

R44-series (28V only) Power Supply/Charger Plug Assembly Installation Kit Instructions

For installation on helicopters with (24V) aft battery (engine compartment) installation only. Includes MT993-5 plug assembly (mating connection for D035-1 plug assembly). Kit accommodates MT991-1 power supply/charger assembly.

NOTE

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

ITEM	PART NUMBER	KIT CONTENTS	QTY
1	KI-257Instr.	Kit Instructions	1
2	D035-1	Plug Assembly (28V, Red)	1
3	MT993-5	Plug Assembly (28V, Red)	1
4	MS25171-4S	Nipple	1
5	MS3367-5-9+	Ty-rap (Note: "+" in contents part number indicates 20-qty pack)	1

Special Tools

- Multimeter

Kit Instructions

1. Turn BATTERY switch OFF. Disconnect negative (ground) cable from battery R44 Maintenance Manual (MM) § 37-10. Verify compliance with R44 Service Bulletin SB-99, as required.
2. Refer to R44 Illustrated Parts Catalog (IPC) Figure 53-1. Remove C377 (LH) cowling assembly.
3. Refer to Figure 1. Position plug assembly on C046 frame as shown. Secure clamps onto frame using supplied hardware.
4. Remove hardware and nipple from outboard terminal of B415 relay stud; retain nut securing battery positive cable and remove cable from stud. Discard existing nipple. Insert fuse holder (red) wire thru MS25171-4S nipple, and install to cable terminal stud; install battery positive cable terminal and retained nut. Special torque nut to 80 in-lb; verify security. Torque stripe per MM Figure 2-1. Position nipple over stud and secure using appropriately-sized ty-raps. Cinch ty-rap until snug without over-tightening, and trim tip flush with head.

NOTE

Parenthetic dash numbers, such as (-2886), indicate number marked on wiring insulation (if single conductor), or jacket (if multi-conductor and/or shielded).

5. Route wire (-2984) to aft-side of battery. Connect wire and ground cable to (NEG) battery terminal and torque as labeled on battery. Verify security. Torque stripe per MM Figure 2-1.

Kit Instructions (continued)

CAUTION
Damage can occur if wiring is incorrect.

- 6. Verify proper installation of D035-1 plug assembly using a multimeter with leads inserted in “+” and “-” slots of plug. Battery voltage should be indicated.
- 7. Secure wire (-2984) to (battery relay) cable using MS3367-5-9 ty-raps as required. Cinch ty-rap until snug without overtightening and trim tip flush with head.
- 8. Install C377 (LH) cowling assembly.
- 9. Turn BATTERY switch ON.
- 10. 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
Power Supply/Charger Plug Installation	+0.23 lbs	96.19 in.	+22.13 in-lb	-17.06 in.	-3.92 in-lb

- 11. Make appropriate maintenance record entries.
- 12. Additionally, install supplied MT993-6 plug assembly on power supply/charger of preference to accommodate KI-257.

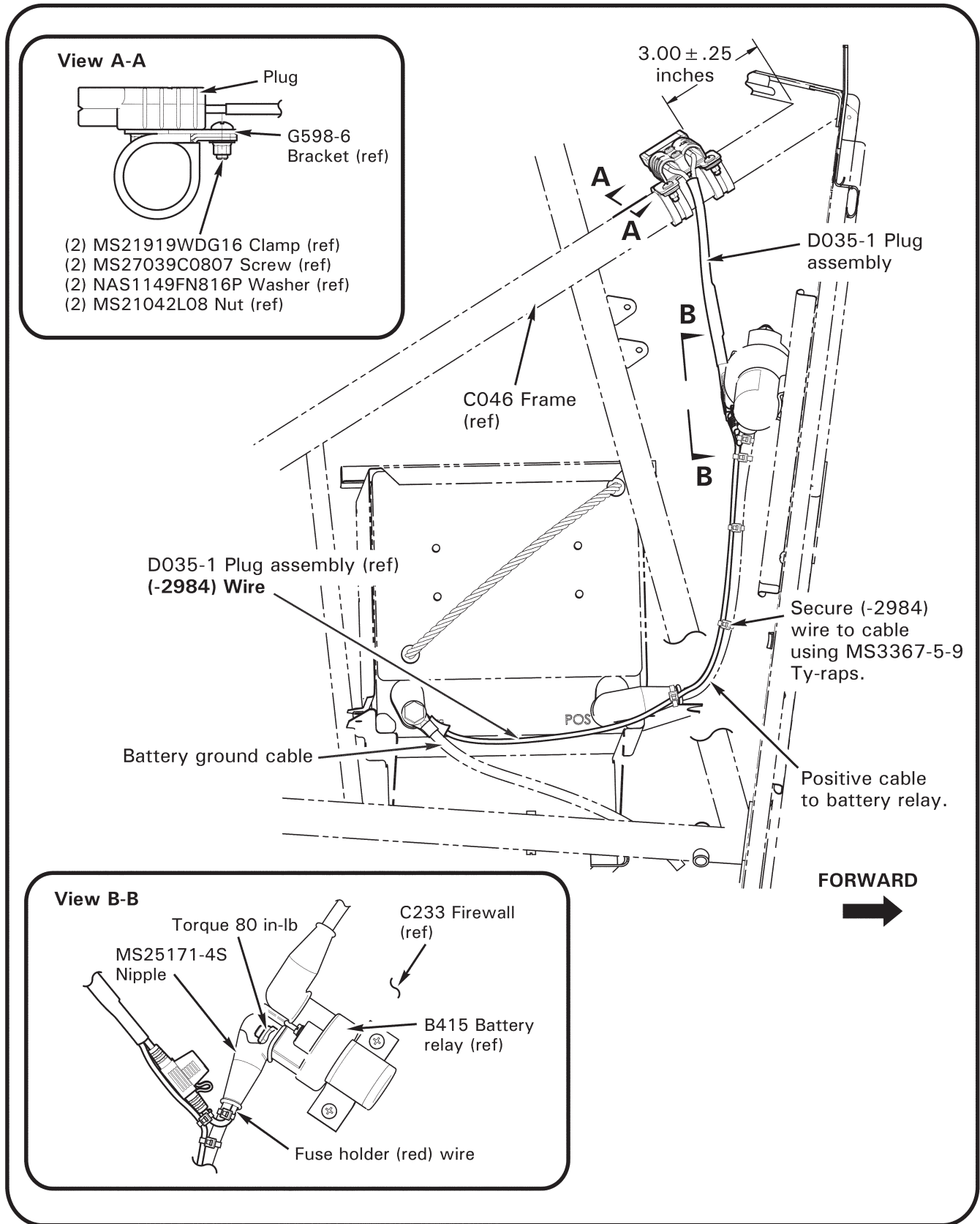


FIGURE 1
(view looking outboard)