

Battery Conversion Kit

(AGM to Lithium-ion)





This kit includes the necessary parts to convert a machine currently equipped with an AGM battery to use a lithium-ion battery. Do not attempt to exchange battery types unless battery conversion kit is installed, machine and battery damage may result.

INSTALLATION INSTRUCTIONS: Installation Time: 1 hour

Models: T1 Battery, Speed Scrub 15" Battery

TOOLS REQUIRED: Philips screwdriver, 10 mm wrench, 8 mm socket wrench and small standard screwdriver.

FOR SAFETY: Before installing kit, carefully read and exercise the safety information included in the Battery Module Quick Reference Guide that is packaged with new battery.

 Remove the battery compartment cover from machine by removing two screws at bottom of cover (Figure 1).

FOR SAFETY: When servicing machine, wear protective gloves and eye protection when handling battery and battery cables.



Fig. 1

2. Unlatch the battery support strap. Disconnect the black negative (-) cable first then red positive (+) cable from battery. Carefully remove the battery from machine (Figure 2).



Fig. 2

Kit Contents			
Item Part		Part	
No.	Number	Description	Qty
1	1063936	Harness, Jumper [Li-ion]	1
2	1065754	Charger, 12VDC, 16A 120/240V [Li-ion]	1
3	1053209	Module, Timer, 12V, 5S interval	1
4	41578	Washer, Flat, 06, SS	1
5	75939	Nut, Hex, Lock, #06-32, NL	1
6	1048378	Gauge, Voltmeter, 12VDC Nominal	1
7	1066222	Label, Lithium-ion, Gray [T1 model]	2
8	1066224	Label, Lithium-ion, Black [Speed Scrub]	2
9	9008690	Battery, Lithium-ion (kit 9008723)	1
10	41578	Washer, Flat, 06, SS	1
11	75939	Nut, Hex, Lock, #06-32, NL	1

3. Remove the top and bottom wire harness retainer brackets from machine (Figure 3).



Fig. 3

4. Disconnect the AGM battery jumper harness connectors and remove harness from machine (Figure 4).

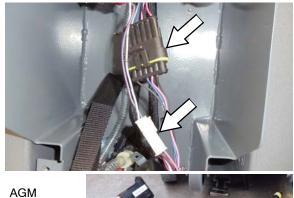




Fig. 4

5. Connect the lithium-ion battery jumper harness to machine harness as shown (Figure 5).

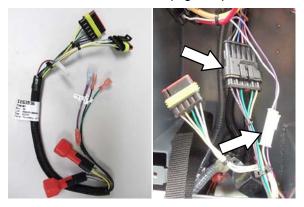


Fig. 5

6. Re-install the two wire harness retainer brackets. There are two sets of mounting studs for the top retainer bracket. Use the lower studs for the lithium-ion battery as shown (Figure 6a). Route battery strap behind brackets. Secure the relay tab behind the lower retainer bracket as shown (Figure 6b).

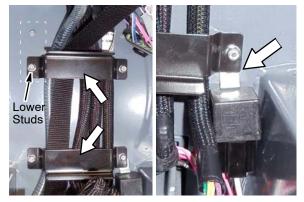


Fig. 6a

Fig. 6b

 Connect the lithium-ion jumper harness wires to timer module as shown [17/17B purple to pin 1, 15 green to pin 2 and 13Y black to pin 3] (Figure 7).

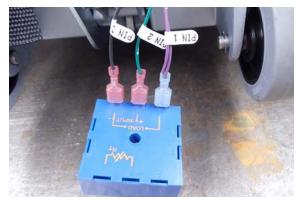


Fig. 7

8. Using the washer and nut supplied with kit, mount the timer module to the machine stud as shown (Figure 8). Route wires under solution hose.

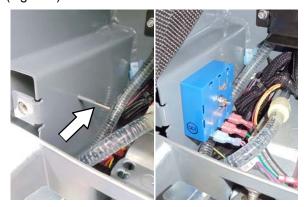


Fig. 8

 Within the machine's wiring, directly below the charger plug connector, disconnect orange/63 wire labeled "AGM" from pink/41C wire labeled "BATTERY SELECT" and connect gray/68 wire labeled "LITHIUM" in its place (Figure 9).

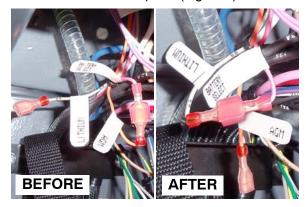


Fig. 9

10. Remove the AGM battery discharge gauge from handle (Figure 10).

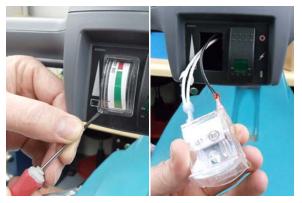


Fig. 10

 Install the lithium-ion battery discharge gauge in its place (Figure 11). Connect white wires to positive (+) terminal and black wire to negative (-) terminal.

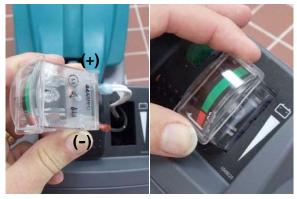


Fig. 11

12. Install the lithium-ion battery into the machine and secure with battery strap. Route battery strap through the warning label slot as shown (Figure 12).

IMPORTANT: DO NOT REMOVE WARNING LABEL FROM BATTERY.



Fig. 12

13. Plug the battery's communication cable into the lithium-ion jumper harness connector as shown (Figure 13). Store the other communication cable above the battery.



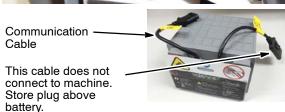


Fig. 13

14. Using the hardware supplied with new battery, connect the battery cables to new battery as shown (Figure 14). Red to positive (+) then black to negative (-) in this order.



Fig. 14

15. Replace the machine's battery compartment cover.

NOTE: For battery charger operating instructions, refer to the User's Manual supplied with the battery charger. Also refer to the machine's operator manual for further information regarding battery charging.

16. Dispose or store old battery in an environmentally safe way according to your local regulations. Contact your local regulatory authorities for proper transporting and disposal instructions. Help preserve the environment – Recycle!



17. Adhere the supplied "Lithium-ion" labels on machine as shown (Figure 15). Adhere one on each side of machine.

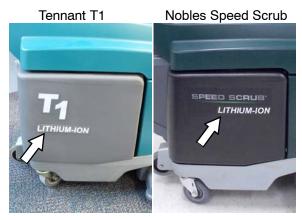


Fig. 15