

R44-series Lead-Acid Battery To Lithium-Ion Battery (Underseat) Conversion Kit Instructions
Kit replaces lead-acid battery installation with True Blue Power® TB17 (RHC P/N D237-2) lithium-ion battery installation on helicopters equipped with factory-installed provisions; battery is not included. Use KI-265-7A on R44 S/N 2625 & subsequent, and Cadet S/N 30071 & subsequent. Use KI-265-7B on R44 II S/N 14412 & subsequent.

NOTE

Visit <https://robinsonheli.com/> to verify kit instructions are current revision. Review instructions before installation; contact RHC Customer Support with questions. Verify kit contents match list; contact RHC Customer Service if parts are missing or damaged.

ITEM	PART NUMBER	KIT CONTENTS	QTY PER KI-265-7A	QTY PER KI-265-7B
1	KI-265-7Instr.	Kit Instructions	1	1
2	A375-1	Tube	1	1
3	A701-5-6IN	Tape – Urethane, 2 inch wide (6 inch length)	1	1
4	A701-3-1FT	Tape – Urethane, 5/16 inch wide (1 foot length)	1	1
5	A701-16-6IN	Tape – Black Neoprene (1 inch wide, 6 inch length)	1	1
6	A785-7	Hose	1	1
7	B277-12	Clamp	2	2
8	D144-9	Support	1	1
9	D144-10	Hold-Down Assembly	1	1
10	F693-7	Harness Assembly – Lithium-ion Battery (FWD)	1	1
11	G198-5	Indicator panel (R44 II With TB17)	0	1
12	G198-9	Indicator panel (R44 With TB17)	1	0
13	G598-4	Cover	1	1
14	MS21042L04	Nut	2	2
15	MS35206-213	Screw	2	2
16	MS3367-4-9+	Ty-rap (Note: “+” in contents part number indicates 20-qty pack)	1	1
17	MS3367-5-9+	Ty-rap (Note: “+” in contents part number indicates 20-qty pack)	1	1
18	MS20470AD3-3.5+	Rivet (Note: “+” in part number indicates 50-qty pack)	1	1
19	NAS1149FN416P+	Washer (Note: “+” in contents part number indicates 20-qty pack)	1	1

Kit Instructions

1. Ensure ignition switch is OFF; remove key. Turn BATTERY switch OFF.
2. Refer to Illustrated Parts Catalog (IPC) Figure 96-13A. To remove G198 indicator panel, remove upper console anchor screws and open upper console ref MM § 13-80. Alternately removal of annunciator panel can be accessed by removing associated Electronic Flight Display ref Maintenance Manual (MM) § 13-70.

Kit Instructions (continued)

3. Refer to Figure 1. Remove jam nut behind the console face and G198 annunciator panel. Remove the push to test switch to annunciator panel. Retain hardware and disconnect existing annunciator panel from airframe harness.
4. Install push-to-test switch to G198-5 or -9 indicator panel. Connect airframe harness connector to annunciator panel and position on console face assembly. Install retained hardware securing annunciator to the console face assembly. Verify security.
5. Install upper console anchor screws and secure console in closed position ref MM § 13-80 or install Electronic Flight Display ref MM § 13-71.

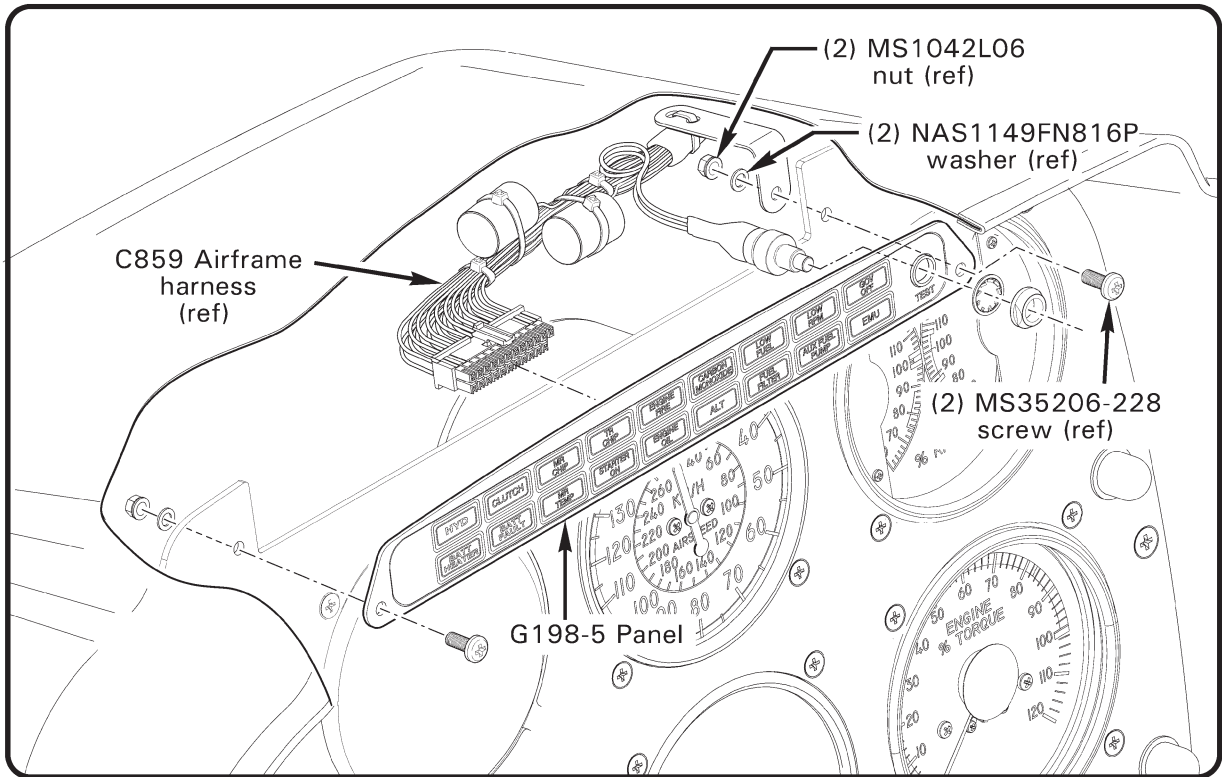


FIGURE 1 Indicator Panel installation
(R44 II 8-Instrument console panel shown)

Kit Instructions (continued)

6. Remove lead-acid battery per MM § 37-10 A.
7. Refer to Figure 2. Remove D144-5 support; retain B526-6 screws.
8. Refer to Figure 3. Trim A701-5 tape to 0.6 inch width x 3.5 inch length, and A701-3 tape to 6.5 inch length. Install A701-5 tape & A701-3 tape as shown.
9. Locate stowed (lithium battery interface) D269-2 receptacle. Cut ty-raps securing stowed receptacle and remove heat shrink. Connect receptacle to F693-7 harness assembly.
10. Refer to Figure 3. Using tube as drill guide, center A372-1 tube on D130-1 doubler and progressively drill (6) 0.097–0.102 inch diameter holes thru C272-1 chin and install clecos. Remove clecos and tube.
11. Refer to Figure 3. Match drill 0.86 inch diameter hole thru chin using step drill. Simultaneous use of vacuum cleaner is recommended to minimize debris accumulation. Clean edge of holes using 320-grit sand paper.
12. Cleco A372-1 tube in position. Progressively remove clecos and install tube using (6) MS20470AD3-3.5 rivets.
13. Perform pre-installation inspection and completely charge D237-2 lithium-ion battery per [True Blue Power Installation Manual and Operating Instructions](#) revision M or subsequent. If battery is new, also perform visual inspection, charging, capacity check, and return to service per [True Blue Power Installation Manual and Operating Instructions](#) revision M or subsequent.
14. Refer to Figure 3. Install D144-9 support assembly using retained screws. Install A785-7 hose to A372-1 tube and secure using B277-12 clamp.
15. Verify battery switch is off. Carefully install battery. Connect positive cable to battery positive terminal using retained hardware. Special torque terminal bolt as noted on battery label and torque stripe per MM Figure 2-1; position nipple over positive terminal. Connect negative (ground) cable to battery negative terminal using retained hardware. Special torque terminal bolt per battery label and torque stripe per MM Figure 2-1.
16. Route and connect F693-7 harness assembly to battery. Secure harness assembly to adjacent cables using appropriately-sized ty-raps. Cinch ty-raps until snug without over-tightening, and trim tips flush with heads.
17. Install A785-7 hose to battery and secure using (1) B277-12 clamp. Wrap A701-16-6IN tape around hose where it contacts battery, trimming tape as required. Verify security of hose.
18. Install D144-10 hold-down assembly using retained hardware, leaving bolt loose enough to slide hold-down assembly (hole is slotted). Position hold-down assembly until it just contacts top of battery. Standard torque bolt per MM § 23-32 and torque stripe per MM Figure 2-1. Verify security of battery installation.

Kit Instructions (continued)

19. Install G598-4 cover to C748-10 cover assembly using hardware as shown. Install cover assembly using retained hardware.
20. Perform functional check of lithium-ion battery by switching battery and strobe switches on and verifying strobe function. Turn battery switch off.
21. Revise helicopter's Weight and Balance Record in Pilot's Operating Handbook (POH) Section 6 to reflect this installation by incorporating the following data:

Install:

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
KI-265-7 Lead-Acid battery To Lithium-Ion Battery (Underseat) Conversion Kit	+15.62 lb	36.38 in.	575.55 in-lb	-8.38 in.	-132.59 in-lb

Remove:

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
B237-4 Battery	-29.50 lb	36.34 in.	-1072.03 in-lb	-8.36 in.	246.62 in-lb

22. Update Pilot's Operating Handbook (POH) Section 9 with Lithium-Ion Battery Supplement, available at <https://robinsonheli.com/> under the Publications tab.
23. Make appropriate maintenance record entries.

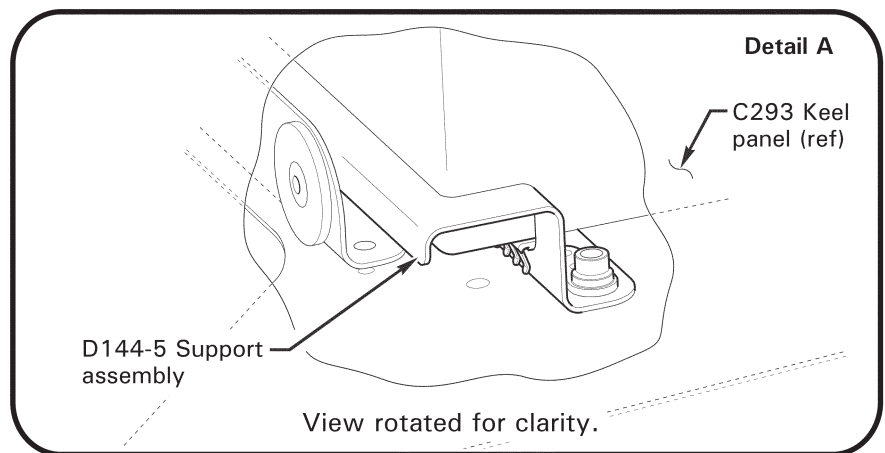
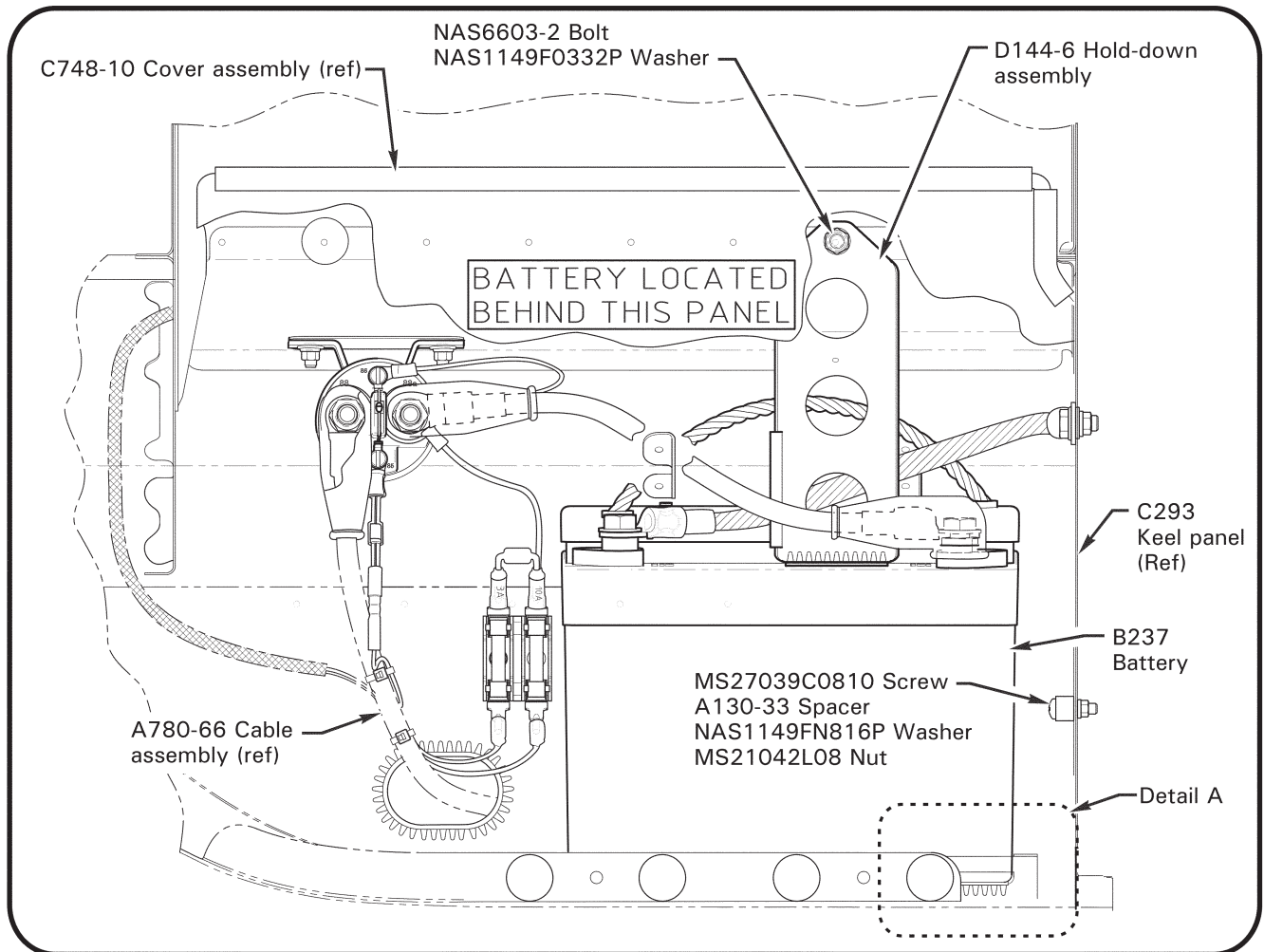


FIGURE 2 Lead-acid battery installation

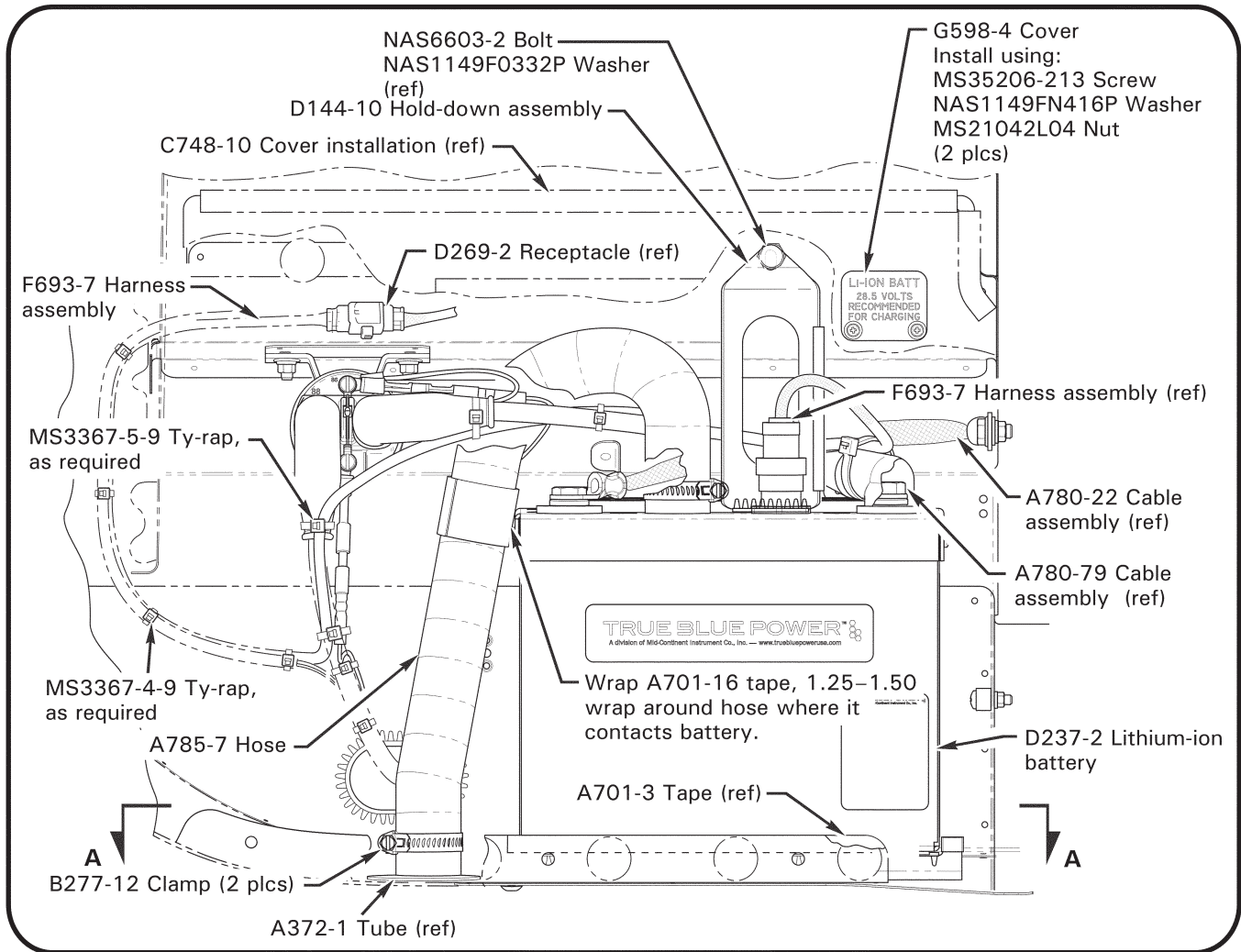
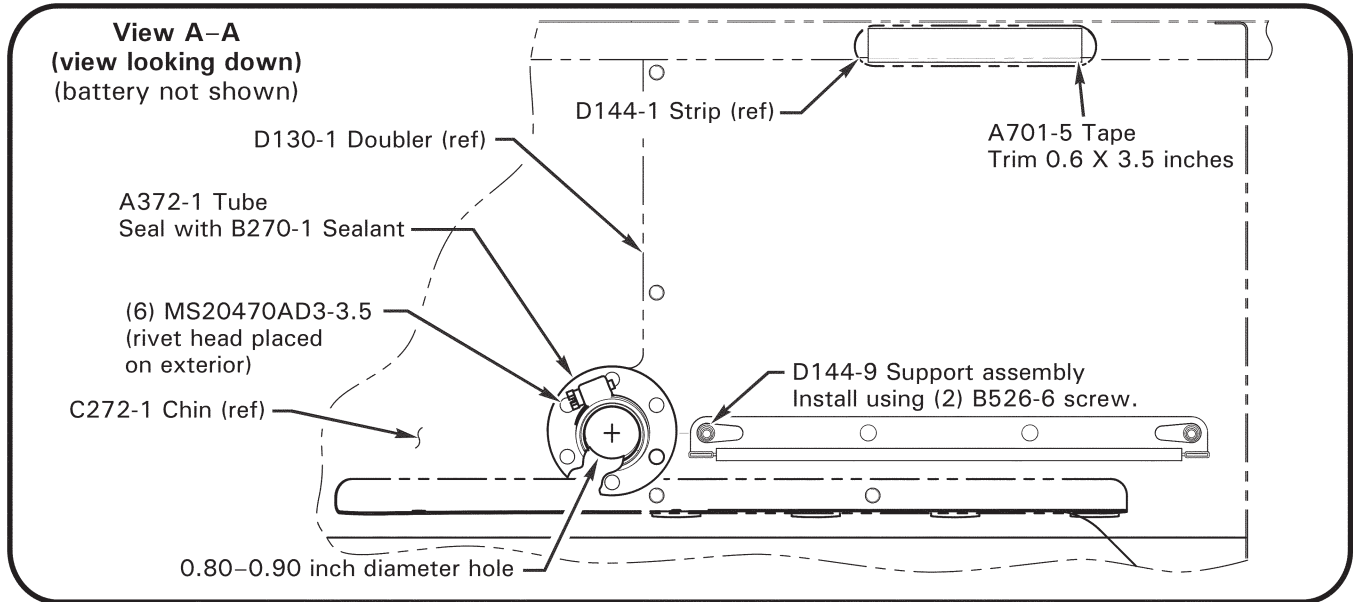


FIGURE 3 Lithium-Ion battery installation