

R22 SERVICE BULLETIN SB-111

DATE: 21 November 2016

TO: R22 Owners, Operators, and Maintenance Personnel

SUBJECT: Ammeter Circuit Fuse Protection

ROTORCRAFT AFFECTED: R22 Helicopters S/N 0002 thru 4714.

TIME OF COMPLIANCE: Within next 200 flight hours or by 31 October 2017, whichever occurs first.

BACKGROUND: Earlier aircraft have no ammeter circuit fuse protection. This bulletin requires installing a fuse assembly at the ammeter shunt to protect the circuit.

COMPLIANCE PROCEDURE:

Special tools:

- wire insulation stripper
- pin/socket crimper

1. For each affected helicopter, order one R9041 kit from any R22 Dealer or Service Center, or order directly from [RHC Customer Service](#) (via RHC web site, fax, or phone).
2. Turn battery switch off. Access battery; disconnect negative (ground) cable, then positive cable from battery.
3. Refer to R22 Illustrated Parts Catalog Figure 96-13 dated SEP 2014 or subsequent. Locate 1465-70-104 shunt in helicopter.
4. Refer to Figure 1. On shunt, disconnect airframe harness -12 wire at screw and install -12 wire from B304-18 fuse assembly. Verify screw security.
5. On shunt, disconnect airframe harness -13 wire at screw and install -13 wire from B304-18 fuse assembly. Verify screw security.
6. Cut ring terminal from disconnected -12 wire, strip insulation, and crimp B263-2 socket on wire. Inspect crimp per Figure 2 and install socket into B263-33 housing position 1. Verify socket security.
7. Cut ring terminal from disconnected -13 wire, strip insulation, and crimp B263-2 socket on wire. Inspect crimp per Figure 2 and install socket into B263-33 housing position 2. Verify socket security.
8. Refer to Figure 1. Connect B304-18 fuse assembly to B263-33 housing (housings will "click" when fully mated).
9. Verify battery switch is off. Connect battery positive cable first, then negative (ground) cable.
10. Make appropriate maintenance record entries. No change to helicopter weight & balance.

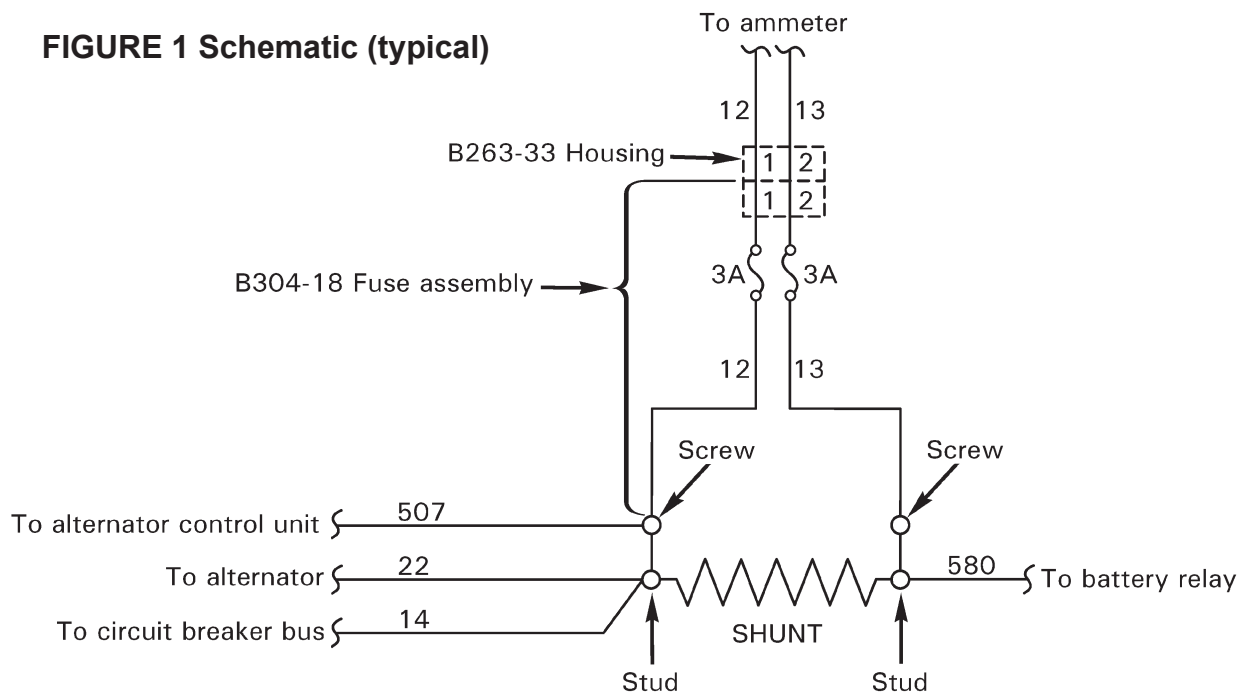
(OVER)

Approximate Cost:

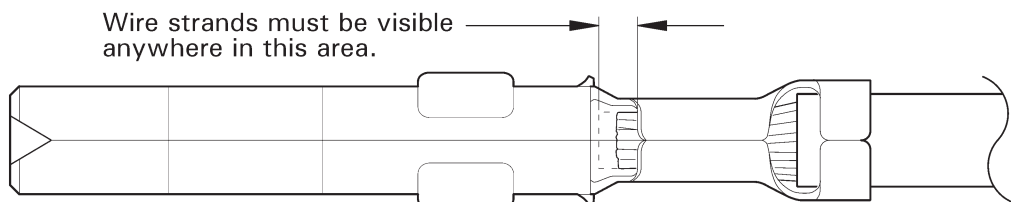
Parts: \$33 for one R9041 kit. Kit includes (3) B263-2 sockets, (1) B263-33 housing, and (1) B304-18 fuse assembly.

Labor: 1 man-hour.

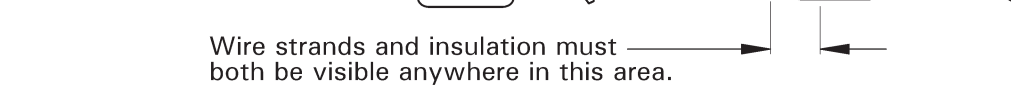
FIGURE 1 Schematic (typical)



Wire strands must be visible anywhere in this area.



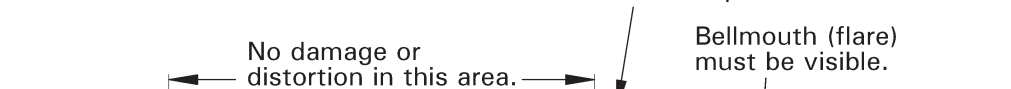
Wire strands and insulation must both be visible anywhere in this area.



Wire strands must not extend above this plane.



No damage or distortion in this area.



Bellmouth (flare) must be visible.



Locking lances not deformed.

FIGURE 2

THE DESIGN ENGINEERING ASPECTS OF THIS BULLETIN HAVE BEEN SHOWN TO COMPLY WITH APPLICABLE FEDERAL AVIATION REGULATIONS AND ARE FAA APPROVED.