



INSTRUCTION BULLETIN

No. 340393
Machine: 6100 IC
Published: 5-00/01
System: ENGINE

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you the cost of ordering an entire kit.

NOTE: Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation instructions for kit number 384460

SYNOPSIS / PROBLEM:

This kit contains the parts needed to install an alternator kit on the model 6100 IC sweeper. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 4 to 5 hours)

PREPARATION:

(Refer to FIG. 1 thru 9)

FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.

1. Lift open the seat support. Secure in place with the seat support brace.
2. Disconnect battery cables from machine.



WARNING: Always disconnect battery cables from machine before working on electrical components.

INSTALLATION:

(Refer to FIG. 1 thru 9)

1. Remove and set aside the shroud from the left side of the machine. (Refer to FIG. 1)

NOTE: Set all machine parts and mounting hardware neatly aside for re-assembly.

2. Loosen the two securing nuts on the bottom of the heat deflector assembly. Remove the top mounting hardware and heat deflector assembly. (Refer to FIG. 2)
3. Remove the muffler guard from the top of the engine. (Refer to FIG. 2)
4. Remove the air intake assembly from the engine. (Refer to FIG. 3)
5. Loosen the tension on the jackshaft belt, and remove the belt from the engine. (Refer to FIG. 4)
6. Remove the air deflector from the machine. (Refer to FIG. 3)
7. Loosen and remove the exhaust pipe. (Refer to FIG. 2)

NOTE: The exhaust pipe is crimped into place during assembly, and may be difficult to remove.

8. Loosen the hydraulic pump belt with a 9/16 wrench on the carriage bolt, and a 17mm wrench on the pivot bolt. (Refer to FIG. 4)
9. Remove the engine voltage regulator from the engine and disconnect it from the main harness. (Refer to FIG. 5)
10. Remove the air cleaner from the engine. (Refer to FIG. 3)
11. Remove the seat support brace from the seat support. Open the seat support as far as possible and secure to the steering wheel.
12. Remove the jackshaft tension arm. (Refer to FIG. 4)
13. Remove the idler pulley from the machine with a 9/16 wrench. (Refer to FIG. 4)
14. Remove the engine oil dipstick tube with a 1 1/16 wrench. (Refer to FIG. 3)
15. Remove the four engine mounting bolts. (Refer to FIG. 3)
16. Slide the engine out just far enough to access the pump and mounting plate.
17. Remove the old pump mounting plate, and replace with the new plate.
(Refer to FIG. 4,6 and 9)
18. Install the pump and belt to the new mounting plate. (Refer to FIG. 6)
19. Install the idler pulley with 9/16 wrench. (Refer to FIG. 6)
20. Check the position of the positive cable to the starter solenoid.
21. Check the mounting clearance for the new alternator. (Refer to FIG. 8 and 9)
22. Install the new alternator. (Refer to FIG. 8 and 9)
23. Install the jackshaft tension arm and jackshaft belt. Do not tighten the belt yet.
24. Locate the sheave for the alternator. Use the square key 1/4 X 1/4 X 3/4
25. Install the belt on the alternator. (Refer to FIG. 6)
26. Align the new sheave on the engine with the alternator. Tighten the set screws with an M3 allen wrench. Check the set screws with a 1/4 in drive ratchet.
27. Relocate the battery ground cable to the front side, inside the engine mounting bolt.
(Refer to FIG. 7)
28. Relocate the engine wire harness ground wires to another engine bolt on the back side.
(Refer to FIG. 7)

NOTE: With the new engine parts installed, you will not be able to get the rear inside motor mounting bolt in.

29. Install the three remaining engine mounting bolts. Check the clearance with the hydraulic hose filter to the tank with 1 1/4 and 7/8. (Refer to FIG. 3)
30. Tighten the belt for the brush and the vacuum fan jackshaft. (Refer to FIG. 6)
31. Install the dipstick tube and air cleaner. (Refer to FIG. 3)
32. Install the positive battery cable to the battery. Use a wire tie to keep the cable away from the sheaves located to the hydraulic suction line.

33. Install the air deflector bracket. Remember the interior/exterior shake on the screw going into the head. (Refer to FIG. 3)
34. Tighten the exhaust pipe, and check for clearance where the pipe goes through the frame. (Refer to FIG. 2)
35. Make sure the wires are tied up and away from the exhaust pipe.
36. Install the seat support brace.
37. Pull the front side all the way out toward you so the shroud fits in okay.
38. Install the muffler guard back on the top of the engine.
39. Replace the heat deflector assembly back on the side of the machine. (Refer to FIG. 2)
40. Plug the wiring harness from the alternator to the wire harness plug. (Refer to FIG. 7 and 8)
41. Disconnect the wires 12/BRN and 11/ORA to the two green wires on the engine. The green wires are located at the right rear by the engine shroud. Use the connectors to cap the 11/ORG and 12/BRN and secure them with a wire tie. (Refer to FIG. 7)
42. In the instrument panel, disconnect the 10E/GREY wire from CB-3 and add in jumper harness to the circuit breaker and plug 10E/GREY into the jumper harness. (Refer to FIG. 7)
43. On the Alternator charge lamp, disconnect the 13K/BLK wire from the light, and connect the wire from CB3 to the light. (Refer to FIG. 7)

NOTE: CHECK CLEARANCES WITH ALL BELTS, BATTERY CABLES AND HYDRAULIC HOSES CLOSELY BEFORE OPERATING MACHINE.

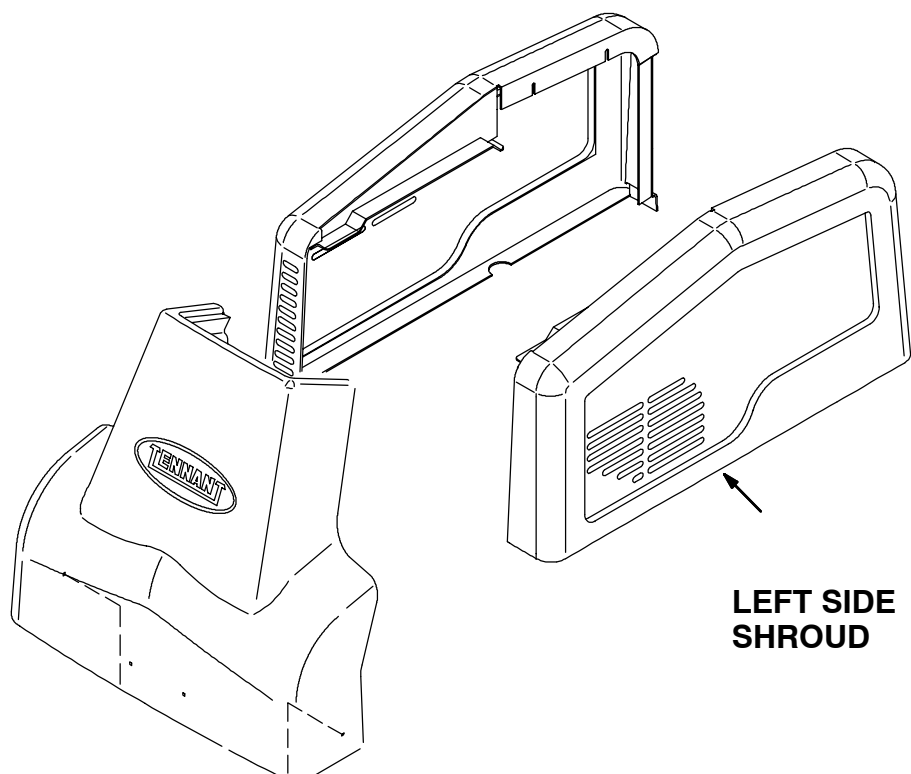


FIG. 1 - SHROUD ASSEMBLY

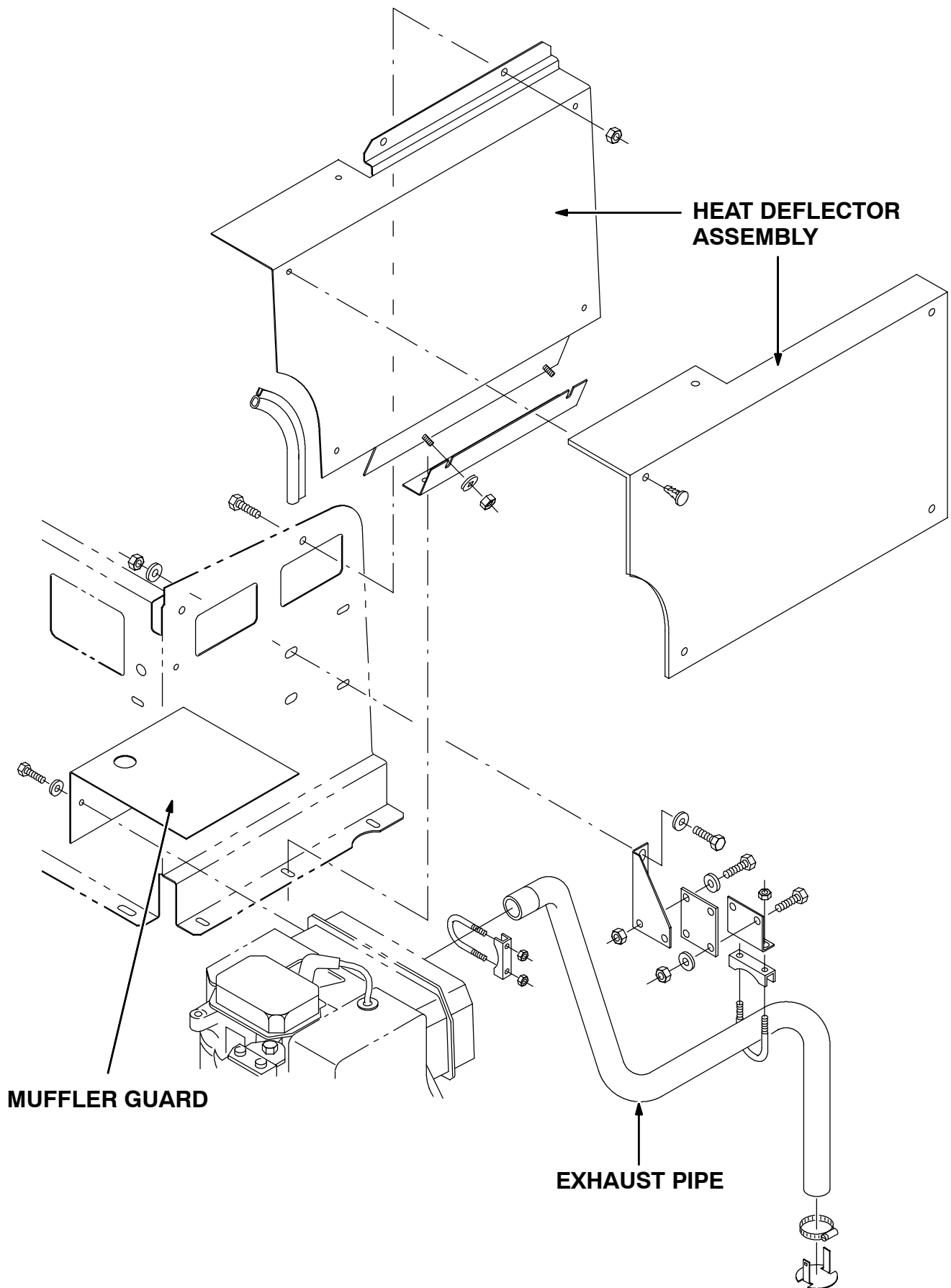


FIG. 2 - MUFFLER GROUP

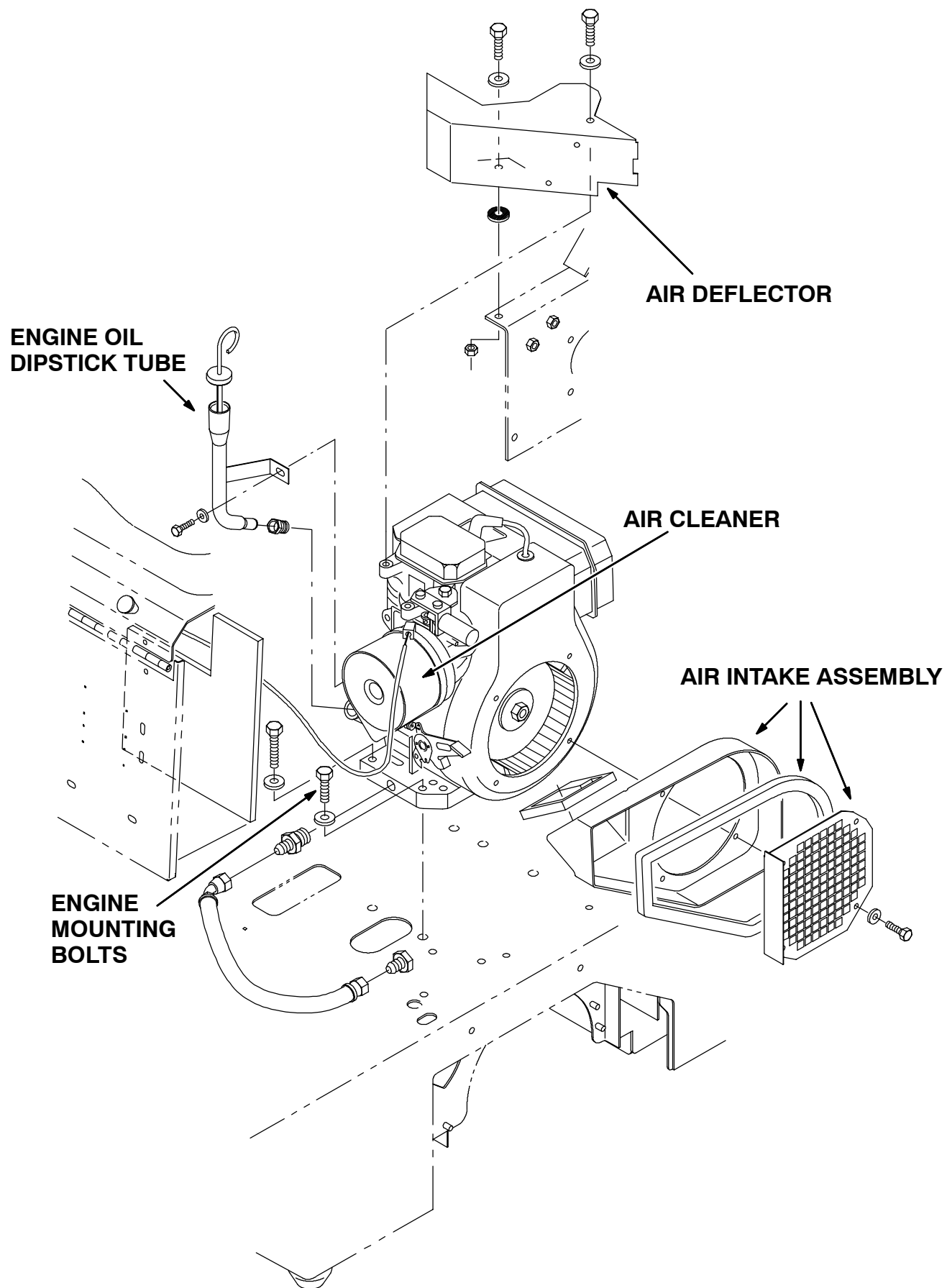


FIG. 3 - ENGINE GROUP

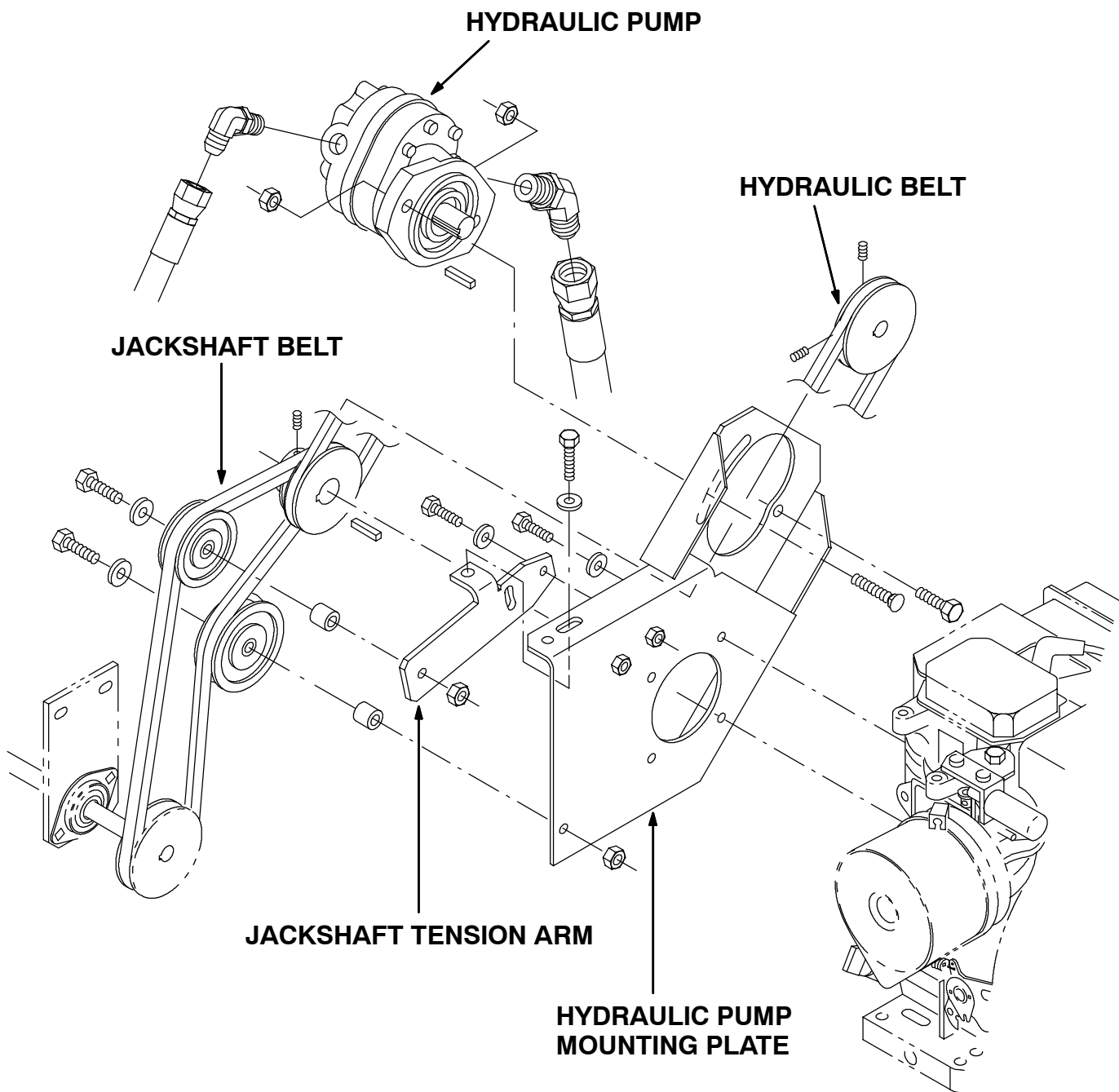


FIG. 4 - HYDRAULIC PUMP AND BELTS GROUP

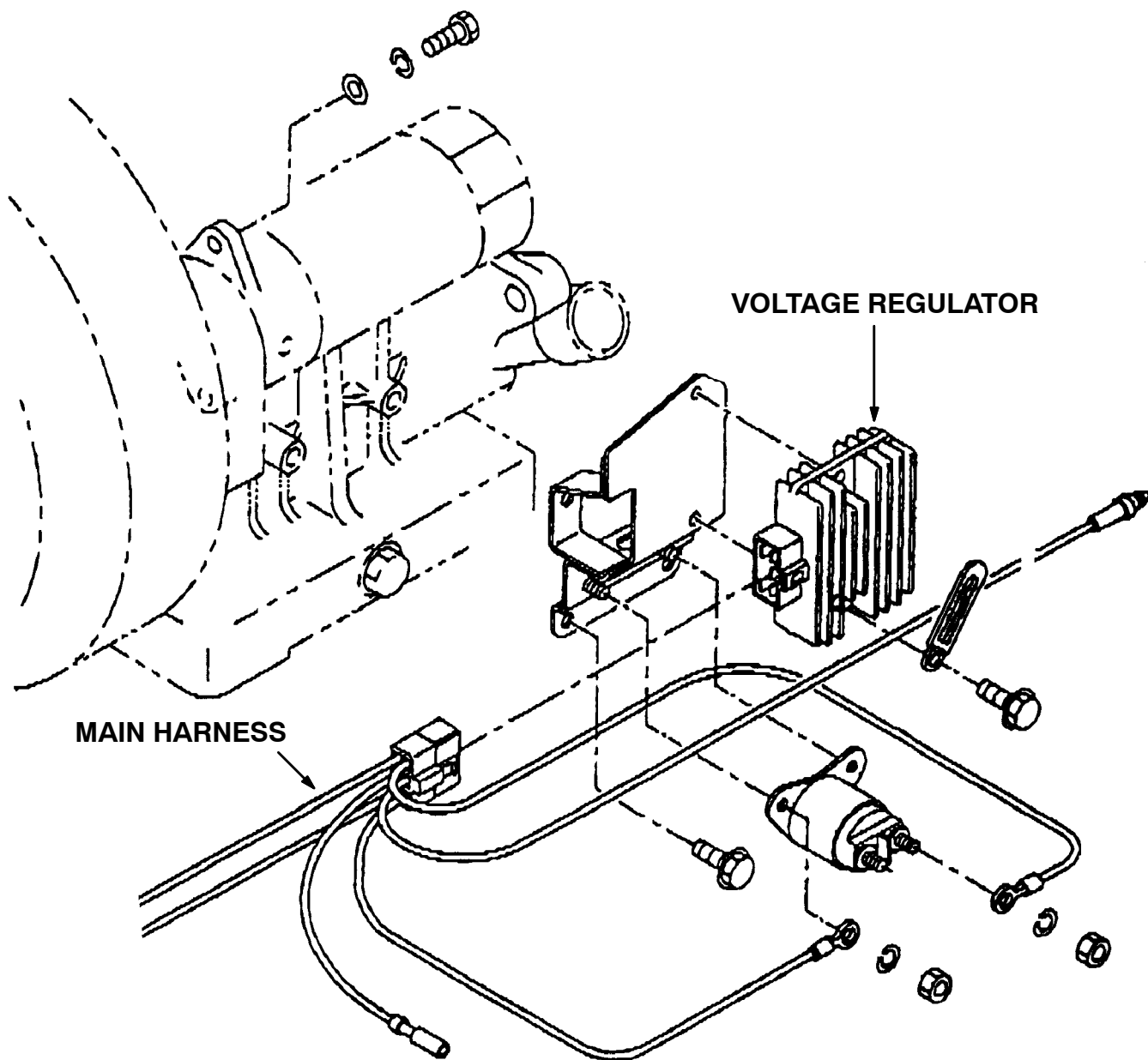


FIG. 5 - REGULATOR AND SOLENOID GROUP

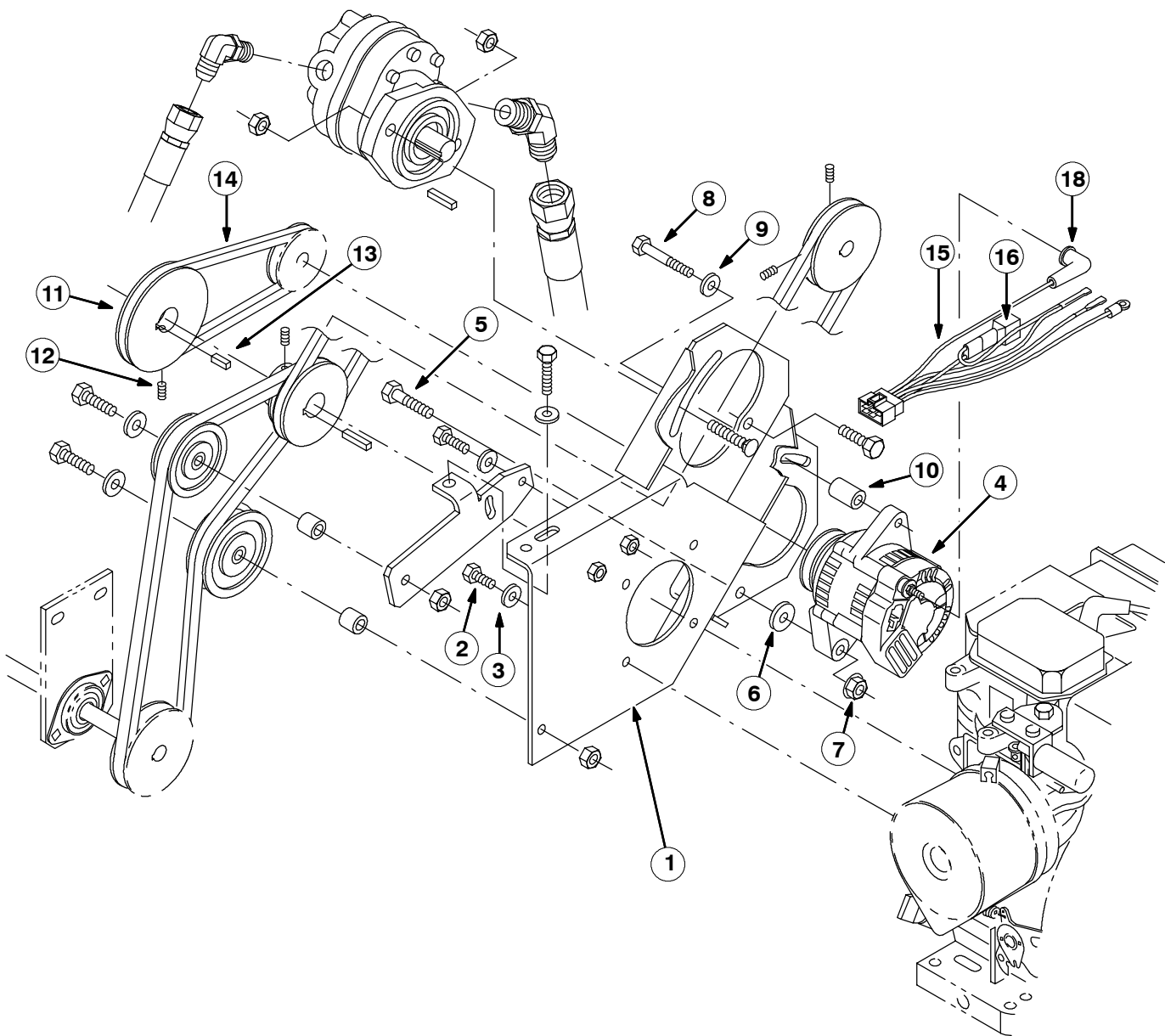


FIG. 6 - NEW MOUNTING PLATE AND ALTERNATOR INSTALLATION

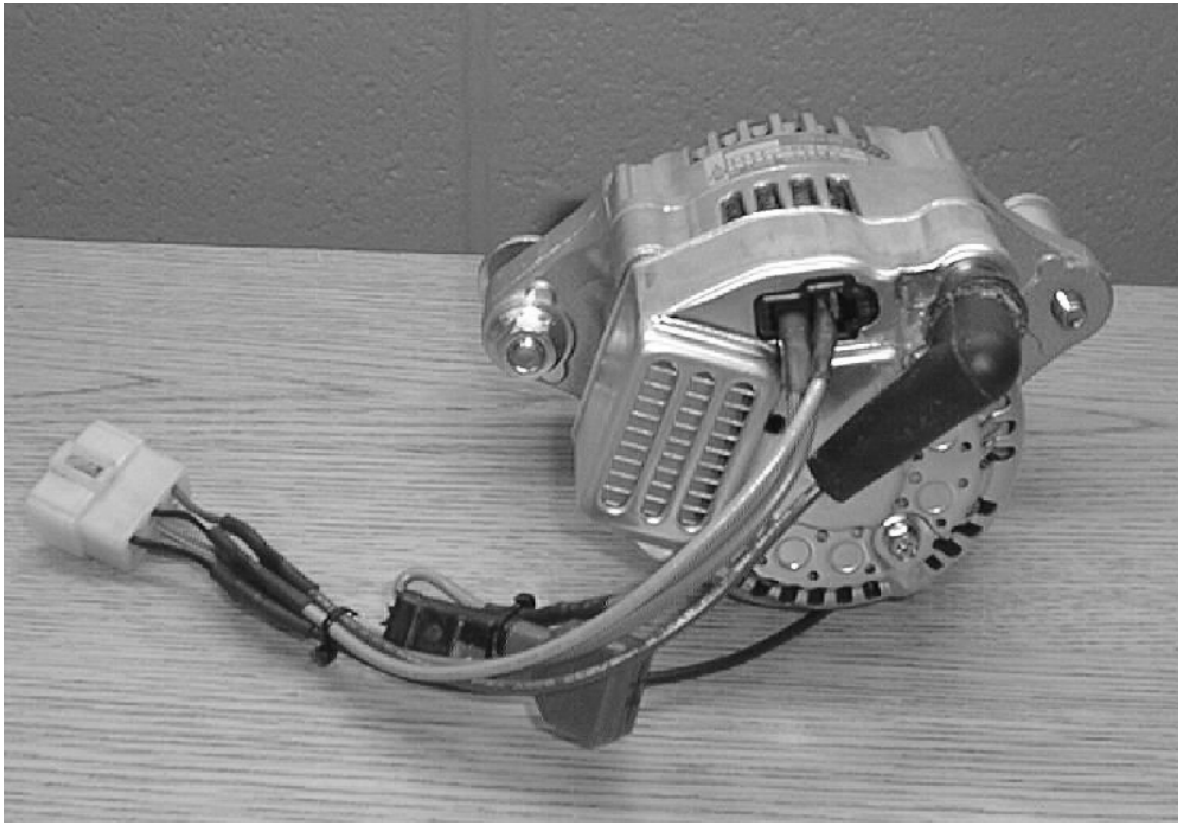


FIG. 8 - NEW ALTERNATOR WIRING

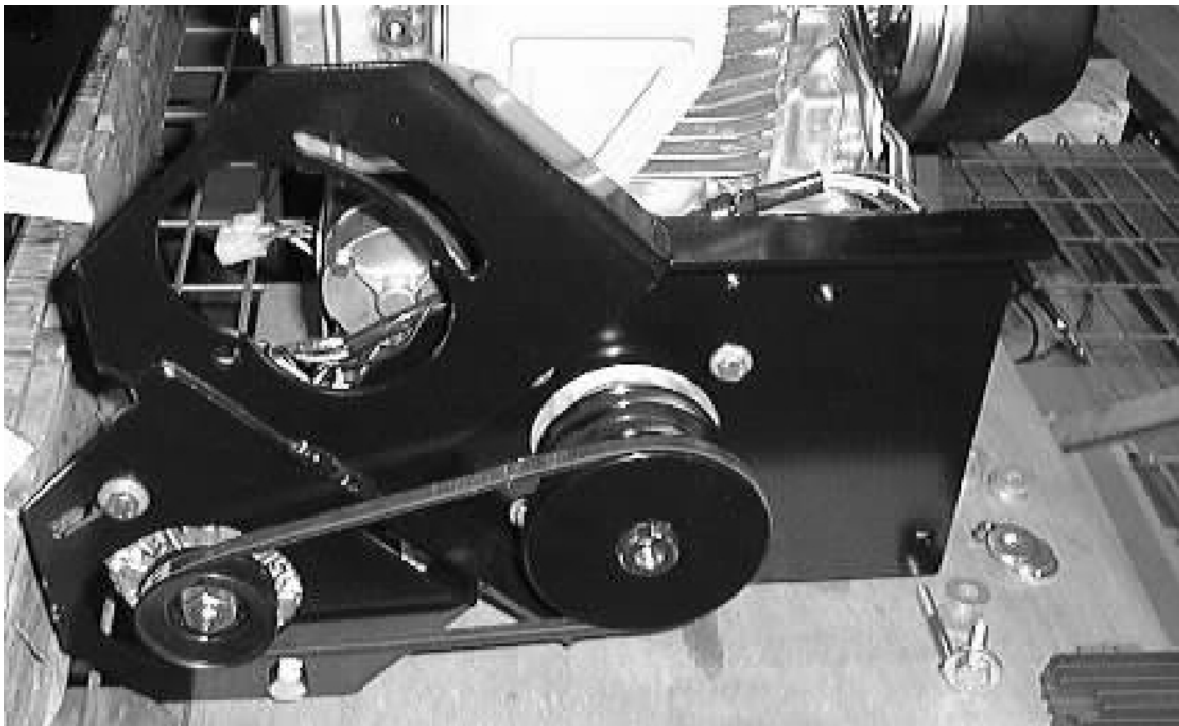


FIG. 9 - NEW ALTERNATOR/MOUNTING PLATE ASSEMBLY

BILL OF MATERIALS FOR 6100 IC ALTERNATOR KIT 384460

Ref.	TENNANT Part No.	Description	Qty.
1	384456	Channel wldt, mtg, alternator	1
2	07592	Screw, hex, .31-24 X 0.75, G5	4
3	39349	Washer, flat, .31 SAE	4
4	361387	Alternator	1
5	06962	Screw, hex, M10-1.5 X 45, 8.8	1
6	13248	Washer	1
7	07792	Nut, hex, flange, M10-1.5	1
8	06957	Screw, hex, M08-1.25 X 60, 8.8	1
9	41186	Washer, belleville, .31	1
10	384459	Tube, 0.75D, 0.41B, 1.2L STL	1
11	384458	Sheave, 3L 1 groove, 4.12PD	1
12	01750	Screw, set, M06-1.0 X 16, 45H	2
13	00926	Key, square,	1
14	384455	Belt, V, 3L, 26.OL	1
15	384461	Harness, alternator	1
16	222290	Diode, ele, plug	1
17	32668	Receptacle, plug	2
18	02076	Boot	1

TENNANT COMPANY
P. O. Box 1452
Minneapolis, MN 55440-1452