



TECHNICAL BULLETIN

DATE: 06 MARCH 2008

PAGE 1 OF 6

* Supersedes Technical Bulletin TB900-027, dated 23 June 2006. Revised to change aircraft affected, warranty policy, replacement parts/supplies, to show the different configurations of the external power box assembly, correct references, and add compliance recording form. Aircraft that are in compliance with Technical Bulletin TB900-027 meet the intent of this revision.

ELECTRICAL NOISE SUPPRESSION MODIFICATION

1. PLANNING INFORMATION

A. Aircraft Affected:

MD900 helicopters, serial numbers 900-00008 thru 900-00124.

B. Assembly/Components Affected By This Bulletin:

Battery/Ext Power Relay Assembly (P/N 900E2750614-101, -103), Hover/Landing Light Relay Assembly (P/N 900E2750615-101), External Power Box Assembly (P/N 900E2750610-117, -119) with MS24166-D2 relay installed, and Forward Equipment Installation (P/N 900E7750011-101).

C. Reason:

Electromagnetic Interference (EMI) affecting a customer optional, non flight essential electronic display system in an MD900 helicopter has been reported. The source of the EMI has been identified as a relay in the hover/landing light relay assembly. The same type of relay is used in other helicopter systems. This Bulletin adds electrical noise suppression to the subject relays.

Failure to comply with this Bulletin may result in EMI affecting any temporary electronic equipment that involves the use of low level signal wiring, especially life support medical equipment.

D. Description:

Procedures in this Bulletin provide owners and operators with information pertaining to installation of a transorb across the coil of the affected relays.

E. FAA Approval:

The technical design aspects of this Bulletin are FAA Approved.

F. Manpower:

Helicopters with forward battery installation: 1 man-hour for one transorb, 2 man-hours for two transorbs, and 5 man-hours for five transorbs.

Helicopters with aft battery installation: 4 man-hours.

G. Time of Compliance

Customer option, at owner/operator discretion. MDHI highly recommends that this modification be accomplished.

H. Interchangeability:

None



DATE: 06 MARCH 2008
PAGE 2 OF 6

TECHNICAL BULLETIN

I. Material/Part Availability:

Contact MDHI Warranty and Repair Department.

REPLACEMENT PARTS/SUPPLIES			
Nomenclature	Part No.	Qty.	Source
Transzorb Assembly	TB900-027-1	As Necessary	MDHI

J. Warranty Policy:

The MDHI Warranty and Repair Dept. will provide all parts at no cost to the operator. MDHI will also provide, to authorized Service Centers, up to 5 hours of labor warranty (spares credit) for transzorb installation.

Submit to MDHI Warranty and Repair Department, the "Bulletin Compliance Recording Form" completed and signed with the part invoice attached, within 30 days after accomplishing this Technical Bulletin or no later than 31 May 2008.

K. Tooling:

N/A

L. Weight and Balance:

N/A

M. Electrical Load Data:

N/A

N. Other Publications Affected:

Illustrated Parts List (CSP-900IPL-4)
Rotorcraft Maintenance Manual (CSP-900RMM-3)

O. Points of Contact

For further assistance, contact the Field Service Department at MDHI, Mesa, Arizona. Telephone 1-800-388-3378 or (480) 346-6387. DATAFAX: (480) 346-6813.

2. ACCOMPLISHMENT INSTRUCTIONS

A. External Power Box Assembly (A610) Modification (Serial Numbers 900-00052 thru 900-00124).

NOTE:

- The external power box assembly (A610) is used with the forward battery installation.
 - There are three different external power box assembly configurations. The three configurations are with no MS24166-D2 relay, one MS24166-D2 relay, or four MS24166-D2 relays.
- (1). Look at the external power box assembly to find if transzorbs are necessary (Ref. Figure 1).

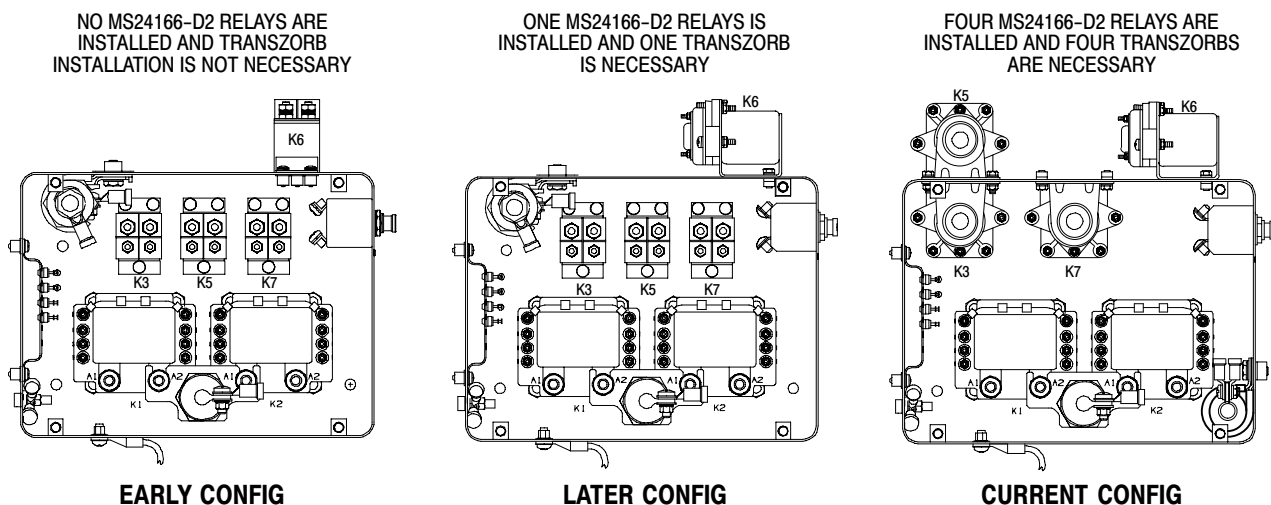
NOTE:

- Transzorbs are not necessary for the **EARLY CONFIG** external power box assembly.
- It is not necessary to remove the external power box assembly if it is the **LATER CONFIG**.

TECHNICAL BULLETIN

DATE: 06 MARCH 2008
PAGE 3 OF 6

- (2). If necessary, remove external power box assembly (Ref. CSP-900RMM-3, Section 96-00-00, External Power Box Assembly Removal).
- (3). Find relays K3, K5, K6, and K7 and if necessary, install transzorb on relay (Ref. Figure 2).
- (4). If necessary, install external power box assembly (Ref. CSP-900RMM-3, Section 96-00-00, External Power Box Assembly Installation).



9B96-194

Figure 1. External Power Box Assembly Relay Configurations

B. Hover/Landing Light Relay Assembly (A615) Modification (Serial Numbers 900-00052 thru 900-00124).

NOTE: The hover/landing light relay assembly (A615) is used with the aft battery installation.

- (1). Verify all power is removed from helicopter (Ref. CSP-900RMM-3, Section 96-00-00, Power Off (Removal)).
- (2). Remove access panel AR129 (Ref. CSP-900RMM-2, Section 53-20-00, Cockpit Outboard Right Floor Panel Removal).
- (3). Remove hover/landing light relay assembly cover (Ref. CSP-900RMM-3, Section 96-40-00, Hover/Landing Light Relay Assembly).
- (4). Locate relays K1 and K2 and install transzorb on each relay (Ref. Figure 2).
- (5). Install hover/landing light relay assembly cover (Ref. CSP-900RMM-3, Section 96-40-00, Hover/Landing Light Relay Assembly).
- (6). Install access panel AR129 (Ref. CSP-900RMM-2, Section 53-20-00, Cockpit Outboard Right Floor Panel Installation).

C. External Power Relay Assembly (A614) Modification (Serial Numbers 900-00052 thru 900-00124).

NOTE: The external power relay assembly (A614) is used with the aft battery installation.

DATE: 06 MARCH 2008
PAGE 4 OF 6

TECHNICAL BULLETIN

- (1). Verify all power is removed from helicopter (Ref. CSP-900RMM-3, Section 96-00-00, Power Off (Removal)).
- (2). Open baggage compartment door.
- (3). Remove external power relay assembly cover (Ref. CSP-900RMM-3, Section 96-00-00, External Power Relay Assembly).
- (4). Locate relays K3 and K4 and install transzorb on each relay (Ref. Figure 2).
- (5). Install external power relay assembly cover (Ref. CSP-900RMM-3, Section 96-00-00, External Power Relay Assembly).
- (6). Close baggage compartment door.

D. K100 Power Relay Modification (Serial Numbers 900-00008 thru 900-00124).

- (1). Verify all power is removed from helicopter (Ref. CSP-900RMM-3, Section 96-00-00, Power Off (Removal)).

NOTE: The K100 power relay is installed on the Sta. 155 bulkhead above the copilot's seat (Ref. CSP-900RMM-3, Section 96-00-00, K100 Power Relay).

- (2). Remove bulkhead cover to access K100 power relay.
- (3). Install transzorb on K100 relay (Ref. Figure 2).
- (4). Install bulkhead cover.
- (5). Restore power to helicopter (Ref. CSP-900RMM-3, Section 96-00-00, Restore Power).

3. IDENTIFICATION

N/A

4. DISPOSITION OF PARTS REMOVED

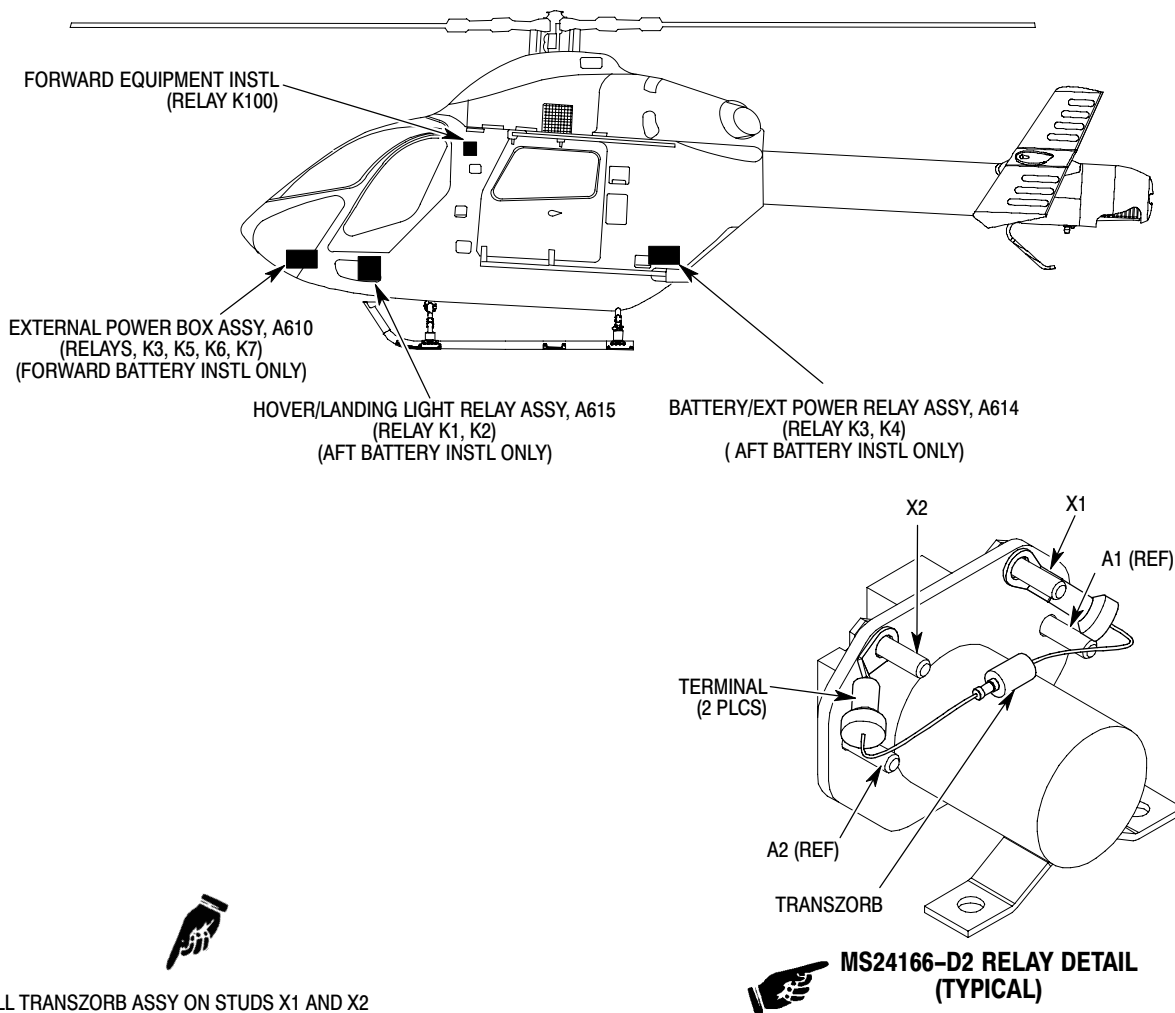
N/A

5. COMPLIANCE RECORD

Record compliance to this Technical Bulletin in the Compliance Record section of the helicopter Log Book.

TECHNICAL BULLETIN

DATE: 06 MARCH 2008
PAGE 5 OF 6



NOTES:

1. INSTALL TRANSZORB ASSY ON STUDS X1 AND X2
2. DO NOT BEND TERMINALS MORE THAN 90 DEGREES.
3. TRANSZORB CAN BE INSTALLED IN EACH OF THE TWO DIRECTIONS.

9B96-193A

Figure 2. Electrical Noise Suppression Modification



DATE: 06 MARCH 2008
PAGE 6 OF 6

TECHNICAL BULLETIN

Bulletin Compliance Recording Form

Technical Bulletin TB900-027R1, Electrical Noise Suppression Modification

FAX this form to MDHI (480) 346-6813 or
Email to ServiceEngineering@mdhelicopters.com

MD Helicopters, Inc.
Field Service Department
4555 E. McDowell Road
Mesa, AZ 85215-9734

800-388-3378 phone (U.S. and Canada)
480-346-6387 phone (International)
480-346-6813 Fax

Dear Sir:

This is to inform you that the Technical Bulletin has been complied with as indicated below:

Customer/Operator Name: _____

Aircraft Serial No: _____

Address: _____

Phone: _____

Helicopter Total Time: _____ Date: _____

Location: _____

Signature of Person Confirming Compliance: _____