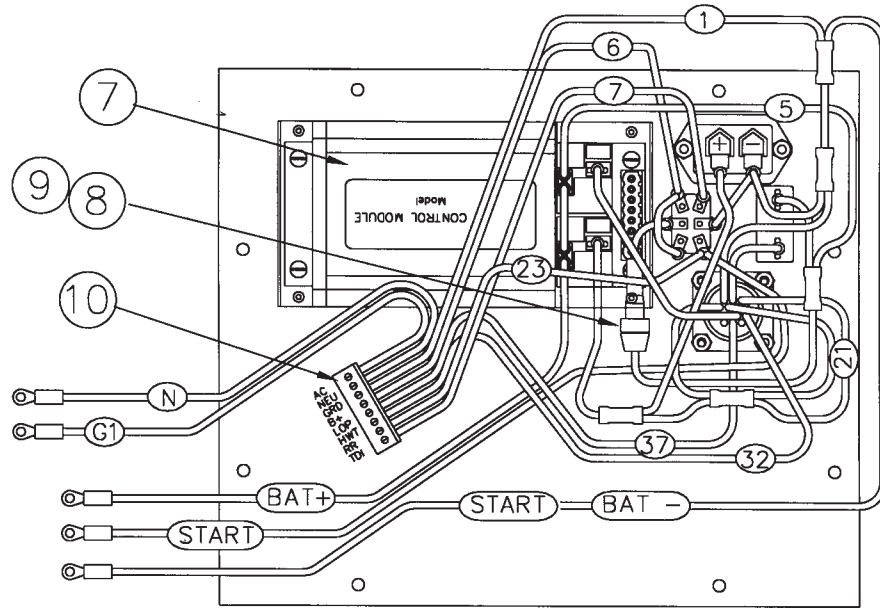
# CONTROL BOX ASSEMBLY

| REF | PART NBR  | QTY | DESCRIPTION           |
|-----|-----------|-----|-----------------------|
| 1   | 61294-002 | 1   | Control Box           |
| 2   | 61615-001 | 1   | Battery Box           |
| 3   | 64666-403 | 1   | Acoustical Foam       |
| 4   | 64666-404 | 1   | Acoustical Foam       |
| 5   | 58684-000 | 12" | Edge Trim             |
| 6   | 22097-001 | 1   | Battery Cable         |
| 7   | 22097-006 | 1   | Battery Cable         |
| 8   | 64780-001 | 1   | Top Cover             |
| 9   | 63782-004 | Ref | Control Panel Wiring  |
| 10  | 80890-000 | 1   | Start Solenoid        |
| 11  | 99525-000 | 1   | Governor Control      |
| 12  | 64545-002 | 1   | Closure Panel         |
| 13  | 64599-001 | 1   | Marker Decal          |
| 14  | 64598-000 | 1   | Terminal Block        |
| 15  | 61615-002 | 1   | Battery Box End Panel |
| 16  | 64613-002 | 1   | Engine Wiring Harness |
| 17  | 63742-001 | 1   | Control Box Divider   |
| 18  | 40730-000 | 1   | Grommet               |
| 19  | 48042-000 | 1   | Ground Lug            |





REAR VIEW OF PLUG SHOWING WIRE TERMINATION

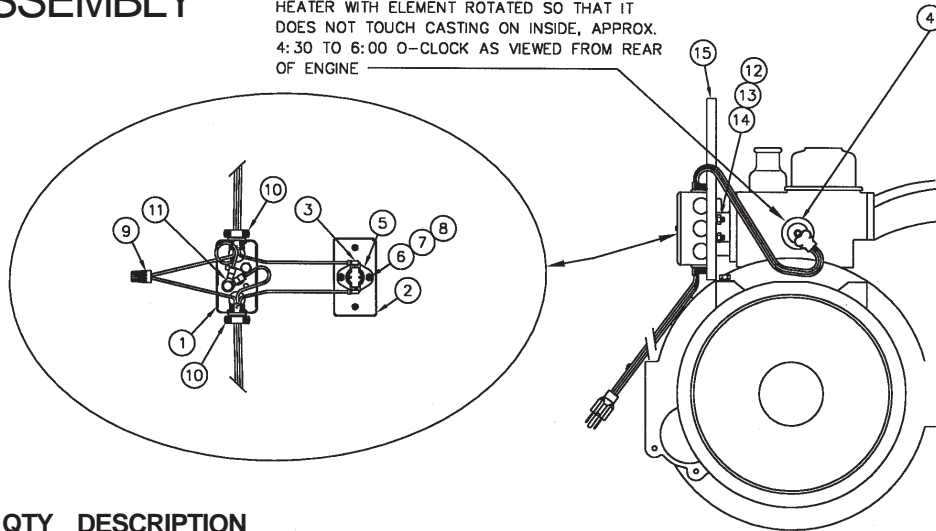


## CONTROL PANEL ASSEMBLY

| REF | PART NBR  | QTY | DESCRIPTION            |
|-----|-----------|-----|------------------------|
| 1   | 63740-003 | 1   | Control Panel          |
| 2   | 71216-001 | 1   | DPDT Toggle Switch     |
| 3   | 58166-006 | 1   | Running Time Meter     |
| 4   | 91286-000 | 1   | 15-Amp Circuit Breaker |
| 5   | 96925-002 | 1   | Connector Recept       |
| 6   | 96923-001 | 1   | Connector Pins         |
| 7   | 64813-000 | 1   | Engine Control         |
| 8   | 95063-000 | 1   | Fuse Holder            |
| 9   | 95064-002 | 1   | 3/4-Amp Fuse           |
| 10  | 64814-000 | 1   | Wire Connector Plug    |

# ENGINE BLOCK HEATER ASSEMBLY

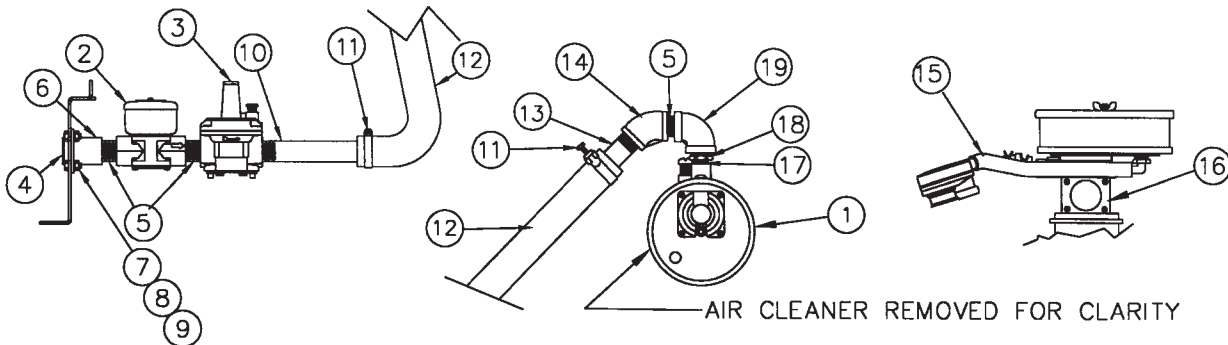
REMOVE FREEZE PLUG AND INSTALL ENGINE HEATER WITH ELEMENT ROTATED SO THAT IT DOES NOT TOUCH CASTING ON INSIDE, APPROX. 4:30 TO 6:00 O-CLOCK AS VIEWED FROM REAR OF ENGINE



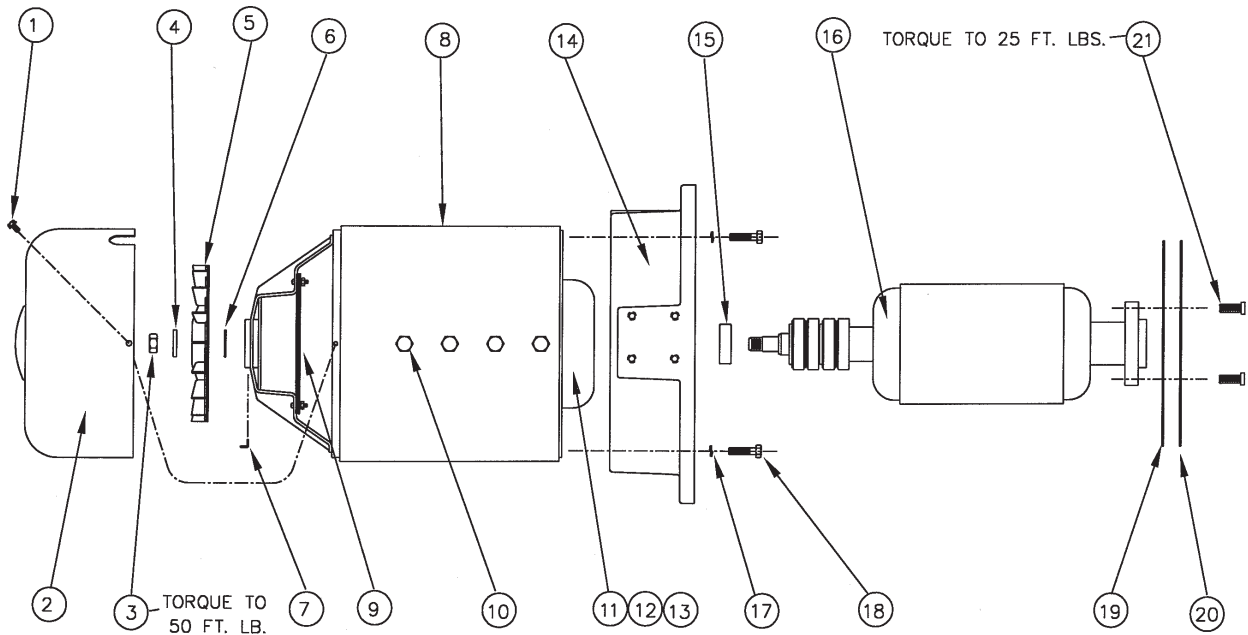
| REF | PART NBR  | QTY | DESCRIPTION               |
|-----|-----------|-----|---------------------------|
| 1   | 92789-000 | 1   | Conduit Box               |
| 2   | 15812-000 | 1   | Box Cover                 |
| 3   | 61898-000 | 1   | Terminal Lug              |
| 4   | 82505-001 | 1   | Engine Heater             |
| 5   | 15816-000 | 1   | Temperature Sensor        |
| 6   | 6174-000  | 2   | #8-32 x 3/8 Rd HD Screw   |
| 7   | 6376-000  | 2   | #8 Split Lockwasher       |
| 8   | 5113-000  | 2   | #8-32 Hex Nut             |
| 9   | 96936-003 | 1   | Wire Connector            |
| 10  | 93073-000 | 2   | Conduit Connector         |
| 11  | 4160-000  | 2   | Terminal Lug              |
| 12  | 463-000   | 2   | 1/4-20 X 1/2 Hex HD Screw |
| 13  | 479-000   | 2   | 1/4 Split Lockwasher      |
| 14  | 638-000   | 2   | 1/4-20 Hex Nut            |
| 15  | 63764-001 | 1   | Mounting Bracket          |

| REF | PART NBR  | QTY | DESCRIPTION               |
|-----|-----------|-----|---------------------------|
| 1   | 350495    | 1   | Gas Mixer                 |
| 2   | 16134-000 | 1   | Fuel Solenoid             |
| 3   | 50248-000 | 1   | Demand Regulator          |
| 4   | 55365-000 | 1   | Plug                      |
| 5   | 22626-000 | 3   | 3/4" Pipe Nipple          |
| 6   | 55931-000 | 1   | Bracket Assembly          |
| 7   | 466-000   | 2   | 1/4 -20 X 3/4 Hex HD Bolt |
| 8   | 479-000   | 2   | 1/4 Lockwasher            |
| 9   | 639-000   | 2   | 1/4-20 Hex Nut            |
| 10  | 63772-000 | 1   | 3/4" Pipe Nipple          |
| 11  | 50245-000 | 2   | Hose Clamp                |
| 12  | 49409-000 | 40" | Hose                      |
| 13  | 81084-000 | 1   | Pipe Nipple               |
| 14  | 56896-000 | 1   | 3/4" Elbow                |
| 15  | 62286-000 | 12" | Hose                      |
| 16  | 350486-1  | 1   | Governor Actuator         |
| 17  | 22768-000 | 1   | 1/2" Close Nipple         |
| 18  | 81075-000 | 1   | 3/4 to 1/2" Hex Reducer   |
| 19  | 50244-000 | 1   | 3/4" Elbow                |

# LP/NG FUEL SYSTEM

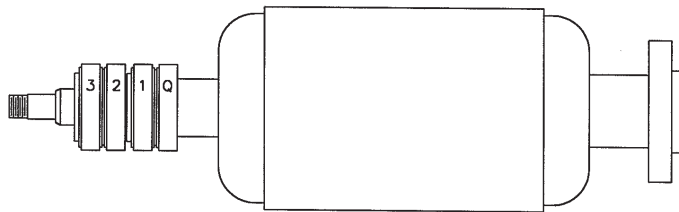
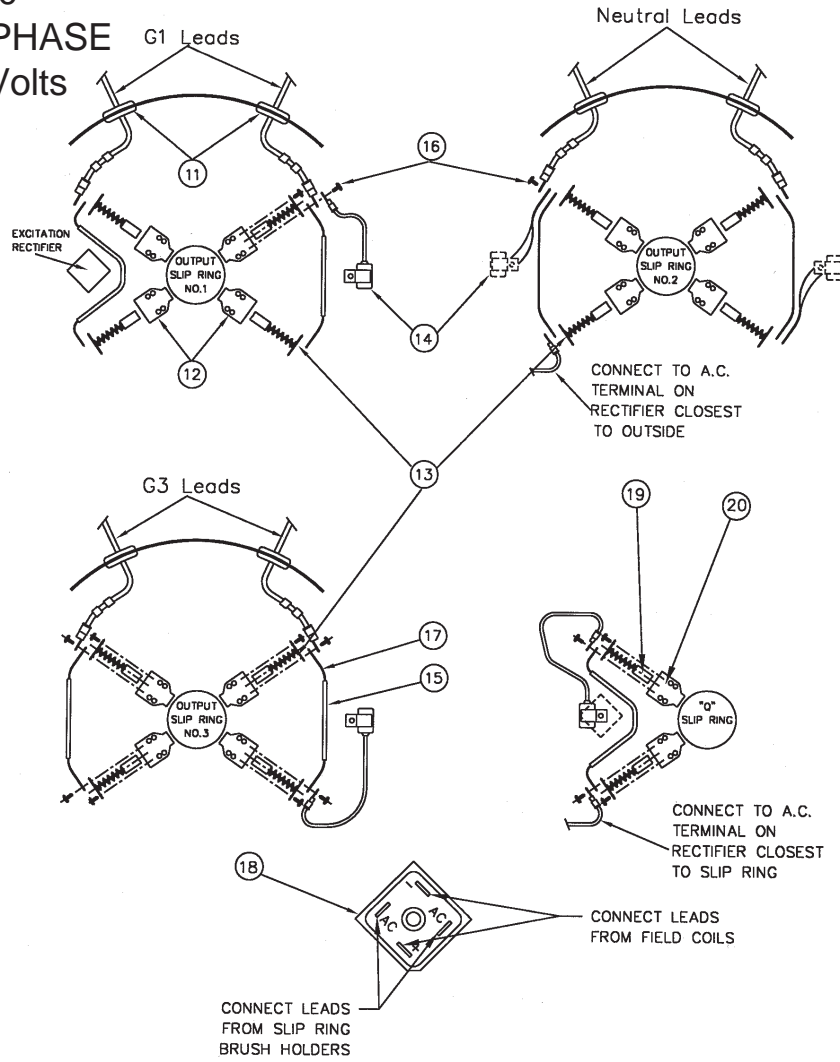


## GENERATOR UNASSEMBLED



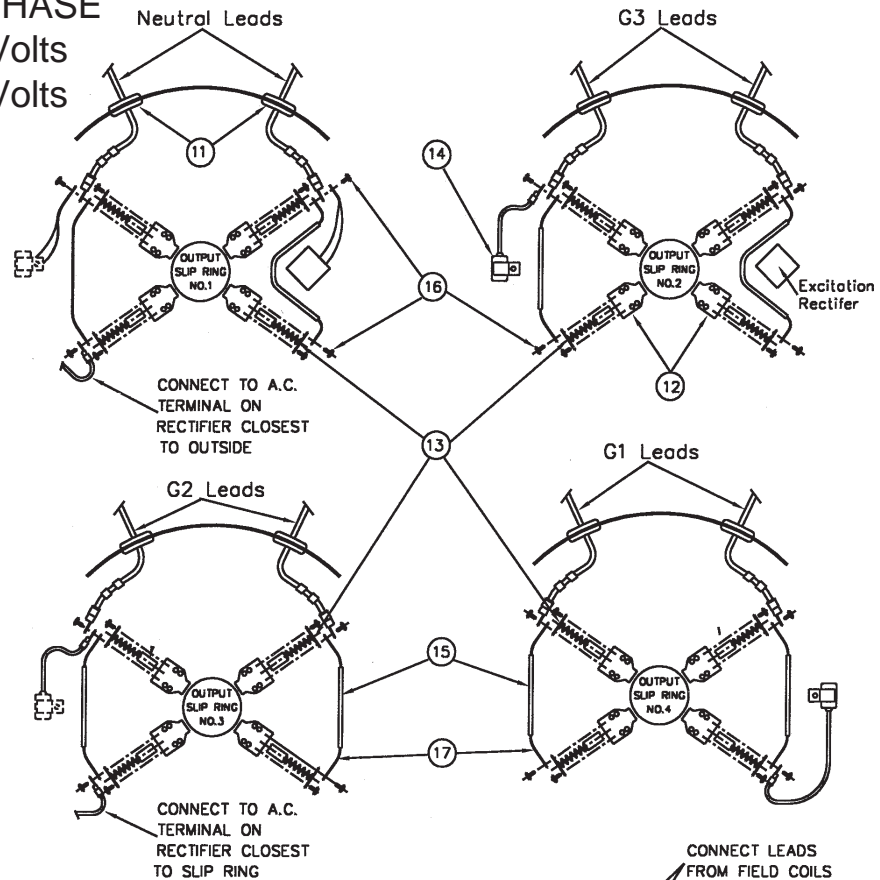
| PSS20000/C |           |     |                                 | PSS20000-4/C | PSS20000-17/C |
|------------|-----------|-----|---------------------------------|--------------|---------------|
| REF        | PART NBR  | QTY | DESCRIPTION                     | PART NBR     | PART NBR      |
| 1          | 53644-000 | 2   | #10-24 X 3/8 Self Tapping Screw | 53644-000    | 53644-000     |
| 2          | 55007-000 | 1   | End Cover Assembly              | 55007-000    | 55007-000     |
| 3          | 9549-000  | 1   | 1/2-20 Hex Nut                  | 9549-000     | 9549-000      |
| 4          | 97627-000 | 1   | Flat Washer                     | 97627-000    | 97627-000     |
| 5          | 23404-000 | 1   | Fan Assembly                    | 23404-000    | 23404-000     |
| 6          | 97627-001 | 1   | Flat Washer                     | 97627-001    | 97627-001     |
| 7          | 59063-000 | 1   | Bearing Anti-Rotation Pin       | 59063-000    | 59063-000     |
| 8          | 97288-000 | 1   | Machined Shell                  | 97288-000    | 97288-000     |
| 9A         | 54242-000 | 1   | Brushrack Assembly (RH)         | 63940-000    | 63940-000     |
| 9b         | 54242-001 | 1   | Brushrack Assembly (LH)         | 63940-001    | 63940-001     |
| 10         | 43781-000 | 8   | 7/16 - 20 X 1.75 Hex Head Bolt  | 43781-000    | 43781-000     |
| 11A        | 52563-000 | 1   | Field Coil (RH) Single Phase    | 63839-000    | 63938-000     |
| 11B        | 52563-001 | 1   | Field Coil (LH) Single Phase    | 63938-001    | 63938-001     |
| 12         | 43473-000 | 2   | Pole Shoe                       | 43473-000    | 43473-000     |
| 13         | 63937-000 | 2   | Pole Shoe Retainer              | 63937-000    | 63937-000     |
| 14         | 63886-000 | 1   | Flywheel Housing Assembly       | 63886-000    | 63866-000     |
| 15         | 59062-000 | 1   | Bearing                         | 59062-000    | 59062-000     |
| 16         | 63802-001 | 1   | Armature                        | 63850-001    | 63850-002     |
| 17         | 480-001   | 4   | Lockwasher                      | 480-001      | 480-001       |
| 18         | 91546-003 | 4   | 5/16-18 X1.25 Hex Head Bolt     | 91546-003    | 91546-003     |
| 19         | 63861-000 | 1   | Drive Disc                      | 63861-000    | 63861-000     |
| 20         | 63861-000 | 1   | Drive Disc                      | 63861-000    | 63861-000     |
| 21         | 64647-001 | 6   | 3/8-16 X 1 Low Head Bolt        | 64647-001    | 64647-001     |

PSS20000  
SINGLE PHASE  
120/240 Volts



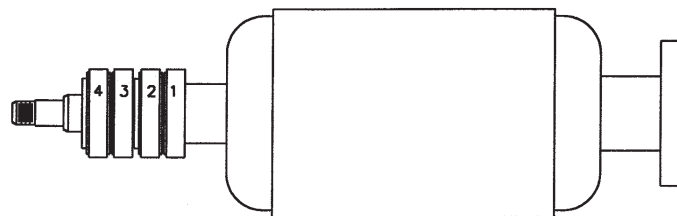
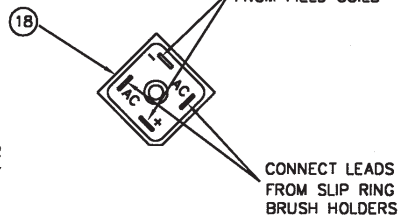
| REF | PART NBR  | QTY | DESCRIPTION        |
|-----|-----------|-----|--------------------|
| 11  | 23917-000 | 2   | Grommet            |
| 12  | 23500-002 | 12  | AC Brushholder     |
| 13  | 24981-000 | 12  | AC Brush           |
| 14  | 41221-000 | 3   | Capacitor          |
| 15  | 41387-008 | 7   | Copper Straps      |
| 16  | 40746-000 | 28  | #8-32 X 5/16 Screw |
| 17  | 46024-003 | 5   | Insulation Tube    |
| 18  | 91452-000 | 1   | Rectifier          |
| 19  | 53949-000 | 2   | "Q" Brush          |
| 20  | 23500-000 | 2   | "Q" Brushholder    |

PSS20000  
THREE PHASE  
120/240 Volts  
120/208 Volts



NOTES:

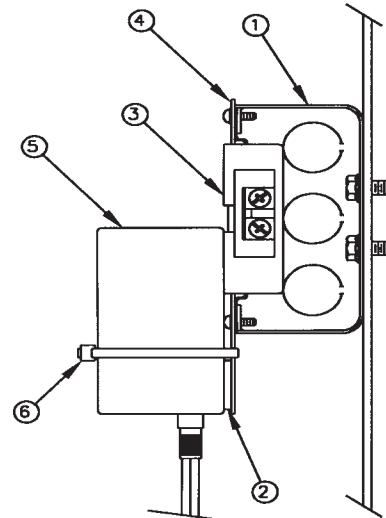
- 1 BRUSH HOLDER DETAILS ARE DRAWN LOOKING TOWARD MOUNTING PLATE, IN EACH CASE.
- 2 LEAD WIRES SHOWN EXITING FROM END COVER ARE ACCOUNTED FOR ON ANOTHER ASSEMBLY



| REF | PART NBR  | QTY | DESCRIPTION        |
|-----|-----------|-----|--------------------|
| 11  | 23917-000 | 2   | Grommet            |
| 12  | 23500-002 | 16  | AC Brushholder     |
| 13  | 24981-000 | 16  | AC Brush           |
| 14  | 41221-000 | 3   | Capacitor          |
| 15  | 41387-008 | 8   | Copper Straps      |
| 16  | 40746-000 | 32  | #8-32 X 5/16 Screw |
| 17  | 46024-003 | 7   | Insulation Tube    |
| 18  | 91452-000 | 1   | Rectifier          |

## BATTERY CHARGER INSTALLATION

| REF | PART NBR  | QTY | DESCRIPTION       |
|-----|-----------|-----|-------------------|
| 1   | 92789-000 | 1   | Conduit Box       |
| 2   | 62912-000 | 2"  | Neoprene Strip    |
| 3   | 24749-000 | 1   | Duplex Receptacle |
| 4   | 59026-001 | 1   | Cover Plate       |
| 5   | 16287-000 | 1   | Battery Charger   |
| 6   | 49975-010 | 1   | Cable Tie         |



### Items Not Illustrated

#### Decals

|           |   |                          |
|-----------|---|--------------------------|
| 15209-000 | 1 | Warning Decal Set        |
| 15750-001 | 1 | Grounding Decal          |
| 53113-001 | 2 | Winco Decal              |
| 97813-000 | 2 | Auto Start Warning Decal |

#### Contactor Coils

| Telemecanique |  |           |
|---------------|--|-----------|
| 60 AMP        |  | 80899-101 |
| 110 AMP       |  | 80899-101 |
| 150 AMP       |  | 80899-102 |
| 230 AMP       |  | 80899-102 |
| 300 AMP       |  | 80899-105 |
| 400 AMP       |  | 80899-105 |

### Generator Specifications

|                     | <u>PSS20000-3</u>   | <u>PSS20000-4</u>  | <u>PSS20000-17</u> |
|---------------------|---------------------|--------------------|--------------------|
| Armature            |                     |                    |                    |
| G1 to N             | 0.025 - 0.0275 OHMS | 0.023 - 0.026 OHMS | 0.076 - 0.084 OHMS |
| G2 to N             | N/A                 | 0.023 - 0.026 OHMS | 0.076 - 0.084 OHMS |
| G3 to N             | 0.025 - 0.075 OHMS  | 0.023 - 0.026 OHMS | 0.065 - 0.071 OHMS |
| Q to N              | 0.100 - 0.110 OHMS  | N/A                | N/A                |
| Field Coils         | 20.2 - 22.4 OHMS    | 25.0 - 27.9 OHMS   | 25.0 - 27.9 OHMS   |
| AC Residual Voltage | 7 VAC               | 7 VAC              | 7 VAC              |
| Winding Spec.       | SS1510              | SS1511             | SS1512             |
| AC Connection       | AC383               | AC133              | AC362              |

**WINCO INC**<sup>®</sup>

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