

1. SCOPE

1.1 Purpose.- The purpose of this specification is to provide instructions for reconditioning and modifying Cutler-Hammer 6046H39 dynamic braking contactor for use on C-45G, C-45H, SNB-5 and SNB-5P aircraft.

1.2 Application.- All reconditioning operations and repairs covered by this specification may be accomplished where required without further authorization. Repairs not authorized by this specification cannot be performed without further authorization.

1.3 List of Pages and Revisions.- This specification consists of the pages listed below. An asterisk (\*) denotes the pages revised by the current revision.

<u>Page</u>	<u>Date</u>	<u>Description of Revision</u>	<u>Serial Effectivity</u>
1	4-22-53		
2	4-22-53		
3	4-22-53		
4	4-22-53		
5	4-22-53		
6	4-22-53		
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APPROVAL:

*Kenneth C. [Signature]*  
USAF Quality Control

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WRITTEN BY <i>M. D. Davis</i>	DATE ISSUED 4-22-53	OVERHAUL SPECIFICATION DYNAMIC BRAKING CONTACTOR - MODEL C-45G, C-45H, SNB-5, AND SNB-5P		
PROJECT ENGINEER <i>[Signature]</i>				
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2. APPLICABLE PUBLICATIONS

2.1 Specifications:

2.1.1 Beech.-

OS 7008 General Acceptable Quality Standards

3. REQUIREMENTS

3.1 Parts Involved:

3.1.1 Parts Not Used.- The following parts will not be revised and will be disposed of at the direction of the customer.

- 23-1460 Motor and dynamic braking contact.
- 23-1682 Motor and dynamic braking contact.
- 23-1593 Motor and dynamic braking contact.

3.1.2 Parts to be Reconditioned.- The following parts are to be reconditioned in accordance with instructions contained herein. "Reconditioned" means the disassembly, cleaning, inspection and correction of discrepancies, repair and/or replacement of components, and modifications to incorporate changes in accordance with applicable engineering drawings to assure an operationally safe and serviceable aircraft.

6046H39 Dynamic braking contactor

3.1.3 Parts to be Supplied New.-

- 23-1460 Motor and dynamic braking contact.
- 23-1682 Motor and dynamic braking contact.
- 23-1593 Motor and dynamic braking contact.

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3.2 Cause for Rejection.- Damage or wear which cannot be corrected by one or more of the methods described herein is cause for rejection.

3.3 Reconditioning Operations.-

- (a) Disassemble and inspect parts for nonrepairable conditions.
- (b) Clean all parts showing corrosion or rust with carbon tetrachloride.
- (c) Make adjustments and repair as authorized in Paragraph 3.4 of this specification.
- (d) Reassemble, using new motor and dynamic braking contacts, 23-1460, 23-1682 and 23-1593.

3.4 Authorized Repairs.-

- (a) Remove light pitting or heavy deposits from parts with a crocus cloth. Particular attention should be given to the inside of the coil (Item 20, Figure 1), plunger (Item 21, Figure 1), pin (Item 24, Figure 1) and spring (Item 22, Figure 1).
- (b) Treat mildewed wires by brushing on CP Grade methyl alcohol sparingly. Let dry and brush mildew off.
- (c) Replace parts that are worn excessively or to the extent that they may impair future proper functioning of the unit. Particular attention should be given to the guide holes in phenolite guide (Item 13, Figure 1), and the striking surfaces of lever (Item 7; Figure 1) and interlock switch (Item 32, Figure 2).
- (d) Add or remove shim washers (Item 19, Figure 1) to obtain plunger travel of .130-inch minimum to .140-inch maximum.
- (e) Adjust wear allowance of contacts (Item 14, Figure 1) by adding or removing shim washers (Item 17, Figure 1) to obtain a clearance of .025-inch minimum to .035-inch maximum.
- (f) When assembling parts on pin (Item 24, Figure 1) add or remove shim washers (Item 10, Figure 1) to eliminate shaft play.

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3.4 Authorized Repairs.- (Continued)

- (g) Adjust contact follow (Item 12, Figure 1) to .020-inch minimum to .030-inch maximum by adding or removing shim washer (Item 3, Figure 1).
- (h) Adjust contact centering on reversing switch (Item 32, Figure 2) by adding or removing shim washers (Item 28, Figure 2) under post (Item 29, Figure 2). Maximum allowable misalignment is 3/64-inch.
- (i) Adjust contact pressure on reversing switch by slight bending of bracket assembly. Pressure is approximately 3.5 ounces.
- (j) Clean reversing switch contacts with crocus cloth and carbon tetrachloride. Replace if pitted.

3.5 Electrical Test Requirements.-

- (a) Contactor must pick up and seal on 16 volts or less and remain closed on seven volts or less.
- (b) Wire contactor in circuit as shown in Figure 3 using landing gear motor as load. Energize Coil 1 - motor should start instantly, de-energize Coil 1 - motor should stop immediately. Repeat above functional test for Coil 2.
- (c) Contactor must not make contact on both sides when both coils are energized on 30 volts.
- (d) A breakdown voltage of 1000 volts DC shall be applied for one second between ground and all ungrounded circuits and between all independent circuits to test insulation.

4. INSPECTION

4.1 General.- The parts will be inspected to the general acceptable quality standards of OS 7008 and the specific quality standards listed below.

4.2 Acceptable Standards.-

- (a) Plunger travel is .130-inch minimum to .140-inch maximum.
- (b) Wear allowance between contacts (Item 14, Figure 1) and insulating bushing (Item 11, Figure 1) shall be .025-inch minimum to .035-inch maximum.

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4.2 Acceptable Standards.- (Continued)

- (c) (Item 12, Figure 1) contact follow is .020-inch minimum to .030-inch maximum.
- (d) Maximum allowable misalignment of contact centering on reversing switch (Item 32, Figure 2) is 3/64-inch.
- (e) Contact pressure on reversing switch is approximately 3.5 ounces.

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NO.	ITEM	NO. REQ'D	PART NO.	
1	Clip	4	55-572	▲
2	Cover	2	49-1305-4	▲
3	Shim washer	4	16-862-4	▲
4	Contact post	4	23-1593-3	▲
5	Cotter key	2	AN380-1-2	
6	Bushing	2	29-1570-2	▲
7	Lever	2	24-1964	▲
8	Washer	2	AN960A10L	
9	Spring	2	69-629	▲
10	Shim washer	4	16-862-7	▲
11	Bushing	4	56-1174-7	▲
12	Movable contact	2	23-1682	▲
13	Guide	2	54-1059	▲
14	Movable contact	2	23-1460	▲
15	Washer	2	16-928	▲
16	Spacer	2	29-1532	▲
17	Shim washer	2	16-862	▲
18	Base with contacts	1	17-2165	▲
19	Shim	2	16-863	▲
20	Coil	2	1029-9	▲
21	Plunger	2	51-405	▲
22	Spring	2	69-863	▲
23	Shim washer	4	16-862	▲
24	Pin	2	13-1563-4	▲
25	Spacer	2	29-336-8	▲
26	Spring	2	69-863	▲
27	Mounting plate	1	17-1726-5	▲
28	Shim washer	6	16-862-6	▲
29	Post	2	18-709	▲
30	Stop nut	1	15-433	▲
31	Cover	1	49-1305-4	▲
32	Interlock switch	1	10-761	▲
33	Insulator	2	56-1208-7	▲

▲ Part number of Cutler-Hammer, Inc

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4	Contact post	4	23-1593-3	▲
5	Cotter key	2	AN380-1-2	
6	Bushing	2	29-1570-2	▲
7	Lever	2	24-1964	▲
8	Washer	2	AN960A10L	
9	Spring	2	69-629	▲
10	Shim washer	4	16-862-7	▲
11	Bushing	4	56-1174-7	▲
12	Movable contact	2	23-1682	▲
13	Guide	2	54-1059	▲
14	Movable contact	2	23-1460	▲
15	Washer	2	16-928	▲
16	Spacer	2	29-1532	▲
17	Shim washer	2	16-862	▲
18	Base with contacts	1	17-2165	▲
19	Shim	2	16-863	▲
20	Coil	2	1029-9	▲
21	Plunger	2	51-405	▲
22	Spring	2	69-863	▲
23	Shim washer	4	16-862	▲
24	Pin	2	13-1563-4	▲
25	Spacer	2	29-336-8	▲
26	Spring	2	69-863	▲
27	Mounting plate	1	17-1726-5	▲
28	Shim washer	6	16-862-6	▲
29	Post	2	18-709	▲
30	Stop nut	1	15-433	▲
31	Cover	1	49-1305-4	▲
32	Interlock switch	1	10-761	▲
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