



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

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

Installation instructions for heavy duty alternator **kit number 393241**

DESCRIPTION:

This kit contains the parts needed to replace the standard alternator with a heavy duty alternator on 800 and 810 model sweepers equipped with GM 3.0L engines.

Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: None

(Estimated time to complete: 1 hour)

PREPARATION:

1. Park machine on a clean level surface.
2. Turn off machine, remove key, and set parking brake.

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

3. Disconnect the battery cables from the machine.



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

INSTALLATION:

(Refer to FIG. 1 for locations of all parts installed in this instruction bulletin)

1. Open the engine cover and side door.
2. Locate the alternator on the front, left corner of the engine.
3. Mark and disconnect the electrical wires leading to the back of the alternator.
4. Remove the screw and nut holding the top of the alternator to the slotted arm.
5. Loosen the lower mount bolt.
6. Push the alternator in toward the engine block.

7. Remove the V-belt from the alternator sheave, water pump sheave, and crankshaft sheave and discard the V-belt.
8. Remove the lower mount bolt and nut. Remove the existing alternator from the engine. *Retain the steel sleeve (Diesel only).*
9. Use the lock nut and washer provided with the new alternator (1) to install the new sheave (2) onto the new alternator.
10. Install the hex screw (12) and lock washer (13) onto the alternator (1).
11. Use a hex screw (20) and a hex nut (23) to loosely mount the heat shield angle (22) to the heat shield plate (21).
12. Use a hex screw (24), a flat washer (16) and two lock washers (19) to mount the heat shield plate (21) onto the machine.
13. Use a hex screw (26) and a belleville washer (25) to mount the new alternator guard bracket (11) and the new alternator arm (18) onto the new alternator (1).
14. Use a hex screw (10) and a flat washer (16) to loosely mount the stationary end of the alternator arm (18) to the machine.
15. Use a hex screw (20) and a hex nut (23) to loosely mount the alternator arm (18) to the heat shield angle (22).
16. Use two hex screws (17), two flat washers (16), sleeve bushings (15), and two lock nuts (9) to mount the new alternator mounting bracket (14) to machine.
17. Press the alternator sleeve (7) into the alternator mounting bracket (14). Use the alternator (1) to guide the alternator sleeve (7) into the alternator mounting bracket (14).
18. Use a hex screw (8), a flat washer (16), the alternator sleeve (7), and a lock nut (9) to loosely mount the new alternator (1) to the alternator mounting bracket (14).
19. Install the new V-belt (6) onto the three sheaves. Pull the alternator (1) away from the engine until the V-belt (6) is tight and tighten hex screw (26). Refer to reference in Fig. 1.
20. Tighten hex screw (8) holding the alternator (1) to the alternator mounting bracket (14). Refer to reference in Fig. 1.
21. Tighten hex screw (10) holding the alternator arm (18) onto the machine. Refer to reference in Fig. 1.
22. Tighten the hex screw (20) and hex nut (23) holding the heat shield angle (22) onto the heat shield plate (21) and the hex screw (20) and hex nut (23) holding the alternator arm (18) onto the heat shield angle (22). Refer to reference in Fig. 1.
23. Use a hex nut (4) and a washer (5) to install the ground wire (3) onto the alternator (1). Connect the loose end of the ground wire (3) to a ground stud.
24. Use a hex nut (4) and a washer (5) to connect the power wire to the alternator (1).
25. Secure the wiring from the engine inside cable clamp (27) and use a hex screw (20) and hex nut (23) to secure the cable clamp (27) onto the heat shield plate (21).
26. Reconnect battery cables and start engine. Check alternator for proper operation.

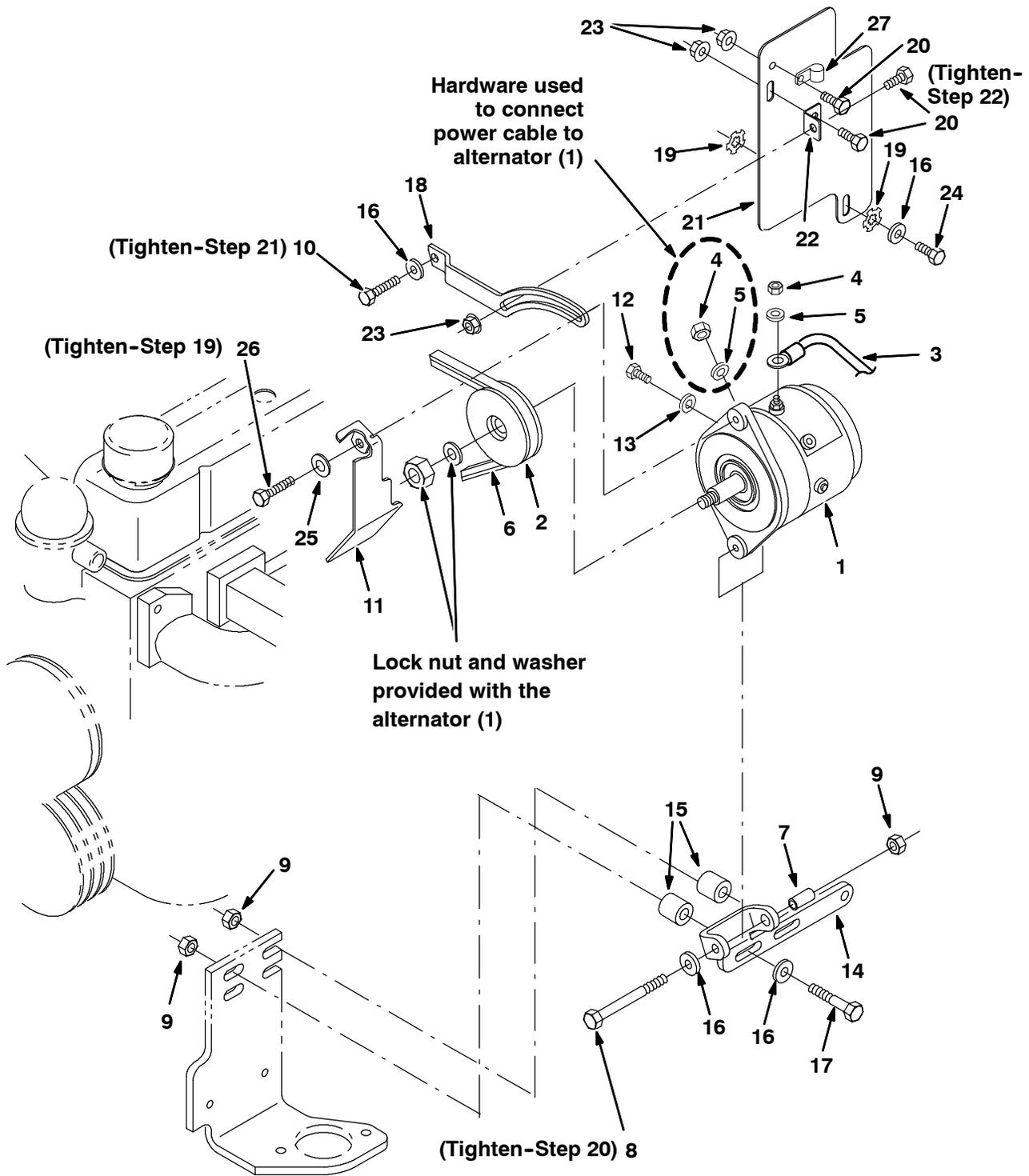


FIG. 1

Bill of Materials for Kit, CI, Alternator, HD, Gas/LPG [GM3.0] (393241)

Ref.	Tennant Part No.	Description	Qty.
▽	393241	Kit, CI, Alternator, HD, Gas/LPG [GM3.0]	1
▲	1 75828	Alternator, 12VDC, 100A [Brushless]	1
▲	2 77555	Sheeve, [3L], 1GRV, 03.5PD 0.67B	1
▲	3 31525	Wire, 10GA 16.0L BLK .38Ring / .25Ring	1
▲	4 08708	Nut, Hex, Lock, M6 X 1.0, NL	2
▲	5 32483	Washer, Flat, 0.25 SAE	1
▲	6 393244	Belt, V, [HC41] 42.0L	1
▲	7 371526	Sleeve, Alternator	1
▲	8 20177	Screw, Hex, .38-16 X 4.00, 5	1
▲	9 50902	Nut, Hex, Lock, .38-16, NI	3
▲	10 21195	Screw, Hex, .38-16 X 0.75, 5	1
▲	11 1008538	Bracket, Guard, Alternator, HD [GM3.0L]	1
▲	12 21237	Screw, Hex, M4 X 0.7 X 6, 8.8	1
▲	13 32978	Washer, Lock, Int, #08	1
▲	14 1008094	Bracket, Mtg, Alternator, HD, [GM3.0L]	1
▲	15 07274	Bushing, Sleeve, .40B X .50D X 1.06L	2
▲	16 32485	Washer, Flat, .38 Sae	5
▲	17 27990	Screw, Hex, 38-16 X 2.00, 5	2
▲	18 1008519	Arm, Alternator, HD, [GM3.0L]	1
▲	19 41142	Washer, Lock, Int-Ext, .38	2
▲	20 16735	Screw, Hex, M8 X 1.25 X 16, 8.8	3
▲	21 1008511	Plate, Shield, Heat	1
▲	22 1008513	Angle, Heat, Shield	1
▲	23 07791	Nut, Hex, Flng, M8 X 1.25	3
▲	24 21197	Screw, Hex, 38-16 X 1.00, 5	1
▲	25 41186	Washer, Belleville, .31	1
▲	26 39277	Screw, Hex, M8 X 1.25 X 25, 8.8	1
▲	27 69234	Clamp, Cable, Stl, 1.00D X 0.62W, 1H	1

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