

Figure 2. Control Box Assembly (Sheet 3 of 5).

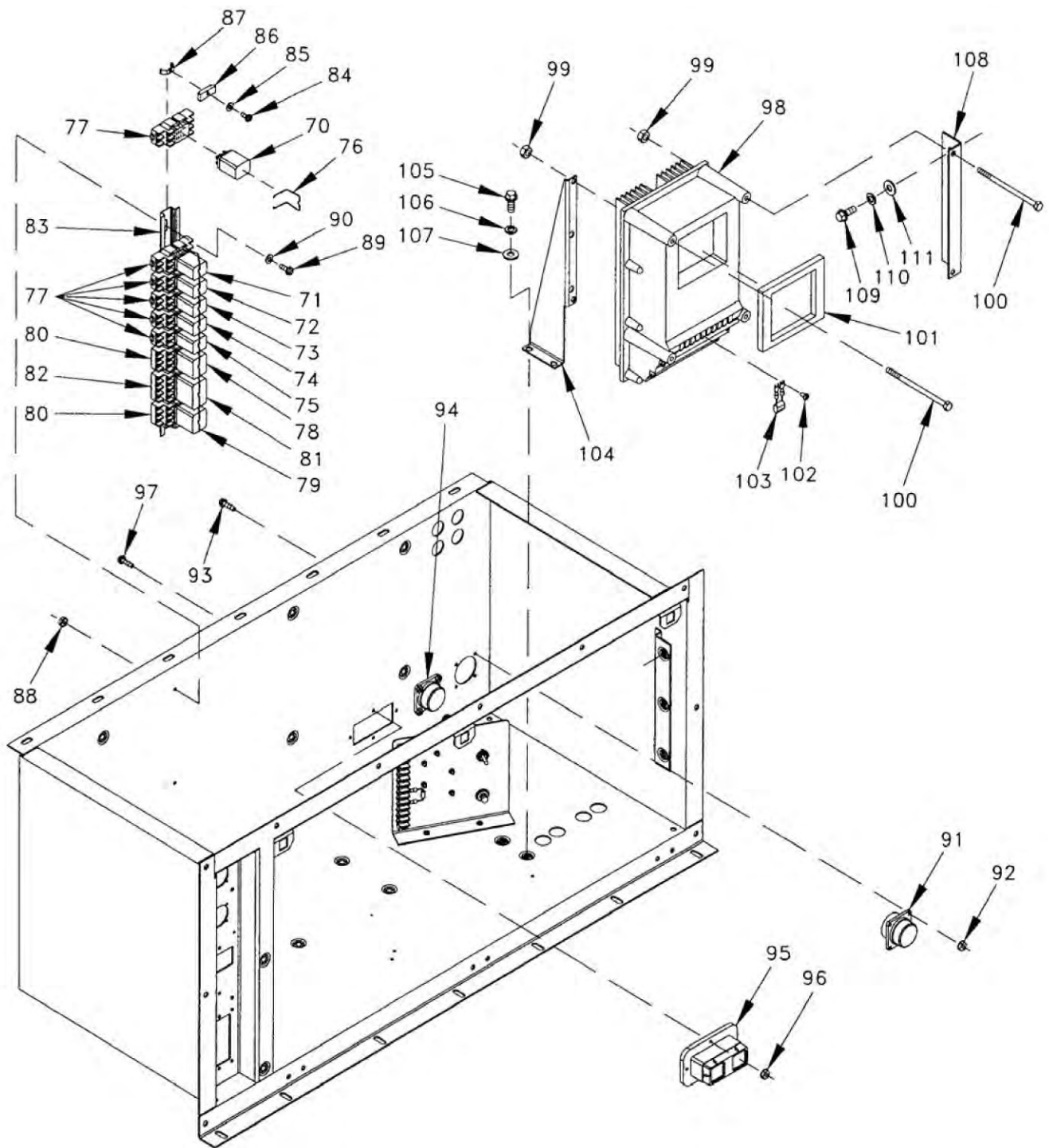


Figure 2. Control Box Assembly (Sheet 4 of 5).

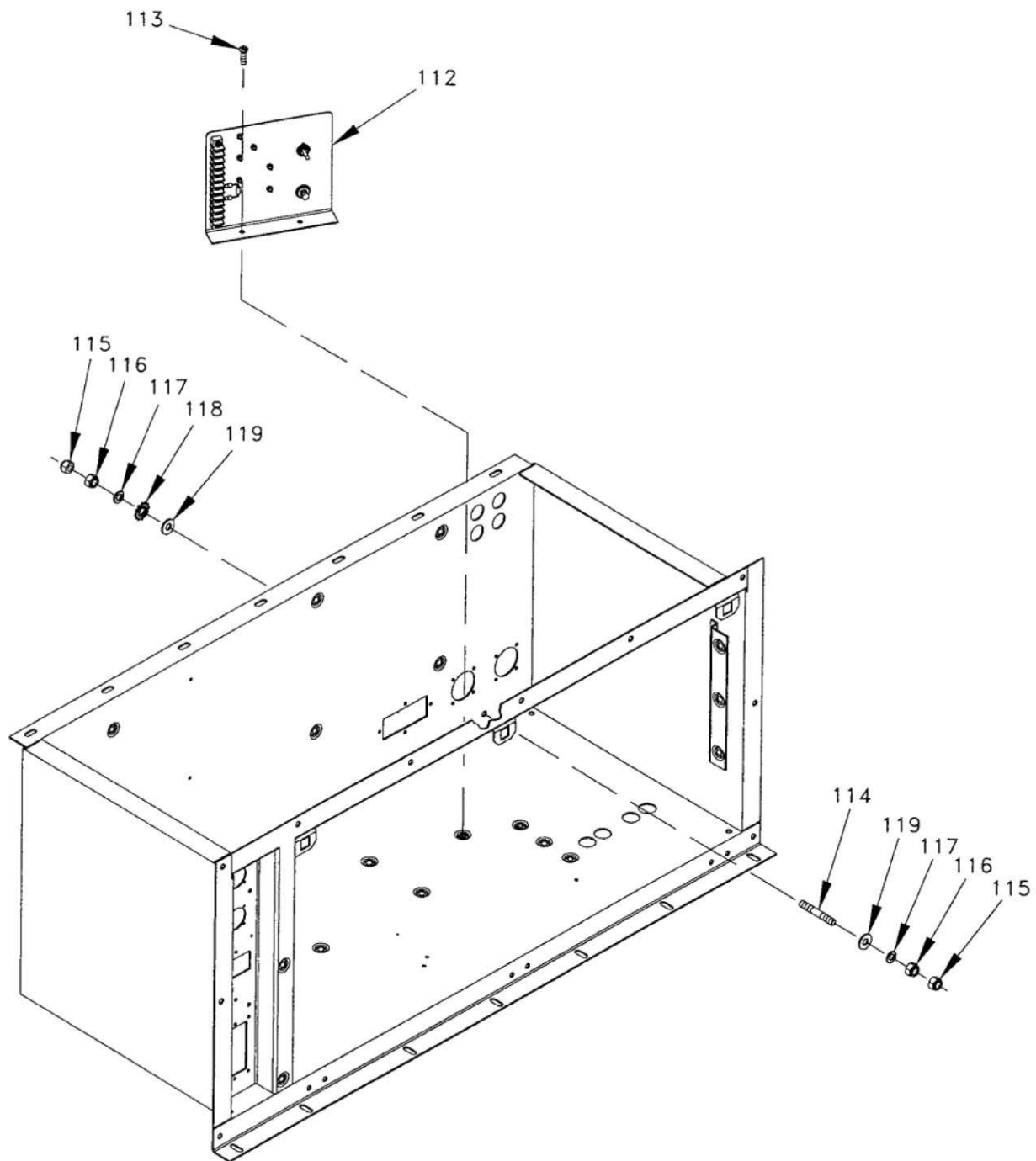


Figure 2. Control Box Assembly (Sheet 5 of 5).

10. To remove duplex receptacle (Figure 2, Sheet 2, Item 31), remove four screws (Figure 2, Sheet 2, Item 32), cover (Figure 2, Sheet 2, Item 33), and receptacle.
11. To remove paralleling receptacle (Figure 2, Sheet 2, Item 34), remove four nuts (Figure 2, Sheet 2, Item 35), four screws (Figure 2, Sheet 2, Item 36), cover (Figure 2, Sheet 2, Item 37), and receptacle. Repeat for other paralleling receptacle.
12. To remove nameplate (Figure 2, Sheet 2, Item 38), (Figure 2, Sheet 2, Item 39), or (Figure 2, Sheet 2, Item 40), remove two rivets (Figure 2, Sheet 2, Item 41) and nameplate.

13. To remove ground fault circuit interrupter (Figure 2, Sheet 3, Item 42), remove two nuts (Figure 2, Sheet 3, Item 43), screws (Figure 2, Sheet 3, Item 44), and circuit interrupter.
14. To remove AC transformer box A5 (Figure 2, Sheet 3, Item 45), remove three fuses (Figure 2, Sheet 3, Item 46), four screws (Figure 2, Sheet 3, Item 47), four lock washers (Figure 2, Sheet 3, Item 48), four washers (Figure 2, Sheet 3, Item 49), and AC transformer box.
15. To remove upper transformer mounting bracket (Figure 2, Sheet 3, Item 50), remove nut (Figure 2, Sheet 3, Item 51), two screws (Figure 2, Sheet 3, Item 52), two lock washers (Figure 2, Sheet 3, Item 53), two washers (Figure 2, Sheet 3, Item 54), and bracket.
16. To remove lower transformer mounting bracket (Figure 2, Sheet 3, Item 55), remove nut (Figure 2, Sheet 3, Item 56), two screws (Figure 2, Sheet 3, Item 57), two lock washers (Figure 2, Sheet 3, Item 58), two washers (Figure 2, Sheet 3, Item 59), and bracket.
17. To remove loop clamp (Figure 2, Sheet 3, Item 60), remove nut (Figure 2, Sheet 3, Item 61), loop clamp, nut (Figure 2, Sheet 3, Item 61), and screw (Figure 2, Sheet 3, Item 62).
18. To remove component mounting channel (Figure 2, Sheet 3, Item 63), remove five screws (Figure 2, Sheet 3, Item 64), lock washers (Figure 2, Sheet 3, Item 65), washers (Figure 2, Sheet 3, Item 66), and channel.
19. Remove nut (Figure 2, Sheet 3, Item 67), two washers (Figure 2, Sheet 3, Item 68), nut, and screw (Figure 2, Sheet 3, Item 69).
20. To remove main contractor relay (Figure 2, Sheet 4, Item 70), cool down relay (Figure 2, Sheet 4, Item 71), AFPR (Figure 2, Sheet 4, Item 72), Alarm Reset (Figure 2, Sheet 4, Item 73), generator fault relay (Figure 2, Sheet 4, Item 74), or relay field flash (Figure 2, Sheet 4, Item 75), remove spring (Figure 2, Sheet 4, Item 76), relay, and socket (Figure 2, Sheet 4, Item 77).
21. To remove relay DBLO (Figure 2, Sheet 4, Item 78) or DBHI (Figure 2, Sheet 4, Item 79), remove spring (Figure 2, Sheet 4, Item 76), relay, and socket (Figure 2, Sheet 4, Item 80).
22. To remove relay paralleling relay (Figure 2, Sheet 4, Item 81), remove spring (Figure 2, Sheet 4, Item 76), relay, and socket (Figure 2, Sheet 4, Item 82).
23. To remove track (Figure 2, Sheet 4, Item 83), remove two screws (Figure 2, Sheet 4, Item 84), two washers (Figure 2, Sheet 4, Item 85), two insulator blocks (Figure 2, Sheet 4, Item 86), two clips (Figure 2, Sheet 4, Item 87), three nuts (Figure 2, Sheet 4, Item 88), three screws (Figure 2, Sheet 4, Item 89), three washers (Figure 2, Sheet 4, Item 90), and track.
24. To remove connector J30 (Figure 2, Sheet 4, Item 91), remove four nuts (Figure 2, Sheet 4, Item 92), screws (Figure 2, Sheet 4, Item 93), and connector. Repeat for connector J31 (Figure 2, Sheet 4, Item 94).
25. To remove connector J37 (Figure 2, Sheet 4, Item 95), remove four nuts (Figure 2, Sheet 4, Item 96), screws (Figure 2, Sheet 4, Item 97), and connector.
26. To remove digital voltage regulator A3 (Figure 2, Sheet 4, Item 98), remove four nuts (Figure 2, Sheet 4, Item 99), screws (Figure 2, Sheet 4, Item 100), digital voltage regulator, and gasket (Figure 2, Sheet 4, Item 101). Remove two screws (Figure 2, Sheet 4, Item 102) and capacitor (Figure 2, Sheet 4, Item 103).
27. To remove DVR bracket (Figure 2, Sheet 4, Item 104), remove two screws (Figure 2, Sheet 4, Item 105), lock washers (Figure 2, Sheet 4, Item 106), washers (Figure 2, Sheet 4, Item 107), and bracket. To remove DVR bracket (Figure 2, Sheet 4, Item 108), remove three screws (Figure 2, Sheet 4, Item 109), lock washers (Figure 2, Sheet 4, Item 110), washers (Figure 2, Sheet 4, Item 111), and bracket.
28. To remove resistor assembly A7 (Figure 2, Sheet 5, Item 112), remove two screws (Figure 2, Sheet 5, Item 113) and resistor assembly.
29. To remove ground stud (Figure 2, Sheet 5, Item 114), remove two locknuts (Figure 2, Sheet 5, Item 115), two jam nuts (Figure 2, Sheet 5, Item 116), two lock washers (Figure 2, Sheet 5, Item 117), external tooth lock washer (Figure 2, Sheet 5, Item 118), two washers (Figure 2, Sheet 5, Item 119), and ground stud.

END OF TASK

ASSEMBLY

1. Install ground stud (Figure 2, Sheet 5, Item 114), two washers (Figure 2, Sheet 5, Item 119), external tooth lock washer (Figure 2, Sheet 5, Item 118), two lock washers (Figure 2, Sheet 5, Item 117), two jam nuts (Figure 2, Sheet 5, Item 116), and two locknuts (Figure 2, Sheet 5, Item 115).

2. Install resistor assembly A7 (Figure 2, Sheet 5, Item 112) and two screws (Figure 2, Sheet 5, Item 113).
3. Install DVR bracket (Figure 2, Sheet 4, Item 108), three washers (Figure 2, Sheet 4, Item 111), lock washers (Figure 2, Sheet 4, Item 110), and screws (Figure 2, Sheet 4, Item 109). Install DVR bracket (Figure 2, Sheet 4, Item 104), three washers (Figure 2, Sheet 4, Item 107), lock washers (Figure 2, Sheet 4, Item 106), and screws (Figure 2, Sheet 4, Item 105).
4. Install capacitor (Figure 2, Sheet 4, Item 103) and two screws (Figure 2, Sheet 4, Item 102) on digital voltage regulator A3 (Figure 2, Sheet 4, Item 98). Install gasket (Figure 2, Sheet 4, Item 101), digital voltage regulator (Figure 2, Sheet 4, Item 98), four screws (Figure 2, Sheet 4, Item 100), and nuts (Figure 2, Sheet 4, Item 99).
5. Install connector J37 (Figure 2, Sheet 4, Item 95), four screws (Figure 2, Sheet 4, Item 97), and nuts (Figure 2, Sheet 4, Item 96).
6. Install connector J30 (Figure 2, Sheet 4, Item 91), four screws (Figure 2, Sheet 4, Item 93), and nuts (Figure 2, Sheet 4, Item 92). Repeat for connector J31 (Figure 2, Sheet 4, Item 94).
7. Install track (Figure 2, Sheet 4, Item 83), three washers (Figure 2, Sheet 4, Item 90), three screws (Figure 2, Sheet 4, Item 89), three nuts (Figure 2, Sheet 4, Item 88), two clips (Figure 2, Sheet 4, Item 87), two insulator blocks (Figure 2, Sheet 4, Item 86), two washers (Figure 2, Sheet 4, Item 85), and two screws (Figure 2, Sheet 4, Item 84).
8. Install socket (Figure 2, Sheet 4, Item 82), paralleling relay (Figure 2, Sheet 4, Item 81), and spring (Figure 2, Sheet 4, Item 76).
9. Install socket (Figure 2, Sheet 4, Item 80), relay DBLO (Figure 2, Sheet 4, Item 78) or DBHI (Figure 2, Sheet 4, Item 79), and spring (Figure 2, Sheet 4, Item 76).
10. Install socket (Figure 2, Sheet 4, Item 77), relay field flash (Figure 2, Sheet 4, Item 75), generator fault relay (Figure 2, Sheet 4, Item 74), Alarm Reset (Figure 2, Sheet 4, Item 73), AFPR (Figure 2, Sheet 4, Item 72), cool down relay (Figure 2, Sheet 4, Item 71), main contractor relay (Figure 2, Sheet 4, Item 70), and spring (Figure 2, Sheet 4, Item 76).
11. Install screw (Figure 2, Sheet 3, Item 69), nut (Figure 2, Sheet 3, Item 67), two washers (Figure 2, Sheet 3, Item 68), and nut (Figure 2, Sheet 3, Item 67).
12. Install component mounting channel (Figure 2, Sheet 3, Item 63), five washers (Figure 2, Sheet 3, Item 66), lock washers (Figure 2, Sheet 3, Item 65), and screws (Figure 2, Sheet 3, Item 64).
13. Install screw (Figure 2, Sheet 3, Item 62), nut (Figure 2, Sheet 3, Item 61), loop clamp (Figure 2, Sheet 3, Item 60), and nut (Figure 2, Sheet 3, Item 61).
14. Install lower transformer mounting bracket (Figure 2, Sheet 3, Item 55), two washers (Figure 2, Sheet 3, Item 59), two lock washers (Figure 2, Sheet 3, Item 58), two screws (Figure 2, Sheet 3, Item 57), and nut (Figure 2, Sheet 3, Item 56).
15. Install upper transformer mounting bracket (Figure 2, Sheet 3, Item 50), two washers (Figure 2, Sheet 3, Item 54), two lock washers (Figure 2, Sheet 3, Item 53), two screws (Figure 2, Sheet 3, Item 52), and nut (Figure 2, Sheet 3, Item 51).
16. Install AC transformer box A5 (Figure 2, Sheet 3, Item 45), four washers (Figure 2, Sheet 3, Item 49), four lock washers (Figure 2, Sheet 3, Item 48), four screws (Figure 2, Sheet 3, Item 47), and three fuses (Figure 2, Sheet 3, Item 46). Record barcode values for VA, VB, VC, IA, IB, IC (setpoints AC01 through AC06) for reprogramming GSC. Setpoints must be reprogrammed if AC transformer box A5 is replaced (WP 0092).
17. Install ground fault circuit interrupter (Figure 2, Sheet 3, Item 42), two screws (Figure 2, Sheet 3, Item 44), and nuts (Figure 2, Sheet 3, Item 43).
18. Install nameplate (Figure 2, Sheet 2, Item 40), (Figure 2, Sheet 2, Item 39), or (Figure 2, Sheet 2, Item 38) and two rivets (Figure 2, Sheet 2, Item 41).
19. Install paralleling receptacle (Figure 2, Sheet 2, Item 34), cover (Figure 2, Sheet 2, Item 37), four screws (Figure 2, Sheet 2, Item 36), and four nuts (Figure 2, Sheet 2, Item 35). Repeat for other paralleling receptacle.
20. Install duplex receptacle (Figure 2, Sheet 2, Item 31), cover (Figure 2, Sheet 2, Item 33), and four screws (Figure 2, Sheet 2, Item 32).
21. Install load sharing module (Figure 2, Sheet 2, Item 28), four washers (Figure 2, Sheet 2, Item 30), and screws (Figure 2, Sheet 2, Item 29).

22. Install overload/short circuit module (Figure 2, Sheet 2, Item 24), four washers (Figure 2, Sheet 2, Item 27), lock washers (Figure 2, Sheet 2, Item 26), and screws (Figure 2, Sheet 2, Item 25).
23. Install bus transformer box A6 (Figure 2, Sheet 2, Item 19), four washers (Figure 2, Sheet 2, Item 23), four lock washers (Figure 2, Sheet 2, Item 22), four screws (Figure 2, Sheet 2, Item 21), and two fuses (Figure 2, Sheet 2, Item 20). Record barcode value for VA (setpoint AC07) for reprogramming GSC. setpoints must be reprogrammed if bus transformer box A6 is replaced (WP 0092, Reprogramming).
24. Install fuse block (Figure 2, Sheet 2, Item 15), two screws (Figure 2, Sheet 2, Item 18), two nuts (Figure 2, Sheet 2, Item 17), and four fuses (Figure 2, Sheet 2, Item 16).
25. Install fuse block (Figure 2, Sheet 1, Item 11), two screws (Figure 2, Sheet 1, Item 14), two nuts (Figure 2, Sheet 1, Item 13), and three fuses (Figure 2, Sheet 1, Item 12).
26. On terminal block TB4 (Figure 2, Sheet 1, Item 2) only, install two spade terminals (Figure 2, Sheet 1, Item 10), diode (Figure 2, Sheet 1, Item 9), and two screws (Figure 2, Sheet 1, Item 8). Install ten jumpers (Figure 2, Sheet 1, Item 7) and screws (Figure 2, Sheet 1, Item 6). Install strip (Figure 2, Sheet 1, Item 5), terminal block TB4 (Figure 2, Sheet 1, Item 2), two screws (Figure 2, Sheet 1, Item 4), and two nuts (Figure 2, Sheet 1, Item 3). Repeat for terminal block TB3.
27. Install three receptacles (Figure 2, Sheet 1, Item 1).
28. Install control box panel assembly (WP 0039).

END OF TASK

INSTALLATION

1. If previously removed, install brace (Figure 1, Item 21) using two screws (Figure 1, Item 18), lock washers (Figure 1, Item 19), and washers (Figure 1, Item 20).
2. Slide control box (Figure 1, Item 17) fully into generator set.
3. Install five screws (Figure 1, Item 14), lock washers (Figure 1, Item 15), and washers (Figure 1, Item 16).
4. Install two screws (Figure 1, Item 11), lock washers (Figure 1, Item 12), and washers (Figure 1, Item 13).
5. Install three screws (Figure 1, Item 8), lock washers (Figure 1, Item 9), and washers (Figure 1, Item 10).
6. Install seven screws (Figure 1, Item 5), lock washers (Figure 1, Item 6), and washers (Figure 1, Item 7).
7. Install ground wire (Figure 1, Item 1) to back of control box terminal (Figure 1, Item 4) with washer (Figure 1, Item 2) and locknut (Figure 1, Item 3).
8. Remove tag and connect ECM to EMCP harness connector ENG-P37 to control box connector J37.
9. Remove tag and connect harness connector P31 to control box connector J31.
10. Remove tag and connect harness connector P30 to control box connector J30.
11. Install front roof section housing assembly (WP 0028).

END OF TASK

LSM A4 Load Gain Adjustment

NOTE

For this procedure the generator set must be running isochronously, not paralleled.

1. Start the generator set and run at full load.
2. Measure the load signal voltage at LSM A4-22 (+) and LSM A4-23 (-).
3. Adjust LSM A4 LOAD GAIN potentiometer for 6.0 VDC \pm 1.0 VDC.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A**
RESISTOR ASSEMBLY A7: DISASSEMBLY, TESTING, ASSEMBLY

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Personnel Required

One

References

TM 9-6115-729-24P
WP 0040

Equipment Condition

Resistor assembly A7 removed from control box (WP 0040)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

DISASSEMBLY

1. Tag and disconnect wires from resistor assembly A7 components.
2. Remove nut (Figure 1, Item 1), washer (Figure 1, Item 2), and ISOCHRONOUS DROOP switch (IDS) (Figure 1, Item 3).
3. Remove nut (Figure 1, Item 4), washer (Figure 1, Item 5), and DC CONTROL POWER circuit breaker CB1 (Figure 1, Item 6).
4. Remove six nuts (Figure 1, Item 7), six screws (Figure 1, Item 8), and resistors R2 (Figure 1, Item 9), R1 (Figure 1, Item 10), and R3 (Figure 1, Item 11).
5. Remove diode CRFF (Figure 1, Item 12).
6. Remove two nuts (Figure 1, Item 13), two screws (Figure 1, Item 14), and terminal board (Figure 1, Item 15).

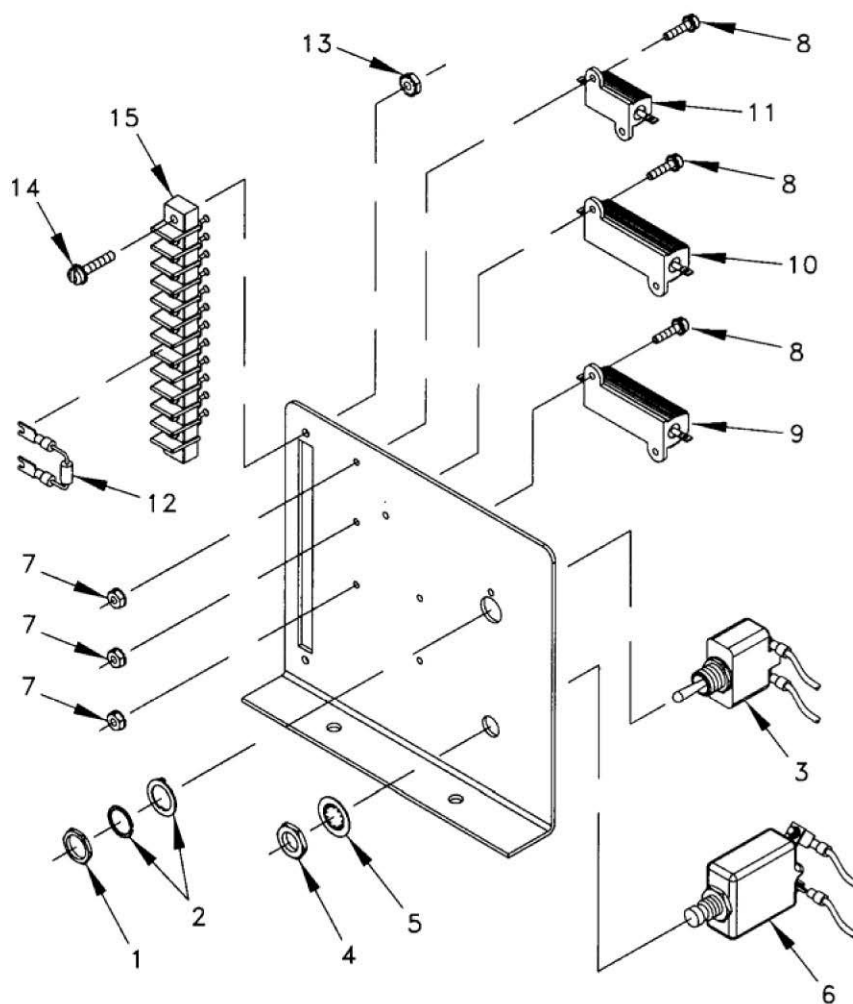


Figure 1. Resistor Assembly A7.

END OF TASK

TESTING

1. Using multimeter, measure resistance of the resistors. R1 = 150 Ohms $\pm 1\%$, R2 = 10 Ohms $\pm 1\%$, and R3 = 15 Ohms $\pm 1\%$.
2. Using multimeter, check forward and reverse bias on diode CRFF.
3. Replace any components that fail a measurement test.

END OF TASK

ASSEMBLY

1. Install terminal board (Figure 1, Item 15), two screws (Figure 1, Item 14), and two nuts (Figure 1, Item 13).
2. Install diode CRFF (Figure 1, Item 12).
3. Install resistors R3 (Figure 1, Item 11), R1 (Figure 1, Item 10), and R2 (Figure 1, Item 9), with six screws (Figure 1, Item 8) and nuts (Figure 1, Item 7).
4. Install DC CONTROL POWER circuit breaker CB1 (Figure 1, Item 6), washer (Figure 1, Item 5), and nut (Figure 1, Item 4).

5. Install ISOCHRONOUS DROOP switch (IDS) (Figure 1, Item 3), washer (Figure 1, Item 2), and nut (Figure 1, Item 1).
6. Install resistor assembly A7 into control box (WP 0040, Assembly, Step 2).
7. Remove tags and connect wires to resistor assembly A7 components.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****CONTROL BOX HARNESS ASSEMBLY: REMOVAL, REPAIR, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Marker tags (WP 0123, Table 1, Item 54)

Personnel Required

One

References

FO-4
TM 9-6115-729-24P
TM 55-1500-323-24
WP 0096

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right and left battery access doors, left front and rear doors, load board door, right front and rear doors,

and generator access cover.

3. Using Table 1. Control Panel Wire List (WP 0096) and Control Box Wiring Diagram FO-4 as guides, tag and disconnect control box harness assembly.

END OF TASK

REPAIR

Repair as required using components identified in Table 1. Control Panel Wire List (WP 0096) and general procedures identified in Installation Practices for Aircraft Electrical and Electronic Wiring, TM 55-1500-323-24.

END OF TASK

INSTALLATION

1. Using Table 1. Control Panel Wire List (WP 0096) and Control Box Wiring Diagram FO-4 as guides, remove tags and connect control box harness assembly.
2. Close generator access cover, right front and rear doors, load board door, left front and rear doors, and left and right battery access doors.
3. Verify that the generator set operates properly.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****RECONNECTION TERMINAL BOARD ASSEMBLY: DISASSEMBLY, ASSEMBLY**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Tiedown straps (WP 0123, Table 1, Item 51)

Personnel Required

One

References

TM 9-6115-729-24P
WP 0092

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

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WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

DISASSEMBLY

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right rear doors.
3. Remove four locknuts (Figure 1, Item 1), four washers (Figure 1, Item 2), and protective cover (Figure 1, Item 3).

4. Remove two screws (Figure 1, Item 4) and four standoffs (Figure 1, Item 5), and pull reconnection terminal board assembly (Figure 1, Item 6) away from its lower mounting and from two standoffs (Figure 1, Item 7).

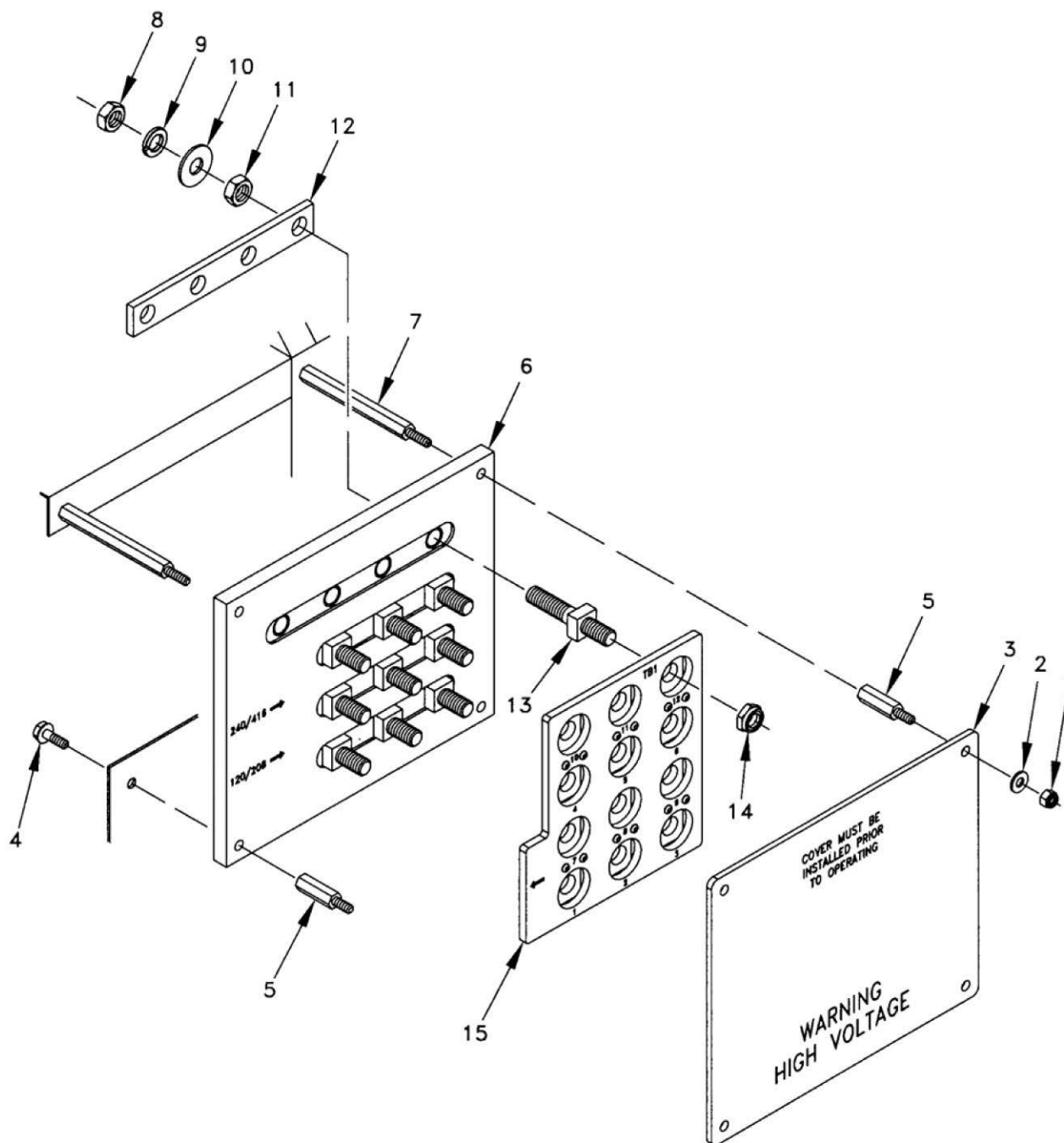


Figure 1. Reconnection Terminal Board Assembly.

NOTE

Cut tiedown straps as required.

5. Remove 13 jam nuts (Figure 1, Item 8), lock washers (Figure 1, Item 9), and washers (Figure 1, Item 10), and tag and disconnect wires from rear of reconnection terminal board assembly (Figure 1, Item 6).

6. Remove 13 jam nuts (Figure 1, Item 11), bus bar (Figure 1, Item 12), 13 studs (Figure 1, Item 13), 13 locknuts (Figure 1, Item 14), and moveable terminal board (Figure 1, Item 15).

END OF TASK**ASSEMBLY**

1. Install moveable terminal board (Figure 1, Item 15) on terminal board assembly (Figure 1, Item 6), and secure with 13 locknuts (Figure 1, Item 14), 13 studs (Figure 1, Item 13), bus bar (Figure 1, Item 12), and 13 jam nuts (Figure 1, Item 11). Torque jam nuts to 30 ft•lbs (40 N•m), and locknuts to 20 ft•lbs (27 N•m).
2. Remove tags and connect wires to rear of reconnection terminal board assembly (Figure 1, Item 6), and secure with 13 washers (Figure 1, Item 10), lock washers (Figure 1, Item 9), and jam nuts (Figure 1, Item 8). Torque jam nuts to 30 ft•lbs (40 N•m).

NOTE

Install tiedown straps as required.

3. Position reconnection terminal board assembly (Figure 1, Item 6) on its lower mounting and two standoffs (Figure 1, Item 7), and secure with four standoffs (Figure 1, Item 5) and two screws (Figure 1, Item 4).
4. Install protective cover (Figure 1, Item 3) and secure with four washers (Figure 1, Item 2) and locknuts (Figure 1, Item 1).
5. Close right rear doors.
6. If required, reprogram GSC and DVR parameters (WP 0092).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A**
LOAD TERMINAL BOARD ASSEMBLY: DISASSEMBLY, ASSEMBLY

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Marker tags (WP 0123, Table 1, Item 54)
Tiedown straps (WP 0123, Table 1, Item 52)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

DISASSEMBLY

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open load board door.

NOTE

Cut tiedown straps as required.

3. Tag and disconnect cables from front of load terminal board (Figure 1, Item 1) and pull cables through opening at rear of generator set.

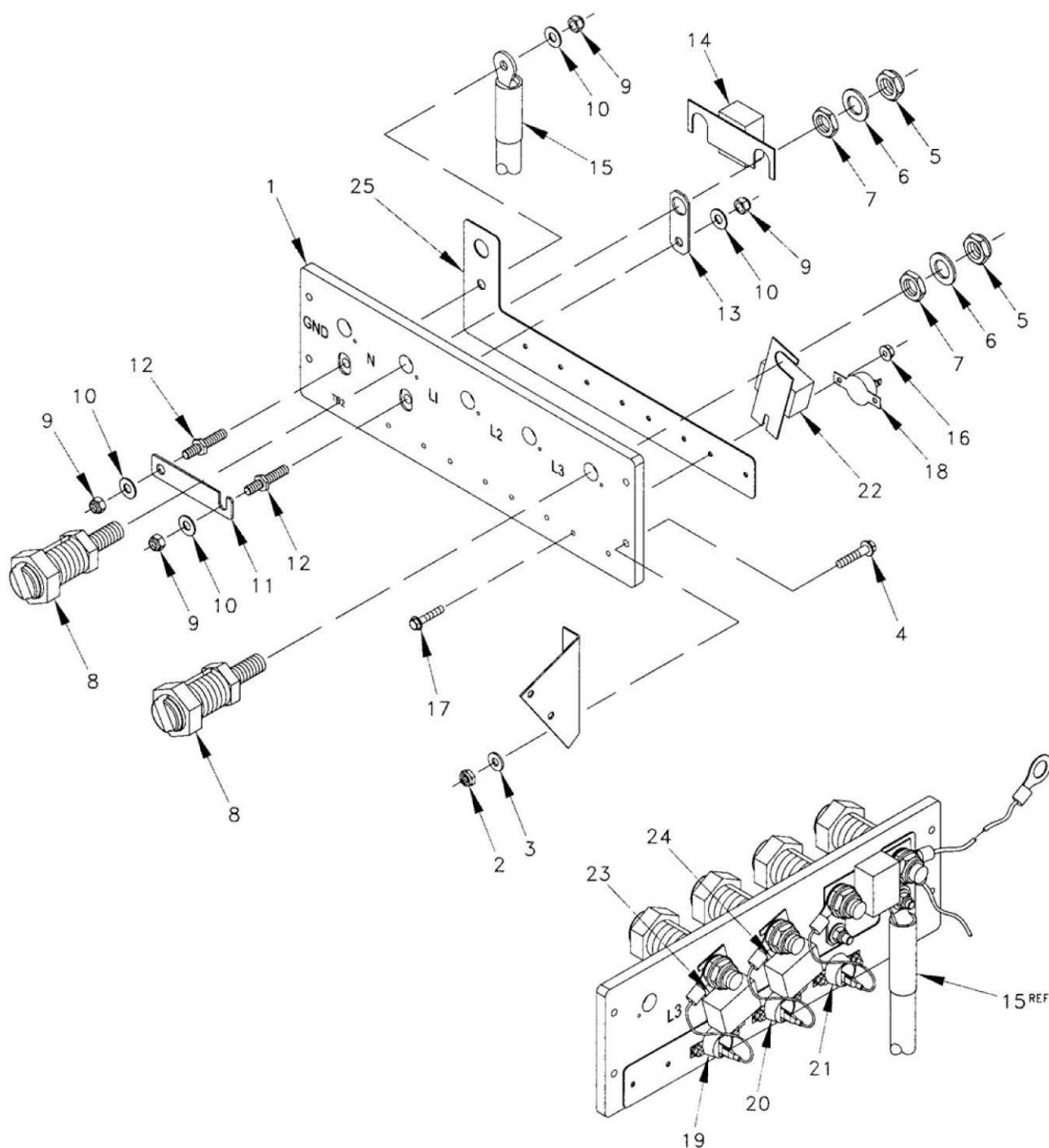


Figure 1. Load Terminal Board Assembly.

4. Remove two locknuts (Figure 1, Item 2) two washers (Figure 1, Item 3), two screws (Figure 1, Item 4), and turn load terminal board (Figure 1, Item 1) partly over.

5. Remove five locknuts (Figure 1, Item 5) and washers (Figure 1, Item 6), and tag and disconnect wires from the rear of load terminal board (Figure 1, Item 1).
6. Remove five jam nuts (Figure 1, Item 7) and load terminals (Figure 1, Item 8).
7. Remove four locknuts (Figure 1, Item 9), washers (Figure 1, Item 10), two studs (Figure 1, Item 12), bus bar (Figure 1, Item 11), bus bar (Figure 1, Item 13), N to GND EMI filter (Figure 1, Item 14), and cable (Figure 1, Item 15).
8. Remove eight nuts (Figure 1, Item 16), eight screws (Figure 1, Item 17), varistors N (Figure 1, Item 18), L1 (Figure 1, Item 19), L2 (Figure 1, Item 20), and L3 (Figure 1, Item 21), EMI filters L1 (Figure 1, Item 22), L2 (Figure 1, Item 23), and L3 (Figure 1, Item 24), and ground plane bar (Figure 1, Item 25).

END OF TASK**ASSEMBLY**

1. Install ground plane bar (Figure 1, Item 25), L3 (Figure 1, Item 24), L2 (Figure 1, Item 23), EMI filters L1 (Figure 1, Item 22), varistors L3 (Figure 1, Item 21), L2 (Figure 1, Item 20), L1 (Figure 1, Item 19), and N (Figure 1, Item 18), eight screws (Figure 1, Item 17), and eight nuts (Figure 1, Item 16).
2. Install cable (Figure 1, Item 15), N to GND EMI filter (Figure 1, Item 14), bus bar (Figure 1, Item 13), two studs (Figure 1, Item 12), bus bar (Figure 1, Item 11), four washers (Figure 1, Item 10), and locknuts (Figure 1, Item 9).
3. Install five load terminals (Figure 1, Item 8) and jam nuts (Figure 1, Item 7).

NOTE

Install tiedown straps as required.

4. Remove tags, connect wires to rear of load terminal board (Figure 1, Item 1), and install five washers (Figure 1, Item 6) and locknuts (Figure 1, Item 5).
5. Position load terminal board (Figure 1, Item 1) and install two screws (Figure 1, Item 4), two washers (Figure 1, Item 3), and two locknuts (Figure 1, Item 2).
6. Remove tags and connect cables to front of load terminal board (Figure 1, Item 1).
7. Close load board door.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****BATTERY CABLE ASSEMBLIES: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Tiedown straps (WP 0123, Table 1, Item 52)

Personnel Required

One

References

TM 9-6115-729-24P
WP 0044

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When disconnecting or removing batteries, disconnect the negative lead that connects directly to the grounding stud first. Disconnect the negative end of the interconnection cable next. When installing batteries, reverse the connection sequence. Failure to comply can cause serious injury to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Ensure there is no external cable connected to slave receptacle.
3. Open right and left battery access doors.

NOTE

Cut tiedown straps as required.

4. Tag cables and remove battery terminal knob (Figure 1, Item 3), lock washer (Figure 1, Item 3A), and flat washer (Figure 1, Item 3B) that secure battery cable 1A40 (Figure 1, Item 1) and battery cable 1C40 (Figure 1, Item 2) to battery BT2 (left battery) negative terminal. Remove battery cables 1A40 and 1C40.
5. Disconnect battery cable 1A40 (Figure 1, Item 1) from battery disconnect switch BDS (Figure 1, Item 4) and remove battery cable 1A40 (Figure 1, Item 1).
6. Tag cable and remove battery terminal knob (Figure 1, Item 7), lock washer (Figure 1, Item 7A), and flat washer (Figure 1, Item 7B) and battery terminal knob (Figure 1, Item 6), lock washer (Figure 1, Item 6A), and flat washer (Figure 1, Item 6B) that secure battery cable 12A40 (Figure 1, Item 5) to battery BT1 (right battery) negative terminal and battery BT2 (left battery) positive terminal. Remove battery cable 12A40.
7. Open left front doors.
8. Remove four nuts (Figure 1, Item 8), screws (Figure 1, Item 9), washers (Figure 1, Item 10), push slave receptacle (Figure 1, Item 11), and retainer (Figure 1, Item 12) out of TQG.
9. Disconnect battery cable 1C40 (Figure 1, Item 2) from slave receptacle SR (Figure 1, Item 11) and remove battery cable 1C40.
10. Disconnect battery cable 24D40 (Figure 1, Item 13) from slave receptacle SR (Figure 1, Item 11). Tag cables and remove battery terminal knob (Figure 1, Item 15), lock washer (Figure 1, Item 15A), and flat washer (Figure 1, Item 15B) that secure battery cable 24D40 (Figure 1, Item 13) and battery cable 24A40 (Figure 1, Item 14) to battery BT1 (right battery) positive terminal. Remove battery cables 24A40 and 24D40.
11. Disconnect battery cable 2A40 (Figure 1, Item 16) from battery disconnect switch BDS (Figure 1, Item 4).
12. Open right front doors.
13. Disconnect battery cable 2A40 (Figure 1, Item 16) from engine starter motor SM (Figure 1, Item 17) and remove battery cable 2A40.
14. Disconnect battery cable 24A40 (Figure 1, Item 14) from engine starter motor SM (Figure 1, Item 17) and remove battery cable 24A40.
15. Open right rear doors.
16. Disconnect battery cable 2C40 (Figure 1, Item 18) from engine starter motor SM (Figure 1, Item 17).
17. Open load board door.
18. Disconnect battery cable 2C40 (Figure 1, Item 18) from load board terminal G (WP 0044) and remove battery cable 2C40.

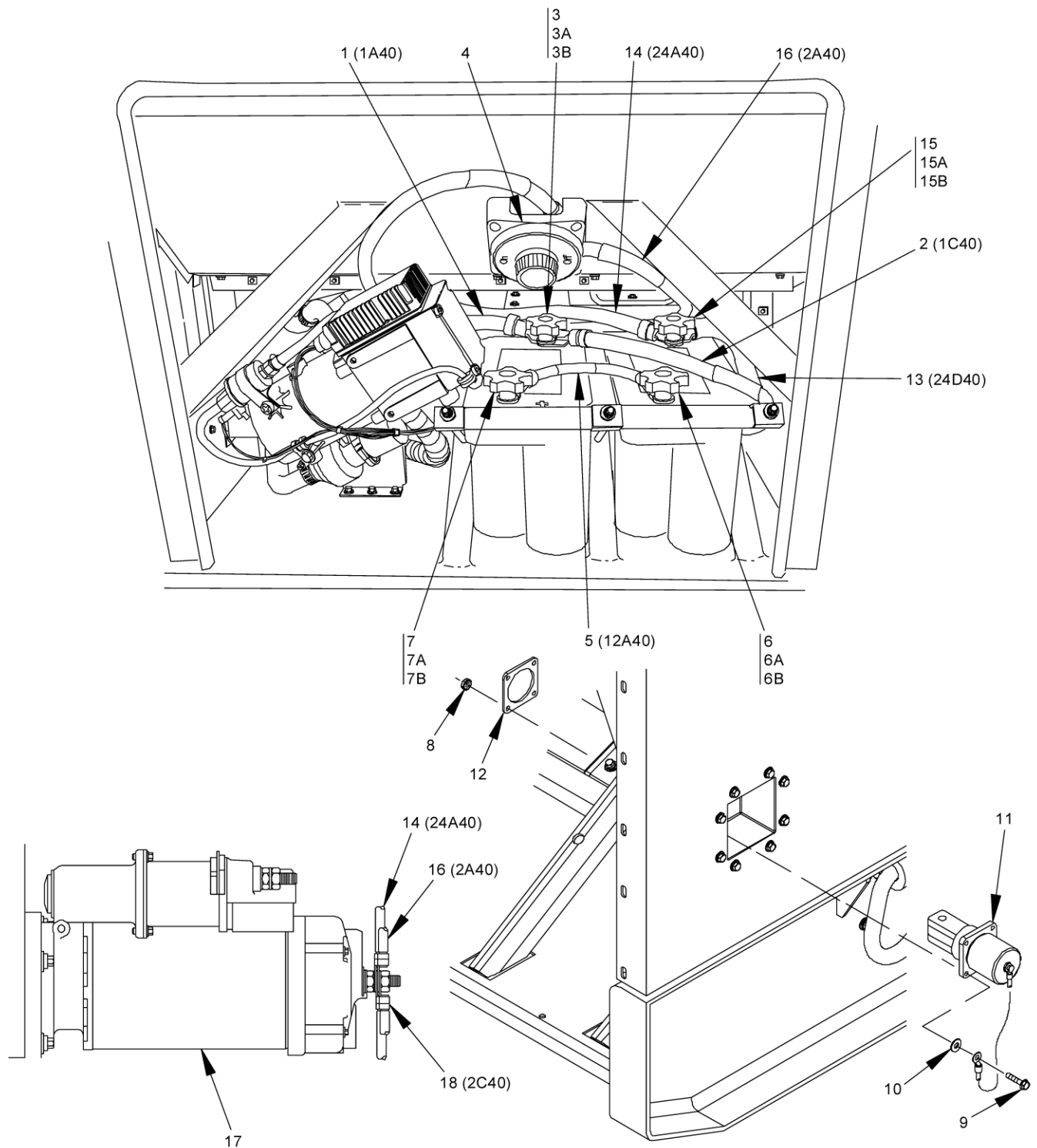


Figure 1. Battery Cable Assemblies (Sheet 1 of 2).

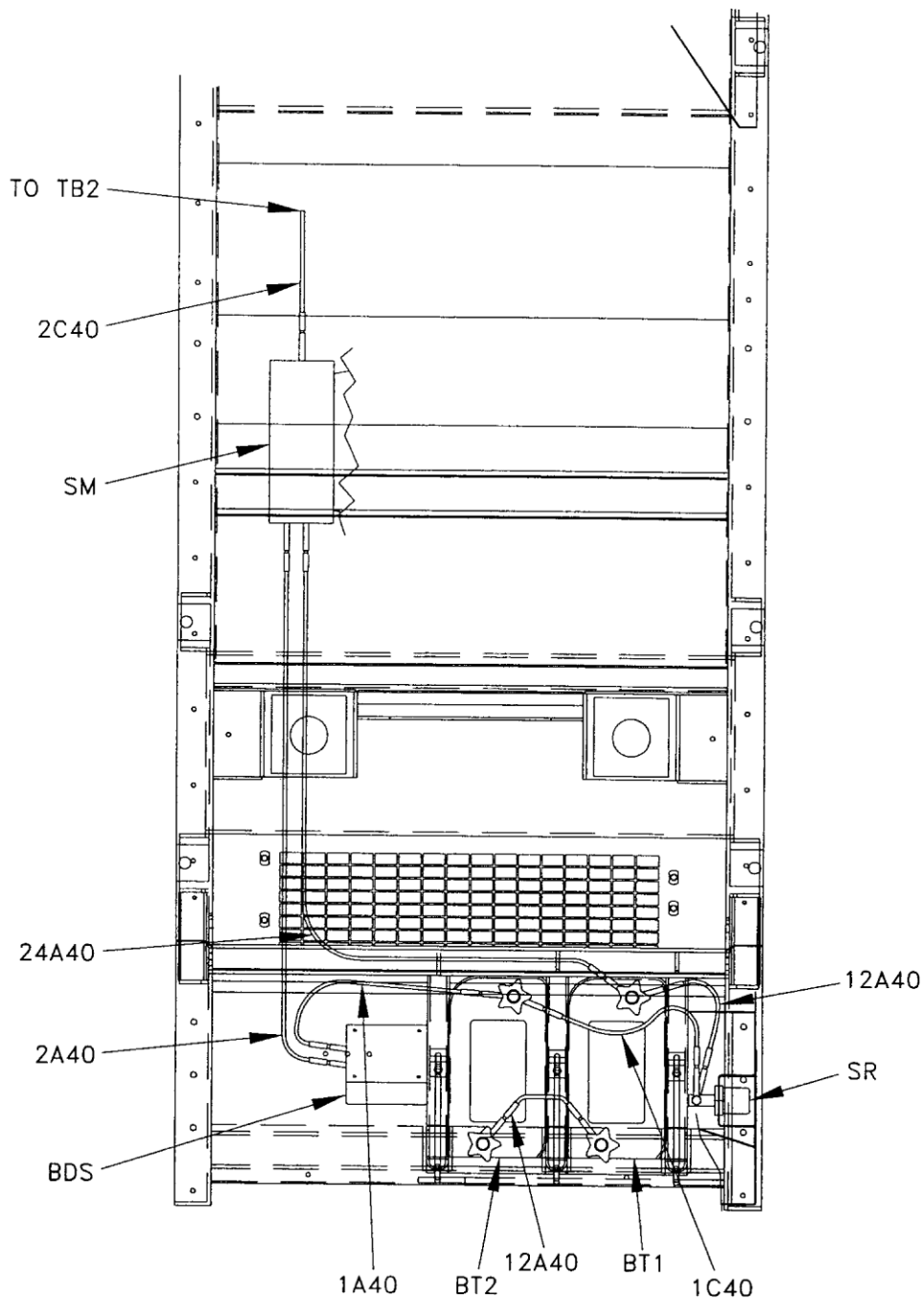


Figure 1. Battery Cable Assemblies (Sheet 2 of 2).

END OF TASK

INSTALLATION

NOTE

Install tiedown straps as required.

1. Install battery cable 2C40 (Figure 1, Item 18) and connect to load board terminal G (WP 0044).

2. Close load board door.
3. Connect battery cable 2C40 (Figure 1, Item 18) to engine starter motor SM (Figure 1, Item 17).
4. Close right rear doors.
5. Install battery cable 24A40 (Figure 1, Item 14) and connect to engine starter motor SM (Figure 1, Item 17).
6. Install battery cable 2A40 (Figure 1, Item 16) and connect to engine starter motor SM (Figure 1, Item 17).
7. Close right front doors.
8. Connect battery cable 2A40 (Figure 1, Item 16) to battery disconnect switch BDS (Figure 1, Item 4).
9. Install battery cable 24A40 (Figure 1, Item 14) and battery cable 24D40 (Figure 1, Item 13) on battery BT1 (right battery) positive terminal and secure with flat washer (Figure 1, Item 15B), lock washer (Figure 1, Item 15A), and battery terminal knob (Figure 1, Item 15). Remove tags from battery cables.
10. Connect battery cable 24D40 (Figure 1, Item 13) to slave receptacle SR (Figure 1, Item 11).
11. Install battery cable 1C40 (Figure 1, Item 2) and connect to slave receptacle SR (Figure 1, Item 11).
12. Push slave receptacle (Figure 1, Item 8) into TQG and install retainer (Figure 1, Item 12), four washers (Figure 1, Item 10), screws (Figure 1, Item 9), and nuts (Figure 1, Item 8).
13. Close left rear doors.
14. Install battery cable 12A40 (Figure 1, Item 5) on battery BT1 (right battery) negative terminal and battery BT2 (left battery) positive terminal and secure with flat washer (Figure 1, Item 6B), lock washer (Figure 1, Item 6A), and battery terminal knob (Figure 1, Item 6), and flat washer (Figure 1, Item 7B), lock washer (Figure 1, Item 7A), and battery terminal knob (Figure 1, Item 7). Remove tag from battery cable.
15. Install battery cable 1A40 (Figure 1, Item 1) and connect to battery disconnect switch BDS (Figure 1, Item 4).
16. Install battery cable 1A40 (Figure 1, Item 1) and battery cable 1C40 (Figure 1, Item 2) on battery BT2 (left battery) negative terminal and secure with flat washer (Figure 1, Item 3B), lock washer (Figure 1, Item 3A), and battery terminal knob (Figure 1, Item 3). Remove tags from battery cables.
17. Close right and left battery access doors.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****POWER CABLE ASSEMBLIES: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Marker tags (WP 0123, Table 1, Item 54)
Tiedown straps (WP 0123, Table 1, Item 52)

Personnel Required

One

References

TM 9-6115-729-24P
WP 0043
WP 0044
WP 0047

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right rear doors. Open load board door.

NOTE

Cut tiedown straps as required.

3. Partly remove load terminal board assembly (Figure 1, Item 1), (WP 0044) sufficiently to gain access to rear of load terminal board assembly.

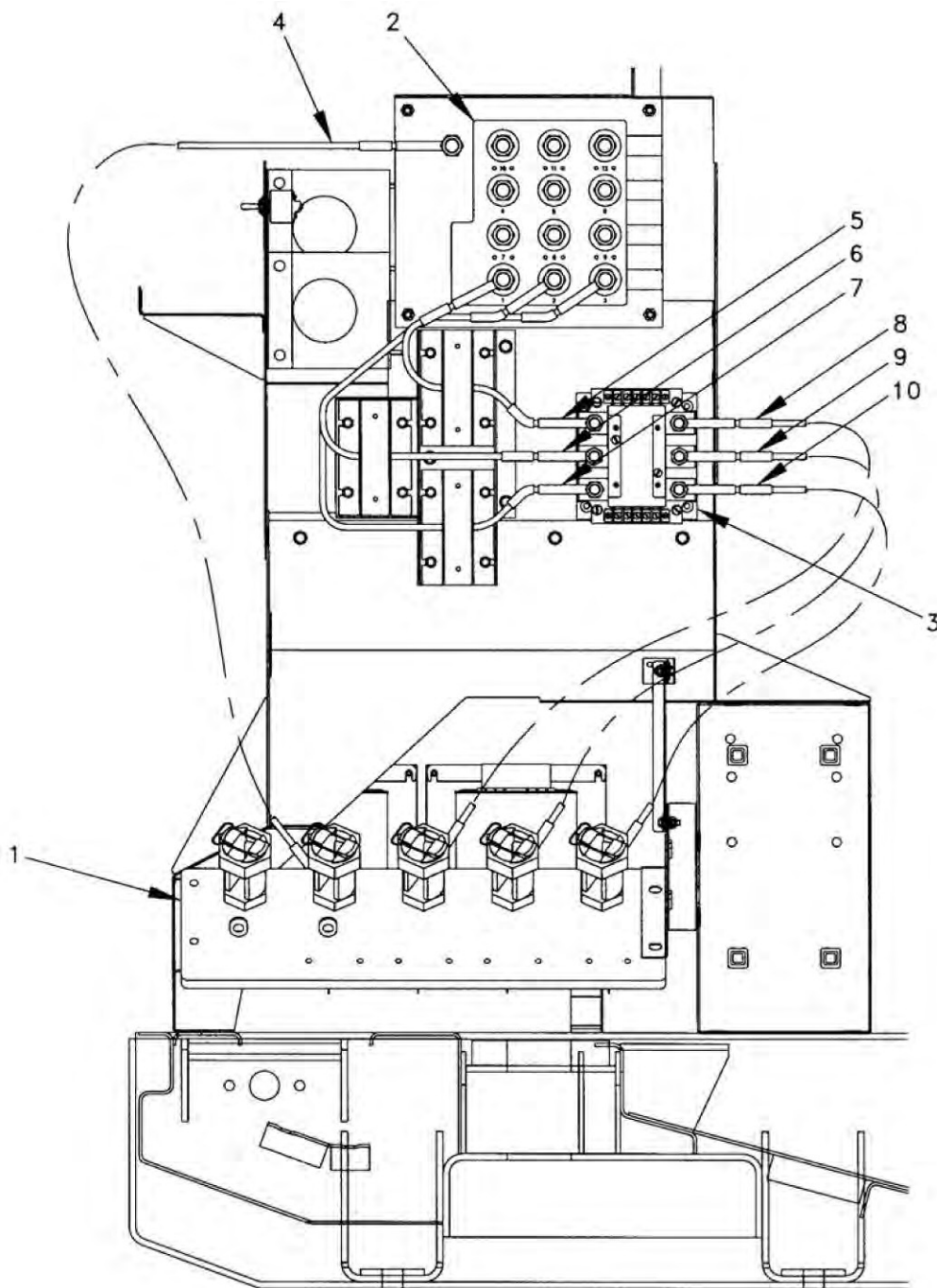


Figure 1. Power Cable Assemblies.

4. Partly remove reconnection terminal board (Figure 1, Item 2), (WP 0043) sufficiently to gain access to rear of reconnection terminal board.

5. Remove two plates from front of main load contactor (Figure 1, Item 3), (WP 0047) to gain access to cable terminals on front of main load contactor.
6. Tag and disconnect cable 110K (Figure 1, Item 4) from terminal 13 on reconnection terminal board (Figure 1, Item 2) and terminal N on load terminal board assembly (Figure 1, Item 1).
7. Tag and disconnect cable 101A (Figure 1, Item 5) from terminal 1 on reconnection terminal board (Figure 1, Item 2) and from terminal A1 on main load contactor (Figure 1, Item 3).
8. Tag and disconnect cable 102A (Figure 1, Item 6) from terminal 2 of reconnection terminal board (Figure 1, Item 2) and from terminal B1 on main load contactor (Figure 1, Item 3).
9. Tag and disconnect cable 103A (Figure 1, Item 7) from terminal 3 on reconnection terminal board (Figure 1, Item 2) and from terminal C1 on main load contactor (Figure 1, Item 3).
10. Tag and disconnect cable 121A (Figure 1, Item 8) from terminal A2 on main load contactor (Figure 1, Item 3) and from terminal L1 on load terminal board (Figure 1, Item 1).
11. Tag and disconnect cable 122A (Figure 1, Item 9) from terminal B2 on main load contactor (Figure 1, Item 3) and from terminal L2 on load terminal board (Figure 1, Item 1).
12. Tag and disconnect cable 123A (Figure 1, Item 10) from terminal C2 on main load contactor (Figure 1, Item 3) and from terminal L3 on load terminal board (Figure 1, Item 1).

END OF TASK

INSTALLATION

NOTE

Install tiedown straps as required.

1. Remove tags and connect cable 123A (Figure 1, Item 10) to terminal L3 on load terminal board (Figure 1, Item 1) and to terminal C2 on main load contactor (Figure 1, Item 3).
2. Remove tags and connect cable 122A (Figure 1, Item 9) to terminal L2 on load terminal board (Figure 1, Item 1) and to terminal B2 on main load contactor (Figure 1, Item 3).
3. Remove tags and connect cable 121A (Figure 1, Item 8) to terminal L1 on load terminal board (Figure 1, Item 1) and to terminal A2 on main load contactor (Figure 1, Item 3).
4. Remove tags and connect cable 103A (Figure 1, Item 7) to terminal C1 on main load contactor (Figure 1, Item 3) and to terminal 3 on reconnection terminal board (Figure 1, Item 2).
5. Remove tags and connect cable 102A (Figure 1, Item 6) to terminal B1 on main load contactor (Figure 1, Item 3) and to terminal 2 on reconnection terminal board (Figure 1, Item 2).
6. Remove tags and connect cable 101A (Figure 1, Item 5) to terminal A1 on main load contactor (Figure 1, Item 3) and to terminal 1 on reconnection terminal board (Figure 1, Item 2).
7. Remove tags and connect cable 110K (Figure 1, Item 4) to terminal N on load terminal board (Figure 1, Item 1) and to terminal 13 on reconnection terminal board (Figure 1, Item 2).
8. Install two plates on front of main load contactor (Figure 1, Item 3) (WP 0047).
9. Install reconnection terminal board (Figure 1, Item 2) (WP 0043).
10. Install load terminal board (Figure 1, Item 1) (WP 0044).
11. Close load board door. Close rear doors.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****MAIN LOAD CONTACTOR K1: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Marker tags (WP 0123, Table 1, Item 54)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right rear door (latch) and right rear door.
3. Remove four screws (Figure 1, Item 1), four lock washers (Figure 1, Item 2), and cover (Figure 1, Item 3).
4. Tag and disconnect cables and wires from main load contactor K1 (Figure 1, Item 4).

5. Remove four screws (Figure 1, Item 5), lock washers (Figure 1, Item 6), lock washers (Figure 1, Item 7), and main load contactor K1 (Figure 1, Item 4).

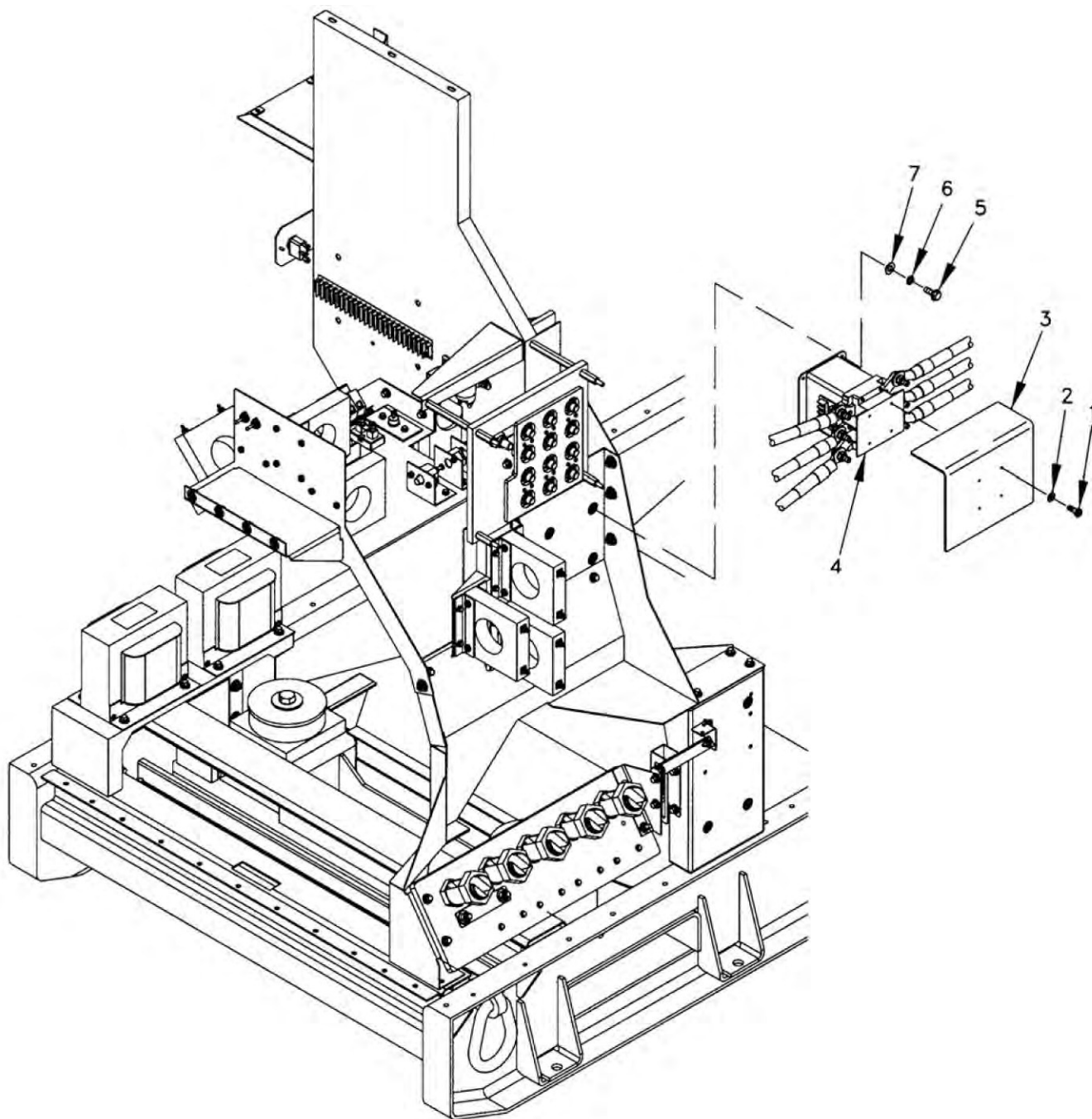


Figure 1. Main Load Contactor K1.

END OF TASK

INSTALLATION

1. Install main load contactor K1 (Figure 1, Item 4) with four washers (Figure 1, Item 7), lock washers (Figure 1, Item 6), and screws (Figure 1, Item 5).

2. Remove tags and connect wires and cables to main load contactor K1 (Figure 1, Item 4).
3. Install cover (Figure 1, Item 3), four lock washers (Figure 1, Item 2), and screws (Figure 1, Item 1).
4. Close right rear door and right rear door (latch).

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****BATTERIES: REMOVAL, TESTING AND CHARGING, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)
Battery Load Tester 4C-4911

Materials/Parts

Marker tags (WP 0123, Table 1, Item 54)

Personnel Required

Two

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When disconnecting or removing batteries, disconnect the negative lead that connects directly to the grounding stud first. Disconnect the negative end of the interconnection cable next. When installing batteries, reverse the connection sequence. Failure to comply can cause serious injury to personnel.

WARNING

Each battery weighs more than 70 pounds (32 kg) and requires a two-person lift. Lifting batteries can cause back strain. Ensure proper lifting techniques are used when lifting batteries. Failure to comply can cause injury to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Ensure there is no external cable connected to slave receptacle.
3. Open right and left side battery access doors.
4. Tag cables and remove battery terminal knob (Figure 1, Item 3), lock washer (Figure 1, Item 3A), and flat washer (Figure 1, Item 3B) that secure battery cable 1A40 (Figure 1, Item 2) and battery cable 1C40 (Figure 1, Item 1) to battery BT2 (left battery) negative terminal. Remove battery cables 1A40 and 1C40.
5. Tag cable and remove battery terminal knob (Figure 1, Item 5), lock washer (Figure 1, Item 5A), and flat washer (Figure 1, Item 5B) and battery terminal knob (Figure 1, Item 6), lock washer (Figure 1, Item 6A), and flat washer (Figure 1, Item 6B) that secure battery cable 12A40 (Figure 1, Item 4) to battery BT1 (right battery) negative terminal and battery BT2 (left battery) positive terminal. Remove battery cable 12A40.
6. Tag cables and remove battery terminal knob (Figure 1, Item 9), lock washer (Figure 1, Item 9A), and flat washer (Figure 1, Item 9B) that secure battery cable 24D40 (Figure 1, Item 7) and battery cable 24A40 (Figure 1, Item 8) to battery BT1 (right battery) positive terminal. Remove battery cables 24A40 and 24D40.
7. Remove three nuts (Figure 1, Item 10), lock washers (Figure 1, Item 11), washers (Figure 1, Item 12), and pull battery hold down angle (Figure 1, Item 13) off three threaded rods (Figure 1, Item 14).
8. Remove right battery BT1 (Figure 1, Item 15) and left battery BT2 (Figure 1, Item 16).

END OF TASK

TESTING AND CHARGING

NOTE

The testing and charging procedures apply only to the absorbed glass mat (AGM) type batteries supplied with the TQG.

NOTE

Do not mix AGM batteries with conventional flooded lead acid batteries, or reduced capacity, shorter battery life, and possible undercharge problems may occur.

1. Allow battery to sit for at least 3 hours, preferably 8 hours. The battery must be disconnected from any load or any other battery, and the ambient temperature should be approximately 70 °F (21 °C). Use the battery load tester (4C-4911) to measure the open circuit voltage across the terminals for 12.8 to 13 Vdc, indicating a fully charged battery.
2. If battery is not fully charged, charge the battery, using the SEALED or GEL setting on the battery charger, before proceeding.
3. If battery is fully charged, apply a load of 550 amps for 15 seconds, using battery load tester (4C-4911). Check the open circuit voltage again for a minimum of 9.6 Vdc.
4. If open circuit voltage is 9.6 Vdc or above, recharge the battery using the SEALED or GEL setting on the battery charger.
5. If the open circuit voltage is less than 9.6 Vdc, battery is defective and must be replaced.

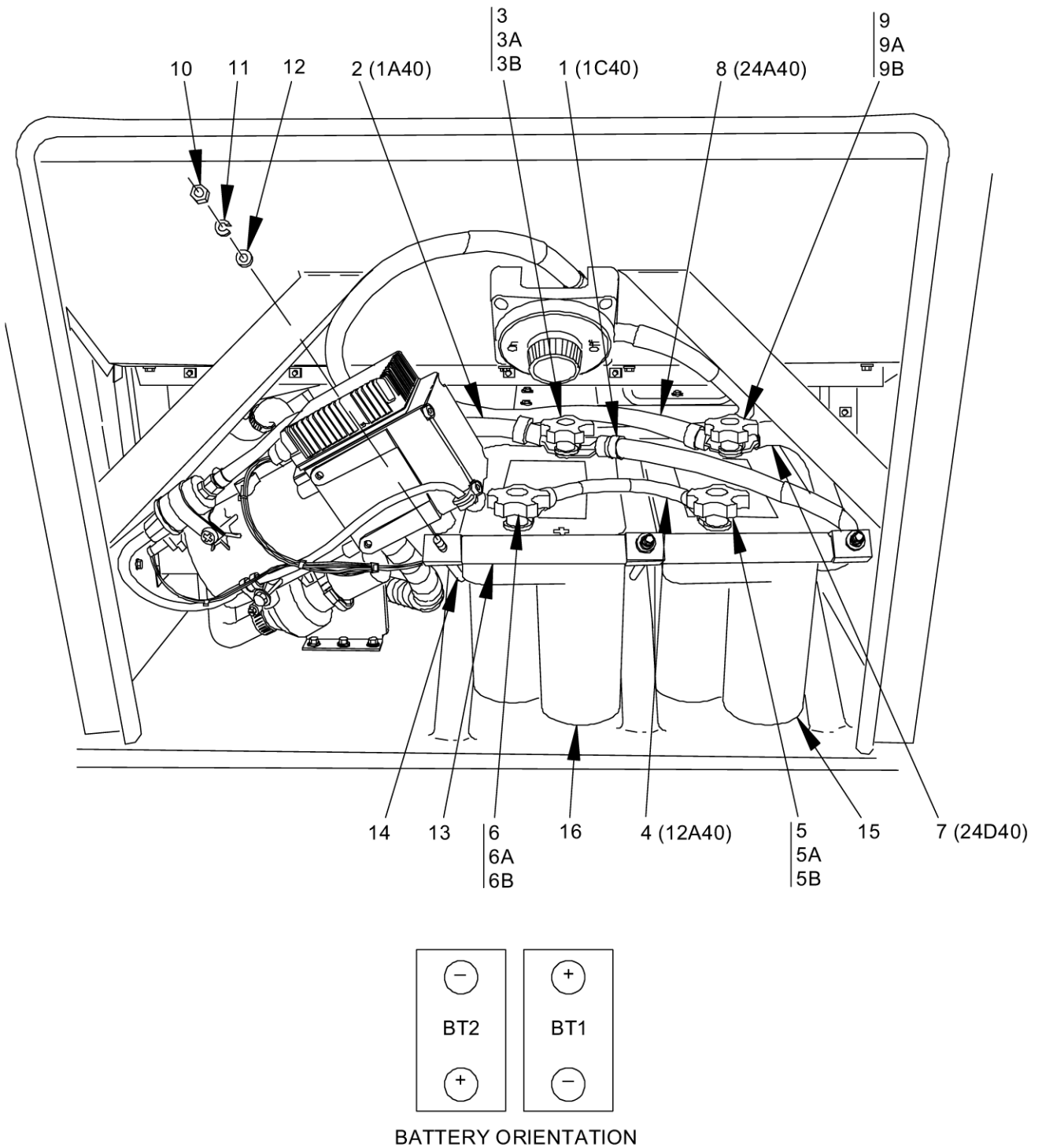


Figure 1. Batteries.

END OF TASK**INSTALLATION**

1. Install left battery BT2 (Figure 1, Item 16) so that positive terminal (Figure 1, Item 6) is close to doorway.

2. Install right battery BT1 (Figure 1, Item 15) so that negative terminal (Figure 1, Item 5) is close to doorway.
3. Position battery hold down angle (Figure 1, Item 13) on three threaded rods (Figure 1, Item 14) and install three washers (Figure 1, Item 12), lock washers (Figure 1, Item 11), and nuts (Figure 1, Item 10).
4. Install battery cable 24A40 (Figure 1, Item 8) and battery cable 24D40 (Figure 1, Item 7) on battery BT1 (right battery) positive terminal and secure with flat washer (Figure 1, Item 9B), lock washer (Figure 1, Item 9A), and battery terminal knob (Figure 1, Item 9). Remove tags from battery cables.
5. Install battery cable 12A40 (Figure 1, Item 4) on battery BT1 (right battery) negative terminal and battery BT2 (left battery) positive terminal and secure with flat washer (Figure 1, Item 6B), lock washer (Figure 1, Item 6A), and battery terminal knob (Figure 1, Item 6), and flat washer (Figure 1, Item 5B), lock washer (Figure 1, Item 5A), and battery terminal knob (Figure 1, Item 5). Remove tag from battery cable.
6. Install battery cable 1A40 (Figure 1, Item 2) and battery cable 1C40 (Figure 1, Item 1) on battery BT2 (left battery) negative terminal and secure with flat washer (Figure 1, Item 3B), lock washer (Figure 1, Item 3A), and battery terminal knob (Figure 1, Item 3). Remove tags from battery cables.
7. Close left and right side battery access doors.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****BATTERY DISCONNECT SWITCH: REMOVAL**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Marker tags (WP 0123, Table 1, Item 54)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When disconnecting or removing batteries, disconnect the negative lead that connects directly to the grounding stud first. Disconnect the negative end of the interconnection cable next. When installing batteries, reverse the connection sequence. Failure to comply can cause serious injury to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Ensure there is no external cable connected to slave receptacle.
3. Open right and left side battery access doors.
4. Tag cables and remove battery terminal knob (Figure 1, Item 3), lock washer (Figure 1, Item 3A), and flat washer (Figure 1, Item 3B) that secure battery cable 1A40 (Figure 1, Item 1) and battery cable 1C40 (Figure 1, Item 2) to battery BT2 (left battery) negative terminal. Remove battery cables 1A40 and 1C40.
5. Tag cable and remove battery terminal knob (Figure 1, Item 6), lock washer (Figure 1, Item 6A), and flat washer (Figure 1, Item 6B) and battery terminal knob (Figure 1, Item 5), lock washer (Figure 1, Item 5A), and flat washer (Figure 1, Item 5B) that secure battery cable 12A40 (Figure 1, Item 4) to battery BT1 (right battery) negative terminal and battery BT2 (left battery) positive terminal. Remove battery cable 12A40.
6. Remove four screws (Figure 1, Item 6), lock washers (Figure 1, Item 7), and washers (Figure 1, Item 8) and pull battery disconnect switch (Figure 1, Item 9) away from wall.
7. At rear of battery disconnect switch (Figure 1, Item 9), tag and disconnect battery cable 1A40 (Figure 1, Item 1) and battery cable 2A40 (Figure 1, Item 10).
8. Remove battery disconnect switch (Figure 1, Item 9).

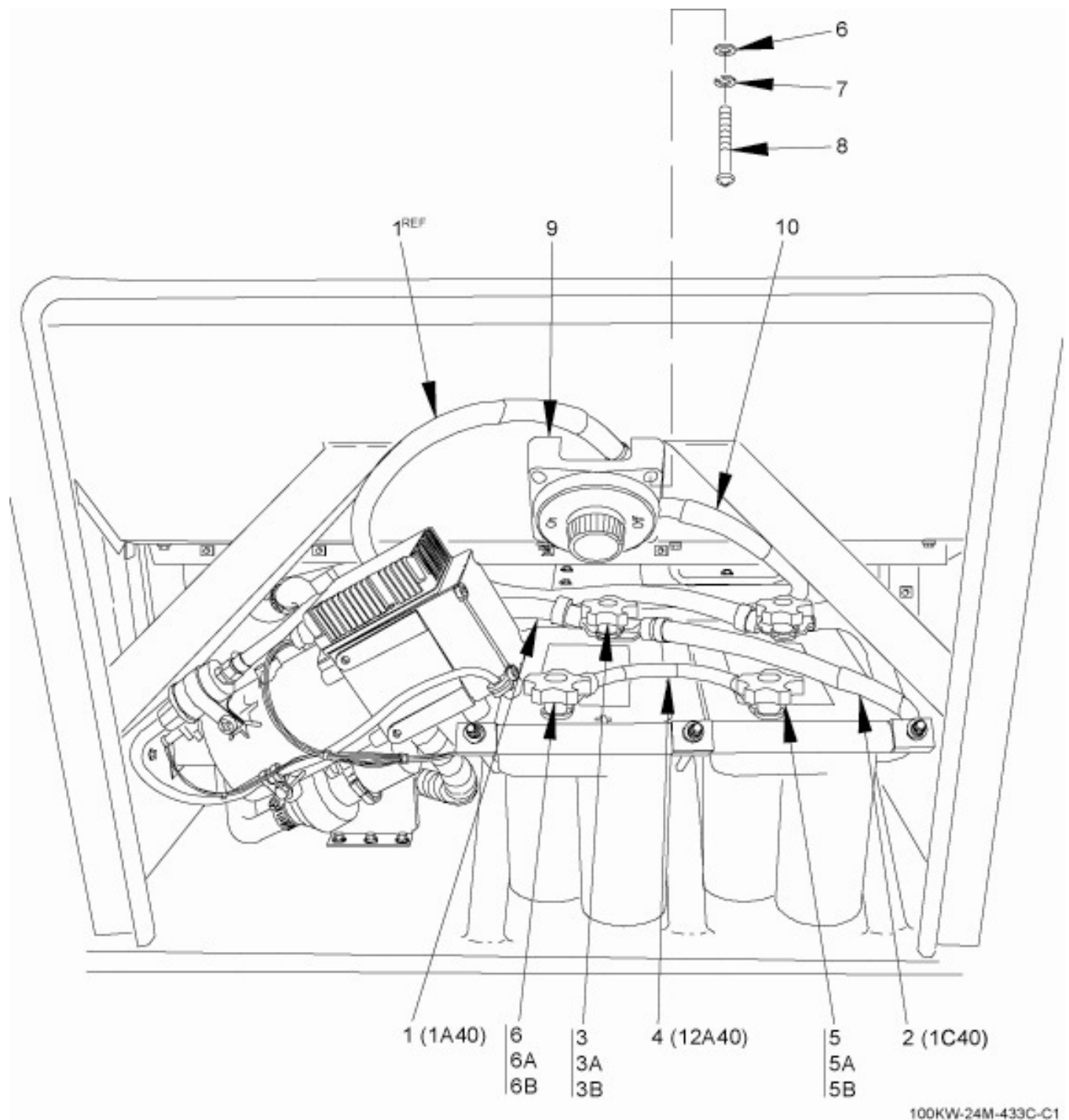


Figure 1. Battery Disconnect Switch.

END OF TASK

INSTALLATION

1. Position battery disconnect switch (Figure 1, Item 9) near where it is to be installed. Remove tags and connect battery cable 2A40 (Figure 1, Item 10) and battery cable 1A40 (Figure 1, Item 1).
2. Install battery disconnect switch (Figure 1, Item 9) with four washers (Figure 1, Item 6), lock washers (Figure

- 1, Item 7), and screws (Figure 1, Item 8).
3. Install battery cable 12A40 (Figure 1, Item 4) on battery BT1 (right battery) negative terminal and battery BT2 (left battery) positive terminal and secure with flat washer (Figure 1, Item 5B), lock washer (Figure 1, Item 5A), and battery terminal knob (Figure 1, Item 5), and flat washer (Figure 1, Item 6B), lock washer (Figure 1, Item 6A), and battery terminal knob (Figure 1, Item 6). Remove tag from battery cable.
 4. Install battery cable 1A40 (Figure 1, Item 1) and battery cable 1C40 (Figure 1, Item 2) on battery BT2 (left battery) negative terminal and secure with flat washer (Figure 1, Item 3B), lock washer (Figure 1, Item 3A), and battery terminal knob (Figure 1, Item 3). Remove tags from battery cables.
 5. Close right and left side battery access doors.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A**
CURRENT TRANSFORMER: REMOVAL, TESTING, INSTALLATION

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Tiedown straps (WP 0123, Table 1, Item 51)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Dangerously high voltage can exist across current transformer (CT) output with engine running. CT could explode if disconnected from load with engine running. Do not disconnect CT with generator rotating. Failure to comply can cause serious injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch

is OFF, and DEAD CRANK SWITCH is OFF before proceeding.

2. Open right rear doors.
3. Open left rear doors.

NOTE

Each current transformer has a cable running through it. These cables must be disconnected at one end in order to remove the current transformer.

NOTE

Cut tiedown straps as required.

4. Identify the cables running through three current transformers (Figure 1, Sheet 1, Item 1) adjacent to main load contactor K1 and disconnect one end of each cable.
5. Remove twelve screws (Figure 1, Sheet 1, Item 2), lock washers (Figure 1, Sheet 1, Item 3), washers (Figure 1, Sheet 1, Item 4), and three current transformers (Figure 1, Sheet 1, Item 1).
6. If necessary, remove two screws (Figure 1, Sheet 1, Item 5), lock washers (Figure 1, Sheet 1, Item 6), washers (Figure 1, Sheet 1, Item 7), and current transformer bracket (Figure 1, Sheet 1, Item 8).
7. Identify the cables running through three current transformers (Figure 1, Sheet 2, Item 9) above the generator and disconnect one end of each cable.
8. Remove twelve screws (Figure 1, Sheet 2, Item 10), lock washers (Figure 1, Sheet 2, Item 11), washers (Figure 1, Sheet 2, Item 12), locknuts (Figure 1, Sheet 2, Item 13), and three current transformers (Figure 1, Sheet 2, Item 9).
9. Identify the cable running through current transformer (Figure 1, Sheet 2, Item 14) above two power transformers and disconnect one end of cable.
10. Remove four screws (Figure 1, Sheet 2, Item 15), washers (Figure 1, Sheet 2, Item 16), lock washers (Figure 1, Sheet 2, Item 17), and current transformer (Figure 1, Sheet 2, Item 14).

END OF TASK

TESTING

Using multimeter, measure continuity between the two leads for each transformer. Ensure that continuity is measured and that there are no opens.

END OF TASK

INSTALLATION

NOTE

Install tiedown straps as required.

1. Put one end of cable through current transformer (Figure 1, Sheet 2, Item 14) to be installed above two power transformers, remove tag, and connect end of cable.
2. Install current transformer (Figure 1, Sheet 2, Item 14), four washers (Figure 1, Sheet 2, Item 16), lock washers (Figure 1, Sheet 2, Item 17), and screws (Figure 1, Sheet 2, Item 15). Connect wires to current transformer (Figure 1, Sheet 2, Item 14).

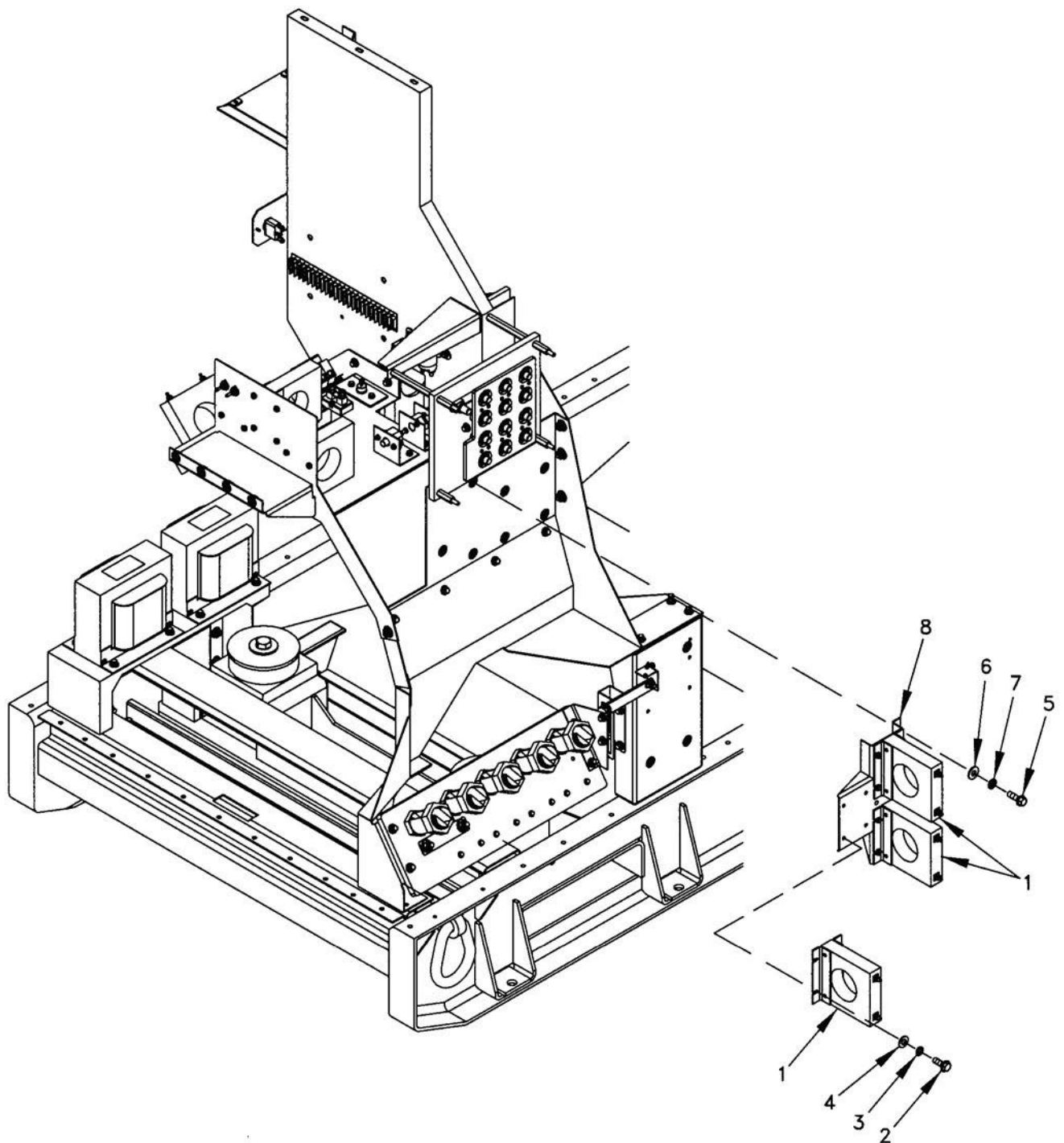


Figure 1. Current Transformer (Sheet 1 of 2).

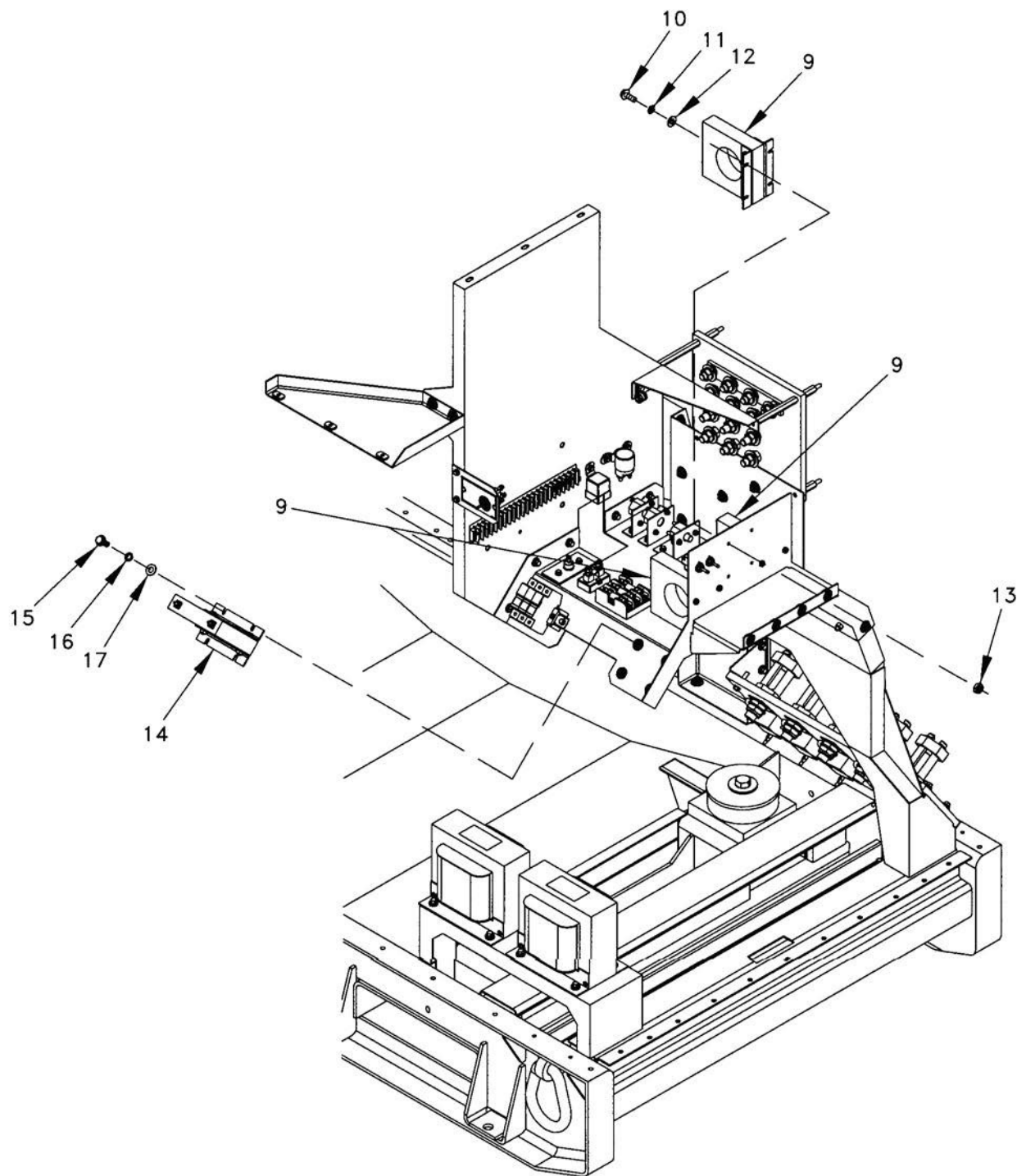


Figure 1. Current Transformer (Sheet 2 of 2).

3. Put one end of cable through each of three current transformers (Figure 1, Sheet 2, Item 9) to be installed above the generator, remove tags, and connect end of each cable.
4. Install three current transformers (Figure 1, Sheet 2, Item 9), locknuts (Figure 1, Sheet 2, Item 13), twelve lock washers (Figure 1, Sheet 2, Item 11), washers (Figure 1, Sheet 2, Item 12), and screws (Figure 1, Sheet 2, Item 10).
5. Install current transformer bracket (Figure 1, Sheet 1, Item 8), two washers (Figure 1, Sheet 1, Item 6), lock

washers (Figure 1, Sheet 1, Item 7), and screws (Figure 1, Sheet 1, Item 5).

6. Put one end of cable through each of three current transformers (Figure 1, Sheet 1, Item 1) to be installed adjacent to AC Circuit interrupter, remove tags, and connect end of each cable.
7. Install three current transformers (Figure 1, Sheet 1, Item 1), twelve washers (Figure 1, Sheet 1, Item 4), lock washers (Figure 1, Sheet 1, Item 3), and screws (Figure 1, Sheet 1, Item 2).
8. Close left and right rear doors.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****POTENTIAL TRANSFORMER: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Marker tags (WP 0123, Table 1, Item 54)
Tiedown straps (WP 0123, Table 1, Item 52)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator access cover removed (WP 0031)
Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.

NOTE

Cut tiedown straps as required.

2. Tag and disconnect wire harness from potential transformer PT3 (Figure 1, Item 1) and PT2 (Figure 1, Item 2).
3. Remove four screws (Figure 1, Item 3), washers (Figure 1, Item 5), lock washers (Figure 1, Item 4), and transformer PT3 (Figure 1, Item 1). Repeat for transformer PT2 (Figure 1, Item 2).
4. If removing bracket, remove two screws (Figure 1, Item 6), lock washers (Figure 1, Item 7), and washers (Figure 1, Item 8).
5. If removing bracket, remove two screws (Figure 1, Item 9), lock washers (Figure 1, Item 10), washers (Figure 1, Item 11), and potential transformers bracket (Figure 1, Item 12).

END OF TASK**INSTALLATION****NOTE**

Install tiedown straps as required.

1. If bracket was removed, install potential transformer bracket (Figure 1, Item 12), washers (Figure 1, Item 11), lock washer (Figure 1, Item 10), and two screws (Figure 1, Item 9).
2. If bracket was removed, install two washers (Figure 1, Item 8), lock washer (Figure 1, Item 7), and screws (Figure 1, Item 6).
3. Install potential transformer PT2 (Figure 1, Item 2), four washers (Figure 1, Item 5), lock washers (Figure 1, Item 4), and screws (Figure 1, Item 3). Repeat for potential transformer PT3 (Figure 1, Item 1).
4. Remove tags and connect wire harness to potential transformers PT2 (Figure 1, Item 2) and PT3 (Figure 1, Item 1).
5. Install generator access cover (WP 0031).

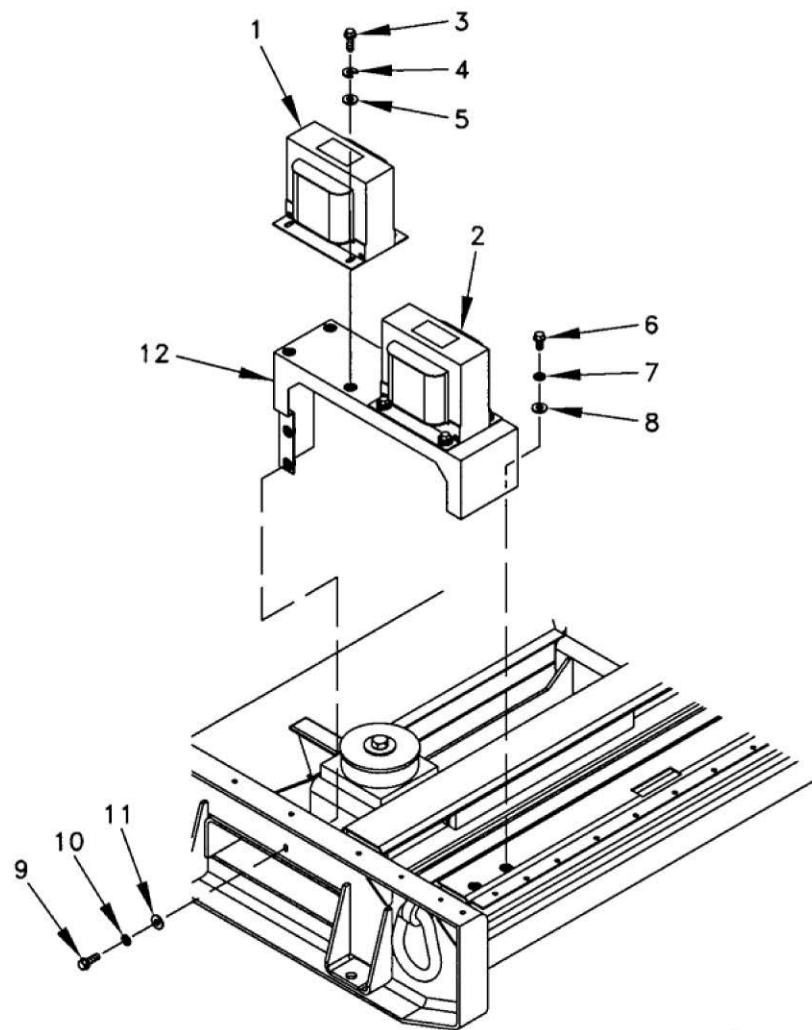


Figure 1. Potential Transformer.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****SLAVE RECEPTACLE: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Marker tags (WP 0123, Table 1, Item 54)
Tiedown straps (WP 0123, Table 1, Item 52)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When disconnecting or removing batteries, disconnect the negative lead that connects directly to the grounding stud first. Disconnect the negative end of the interconnection cable next. When installing batteries, reverse the connection sequence. Failure to comply can cause serious injury to personnel.

WARNING

Slave receptacle (NATO connector) is electrically live at all times and is unfused. The Battery Disconnect Switch does not remove power from the slave receptacle. NATO slave receptacle has 24 VDC even when Battery Disconnect Switch is set to OFF. This circuit is only dead when the batteries are fully disconnected. Disconnect the batteries before performing maintenance on the slave receptacle. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Ensure there is no external cable connected to slave receptacle.
3. Open right and left battery access doors. Open left front door.

NOTE

Cut tiedown straps as required.

4. Tag cables and remove battery terminal knob (Figure 1, Item 3), lock washer (Figure 1, Item 3A), and flat washer (Figure 1, Item 3B) that secure battery cable 1A40 (Figure 1, Item 2) and battery cable 1C40 (Figure 1, Item 1) to battery BT2 (left battery) negative terminal. Remove battery cables 1A40 and 1C40.
5. Tag cable and remove battery terminal knob (Figure 1, Item 6), lock washer (Figure 1, Item 6A), and flat washer (Figure 1, Item 6B) and battery terminal knob (Figure 1, Item 5), lock washer (Figure 1, Item 5A), and flat washer (Figure 1, Item 5B) that secure battery cable 12A40 (Figure 1, Item 4) to battery BT1 (right battery) negative terminal and battery BT2 (left battery) positive terminal. Remove battery cable 12A40.
6. Remove four nuts (Figure 1, Item 16), screws (Figure 1, Item 7), washers (Figure 1, Item 8), retainer (Figure 1, Item 9), and push slave receptacle (Figure 1, Item 10) out of TQG.
7. Tag and disconnect battery cables 1C40 (Figure 1, Item 1) and 24D40 (Figure 1, Item 11) from slave receptacle (Figure 1, Item 10).
8. Remove eight locknuts (Figure 1, Item 12), washers (Figure 1, Item 13), screws (Figure 1, Item 14), and slave receptacle pocket (Figure 1, Item 15).

END OF TASK

INSTALLATION

NOTE

Install tiedown straps as required.

1. Install slave receptacle pocket (Figure 1, Item 15), eight screws (Figure 1, Item 14), washers (Figure 1, Item 13), and locknuts (Figure 1, Item 12).
2. Remove tags and connect battery cables 1C40 (Figure 1, Item 1) and 24D40 (Figure 1, Item 11) to slave receptacle (Figure 1, Item 10).
3. Install slave receptacle (Figure 1, Item 10) and retainer (Figure 1, Item 9) with four washers (Figure 1, Item 8), screws (Figure 1, Item 7), and nuts (Figure 1, Item 16).
4. Install battery cable 12A40 (Figure 1, Item 4) on battery BT1 (right battery) negative terminal and battery BT2 (left battery) positive terminal and secure with flat washer (Figure 1, Item 5B), lock washer (Figure 1, Item 5A), and battery terminal knob (Figure 1, Item 5), and flat washer (Figure 1, Item 6B), lock washer (Figure 1, Item 6A), and battery terminal knob (Figure 1, Item 6). Remove tag from battery cable.
5. Install battery cable 1A40 (Figure 1, Item 2) and battery cable 1C40 (Figure 1, Item 1) on battery BT2 (left battery) negative terminal and secure with flat washer (Figure 1, Item 3B), lock washer (Figure 1, Item 3A), and battery terminal knob (Figure 1, Item 3). Remove tags from battery cables.
6. Close left front door. Close right and left battery access doors.

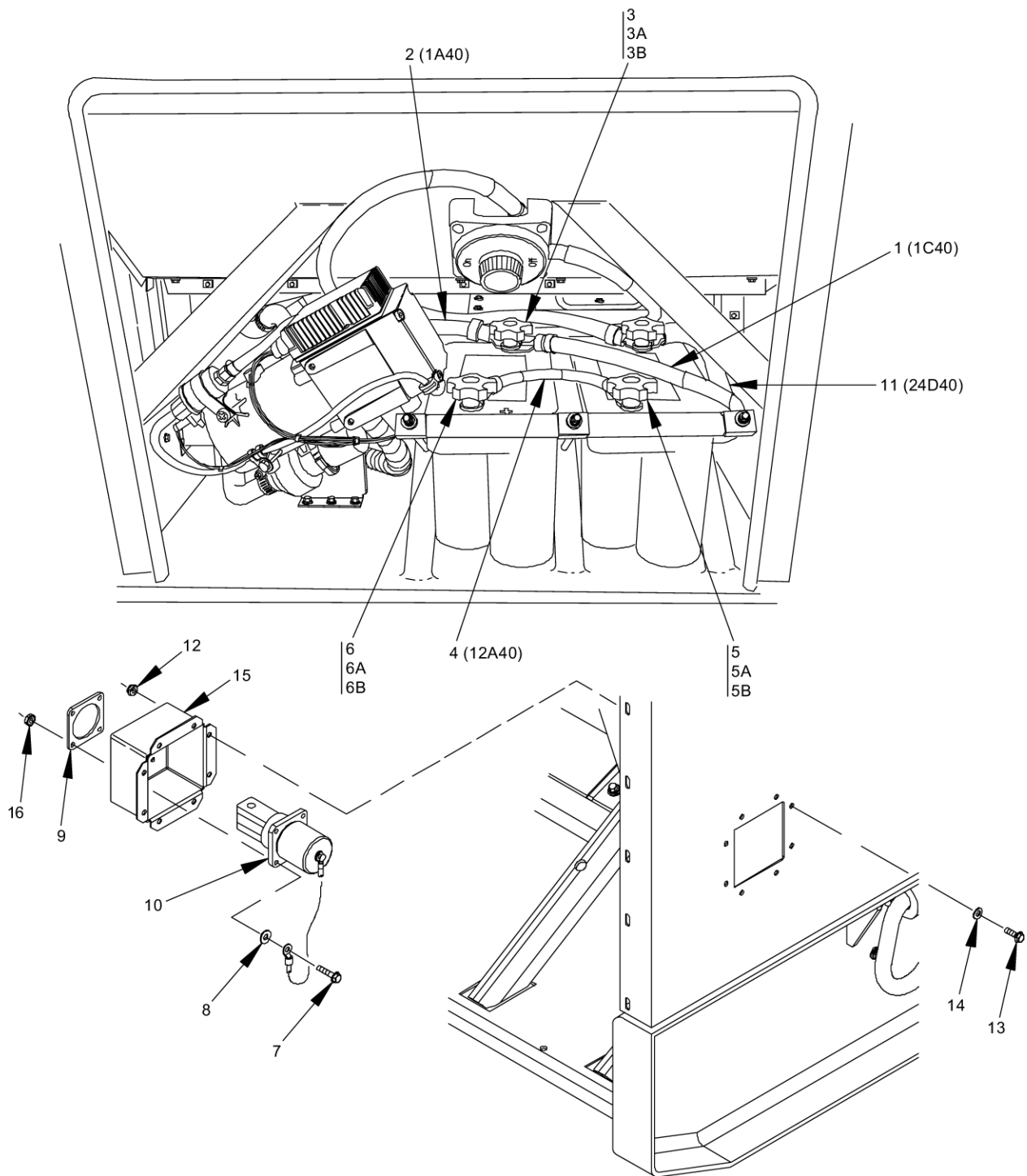


Figure 1. Slave Receptacle.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****ELECTRICAL INSTALLATION: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Marker tags (WP 0123, Table 1, Item 54)
Rivets
Tiedown straps (WP 0123, Table 1, Item 50)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

REMOVAL**NOTE**

Table 1 identifies removal and installation steps for maintenance significant components of the electrical installation.

NOTE

Cut tiedown straps as required.

Table 1. WP 0053 Guide.

NAME	FIGURE 1 ITEM	REMOVAL STEP	INSTALLATION STEP
DEAD CRANK SWITCH	1	1 through 3	15
CATSW1 (RESET SW FUEL)	18	1, 2, and 6	12
CATSW2 (RESET SW OIL)	19	1, 2, and 6	12
Slave relay SRY	22	1, 2, and 7	11
Starter motor magnetic switch (SMMS) relay	26	1, 2, and 8	10
Circuit breaker CB2	48	1, 2, and 13	4
Circuit breaker CB4	52	1, 2, and 14	3
Circuit breaker CB5	47	1, 2, and 13	4
Ammeter shunt R4	40	1, 2, and 11	6
Diode D1	42	1, 2, and 12	5
Fuses F1, F2, and F3	30	1, 2, and 9	9

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right rear doors and left rear doors.
3. To remove DEAD CRANK SWITCH (Figure 1, Sheet 1, Item 1), tag and disconnect wires from switch, remove nut (Figure 1, Sheet 1, Item 2), lock washer (Figure 1, Sheet 1, Item 3), and switch.
4. If necessary, drill out two rivets (Figure 1, Sheet 1, Item 4) and remove dead crank plate (Figure 1, Sheet 1, Item 5). Remove two locknuts (Figure 1, Sheet 1, Item 6), lock washers (Figure 1, Sheet 1, Item 7), washers (Figure 1, Sheet 1, Item 8), screws (Figure 1, Sheet 1, Item 9), and switch plate (Figure 1, Sheet 1, Item 10) from air cleaner bracket (Figure 1, Sheet 1, Item 11).

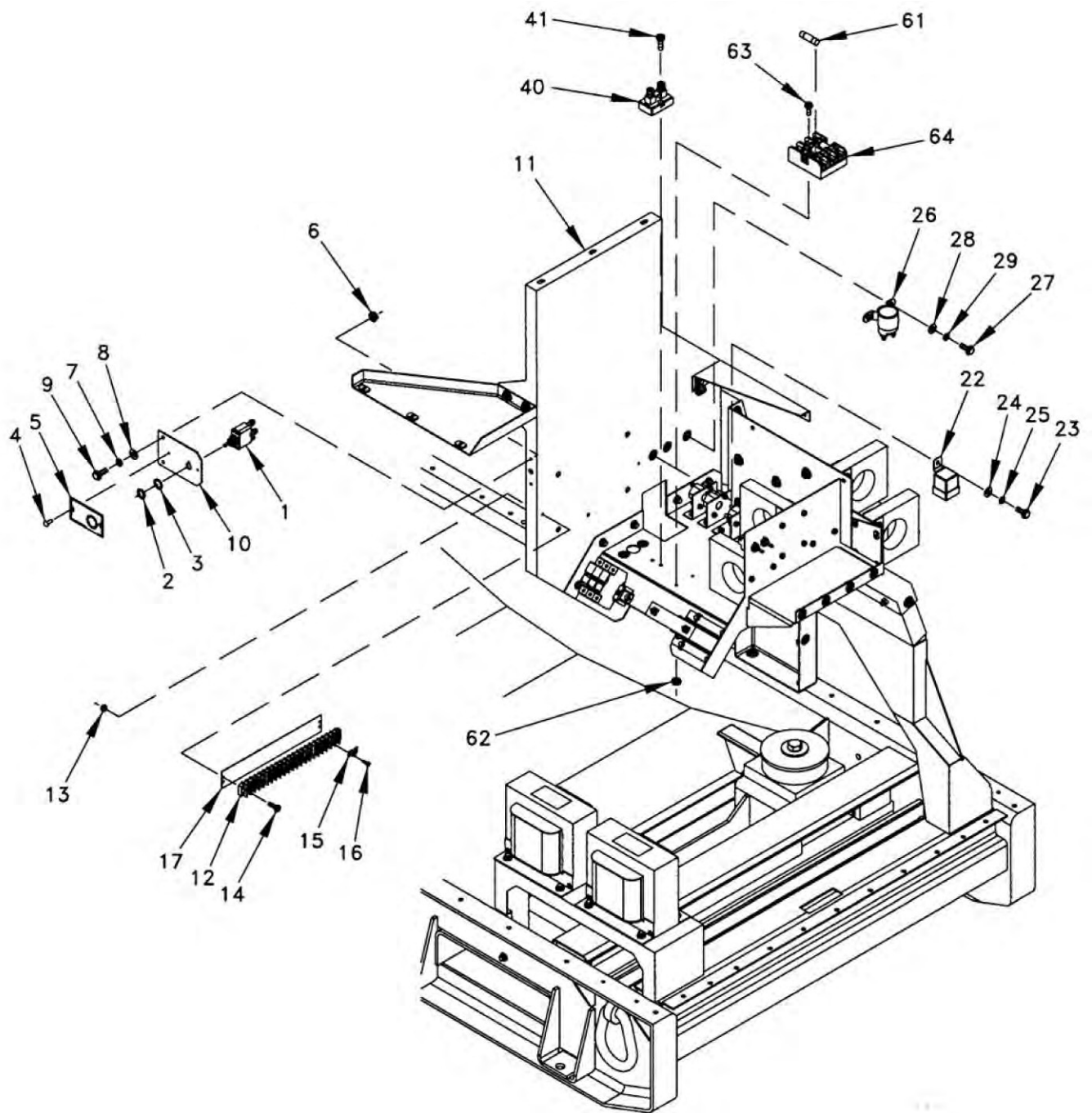


Figure 1. Electrical Installation (Sheet 1 of 3).

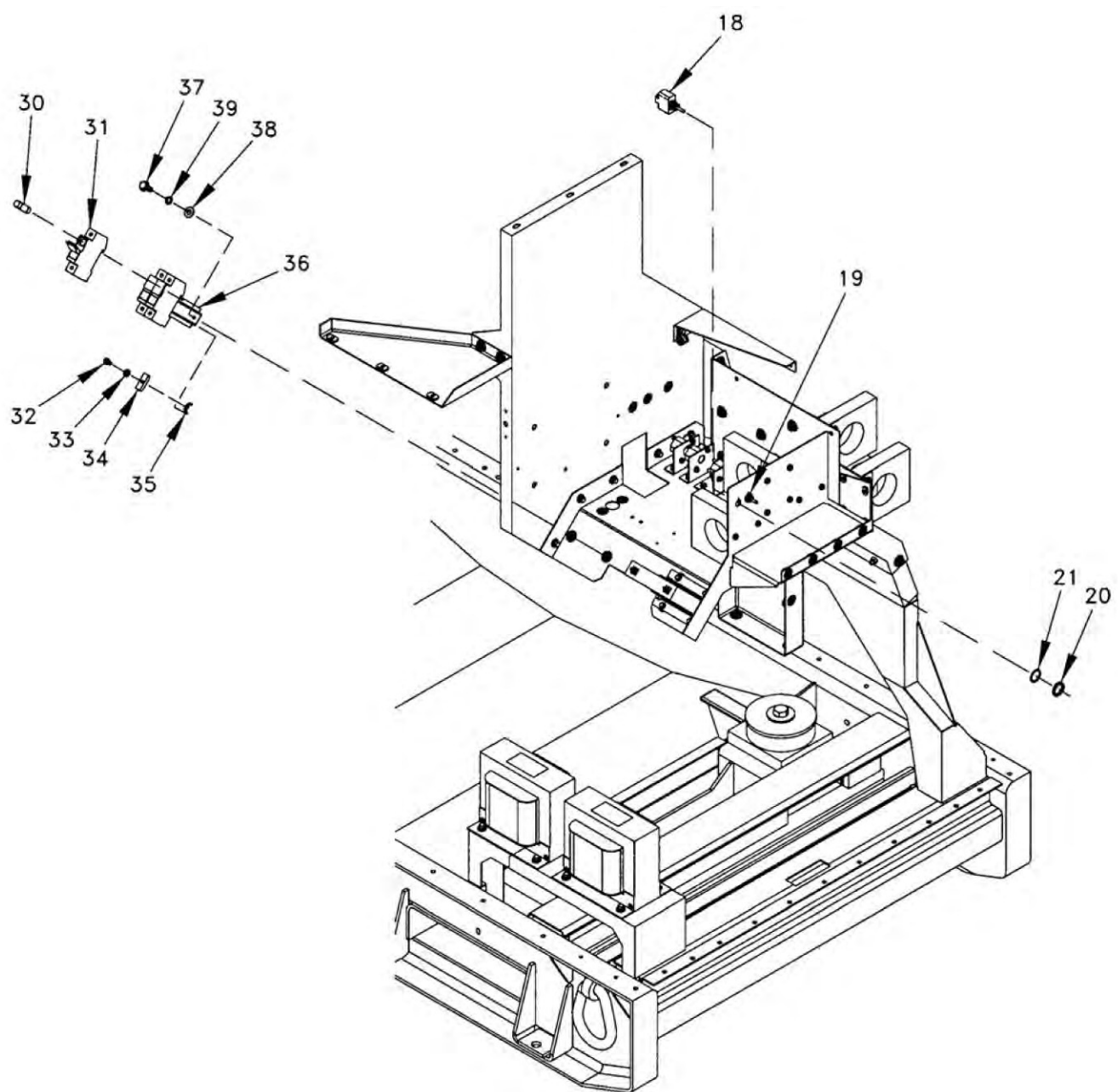


Figure 1. Electrical Installation (Sheet 2 of 3).

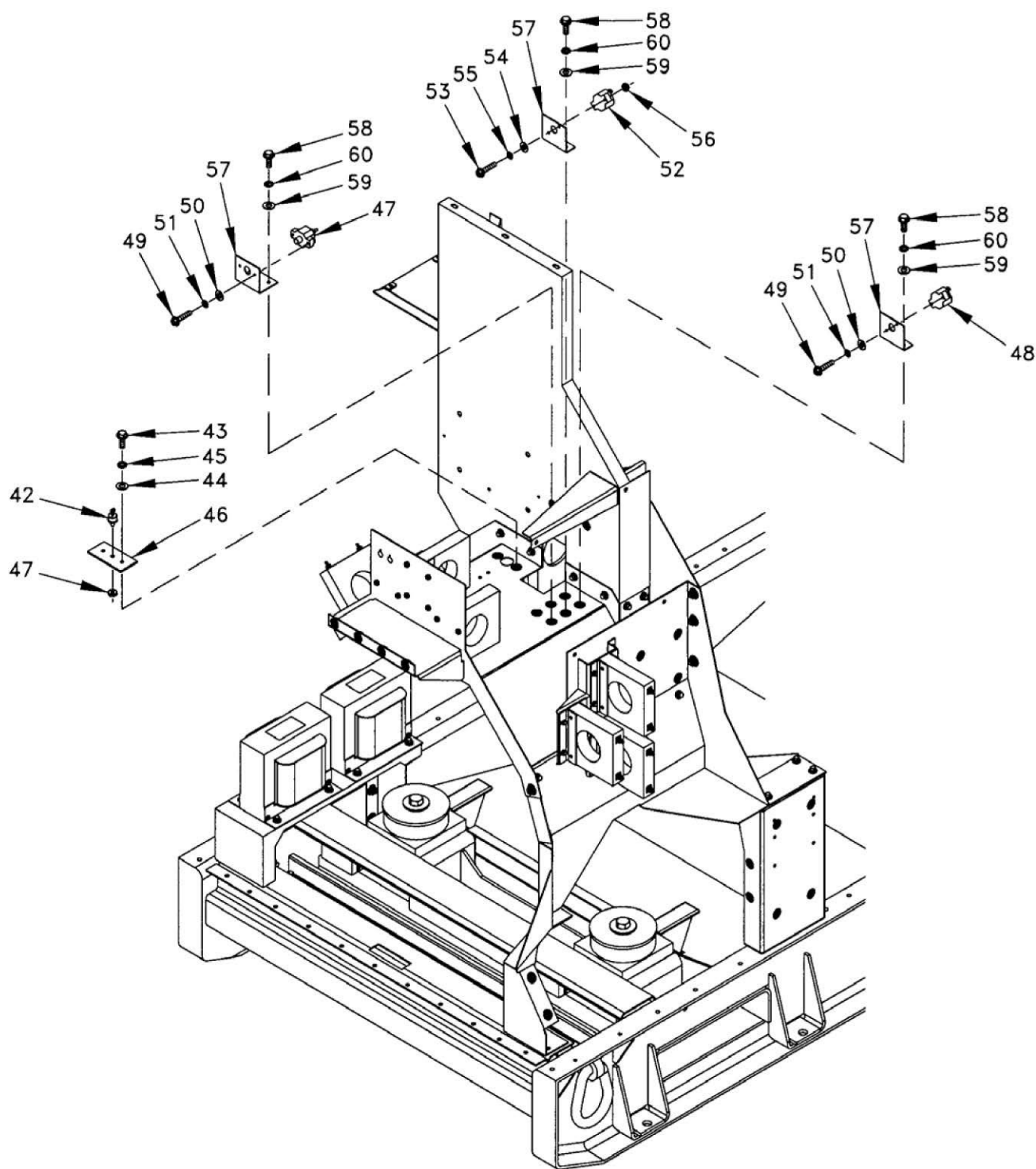


Figure 1. Electrical Installation (Sheet 3 of 3).

5. To remove terminal board TB5 (Figure 1, Sheet 1, Item 12), tag and disconnect wires from terminal board, remove two nuts (Figure 1, Sheet 1, Item 13), screws (Figure 1, Sheet 1, Item 14), terminal board (Figure 1, Sheet 1, Item 12), and strip (Figure 1, Sheet 1, Item 17). Tag jumpers (Figure 1, Sheet 1, Item 15) locations. Remove screws (Figure 1, Sheet 1, Item 16) and jumpers (Figure 1, Sheet 1, Item 15).

6. To remove either switch CATSW1 (Figure 1, Sheet 2, Item 18) or switch CATSW2 (Figure 1, Sheet 2, Item 19), tag and disconnect wires from switch, remove nut (Figure 1, Sheet 2, Item 20), lock washer (Figure 1, Sheet 2, Item 21), and switch.
7. To remove slave relay SRY (Figure 1, Sheet 1, Item 22), tag and disconnect wires from relay, remove screw (Figure 1, Sheet 1, Item 23), washer (Figure 1, Sheet 1, Item 24), lock washer (Figure 1, Sheet 1, Item 25), and relay.
8. To remove starter motor magnetic switch (SMMS) relay (Figure 1, Sheet 1, Item 26), tag and disconnect wires from SMMS relay, remove two screws (Figure 1, Sheet 1, Item 27), washers (Figure 1, Sheet 1, Item 28), lock washers (Figure 1, Sheet 1, Item 29), and SMMS relay.
9. To remove any of three fuses F1, F2, and F3 (Figure 1, Sheet 2, Item 30), pull fuse out of fuse holder (Figure 1, Sheet 2, Item 31). To remove fuse holder (Figure 1, Sheet 2, Item 31), remove two screws (Figure 1, Sheet 2, Item 32), washers (Figure 1, Sheet 2, Item 33), clips (Figure 1, Sheet 2, Item 34), fuse holder, and two insulators (Figure 1, Sheet 2, Item 35).
10. To remove fuse holder track (Figure 1, Sheet 2, Item 36), remove two screws (Figure 1, Sheet 2, Item 37), washers (Figure 1, Sheet 2, Item 38), lock washers (Figure 1, Sheet 2, Item 39), and track.
11. To remove ammeter shunt R4 (Figure 1, Sheet 1, Item 40), tag and disconnect wires from shunt, remove two screws (Figure 1, Sheet 1, Item 41) and shunt.
12. To remove diode D1 (Figure 1, Sheet 3, Item 42), tag and disconnect wires from diode, remove two screws (Figure 1, Sheet 3, Item 43), washers (Figure 1, Sheet 3, Item 44), lock washers (Figure 1, Sheet 3, Item 45), insulator (Figure 1, Sheet 3, Item 46), and diode. Remove nut (Figure 1, Sheet 3, Item 47), and diode from insulator.
13. To remove circuit breaker CB5 (Figure 1, Sheet 3, Item 47) or CB2 (Figure 1, Sheet 3, Item 48), remove two screws (Figure 1, Sheet 3, Item 49), washers (Figure 1, Sheet 3, Item 50), lock washers (Figure 1, Sheet 3, Item 51), and circuit breaker.
14. To remove circuit breaker CB4 (Figure 1, Sheet 3, Item 52), remove two screws (Figure 1, Sheet 3, Item 53), washers (Figure 1, Sheet 3, Item 54), lock washers (Figure 1, Sheet 3, Item 55), nut (Figure 1, Sheet 3, Item 56), and circuit breaker.
15. To remove brackets (Figure 1, Sheet 3, Item 57) for CB5, CB4, or CB2, remove two screws (Figure 1, Sheet 3, Item 58), washers (Figure 1, Sheet 3, Item 59), lock washers (Figure 1, Sheet 3, Item 60), and bracket.
16. Remove three spare fuses (Figure 1, Sheet 1, Item 61), two nuts (Figure 1, Sheet 1, Item 62), two screws (Figure 1, Sheet 1, Item 63), and spare fuse holder (Figure 1, Sheet 1, Item 64).

END OF TASK

INSTALLATION

NOTE

Install tiedown straps as required.

1. Install spare fuse holder (Figure 1, Sheet 1, Item 64), two screws (Figure 1, Sheet 1, Item 63), two nuts (Figure 1, Sheet 1, Item 62), and three spare fuses (Figure 1, Sheet 1, Item 61).
2. To install circuit breaker brackets (Figure 1, Sheet 3, Item 57) for CB5, CB4, or CB2, install bracket, two screws (Figure 1, Sheet 3, Item 58), washers (Figure 1, Sheet 3, Item 59), and lock washers (Figure 1, Sheet 3, Item 60).
3. To install circuit breaker CB4 (Figure 1, Sheet 3, Item 52), install circuit breaker, two screws (Figure 1, Sheet 3, Item 53), washers (Figure 1, Sheet 3, Item 54), lock washers (Figure 1, Sheet 3, Item 55), and nut (Figure 1, Sheet 3, Item 56).
4. To install circuit breaker CB5 (Figure 1, Sheet 3, Item 47) or CB2 (Figure 1, Sheet 3, Item 48), install circuit breaker, two screws (Figure 1, Sheet 3, Item 49), washers (Figure 1, Sheet 3, Item 50), and lock washers (Figure 1, Sheet 3, Item 51).
5. To install diode D1 (Figure 1, Sheet 3, Item 42), install diode, insulator (Figure 1, Sheet 3, Item 46), two lock washers (Figure 1, Sheet 3, Item 45), washers (Figure 1, Sheet 3, Item 44), and screws (Figure 1, Sheet 3, Item 43). Connect wires as tagged.

6. To install ammeter shunt R4 (Figure 1, Sheet 1, Item 40), install shunt and two screws (Figure 1, Sheet 1, Item 41). Connect wires as tagged.
7. To install fuse holder track (Figure 1, Sheet 2, Item 36), install two screws (Figure 1, Sheet 2, Item 37), washers (Figure 1, Sheet 2, Item 38), lock washers (Figure 1, Sheet 2, Item 39), and track.
8. To install any fuse holder (Figure 1, Sheet 2, Item 31), install fuse holder, two insulators (Figure 1, Sheet 2, Item 35), two clips (Figure 1, Sheet 2, Item 34), washers (Figure 1, Sheet 2, Item 33), and two screws (Figure 1, Sheet 2, Item 32). Connect wires as tagged.
9. To install any of three fuses F1, F2, and F3 (Figure 1, Sheet 2, Item 30), push fuse into fuse holder (Figure 1, Sheet 2, Item 31).
10. To install relay SMMS (Figure 1, Sheet 1, Item 26), install relay, two lock washers (Figure 1, Sheet 1, Item 29), washers (Figure 1, Sheet 1, Item 28), and two screws (Figure 1, Sheet 1, Item 27). Connect wires as tagged.
11. To install relay SRY (Figure 1, Sheet 1, Item 22), install relay, lock washer (Figure 1, Sheet 1, Item 25), washer (Figure 1, Sheet 1, Item 24), and screw (Figure 1, Sheet 1, Item 23). Connect wires as tagged.
12. To install either switch CATSW2 (Figure 1, Sheet 2, Item 19), or CATSW1 (Figure 1, Sheet 2, Item 18), install switch, lock washer (Figure 1, Sheet 2, Item 21), and nut (Figure 1, Sheet 2, Item 20). Connect wires as tagged.
13. Install jumpers (Figure 1, Sheet 1, Item 15) using screws (Figure 1, Sheet 1, Item 16) onto terminal board (Figure 1, Sheet 1, Item 12). To install terminal board TB5 (Figure 1, Sheet 1, Item 12), install strip (Figure 1, Sheet 1, Item 17), terminal board (Figure 1, Sheet 1, Item 12), two screws (Figure 1, Sheet 1, Item 14) and nuts (Figure 1, Sheet 1, Item 13). Connect wires as tagged.
14. Install switch plate (Figure 1, Sheet 1, Item 10) on air cleaner bracket (Figure 1, Sheet 1, Item 11), and secure with two screws (Figure 1, Sheet 1, Item 9), washers (Figure 1, Sheet 1, Item 8), lock washers (Figure 1, Sheet 1, Item 7), and locknuts (Figure 1, Sheet 1, Item 6). If necessary, install dead crank plate (Figure 1, Sheet 1, Item 5) and secure with two rivets (Figure 1, Sheet 1, Item 4).
15. To install DEAD CRANK SWITCH (Figure 1, Sheet 1, Item 1), install switch, lock washer (Figure 1, Sheet 1, Item 3), and nut (Figure 1, Sheet 1, Item 2).
16. Close left rear doors and right rear doors.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FUEL LEVEL SWITCH ASSEMBLY: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Gasket
Sealing compound (WP 0123, Table 1, Item 43)
Tiedown straps (WP 0123, Table 1, Item 51)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left front door.

NOTE

Cut tiedown straps as required.

3. Tag and disconnect wires from fuel level switch (Figure 1, Item 1).

CAUTION

Cover hole in fuel tank to prevent contamination.

4. Remove five screws (Figure 1, Item 2), lock washers (Figure 1, Item 3), washers (Figure 1, Item 4), fuel level switch assembly (Figure 1, Item 1), and gasket (Figure 1, Item 5).

END OF TASK**INSTALLATION****NOTE**

Install tiedown straps as required.

1. Apply sealing compound to both sides of gasket (Figure 1, Item 5) and install gasket, fuel level switch assembly (Figure 1, Item 1), five washers (Figure 1, Item 4), lock washers (Figure 1, Item 3), and screws (Figure 1, Item 2).
2. Remove tags and connect wires from fuel level switch (Figure 1, Item 1).
3. Close left front door.

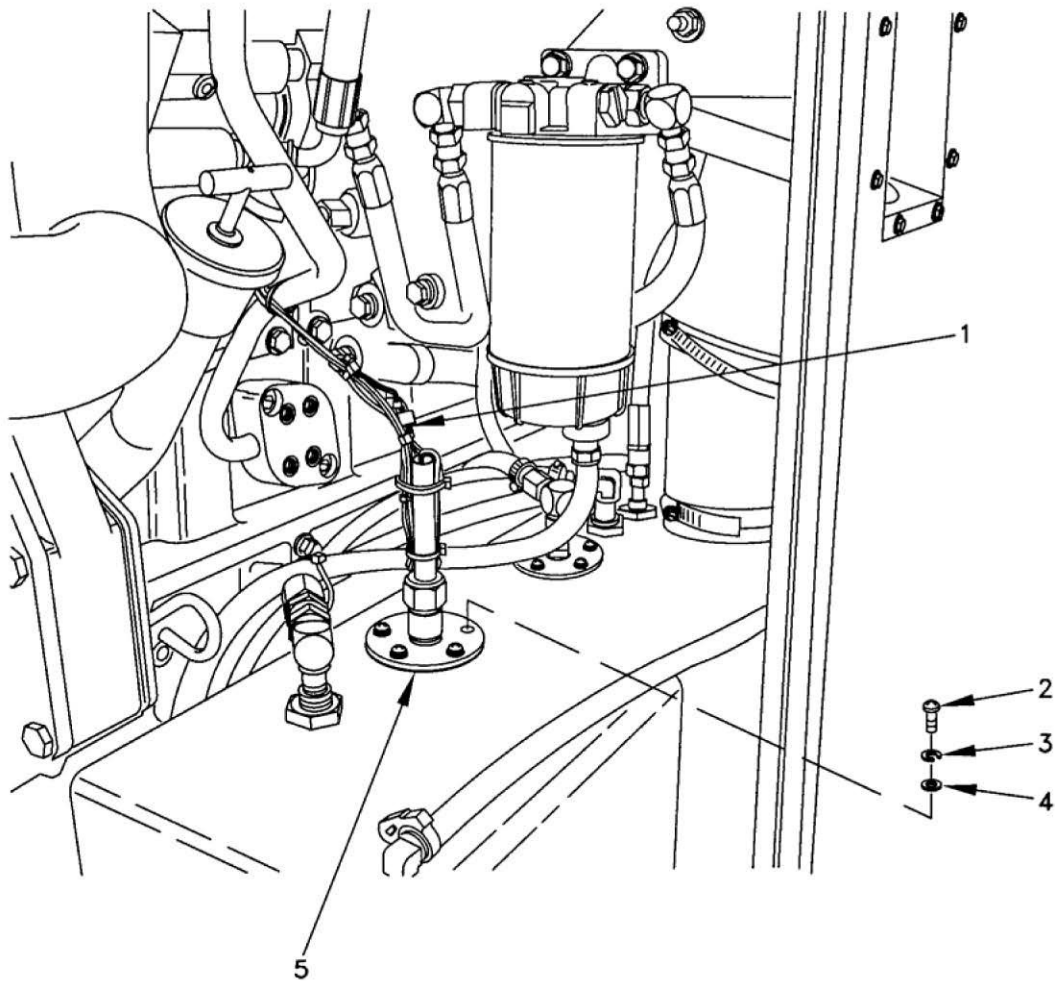


Figure 1. Fuel Level Switch Assembly.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FUEL HOSES: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Cap and plug set (WP 0123, Table 1, Item 8)
Sealing compound (WP 0123, Table 1, Item 40)
Tiedown straps (WP 0123, Table 1, Item 50)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Radiator removed (WP 0066)
Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the engine.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left front doors, left rear doors, right front doors, and right rear doors.

NOTE

Cut tiedown straps as required.

3. Disconnect hose assembly (Figure 1, Sheet 3, Item 1) from elbow (Figure 1, Sheet 3, Item 2) on fuel pickup tube assembly (Figure 1, Sheet 3, Item 3) and from elbow (Figure 1, Sheet 3, Item 4) on water separator filter (Figure 1, Sheet 3, Item 5).
4. If necessary, remove elbow (Figure 1, Sheet 3, Item 2) and elbow (Figure 1, Sheet 3, Item 4).
5. Remove two hose clamps and disconnect hose (Figure 1, Sheet 1, Item 6) from elbow (Figure 1, Sheet 1, Item 7) on fuel tank (Figure 1, Sheet 1, Item 8) and from adapter (Figure 1, Sheet 1, Item 9) on tee (Figure 1, Sheet 1, Item 10) mounted on fuel tank filler neck (Figure 1, Sheet 1, Item 11).
6. Remove two hose clamps and disconnect hose (Figure 1, Sheet 2, Item 12) from elbow (Figure 1, Sheet 2, Item 13) on tee (Figure 1, Sheet 2, Item 14) mounted on fuel tank (Figure 1, Sheet 1, Item 8) and from tee (Figure 1, Sheet 1, Item 10) mounted on fuel tank filler neck (Figure 1, Sheet 1, Item 11).
7. If necessary, remove elbow (Figure 1, Sheet 2, Item 13), fitting (Figure 1, Sheet 1, Item 15), adapter (Figure 1, Sheet 1, Item 9), seal nut (Figure 1, Sheet 1, Item 16), washer (Figure 1, Sheet 1, Item 17), and nipple (Figure 1, Sheet 1, Item 18).
8. Remove two hose clamps and disconnect hose (Figure 1, Sheet 3, Item 19) from male connector (Figure 1, Sheet 3, Item 20) on tee (Figure 1, Sheet 2, Item 14) mounted on fuel tank (Figure 1, Sheet 1, Item 8) and from elbow (Figure 1, Sheet 3, Item 21) mounted on fuel tank (Figure 1, Sheet 1, Item 8).
9. If necessary, remove male connector (Figure 1, Sheet 3, Item 20), tee (Figure 1, Sheet 2, Item 14), and elbow (Figure 1, Sheet 3, Item 21).
10. Disconnect hose assembly (Figure 1, Sheet 3, Item 22) from elbow (Figure 1, Sheet 3, Item 23) on fuel tank (Figure 1, Sheet 1, Item 8) and from fuel cooler (Figure 1, Sheet 3, Item 24). If necessary, remove elbow (Figure 1, Sheet 3, Item 23).
11. Remove two clamps and disconnect hose assembly (Figure 1, Sheet 3, Item 25) from adapter (Figure 1, Sheet 3, Item 26) on regulator (Figure 1, Sheet 3, Item 27) at engine fuel return and from swivel elbow (Figure 1, Sheet 3, Item 28) on fuel cooler (Figure 1, Sheet 3, Item 24).
12. If necessary, remove adapter (Figure 1, Sheet 3, Item 26), regulator (Figure 1, Sheet 3, Item 27), and swivel elbow (Figure 1, Sheet 3, Item 28).
13. Disconnect hose assembly (Figure 1, Sheet 2, Item 29) from adapter (Figure 1, Sheet 2, Item 30) on fuel tank (Figure 1, Sheet 1, Item 8) and from elbow (Figure 1, Sheet 2, Item 31) on auxiliary fuel pump (Figure 1, Sheet 2, Item 32). If necessary, remove adapter (Figure 1, Sheet 2, Item 30) and elbow (Figure 1, Sheet 2, Item 31).
14. Disconnect hose assembly (Figure 1, Sheet 3, Item 33) from elbow (Figure 1, Sheet 3, Item 34) on water separator filter (Figure 1, Sheet 3, Item 5) and from elbow (Figure 1, Sheet 1, Item 35) on engine fuel pump.

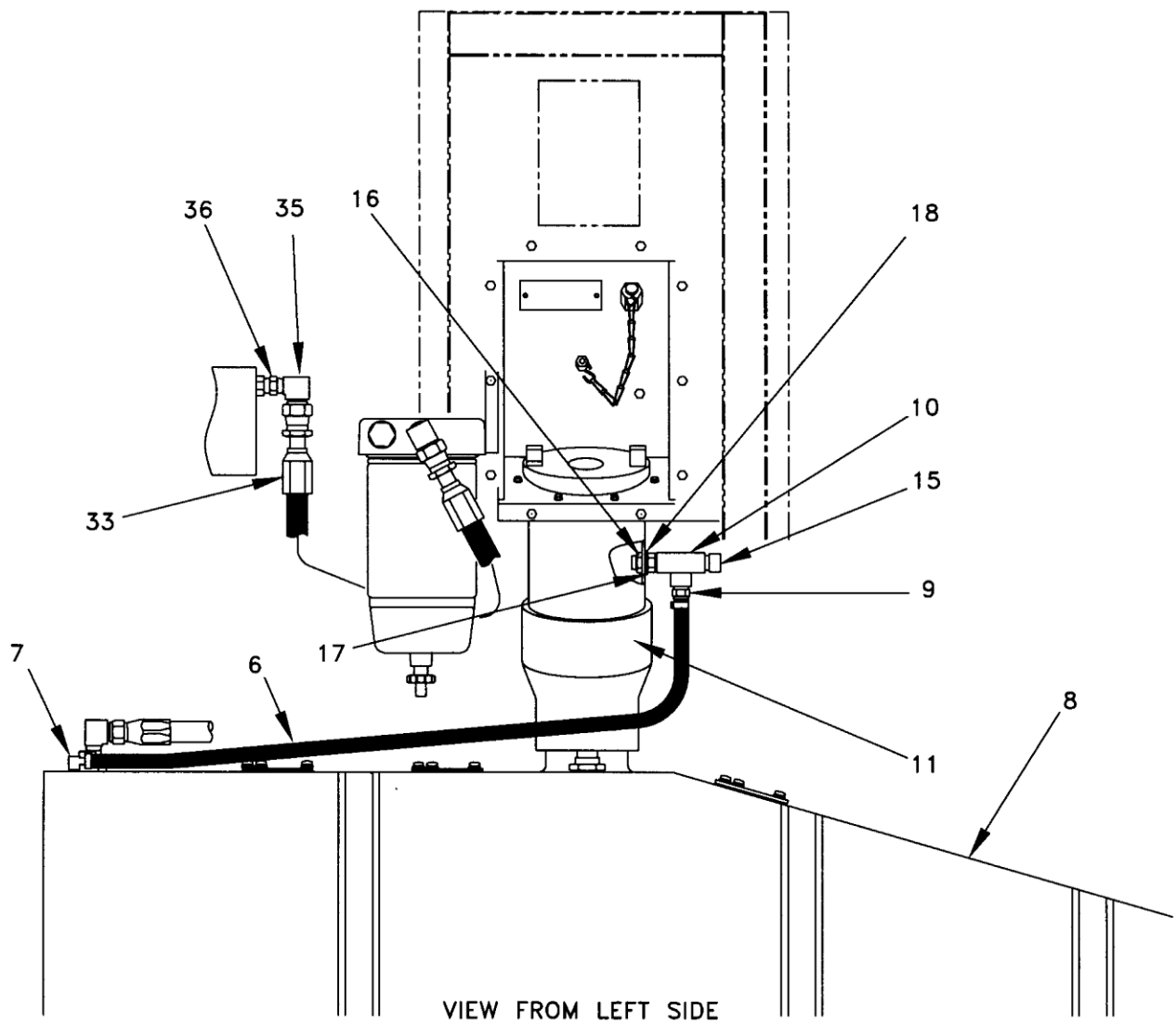


Figure 1. Fuel Hoses (Sheet 1 of 3).

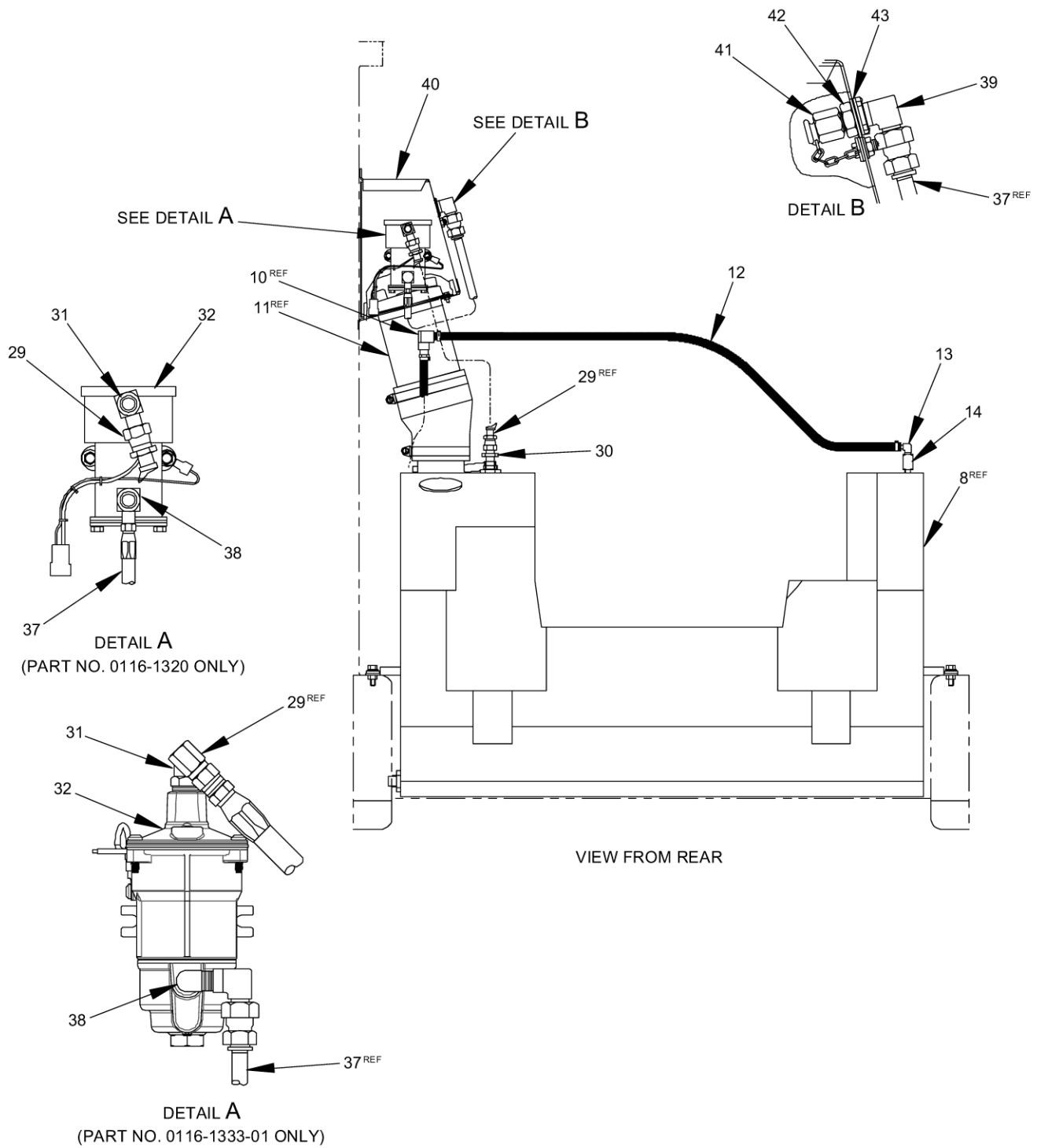


Figure 1. Fuel Hoses (Sheet 2 of 3).

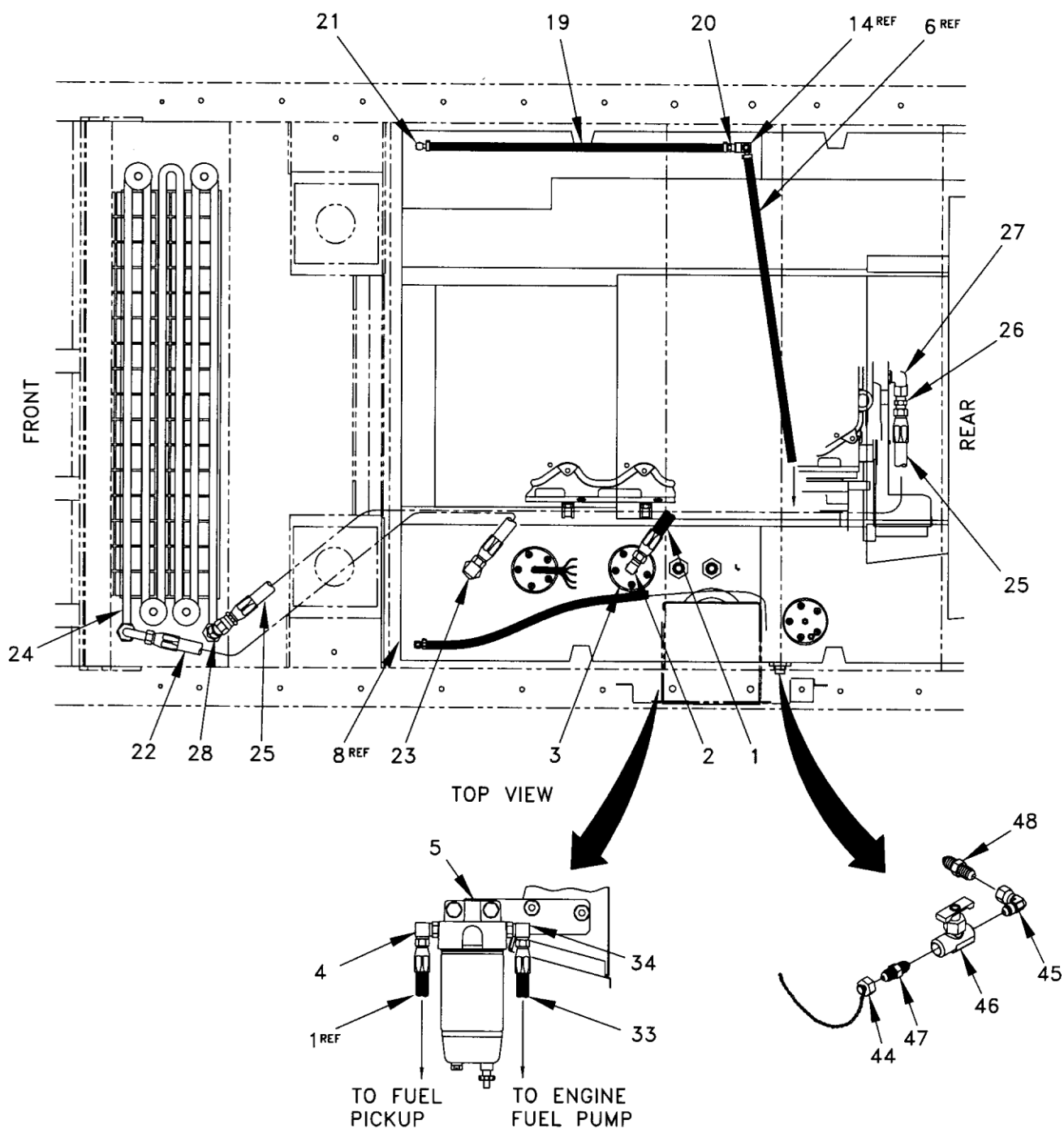


Figure 1. Fuel Hoses (Sheet 3 of 3).

15. If necessary, remove elbow (Figure 1, Sheet 3, Item 34), elbow (Figure 1, Sheet 1, Item 35), and adapter (Figure 1, Sheet 1, Item 36).
16. Disconnect hose assembly (Figure 1, Sheet 2, Item 37) from elbow (Figure 1, Sheet 2, Item 38) on auxiliary fuel pump (Figure 1, Sheet 2, Item 32) and from bulkhead elbow (Figure 1, Sheet 2, Item 39) on filler neck pocket (Figure 1, Sheet 2, Item 40).
17. If necessary, remove elbow (Figure 1, Sheet 2, Item 38), cap (Figure 1, Sheet 2, Item 41), oversize washer (Figure 1, Sheet 2, Item 42), bulkhead locknut (Figure 1, Sheet 2, Item 43), and bulkhead elbow (Figure 1, Sheet 2, Item 39).

18. Remove cap (Figure 1, Sheet 3, Item 44) and drain fuel from tank (Figure 1, Sheet 1, Item 8). Use suitable container to collect fuel and dispose of in accordance with local ordinances.
19. Remove elbow (Figure 1, Sheet 3, Item 45), drain valve (Figure 1, Sheet 3, Item 46), and adapter (Figure 1, Sheet 3, Item 47) as an assembly.
20. Disassemble elbow (Figure 1, Sheet 3, Item 45), drain valve (Figure 1, Sheet 3, Item 46) and adapter (Figure 1, Sheet 3, Item 47).
21. Remove pipe coupling (Figure 1, Sheet 3, Item 48) from fuel tank (Figure 1, Sheet 1, Item 8).

END OF TASK

INSTALLATION

NOTE

Apply sealing compound to all male pipe threads before connecting. Install tiedown straps as required.

NOTE

Install tiedown straps as required.

1. Install pipe coupling (Figure 1, Sheet 3, Item 48) into fuel tank (Figure 1, Sheet 1, Item 8).
2. Assemble adapter (Figure 1, Sheet 3, Item 47), drain valve (Figure 1, Sheet 3, Item 46), and elbow (Figure 1, Sheet 3, Item 45).
3. Install elbow (Figure 1, Sheet 3, Item 45), drain valve (Figure 1, Sheet 1, Item 46), and adapter (Figure 1, Sheet 3, Item 47) as an assembly.
4. Install cap (Figure 1, Sheet 3, Item 44).
5. If removed, install bulkhead elbow (Figure 1, Sheet 2, Item 39), bulkhead locknut (Figure 1, Sheet 2, Item 43), oversize washer (Figure 1, Sheet 2, Item 42), and cap (Figure 1, Sheet 2, Item 41) on filler neck pocket (Figure 1, Sheet 2, Item 40).
6. Install elbow (Figure 1, Sheet 2, Item 38) on auxiliary fuel pump (Figure 1, Sheet 2, Item 32).
7. Connect hose assembly (Figure 1, Sheet 2, Item 37) to elbow (Figure 1, Sheet 2, Item 38) on auxiliary fuel pump (Figure 1, Sheet 2, Item 32) and to bulkhead elbow (Figure 1, Sheet 2, Item 39) on filler neck pocket (Figure 1, Sheet 2, Item 40).
8. If removed, install adapter (Figure 1, Sheet 1, Item 36) and elbow (Figure 1, Sheet 1, Item 35) on engine fuel pump, and install elbow (Figure 1, Sheet 3, Item 34) on water separator filter (Figure 1, Sheet 3, Item 5).
9. Connect hose assembly (Figure 1, Sheet 3, Item 33) to elbow (Figure 1, Sheet 1, Item 35) and to elbow (Figure 1, Sheet 3, Item 34).
10. If removed, install elbow (Figure 1, Sheet 2, Item 31) on auxiliary fuel pump (Figure 1, Sheet 2, Item 32) and install adapter (Figure 1, Sheet 2, Item 30) on fuel tank (Figure 1, Sheet 1, Item 8). Connect hose assembly (Figure 1, Sheet 2, Item 29) to elbow (Figure 1, Sheet 2, Item 31) and to adapter (Figure 1, Sheet 2, Item 30).
11. If removed, install swivel elbow (Figure 1, Sheet 3, Item 28) on fuel cooler (Figure 1, Sheet 3, Item 24), and install regulator (Figure 1, Sheet 3, Item 27) and adapter (Figure 1, Sheet 3, Item 26) on engine fuel return.
12. Connect hose assembly (Figure 1, Sheet 3, Item 25) to swivel elbow (Figure 1, Sheet 3, Item 28) and to adapter (Figure 1, Sheet 3, Item 26).
13. If removed, install elbow (Figure 1, Sheet 3, Item 23) on fuel tank (Figure 1, Sheet 1, Item 8). Connect hose assembly (Figure 1, Sheet 3, Item 22) to elbow (Figure 1, Sheet 3, Item 23) and to fuel cooler (Figure 1, Sheet 3, Item 24).
14. Install radiator (WP 0066).
15. If removed, install elbow (Figure 1, Sheet 3, Item 21), tee (Figure 1, Sheet 2, Item 14), and male connector (Figure 1, Sheet 3, Item 20) on fuel tank (Figure 1, Sheet 1, Item 8).

16. Connect hose assembly (Figure 1, Sheet 3, Item 19) to elbow (Figure 1, Sheet 3, Item 21) and to male connector (Figure 1, Sheet 3, Item 20).
17. If removed, install nipple (Figure 1, Sheet 1, Item 18), washer (Figure 1, Sheet 1, Item 17), seal nut (Figure 1, Sheet 1, Item 16), adapter (Figure 1, Sheet 1, Item 9), and fitting (Figure 1, Sheet 1, Item 15) on fuel tank filler neck (Figure 1, Sheet 1, Item 11).
18. Install elbow (Figure 1, Sheet 2, Item 13) on tee (Figure 1, Sheet 2, Item 14).
19. Connect hose assembly (Figure 1, Sheet 2, Item 12) to elbow (Figure 1, Sheet 2, Item 13) and to tee (Figure 1, Sheet 1, Item 10).
20. If removed, install elbow (Figure 1, Sheet 1, Item 7) on fuel tank (Figure 1, Sheet 1, Item 8). Connect hose assembly (Figure 1, Sheet 1, Item 6) to elbow (Figure 1, Sheet 1, Item 7) and to adapter (Figure 1, Sheet 1, Item 9).
21. If removed, install elbow (Figure 1, Sheet 3, Item 4) on water separator filter (Figure 1, Sheet 3, Item 5), and install elbow (Figure 1, Sheet 3, Item 2) on fuel pickup tube assembly (Figure 1, Sheet 3, Item 3).
22. Connect hose assembly (Figure 1, Sheet 3, Item 1) to elbow (Figure 1, Sheet 3, Item 2) and to elbow (Figure 1, Sheet 3, Item 4).
23. Close right rear doors, right front doors, left rear doors, and left front doors.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FUEL PICKUP TUBE ASSEMBLY: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Cap and plug set (WP 0123, Table 1, Item 8)
Gasket
Sealing compound (WP 0123, Table 1, Item 43)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the engine.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left front doors.
3. Disconnect hose (Figure 1, Item 1) from fuel pickup tube (Figure 1, Item 2).
4. Remove five screws (Figure 1, Item 3), lock washers (Figure 1, Item 4), washers (Figure 1, Item 5), fuel pickup tube (Figure 1, Item 2), and gasket (Figure 1, Item 6).

END OF TASK

INSTALLATION

1. Clean area on fuel tank where gasket (Figure 1, Item 6) will be installed.
2. Apply sealing compound to both sides of gasket (Figure 1, Item 6), and install gasket, fuel pickup tube (Figure 1, Item 2), five washers (Figure 1, Item 5), lock washers (Figure 1, Item 4), and screws (Figure 1, Item 3).
3. Connect hose (Figure 1, Item 1) to fuel pickup tube (Figure 1, Item 2).
4. Close left front doors.

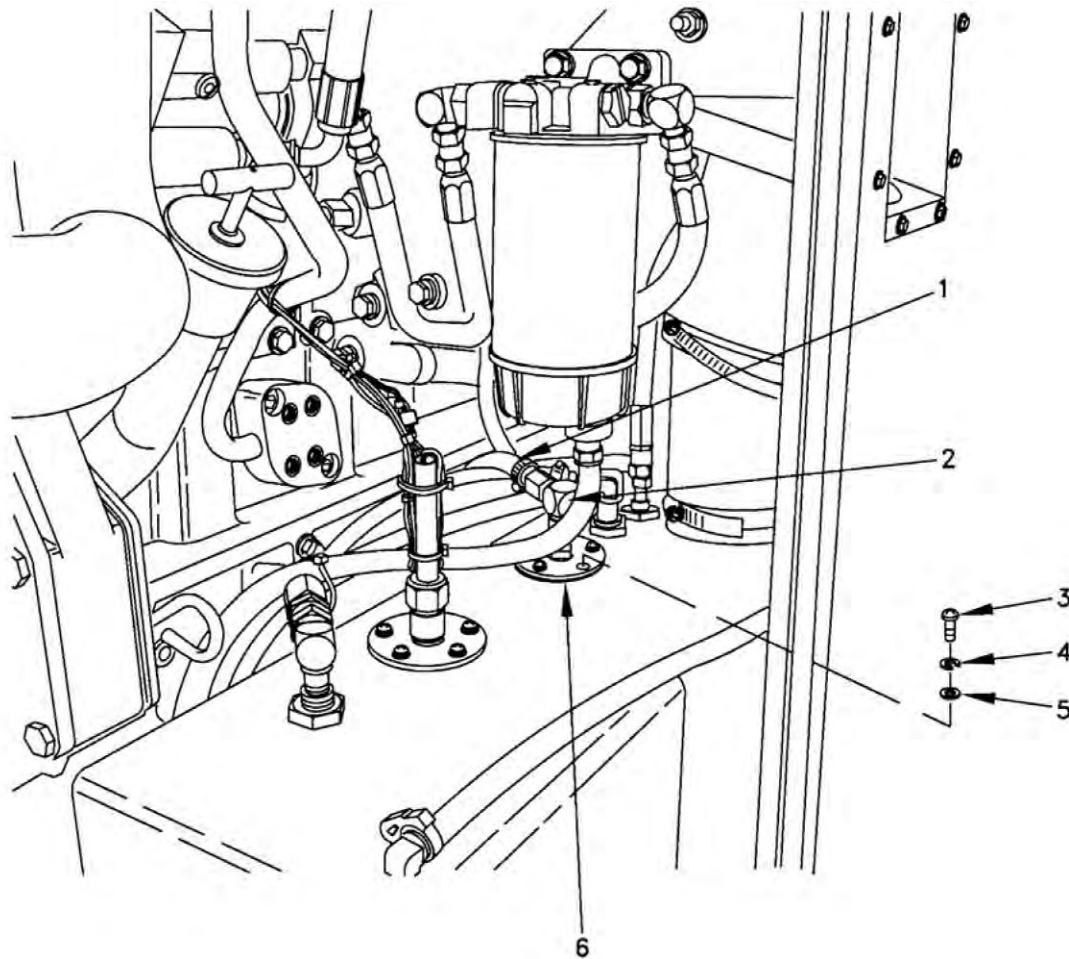


Figure 1. Fuel Pickup Tube Assembly.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****AUXILIARY FUEL PUMP ASSEMBLY AND SOLENOID VALVE: SERVICING, REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Cap and plug set (WP 0123, Table 1, Item 8)
Fuel (WP 0123, Table 1, Items 18, 19, 55, or 56)
Gasket
Marker tags (WP 0123, Table 1, Item 54)
Sealing compound (WP 0123, Table 1, Item 43)
Tiedown straps (WP 0123, Table 1, Item 53)

Personnel Required

Two

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the engine.

SERVICING (PART NO. 0116-1320 ONLY)**NOTE**

Servicing can be performed without removing auxiliary fuel pump.

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left front doors, and left rear doors.
3. Remove three screws (Figure 1, Item 1), cover (Figure 1, Item 2), gasket (Figure 1, Item 3), and strainer (Figure 1, Item 4) from auxiliary fuel pump (Figure 1, Item 5).
4. Clean strainer (Figure 1, Item 4) with clean fuel. Replace strainer if damaged.
5. Install strainer (Figure 1, Item 4), gasket (Figure 1, Item 3), cover (Figure 1, Item 2), and three screws (Figure 1, Item 1).

END OF TASK**SERVICING (PART NO. 0116-016 INCORPORATED)****NOTE**

Servicing can be performed without removing auxiliary fuel pump.

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left front doors, and left rear doors.
3. Remove bowl screw (Figure 1, Item 1) that secures fuel bowl (Figure 1, Item 2) to auxiliary fuel pump (Figure 1, Item 5).
4. Remove fuel bowl (Figure 1, Item 2), O-ring (Figure 1, Item 3), and strainer (Figure 1, Item 4) from auxiliary fuel pump (Figure 1, Item 5).
5. Clean strainer (Figure 1, Item 4) with clean fuel. Replace strainer if damaged.
6. Install strainer (Figure 1, Item 4), O-ring (Figure 1, Item 3), and fuel bowl (Figure 1, Item 2) on auxiliary fuel pump (Figure 1, Item 5) and secure with bowl screw (Figure 1, Item 1).

END OF TASK**REMOVAL**

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left front doors, and left rear doors.

NOTE

Cut tiedown straps as required.

3. Disconnect hose (Figure 1, Item 6) and hose (Figure 1, Item 7) from auxiliary fuel pump (Figure 1, Item 5).
4. Tag and disconnect wires coming from solenoid valve (Figure 1, Item 8).
5. Remove two locknuts (Figure 1, Item 9), washers (Figure 1, Item 10), screws (Figure 1, Item 11), and auxiliary fuel pump (Figure 1, Item 5).

6. If necessary, remove elbow (Figure 1, Item 12) and elbow (Figure 1, Item 13).
7. Disconnect two hoses (Figure 1, Item 14) and (Figure 1, Item 15) from solenoid valve (Figure 1, Item 8).
8. Remove two screws (Figure 1, Item 17), lock washers (not shown), and solenoid valve (Figure 1, Item 8).
9. If necessary, remove two elbows (Figure 1, Item 18).

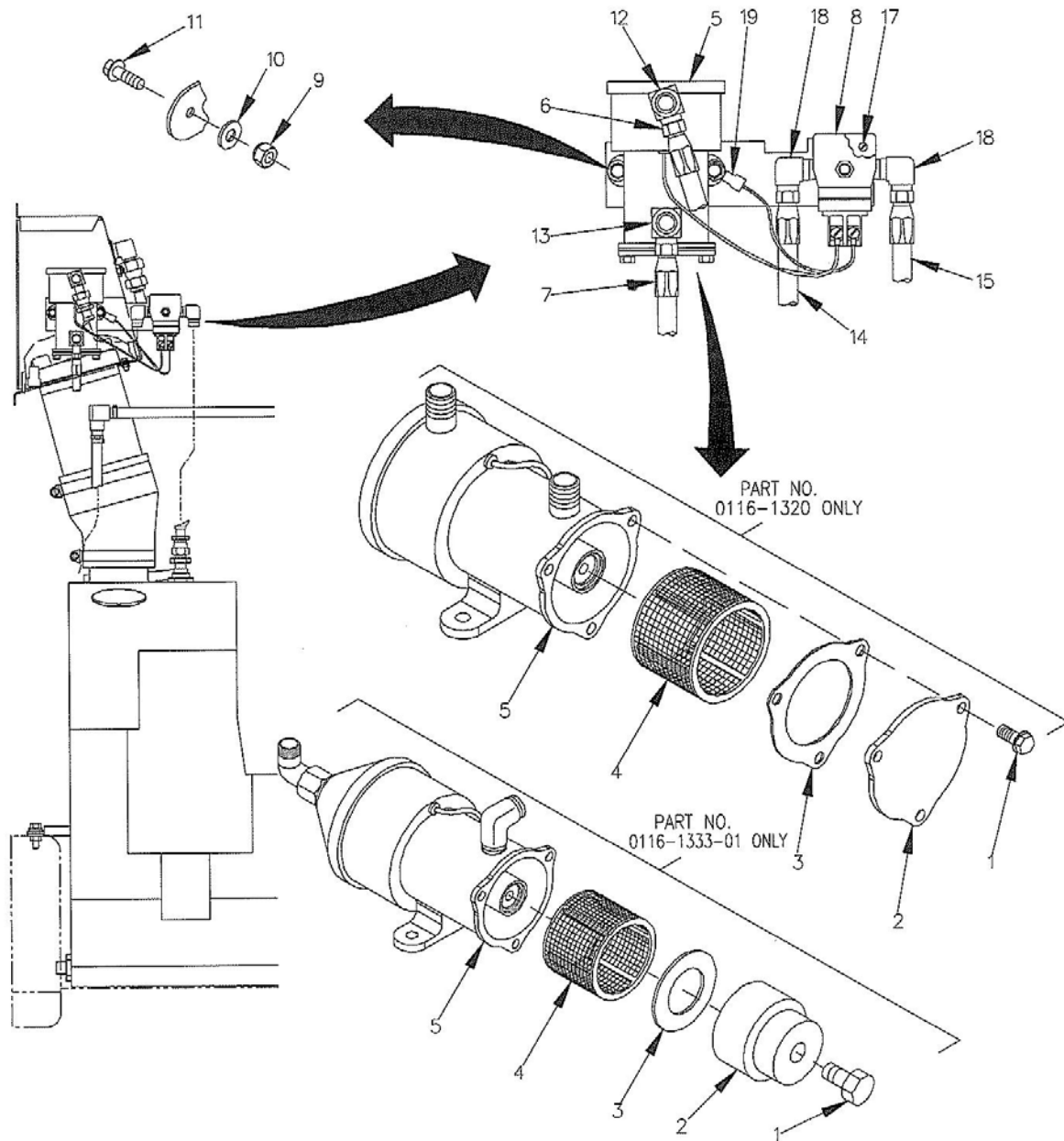


Figure 1. Main Fuel Pump and Auxiliary Fuel Pump Assembly with Solenoid Valve.

END OF TASK

INSTALLATION**NOTE**

Apply sealing compound to all male pipe threads before connecting.

1. If removed, install two elbows (Figure 1, Item 18).
2. Install solenoid valve (Figure 1, Item 8), two lock washers (not shown), and two screws (Figure 1, Item 17).
3. Connect two hoses (Figure 1, Item 15) and (Figure 1, Item 14) to solenoid valve (Figure 1, Item 8).
4. If removed, install two elbows (Figure 1, Item 13) and (Figure 1, Item 12) to auxiliary fuel pump (Figure 1, Item 5).
5. Making sure ground lug (Figure 1, Item 19) is positioned between screw (Figure 1, Item 11) and washer (Figure 1, Item 10), install auxiliary fuel pump (Figure 1, Item 5), two screws (Figure 1, Item 11), washers (Figure 1, Item 10), and locknuts (Figure 1, Item 9).

NOTE

Install tiedown straps as required.

6. Remove tags and connect wires to solenoid valve (Figure 1, Item 8).
7. Connect hose (Figure 1, Item 7) and hose (Figure 1, Item 6).
8. Close left rear doors, and left front doors.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FUEL COOLER: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Cap and plug set (WP 0123, Table 1, Item 8)

Personnel Required

Two

References

TM 9-6115-729-24P

Equipment Condition

Front roof section housing assembly removed (WP 0028)
Engine generator compartment ceiling removed (WP 0030)
Radiator removed (WP 0066)
Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the fuel system.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.

NOTE

Remove tiedown straps as required.

2. Remove eight nuts (Figure 1, Sheet 2, Item 1), lock washers (Figure 1, Sheet 2, Item 2), bolts (Figure 1, Sheet 2, Item 3) and left and right radiator mounting brackets (Figure 1, Sheet 2, Item 4).
3. Remove two screws (Figure 1, Sheet 1, Item 5), two screws (Figure 1, Sheet 1, Item 6), lock washers (Figure 1, Sheet 1, Item 8), washers (Figure 1, Sheet 1, Item 7), and plate (Figure 1, Sheet 1, Item 9).
4. Remove three screws (Figure 1, Sheet 1, Item 10), lock washers (Figure 1, Sheet 1, Item 11), washers (Figure 1, Sheet 1, Item 12).
5. Remove three screws (Figure 1, Sheet 1, Item 13), lock washers (Figure 1, Sheet 1, Item 14), washers (Figure 1, Sheet 1, Item 15).
6. Remove four screws (Figure 1, Sheet 1, Item 16), lock washers (Figure 1, Sheet 1, Item 17), washers (Figure 1, Sheet 1, Item 18).
7. Remove three screws (Figure 1, Sheet 1, Item 19), lock washers (Figure 1, Sheet 1, Item 20), washers (Figure 1, Sheet 1, Item 21).
8. Remove left base baffle (Figure 1, Sheet 1, Item 22) and right base baffle (Figure 1, Sheet 1, Item 23).
9. Remove four screws (Figure 1, Sheet 1, Item 24), lock washers (Figure 1, Sheet 1, Item 25), washers (Figure 1, Sheet 1, Item 26), two baffle base brackets (Figure 1, Sheet 1, Items 27 and 28).
10. Remove screw (Figure 1, Sheet 1, Item 29), lock washer (Figure 1, Sheet 1, Item 30), and washer (Figure 1, Sheet 1, Item 31).
11. Remove two screws (Figure 1, Sheet 1, Item 32), lock washers (Figure 1, Sheet 1, Item 33), and washers (Figure 1, Sheet 1, Item 34).
12. Remove four screws (Figure 1, Sheet 1, Item 35), lock washers (Figure 1, Sheet 1, Item 36), washers (Figure 1, Sheet 1, Item 37), and left lower front base baffle (Figure 1, Sheet 1, Item 38) and bottom front baffle (Figure 1, Sheet 1, Item 39).
13. Disconnect hose (Figure 1, Sheet 2, Item 40) and hose (Figure 1, Sheet 2, Item 41) from fuel cooler (Figure 1, Sheet 2, Item 42).
14. Remove four screws (Figure 1, Sheet 2, Item 43), eight washers (Figure 1, Sheet 2, Item 44), and bushings (Figure 1, Sheet 2, Item 45).
15. Remove fuel cooler (Figure 1, Sheet 2, Item 42).

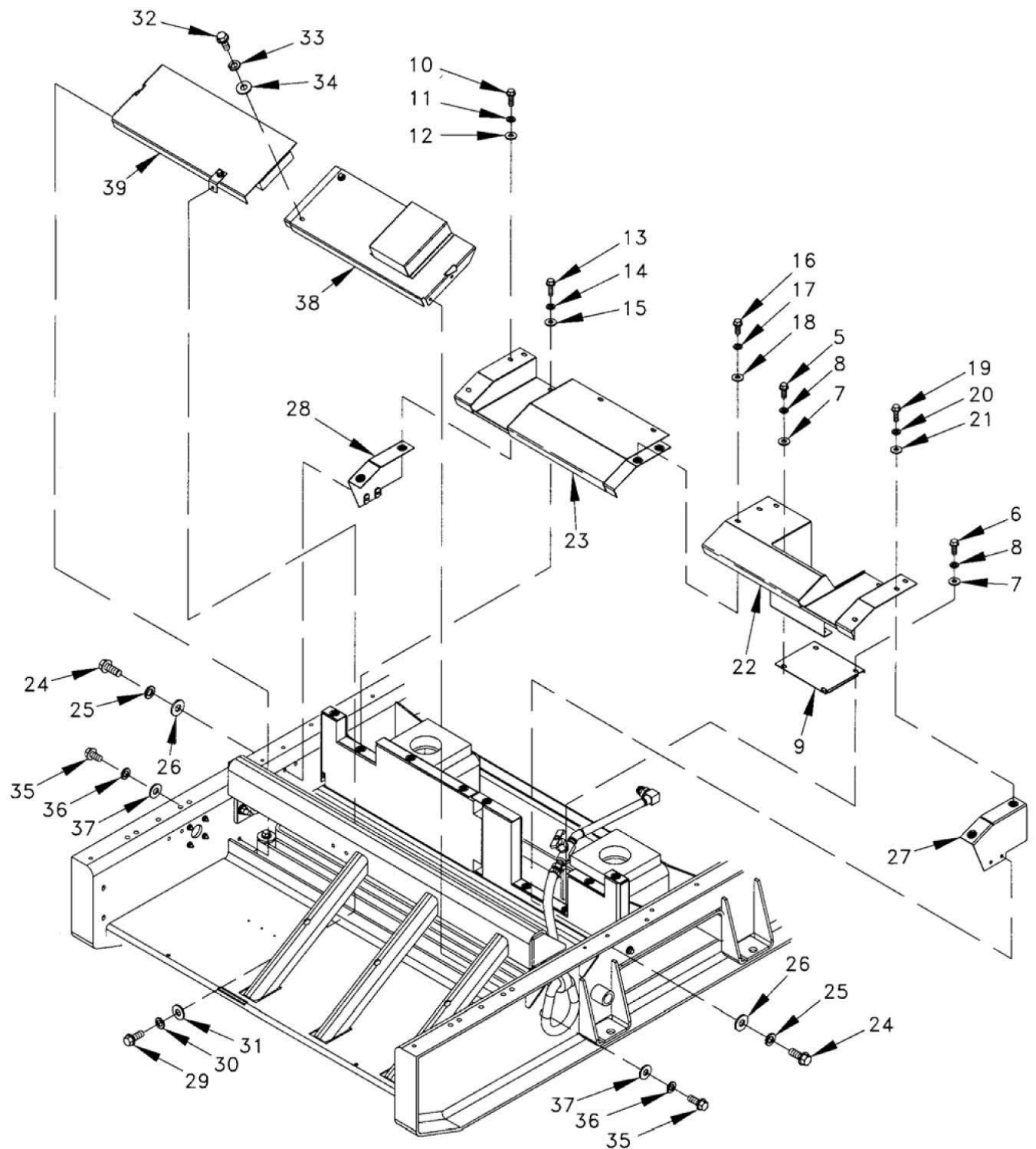


Figure 1. Fuel Cooler (Sheet 1 of 2).

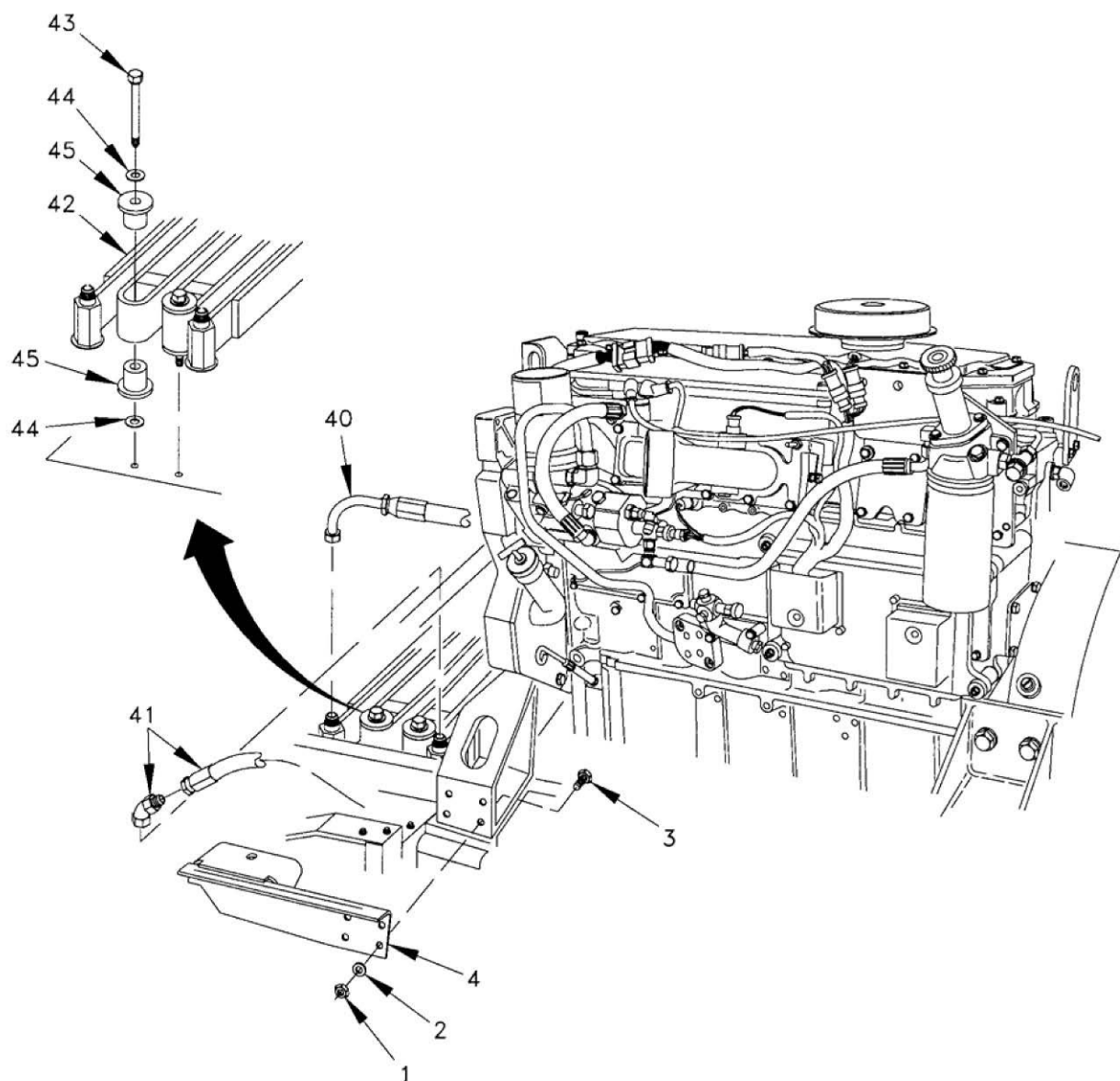


Figure 1. Fuel Cooler (Sheet 2 of 2).

END OF TASK

INSTALLATION

1. Install fuel cooler (Figure 1, Sheet 1, Item 42), eight bushings (Figure 1, Sheet 1, Item 45), washers (Figure 1, Sheet 1, Item 44), and four screws (Figure 1, Sheet 1, Item 43).
2. Connect hose (Figure 1, Sheet 1, Item 41) and hose (Figure 1, Sheet 1, Item 40).

NOTE

Install tiedown straps as required.

3. Install bottom front baffle (Figure 1, Sheet 1, Item 39) and left lower front base baffle (Figure 1, Sheet 1, Item 38) with four washers (Figure 1, Sheet 1, Item 37), lock washers (Figure 1, Sheet 1, Item 36), and screws (Figure 1, Sheet 1, Item 35).

4. Install four washers (Figure 1, Sheet 1, Item 34), lock washers (Figure 1, Sheet 1, Item 33), and screws (Figure 1, Sheet 1, Item 32).
5. Install four washers (Figure 1, Sheet 1, Item 31), lock washers (Figure 1, Sheet 1, Item 30), and screws (Figure 1, Sheet 1, Item 29).
6. Install two baffle base brackets (Figure 1, Sheet 1, Item 28 and 27) with four washers (Figure 1, Sheet 1, Item 26), lock washers (Figure 1, Sheet 1, Item 25), and screws (Figure 1, Sheet 1, Item 24).
7. Install left base baffle (Figure 1, Sheet 1, Item 23) and right base baffle (Figure 1, Sheet 1, Item 22).
8. Install three washers (Figure 1, Sheet 1, Item 21), lock washers (Figure 1, Sheet 1, Item 20), screws (Figure 1, Sheet 1, Item 19),
9. Install four washers (Figure 1, Sheet 1, Item 18), lock washers (Figure 1, Sheet 1, Item 17), screws (Figure 1, Sheet 1, Item 16),
10. Install three washers (Figure 1, Sheet 1, Item 15), lock washers (Figure 1, Sheet 1, Item 14), screws (Figure 1, Sheet 1, Item 13),
11. Install three washers (Figure 1, Sheet 1, Item 12), lock washers (Figure 1, Sheet 1, Item 11), screws (Figure 1, Sheet 1, Item 10),
12. Install plate (Figure 1, Sheet 1, Item 9) four washers (Figure 1, Sheet 1, Item 7), lock washers (Figure 1, Sheet 1, Item 8), two screws (Figure 1, Sheet 1, Item 6) and screws (Figure 1, Sheet 1, Item 5),
13. Install left and right radiator mounting brackets (Figure 1, Sheet 2, Item 4) with eight nuts (Figure 1, Sheet 2, Item 3), washers (Figure 1, Sheet 2, Item 2), and bolts (Figure 1, Sheet 2, Item 1).
14. Install radiator (WP 0066).
15. Install engine generator compartment ceiling (WP 0030).
16. Install front roof section housing assembly (WP 0028).

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****WATER SEPARATOR FILTER AND BRACKET: DRAINING, REPLACEMENT, REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Cap and plug set (WP 0123, Table 1, Item 8)
Filter
Gasket
Sealing compound (WP 0123, Table 1, Item 43)
Tiedown strap (WP 0123, Table 1, Item 50)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the fuel system.

DRAINING

1. Open left front door.
2. Rotate valve (Figure 1, Item 1) and air vent (Figure 1, Item 2) to allow water to drain from bowl (Figure 1, Item 3).
3. Rotate valve (Figure 1, Item 1) and air vent (Figure 1, Item 2) to close.
4. Close left front door.

END OF TASK

FILTER ELEMENT REPLACEMENT

1. Open left front doors.
2. Remove clamp (Figure 1, Item 4) and disconnect hose (Figure 1, Item 5) from drain port on bottom of water separator filter bowl (Figure 1, Item 3).
3. Remove bowl (Figure 1, Item 3) and gasket (Figure 1, Item 6) from water separator filter assembly (Figure 1, Item 7) and remove filter element (Figure 1, Item 8).
4. Inspect gasket and replace as required.
5. Add a light coat of fuel to the gasket and install new filter element (Figure 1, Item 8) into water separator assembly (Figure 1, Item 7). Apply a light coat of fuel to the gasket and install gasket (Figure 1, Item 6) and bowl (Figure 1, Item 3).
6. Connect hose (Figure 1, Item 5) to bottom of bowl (Figure 1, Item 3) and install clamp (Figure 1, Item 4).
7. Close left front doors.

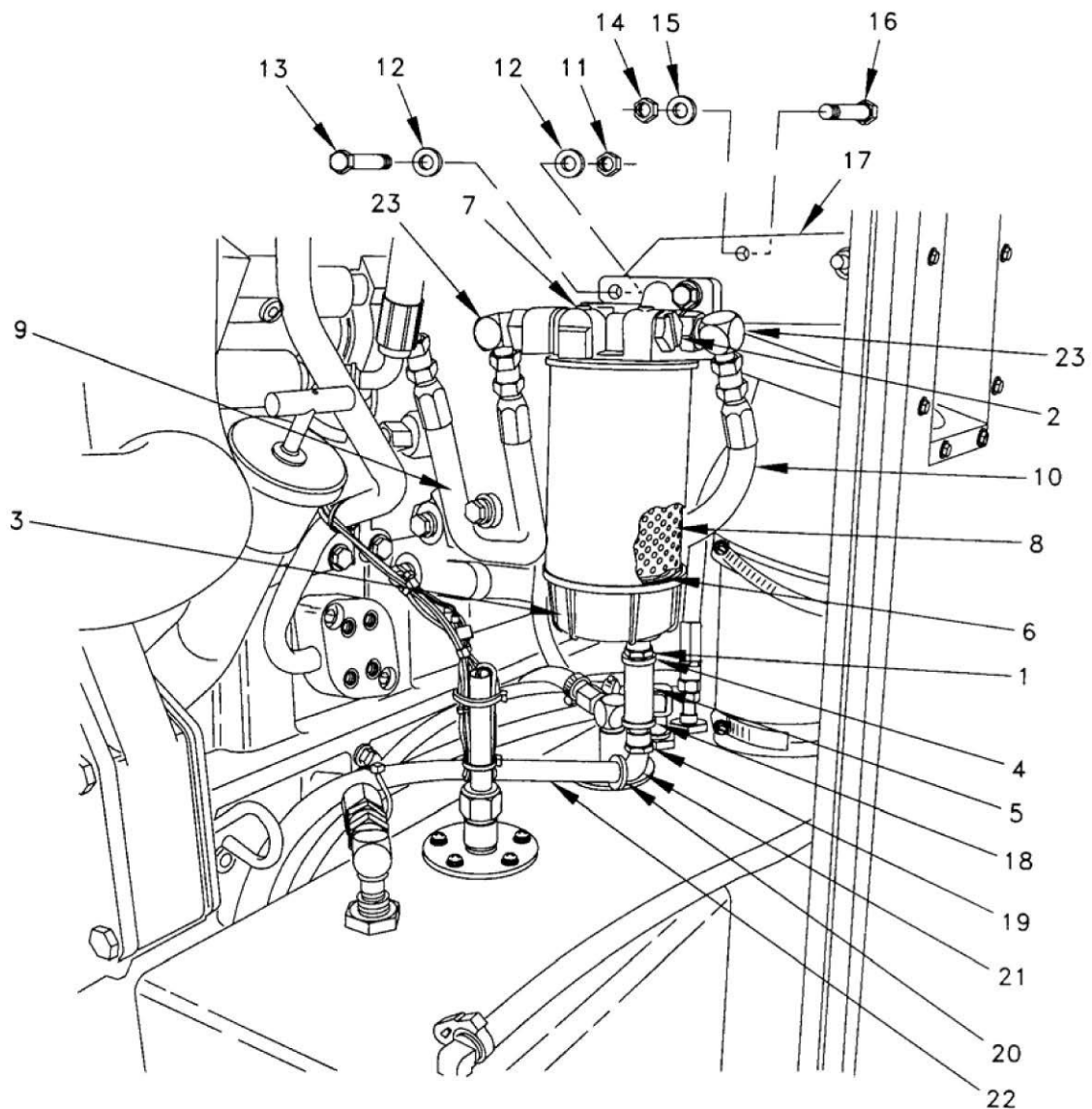


Figure 1. Water Separator Filter and Bracket.

END OF TASK

WATER SEPARATOR FILTER ELEMENT REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.

NOTE

Cut tiedown straps as required.

2. Open left front doors.
3. Remove clamp (Figure 1, Item 4) and disconnect hose (Figure 1, Item 5) from drain port on bottom of water separator filter bowl (Figure 1, Item 3).

4. Disconnect hose (Figure 1, Item 9) and hose (Figure 1, Item 10) from water separator filter assembly (Figure 1, Item 7).
5. Remove two nuts (Figure 1, Item 11), four washers (Figure 1, Item 12), two screws (Figure 1, Item 13), and water separator filter assembly (Figure 1, Item 7).
6. Remove two nuts (Figure 1, Item 14), washers (Figure 1, Item 15), screw (Figure 1, Item 16), and bracket (Figure 1, Item 17).
7. Remove hose clamp (Figure 1, Item 18), swivel (Figure 1, Item 19), clamp (Figure 1, Item 20), and elbow (Figure 1, Item 21), from hose (Figure 1, Item 22).
8. If necessary, remove two elbows (Figure 1, Item 23).

END OF TASK**WATER SEPARATOR FILTER INSTALLATION****NOTE**

Install tiedown straps as required.

1. Apply sealing compound to male threads and install two elbows (Figure 1, Item 23) on water separator filter assembly (Figure 1, Item 7).
2. Install elbow (Figure 1, Item 21) on hose (Figure 1, Item 22), with swivel (Figure 1, Item 19), and clamp (Figure 1, Item 18).
3. Install bracket (Figure 1, Item 17), two screws (Figure 1, Item 16), washers (Figure 1, Item 15), and nuts (Figure 1, Item 14).
4. Install water separator filter assembly (Figure 1, Item 7) on bracket (Figure 1, Item 17), and secure with two screws (Figure 1, Item 13), four washers (Figure 1, Item 12), and two nuts (Figure 1, Item 11).
5. Connect hose (Figure 1, Item 10) and hose (Figure 1, Item 9) to water separator filter assembly (Figure 1, Item 7).
6. Connect hose (Figure 1, Item 5) to drain port on bottom of water separator filter bowl (Figure 1, Item 3) and install clamp (Figure 1, Item 4).
7. Close left front door.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FUEL LEVEL SENDER: REMOVAL, TEST AND INSPECTION, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Cap and plug set (WP 0123, Table 1, Item 8)
Gasket
Sealing compound (WP 0123, Table 1, Item 43)
Tiedown strap (WP 0123, Table 1, Item 51)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the fuel system.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left rear doors.

NOTE

Cut tiedown straps as required.

3. Tag and disconnect wires from fuel level sender (Figure 1, Sheet 1, Item 1).

CAUTION

Note and mark orientation of sender assembly to ensure proper orientation of float when installed, or incorrect fuel level indications will result.

4. Remove five screws (Figure 1, Sheet 1, Item 2), lock washers (Figure 1, Sheet 1, Item 3), washers (Figure 1, Sheet 1, Item 4), fuel level sender assembly (Figure 1, Sheet 1, Item 1), and gasket (Figure 1, Sheet 1, Item 5).

END OF TASK**TEST AND INSPECTION**

1. Set up fuel level sender (Figure 1, Sheet 1, Item 1), fuel level indicator and DC power supply as shown in Figure 1, Sheet 2. Adjust power supply for 24-28 VDC.
2. Hold fuel level sender (Figure 1, Sheet 1, Item 1) in vertical position with armature (Figure 1, Sheet 2, Item 6) hanging down. Fuel level indicator should read "E" $\pm 1/8$ inch.
3. Raise armature (Figure 1, Sheet 2, Item 6) to full up position. Fuel level indicator should read "F" $\pm 1/8$ inch.
4. Check resistance with armature (Figure 1, Sheet 2, Item 6) full down and full up for correct readings.
5. If fuel level indicator readings or resistance measurements are incorrect, replace fuel level sender (Figure 1, Sheet 1, Item 1).
6. Bend armature (Figure 1, Sheet 2, Item 6) as required to achieve dimensions shown.

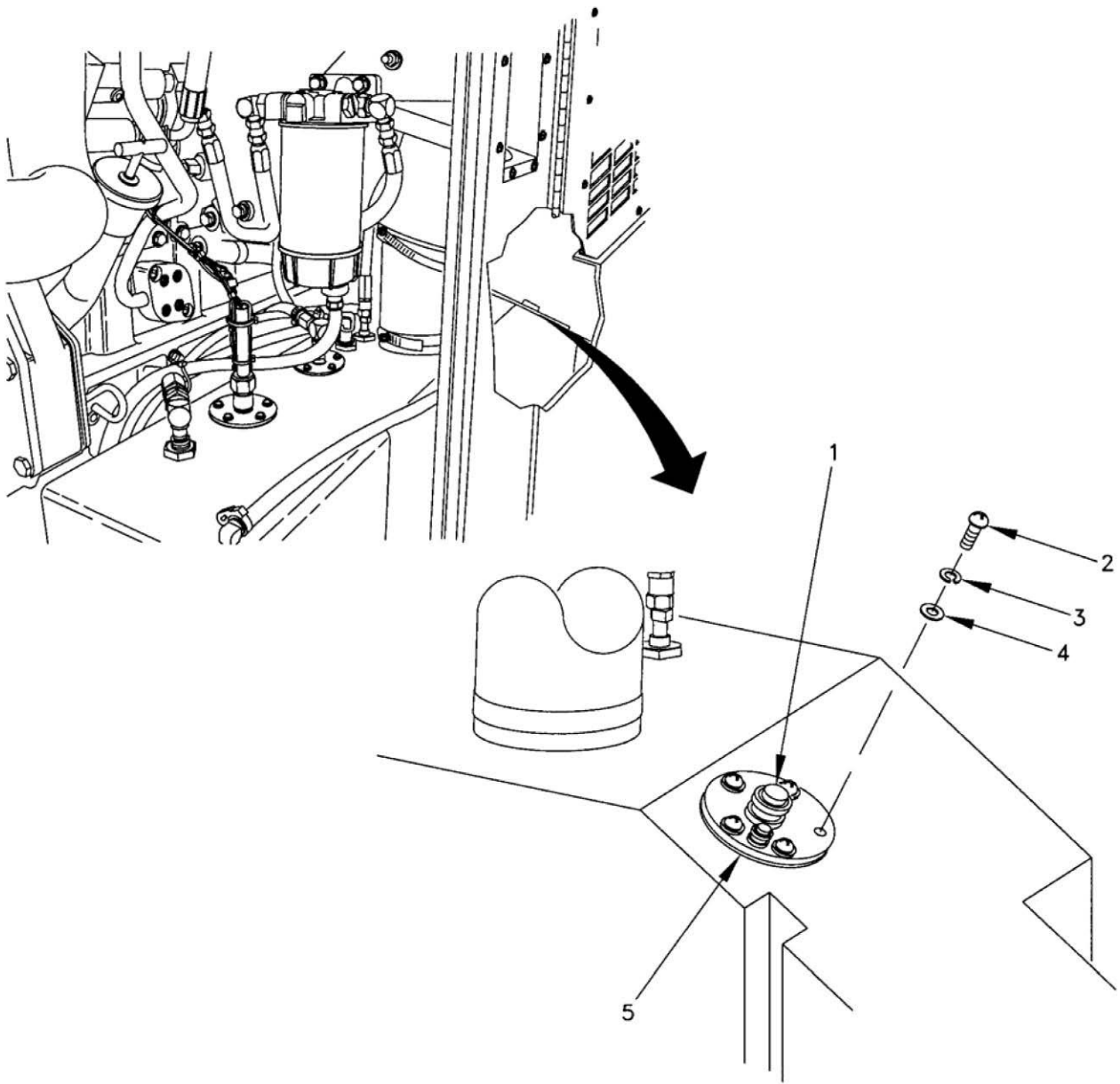


Figure 1. Fuel Level Sender (Sheet 1 of 2).

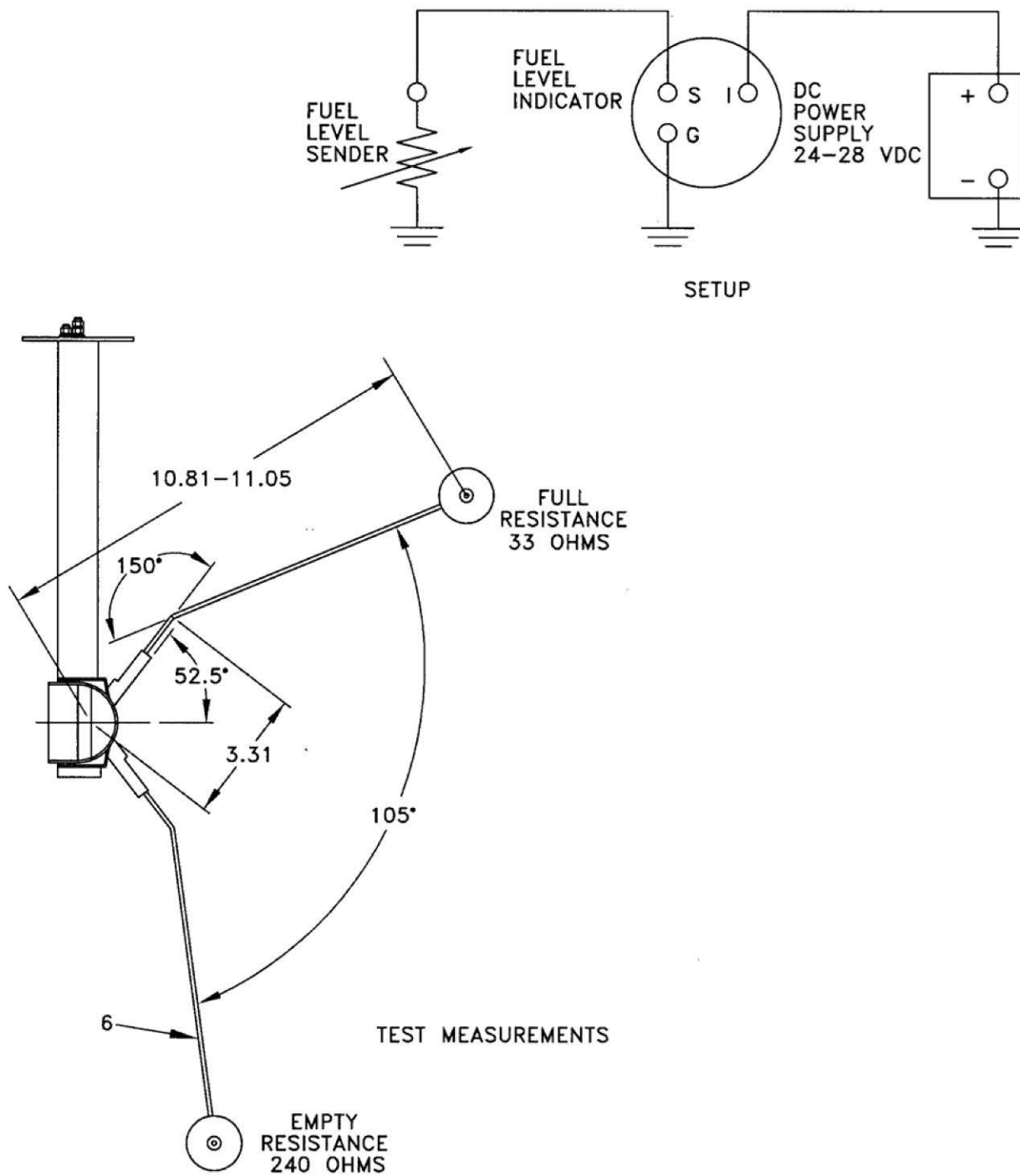


Figure 1. Fuel Level Sender (Sheet 2 of 2).

END OF TASK**INSTALLATION**

1. Clean area on fuel tank where gasket (Figure 1, Sheet 1, Item 5) is to be installed.

CAUTION

Install sender assembly as marked, to ensure proper orientation of float when installed, or incorrect fuel level indications will result.

2. Apply sealing compound to both sides of gasket (Figure 1, Sheet 1, Item 5) and install gasket, fuel level sender assembly (Figure 1, Sheet 1, Item 1), five washers (Figure 1, Sheet 1, Item 4), lock washers (Figure 1, Sheet 1, Item 3), and screws (Figure 1, Sheet 1, Item 2).

NOTE

Install tiedown straps as required.

3. Remove tags and connect wires from fuel level sender (Figure 1, Sheet 1, Item 1).
4. Close left rear doors.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FUEL TANK: REMOVAL, REPAIR, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Repair kit, adhesive (WP 0123, Table 1, Item 39)

Personnel Required

One

References

TM 9-6115-729-10
TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Auxiliary fuel pump removed (WP 0057)
Engine removed (WP 0104)
Fuel level switch assembly removed (WP 0054)
Fuel pickup tube assembly removed (WP 0056)
Fuel level sender removed (WP 0060)
Fuel filler inlet disconnected (WP 0055)
Fuel hoses and fittings removed (WP 0055)
Fuel drain valve and piping removed (WP 0055)
Front roof section housing assembly removed (WP 0028)
Rear roof section housing assembly removed (WP 0029)
Engine generator compartment ceiling assembly removed (WP 0030)
Front section housing assembly removed (WP 0032)
Rear section housing assembly removed (WP 0033)
Left center panel assembly removed (WP 0034)
Right center panel assembly removed (WP 0035)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the fuel system.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Remove four screws (Figure 1, Item 1), washers (Figure 1, Item 2), nuts (Figure 1, Item 3), two hold down assemblies (Figure 1, Item 4), and remove fuel tank (Figure 1, Item 5).

END OF TASK**REPAIR**

Repair damage to fuel tank with adhesive repair kit, following directions provided with the kit.

END OF TASK**INSTALLATION**

1. Install fuel tank (Figure 1, Item 5), two hold down assemblies (Figure 1, Item 4), four screws (Figure 1, Item 1), washers (Figure 1, Item 2), and nuts (Figure 1, Item 3).
2. Install fuel drain valve and piping (WP 0055).
3. Install fuel hoses and fittings (WP 0055).
4. Connect fuel filler inlet (WP 0055).
5. Install fuel level sender (WP 0060).
6. Install fuel pickup tube (WP 0056).
7. Install fuel level switch assembly (WP 0054).
8. Install engine (WP 0104).
9. Install auxiliary fuel pump (WP 0057).

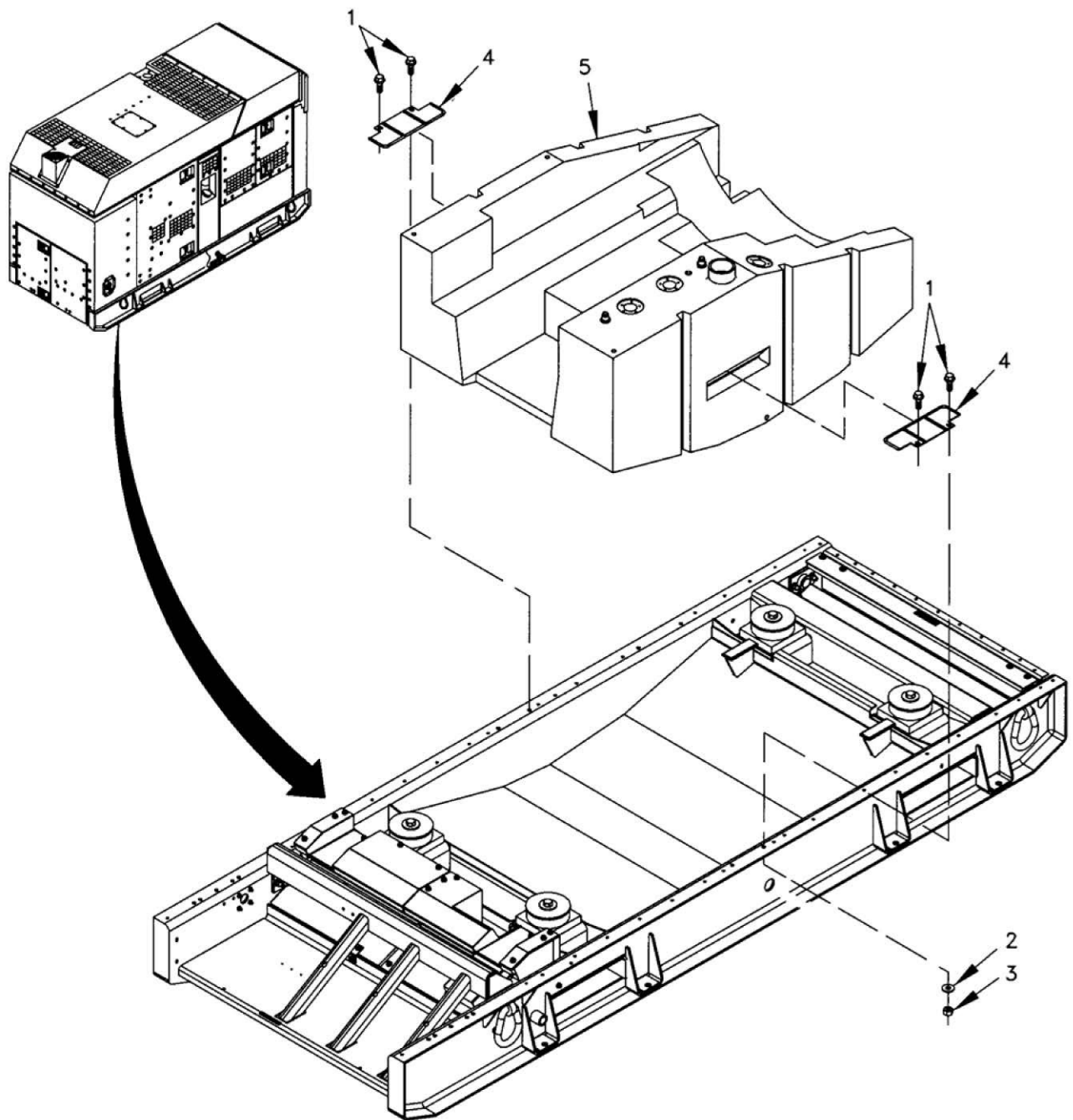


Figure 1. Fuel Tank Maintenance.

10. Install engine generator compartment ceiling assembly (WP 0030).
11. Install front section housing assembly (WP 0032).
12. Install rear section housing assembly (WP 0033).
13. Install front roof section housing assembly (WP 0028).
14. Install rear roof section housing assembly (WP 0029).
15. Install left center panel assembly (WP 0034).
16. Install right center panel assembly (WP 0035).

17. Service fuel tank (TM 9-6115-729-10).

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****COOLANT RECOVERY SYSTEM: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Antifreeze (WP 0123, Table 1, Item 7)
Cap and plug set (WP 0123, Table 1, Item 8)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Cooling system operates at high temperature and pressure. Contact with high pressure steam and/or liquids can result in burns and scalding. Shut down generator set, and allow system to cool before performing checks, services, and maintenance. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the fuel system.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right rear doors.
3. Place container under coolant recovery system bottle (Figure 1, Item 1).
4. Remove two hose clamps (Figure 1, Item 2) securing hoses (Figure 1, Item 3) and (Figure 1, Item 4) from coolant recovery system bottle (Figure 1, Item 1) and disconnect two hoses.
5. Drain coolant into suitable container until coolant recovery system is empty. Retain coolant for refilling cooling system.
6. Remove two screws (Figure 1, Item 5), washers (Figure 1, Item 7), lock washers (Figure 1, Item 6), and coolant recovery system bottle (Figure 1, Item 1).

END OF TASK

INSTALLATION

1. Install coolant recovery system bottle (Figure 1, Item 1), two lock washers (Figure 1, Item 6), washers (Figure 1, Item 7), and screws (Figure 1, Item 5).
2. Connect two hoses (Figure 1, Item 3) and (Figure 1, Item 4) to coolant recovery system bottle (Figure 1, Item 1) and secure with two hose clamps (Figure 1, Item 2).
3. Pour coolant into coolant recovery system bottle (Figure 1, Item 1). If necessary, add coolant so level is between HOT and COLD marks on bottle.
4. Close right rear doors.

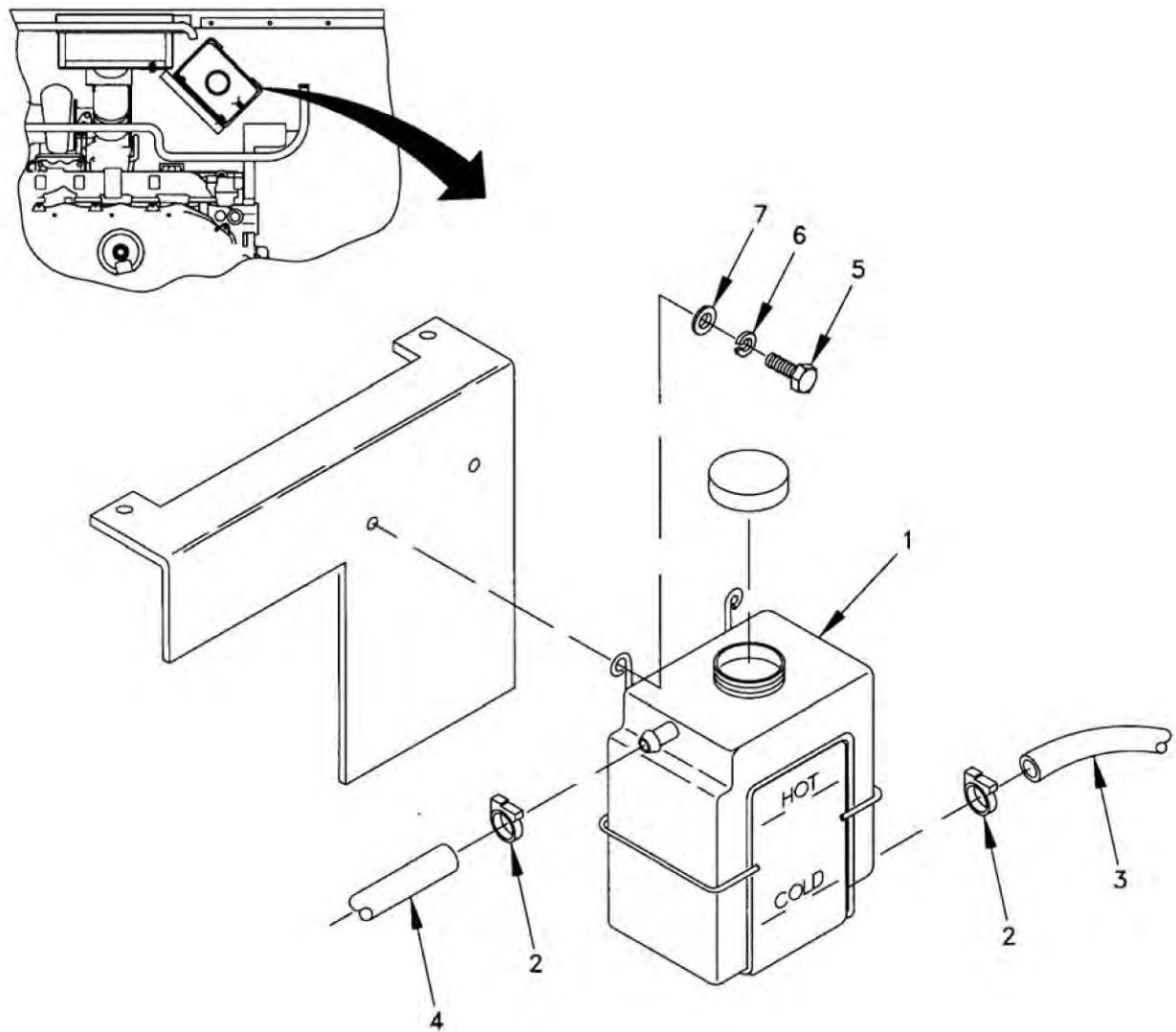


Figure 1. Coolant Recovery System.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****SURGE TANK: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Antifreeze (WP 0123, Table 1, Item 7)
Cap and plug set (WP 0123, Table 1, Item 8)
Sealing compound (WP 0123, Table 1, Item 43)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Right side access cover removed (WP 0027)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Cooling system operates at high temperature and pressure. Contact with high pressure steam and/or liquids can result in burns and scalding. Shut down generator set, and allow system to cool before performing checks, services, and maintenance. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the coolant system.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right rear doors and right front door.
3. Place container under COOLANT DRAIN on right side of TQG.
4. Remove coolant fill cap (Figure 1, Item 1) and open drain valve (Figure 1, Item 2) on right rear and drain valve (Figure 1, Item 3) on lower right side of engine. Drain approximately two gallons of coolant into suitable container until surge tank (Figure 1, Item 4) is empty. Retain coolant for refilling cooling system.
5. Close drain valves (Figure 1, Item 2) and (Figure 1, Item 3).
6. Remove hose clamp (Figure 1, Item 5) and disconnect hose (Figure 1, Item 6) from bottom of surge tank (Figure 1, Item 4).
7. Remove coolant level sensor (Figure 1, Item 7) and reducer fitting (Figure 1, Item 8) from surge tank (Figure 1, Item 4).
8. Loosen two hose clamps (Figure 1, Item 9) and disconnect water hose (Figure 1, Item 10) from top of surge tank (Figure 1, Item 4).
9. Loosen two hose clamps and tag and disconnect two hoses (Figure 1, Item 11) and (Figure 1, Item 12) from top of surge tank (Figure 1, Item 4).
10. Remove four locknuts (Figure 1, Item 13), washers (Figure 1, Item 14), and screws (Figure 1, Item 15), and remove two lower surge tank brackets (Figure 1, Item 16) and surge tank (Figure 1, Item 4) from two upper surge tank brackets (Figure 1, Item 17).
11. Remove four screws (Figure 1, Item 18), lock washers (Figure 1, Item 19), and washers (Figure 1, Item 20), and remove two upper surge tank brackets (Figure 1, Item 17).

END OF TASK

INSTALLATION

1. Install two upper surge tank brackets (Figure 1, Item 17) and secure with four washers (Figure 1, Item 20), lock washers (Figure 1, Item 19), and screws (Figure 1, Item 18).
2. Install surge tank (Figure 1, Item 4) and two lower surge tank brackets (Figure 1, Item 16) and secure with four screws (Figure 1, Item 15), washers (Figure 1, Item 14), and locknuts (Figure 1, Item 13).
3. Remove tags and connect two hoses (Figure 1, Item 12) and (Figure 1, Item 11) to top of surge tank (Figure 1, Item 4).
4. Connect water hose (Figure 1, Item 10) to top of surge tank (Figure 1, Item 4) and tighten two hose clamps (Figure 1, Item 9).
5. Apply sealing compound to male threads of reducer fitting (Figure 1, Item 8) and coolant level sensor (Figure 1, Item 7) and install reducer and coolant level sensor on surge tank (Figure 1, Item 4).

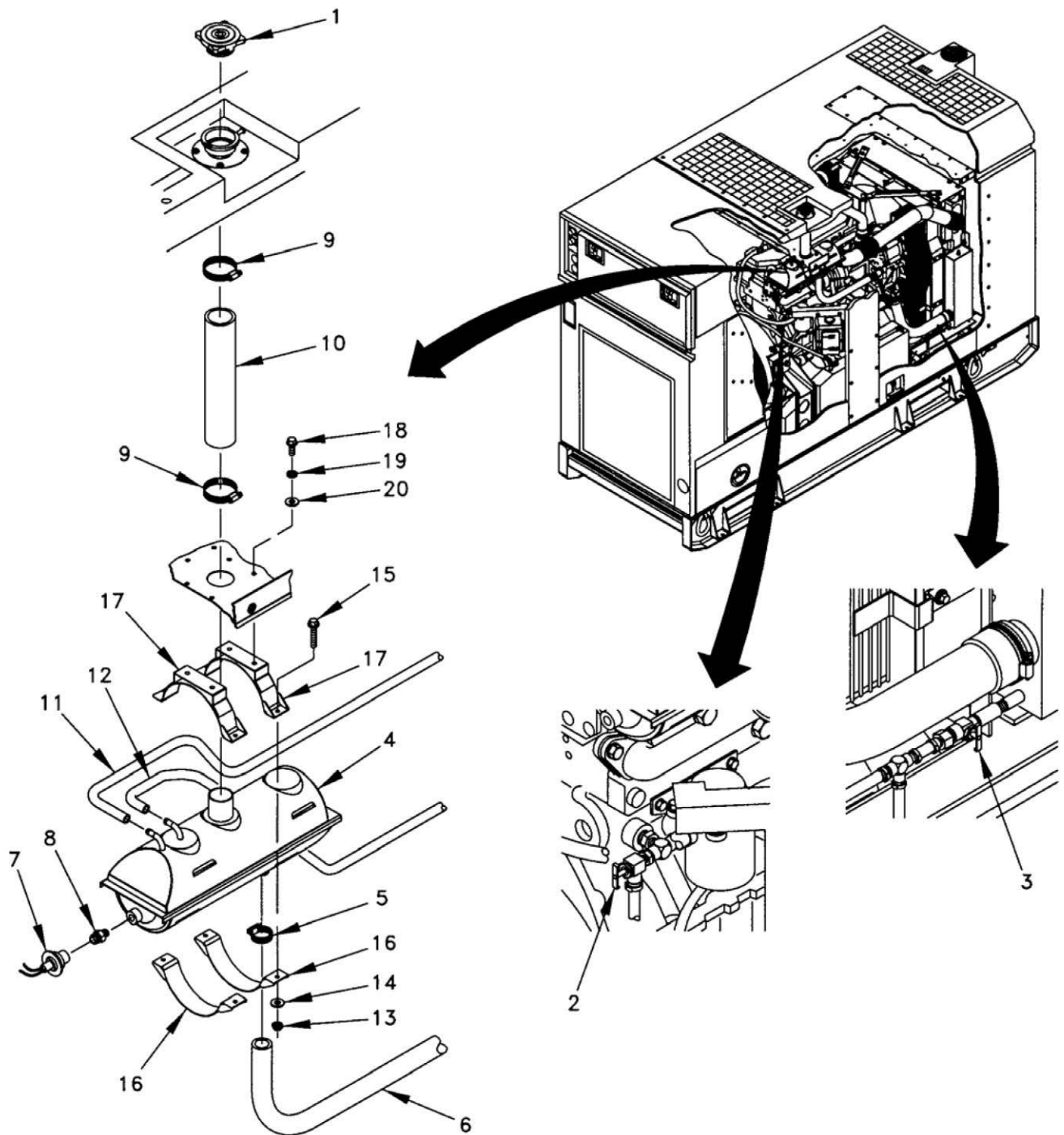


Figure 1. Surge Tank.

6. Connect hose (Figure 1, Item 6) to bottom of surge tank (Figure 1, Item 4) and install hose clamp (Figure 1, Item 5).
7. Pour coolant into COOLANT FILL and install fill cap (Figure 1, Item 1). If necessary, add coolant so level is between HOT and COLD marks on coolant recovery system bottle.

WARNING

Operating the generator set with any access door open exposes personnel to a high noise level. Double hearing protection must be worn when operating or working near the generator set with any access door open. Failure to comply can cause hearing damage to personnel.

8. Operate TQG and check for leaks.
9. Install right side access cover (WP 0027).
10. Close right rear doors and right front door.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FAN AND FAN GUARDS: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Antifreeze (WP 0123, Table 1, Item 7)

Personnel Required

Two

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Cooling system drained (WP 0066)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Cooling system operates at high temperature and pressure. Contact with high pressure steam and/or liquids can result in burns and scalding. Shut down generator set, and allow system to cool before performing checks, services, and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

Fan has sharp blades. Use caution and wear gloves when removing or installing belts. Failure to comply can cause injury to personnel.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right front door and left front door.

NOTE

Table 1 lists removal and installation steps for fan and fan guard elements.

Table 1. WP 0064 Guide.

NAME	FIGURE 1 ITEM	REMOVAL STEPS	INSTALLATION STEPS
Upper right fan guard	5	3	4 through 9, 10 and 11, 20
Lower right fan guard	9	4 and 5	4 through 9, 10 and 11, 18 and 19
Upper left fan guard	16	6 and 7	3, 10 through 13, 16 and 17
Lower left fan guard	17	8 and 9	3, 10 through 15
Left shroud flange	21	10, 11, 12, 15 through 20	3, 10 through 13
Right shroud flange	6	10, 11, 12, 13, 14	4 through 9, 10 and 11
Fan and adapter	71, 72	3 through 21	1 and 2

3. Remove four screws (Figure 1, Sheet 1, Item 1), lock washers (Figure 1, Sheet 1, Item 2), washers (Figure 1, Sheet 1, Item 3), hose clamp (Figure 1, Sheet 1, Item 4), and upper right fan guard (Figure 1, Sheet 1, Item 5) from right shroud flange (Figure 1, Sheet 1, Item 6).
4. Remove nut (Figure 1, Sheet 1, Item 7) and washer (Figure 1, Sheet 1, Item 8) securing lower right fan guard (Figure 1, Sheet 1, Item 9) to engine.

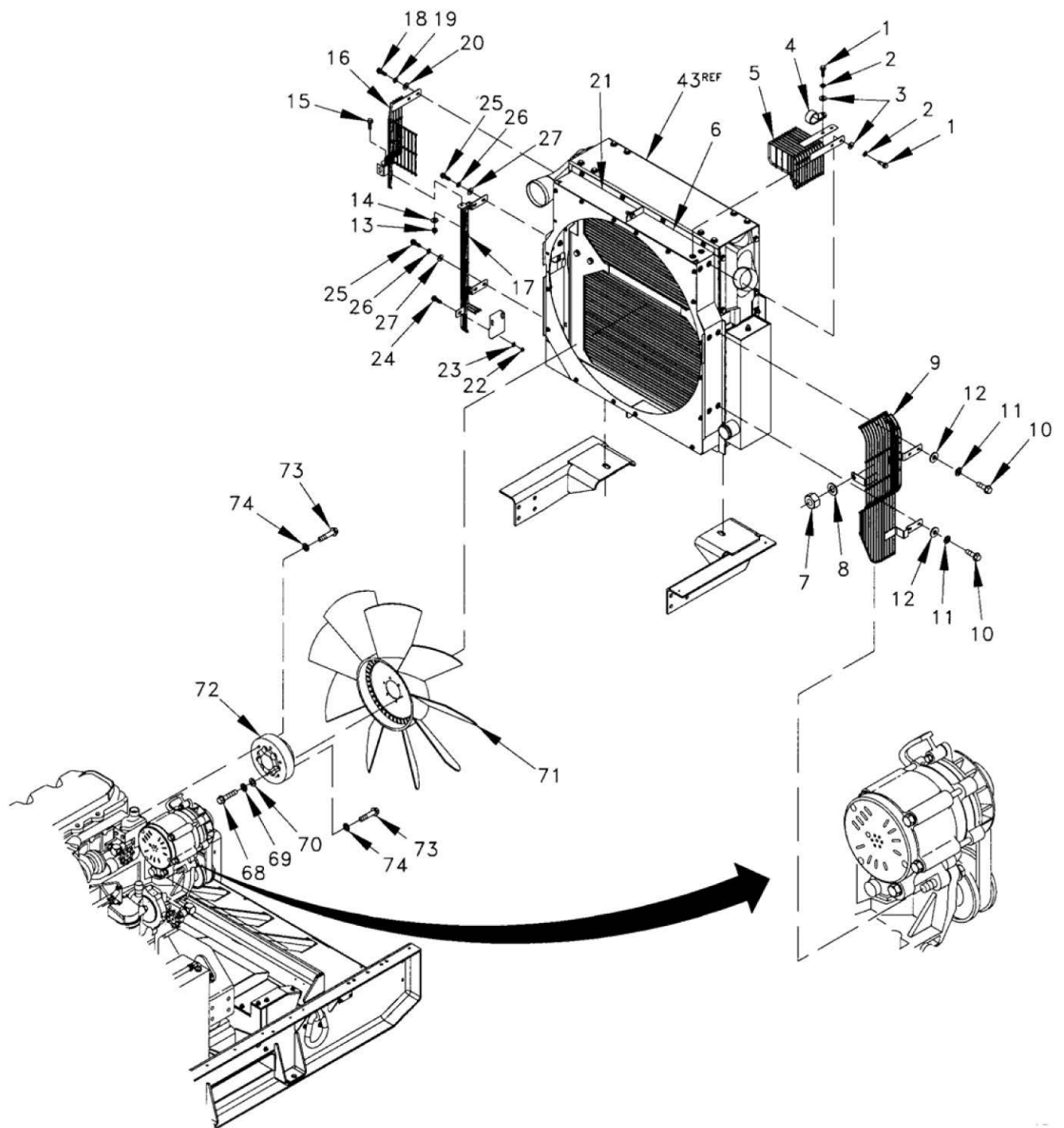


Figure 1. Fan and Fan Guards (Sheet 1 of 3).

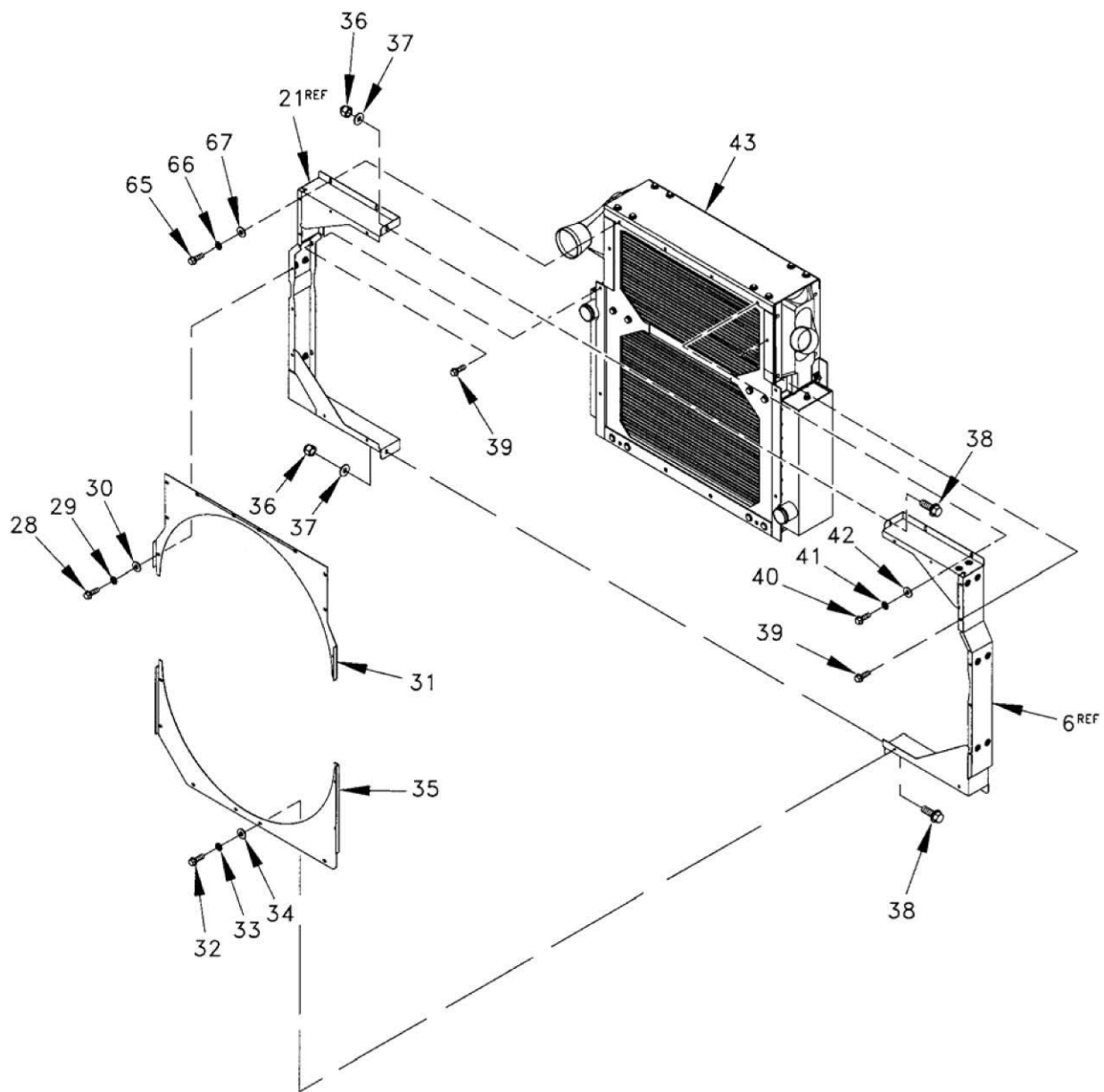


Figure 1. Fan and Fan Guards (Sheet 2 of 3).

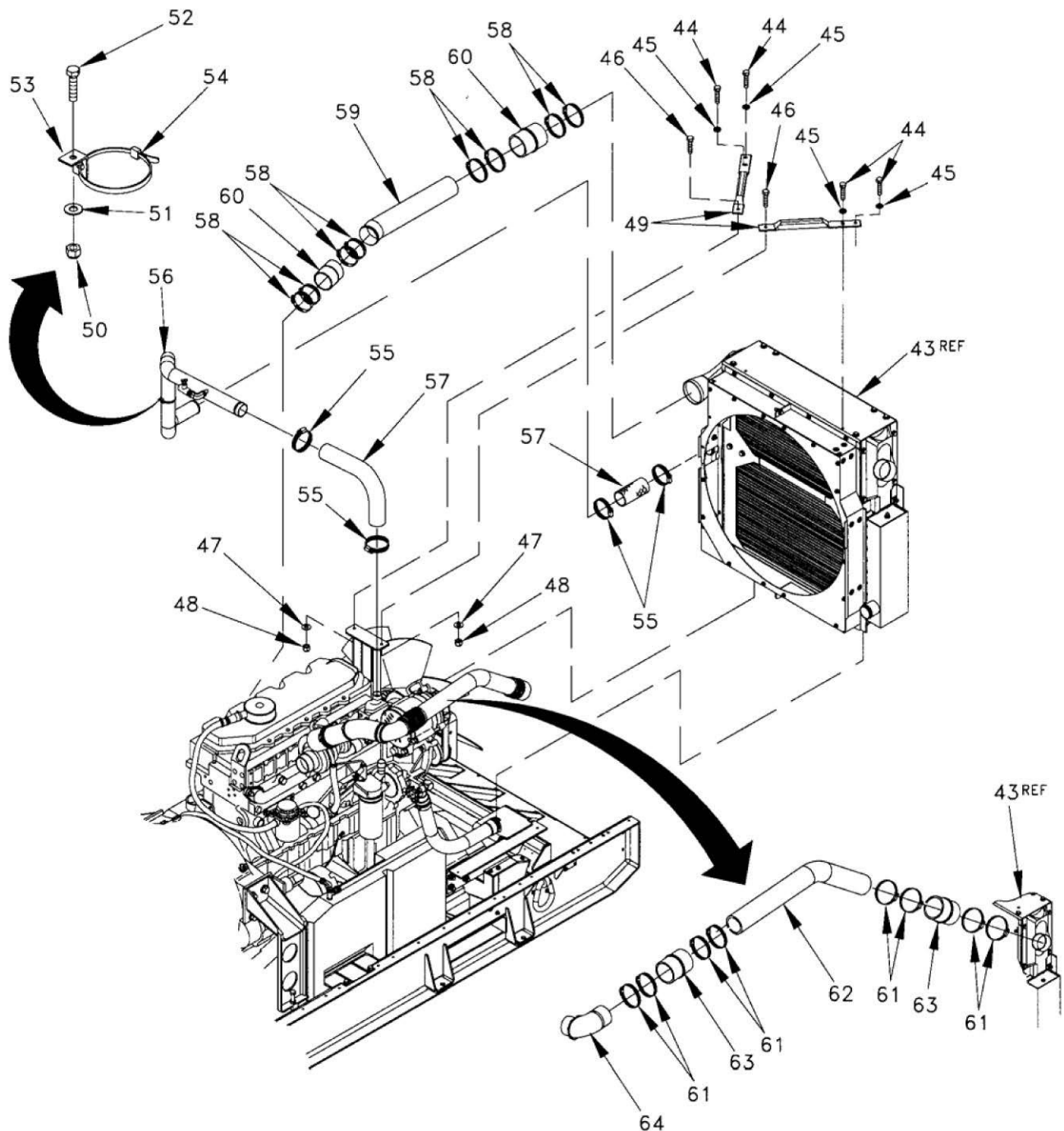


Figure 1. Fan and Fan Guards (Sheet 3 of 3).

5. Remove four screws (Figure 1, Sheet 1, Item 10), lock washers (Figure 1, Sheet 1, Item 11), washers (Figure 1, Sheet 1, Item 12), and lower right fan guard (Figure 1, Sheet 1, Item 9) from right shroud flange (Figure 1, Sheet 1, Item 6).
6. Remove locknut (Figure 1, Sheet 1, Item 13), washer (Figure 1, Sheet 1, Item 14), and screw (Figure 1, Sheet 1, Item 15) that attach upper left fan guard (Figure 1, Sheet 1, Item 16) to lower left fan guard (Figure 1, Sheet 1, Item 17).

7. Remove two screws (Figure 1, Sheet 1, Item 18), lock washers (Figure 1, Sheet 1, Item 19), washers (Figure 1, Sheet 2, Item 20), and upper left fan guard (Figure 1, Sheet 2, Item 16) from left shroud flange (Figure 1, Sheet 2, Item 21).
8. Remove locknut (Figure 1, Sheet 1, Item 22), washer (Figure 1, Sheet 1, Item 23), and screw (Figure 1, Sheet 1, Item 24) securing lower left fan guard (Figure 1, Sheet 1, Item 17) to engine bracket.
9. Remove four screws (Figure 1, Sheet 1, Item 25), lock washers (Figure 1, Sheet 1, Item 26), washers (Figure 1, Sheet 1, Item 27), and lower left fan guard (Figure 1, Sheet 1, Item 17) from left shroud flange (Figure 1, Sheet 1, Item 21).
10. Remove 10 screws (Figure 1, Sheet 2, Item 28), lock washers (Figure 1, Sheet 2, Item 29), washers (Figure 1, Sheet 2, Item 30), and upper shroud plate (Figure 1, Sheet 2, Item 31) from left shroud flange (Figure 1, Sheet 1, Item 21) and right shroud flange (Figure 1, Sheet 1, Item 6).
11. Remove eight screws (Figure 1, Sheet 2, Item 32), lock washers (Figure 1, Sheet 2, Item 33), washers (Figure 1, Sheet 2, Item 34), and lower shroud plate (Figure 1, Sheet 2, Item 35) from left shroud flange (Figure 1, Sheet 1, Item 21) and right shroud flange (Figure 1, Sheet 1, Item 6).
12. Remove locknut (Figure 1, Sheet 2, Item 36), washer (Figure 1, Sheet 2, Item 37), screw (Figure 1, Sheet 2, Item 38) in two places, top and bottom, that attach right shroud flange (Figure 1, Sheet 1, Item 6) and left shroud flange (Figure 1, Sheet 1, Item 21) together.
13. Remove three screws (Figure 1, Sheet 2, Item 39) from left fan shroud (Figure 1, Sheet 1, Item 21) and three screws (Figure 1, Sheet 2, Item 39) from right fan shroud (Figure 1, Sheet 1, Item 6).
14. Remove four screws (Figure 1, Sheet 2, Item 40), lock washers (Figure 1, Sheet 2, Item 41), washers (Figure 1, Sheet 2, Item 42), and right shroud flange (Figure 1, Sheet 1, Item 6) from radiator (Figure 1, Sheet 2, Item 43).
15. Remove four screws (Figure 1, Sheet 3, Item 44) and lock washers (Figure 1, Sheet 3, Item 45), two screws (Figure 1, Sheet 3, Item 46), washers (Figure 1, Sheet 3, Item 47), nuts (Figure 1, Sheet 3, Item 48), and two upper radiator mounting tie rods (Figure 1, Sheet 3, Item 49).
16. Remove nut (Figure 1, Sheet 3, Item 50), washer (Figure 1, Sheet 3, Item 51), screw (Figure 1, Sheet 3, Item 52), bracket (Figure 1, Sheet 3, Item 53), and loop clamp (Figure 1, Sheet 3, Item 54).
17. Remove four hose clamps (Figure 1, Sheet 3, Item 55), upper radiator hose (Figure 1, Sheet 3, Item 56), and two coolant hoses (Figure 1, Sheet 3, Item 57).
18. Remove eight hose clamps (Figure 1, Sheet 3, Item 58), two hose connectors (Figure 1, Sheet 3, Item 59), and manifold in hose (Figure 1, Sheet 3, Item 60).
19. Remove eight hose clamps (Figure 1, Sheet 3, Item 61), manifold out tube (Figure 1, Sheet 3, Item 62), and two hose connectors (Figure 1, Sheet 3, Item 63) from radiator (Figure 1, Sheet 3, Item 43) and from turbo out elbow (Figure 1, Sheet 3, Item 64).
20. Remove four screws (Figure 1, Sheet 2, Item 65), lock washers (Figure 1, Sheet 2, Item 66), washers (Figure 1, Sheet 2, Item 67), and left shroud flange (Figure 1, Sheet 1, Item 21) from radiator (Figure 1, Sheet 2, Item 43).
21. Remove six screws (Figure 1, Sheet 1, Item 68), lock washers (Figure 1, Sheet 1, Item 69), washers (Figure 1, Sheet 1, Item 70), and fan (Figure 1, Sheet 1, Item 71) from fan mounting adapter (Figure 1, Sheet 1, Item 72).
22. Remove six screws (Figure 1, Sheet 1, Item 73), lock washers (Figure 1, Sheet 1, Item 74), and fan mounting adapter (Figure 1, Sheet 1, Item 72).

END OF TASK

INSTALLATION

1. Install fan mounting adapter (Figure 1, Sheet 1, Item 72), six lock washers (Figure 1, Sheet 1, Item 74), and screws (Figure 1, Sheet 1, Item 73). Torque screws (Figure 1, Sheet 1, Item 73) to 27-33 lb•ft (37-44 N•m).

2. Install fan (Figure 1, Sheet 1, Item 71) on fan mounting adapter (Figure 1, Sheet 1, Item 72), and secure with six washers (Figure 1, Sheet 1, Item 70), lock washers (Figure 1, Sheet 1, Item 69), and screws (Figure 1, Sheet 1, Item 68). Torque screws (Figure 1, Sheet 1, Item 68) to 27-33 lb•ft (37-44 N•m).
3. Install left shroud flange (Figure 1, Sheet 1, Item 21) on radiator (Figure 1, Sheet 2, Item 43), and secure with four washers (Figure 1, Sheet 2, Item 67), lock washers (Figure 1, Sheet 2, Item 66), and screws (Figure 1, Sheet 2, Item 65).
4. Install two hose connectors (Figure 1, Sheet 3, Item 63), and manifold out tube (Figure 1, Sheet 3, Item 62) onto radiator (Figure 1, Sheet 3, Item 43) and turbo out elbow (Figure 1, Sheet 3, Item 64) with eight hose clamps (Figure 1, Sheet 3, Item 61).
5. Install manifold in hose (Figure 1, Sheet 3, Item 60), two hose connectors (Figure 1, Sheet 3, Item 59), and eight hose clamps (Figure 1, Sheet 3, Item 58).
6. Install two coolant hoses (Figure 1, Sheet 3, Item 57), upper radiator hose (Figure 1, Sheet 3, Item 56), and four hose clamps (Figure 1, Sheet 3, Item 55).
7. Install bracket (Figure 1, Sheet 3, Item 53), and loop clamp (Figure 1, Sheet 3, Item 54), with screw (Figure 1, Sheet 3, Item 52), washer (Figure 1, Sheet 3, Item 51), and nut (Figure 1, Sheet 3, Item 50).
8. Install two upper radiator mounting tie rods (Figure 1, Sheet 3, Item 49), two screws (Figure 1, Sheet 3, Item 46), washers (Figure 1, Sheet 3, Item 47), nuts (Figure 1, Sheet 3, Item 48), four screws (Figure 1, Sheet 3, Item 44) and lock washers (Figure 1, Sheet 3, Item 45).
9. Install right shroud flange (Figure 1, Sheet 1, Item 6) on radiator (Figure 1, Sheet 2, Item 43), and secure with four washers (Figure 1, Sheet 2, Item 42), lock washers (Figure 1, Sheet 2, Item 41), and screws (Figure 1, Sheet 1, Item 40).
10. Install three screws (Figure 1, Sheet 2, Item 39) to left fan shroud and three screws (Figure 1, Sheet 2, Item 39) to right fan shroud.
11. Secure right shroud flange (Figure 1, Sheet 1, Item 6) and left shroud flange (Figure 1, Sheet 1, Item 21) together by installing screw (Figure 1, Sheet 2, Item 38), washers (Figure 1, Sheet 2, Item 37), and locknut (Figure 1, Sheet 1, Item 36) in two places, top and bottom.
12. Install lower shroud plate (Figure 1, Sheet 2, Item 35) on left shroud flange (Figure 1, Sheet 1, Item 21) and right shroud flange (Figure 1, Sheet 2, Item 6), and secure with eight washers (Figure 1, Sheet 2, Item 34), lock washers (Figure 1, Sheet 2, Item 33), and screws (Figure 1, Sheet 2, Item 32).
13. Install upper shroud plate (Figure 1, Sheet 2, Item 31) on left shroud flange (Figure 1, Sheet 1, Item 21) and right shroud flange (Figure 1, Sheet 1, Item 6), and secure with 10 washers (Figure 1, Sheet 2, Item 30), lock washers (Figure 1, Sheet 2, Item 29), and screws (Figure 1, Sheet 2, Item 28).
14. Install lower left fan guard (Figure 1, Sheet 1, Item 17) on left shroud flange (Figure 1, Sheet 1, Item 21), and secure with four washers (Figure 1, Sheet 1, Item 27), lock washers (Figure 1, Sheet 1, Item 26), and screws (Figure 1, Sheet 1, Item 25).
15. Install screw (Figure 1, Sheet 1, Item 24), washer (Figure 1, Sheet 1, Item 23), and locknut (Figure 1, Sheet 1, Item 22) on lower left fan guard (Figure 1, Sheet 2, Item 17).
16. Install upper left fan guard (Figure 1, Sheet 1, Item 16) on left shroud flange (Figure 1, Sheet 1, Item 21), and secure with two washers (Figure 1, Sheet 1, Item 20), lock washers (Figure 1, Sheet 1, Item 19), and screws (Figure 1, Sheet 1, Item 18).
17. Connect upper left fan guard (Figure 1, Sheet 1, Item 16) to lower left fan guard (Figure 1, Sheet 1, Item 17), and secure with screw (Figure 1, Sheet 1, Item 15), washer (Figure 1, Sheet 1, Item 14), and locknut (Figure 1, Sheet 1, Item 13).
18. Install lower right fan guard (Figure 1, Sheet 1, Item 9) on right shroud flange (Figure 1, Sheet 1, Item 6), and secure with four washers (Figure 1, Sheet 1, Item 12), lock washers (Figure 1, Sheet 1, Item 11), and screws (Figure 1, Sheet 1, Item 10).
19. Install washer (Figure 1, Sheet 1, Item 8) and nut (Figure 1, Sheet 1, Item 7) securing lower right fan guard (Figure 1, Sheet 1, Item 9) to engine.
20. Install upper right fan guard (Figure 1, Sheet 1, Item 5) and hose clamp (Figure 1, Sheet 1, Item 4) on right shroud flange (Figure 1, Sheet 1, Item 6), and secure with four washers (Figure 1, Sheet 1, Item 3), lock washers (Figure 1, Sheet 1, Item 2), and screws (Figure 1, Sheet 1, Item 1).

21. Refill cooling system with saved coolant and add coolant as required (WP 0066).
22. Close left front door and right front door.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****COOLANT HOSE ASSEMBLIES: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Antifreeze (WP 0123, Table 1, Item 7)
Cap and plug set (WP 0123, Table 1, Item 8)
Sealing compound (WP 0123, Table 1, Item 43)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Cooling system operates at high temperature and pressure. Contact with high pressure steam and/or liquids can result in burns and scalding. Shut down generator set, and allow system to cool before performing checks, services, and maintenance. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the coolant system.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left front door and right front door.

NOTE

Coolant system capacity is 38 quarts (34.5 liters).

3. Place suitable container under coolant drain on front right side of TQG. Open drain valve (Figure 1, Sheet 1, Item 1) on right side at rear of engine, and drain valve (Figure 1, Sheet 1, Item 2) on front right side bottom of engine, and drain coolant. Save coolant for refilling system.
4. On right side, remove two clamps (Figure 1, Sheet 2, Item 3) and hose (Figure 1, Sheet 1, Item 4) from radiator filler neck (Figure 1, Sheet 2, Item 5) and from coolant recovery system (under surge tank) (Figure 1, Sheet 2, Item 6).
5. At lower right rear of engine, remove two clamps (Figure 1, Sheet 1, Item 7) and hose (Figure 1, Sheet 1, Item 8) from coolant recovery system (Figure 1, Sheet 2, Item 6) and from drain tee (Figure 1, Sheet 1, Item 9) on lower right rear of engine.
6. Remove hose clamp (Figure 1, Sheet 1, Item 10) and hose clamp (Figure 1, Sheet 1, Item 11) and remove hose (Figure 1, Sheet 1, Item 12) from drain tee (Figure 1, Sheet 1, Item 9) and drain valve (Figure 1, Sheet 1, Item 1), and remove drain valve (Figure 1, Sheet 1, Item 1), reducer bushing (Figure 1, Sheet 1, Item 13), tee (Figure 1, Sheet 1, Item 14), pipe plug (Figure 1, Sheet 1, Item 15), nipple (Figure 1, Sheet 1, Item 16), and adapter fitting (Figure 1, Sheet 1, Item 17).
7. Remove two hose clamps (Figure 1, Sheet 1, Item 7) and (Figure 1, Sheet 1, Item 18), and remove hose (Figure 1, Sheet 1, Item 19) and drain tee (Figure 1, Sheet 1, Item 9).
8. Remove hose clamp (Figure 1, Sheet 1, Item 20) and hose (Figure 1, Sheet 1, Item 21).
9. Remove fitting (Figure 1, Sheet 1, Item 22), two hose clamps (Figure 1, Sheet 1, Item 23), hose (Figure 1, Sheet 1, Item 24), fitting (Figure 1, Sheet 1, Item 25), drain valve (Figure 1, Sheet 1, Item 2), nipple (Figure 1, Sheet 1, Item 26), and elbow (Figure 1, Sheet 1, Item 27).
10. At left side of engine, remove locknut (Figure 1, Sheet 2, Item 28), washer (Figure 1, Sheet 2, Item 29), screw (Figure 1, Sheet 2, Item 30), clamp (Figure 1, Sheet 2, Item 31), four hose clamps (Figure 1, Sheet 2, Item 33), upper radiator hose (Figure 1, Sheet 2, Item 32), radiator hose (Figure 1, Sheet 2, Item 34), and radiator hose (Figure 1, Sheet 2, Item 35).
11. Remove two hose clamps (Figure 1, Sheet 2, Item 36) and remove hose (Figure 1, Sheet 2, Item 37) from surge tank and engine. Remove fitting (Figure 1, Sheet 2, Item 38).

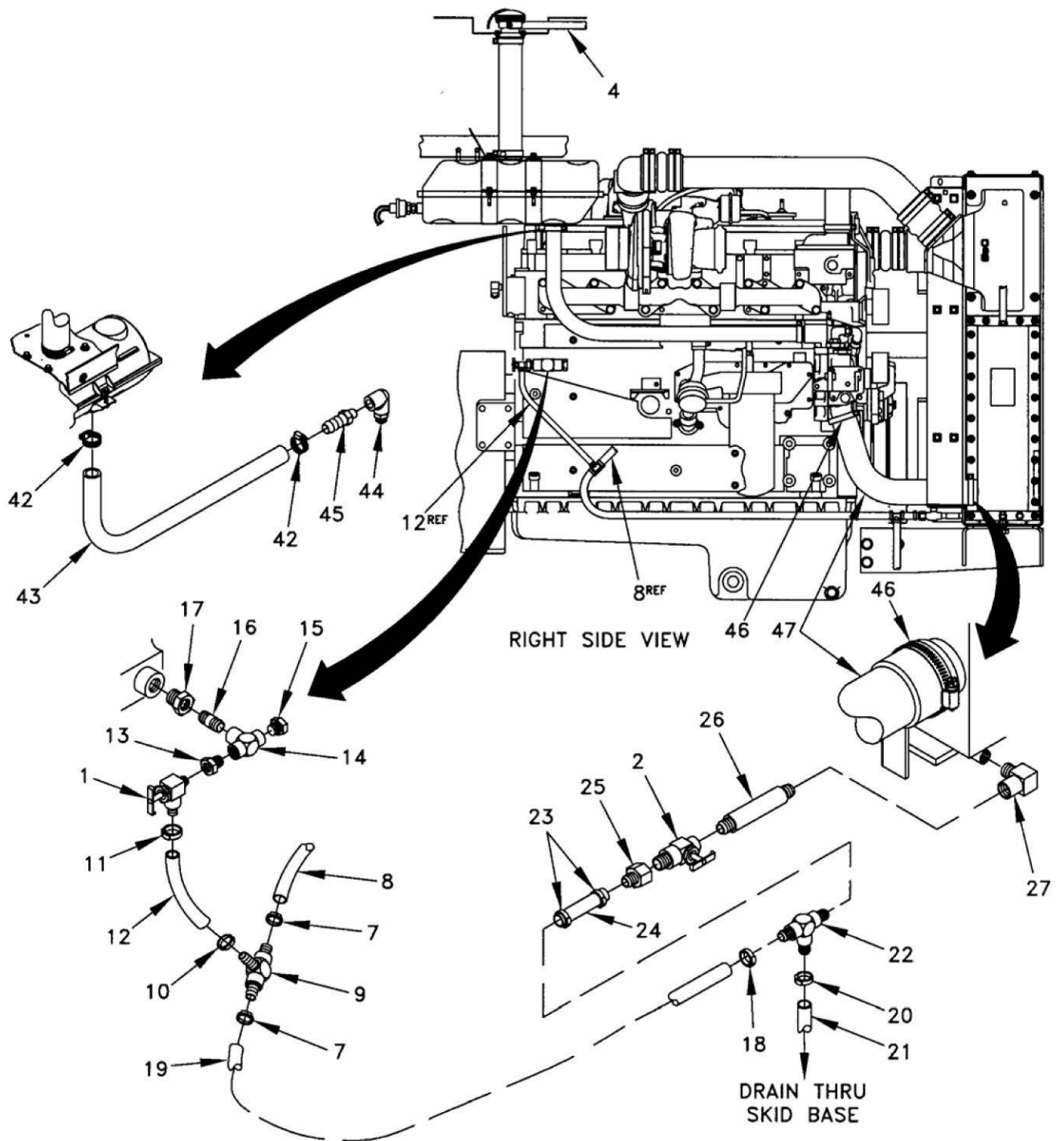


Figure 1. Coolant Hose Assemblies (Sheet 1 of 2).

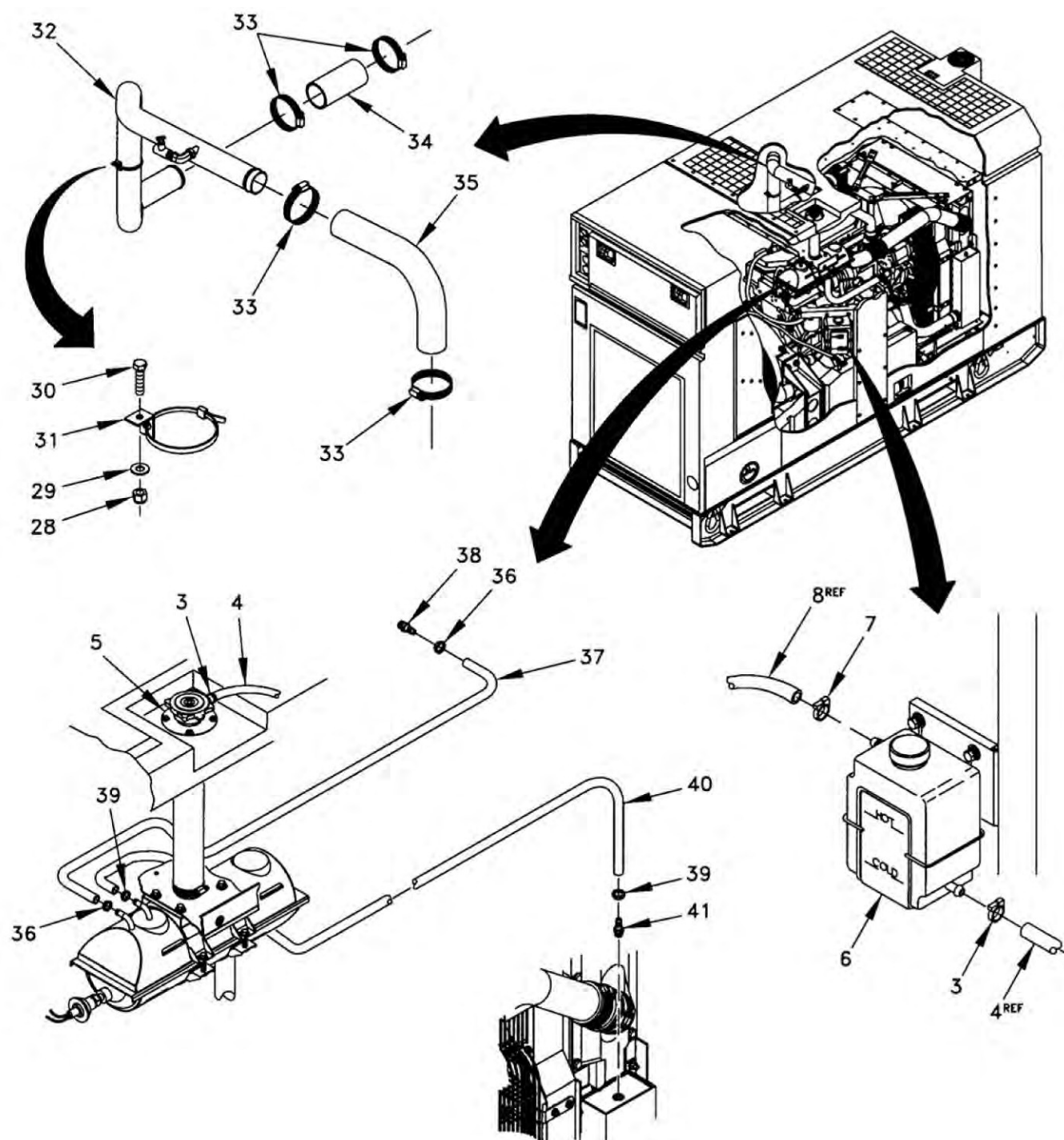


Figure 1. Coolant Hose Assemblies (Sheet 2 of 2).

12. Remove two hose clamps (Figure 1, Sheet 2, Item 39) and remove hose (Figure 1, Sheet 2, Item 40) from surge tank and radiator. Remove fitting (Figure 1, Sheet 2, Item 41).
13. Remove two hose clamps (Figure 1, Sheet 1, Item 42) and remove hose (Figure 1, Sheet 1, Item 43) from beneath surge tank and from elbow (Figure 1, Sheet 1, Item 44). Remove elbow (Figure 1, Sheet 1, Item 44) and fitting (Figure 1, Sheet 1, Item 45) from engine.

14. Remove two hose clamps (Figure 1, Sheet 1, Item 46) and lower radiator hose (Figure 1, Sheet 1, Item 47).

END OF TASK

INSTALLATION

NOTE

Apply sealing compound to all male pipe threads before connecting.

1. At right side of engine, install lower radiator hose (Figure 1, Sheet 1, Item 47) and two hose clamps (Figure 1, Sheet 1, Item 46).
2. Install fitting (Figure 1, Sheet 1, Item 45) and elbow (Figure 1, Sheet 1, Item 44) on engine. Install hose (Figure 1, Sheet 1, Item 43) to elbow (Figure 1, Sheet 1, Item 44) and to bottom side of surge tank with two hose clamps (Figure 1, Sheet 2, Item 42).
3. Install fitting (Figure 1, Sheet 2, Item 41) to right top side of radiator, and install hose (Figure 1, Sheet 2, Item 40) to fitting (Figure 1, Sheet 2, Item 41) and to top of surge tank with two hose clamps (Figure 1, Sheet 2, Item 39).
4. Install fitting (Figure 1, Sheet 2, Item 38) to right side of engine, and install hose (Figure 1, Sheet 2, Item 37) to fitting (Figure 1, Sheet 2, Item 38) and to top of surge tank with two hose clamps (Figure 1, Sheet 2, Item 36).
5. Install radiator hose (Figure 1, Sheet 2, Item 35), radiator hose (Figure 1, Sheet 2, Item 34), and upper radiator hose (Figure 1, Sheet 2, Item 32), four hose clamps (Figure 1, Sheet 2, Item 33), clamp (Figure 1, Sheet 2, Item 31), screw (Figure 1, Sheet 2, Item 30), washer (Figure 1, Sheet 2, Item 29), and locknut (Figure 1, Sheet 2, Item 28).
6. At lower right front of engine, install elbow (Figure 1, Sheet 1, Item 27), nipple (Figure 1, Sheet 1, Item 26), drain valve (Figure 1, Sheet 1, Item 2), fitting (Figure 1, Sheet 1, Item 25), hose (Figure 1, Sheet 1, Item 24), fitting (Figure 1, Sheet 1, Item 22), and two hose clamps (Figure 1, Sheet 1, Item 23).
7. Install hose (Figure 1, Sheet 1, Item 21) and hose clamp (Figure 1, Sheet 1, Item 20).
8. Connect hose (Figure 1, Sheet 1, Item 19) and install drain tee (Figure 1, Sheet 1, Item 9) and two hose clamps (Figure 1, Sheet 1, Item 7).
9. At lower right rear of engine, install adapter fitting (Figure 1, Sheet 1, Item 17), nipple (Figure 1, Sheet 1, Item 16), pipe plug (Figure 1, Sheet 1, Item 15), tee (Figure 1, Sheet 1, Item 14), reducer bushing (Figure 1, Sheet 1, Item 13), and drain valve (Figure 1, Sheet 1, Item 1). Connect hose (Figure 1, Sheet 1, Item 12) to drain tee (Figure 1, Sheet 1, Item 9) and to drain valve (Figure 1, Sheet 1, Item 1) with hose clamp (Figure 1, Sheet 1, Item 11) and hose clamp (Figure 1, Sheet 1, Item 10).
10. Connect hose (Figure 1, Sheet 1, Item 8) from coolant recovery system (Figure 1, Sheet 2, Item 6) (under surge tank) to drain tee (Figure 1, Sheet 1, Item 9) using hose clamps (Figure 1, Sheet 1, Item 7) and (Figure 1, Sheet 2, Item 7).
11. Connect hose (Figure 1, Sheet 1, Item 4) from radiator filler neck (Figure 1, Sheet 2, Item 5) to coolant recovery system (Figure 1, Sheet 2, Item 6) using hose clamps (Figure 1, Sheet 2, Item 3).
12. Close drain valve (Figure 1, Sheet 1, Item 2) and drain valve (Figure 1, Sheet 1, Item 1).
13. Refill cooling system with coolant.
14. Close right front door and left front door.
15. Bring generator set to operating temperature and check for leaks.
16. Check coolant and fill as required.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****RADIATOR ASSEMBLY: REMOVAL, REPAIR, INSTALLATION, FLUSHING, CLEANING**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Acid (WP 0123, Table 1, Item 1)
Alkaline (WP 0123, Table 1, Item 2)
Antifreeze (WP 0123, Table 1, Item 7)
Cap and plug set (WP 0123, Table 1, Item 8)
Sealing compound (WP 0123, Table 1, Item 43)

Personnel Required

Two

References

TB 750-651
TM 750-254
TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Fan guards, shrouds, and upper and lower shroud plates removed (WP 0064)
Engine generator compartment ceiling assembly removed (WP 0030)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Cooling system operates at high temperature and pressure. Contact with high pressure steam and/or liquids can result in burns and scalding. Shut down generator set, and allow system to cool before performing checks, services, and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

Radiator weighs more than 37 pounds (17 kg) and requires a two-person lift. Lifting radiator can cause back strain. Ensure proper lifting techniques are used when lifting radiator. Failure to comply can cause injury to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the coolant system.

REMOVAL

1. Ensure generator set is fully stopped, Engine Control switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left front door and right front door.

NOTE

Coolant system capacity is 38 qt (34.5 l).

3. Place suitable container under COOLANT DRAIN on front right side of TQG. Open drain valve (Figure 1, Sheet 1, Item 1) on right side at rear of engine, and drain valve (Figure 1, Sheet 1, Item 2) on lower right front of engine, and drain coolant. Save coolant for refilling system.
4. Remove four hose clamps (Figure 1, Sheet 1, Item 3), manifold out tube (Figure 1, Sheet 1, Item 4), and two hose connectors (Figure 1, Sheet 1, Item 5) from radiator (Figure 1, Sheet 1, Item 6) and from turbo out elbow (Figure 1, Sheet 1, Item 7).
5. Remove two hose clamps (Figure 1, Sheet 1, Item 8) and lower radiator hose (Figure 1, Sheet 1, Item 9).
6. Remove hose clamp (Figure 1, Sheet 1, Item 10) and disconnect coolant hose (Figure 1, Sheet 1, Item 11) from female connector (Figure 1, Sheet 1, Item 12) on drain valve (Figure 1, Sheet 1, Item 2) on lower right side of engine.
7. Remove female connector (Figure 1, Sheet 1, Item 12), drain valve (Figure 1, Sheet 1, Item 2), and nipple (Figure 1, Sheet 1, Item 13) from radiator (Figure 1, Sheet 1, Item 6).
8. At left side of engine, remove four hose clamps (Figure 1, Sheet 2, Item 14), manifold in hose (Figure 1, Sheet 2, Item 15), and two hose connectors (Figure 1, Sheet 2, Item 16) from radiator (Figure 1, Sheet 1, Item 6) and manifold.
9. At top of radiator (Figure 1, Sheet 1, Item 6), remove nut (Figure 1, Sheet 2, Item 17), washer (Figure 1, Sheet 2, Item 18), screw (Figure 1, Sheet 2, Item 19), loop clamp (Figure 1, Sheet 2, Item 20), and bracket (Figure 1, Sheet 2, Item 21) supporting upper radiator hose (Figure 1, Sheet 2, Item 22).
10. Remove four hose clamps (Figure 1, Sheet 2, Item 23), upper radiator hose (Figure 1, Sheet 2, Item 22), and two coolant hoses (Figure 1, Sheet 2, Item 24).
11. Remove four screws (Figure 1, Sheet 2, Item 25) and lock washers (Figure 1, Sheet 2, Item 26), two screws (Figure 1, Sheet 2, Item 27), washers (Figure 1, Sheet 2, Item 28), nuts (Figure 1, Sheet 2, Item 29), and two upper radiator mounting tie rods (Figure 1, Sheet 2, Item 30).

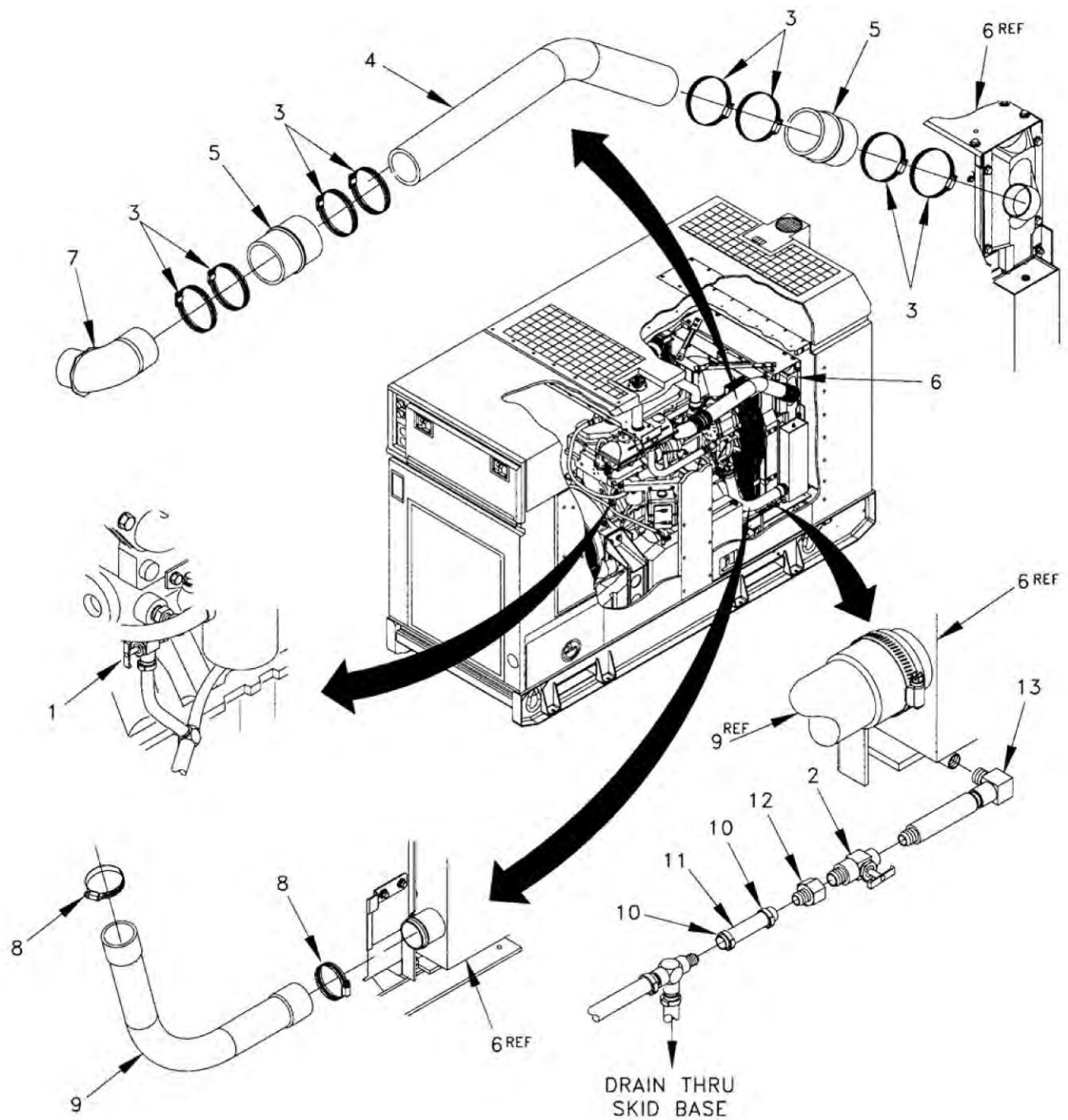


Figure 1. Radiator Assembly (Sheet 1 of 2).

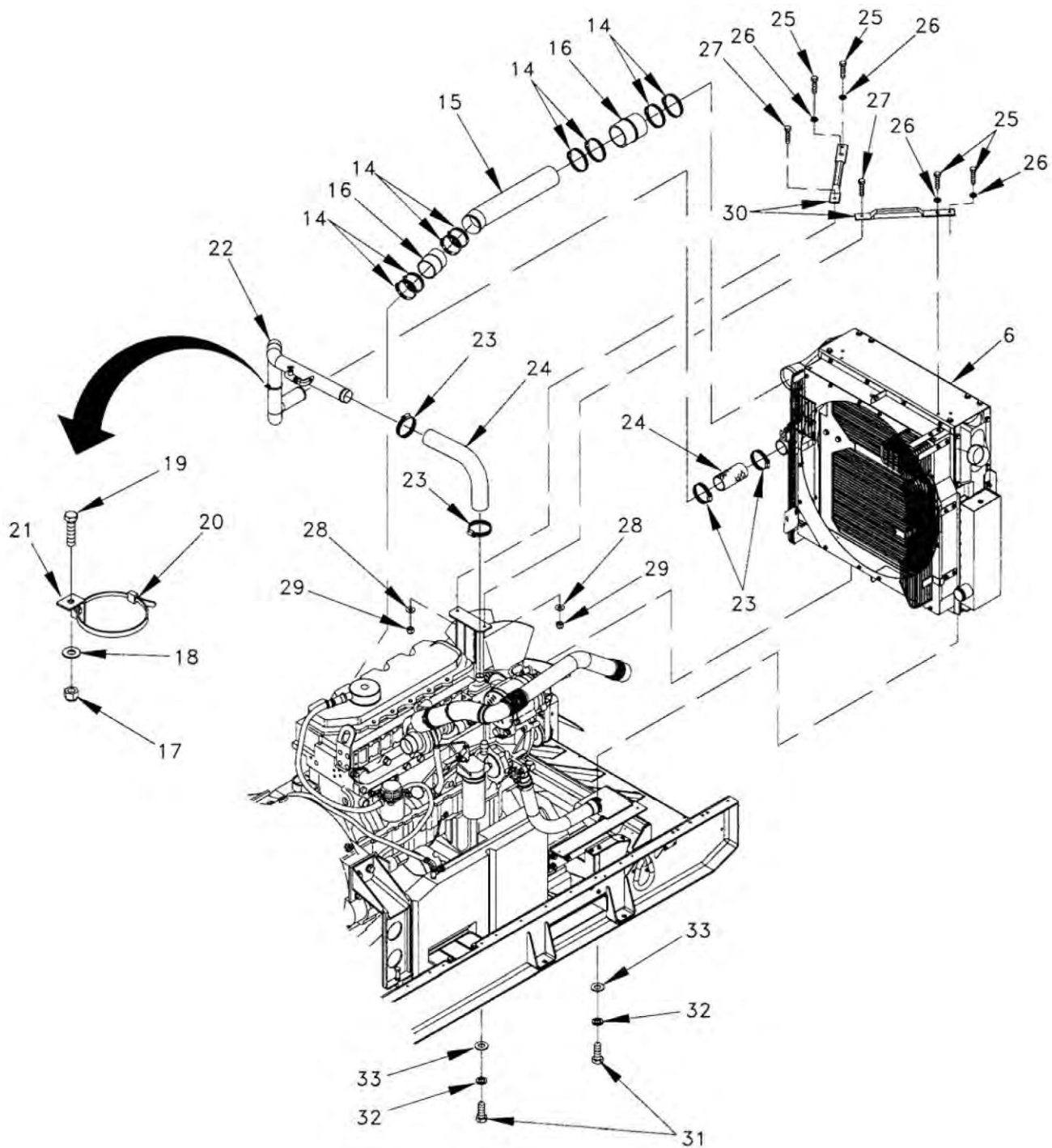


Figure 1. Radiator Assembly (Sheet 2 of 2).

WARNING

Radiator weighs 140 pounds (64 kg) and requires a two-person lift. Lifting radiator can cause back strain. Ensure proper lifting techniques are used when lifting radiator. Failure to comply can cause injury to personnel.

12. Under radiator (Figure 1, Sheet 1, Item 6), remove two screws (Figure 1, Sheet 2, Item 31), lock washers (Figure 1, Sheet 2, Item 32), and washers (Figure 1, Sheet 2, Item 33), and remove radiator.

END OF TASK**REPAIR**

For repair of the radiator, refer to procedures in TM 750-254, Cooling Systems: Tactical Vehicles.

END OF TASK**INSTALLATION****NOTE**

Apply sealing compound to all male pipe threads before connecting.

1. Install radiator (Figure 1, Sheet 1, Item 6) through left front door assembly (latch) and install two washers (Figure 1, Sheet 2, Item 33), lock washers (Figure 1, Sheet 2, Item 32) and screws (Figure 1, Sheet 2, Item 31) under radiator.
2. At top of radiator (Figure 1, Sheet 1, Item 6), install two upper radiator mounting tie rods (Figure 1, Sheet 2, Item 30), four nuts (Figure 1, Sheet 2, Item 29), washers (Figure 1, Sheet 2, Item 28), and screws (Figure 1, Sheet 2, Item 27), and four lock washers (Figure 1, Sheet 2, Item 26) and screws (Figure 1, Sheet 2, Item 25).
3. Install two coolant hoses (Figure 1, Sheet 2, Item 24), upper radiator hose (Figure 1, Sheet 2, Item 22), and four hose clamps (Figure 1, Sheet 2, Item 23).
4. Install bracket (Figure 1, Sheet 2, Item 21), loop clamp (Figure 1, Sheet 2, Item 20), screw (Figure 1, Sheet 2, Item 19), washer (Figure 1, Sheet 2, Item 18), and nut (Figure 1, Sheet 2, Item 17).
5. At left side of engine, install two hose connectors (Figure 1, Sheet 2, Item 16), manifold in hose (Figure 1, Sheet 2, Item 15), and four hose clamps (Figure 1, Sheet 2, Item 14).
6. At lower right side of engine, install nipple (Figure 1, Sheet 1, Item 13), drain valve (Figure 1, Sheet 1, Item 2), and female connector (Figure 1, Sheet 1, Item 12) on radiator (Figure 1, Sheet 1, Item 6).
7. Connect coolant hose (Figure 1, Sheet 1, Item 11) to female connector (Figure 1, Sheet 1, Item 12) and install hose clamp (Figure 1, Sheet 1, Item 10).
8. Install lower radiator hose (Figure 1, Sheet 1, Item 9) and two hose clamps (Figure 1, Sheet 1, Item 8).
9. On right side of engine, connect two hose connectors (Figure 1, Sheet 1, Item 5) to radiator (Figure 1, Sheet 1, Item 6) and to turbo out elbow (Figure 1, Sheet 1, Item 7), and install manifold out tube (Figure 1, Sheet 1, Item 4) and four hose clamps (Figure 1, Sheet 1, Item 3).
10. Install fan and fan guards (WP 0064).
11. Install engine generator compartment ceiling assembly (WP 0030).

NOTE

Coolant system capacity is 38 quarts (34.5 l).

12. Close drain valves (Figure 1, Sheet 1, Item 1) and (Figure 1, Sheet 1, Item 2). Refill cooling system with coolant. Add coolant as required.
13. Set Battery Disconnect Switch to ON and DEAD CRANK SWITCH to ON. On EMCP set Engine Control Switch (ECS) to START.
14. With engine running, check for leaks.

15. Close left front door and right front door.

END OF TASK

FLUSHING

For flushing of the cooling system, refer to procedures in TM 750-254, Cooling Systems: Tactical Vehicles.

END OF TASK

CLEANING

For cleaning of the cooling system, refer to procedures in TB 750-651 (Use of Antifreeze Multi-Engine Type Compounds and Test Kits in Engine Cooling Systems) and TM 750-254 (Cooling Systems: Tactical Vehicles).

NOTE

Do not use Acid and Alkaline cleaners together. Mixing Acid and Alkaline cleaners will lose effectiveness to clean radiator. Use acid cleaner first for removal of scale, corrosion, and oil fouling. Use Alkaline cleaner for removal of silicate gelation. Removal of silicate gelation is the primary use of Alkaline cleaner. All other uses provide marginal results.

Use cleaning compounds listed (WP 0123, Items 1 and 2) when necessary to clean heavily rusted or partially clogged cooling systems. A 10% solution is suitable for most requirements (1 gal of cleaner mixed with 9 gal of water). A 20% solution may be used for heavy corrosion and scale deposits (2 gal of cleaner mixed with 8 gal of water).

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****EXHAUST SYSTEM: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Wire, nonelectrical (WP 0123, Table 1, Item 9)

Personnel Required

Two

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Access covers removed (WP 0027)
Front roof section housing assembly removed (WP 0028)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

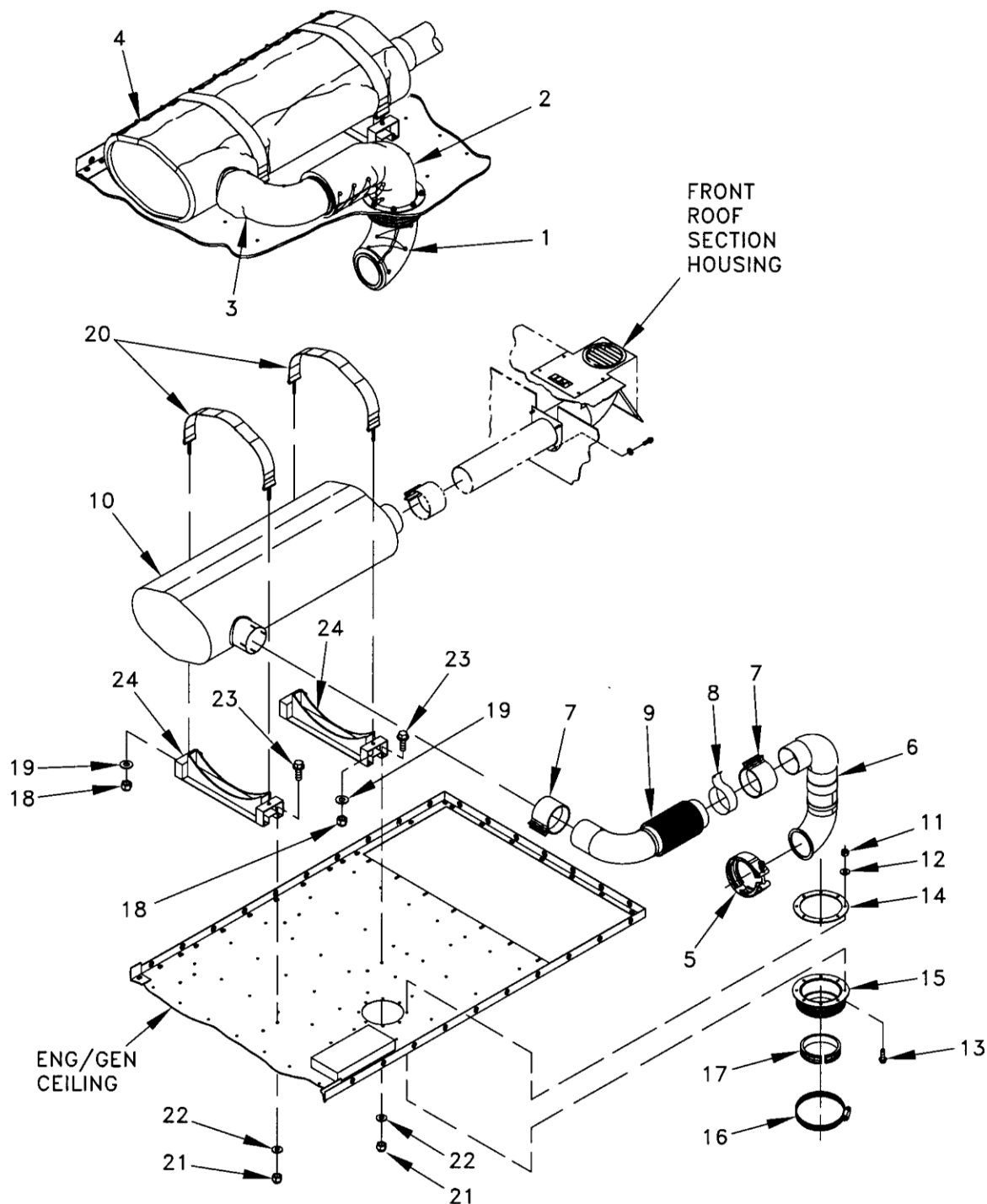
DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Exhaust system can get very hot. Shut down generator set, and allow system to cool before performing checks, services and maintenance. Failure to comply can cause severe burns and injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch (ECS) is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left front door and right front door.

**Figure 1. Exhaust System.**

WARNING

The muffler blanket is made of fiberglass fabric which can break down with heat and flexing. Fiberglass fibers can irritate the flesh and respiratory passages. Wear protective eyewear, mask, and gloves when removing or installing muffler blanket. Failure to comply can cause injury to personnel.

3. Remove lacing and elbow blanket (Figure 1, Item 1), inlet pipe turbo end blanket (Figure 1, Item 2), inlet pipe muffler end blanket (Figure 1, Item 3), and muffler blanket (Figure 1, Item 4).
4. Remove pipe clamp (Figure 1, Item 5) from exhaust in elbow (Figure 1, Item 6).
5. Remove two exhaust pipe clamps (Figure 1, Item 7) and one ceramic strip (Figure 1, Item 8) that attaches flex exhaust tube assembly (Figure 1, Item 9) to muffler (Figure 1, Item 10). Remove flex exhaust tube assembly (Figure 1, Item 9) from muffler and exhaust in elbow (Figure 1, Item 6).
6. Remove eight locknuts (Figure 1, Item 11), washers (Figure 1, Item 12), and screws (Figure 1, Item 13), and remove exhaust flange (Figure 1, Item 14), exhaust in elbow (Figure 1, Item 6), and bellows (Figure 1, Item 15). Remove clamp (Figure 1, Item 16) and insulation strip (Figure 1, Item 17).
7. Remove two locknuts (Figure 1, Item 18) and washers (Figure 1, Item 19) from each of two muffler tie down strap assemblies (Figure 1, Item 20). Remove straps and muffler (Figure 1, Item 10).
8. Remove four locknuts (Figure 1, Item 21), washers (Figure 1, Item 22), and screws (Figure 1, Item 23) from each of two muffler brackets (Figure 1, Item 24), and remove two brackets (Figure 1, Item 24) from engine/generator compartment ceiling.

END OF TASK**INSTALLATION**

1. Install two brackets (Figure 1, Item 24) to engine/generator compartment ceiling, and secure with four screws (Figure 1, Item 23), washers (Figure 1, Item 22), and locknuts (Figure 1, Item 21).
2. Install muffler (Figure 1, Item 10), two muffler tiedown strap assemblies (Figure 1, Item 20), two washers (Figure 1, Item 19), and locknuts (Figure 1, Item 18).
3. Install exhaust flange (Figure 1, Item 14) and bellows (Figure 1, Item 15) on exhaust in elbow (Figure 1, Item 6). Install insulation strip (Figure 1, Item 17) and clamp (Figure 1, Item 16). Install eight screws (Figure 1, Item 13), washers (Figure 1, Item 12), and locknuts (Figure 1, Item 11).
4. Install flex exhaust tube assembly (Figure 1, Item 9) on muffler (Figure 1, Item 10) and exhaust in elbow (Figure 1, Item 6) and install ceramic strip (Figure 1, Item 8) and two exhaust pipe clamps (Figure 1, Item 7).
5. Install pipe clamp (Figure 1, Item 5) on exhaust in elbow (Figure 1, Item 6).

WARNING

The muffler blanket is made of fiberglass fabric which can break down with heat and flexing. Fiberglass fibers can irritate the flesh and respiratory passages. Wear protective eyewear, mask, and gloves when removing or installing muffler blanket. Failure to comply can cause injury to personnel.

6. Install muffler blanket (Figure 1, Item 4), inlet pipe muffler end blanket (Figure 1, Item 3), inlet pipe turbo end blanket (Figure 1, Item 2), elbow blanket (Figure 1, Item 1), and secure with lacing.
7. Install front roof section housing assembly (WP 0028).
8. Install access covers (WP 0027).
9. Close left front door and right front door.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A**
CRANKCASE VENTILATION FILTER: REMOVAL, INSTALLATION

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Cap and plug set (WP 0123, Table 1, Item 8)
Filter
Wiping rags (WP 0123, Table 1, Item 32)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the engine.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right rear doors and right front door.
3. Disconnect hose (Figure 1, Item 1) and reducer (Figure 1, Item 2) from bottom of crankcase ventilation filter (Figure 1, Item 3).
4. Unlatch bowl (Figure 1, Item 4) from crankcase ventilator filter (Figure 1, Item 3) and remove filter element (Figure 1, Item 5).
5. Wipe up any spilled oil.

END OF TASK**INSTALLATION**

1. Install filter element (Figure 1, Item 5) and latch bowl (Figure 1, Item 4) back onto crankcase ventilation filter (Figure 1, Item 3).
2. Install reducer (Figure 1, Item 2) on bottom of crankcase ventilation filter (Figure 1, Item 3) and install hose (Figure 1, Item 1).
3. Close right rear doors and right front door.

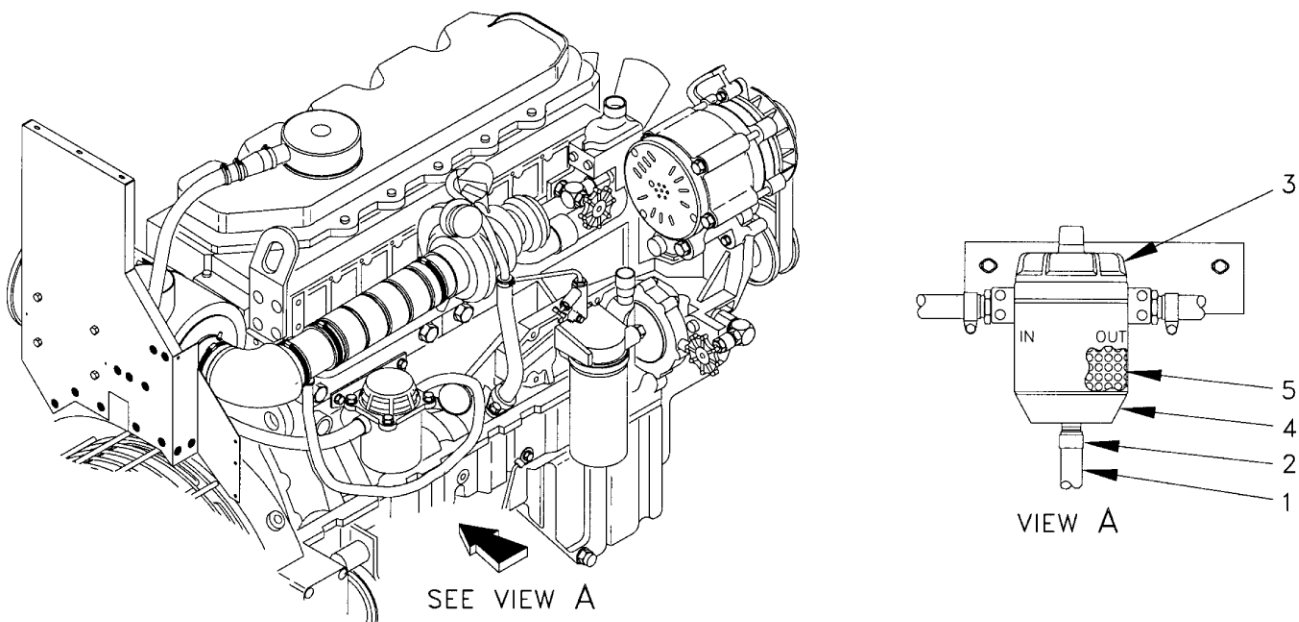


Figure 1. Crankcase Ventilation Filter.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****AIR CLEANER FILTER: REMOVAL, INSPECT, CLEANING, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Cap and plug set (WP 0123, Table 1, Item 8)
Filter, primary
Filter, safety
Gasket
Wiping rags (WP 0123, Table 1, Item 38)

Personnel Required

One

References

TM 9-2350-729-10
TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the air cleaner system.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left rear door.
3. Unfasten four clips (Figure 1, Item 1) and remove air cleaner cover (Figure 1, Item 2) and gasket (Figure 1, Item 3) from air cleaner canister (Figure 1, Item 4).

CAUTION

Do not twist filter elements or filter elements may be damaged.

4. Pull out primary filter element (Figure 1, Item 5) and safety filter element (Figure 1, Item 6).

END OF TASK**INSPECT**

Inspect the air cleaner filter elements (TM 9-2350-729-10).

END OF TASK**CLEANING****WARNING**

Cleaning with compressed air can cause flying particles. When using compressed air, wear protective glasses and use clean, low pressure air, less than 30 PSI (208 kPa). Failure to comply can cause eye injury to personnel.

1. Clean filter elements with low pressure (less than 30 PSI) compressed air.
2. Replace filter elements when damaged or they cannot be cleaned, or when restriction gauge (Figure 1, Item 7) stays red.

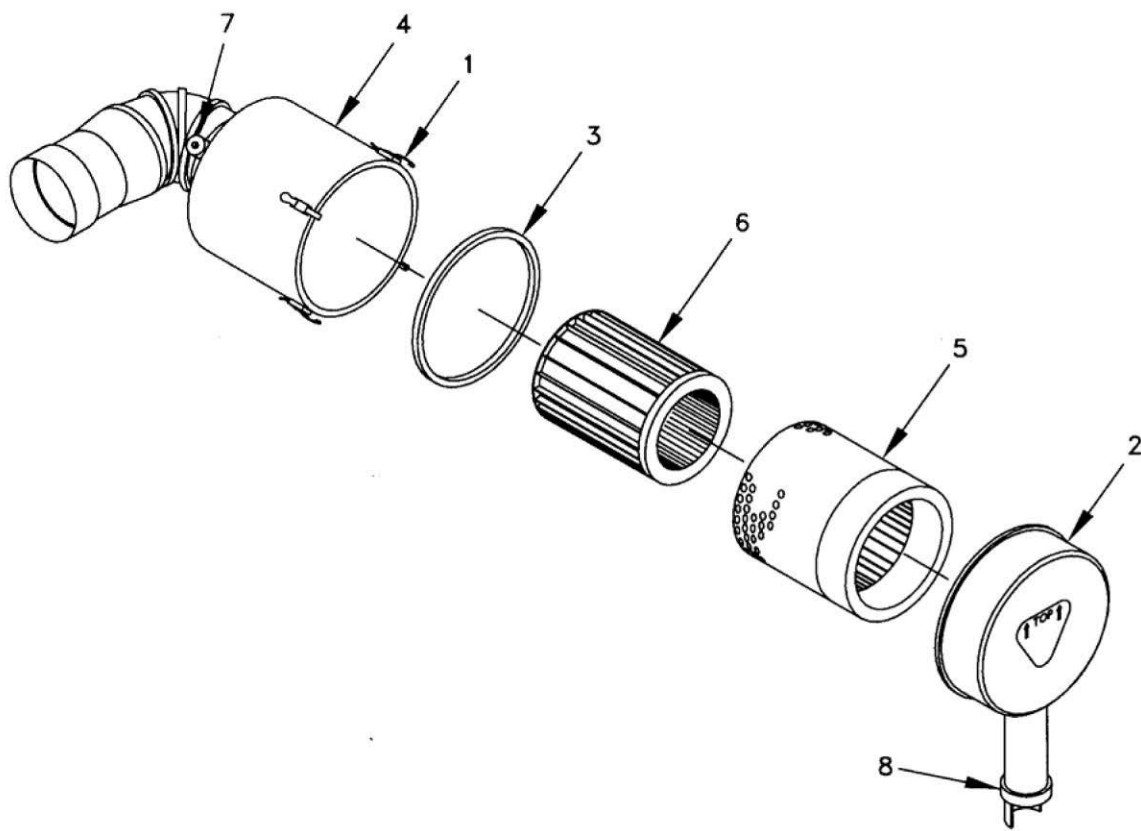


Figure 1. Air Cleaner Filter.

3. Check restriction gauge (Figure 1, Item 7) for cracks. Ensure gauge can be read, and that it returns to green when reset is pushed.
4. Squeeze rubber dust cup (Figure 1, Item 8) several times to expel dust and debris.

END OF TASK

INSTALLATION

1. Install safety filter element (Figure 1, Item 6) inside primary filter element (Figure 1, Item 5) and install into air cleaner canister (Figure 1, Item 4).
2. Install gasket (Figure 1, Item 3) and cover (Figure 1, Item 2) and fasten four clips (Figure 1, Item 1).
3. Close left rear door.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****AIR CLEANER SYSTEM: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Cap and plug set (WP 0123, Table 1, Item 8)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

CAUTION

All fittings and openings must be capped or plugged immediately after opening to prevent contamination of the air cleaner system.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right front door and left front door.
3. Remove air cleaner indicator (Figure 1, Sheet 1, Item 1) from air cleaner (Figure 1, Sheet 1, Item 2).
4. Remove two clamps (Figure 1, Sheet 1, Item 3) and collar (Figure 1, Sheet 1, Item 4) and reducing elbow (Figure 1, Sheet 1, Item 5) from air cleaner (Figure 1, Sheet 1, Item 2) and restricted tap sleeve (Figure 1, Sheet 1, Item 6).
5. Remove sensor (Figure 1, Sheet 1, Item 7) from restricted tap sleeve (Figure 1, Sheet 1, Item 6).
6. Remove two clamps (Figure 1, Sheet 1, Item 8) and hose (Figure 1, Sheet 1, Item 9) from restricted tap sleeve (Figure 1, Sheet 1, Item 6) and OUT port fitting on crankcase ventilation filter (Figure 1, Sheet 2, Item 10).
7. Remove clamp (Figure 1, Sheet 1, Item 11) and disconnect restricted tap sleeve (Figure 1, Sheet 1, Item 6) from air vent hose (Figure 1, Item 12).
8. Remove clamp (Figure 1, Sheet 1, Item 13) and disconnect air vent hose (Figure 1, Sheet 1, Item 12) from engine turbo.
9. Remove two clamps (Figure 1, Sheet 1, Item 14) and hose (Figure 1, Sheet 1, Item 15) from IN port fitting on crankcase ventilation filter (Figure 1, Sheet 2, Item 10) and engine crankcase filter adapter.
10. Remove two clamps (Figure 1, Sheet 2, Item 16) and disconnect hose (Figure 1, Sheet 2, Item 17) from swivel fitting (Figure 1, Sheet 2, Item 18) on bottom of crankcase ventilation filter (Figure 1, Sheet 2, Item 10) and from elbow (Figure 1, Sheet 2, Item 19) on right hand rear engine dipstick port.
11. Remove elbow (Figure 1, Sheet 2, Item 19), check valve (Figure 1, Sheet 2, Item 20) and adapter (Figure 1, Sheet 2, Item 21) from right hand rear engine dipstick port.
12. Remove two fittings (Figure 1, Sheet 2, Item 22) from IN port and OUT ports on crankcase ventilation filter (Figure 1, Sheet 2, Item 10).
13. Remove swivel fitting (Figure 1, Sheet 2, Item 18) from bottom of crankcase ventilation filter (Figure 1, Sheet 2, Item 10).
14. Remove two screws (Figure 1, Sheet 2, Item 23), lock washers (Figure 1, Sheet 2, Item 24), and washers (Figure 1, Sheet 2, Item 25) to remove crankcase ventilation filter (Figure 1, Sheet 2, Item 10) from bracket (Figure 1, Sheet 2, Item 26).
15. Remove two screws (Figure 1, Sheet 2, Item 27), lock washers (Figure 1, Sheet 2, Item 28), and washers (Figure 1, Sheet 2, Item 29), and spacers (Figure 1, Sheet 2, Item 30) to remove crankcase ventilation filter bracket (Figure 1, Sheet 2, Item 26).
16. Remove air cleaner cover (Figure 1, Sheet 1, Item 31) by releasing four clamps (Figure 1, Sheet 1, Item 32).
17. Loosen nut (Figure 1, Sheet 1, Item 33) on each air cleaner mounting band (Figure 1, Sheet 1, Item 34) and remove air cleaner (Figure 1, Sheet 1, Item 2).

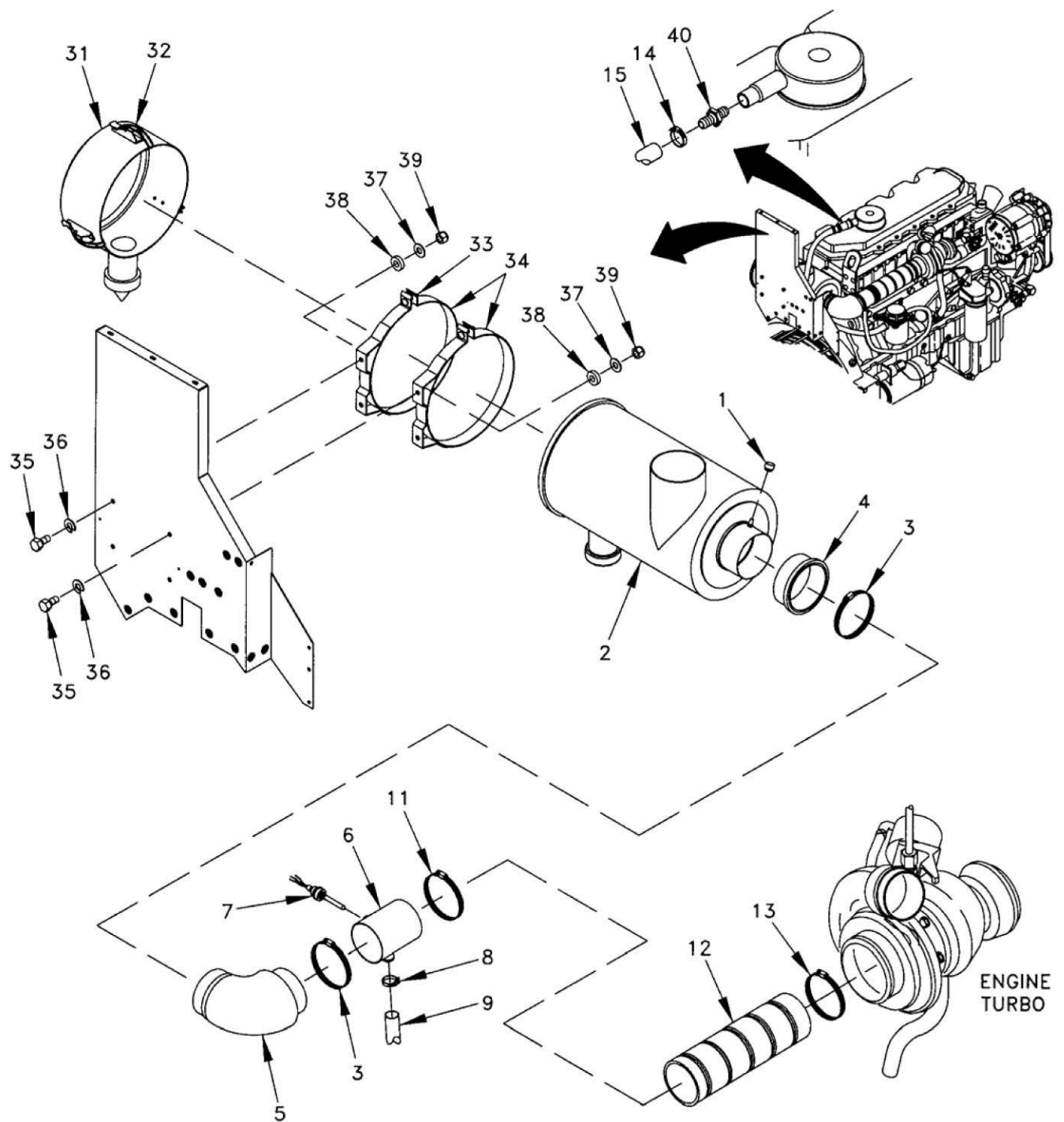


Figure 1. Air Cleaner System (Sheet 1 of 2).

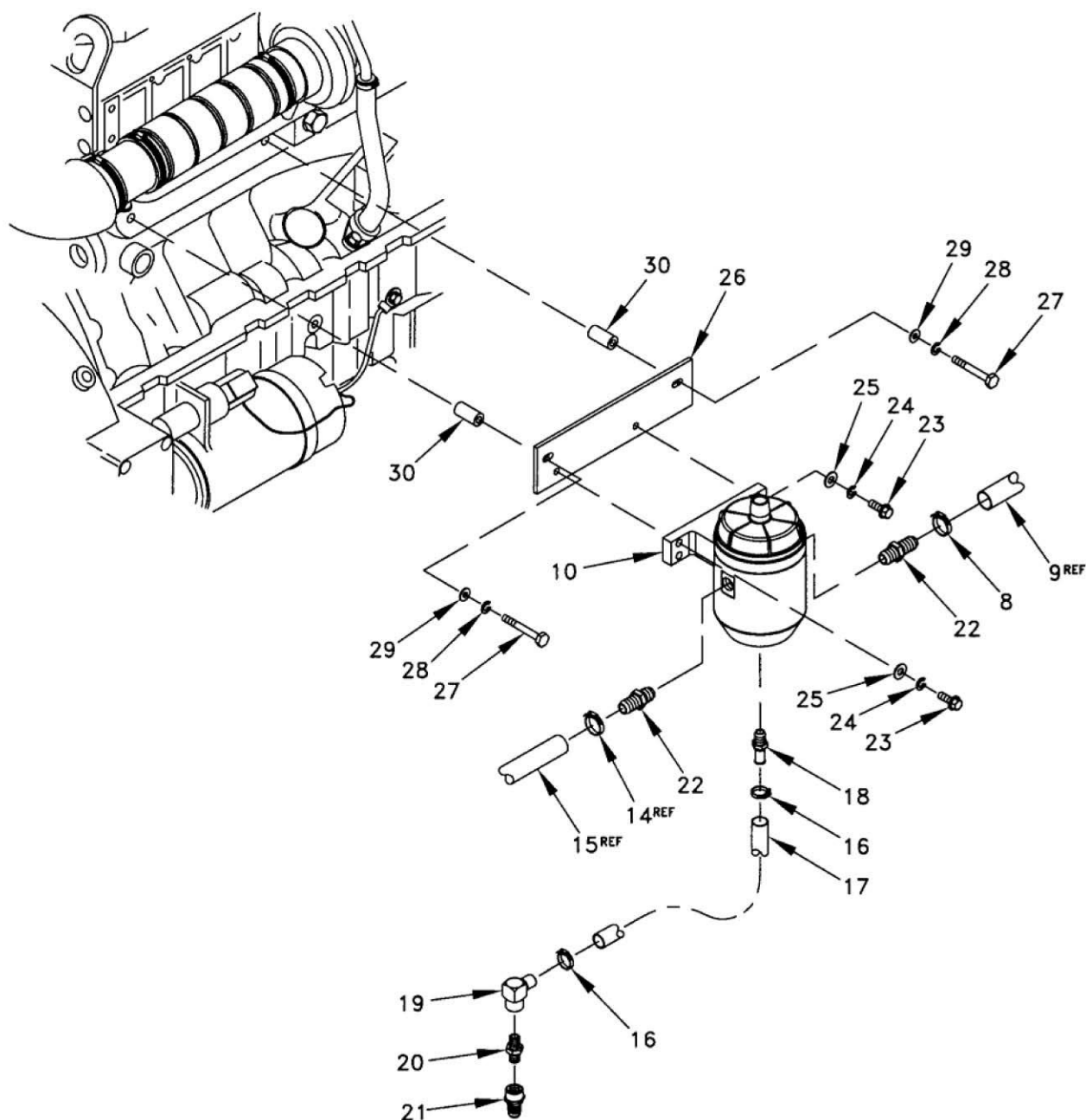


Figure 1. Air Cleaner System (Sheet 2 of 2).

18. Remove four screws (Figure 1, Sheet 1, Item 35), lock washers (Figure 1, Sheet 1, Item 36), washers (Figure 1, Sheet 1, Item 37), four spacers (Figure 1, Sheet 1, Item 38), four lock nuts (Figure 1, Sheet 1, Item 39), and two air cleaner mounting bands (Figure 1, Sheet 1, Item 34).
19. Remove straight barb connector (Figure 1, Sheet 1, Item 40) from engine crankcase filter adapter.

END OF TASK

INSTALLATION

1. Install straight barb connector (Figure 1, Sheet 1, Item 40) on engine crankcase filter adapter.

2. Install two air cleaner mounting bands (Figure 1, Sheet 1, Item 34), four lock nuts (Figure 1, Sheet 1, Item 39), four spacers (Figure 1, Sheet 1, Item 38), washers (Figure 1, Sheet 1, Item 37), lock washers (Figure 1, Sheet 1, Item 36), and four screws (Figure 1, Sheet 1, Item 35).
3. Install air cleaner (Figure 1, Sheet 1, Item 2) into air cleaner mounting bands (Figure 1, Sheet 1, Item 34) and tighten two nuts (Figure 1, Sheet 1, Item 33).
4. Install air cleaner cover (Figure 1, Sheet 1, Item 31) by fastening four clamps (Figure 1, Sheet 1, Item 32).
5. Install two screws (Figure 1, Sheet 2, Item 27), lock washers (Figure 1, Sheet 2, Item 28), washers (Figure 1, Sheet 2, Item 29), spacers (Figure 1, Sheet 2, Item 30) and crankcase ventilation filter bracket (Figure 1, Sheet 2, Item 26).
6. Install crankcase ventilation filter (Figure 1, Sheet 2, Item 10) on bracket (Figure 1, Sheet 2, Item 26) and secure with two washers (Figure 1, Sheet 2, Item 25), lock washers (Figure 1, Sheet 2, Item 24), and screws (Figure 1, Sheet 2, Item 23).
7. Install swivel fitting (Figure 1, Sheet 2, Item 18) on bottom of crankcase ventilation filter (Figure 1, Sheet 2, Item 10). Install two fittings (Figure 1, Sheet 2, Item 22), one to IN port and one to OUT port, on crankcase ventilation filter (Figure 1, Sheet 2, Item 10).
8. Install adapter (Figure 1, Sheet 2, Item 21) and check valve (Figure 1, Sheet 2, Item 20) on right hand rear engine dipstick port.
9. Connect hose (Figure 1, Sheet 2, Item 17) to swivel fitting (Figure 1, Sheet 2, Item 18) on bottom of crankcase ventilation filter (Figure 1, Sheet 2, Item 10) and to check valve (Figure 1, Sheet 2, Item 20) on right hand rear engine dipstick port and install two clamps (Figure 1, Sheet 2, Item 16).
10. Connect hose (Figure 1, Sheet 1, Item 15) to IN port fitting on crankcase ventilation filter (Figure 1, Sheet 2, Item 10) and to straight barb connector (Figure 1, Sheet 1, Item 40) on engine crankcase filter adapter.
11. Connect air vent hose (Figure 1, Sheet 1, Item 12) to engine turbo and install clamp (Figure 1, Sheet 1, Item 13).
12. Connect restricted tap sleeve (Figure 1, Sheet 1, Item 6) to air vent hose (Figure 1, Sheet 1, Item 12) and install clamp (Figure 1, Sheet 1, Item 11).
13. Connect hose (Figure 1, Sheet 1, Item 9) to restricted tap sleeve (Figure 1, Sheet 1, Item 6) and to OUT port fitting on crankcase ventilation filter (Figure 1, Sheet 2, Item 10).
14. Install sensor (Figure 1, Sheet 1, Item 7) on restricted tap sleeve (Figure 1, Sheet 1, Item 6).
15. Install reducing elbow (Figure 1, Sheet 1, Item 5) on air cleaner (Figure 1, Sheet 1, Item 2) and restricted tap sleeve (Figure 1, Sheet 1, Item 6) and install collar (Figure 1, Sheet 1, Item 4), and two clamps (Figure 1, Sheet 1, Item 3).
16. Install air cleaner indicator (Figure 1, Sheet 1, Item 1) on air cleaner (Figure 1, Sheet 1, Item 2).
17. Close left front door and right front door.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****ALTERNATOR: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Manifold out tube removed (WP 0065)
Upper and lower right fan guards removed (WP 0064)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right front door.

NOTE

Note routing of alternator belt (Figure 1, Item 1).

3. Place wrench on tensioner pulley (Figure 1, Item 2) and use to rotate tensioner pulley clockwise (CW) sufficiently to relieve tension on alternator belt (Figure 1, Item 1) and slip belt off alternator pulley (Figure 1, Item 3). Allow tensioner pulley (Figure 1, Item 2) to rotate slowly back into place.
4. Tag and disconnect wiring from alternator (Figure 1, Item 4).

WARNING

Support alternator when removing attaching hardware or alternator may fall. Failure to comply can cause injury to personnel and equipment damage.

5. Remove nut (Figure 1, Item 5), two washers (Figure 1, Item 6), bolt (Figure 1, Item 7), nut (Figure 1, Item 8), two washers (Figure 1, Item 9), bolt (Figure 1, Item 10), and alternator (Figure 1, Item 4).

END OF TASK**INSTALLATION****WARNING**

Support alternator when removing attaching hardware or alternator may fall. Failure to comply can cause injury to personnel and equipment damage.

1. Install alternator (Figure 1, Item 4) and secure with bolt (Figure 1, Item 10), two washers (Figure 1, Item 9), nut (Figure 1, Item 8), bolt (Figure 1, Item 7), two washers (Figure 1, Item 6), and nut (Figure 1, Item 5). Tighten nuts.
2. Connect wiring to alternator (Figure 1, Item 4).
3. Place wrench on tensioner pulley (Figure 1, Item 2) and use to rotate tensioner pulley clockwise (CW) sufficiently to allow alternator belt (Figure 1, Item 1) to be slipped on alternator pulley (Figure 1, Item 3). Allow tensioner pulley (Figure 1, Item 2) to rotate slowly back into place.
4. Check alternator belt (Figure 1, Item 1) for correct routing and to be sure the belt is firmly seated in all pulley grooves.
5. Install upper and lower right side fan guards (WP 0064).
6. Install manifold out tube (WP 0065).
7. Close right front door.

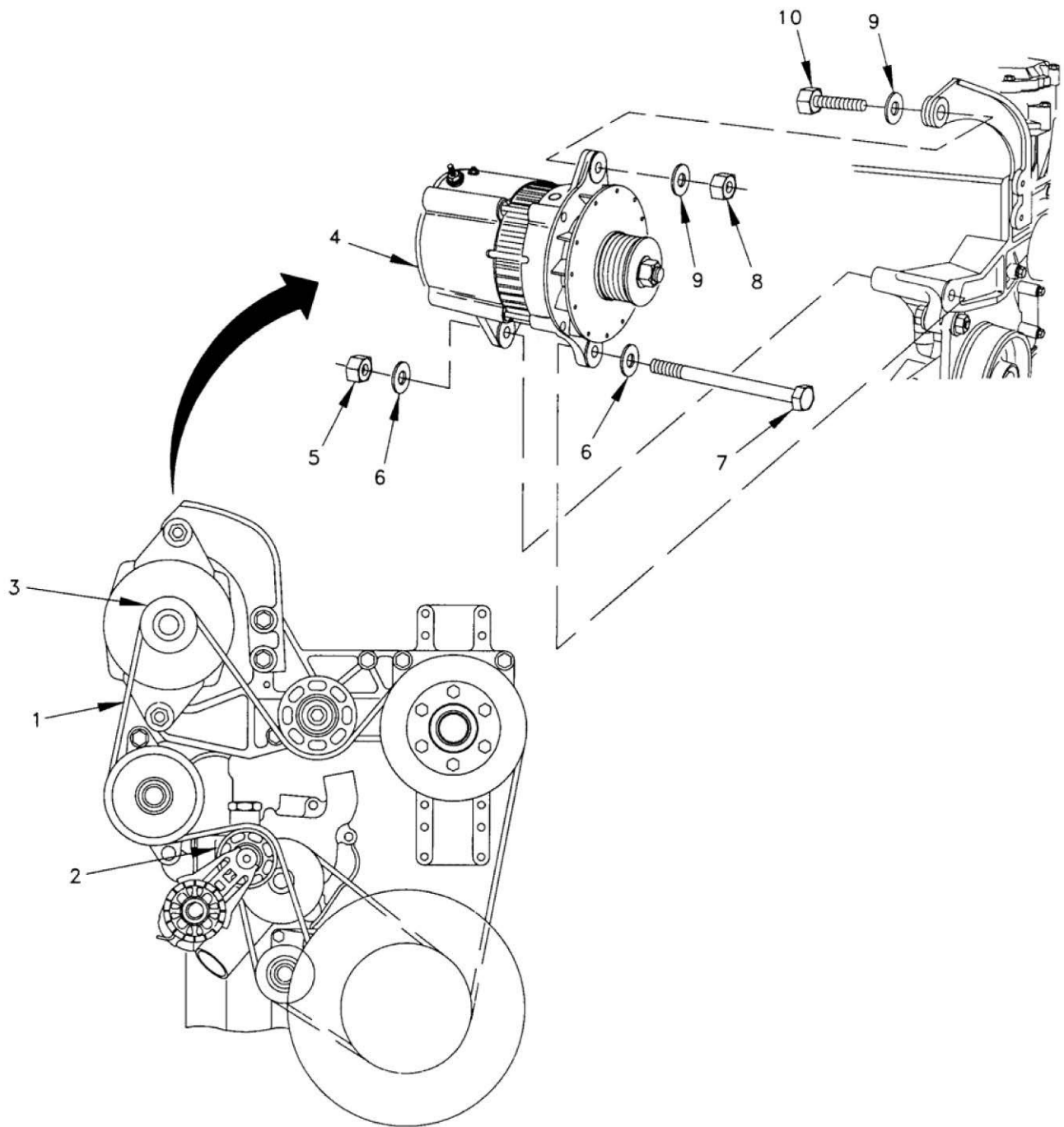


Figure 1. Alternator.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****BELT: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Belt

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Upper and lower right fan guards removed (WP 0064)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL Switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right front door.

NOTE

Note routing of alternator belt (Figure 1, Item 1).

WARNING

Fan has sharp blades. Use caution and wear gloves when removing or installing belts. Failure to comply can cause injury to personnel.

3. Place wrench on tensioner pulley (Figure 1, Item 2) and use to rotate tensioner pulley clockwise (CW) sufficiently to relieve tension on alternator belt (Figure 1, Item 1) and slip belt off alternator pulley (Figure 1, Item 3). Allow tensioner pulley (Figure 1, Item 2) to rotate slowly back into place.
4. Carefully remove alternator belt (Figure 1, Item 1) off idler (Figure 1, Item 4), pulley (Figure 1, Item 5), crankshaft pulley (Figure 1, Item 6), tensioner pulley (Figure 1, Item 2), and idler (Figure 1, Item 7).
5. Carefully thread alternator belt (Figure 1, Item 1) over fan blades and remove belt.
6. Loosen bolt (Figure 1, Item 8) and slot bolt (Figure 1, Item 9). Push idler bracket (Figure 1, Item 10) toward left side of engine to relax tension on water pump belt (Figure 1, Item 11).
7. Carefully remove water pump belt (Figure 1, Item 11) from idler pulley (Figure 1, Item 12), water pump pulley (Figure 1, Item 13), and crankshaft pulley (Figure 1, Item 6).
8. Carefully thread water pump belt over fan blades and remove belt.

END OF TASK**INSTALLATION****WARNING**

Fan has sharp blades. Use caution and wear gloves when removing or installing belts. Failure to comply can cause injury to personnel.

1. Carefully thread water pump belt (Figure 1, Item 11) over fan blades, then onto crankshaft pulley (Figure 1, Item 6), water pump pulley (Figure 1, Item 13), and idler pulley (Figure 1, Item 12).
2. Use breaker bar on idler bracket (Figure 1, Item 10) to tighten water pump belt (Figure 1, Item 11) and tighten slot bolt (Figure 1, Item 9) and bolt (Figure 1, Item 8). Figure 1.

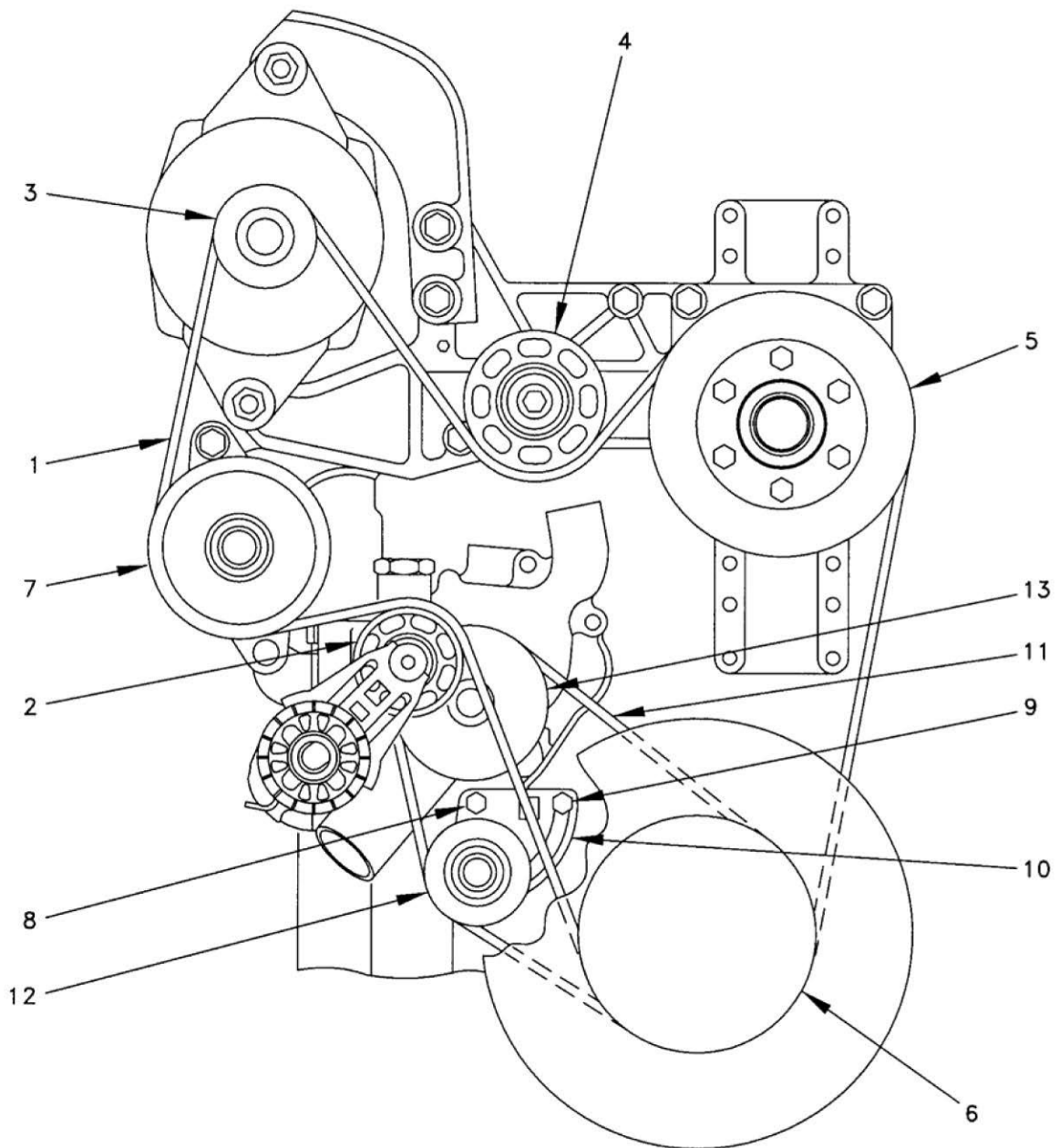


Figure 1. Belt.

3. Carefully thread alternator belt (Figure 1, Item 1) over fan blades, then onto idler (Figure 1, Item 7), tensioner pulley (Figure 1, Item 2), crankshaft pulley (Figure 1, Item 6), pulley (Figure 1, Item 5), and idler (Figure 1, Item 4).
4. Place wrench on tensioner pulley (Figure 1, Item 2) and use to rotate tensioner pulley clockwise (CW) sufficiently to allow alternator belt (Figure 1, Item 1) to be slipped onto alternator pulley (Figure 1, Item 3). Allow tensioner pulley (Figure 1, Item 2) to slowly rotate back into place.
5. Check alternator belt (Figure 1, Item 1) and water pump belt (Figure 1, Item 11) for correct routing and be sure belts are firmly seated in all pulley grooves.

6. Install upper and lower right side fan guards (WP 0064).
7. Close right front door.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****STARTER: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Personnel Required

Two

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.

2. Open right front door, and right rear doors.

WARNING

Support starter when removing attaching hardware or alternator may fall. Failure to comply can cause injury to personnel and equipment damage.

3. Tag and disconnect wiring from ground terminal and solenoid on starter (Figure 1, Item 1).
4. Remove three bolts (Figure 1, Item 2), washers (Figure 1, Item 3), and starter (Figure 1, Item 1).

END OF TASK

INSTALLATION

WARNING

Support starter when removing attaching hardware or alternator may fall. Failure to comply can cause injury to personnel and equipment damage.

1. Position starter (Figure 1, Item 1) into flywheel housing, ensure starter gear teeth mesh with flywheel gear teeth, and line up mounting holes. Install three washers (Figure 1, Item 3) and bolts (Figure 1, Item 2). Tighten bolts.
2. Clean electrical contacts if necessary.
3. Remove tags. Connect wiring to solenoid on starter (Figure 1, Item 1) and wiring to ground terminal.
4. Close right front door and right rear doors.

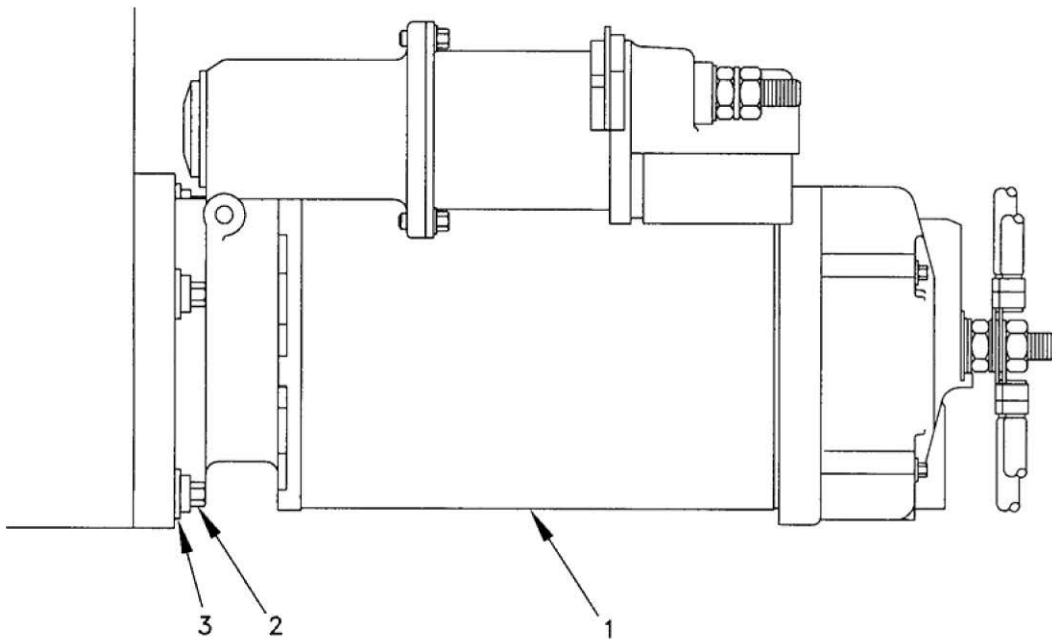


Figure 1. Starter.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****TENSIONER: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Upper left and upper right fan guards removed (WP 0064)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

WARNING

Fan has sharp blades. Use caution and wear gloves when removing or installing belts. Failure to comply can cause injury to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right front door.

NOTE

Note routing of alternator belt (Figure 1, Item 1).

3. Place wrench on tensioner pulley (Figure 1, Item 2) and use to rotate tensioner pulley clockwise (CW) sufficiently to relieve tension on alternator belt (Figure 1, Item 1) and slip belt off alternator pulley (Figure 1, Item 3). Allow tensioner pulley (Figure 1, Item 2) to rotate slowly back into place.
4. Remove bolt (Figure 1, Item 4), washer (Figure 1, Item 5), and sleeve (Figure 1, Item 6) from side of tensioner (Figure 1, Item 7), and remove bolt (Figure 1, Item 8) and washer (Figure 1, Item 9) from front of tensioner, and remove tensioner.

END OF TASK**INSTALLATION**

1. Position tensioner (Figure 1, Item 7) on bracket and install washer (Figure 1, Item 9) and bolt (Figure 1, Item 8) on front, and install sleeve (Figure 1, Item 6), washer (Figure 1, Item 5), and bolt (Figure 1, Item 4) on side of tensioner. Tighten bolts.
2. Place wrench on tensioner pulley (Figure 1, Item 2) and use to rotate tensioner pulley clockwise (CW) sufficiently to allow alternator belt (Figure 1, Item 1) to be slipped on alternator pulley (Figure 1, Item 3). Allow tensioner pulley (Figure 1, Item 2) to rotate slowly back into place.
3. Check alternator belt (Figure 1, Item 1) for correct routing and to be sure the belt is firmly seated in all pulley grooves.
4. Install upper left and upper right fan guards (WP 0064).
5. Close right front door.

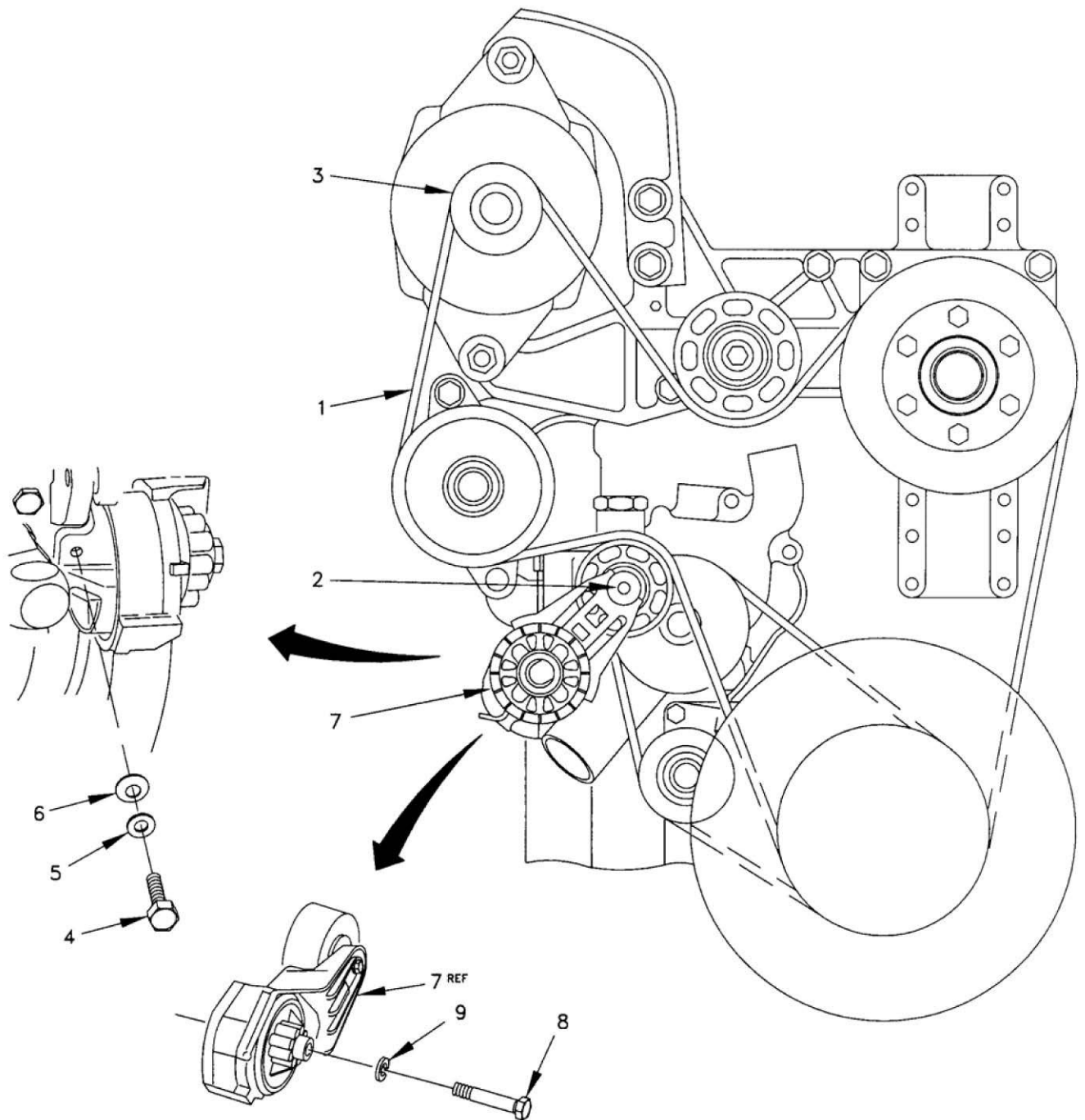


Figure 1. Tensioner.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FAN PULLEY: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Breakthrough cleaning solvent (WP 0123, Table 1, Item 49)
Grease (WP 0123, Table 1, Item 25)
O-ring
Wiping rags (WP 0123, Table 1, Item 38)

Personnel Required

One

References

TM 9-6115-729-24P
WP 0095

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Engine cooling fan removed (WP 0064)
Upper right fan guard removed (WP 0064)
Fan belt removed (WP 0072)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Remove six bolts (Figure 1, Item 1) and fan pulley (Figure 1, Item 2).
2. Remove three bolts (Figure 1, Item 3), washers (Figure 1, Item 4), and shaft (Figure 1, Item 5) with parts attached.
3. Remove two bolts (Figure 1, Item 6), plate (Figure 1, Item 7), O-ring (Figure 1, Item 8), bearing (Figure 1, Item 9), and retainer (Figure 1, Item 10) from shaft (Figure 1, Item 5).
4. Remove four bolts (Figure 1, Item 11), washers (Figure 1, Item 12), and bracket (Figure 1, Item 13).

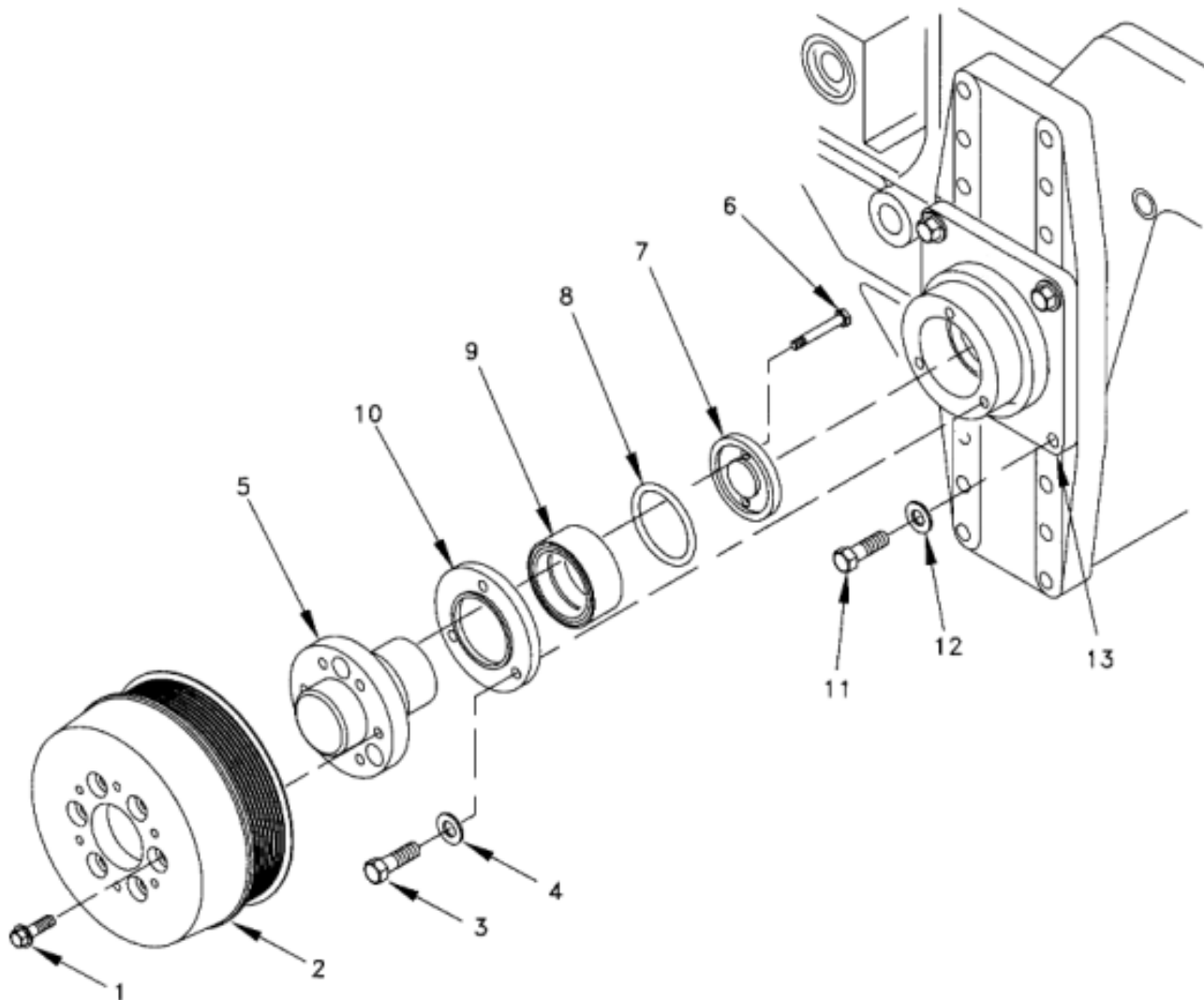


Figure 1. Fan Pulley.

END OF TASK

INSTALLATION

1. Install bracket (Figure 1, Item 13) and secure with four washers (Figure 1, Item 12) and bolts (Figure 1, Item 11).

NOTE

Install bearing with lip seal facing away from engine.

2. Install retainer (Figure 1, Item 10), bearing (Figure 1, Item 9), O-ring (Figure 1, Item 8), and plate (Figure 1, Item 7) on shaft (Figure 1, Item 5) and secure with two bolts (Figure 1, Item 6). Torque bolts (WP 0095).
3. Install shaft (Figure 1, Item 5) and attached parts on bracket (Figure 1, Item 13) and secure with three washers (Figure 1, Item 4) and bolts (Figure 1, Item 3). Torque bolts (WP 0095).
4. Install fan pulley (Figure 1, Item 2) and secure with six bolts (Figure 1, Item 1). Torque bolts (WP 0095).
5. Install engine cooling fan and upper right fan guard (WP 0064).
6. Install engine cooling fan belt (WP 0072).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****WATER PUMP: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Antifreeze (WP 0123, Table 1, Item 7)
Sealing compound (WP 0123, Table 1, Item 43)

Personnel Required

One

References

TM 9-6115-729-24P
WP 0095

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Fan removed (WP 0064)
Idler pulley loosened (WP 0072)
Alternator belt removed (WP 0072)
Tensioner removed (WP 0074)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

WARNING

Cooling system operates at high temperature and pressure. Contact with high pressure steam and/or liquids can result in burns and scalding. Shut down generator set, and allow system to cool before performing checks, services, and maintenance. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right front door and left front door.
3. Place suitable container under coolant drain on front right side of TQG. Open drain valve on right side at rear of engine and drain valve on front right side bottom of engine, and drain approximately two gallons of coolant. Save coolant for refilling system.
4. Loosen pulley assembly mounting bracket bolt (Figure 1, Item 1), remove slot bolt (Figure 1, Item 2) and washer (Figure 1, Item 3), and move pulley (Figure 1, Item 4) to relax tension on water pump belt (Figure 1, Item 5). Remove water pump belt (Figure 1, Item 5). Remove pulley assembly mounting bracket bolt (Figure 1, Item 1), washer (Figure 1, Item 6), and pulley assembly (Figure 1, Item 7).
5. Remove clamp (Figure 1, Item 9) and hose (Figure 1, Item 10) from top right side of water pump (Figure 1, Item 11). Remove clamp (Figure 1, Item 12) hose (Figure 1, Item 13), elbow (Figure 1, Item 14), and O-ring (Figure 1, Item 15) from top left side of water pump (Figure 1, Item 11).
6. Remove hose clamp (Figure 1, Item 16) and lower radiator hose (Figure 1, Item 17) from water pump (Figure 1, Item 11).
7. If winterization kit is installed, remove hose clamp (Figure 1, Item 18), heater hose (Figure 1, Item 19), shut-off valve (Figure 1, Item 20), elbow (Figure 1, Item 21), fitting (Figure 1, Item 22), and O-ring (Figure 1, Item 23) from water pump (Figure 1, Item 11).
8. Remove four bolts (Figure 1, Item 24) and water pump (Figure 1, Item 11).
9. Remove O-ring (Figure 1, Item 25).
10. Remove plug (Figure 1, Item 26) and O-ring (Figure 1, Item 27), if necessary.

END OF TASK**INSTALLATION**

1. Install O-ring (Figure 1, Item 27) and plug (Figure 1, Item 26), if necessary.
2. Install O-ring (Figure 1, Item 25) into recessed hole at rear of water pump (Figure 1, Item 11).
3. Install water pump (Figure 1, Item 11) and secure with four bolts (Figure 1, Item 24). Torque bolts (WP 0095).

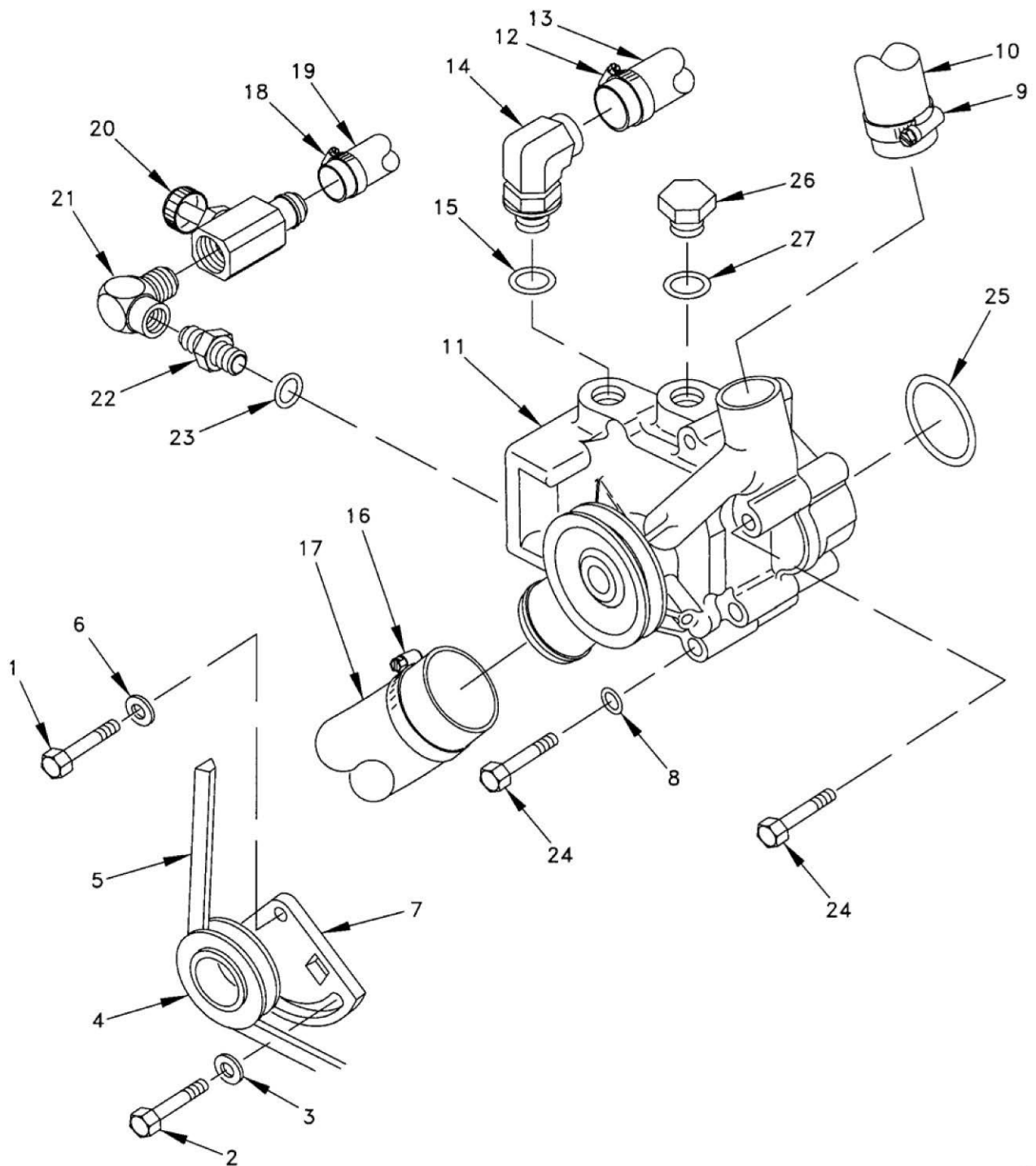


Figure 1. Water Pump.

NOTE

Apply sealing compound to all male pipe threads before connecting.

4. If winterization kit is installed, install O-ring (Figure 1, Item 23), fitting (Figure 1, Item 22), elbow (Figure 1, Item 21), shut-off valve (Figure 1, Item 20), heater hose (Figure 1, Item 19), and hose clamp (Figure 1, Item 18) on water pump (Figure 1, Item 11).

5. Install lower radiator hose (Figure 1, Item 17) and hose clamp (Figure 1, Item 16) on water pump (Figure 1, Item 11).
6. Install O-ring (Figure 1, Item 15), elbow (Figure 1, Item 14), hose (Figure 1, Item 13) and hose clamp (Figure 1, Item 12) on top left side of water pump (Figure 1, Item 11). Install hose (Figure 1, Item 10) and clamp (Figure 1, Item 9) on top right side of water pump (Figure 1, Item 11).
7. Install pulley assembly (Figure 1, Item 7), washer (Figure 1, Item 6) and pulley assembly mounting bracket bolt (Figure 1, Item 1). Tighten bolt.
8. Install water pump belt (Figure 1, Item 5) on water pump pulley (Figure 1, Item 4).
9. Install washer (Figure 1, Item 3) and slot bolt (Figure 1, Item 2). Do not tighten.
10. Check water pump belt (Figure 1, Item 5) for correct routing and to be sure the belt is firmly seated in all pulley grooves.
11. Use breaker bar on pulley assembly (Figure 1, Item 7) to apply tension to belt and tighten slot bolt (Figure 1, Item 2) and pulley assembly mounting bracket bolt (Figure 1, Item 1) and washer (Figure 1, Item 6). Tighten bolt.
12. Refill cooling system with coolant.
13. Install fan (WP 0064).
14. Install alternator belt (WP 0072).
15. Tighten idler pulley (WP 0072).
16. Install tensioner (WP 0074).
17. Close right front door and left front door.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FUEL PRIMING PUMP: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Gasket
Wiping rags (WP 0123, Table 1, Item 38)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left rear doors.
3. Remove two bolts (Figure 1, Item 1), washers (Figure 1, Item 2), fuel priming pump (Figure 1, Item 3), and gasket (Figure 1, Item 4).

END OF TASK

INSTALLATION

1. Clean area where gasket (Figure 1, Item 4) will mate with engine.
2. Apply a light coat of fuel to gasket and install gasket (Figure 1, Item 4), fuel priming pump (Figure 1, Item 3), two washers (Figure 1, Item 2), and bolts (Figure 1, Item 1). Tighten bolts.
3. Close left rear doors.

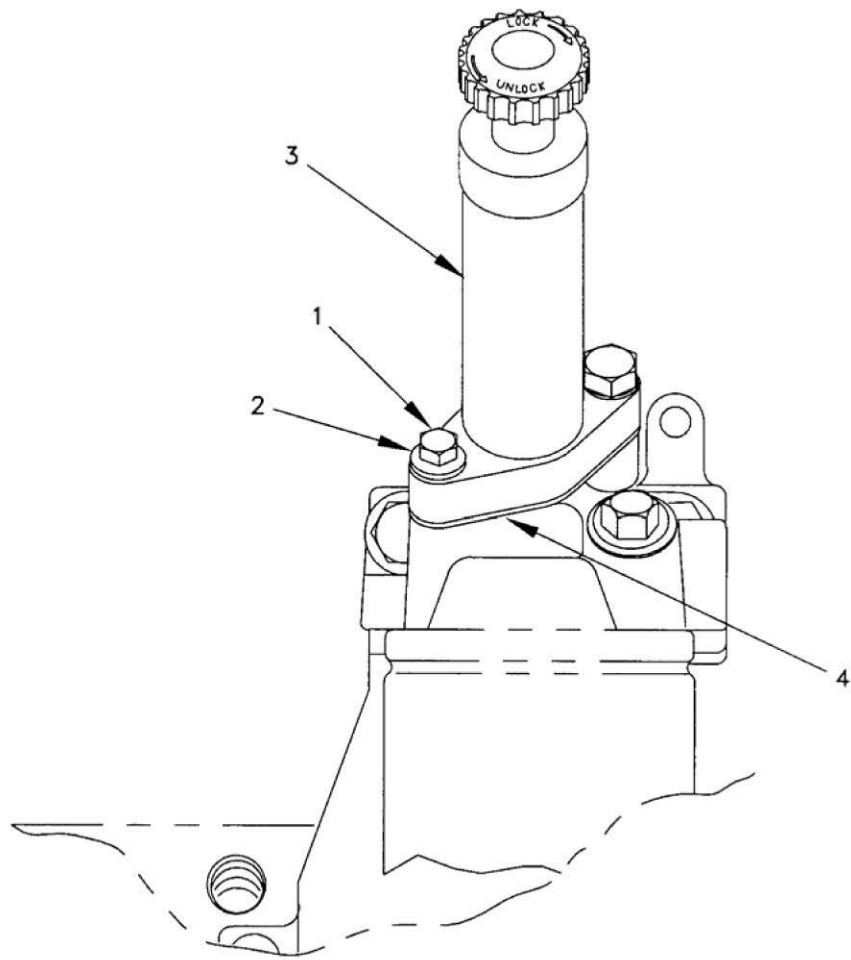


Figure 1. Fuel Priming Pump.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FUEL FILTER: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Fuel (WP 0123, Table 1, Items 18, 19, 55, or 56)
Fuel filter
Wiping rags (WP 0123, Table 1, Item 38)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

WARNING

Diesel fuel is flammable and toxic to eyes, skin, and respiratory tract. Skin and eye protection are required when working in contact with diesel fuel. Avoid repeated or prolonged contact. Provide adequate ventilation. Personnel are to wash exposed skin and change chemical soaked clothing promptly if exposed to fuel. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open left rear doors.
3. Place suitable container under fuel filter (Figure 1, Item 1) to retain spillage.
4. Remove fuel filter (Figure 1, Item 1), using strap wrench if necessary.

END OF TASK

INSTALLATION

1. Clean area where seal (Figure 1, Item 2) will mate with engine.
2. Apply light coat of fuel to seal (Figure 1, Item 2).
3. Install fuel filter (Figure 1, Item 1) by hand. Turn $\frac{3}{4}$ additional turn after seal (Figure 1, Item 2) contacts base.
4. Inside control box, verify that resistor assembly A7 DC POWER CONTROL circuit breaker CB1 is pushed in.
5. Set Battery Disconnect Switch to ON, and DEAD CRANK SWITCH to NORMAL. On EMCP, set ENGINE CONTROL switch to COOL DOWN/STOP.
6. Reset CATSW1, (RESET SW FUEL) switch, inside left rear door.
7. Operate fuel priming pump (Figure 1, Item 3) until strong pressure is felt.

WARNING

Operating the generator set with any access door open exposes personnel to a high noise level. Double hearing protection must be worn when operating or working near the generator set with any access door open. Failure to comply can cause hearing damage to personnel.

8. Close left rear doors.
9. Operate engine and check for leaks.

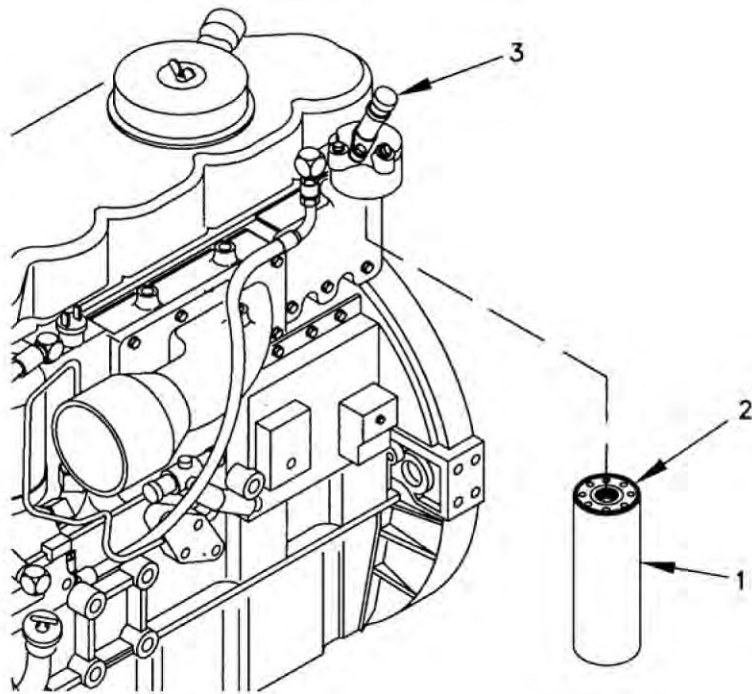


Figure 1. Fuel Filter.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FUEL FILTER BASE: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Breakthrough cleaning solvent (WP 0123, Table 1, Item 49)
O-ring
Preformed packing
Wiping rags (WP 0123, Table 1, Item 38)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Fuel priming pump removed (WP 0077)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Place suitable drain pan under fuel filter element (Figure 1, Item 1) to retain spillage.
2. Remove fuel filter element (Figure 1, Item 1) using strap wrench if necessary.
3. Disconnect tube assembly (Figure 1, Item 2) and remove O-ring (Figure 1, Item 3) from tee (Figure 1, Item 4).
4. Remove plug (Figure 1, Item 5), O-ring (Figure 1, Item 6), tee (Figure 1, Item 4), and O-ring (Figure 1, Item 7) from fuel filter base (Figure 1, Item 8).
5. Disconnect hose (Figure 1, Item 9) and remove O-ring (Figure 1, Item 10), elbow (Figure 1, Item 11), and O-ring (Figure 1, Item 12) from fuel filter base (Figure 1, Item 8).
6. Remove two bolts (Figure 1, Item 13) and fuel filter base (Figure 1, Item 8) from bracket (Figure 1, Item 14).

7. Remove plug (Figure 1, Item 15) and preformed packing (Figure 1, Item 16) from fuel filter base (Figure 1, Item 8).

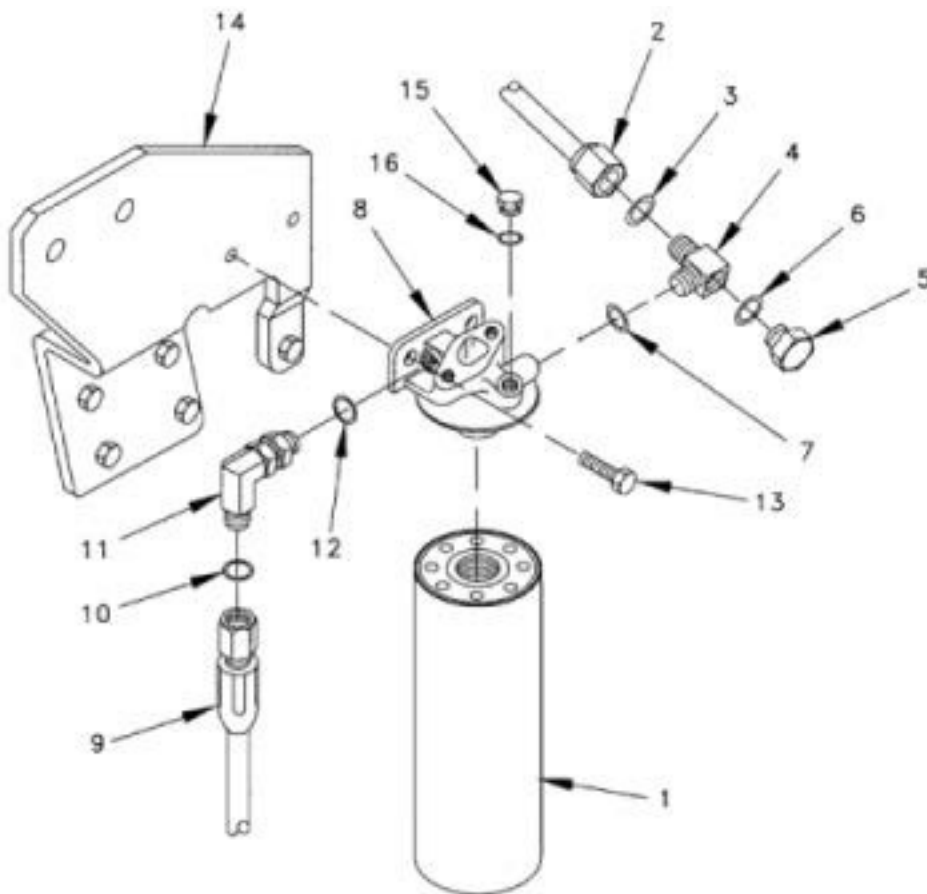


Figure 1. Fuel Filter Base.

END OF TASK

INSTALLATION

1. Install preformed packing (Figure 1, Item 16) and plug (Figure 1, Item 15) on fuel filter base (Figure 1, Item 8).
2. Install fuel filter base (Figure 1, Item 8) on bracket (Figure 1, Item 14) and secure with two bolts (Figure 1, Item 13). Tighten bolts.
3. Install O-ring (Figure 1, Item 12), elbow (Figure 1, Item 11), and O-ring (Figure 1, Item 10) on fuel filter base (Figure 1, Item 8), and connect hose (Figure 1, Item 9).
4. Install O-ring (Figure 1, Item 7), tee (Figure 1, Item 4), O-ring (Figure 1, Item 6), and plug (Figure 1, Item 5) on fuel filter base (Figure 1, Item 8).
5. Install O-ring (Figure 1, Item 3) on tee (Figure 1, Item 4), and connect tube assembly (Figure 1, Item 2).
6. Apply light coat of fuel to seal and install fuel filter element (Figure 1, Item 1) by hand. Turn $\frac{3}{4}$ additional turn after seal contacts fuel filter base (Figure 1, Item 8).
7. Install fuel priming pump (WP 0077).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****OIL FILTER MAINTENANCE AND OIL CHANGE: REMOVAL, INSTALLATION, OIL SAMPLING**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Personnel Required

One

Materials/Parts

Lubricating oil (WP 0123, Table 1, Items 29 through 36)
Oil filter
Wiping rags (WP 0123, Table 1, Item 38)

References

TM 9-6115-729-24P
WP 0015 (Table 3)

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped. On EMCP, set ENGINE CONTROL Switch to OFF/RESET, set Battery Disconnect Switch to OFF, and set DEAD CRANK SWITCH to OFF. before proceeding.

CAUTION

Do not drain oil when engine is cold. When engine is cold, oil contaminants are not suspended in the oil and will not be removed during the draining process. This will allow contaminants to remain in oil and will cause equipment damage.

2. Allow engine to cool for approximately 10 minutes.

NOTE

Engine oil capacity is 30 quarts (27.3 L).

3. Open right front door and left front door.
4. Place suitable container below oil drain, located at lower front left side of TQG, near slave receptacle.
5. Remove plug (Figure 1, Item 1) from oil drain.
6. Open oil drain valve (Figure 1, Item 2) at lower left side of oil pan and allow oil to drain from system.
7. Remove oil filter (Figure 1, Item 3) using strap wrench if necessary.
8. Remove magnetic plug (Figure 1, Item 4) and preformed packing (Figure 1, Item 5) from lower right side of oil pan, opposite drain valve (Figure 1, Item 2). Inspect magnetic plug for metal particles. If metal particles are present, notify supervisor. Wipe off plug.

END OF TASK**INSTALLATION**

1. Clean area where oil filter mounts.
2. Install preformed packing (Figure 1, Item 5) and magnetic plug (Figure 1, Item 4).
3. Apply thin coat of lubricating oil to rubber seal (Figure 1, Item 6) on oil filter (Figure 1, Item 3).
4. Install oil filter (Figure 1, Item 3) by hand until seal (Figure 1, Item 6) contacts base, then tighten by hand $\frac{3}{4}$ turn more.
5. Close oil drain valve (Figure 1, Item 2).

NOTE

Engine oil capacity is 30 quarts (27.3 L).

6. Remove oil filler cap (Figure 1, Item 7) on left front of engine. Refill system with oil (see WP 0015, Table 3. Engine Oil). Install oil filler cap (Figure 1, Item 7).

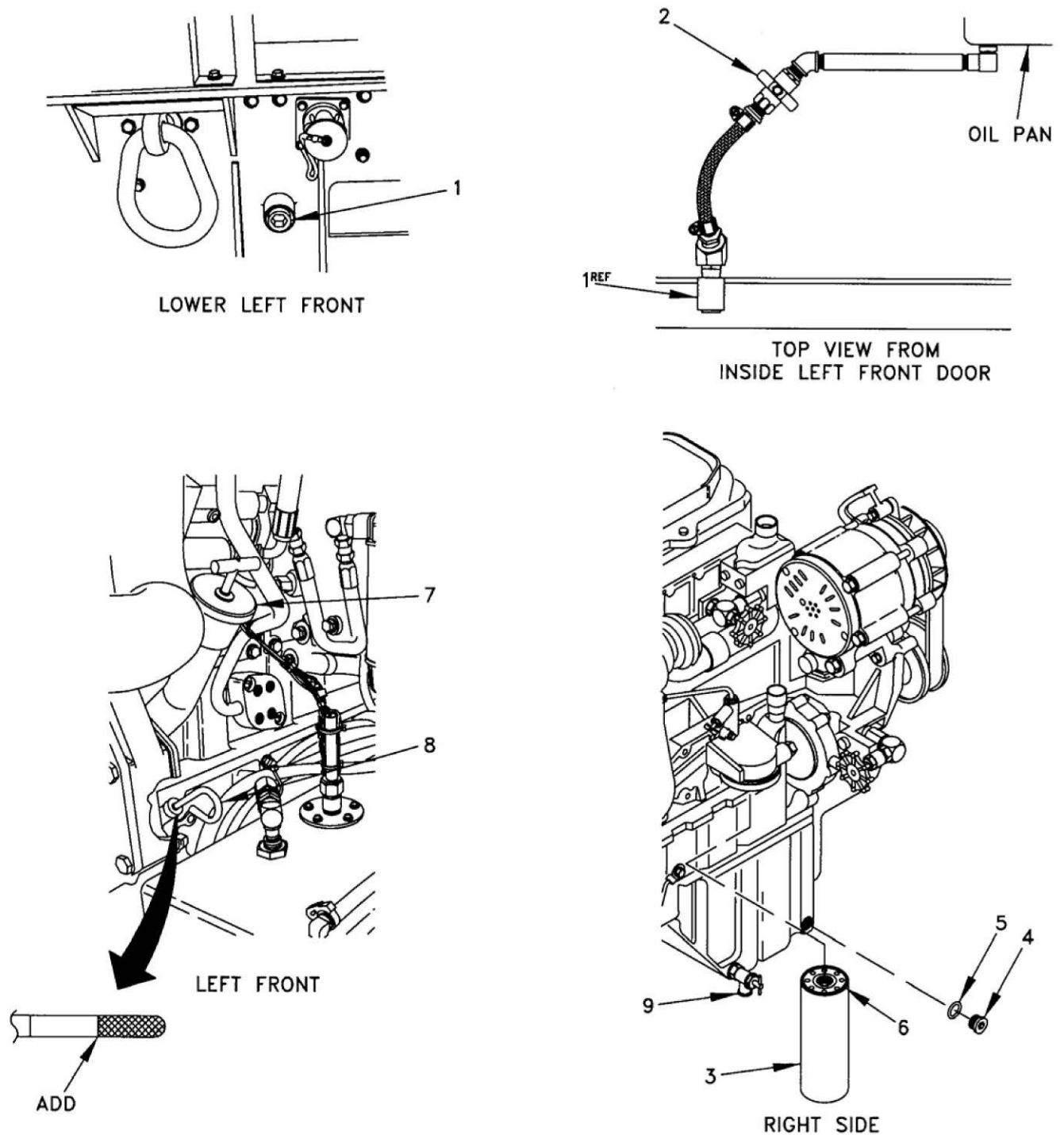


Figure 1. Oil Filter Maintenance and Oil Change.

7. Check dipstick (Figure 1, Item 8) for correct oil level.
8. Inside control box, verify that resistor assembly A7 DC POWER CONTROL circuit breaker CB1 is pushed in (engaged).
9. Set Battery Disconnect Switch to ON, and set DEAD CRANK SWITCH to NORMAL. On EMCP, set ENGINE CONTROL Switch to COOL DOWN/STOP.
10. Reset CATSW2, (RESET SW OIL) switch, inside left rear door.

WARNING

Operating the generator set with any access door open exposes personnel to a high noise level. Double hearing protection must be worn when operating or working near the generator set with any access door open. Failure to comply can cause hearing damage to personnel.

11. Operate engine and check for leaks.
12. Check dipstick (Figure 1, Item 8) for correct oil level.
13. Close right front door and left front door.

END OF TASK**OIL SAMPLING****CAUTION**

Do not sample oil when engine is cold. When engine is cold, oil contaminants are not suspended in the oil and a true representative sample of the oil will not be obtained. This may cause equipment damage.

NOTE

Oil sampling is performed in accordance with Army Oil Analysis Program (AOAP) requirements and processes.

1. Allow engine to cool for approximately 10 minutes.
2. Ensure generator set is fully stopped. On EMCP, set ENGINE CONTROL Switch to OFF/RESET, set Battery Disconnect Switch to OFF, and set DEAD CRANK SWITCH to OFF. before proceeding.
3. Open right front door assembly (latch).
4. Open oil drain valve (Figure 1, Item 9) on right side of engine below oil filter, collect oil sample, and close drain valve.
5. Close right front door assembly (latch).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****THERMOSTAT: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Antifreeze (WP 0123, Table 1, Item 7)
Gasket
Sealing compound (WP 0123, Table 1, Item 43)
Thermostat (2)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

Cooling system operates at high temperature and pressure. Contact with high pressure steam and/or liquids can result in burns and scalding. Shut down generator set, and allow system to cool before performing checks, services, and maintenance. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
2. Open right front door.
3. Position suitable drain pan below coolant drain, located below right front door assembly (latch).

NOTE

Engine coolant capacity is 38 quarts (35.9 L).

4. Open coolant drain valve (Figure 1, Item 1), located below and to the right rear of the radiator. Drain 8-10 quarts (7.5-9.5 L) of coolant into drain pan. Save coolant for refilling.
5. Place several rags under thermostat housing (Figure 1, Item 2) to soak up spills.
6. Remove six screws (Figure 1, Item 3), washers (Figure 1, Item 4), thermostat elbow (Figure 1, Item 5), and gasket (Figure 1, Item 6) from thermostat housing (Figure 1, Item 2). Discard gasket.
7. Remove two thermostats (Figure 1, Item 7) from thermostat housing (Figure 1, Item 2).
8. Scrape gasket debris from thermostat housing (Figure 1, Item 2) and thermostat elbow (Figure 1, Item 5).

END OF TASK**INSTALLATION**

1. Apply sealing compound to gasket contact surface of thermostat housing (Figure 1, Item 2).
2. Position gasket (Figure 1, Item 6) on thermostat housing (Figure 1, Item 2).
3. Install two thermostats (Figure 1, Item 7), short end up, on thermostat housing (Figure 1, Item 2).
4. Apply sealing compound to mating surface of thermostat elbow (Figure 1, Item 5).
5. Install thermostat elbow (Figure 1, Item 5) on thermostat housing (Figure 1, Item 2) and secure with six washers (Figure 1, Item 4) and screws (Figure 1, Item 3). Tighten screws evenly.
6. Close coolant drain valve (Figure 1, Item 1).
7. Refill coolant system with coolant from drain pan.

WARNING

Operating the generator set with any access door open exposes personnel to a high noise level. Double hearing protection must be worn when operating or working near the generator set with any access door open. Failure to comply can cause hearing damage to personnel.

8. Operate engine and check for leaks.
9. Close right front door.

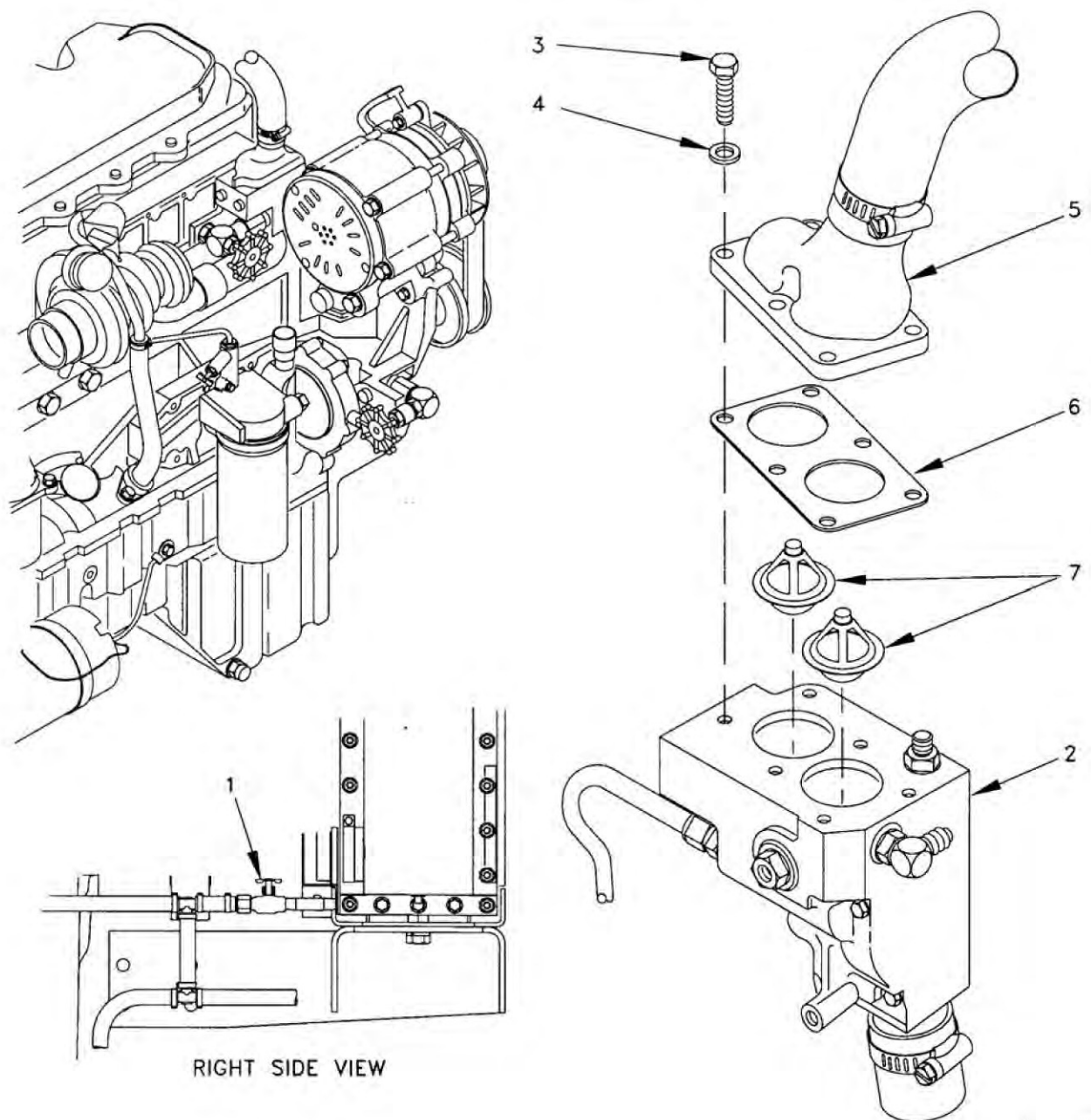


Figure 1. Thermostat.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****THERMOSTAT HOUSING: REMOVAL, DISASSEMBLY, ASSEMBLY, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Adhesive (WP 0123, Table 1, Item 5)
Breakthrough cleaning solvent (WP 0123, Table 1, Item 49)
Gasket
O-ring
Thermostat (2)
Wiping rags (WP 0123, Table 1, Item 38)

Personnel Required

One

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Position suitable drain pan below thermostat housing (Figure 1, Item 1) to catch spills.
2. Loosen hose clamp (Figure 1, Item 2) and disconnect hose (Figure 1, Item 3).
3. If optional winterization kit is installed, loosen hose clamp (Figure 1, Item 4) and disconnect hose (Figure 1, Item 5).
4. Loosen hose clamp (Figure 1, Item 6) and disconnect hose (Figure 1, Item 7).
5. Loosen hose clamp (Figure 1, Item 8) and disconnect hose (Figure 1, Item 9).
6. Disconnect hose (Figure 1, Item 10).

7. Remove two screws (Figure 1, Item 11), screw (Figure 1, Item 12), thermostat housing (Figure 1, Item 1), and gasket (Figure 1, Item 13). Discard gasket.

END OF TASK

DISASSEMBLY

1. Remove six screws (Figure 1, Item 14), washers (Figure 1, Item 15), thermostat elbow (Figure 1, Item 16), gasket (Figure 1, Item 17), and two thermostats (Figure 1, Item 18). Discard gasket.
2. Remove two plugs (Figure 1, Item 19) and plug (Figure 1, Item 20).
3. If optional winterization kit is installed, remove valve (Figure 1, Item 21) and connector (Figure 1, Item 22).
4. Remove elbow (Figure 1, Item 23), O-ring (Figure 1, Item 24), and connector (Figure 1, Item 25).

END OF TASK

ASSEMBLY

1. Scrape all old gasket material from thermostat housing (Figure 1, Item 1), thermostat elbow (Figure 1, Item 16), and mating surface of engine block.
2. Apply adhesive to threads of connector (Figure 1, Item 25) and install connector (Figure 1, Item 25).
3. Apply adhesive to thermostat housing side threads of elbow (Figure 1, Item 23), and install O-ring (Figure 1, Item 24) and elbow (Figure 1, Item 23).
4. If optional winterization kit is installed, apply adhesive to threads of connector (Figure 1, Item 22), and install connector (Figure 1, Item 22) and valve (Figure 1, Item 21).
5. Apply adhesive to threads of plug (Figure 1, Item 20) and install plug (Figure 1, Item 20).
6. Install two plugs (Figure 1, Item 19).
7. Apply adhesive to both sides of gasket (Figure 1, Item 17). Install two thermostats (Figure 1, Item 18), short end up, gasket (Figure 1, Item 17), thermostat elbow (Figure 1, Item 16), six washers (Figure 1, Item 15), and screws (Figure 1, Item 14). Tighten screws (Figure 1, Item 14) evenly.

END OF TASK

INSTALLATION

1. Install gasket (Figure 1, Item 13), thermostat housing (Figure 1, Item 1), two screws (Figure 1, Item 11), and screw (Figure 1, Item 12). Tighten screws.
2. Connect hose (Figure 1, Item 10).
3. Connect hose (Figure 1, Item 9) and tighten hose clamp (Figure 1, Item 8).
4. Connect hose (Figure 1, Item 7) and tighten hose clamp (Figure 1, Item 6).
5. Connect hose (Figure 1, Item 5) and tighten hose clamp (Figure 1, Item 4).
6. Connect hose (Figure 1, Item 3) and tighten hose clamp (Figure 1, Item 2).

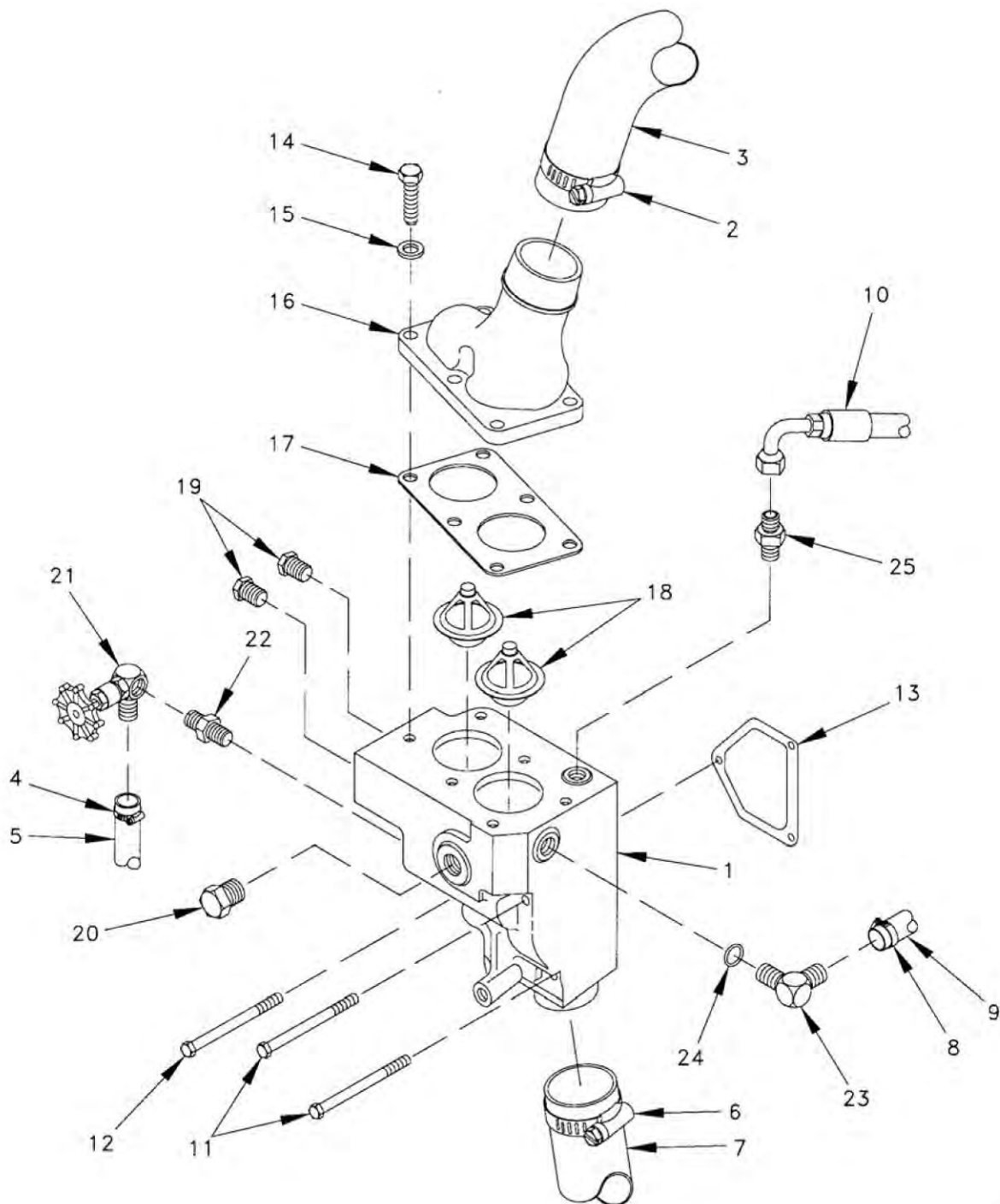


Figure 1. Thermostat Housing.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****ENGINE CONTROL MODULE: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Tiedown straps (WP 0123, Table 1, Item 50)

Personnel Required

Two

References

TM 9-6115-729-24P
WP 0012 (Symptoms 11, 12, and 15)

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Water separator filter and bracket removed (WP 0059)
Fuel filter base removed (WP 0079)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

WARNING

DC voltages are present at generator set electrical components even with generator set shut down. Avoid shorting any positive with ground/negative. Failure to comply can cause injury to personnel and damage to equipment.

WARNING

When running, generator set engine has hot metal surfaces that will burn flesh on contact. Shut down generator set, and allow engine to cool before performing checks, services, and maintenance. Wear gloves and additional protective clothing as required. Failure to comply can cause injury or death to personnel.

REMOVAL

1. Refer to WP 0012, SYMPTOM 15 to copy the configuration data from the old ECM.
2. Ensure generator set is fully stopped, ENGINE CONTROL switch is OFF/RESET, Battery Disconnect Switch is OFF, and DEAD CRANK SWITCH is OFF before proceeding.
3. Open right front door and right rear doors.

NOTE

Cut tiedown straps as required.

4. Tag and disconnect engine harness connector ENG-P2/J2 (Figure 1, Item 1) and ECM J1 to EMCP harness connector ENG-P1/J1 (Figure 1, Item 2) from engine control module (Figure 1, Item 3).
5. Remove four bolts (Figure 1, Item 4), washers (Figure 1, Item 5), ground strap (Figure 1, Item 6), and engine control module (Figure 1, Item 3).

END OF TASK**INSTALLATION****NOTE**

When installing ECM ensure personality module is positioned at lower left. Top left bolt on ECM also secures the grounding strap and is longer than the other three.

NOTE

Install tiedown straps as required.

1. Install engine control module (Figure 1, Item 3), ground strap (Figure 1, Item 6), four washers (Figure 1, Item 5), and bolts (Figure 1, Item 4).
2. Install ECM J1 to EMCP harness connector ENG-P1/J1 (Figure 1, Item 2) and engine harness connector J2/P2 (Figure 1, Item 1). Torque ENG-P1/J1 and ENG-P2/J2 ECM connectors to 55 +13.0 -4.0 lb•in (6.0 +1.5 -0.5 N•m)
3. Close right front door and right rear doors.
4. Refer to WP 0012, SYMPTOM 12 to flash program the flash file into the ECM.
5. Refer to WP 0012, SYMPTOM 15 to copy the configuration data into the ECM.
6. Refer to WP 0012, SYMPTOM 11 to calibrate the engine timing sensor.

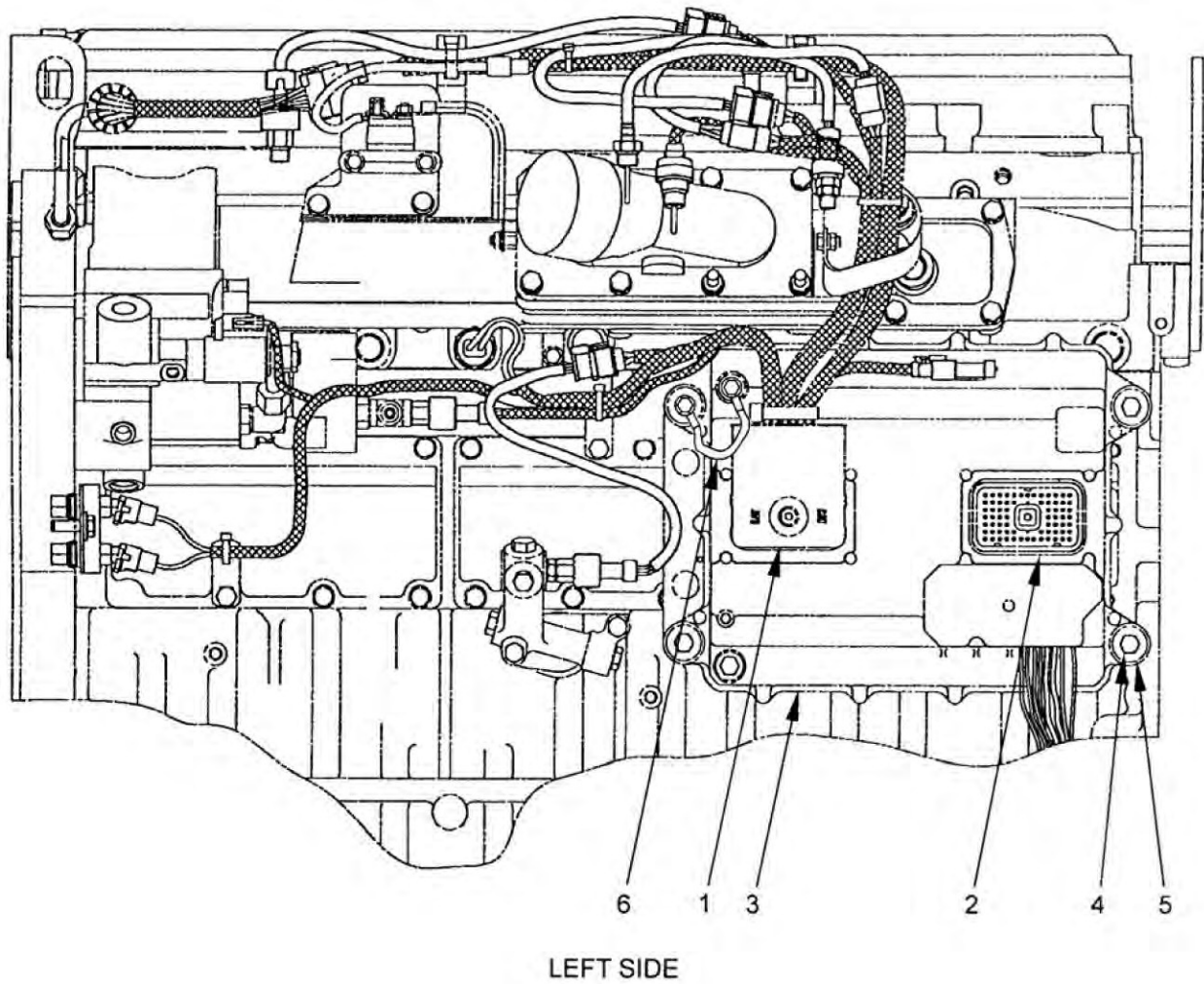


Figure 1. Engine Control Module.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE**TACTICAL QUIET GENERATOR 100 kW, 50/60 Hz MEP-807A/PU-807A****FLYWHEEL HOUSING: REMOVAL, INSTALLATION**

INITIAL SETUP:**Tools and Special Tools**

Tool Kit, General Mechanic's (GMTK) (WP 0122, Table 2, Item 2)
Tool Set, Standard Automotive (SATS) Base (WP 0122, Table 2, Item 3)

Materials/Parts

Breakthrough cleaning solvent (WP 0123, Table 1, Item 49)
Sealing compound (WP 0123, Table 1, Item 43)
Wiping rags (WP 0123, Table 1, Item 38)

Personnel Required

Two

References

TM 9-6115-729-24P

Equipment Condition

Generator Set fully stopped
Engine Control Switch in OFF/RESET Position
Battery Disconnect Switch set in OFF Position
Dead Crank Switch set in OFF Position
Starter removed (WP 0073)
Flywheel removed (WP 0114)

WARNING

Metal jewelry will conduct electricity. All jewelry can become entangled in generator set components. Remove all jewelry when working on generator set. Failure to comply can cause injury or death to personnel by electrocution.

WARNING

DO NOT wear loose clothing when performing checks, services and maintenance. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when this generator set is in operation. Make sure unit is completely shut down and free of any power source before attempting any repair or maintenance on the unit. Failure to comply can cause injury or death to personnel.

WARNING

High voltage is produced when the generator set is in operation. Never attempt to start or maintain the generator set unless it is properly grounded. Failure to comply can cause injury or death to personnel.

REMOVAL**WARNING**

Flywheel housing weighs more than 55 pounds (25 kg) and requires a two-person lift. Lifting flywheel housing can cause back strain. Ensure proper lifting techniques are used when lifting flywheel housing. Failure to comply can cause injury to personnel.

1. Remove two screws (Figure 1, Item 1), ten screws (Figure 1, Item 2), and flywheel housing (Figure 1, Item 3).
2. Remove two plugs (Figure 1, Item 4), pipe plug (Figure 1, Item 5), and plug (Figure 1, Item 6).

END OF TASK

INSTALLATION

1. Install plug (Figure 1, Item 6), pipe plug (Figure 1, Item 5), and two plugs (Figure 1, Item 4).
2. Apply sealing compound to contact surface of flywheel housing (Figure 1, Item 3) and install flywheel housing, ten screws (Figure 1, Item 2), and two screws (Figure 1, Item 1).
3. Torque two screws (Figure 1, Item 1) to 33-47 lb•in (45-65 N•m). Torque ten screws (Figure 1, Item 2) to 98-144 lb•ft (130-190 N•m).
4. Install flywheel (WP 0114).
5. Install starter (WP 0073).

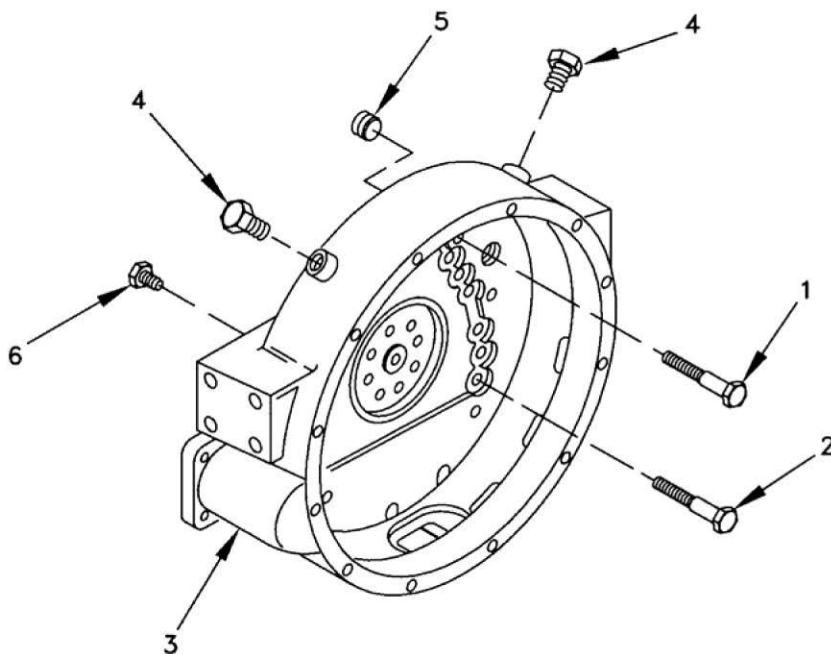


Figure 1. Flywheel Housing.

END OF TASK

END OF WORK PACKAGE