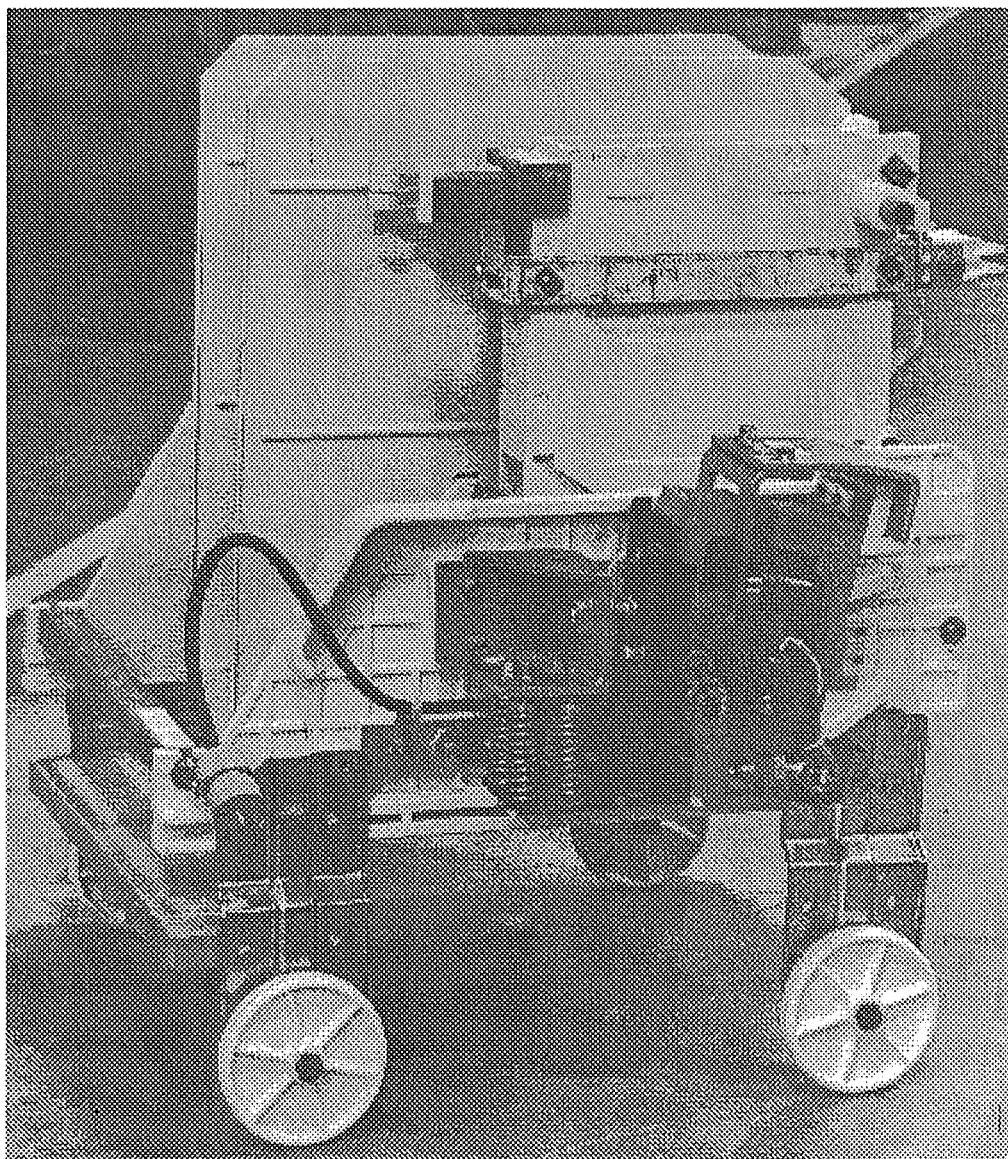




GEF-8017 RENEWAL PARTS BULLETIN

***CR193V & W Drawout
Vacuum Limitamp[®] Contactors***



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These instructions do not purport to cover all details or variations in equipment for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the Purchaser's purposes, the matter should be referred to the nearest GE Sales Office.

General Information

This renewal parts bulletin will provide the proper identification of standard parts which may be required for the maintenance of CR193V (w/clip fuses) and CR193W (w/bolted fuses) Vacuum Limitamp contactors.

Both the complete contactors and required renewal parts are shown as catalog numbers and are supported by photographs.

Catalog numbers identified in this bulletin may not be the same as those parts on the original equipment. The renewal part catalog numbers are shown in kit form.

It is the intent of this bulletin to give our customers a quick and accurate way to identify parts required for normal maintenance of the CR193V & W drawout Vacuum Limitamp contactors. Unless otherwise stated, all of the parts shown in the bulletin are compatible with the contactors manufactured since 1982.

Attention should be given to forecasting your particular renewal parts requirements to ensure on-site availability of the specific parts as required for normal maintenance and proper operation of your equipment.

To maintain maximum operating efficiency and reliability of your equipment, genuine GE renewal parts are recommended.

Since contactors are supplied to meet specific customer control and distribution requirements, certain replacement parts not listed in this publication may occasionally be required. Please refer to the factory for these requests.

In these situations, please provide a complete description of the part, along with the complete data shown on the contactor nameplate that is affixed to the top of the contactor coil support assembly.

For pricing and availability of parts shown in this bulletin, contact your nearest GE sales office.

CR193V & W Renewal Parts Bulletin

CONTACTOR CATALOG NUMBER SYSTEM

ARGUMENTS

01 - Basic Contactor Type

- CR193V - 400A contactor with clip fuses
- CR193W - 400A contactor with bolted fuses

02 - Voltage

- A - 2300 volts 50/60 HZ
- B - 4800 volts 50/60 HZ
- C - 5000 volts 50/60 HZ -- For CR193V contactors only

03 - Current Rating

- 4 - 400 Amperes

04 - Arc Chutes and Fuse Base Assembly

- AA - 2300 volts, w/fuse mounting
- AB - 4800 volts, w/fuse mounting

For CR193V contactors only

- AC - 5000 volts, no fuse mounting, no stabs
- AD - 5000 volts, shorting bars, w/stabs

05 - Mounting Assembly

- 1 - Wheels and 2300 volt intermediate power stabs
- 2 - Wheels and 4800 or 5000 volt intermediate power stabs
- 3 - No wheels and intermediate power stabs for all voltages

06 - Armature

- A - Standard DC magnet

07 - Operating Coil

- | | |
|---|---|
| 000 - No coil | 452 - 115V rectified AC w/ aux components |
| 412 - 115V rectified AC w/o aux. components | 453 - 230V rectified AC w/aux components |
| 413 - 230V rectified AC w/o aux components | 455 - 460V rectified AC w/aux components |
| 415 - 460V rectified AC w/o aux components | 552 - 125V DC w/holding resistors |
| 512 - 125V DC w/o holding resistors | 553 - 250V DC w/holding resistors |
| 513 - 250V DC w/o holding resistors | 554 - 48V DC w/holding resistors |
| 514 - 48 V DC w/o holding resistors | 855 - 48V DC w/holding resistors |
| 815 - 24V DC w/o holding resistors | |

08 - Mechanical Latch Assembly

- AA - No mechanical latch
- AB - Magnetic close and release, no manual operation, with wire harness
- AD - Magnetic close and release, w/ manual release only, with wire harness
- AG - Magnetic close and release, w/manual release only, w/o wire harness
- AH - Magnetic close and release, no manual operation, w/o wire harness

Following for CR193W type contactors only

- BA - Magnetic close and release, no manual operation, w/wire harness, w/anti-single phase mechanism
- BD - Magnetic close and release, w/ manual release only, w/wire harness, w/anti-single phase mechanism
- BG - Magnetic close and release, w/manual release only, w/o wire harness, w/anti-single phase mechanism

09 - Mechanical Latch Coil Voltage

- 02 - No mechanical latch
- 03 - 24V DC
- 04 - 48V DC
- 05 - 125V DC
- 06 - 250V DC
- 75 - 115V rectified AC
- 76 - 230V rectified AC

10 - Grounding

- A - Without ground strap
- B - With ground strap
- E - Without ground strap, w/coil plug
- F - With ground strap, w/coil plug

Typical Contactor Catalog number										
CR193V	A	4	AA	1	A	412	AA	02	E	
Argument	01	02	03	04	05	06	07	08	09	10

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To determine the part number for a specific part follow the steps listed below:

1. Determine the catalog number for your contactor. Contactor catalog number is located on a nameplate on top of the coil support assembly.
2. Locate the specific item needed in the pictures on the following pages of this bulletin.
3. Note the item number for the part needed.
4. Using tables 1,2 and 3 locate the part number and description for the needed part. Use the item number and the contactor catalog "argument" numbers to locate the correct parts for the contactor you have.

ITEM	DESCRIPTION	PART NUMBER	ALL CONTACTORS
1	Magnet clamp top	188A5536P1	1
2	Magnet clamp bottom	188A5536P2	1
4	Magnet back plate	194A7843P1	1
5	Coil retainer	218A5593G1	1
10	Vacuum Bottle Asm.	204B4051GHG1	3
11	Fixed End Bottle Support	169C6383BBP2	3
12	Fixed End Bottle Clamp	204B4051GGP1	3
13	Movable Bottle Support	55C679820P1	3
14	Bottle Pressure Spring	259A4148P1	3
15	Bottle Sleeve Bearing	272A5651FTP1	3
16	Insulator (Phase 2 only)	204B4051FTP1	1
17	Interlock Operator	202B3620G1	1
18	Tie Bar	116C9907P1	1
19	Isol. Switch Mod. Instr.	See Page 13	X
40	Armature Assembly	272A5651GCG1	1
41	Magnet	129B9715P1	1
49	Return Spring	272A5651FWP1	4

TABLE 1

CR193V & W Renewal Parts Bulletin

ITEM	DESCRIPTION	PART NUMBER	ARG 07														ARG 08								
			412	413	415	512	513	514	815	452	453	455	552	553	554	855	AA	AB	AD	AG	AH	BA	BB	BD	BG
44	Coil	1D300G139			1						1														
44	Coil	1D300G144		1			1				1			1											
44	Coil	1D300G148				1						1													
44	Coil	1D300G150							1								1								
44	Coil	1D300G152	1							1															
44	Coil	1D300G158						1						1											
45	Stop Assembly	272A5651FYG1															1				1				
45	Stop/Latch Assembly	Contact Factory																X	X	X	X		X	X	X
262	Trip Assembly	685D963G1																			1	1	1	1	

TABLE 2

ITEM	DESCRIPTION	PART NUMBER	ARG 05			ARG 10			
			1	2	3	A	B	E	F
34	Stab assembly	149B1754G7		2					
35	Stab assembly	149B1754G8	3	1					
36	Stab assembly	188A5686P2			3				
38	Handle	302A3499ANP1			1				
39	Thumb screw	188A5688G1			2				
233	Wheel Assembly	195B6267G1	1	1					
290	Plug	GE#GLD0611						1	1
293	Receptacle	GE#GL0614						1	1

TABLE 3

CR193V & W Renewal Parts Bulletin

ITEM	DESCRIPTION	PART NUMBER	CR193V ARG 04				CR194W ARG 04	
			AA	AB	AC	AD	AA	AB
160	Arc Chute, Left	202B3612G5	1					
160	Arc Chute, Left	202B3612G2		1				
160	Arc Chute, Left	202B3612G11			1			
160	Arc Chute, Left	202B3612G8				1		
160	Arc Chute, Left	204B4051FCG2					1	1
161	Arc Chute, Center	202B3612G4	1					
161	Arc Chute, Center	202B3612G1		1				
161	Arc Chute, Center	202B3612G10			1			
161	Arc Chute, Center	202B3612G7				1		
161	Arc Chute, Center	204B4051FCG1					1	1
162	Arc Chute, Right	202B3612G6	1					
162	Arc Chute, Right	202B3612G3		1				
162	Arc Chute, Right	202B3612G11			1			
162	Arc Chute, Right	202B3612G9				1		
162	Arc Chute, Right	204B4051FCG3					1	1
164	Interphase Barrier	139B7619P1	2	2	2	2	2	2
165	Operator Shaft, Left	194A6900G2	1	1		1	1	1
166	Barrier Support, Left	116C9908P4	1	1	1	1	1	1
167	Operator Shaft, Right	194A6900G1	1	1		1	1	1
168	Barrier Support, Right	116C9908P3	1	1	1	1	1	1

TABLE 4

Note: Items #160-162 include fuse clips, stabs, terminals and items #165-168. Left and right as noted in table is when contactor is viewed from the fuse side.

Fig. 1

Contactor Nameplate

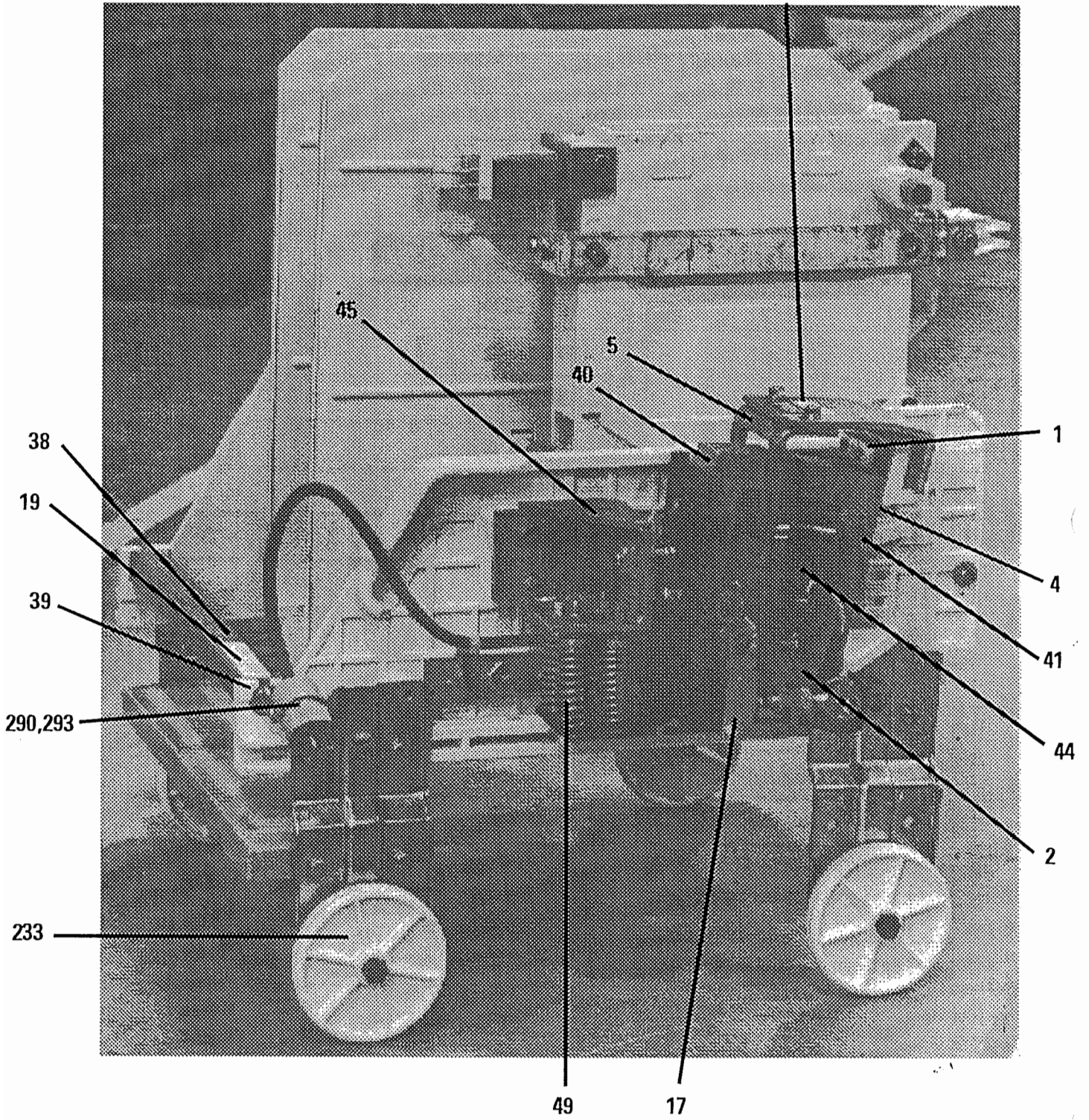
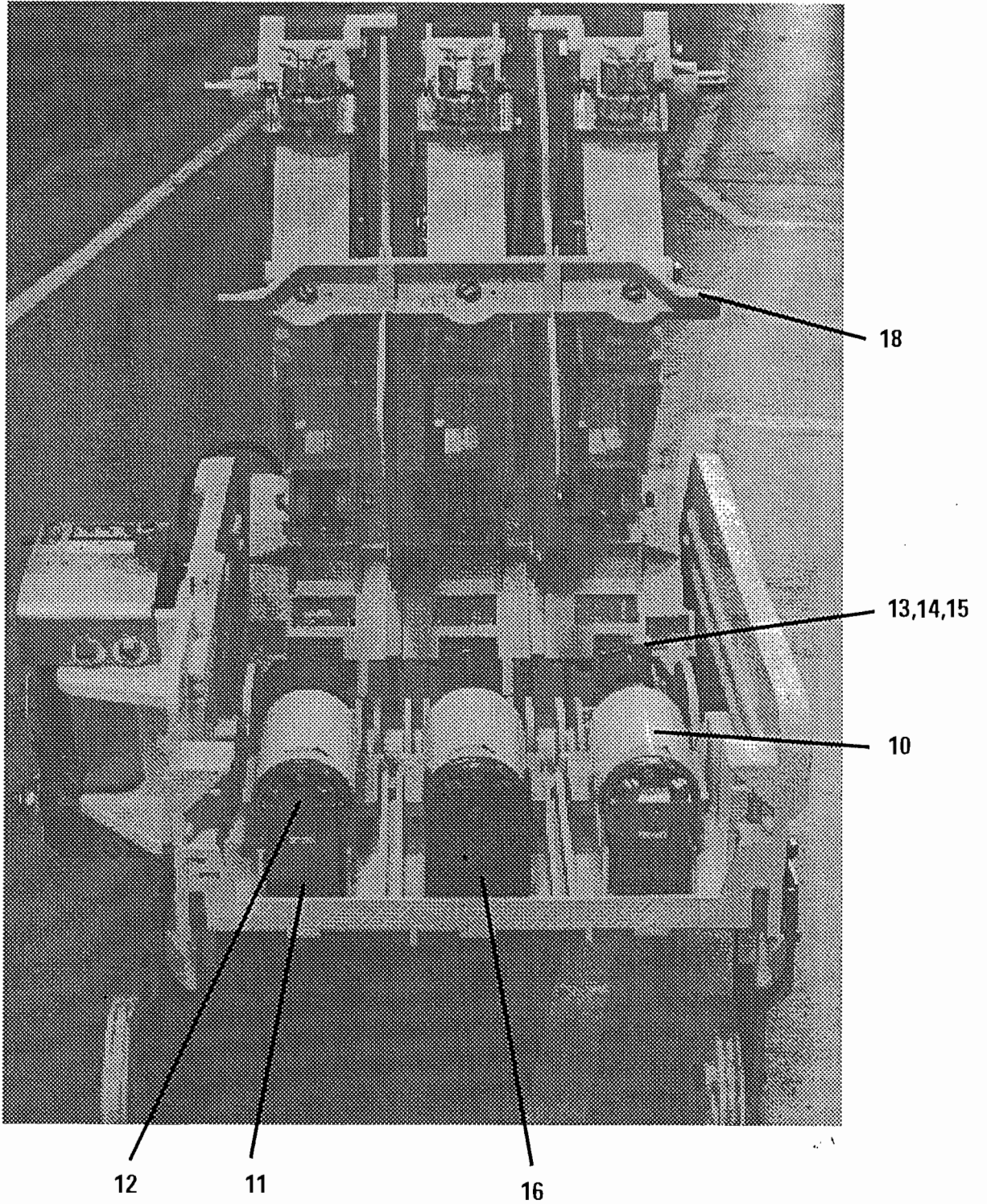


Fig. 2



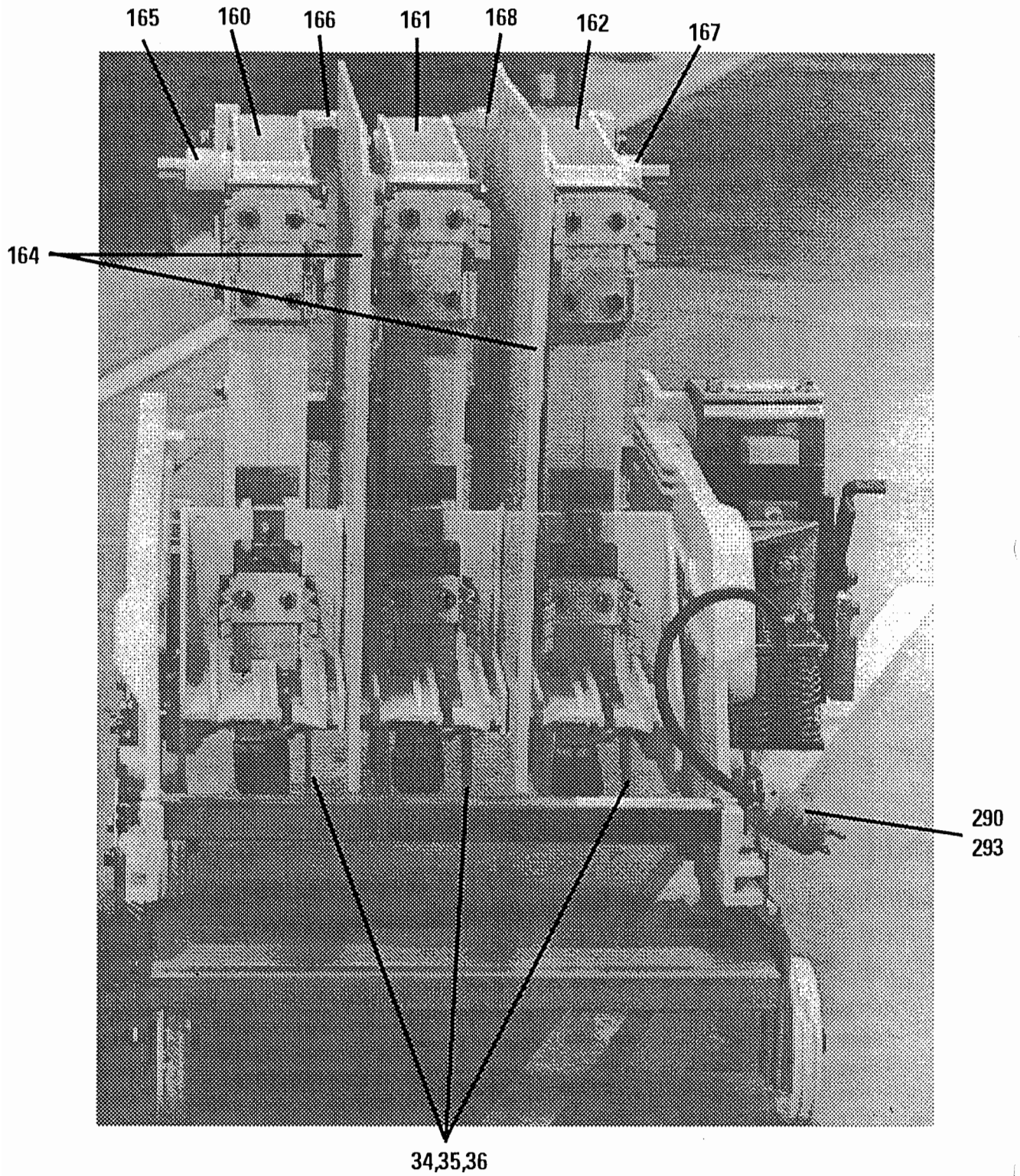


Fig. 3
CR193V Contactor viewed from fuse side

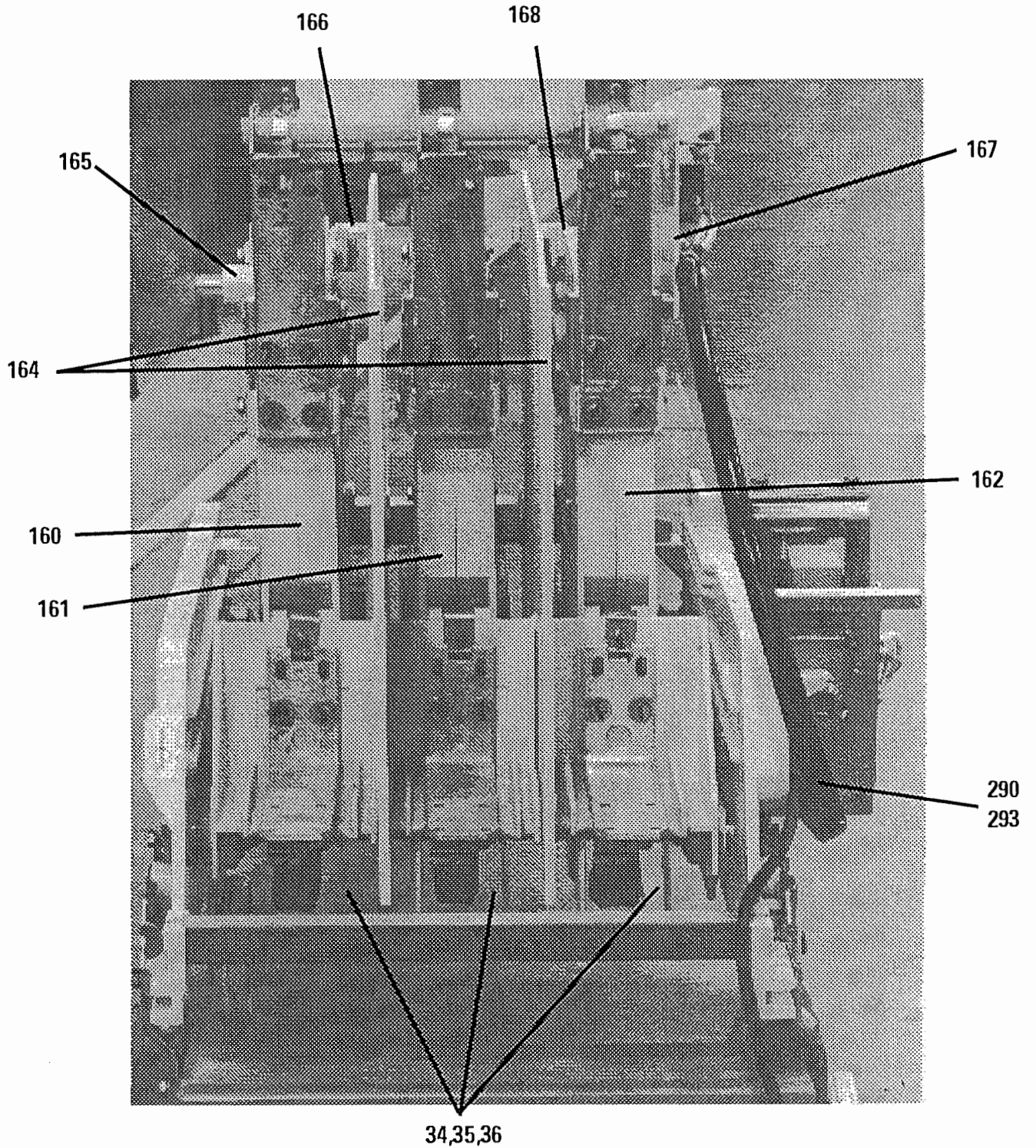
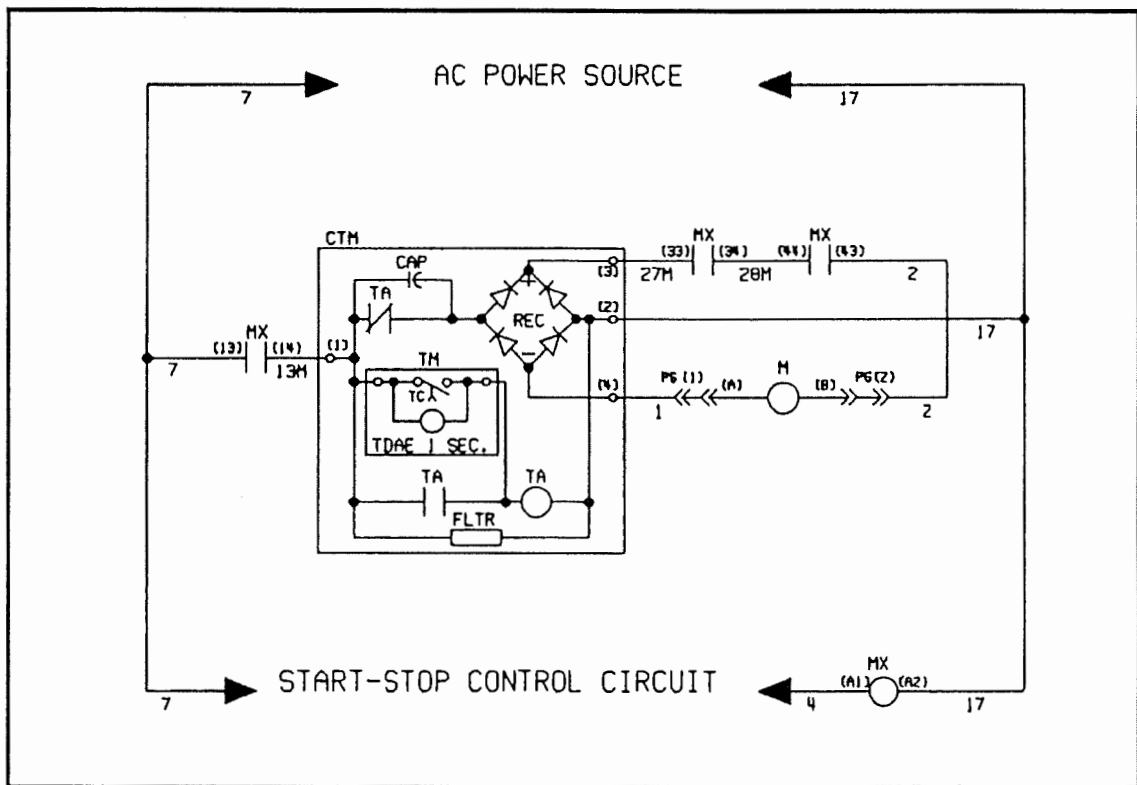


Fig. 4
CR193W Contactor viewed from fuse side

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Air-Break To Drawout Vacuum Conversion

The CR193V & W drawout vacuum Limitamp contactors are interchangeable with existing 400 ampere air-break contactors, beginning with the 1966 Limitamp design. When replacing an air-break contactor with a vacuum contactor a minor control circuit modification and an isolation switch handle modification are required. The diagram below shows how the contactor timing module (CTM) that is required for the CR193V & W contactors is typically connected in the control circuit. Order the correct CTM unit to match the control voltage in the starter that is being retrofitted with a drawout vacuum contactor.



Typical CTM Connection

Control Circuit Voltage

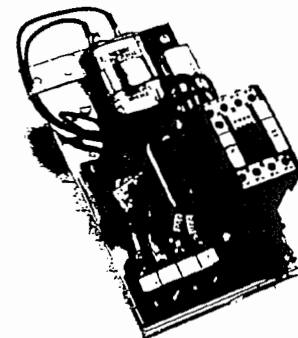
- 115 VAC / 60 HZ
- 230 VAC / 60 HZ
- 115 VAC / 50 HZ
- 230 VAC / 50 HZ

CTM Part Number

- 55B532928G46A
- 55B532928G50B
- 55B532928G48A
- 55B532928G51B

Isolation Switch Handle Modification Kit

204B4051FUG1



View of CTM
(Size 4.75"W X 8.50"H)



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