
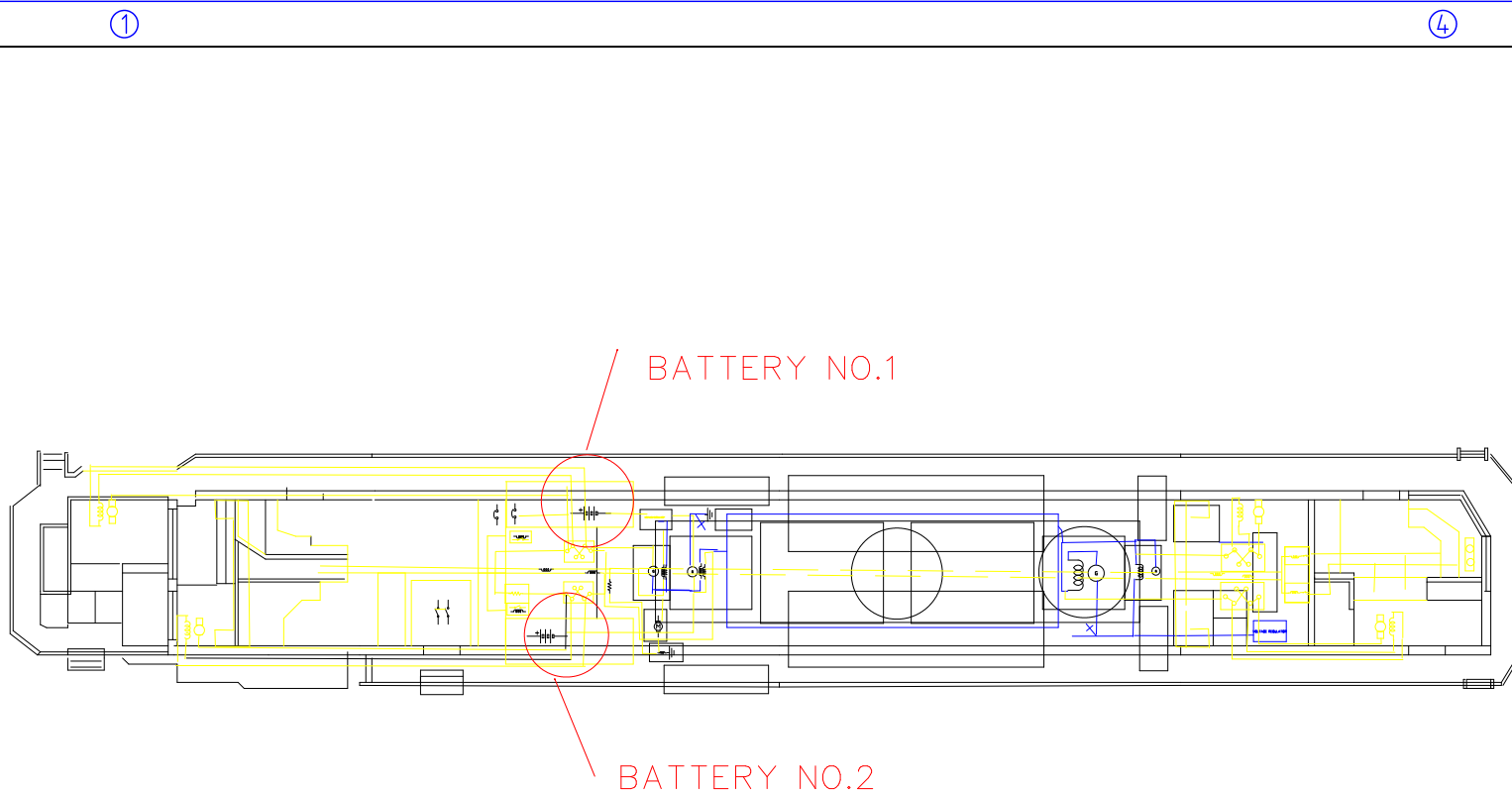

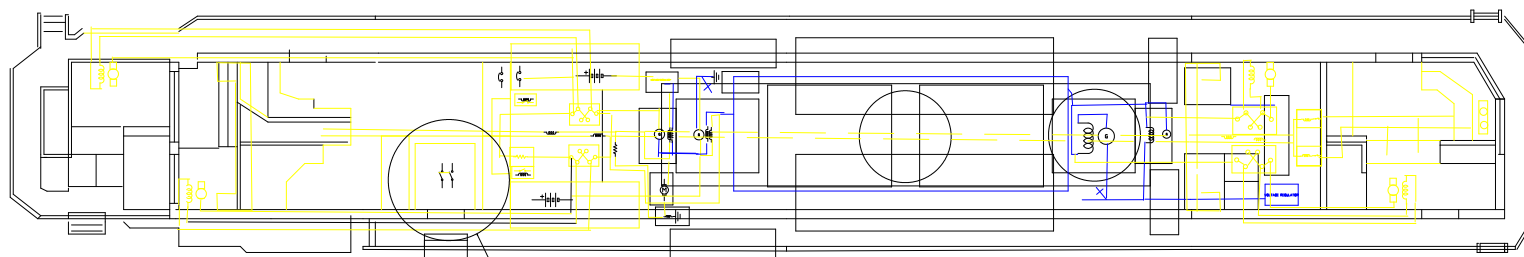


AUXILIARY EXICTER GENERATORS


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oc	change	date	name	project	project		



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oc	change	date	name	project	project		



BATTERY KNIFE SWITCH

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4833-058

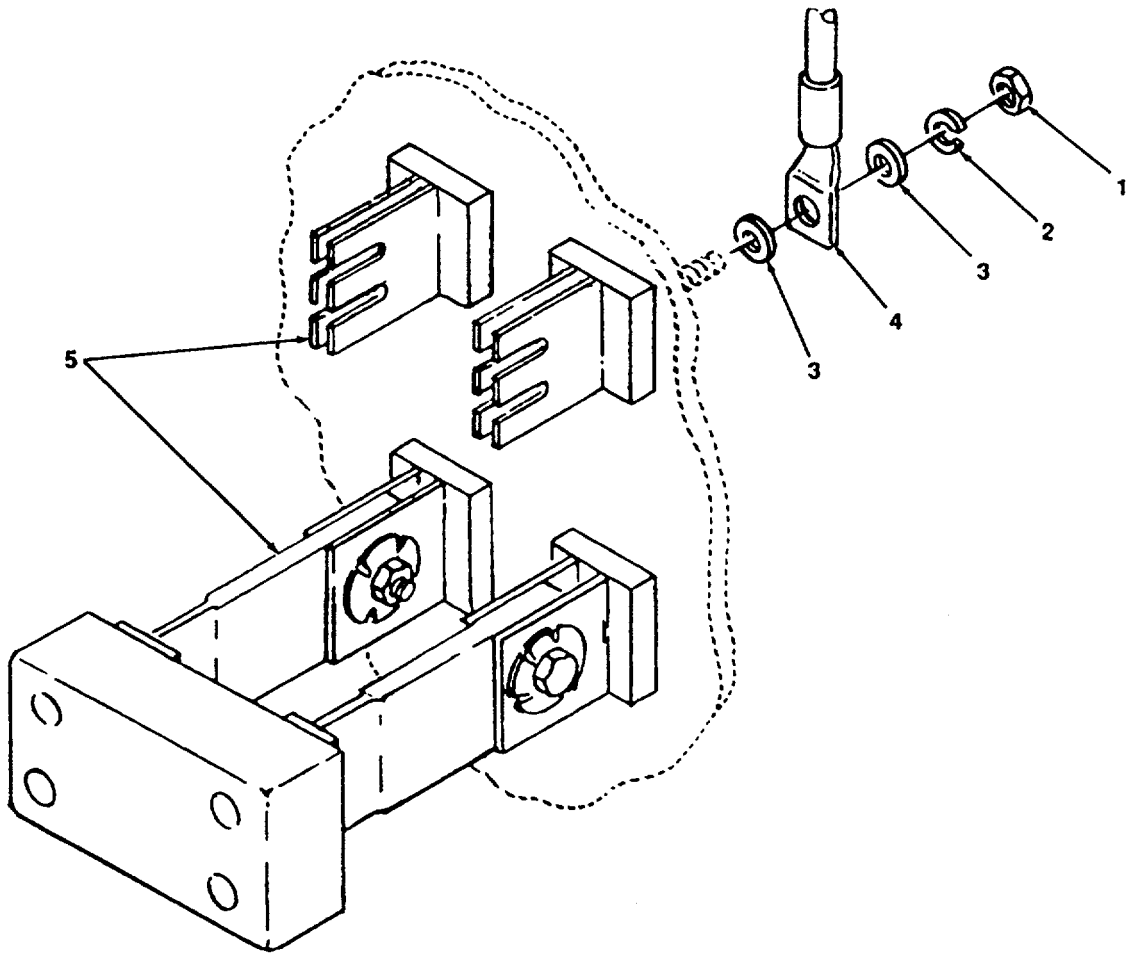
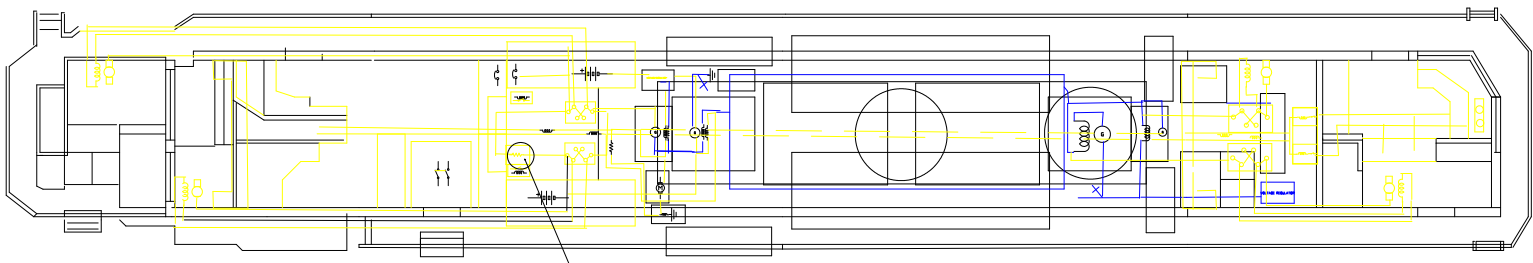


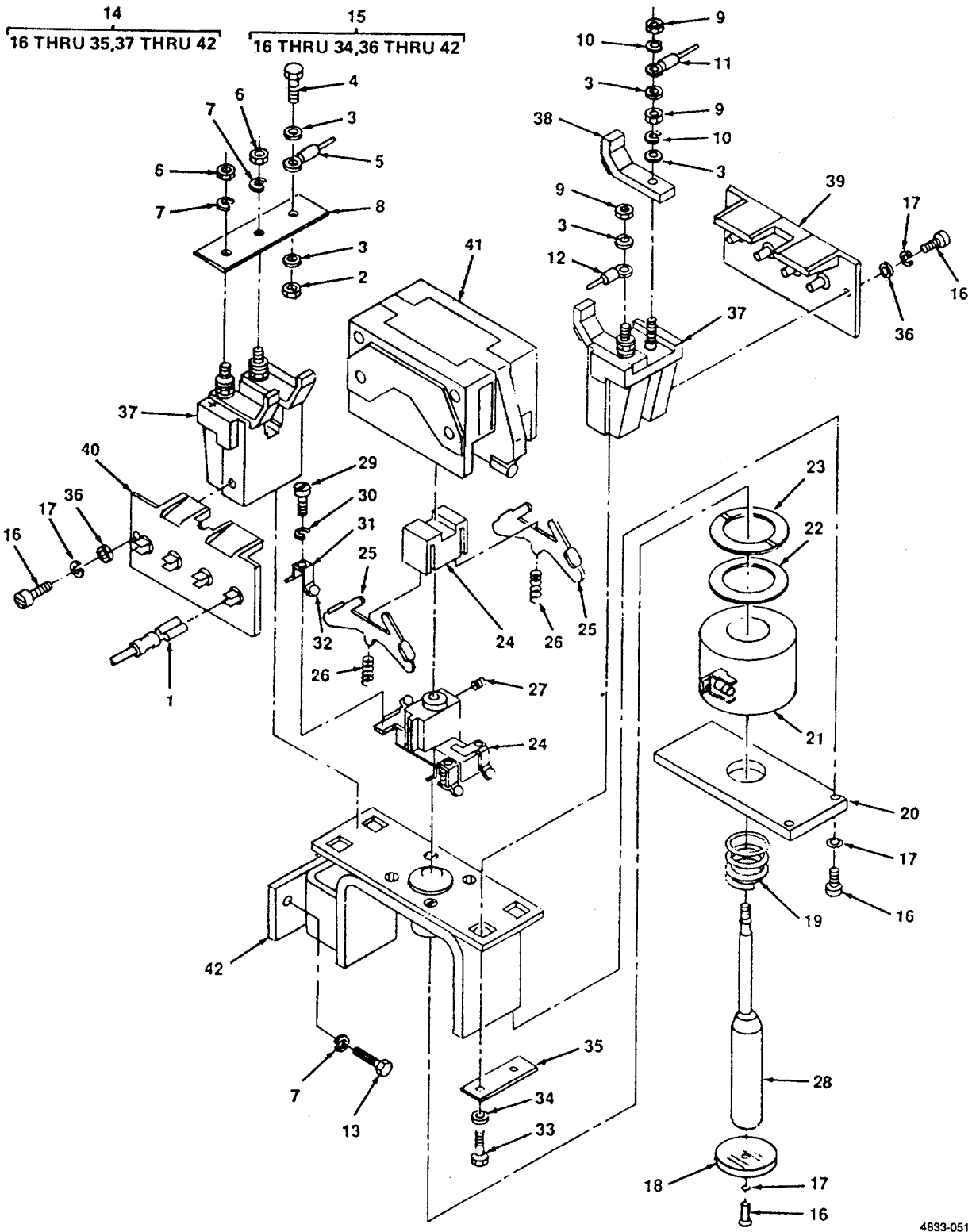
Figure 58. Knife Switches, Battery.

(1) ITEM NUMBER	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE (UOC)	(5) QTY
			GROUP 10 CONTROLS, ELECTRICAL GROUP	
			FIG. 58 KNIFE SWITCHES, BATTERY	
1	96906	MS51967-09	NUT, HEX, 3/4 IN.	4
2	96906	MS35338-46	WASHER, LOCK, 3/8 IN.	8
3	96906	MS27183-14	WASHER, FLAT, 3/8 IN.	8
4			CABLE, 3/0 W/318 STUD, REF. DES: BY, BX, BC, BFC	4
5	24446	41B11393P1	SWITCH, KNIFE, DOUBLE, BATTERY, REF. DES: BS	1
			END OF FIGURE	



CONTACTOR BATTERY FIELD AND SHUNT FIELD

					CONTACTOR BATTERY FIELD AND SHUNT FIELD	
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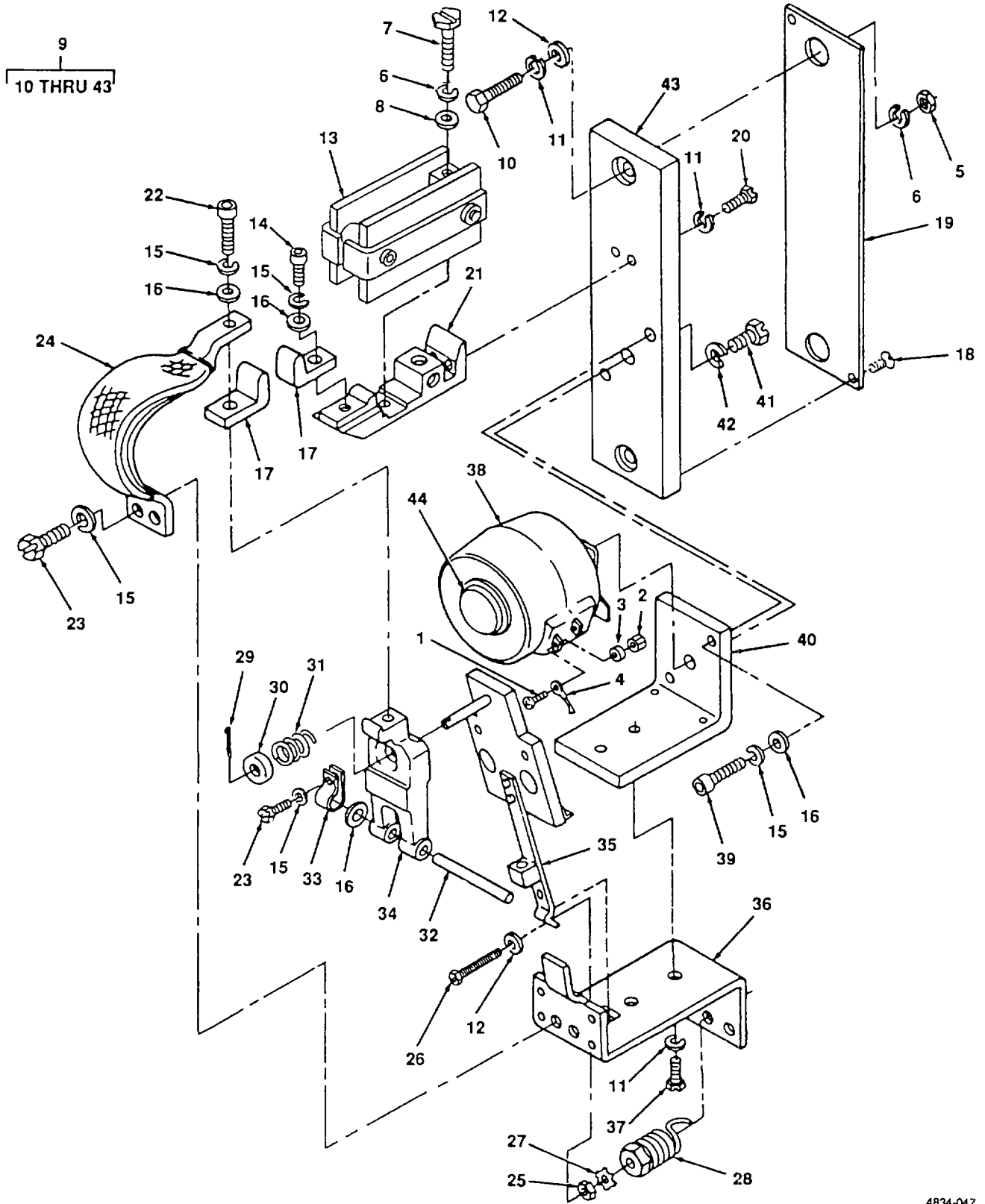


4833-051

Figure 51. Contactor, Battery Field and Shunt Field .

(1) ITEM NUMBER	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE (UOC)	(5) QTY
			GROUP 10 CONTROLS, ELECTRICAL GROUP	
			FIG. 51 CONTACTOR, BATTERY FIELD AND SHUNT FIELD	
1			LEAD, ELECTRICAL, MADE FROM WIRE, 14 AWG, P/N 847054 (72915) TERMINAL, 14 AWG FASTON P/N 8250906 (72915), REF DES: 6B, 6B1, 6G	3
2	96906	MS15922-49	NUT, HEX, 5/8	4
3	96906	MS27183-24	WASHER, FLAT, 5/8	6
4	96906	MS90725-159	SCREW, HEX, 5/8	2
5			LEAD, ELECTRICAL, MADE FROM; WIRE 8 AWG, P/N 9094884 (72915) TERMINAL 8 AWG, STUD 3/8 IN. P/N 324045 (72915) REF DES; ITEM 14, GF1-, GF+, N66, N67	
6	96906	142212	NUT, HEX, REF. DES; ITEM 14	6
7	96906	120423	WASHER, LOCK, 1/4 IN.	11
8	96906	8240751	CONTACT, MAIN MOVABLE, ITEM 14	2
9	96906	5939163	NUT, LOCK	4
10	96906	121801	WASHER, LOCK, #10 INT. TOOTH	16
11			LEAD, ELECTRICAL, MADE FROM WIRE, 14 AWG P/N 847054 (72915), TERMINAL, 14 AWG LUG P/N 81232A1 (72915) REF. DES; ITEM 15, N65, N66, 6FC	2
12			LEAD, ELECTRICAL, MADE FROM; WIRE, 12 AWG P/N 9326091 (72915) TERMINAL, LUG P/N 8123281 (72915) REF. DES; ITEM 15, EX1-, EX1+	2
13	96906	MS90725-9	SCREW, HEX 1/2 X 1-1/4.	4
14	72915	8200709	CONTACTOR ASSEMBLY, BATTERY FIELD	1
15	72915	8251126	CONTACTOR ASSEMBLY, SHUNT FIELD	1
16	72915	8208916	SCREW, CAP, SOCKETHEAD	1
17	72915	138530	WASHER, LOCK, INT. TOOTH	9
18	72915	8208919	WASHER, CAP, 1 1/2 IN. L.D.	1
19	72915	8208918	SPRING, COMPRESSION, REEE LENGTH 1 11/32 IN. LONG	1
20	72915	8208911	PLATE, YOKE END	1
21	72915	8208928	COIL, MAGNET	1

(1) ITEM NUMBER	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE (UOC)	(5) QTY
FIG. 51 CONTACTOR, BATTERY FIELD AND SHUNT FIELD (CONT)				
22	72915	8208913	WASHER, COIL SHIM, FISH PAPER	4
23	72915	8360526	WASHER, COIL, SPRING, BERRYLLIUM COPPER	1
24	72915	8208925	CARRIER ASSEMBLY, CONTACT	1
25	72915	8208924	CARRIER, MOVABLE CONTACT	1
26	72915	8247541	SPRING, COMPRESSION 17/32 IN. LONG	2
27	72915	131970	SCREW, MACHINE SET SOCKETHEAD	1
28	72915	8278221	PLUNGER, MAGNET	1
29	72915	426885	SCREW, MACHINE 6-32 X9/16 FIL. HD. BRASS	4
30	72915	138526	WASHER, LOCK #6, INT. TOOTH	4
31	72915	8190094	BRIDGE ASSEMBLY	4
32	72915	8190091	STUD ASSEMBLY	8
33	72915	130021	SCREW, HEX-HEAD, SUPPORT MTG., 1/4-20 X 7/8	4
34	72915	120423	WASHER, LOCK, 1/4 IN. TOOTH	4
35	72915	8253755	BAR, TERM. 1-1/2 X 3/4 X 1/16-(2) 3/16 DIA. HOLES, REF. DES: ITEM 15	2
36	72915	8130023	WASHER, FLAT #8, BRASS	4
37	72915	8241521	SUPPORT ASSEMBLY, CONTACT	2
38	72915	8208931	CONTACT, STATIONARY	4
39	72915	8309895	SUPPORT ASSEMBLY, LH	1
40	72915	8309894	SUPPORT ASSEMBLY, RH	1
41	72915	8208933	CHUTE, ARC	1
42	72915	8208926	MOUNTING ASSEMBLY, MAGNET YOKE	1
END OF FIGURE				



4834-047

Figure 47. Contactor, Field Shunt

(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			GROUP 10 CONTROLS, ELECTRICAL GROUP	
			FIG. 47 CONTACTOR, FIELD SHUNT	
1	96906	MS27617-8	SCREW, #10, 3/8 IN LONG	2
2	96906	MS35649-202	NUT, #10	2
3	96906	MS35338-8	WASHER, LOCK, #10	2
4			LEAD, ELECTRICAL, MAKE FROM, WIRE, 14 AWG P/N 8491796 (72915) AND TERMINAL LUG P/N 31906 (89110), REF DES, N58, N59, N60, N62, N69, N64, CCF, 1CCF, 2CCF, 3CCF	10
5	96906	MS51967-09	NUT, 3/8 IN	2
6	96906	MS35338-46	WASHER, LOCK, 3/8 IN	2
7	96906	MS90725	SCREW, HEX-HEAD, 3/8 X 1 3/4 IN	2
8	96906	MS27183-14	WASHER, FLAT, 3/8 IN	2
9	24446	17CM53B9	FIELD, SHUNT CONTACTOR, REF DES, FS1, FS2, FS3, FS4	4
10	96906	MS90725-14	SCREW, HEX-HEAD, 1/4 IN, 2 IN LONG	2
11	96906	MS35338-44	WASHER, LOCK	3
12	96906	MS27183-10	WASHER, FLAT	2
13	80971	2744700G3	ARC, CHUTE	1
14	80971	N170P23016B	SCREW, CAP, SOCKET-HEAD	1
15	96906	MS35338-45	WASHER, LOCK, 5/16 IN	8
16	96906	MS27183-12	WASHER, FLAT, 5/16 IN	8
17	80971	9960190G1	CONTACT TIP, STATIONARY	2
18	96906	N125P1306B	SCREW	2
19	80981	6713391P1	SHIELD	1
20	96906	MS90725-10	SCREWS, HEX-HEAD	2
21	80971	4767491P1	SUPPORT, CONTACT TIP	1
22	80971	N170P23020B	SCREW, CAP, SOCKET-HEAD	1
23	96906	MS90725-28	SCREW, HEX-HEAD	1
24	96906	9963819G1	SHUNT	1
25	96906	N210P16B	LOCKNUT, CALIBRATING	1
26	96906	6706033G1	SCREW, CALIBRATING	1
27	80971	N403P19B	WASHER, STAR	2
28	80971	8823898G1	SPRING, CALIBRATING	1
29	80971	N503P908B6	PIN, COTTER, 3/32 IN , 1/2 IN LONG	1
30	80971	8814853P1	SEAT, SPRING	1
31	80971	8862956P1	PRESSURE, SPRING, CONTACT	1

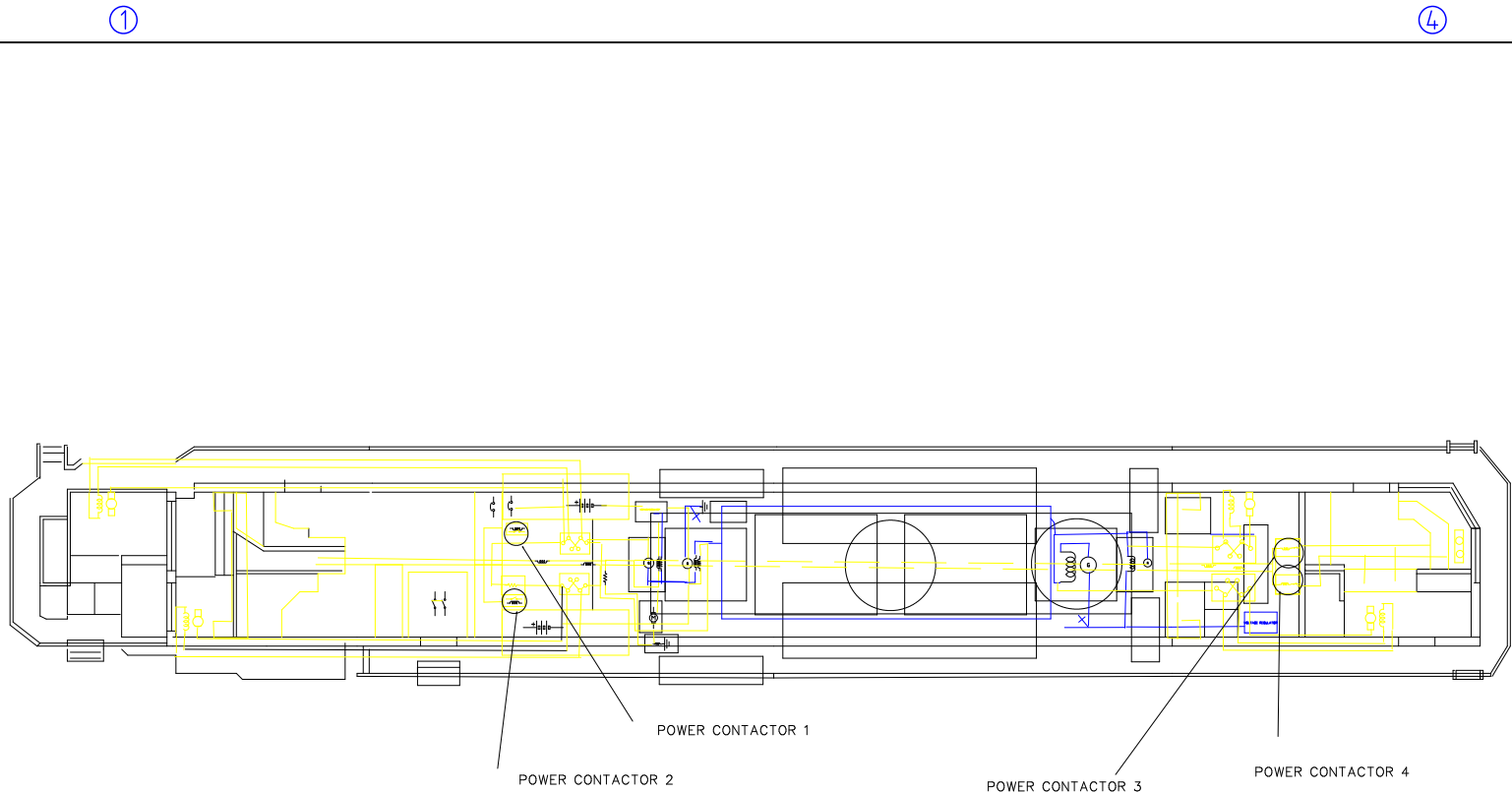
(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			FIG. 47 CONTACTOR, FIELD SHUNT (CONT)	
32	80971	8814797P1	PINS	1
33	80971	8814696P1	CLAMPS	2
34	80971	336B640P7	CONTACT LEVER ARM	1
35	80971	8839157G1	ARMATURE, WITH SPRING POST AND BRACKET	1
36	80971	9960149P2	ARMATURE, STOP	1
37	96906	MS90725-6	SCREWS, HEX-HEAD	2
38	80971	4739326G2	OPERATING COIL	1
39	96906		SCREW, CAP, SOCKET-HEAD	2
40	80971	4768834P1	MAGNET, FRAME	1
41	96906	MS90725-36	SCREW, HEX HEAD	1
42	96906	MS35338-45	WASHER, LOCK	1
43	80971	996019P1	BASE	1
44	4710372P1		CORE, MAGNET	1
			END OF FIGURE	

TECHNICAL MANUAL

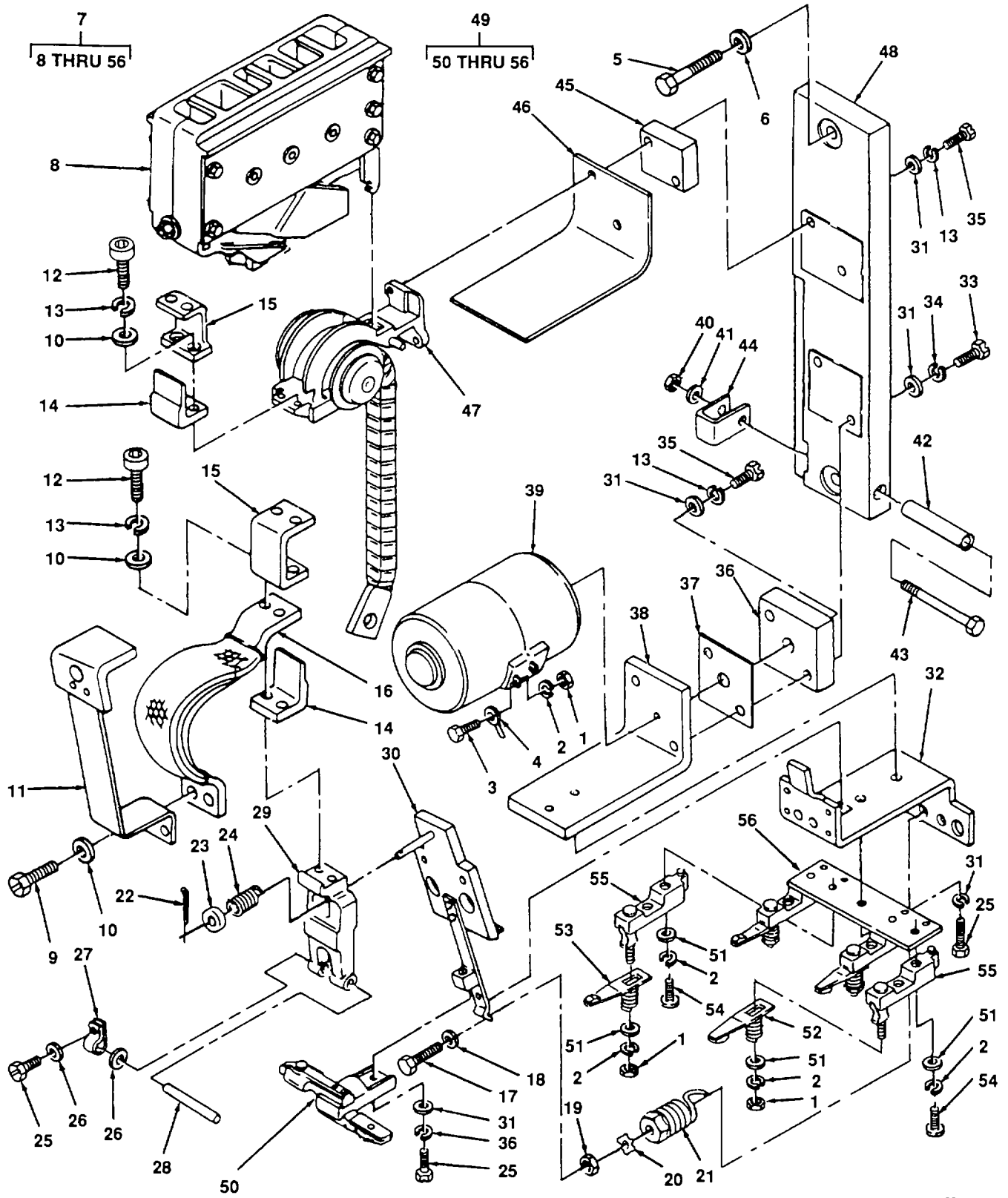
**UNIT, INTERMEDIATE DIRECT SUPPORT
AND GENERAL SUPPORT
REPAIR PARTS AND SPECIAL TOOLS LIST
LOCOMOTIVE, DIESEL-ELECTRIC,
56-1/2-INCH GAGE, 80-TON, 670 HP,
0-4-4-0 WHEEL,
MODEL B-B-160/160-4GE747-A1
NSN 2210-01-158-2980**

Approved for public release, distribution is unlimited

**HEADQUARTERS, DEPARTMENT OF THE ARMY
2 OCTOBER 1989**



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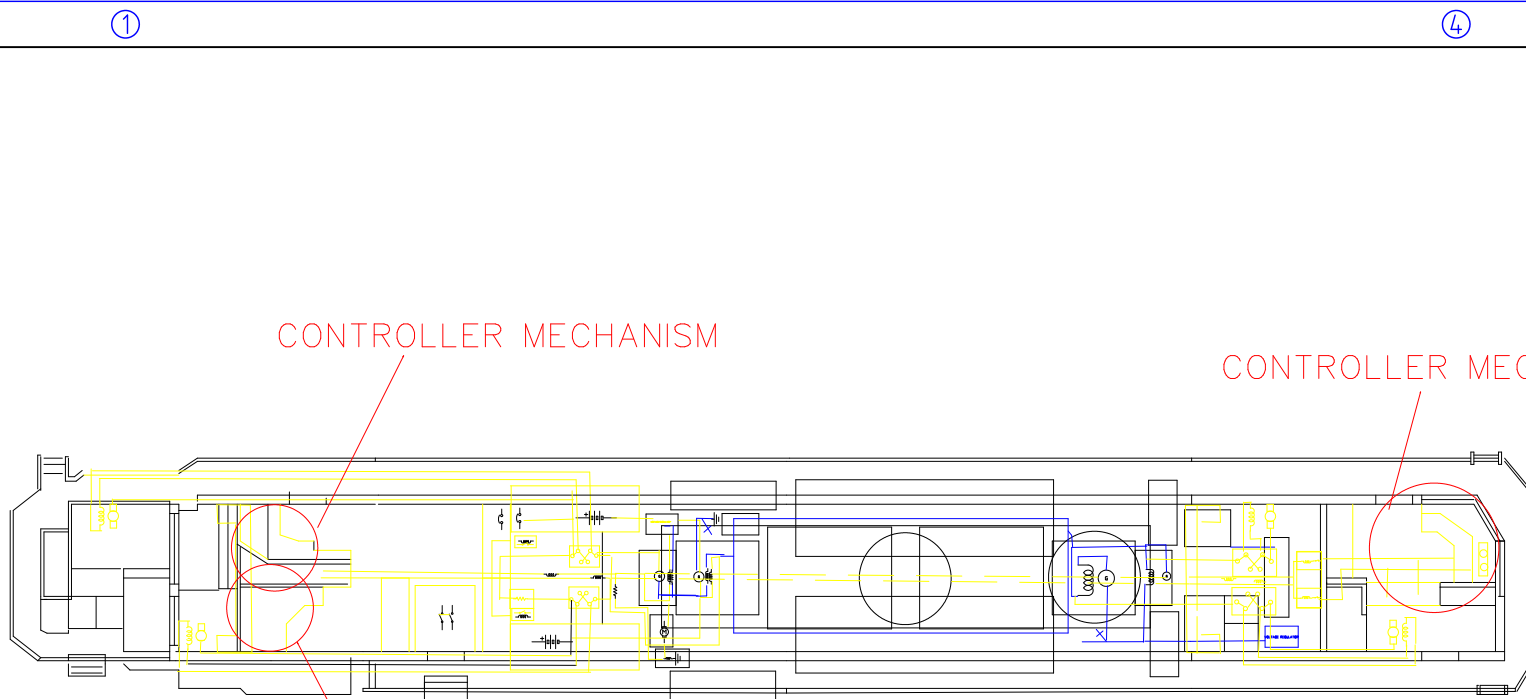


4834-049

Figure 49. Contactor, Power

(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			GROUP 10 CONTROLS, ELECTRICAL GROUP	
			FIG. 49 CONTACTOR, POWER	
1	96906	MS35649-202	NUT, #10	3
2	96906	MS35338-8	WASHER, LOCK	5
3	96906	MS27617-8	SCREW, #10, 3/8 IN. LONG	2
4			LEAD, ELECTRICAL, MAKE FROM, WIRE, 14 AWG 8491796 (72915) AND TERMINAL LUG 1434780 (594000), REF DES,	
5	96906	MS90725-67	SCREWS, HEX-HEAD, 3/8 X 2 1/4 IN	2
6	96906	MS27183-14	WASHERS, FLAT, 3/8	2
7	24446	17CM55AK5	CONTACTOR, POWER	1
8	80971	41 D750063G1	ARC CHUTE	1
9	96906	MS90725-31	SCREW, HEX-HEAD, 5/16 IN -18,5/8 IN LONG	2
10	96906	MS27183-12	WASHERS, FLAT, 5/16	4
11	80971	6715120G1	SPRING, SUPPORT	1
12	80971	N170P23016B	SCREWS, ALLEN-HEAD, 5/16 X1 IN LONG	4
13	96906	MS35338-45	WASHER, LOCK, 5/16 IN	6
14	80971	41A263565G1	CONTACT, TIP STATIONARY	1
15	80971	8814906P1	HORN, ARCING	2
16	80971	9960283G1	SHUNT	1
17	80971	6706033G1	SCREW, ASSEMBLY, CALIBRATING	1
18	96906	MS27183-10	WASHER, FLAT, 1/4 IN	1
19	80971	N210P16B13	NUT, CALIBRATING	1
20	80971	N403P19B13	WASHER, STAR	1
21	80971	8823898G1	SPRING CALIBRATING	1
22	80971	N503P90B13	PIN, COTTER	1
23	80971	8814853P1	RETAINER, SPRING	1
24	80971	8862957P1	SPRING, CONTACT PRESSURE	1
25	96906	MS90725-6	SCREW, HEX-HEAD	2
26	96906	MS35338-43	WASHER, LOCK	2
27	80971	8814696P1	CLAMPS	1
28	80971	881497P1	PIN 1	
29	80971	336B640P6	CONTACT, LEVER	1
30	80971	8839157G1	ARMATURE	1
31	96906	MS27183-10	WASHER, FLAT, #10	1
32	80971		ARMATURE, STOP	1

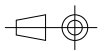
(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			FIG. 49 CONTACTOR, POWER (CONT)	
33	96906	MS90725-40	SCREW, 5/16-18 X 2 IN	2
34	96906	MS35338-45	WASHER, LOCK, 3/8	2
35	96906	MS90725-36	SCREW, HEX-HEAD	2
36	80971	41C653400P13	INSULATING BLOCK	1
37	80971	41A272792P2	SHIM, 030 IN	1
38	80971	4734385P1	MAGNET FRAME	1
39	80971	47396562	COIL, OPERATING	1
40	96906	MS51967-03	NUT, 1/4 X 20	1
41	96906	MS35338-44	WASHER, LOCK, 1/4 IN	1
42	80971	41C653393P7	SPACER, 23/16 IN	1
43	96906	MS90725-20	SCREW, CAP	1
44	80971	41C653393P6	CLAMP	1
45	80971	41C653400P12	INSULATING BLOCK	1
46	80971	41A271220P2	INSULATION	1
47	80971	170X1010	BLOWOUT COIL	1
48	80971	41C657010P3	BASE	1
49	80971	17AF14J3	INTERLOCK J1, J3	
50	80971	6701850G1	CONTACT ASSEMBLY (J1, J3)	1
51	90906	MS27183-8	WASHER, FLAT, #10 (J1, J3)	8
52	80971	6700284G1	CONTACT, FINGER (J1, J3)	2
53	80971	6700314G1	CONTACT, FINGER WITH COMPRESSION SPRING (J1, J3)	2
54	80971	N44P16008B	SCREW, SL FL HD, #10-32 X 11/2 IN (J1, J3)	4
55	80971	8860652P1	SUPPORT (J1, J3)	4
56	80971	6700603P1	MOUNTING PLATE	1
			END OF FIGURE	

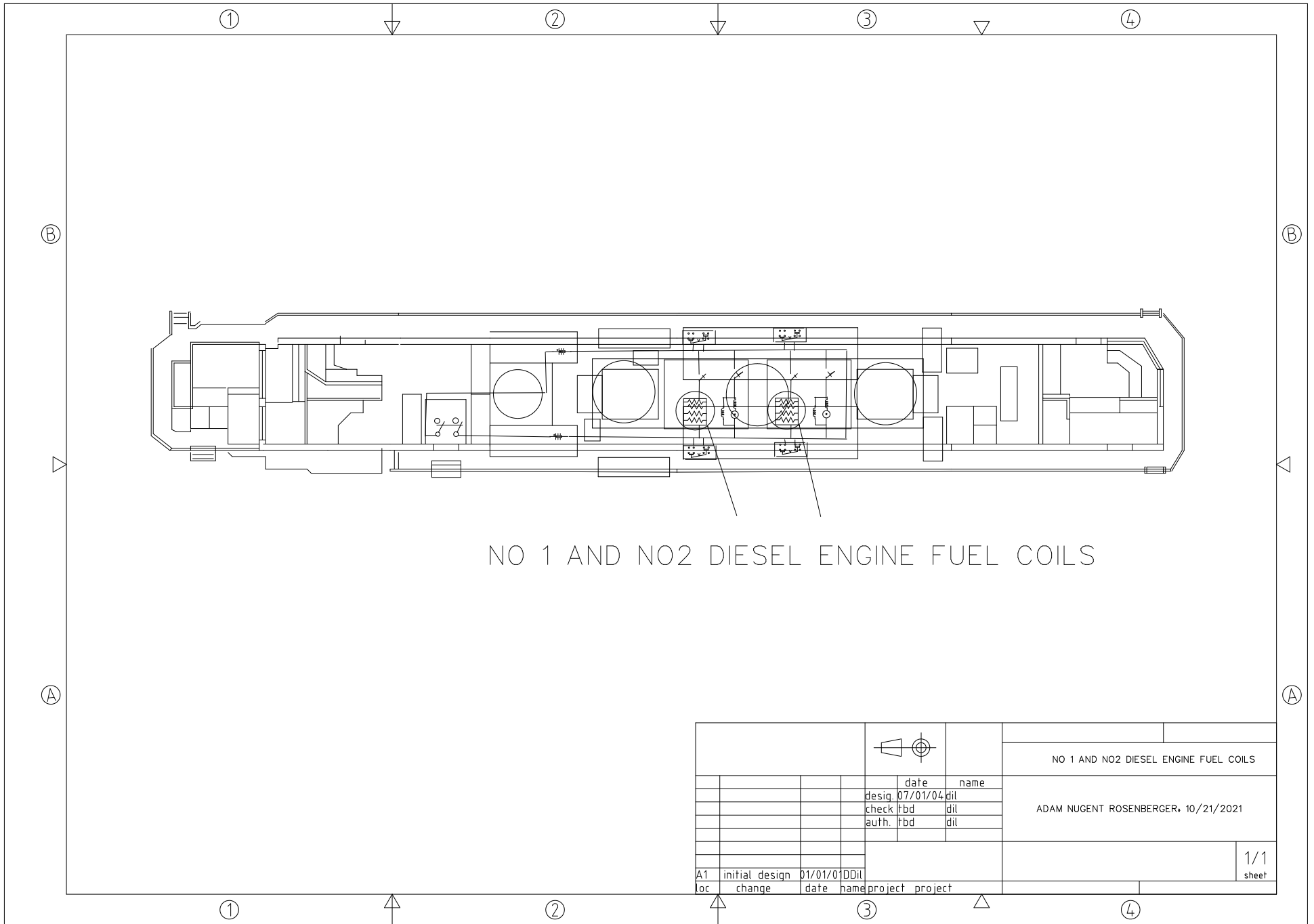


CONTROLLER MECHANISM


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CONTROLLER MECHANISM

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oc	change	date	name	project	project		



NO 1 AND NO2 DIESEL ENGINE FUEL COILS

								
				NO 1 AND NO2 DIESEL ENGINE FUEL COILS				
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				desig.	07/01/04	dil		
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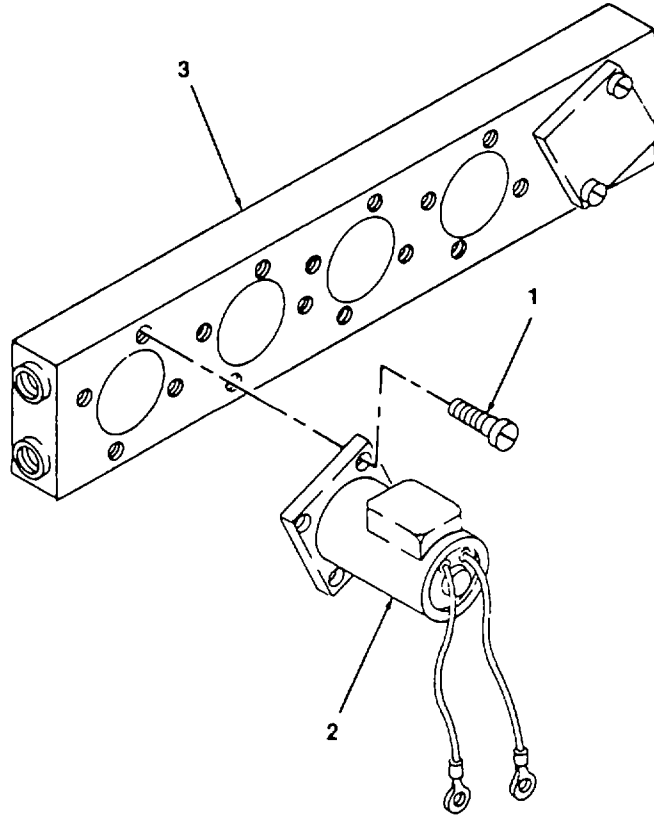
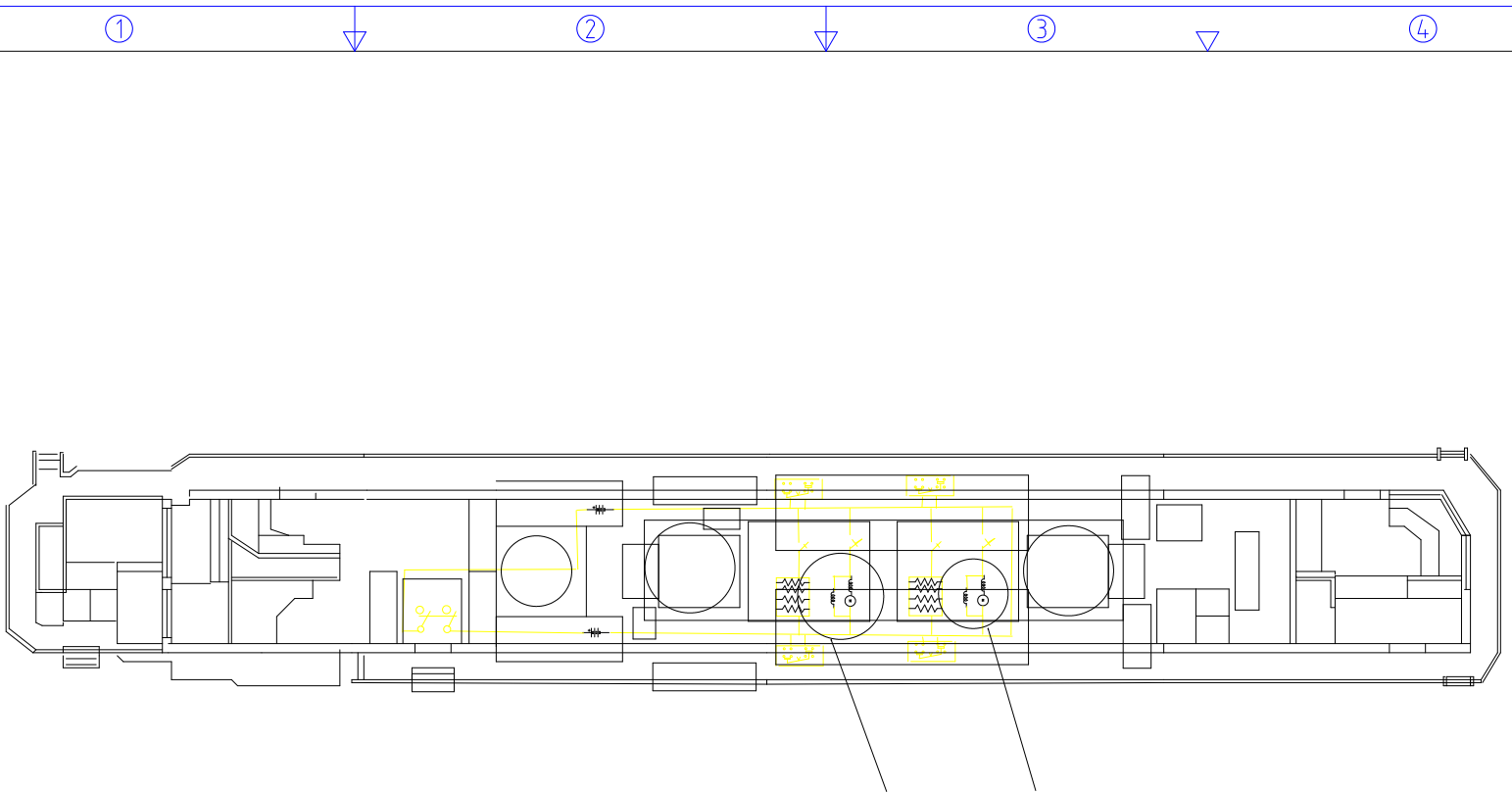



Figure 108. Fuel Control Solenoids

(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
1 2 3	96906	ESM-3011-3BC-3025	GROUP 18 ENGINE GROUP, DIESEL FIG. 108 FUEL CONTROL SOLENOIDS SCREW, MACHINE SOLENOID, FUEL CONTROL (VERSA PRODUCTS) MANIFOLD, FUEL CONTROL END OF FIGURE	16 4 1



FUEL PUMP AND DAMPER

						
					FUEL PUMP AND DAMPER	
					ADAM NUGENT ROSENBERGER, 10/21/2021	
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					sheet	
A1	initial design	01/01/01	DD	dl		
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2 THRU 10

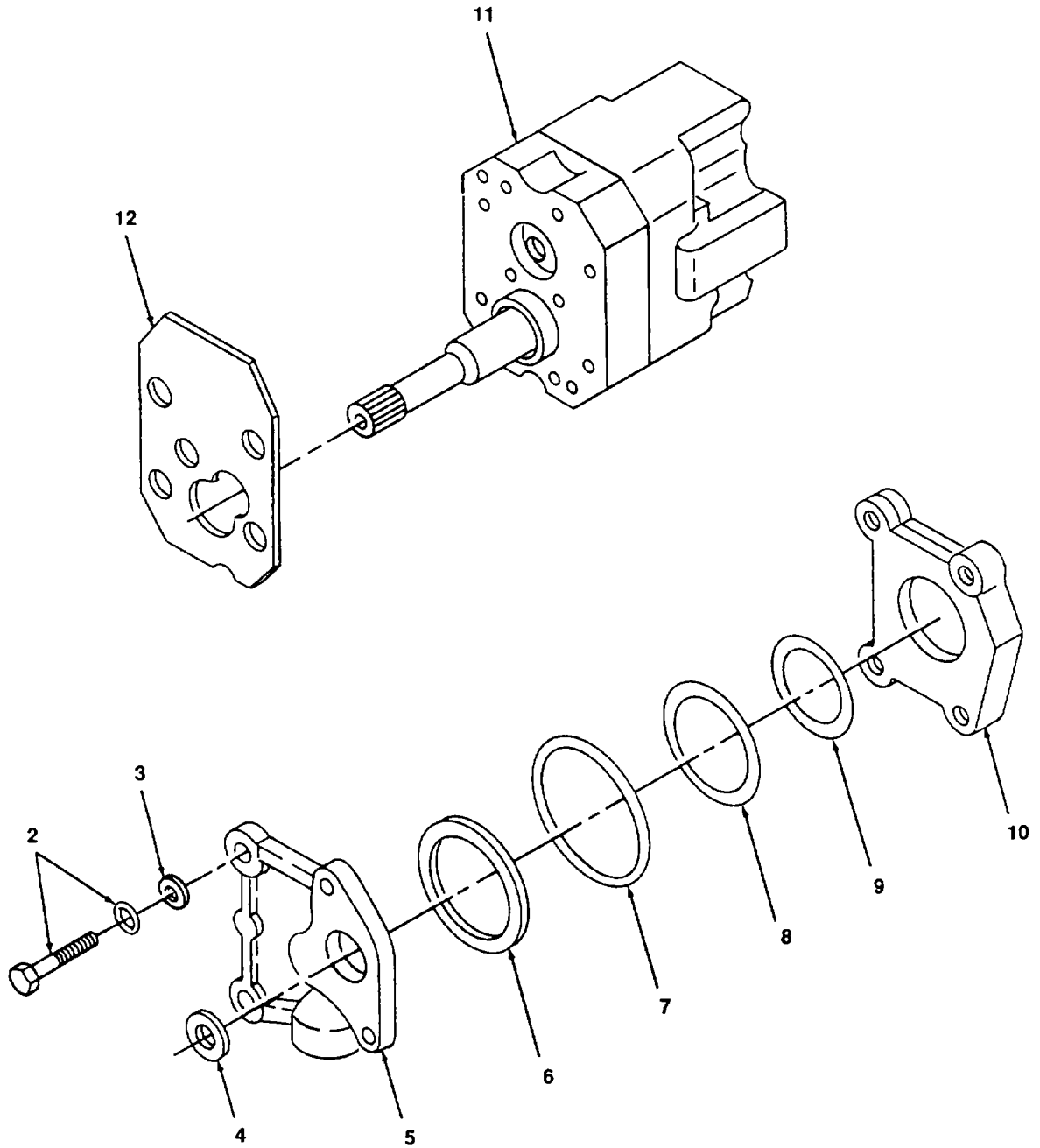


Figure 107. Fuel Pump and Damper.

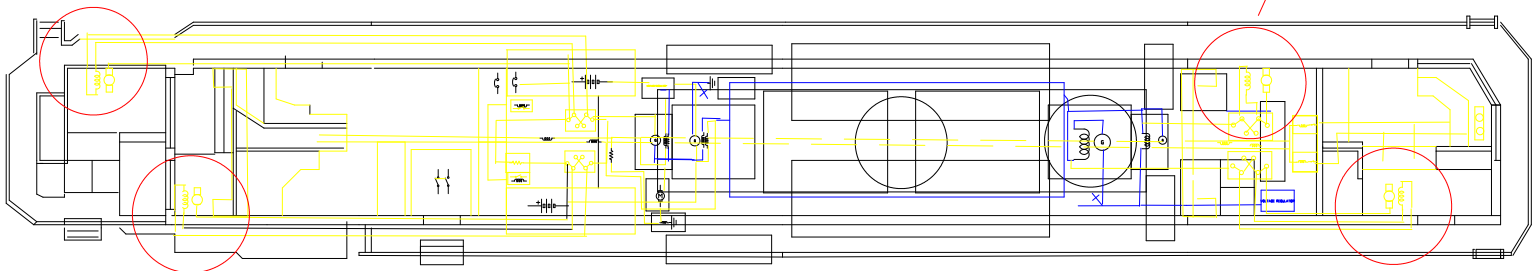
(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			GROUP 18 ENGINE GROUP, DIESEL	
			FIG. 107 FUEL PUMP AND DAMPER	
1	15434	BM-76340	DAMPER, FUEL PUMP	1
2	15434	3017051	CAPSCREW	2
3	15434	70704	WASHER, FLAT	2
4	15434	151900	SEAL, DAMPER TO GEAR PUMP	1
5	15434	153336	BODY, DAMPER	1
6	15434	100099	O-RING	1
7	15434	202897	DIAPHRAGM	1
8	15434	139988	O-RING	1
9	15434	160514	WASHER, NYLON	1
10	15434	153338	PLATE	1
11	15434	3034217	PUMP, GEAR	1
12	15434	3026163	GASKET	1
			END OF FIGURE	


TRACTION MOTOR 1

TRACTION MOTOR 3

TRACTION MOTOR 2

TRACTION MOTOR 4



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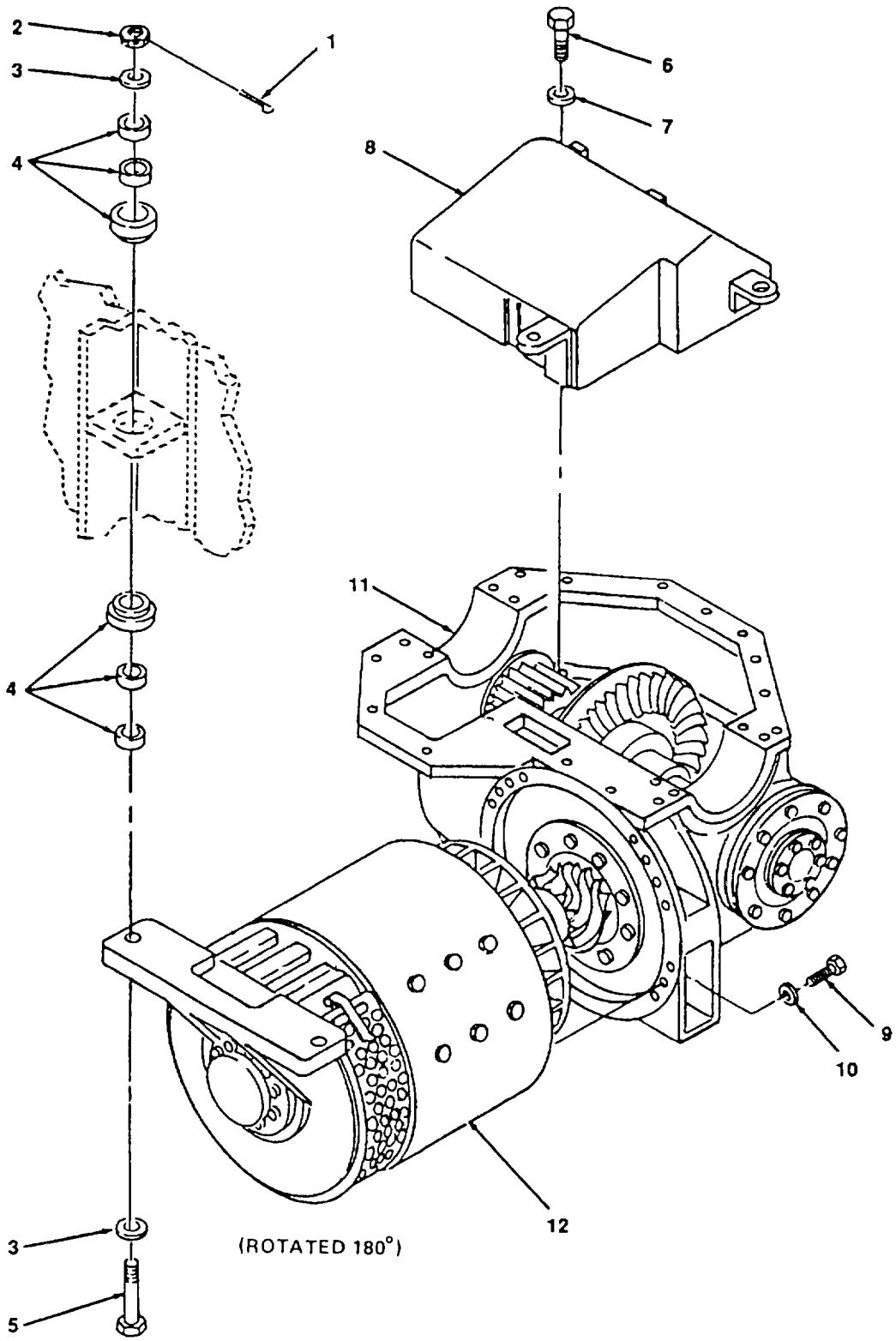


Figure 153. Traction Motor (Sheet 1 of 3).

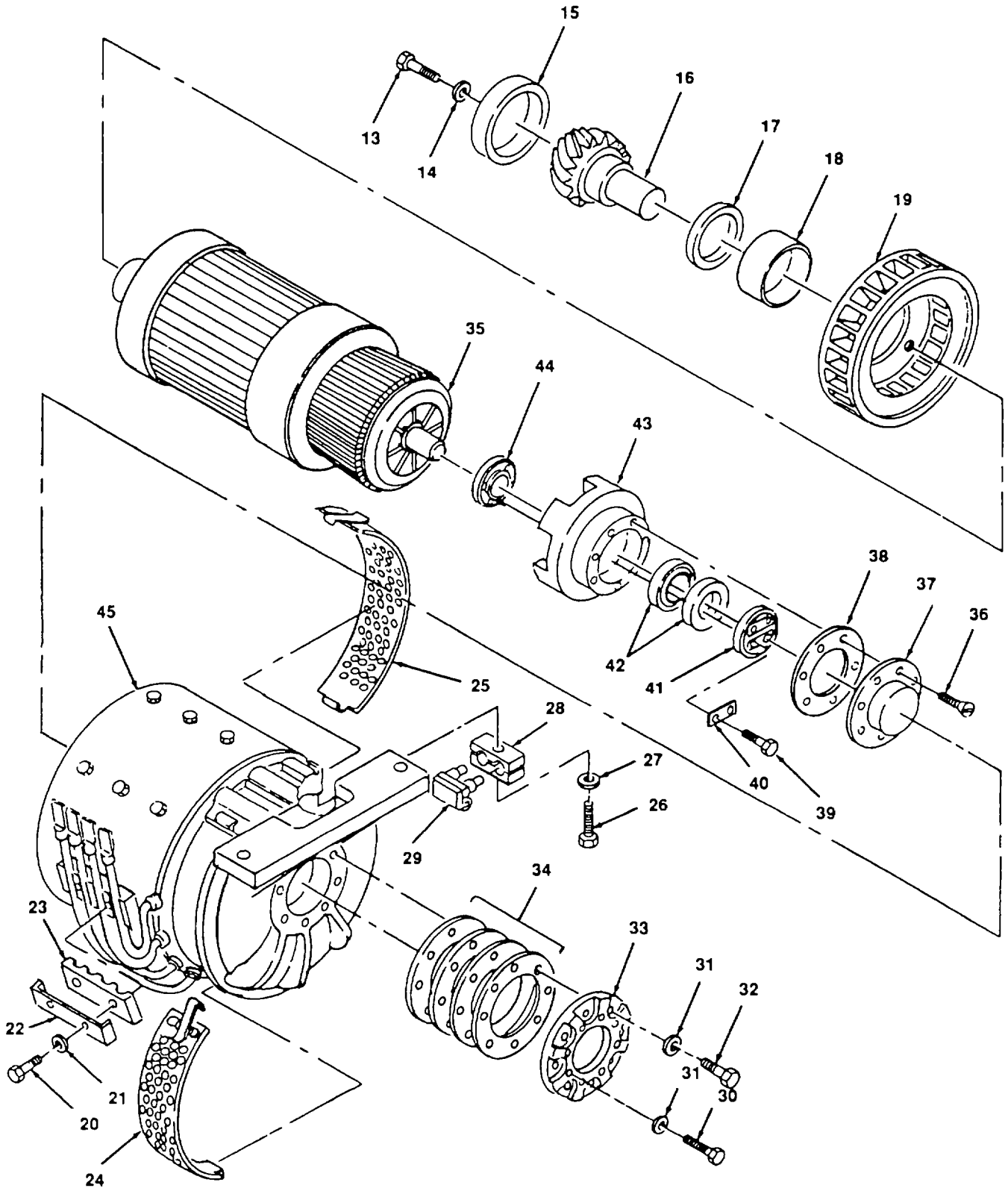


Figure 153. Traction Motor (Sheet 2 of 3).

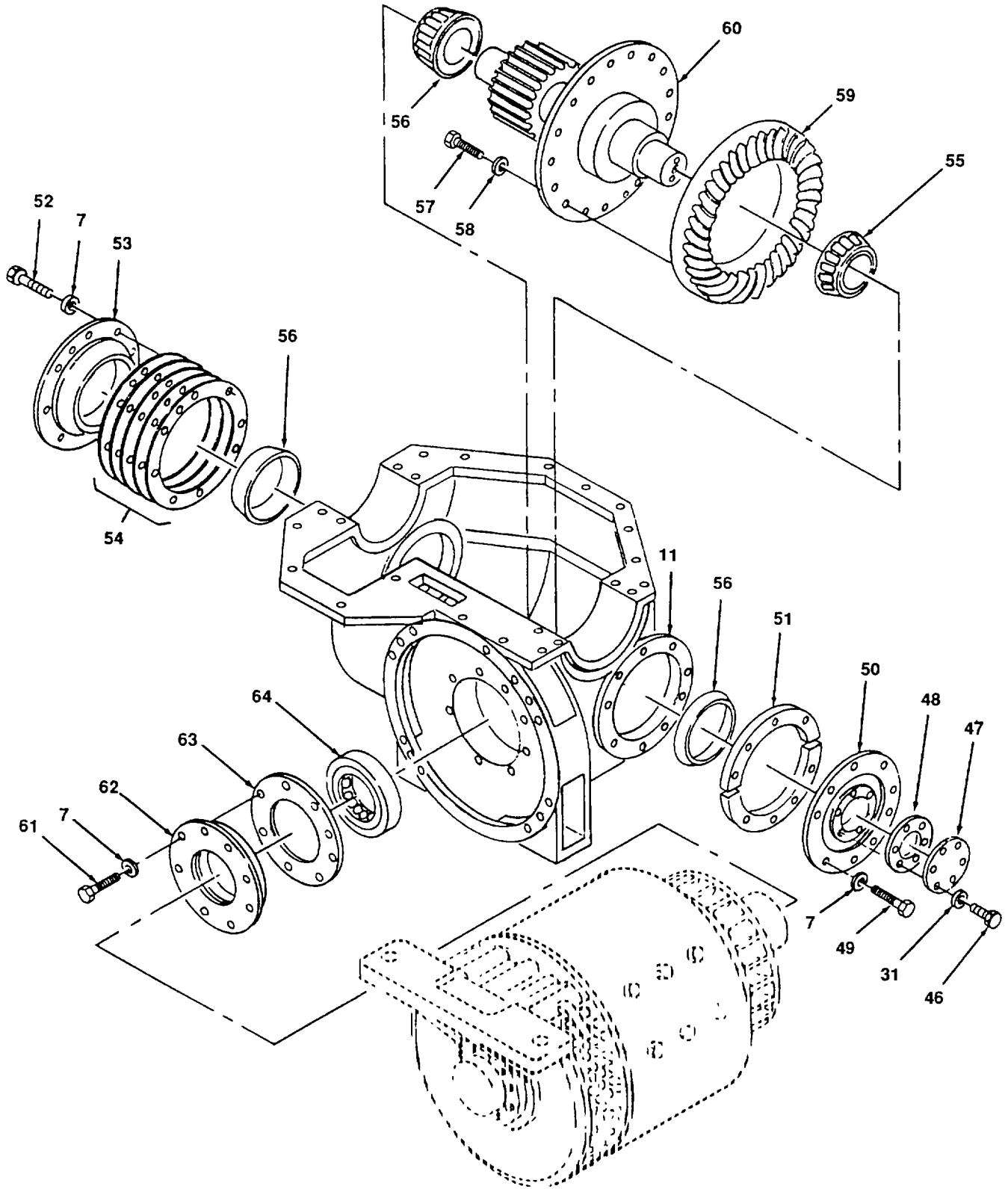


Figure 153. Traction Motor (Sheet 3 of 3).

SECTION II

TM 55-2210-224-24P

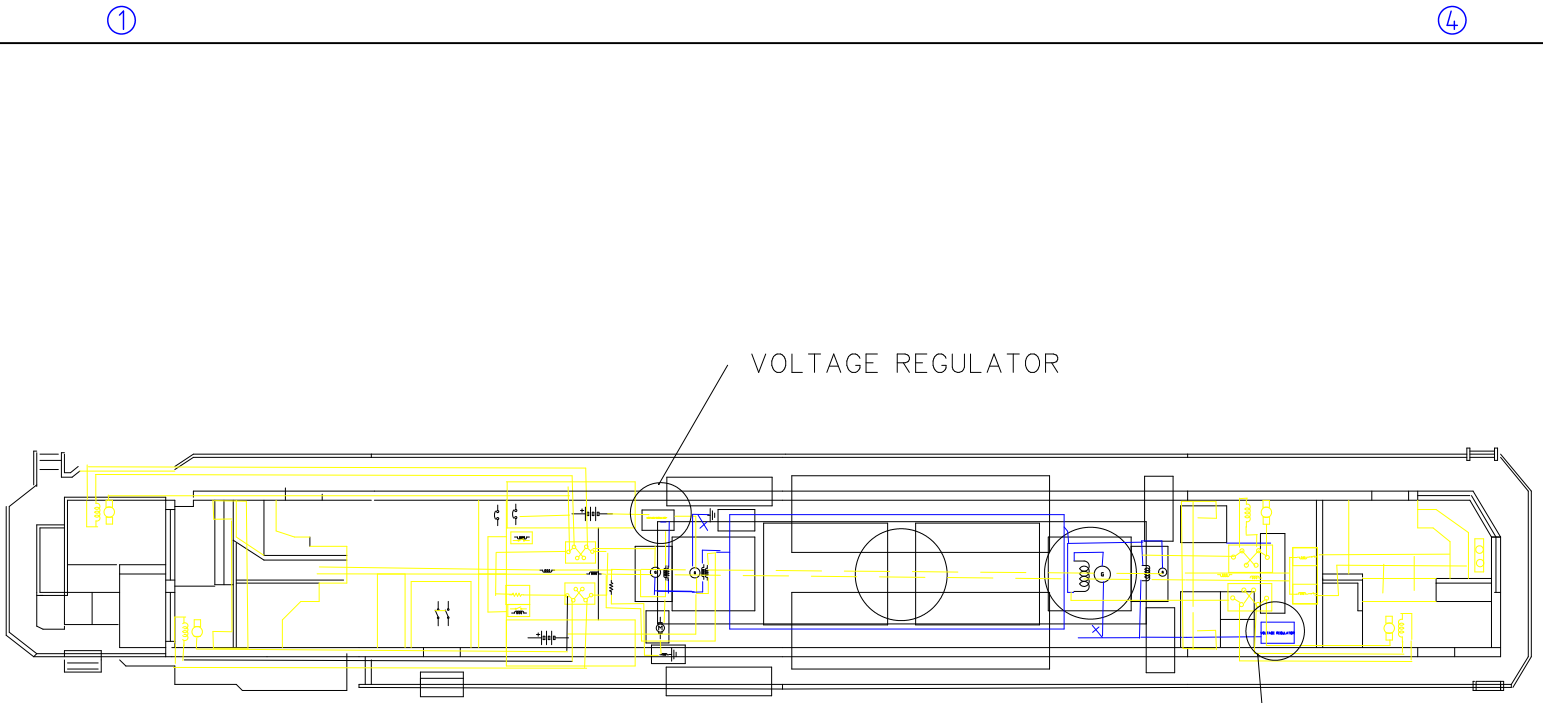
(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			GROUP 21 TRACTION MOTOR	
			FIG. 153 TRACTION MOTOR AND GEAR UNIT	
1	24446	14547	PIN, COTTER	2
2	24446	270641	NUT	2
3	24446	8816910	WASHER, FLAT	2
4	24446	9962139G1	PAD ASSEMBLY	2
5	24446	8869918P29	BOLT, HEX-HEAD	2
6	24446	8806102P1	SCREW, HEX-HEAD, OIL PAN TO GEAR BOX, 5/8-11 NC	12
7	96906	MS35338-50	WASHER, LOCK, 5/8	116
8			PAN, OIL HYPOID	2
9	24446	220105	SCREW, HEX-HEAD, GEAR BOX TO MOTOR, 3/4-10 NC	48
10	96906	MS35338-51	WASHER, LOCK, 3/4 IN	48
11	80971	7GA22C1	UNIT, GEAR	4
12	24446	SGE747D2	TRACTION MOTOR	4
13	24446	6709888P1	SCREW, MACHINE PINION TO ARMATURE SHAFT, 3/4-16 NC	4
14	24446	6709884P1	WASHER, PINION BOLT, 3/4 IN	4
15			SLINGER, OIL	4
16			PINION, HYPOID	4
17	24446	6709832P1	COLLAR, SPACER BEARING TO PINION	4
18			RACE, BEARING	4
19			FAN, BLOWER TRACTION MOTOR	4
20			SCREW, HEX-HEAD	8
21			WASHER, LOCK	8
22			CLAMP, WIRE BRACKET	4
23			BRACKET, WIRE	4
24	24446	6744392G2	COVER, COMMUTATOR INSPECTION WITH CLAMPING LEVER, L.H	4
25	24446	6744392G1	COVER, COMMUTATOR INSPECTION WITH CLAMPING LEVER, R H	4
26			SCREW, HEX-HEAD	16
27			WASHER, LOCK	16
28			CLAMP, BRUSH HOLDER	16
29	24446		BRUSH ASSEMBLY (SEE FIG 112 FOR BREAKDOWN)	4

SECTION II


TM 55-2210-224-24P

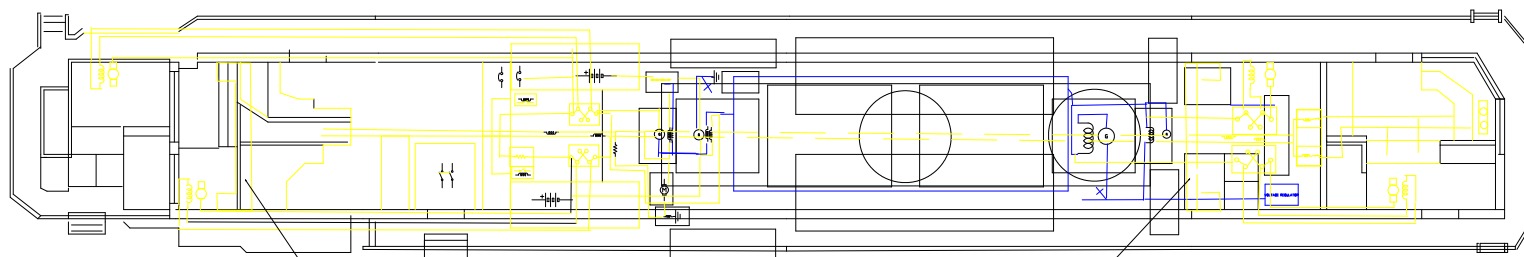
(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			FIG. 153 TRACTION MOTOR AND GEAR UNIT (CONT)	
30	96906	MS90725	SCREW, HEX-HEAD, 3/8-16 UNC	32
31	96906	MS35338-46	WASHER, LOCK, 3/8 IN	56
32	96906	MS90725	SCREW, HEX-HEAD, 5/8-11 UNC	32
33	24446	493A374PT1	PLATE, END, COMMUTATOR END	4
34			SHIMS, END PLATE, COMMUTATOR	
35	24446	6756899G1	ARMATURE, TRACTION MOTOR W/COMMUTATOR SHAFT AND FAN	4
36			SCREW, FLAT HEAD, SLOTTED	16
37	15434	334B309PT1	CAP, BEARING, COMMUTATOR END	4
38	24446	186V855PT1	GASKET, END CAP COMMUTATOR	4
39			SCREW, HEX-HEAD	16
40			BAR, LOCK TAB	8
41	60969	189V441 P1	PLATE, CLAMP, COMMUTATOR END	4
42	24446	8864950PT129	BEARING, BALL, COMMUTATOR END	8
43	15434	334B274PT1	HOUSING, BEARING SEAL, COMMUTATOR END	4
44	24446	493A384PT1	COLLAR, BEARING SEAL, COMMUTATOR END	4
45			HOUSING, MOTOR	4
46	24446	234483	SCREW, HEX-HEAD, BEARING HOUSING COVER	24
47			PLATE, COVER	4
48	24446	8806076P1	GASKET, COVER, BEARING HOUSING, GEAR END (NSN 5330-366-1607)	4
49	24446	98X25	SCREW, HEX-HEAD, BEARING HOUSING TO GEAR BOX 5/8-11 NC	36
50			HOUSING, BEARING	4
51			SPACER, SPLIT, BEARING HOUSING	4
52	96906	MS90725-163	SCREW, HEX-HEAD, BEARING HOUSING TO GEAR BOX, 5/8-11 NC X 1 3/4 IN LONG	36
53			HOUSING, BEARING	4
54	80971	8828025P1	SHIM, BEARING HOUSING, 0 003 IN THICK	V
	24446	8828025P23	SHIM, BEARING HOUSING, 0 005 IN THICK	V
	24446	8828025P2	SHIM, BEARING HOUSING, 0 007 IN THICK	V
	24446	8828025P4	SHIM, BEARING HOUSING, 0 025 IN THICK	V
	24446	6709830P4	SHIM, BEARING HOUSING, 0 063 IN THICK	V
55	24446	8864953P22	BEARING, ROLLER, TAPERED W/CONE AND CUP, PINION END	4

(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
56	24446	8864953P22	FIG. 153 TRACTION MOTOR AND GEAR UNIT (CONT) BEARING, ROLLER, TAPERED W/CONE AND CUP, GEAR END	4
57	24446	6709856P1	SCREW, HEX-HEAD, 3/4-16 NC	72
58	24446	8806056P1	WASHER, HUB MTG SCREW, 3/4 IN	72
59	24446	153X5	GEAR, RING AND PINION SET, HYPOID RING, 49 TEETH, PINION; 10 TEETH	4
60	24446	6744394G7	SHAFT, REDUCTION GEAR INCL PINION AND HUB	4
61	24446	6744394G7	SCREW, HEX-HEAD AP BEARING CAP TO GEAR BOX, 1/2° 18 NC X 1/2 IN. LONG	72
62	24446	6733789G1	CAP, ROLLER BEARING, W/LUBRICANT FLINGER (NSN 2240-366-1600)	4
63	24446	6709833P1	GASKET, BEARING CAP TO GEAR BOX	4
64	62679	NU32OW23	BEARING, CYLINDRICAL ROLLER PINION	4
<p>NOTE</p> <p>Assure bearing is manufactured specifically for traction motor use.</p> <p>END OF FIGURE</p>				




VOLTAGE REGULATOR

						VOLTAGE REGULATOR		
				date	name	ADAM NUGENT ROSENBERGER, 11/5/2021		
				desig. 07/01/04	dil			
				check fbd	dil			
				auth. fbd	dil			
								1/1
A1	initial design	01/01/0	DDil					sheet
oc	change	date	name	project	project			



WHEEL SLIP RELAY 1

WHEEL SLIP RELAY 2

				WHEEL SLIP RELAYS	
		date	name	ADAM NUGENT ROSENBERGER, 11/5/2021	
		desig. 07/01/04	dil		
		check fbd	dil		
		auth. fbd	dil		
A1	initial design	01/01/00	DDil	1/1	
oc	change	date	name	project	project
				sheet	

5
6 THRU 10

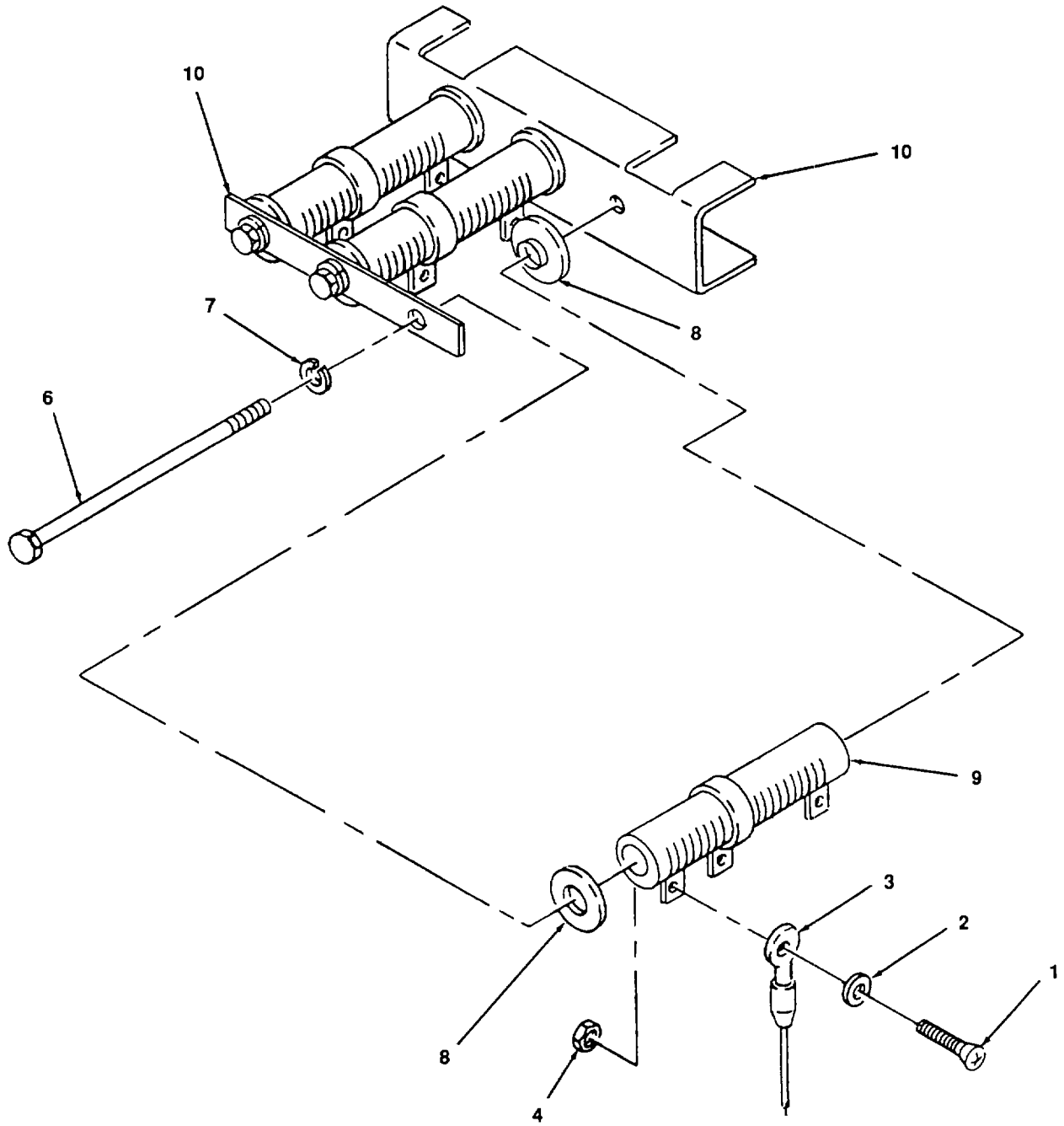
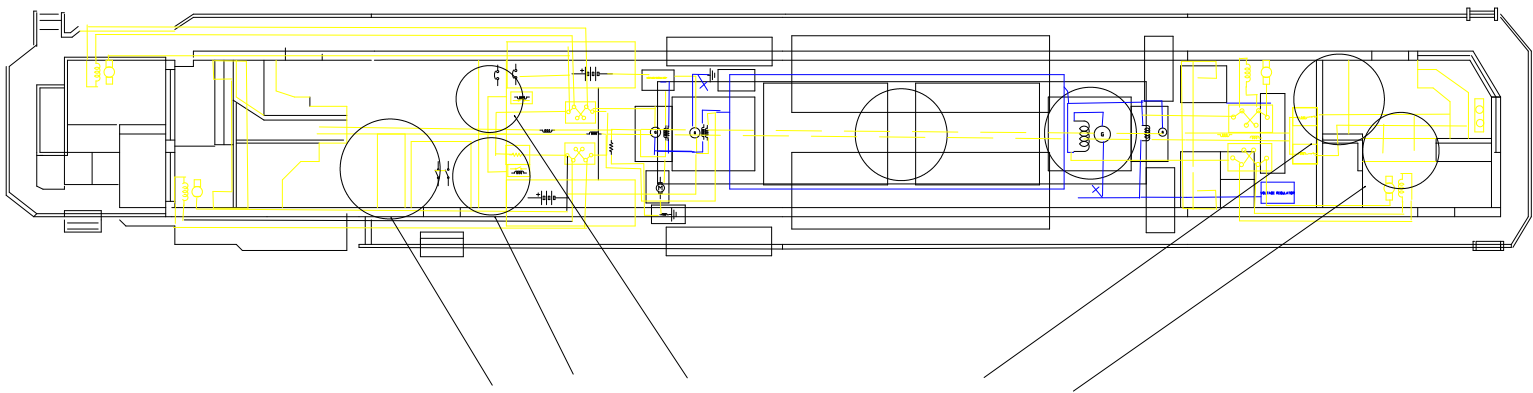



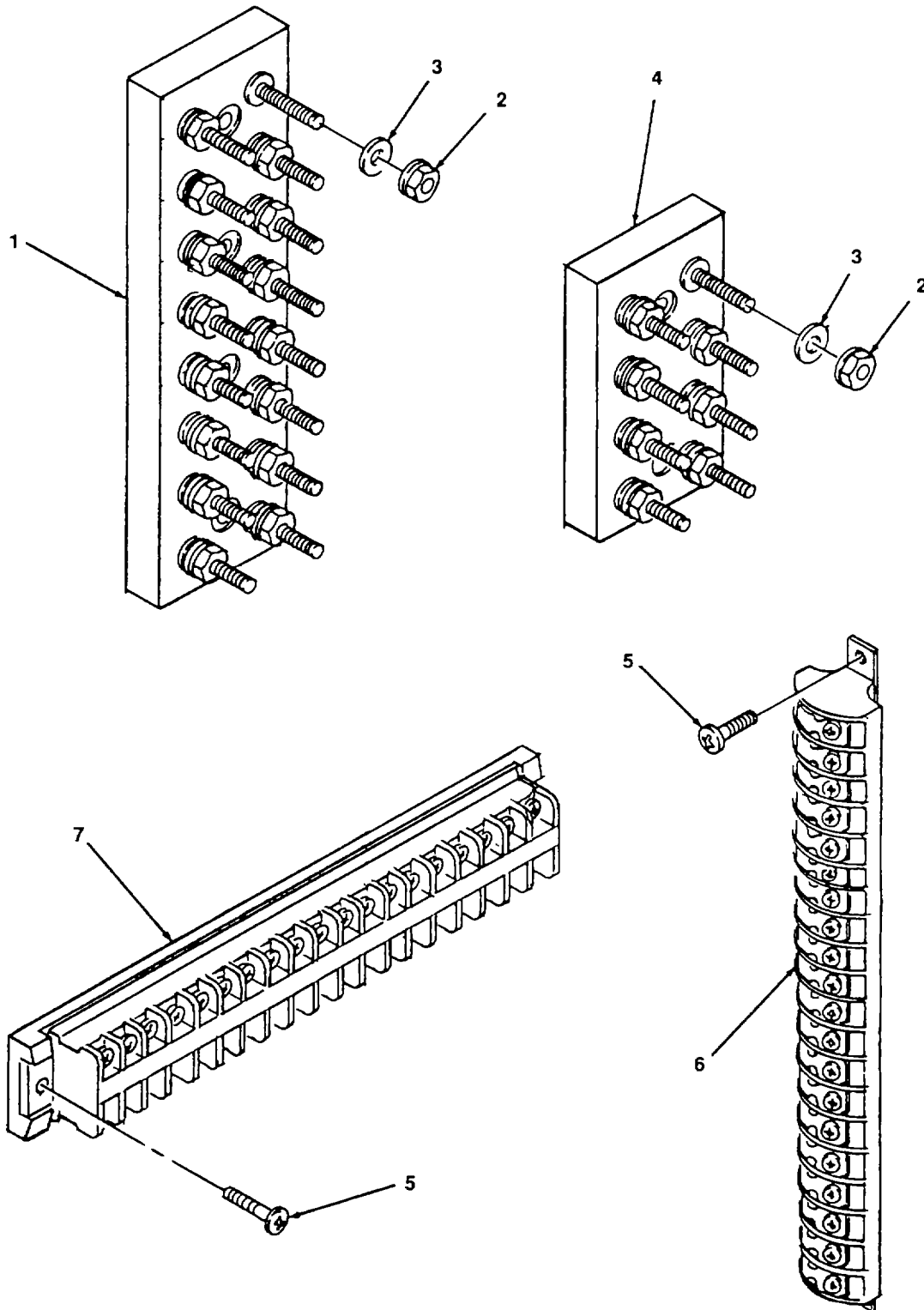
Figure 59. Wheel-Slip Relay Resistor

(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			GROUP 10 BRAKE SYSTEM, AIR	
			FIG. 59 RESISTOR, ASSEMBLY, WHEEL SLIP RELAY	
1	96906	MS90725-3	SCREW, 1/4 IN.	7
2	96906	MS27183-10	WASHER, FLAT, 1/4 IN.	7
3			LEAD, ELECTRICAL, MAKE FROM, 14 AWG P/N 31906 (89110), TERMINAL, 14-16 AWG #10 STUD, P/N 8491796 (72195) REF DES, WS, WSA, J, AA1,1 AA3	7
4	96906	MS51967-03	NUT, 1/4 IN	7
5	24446	17FR45B3	RESISTOR ASSEMBLY, WHEEL SLIP RELAY	3
6	96906	MS90725	SCREW, 3/8 IN	3
7	96906	MS35338-46	WASHER, LOCK, 3/8 IN	3
8	24446		INSULATOR, 3/8 IN	6
9	24446	496A755G1	RESISTOR, WHEEL SLIP RELAY	3
10	24446	392A951G2	BRACKET	1
			END OF FIGURE	



CONTROL CABINETS/TERMINAL BOARDS

							
						CONTROL CABINETS TERMINAL BOARDS	
				date	name	ADAM NUGENT ROSENBERGER+11/5/2021	
				desig. 07/01/04	dil		
				check fbd	dil		
				auth. fbd	dil		
A1	initial design	01/01/0	DDil			1/1 sheet	
oc	change	date	name	project	project		



4834-064

Figure 64. Terminal Boards.

(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			GROUP 10 CONTROLS, ELECTRICAL GROUP	
			FIG.. 64 TERMINAL BOARDS	
1	72915	8458371	TERMINAL BOARD (TB 1,10,11,13,14,17,18, 61,51, 52 & 53	
2	96906	MS51922-1	NUT, SELF-LOCKING	24
3	96906	MS27183-10	WASHER, FLAT	24
4	72915		TERMINAL BOARD, MAKE FROM, 8458371 TB37838	2
5	96906	MS24617	SCREW, #10, 1 IN LONG	4
6	72915		TERMINAL BOARD (TB 19 & 20)	
7	72915		TERMINAL BOARD (TB 13 & 14)	
			END OF FIG.URE	

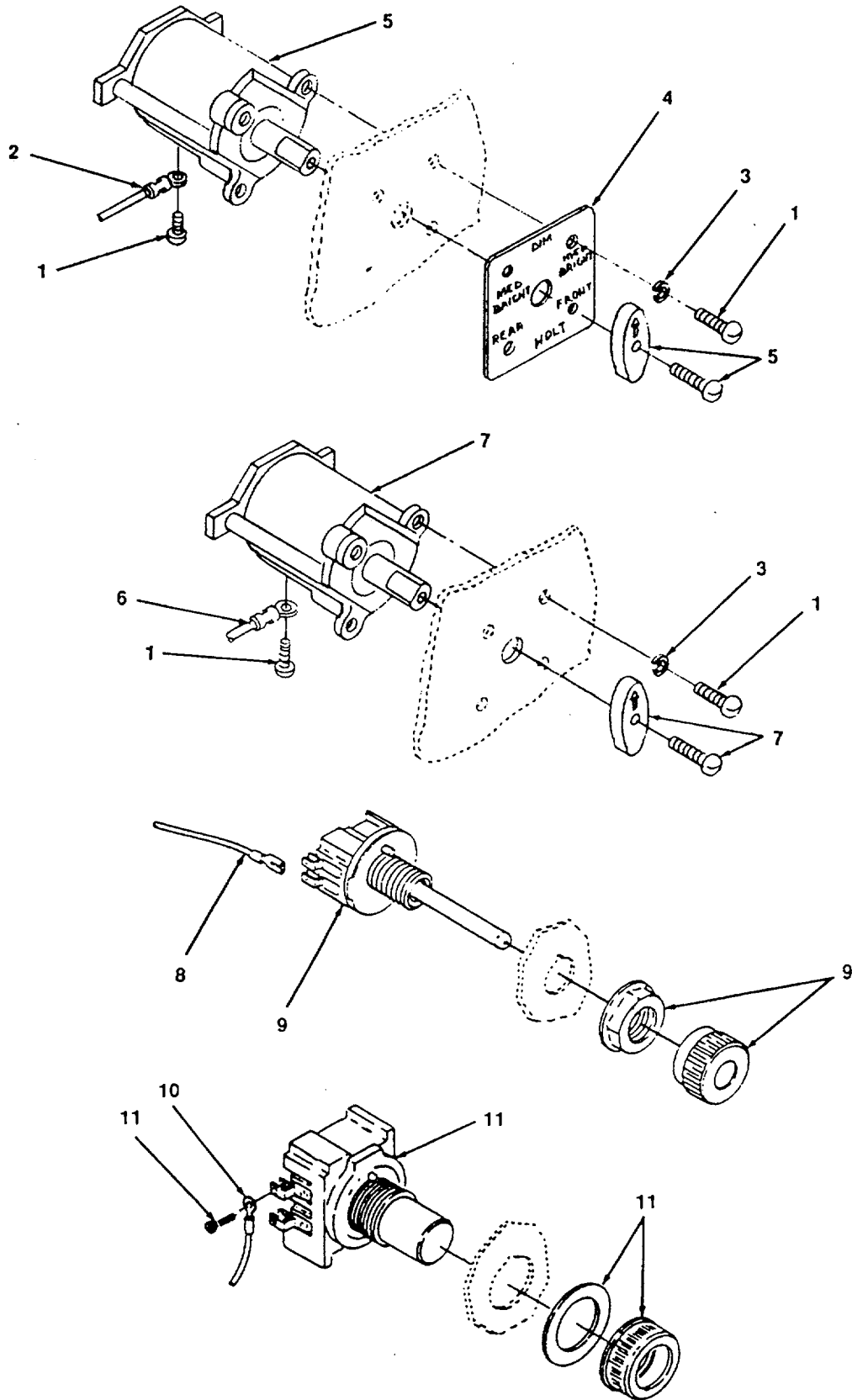


Figure 36. Switches (Sheet 1 of 2).

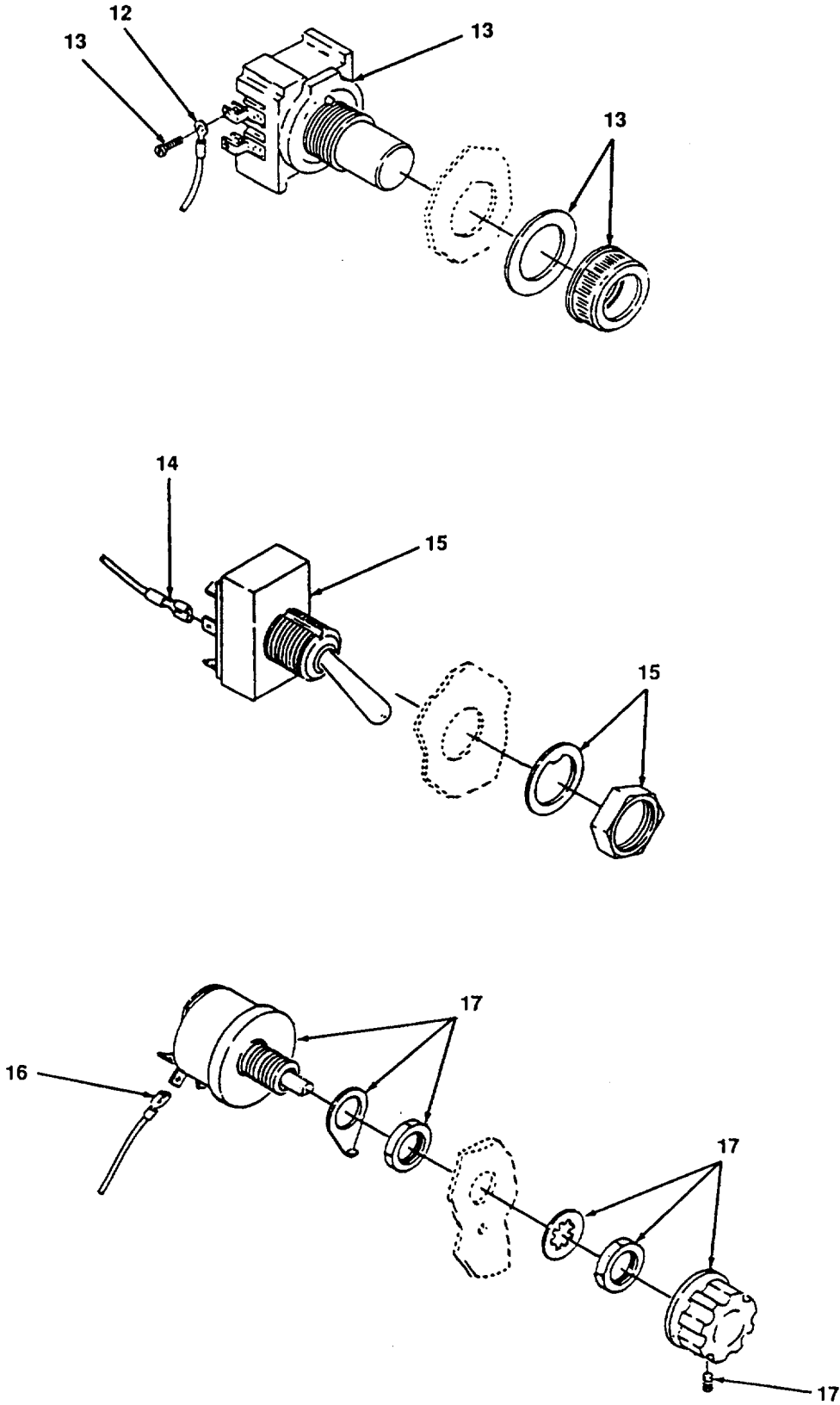


Figure 36. Switches (Sheet 2 of 2).

(1) ITEM NUMBER	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE (UOC)	(5) QTY
GROUP 08 ELECTRICAL ACCESSORIES GROUP FIG. 36 SWITCHES				
1	96906	MS35206-34	SCREW, PAN HEAD #6	4
2	96906	MS35206-34	LEAD, ELECTRICAL, MADE FROM; WIRE 14 AWG P/N 8491796 (72915), TERMINAL LUG 14-16 AWG P/N 31906 (891 10), REF. DES: FRONT: HA22, HP5; REAR: HU22	3
3	96906	MS35338-41	WASHER, LOCK #6	4
4	72915	8238114	PLATE, ROTARY SNAP SWITCH HEADLIGHT INDICATOR	1
5	72915	8237656	SWITCH, ROTARY SNAP, HEADLIGHT	1
6	72915	8237656	LEAD, ELECTRICAL, MADE FROM; WIRE 14 AWG P/N 8491796 (72915), TERMINAL, LUG, 14-16 AWG P/N 31906 (891 10), REF. DES: ISOLATION, JA5, 3J913T5, 6A, 6A9, 16A9, 3T11, P04; REMOTE HEADLIGHT: J, HM4, 25T2, 25T1	11
7	72915	8157802	SWITCH, ROTARY	2
8	72915	8157802	LEAD, ELECTRICAL, MADE FROM; WIRE 14 AWG, P/N 8491796 (72915) TERMINAL, SPADE, P/N A2272 (46522), REF. DES: SA10, SA	2
9	72915	8295963	SWITCH, SAND, WOBBLE	1
10	72915	8295963	LEAD, ELECTRICAL, MADE FROM WIRE, 14 AWG, P/N 849176 (72915), TERMINAL, LUG 14-16 AWG P/N 31906 (89110) REF. DES: SW9, SA9	2
11	72915	8384650	SWITCH, STOP, RED PUSHBUTTON	1
12	72915	8384650	LEAD, ELECTRICAL, MADE FROM; WIRE 14 AWG, P/N 8491796 (72915), TERMINAL, LUG, 14-16 AWG P/N 31906 (89110) REF. DES: BPA9/BPA, GR, AGP6, AGP7, SE1, M2, SE9, FP1, FP, SZA, SZG	12
13	72915	8230431	SWITCH, BLACK, PUSHBUTTON	3

(1) ITEM NUMBER	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE (UOC)	(5) QTY
14			<p>FIG. 36 SWITCHES (CONT)</p> <p>LEAD, ELECTRICAL, MADE FROM; WIRE, 14 AWG P/N 8491796 (72915), TERMINAL, FASTON 14-16 AWG, P/N A2272 (46522) REF. DES: LE6, LE7</p>	2
15	72915	8331384	SWITCH, TOGGLE	2
16			<p>LEAD, ELECTRICAL, MADE FROM; WIRE, 14 AWG, P/N 8491796 (72915), TERMINAL, FASTON 14-16 AWG, P/N A2272 (46522) REF. DES: HT22, H2TA, L53 THRU L59, GA3</p>	8
17	72915	8237523	SWITCH, RHEOSTAT	2
			END OF FIGURE	

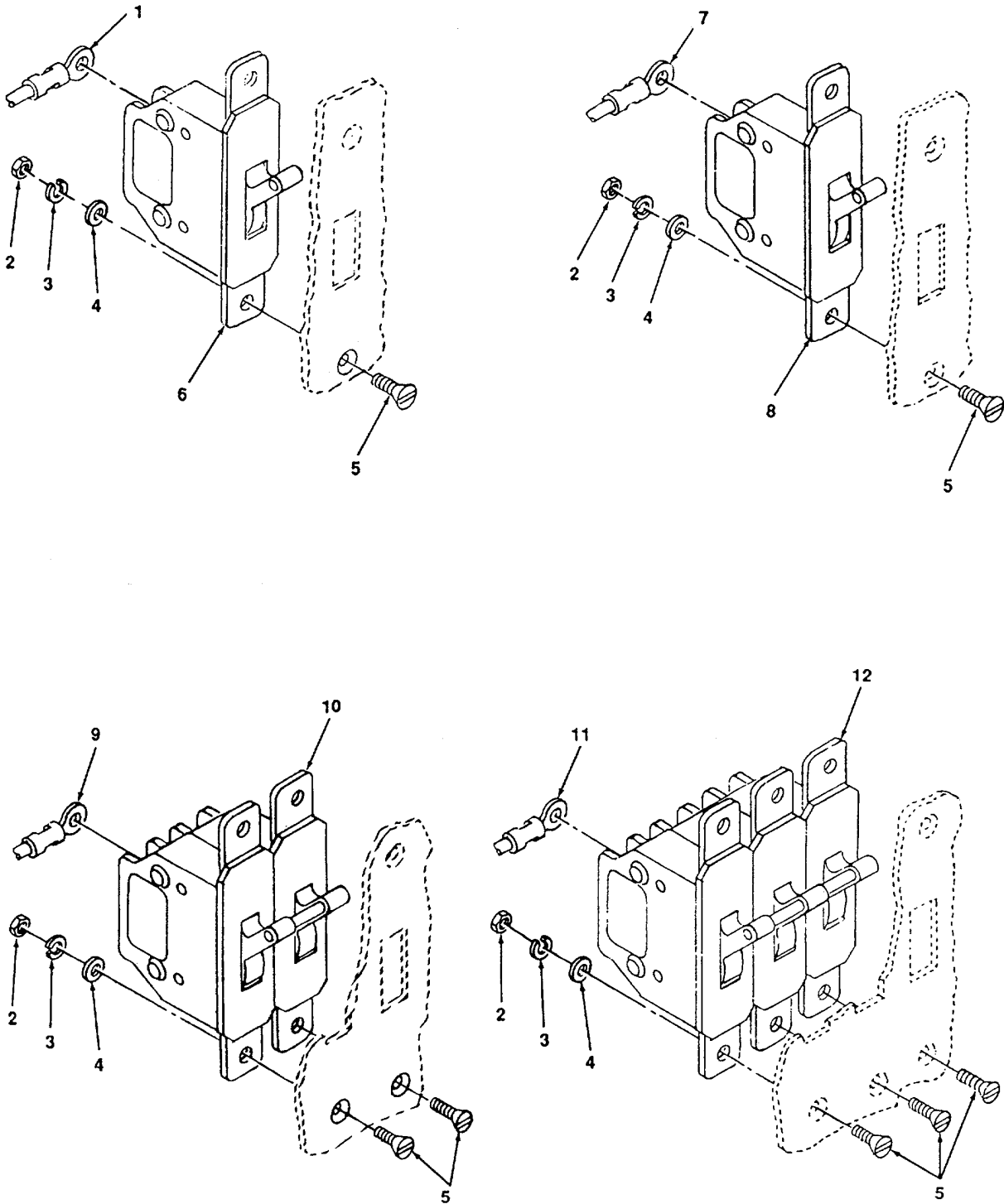


Figure 38. Circuit Breakers.

(1) ITEM NUMBER	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE (UOC)	(5) QTY
			GROUP 08 ELECTRICAL ACCESSORIES GROUP FIG. 38 CIRCUIT BREAKERS	
1			LEAD, ELECTRICAL, MADE FROM; WIRE, 14 AWG, P/N 8491796 (72915), TERMINAL, LUG 14-16 AWG, P/N 8210498 (72915) REF. DES: CB50; STEP: CB51; GAGE: CB52, HTRI, CB53, HTR, GB53, 58, 13; SPARE 1, 2, 3	14
2	96906	MS51967-03	NUT, HEX, 1/4 IN.	32
3	96906	MS35338-44	WASHER, LOCK, 1/4 IN.	32
4	96906	MS27183-10	WASHER, FLAT, 1/4 IN.	32
5	96906	MS35206	SCREW, FLAT HEAD, COUNTERSINK, 1/4 IN.	32
6	72915	8458698	CIRCUITBREAKER, SINGLE, 15AMP	2
7			LEAD, ELECTRICAL, MADE FROM; WIRE, 14 AWG, P/N 8491796 (72915), TERMINAL, FASTON 14-16 AWG, P/N 31906 (89110) REF. DES; CB4, 54, CB7, 5, 32, 59	6
8	72915	8458699	CIRCUIT BREAKER, SINGLE, 30 AMP	2
9			LEAD, ELECTRICAL, MAKE FROM; WIRE, 14 AWG, P/N 8491796 (72915) TERMINAL, FASTON, 14-16 AWG, P/N 31906 (89110) REF. DES:	2
10	72915	8458724	CIRCUIT BREAKER, DOUBLE, 30 AMP	4
11			LEAD, ELECTRICAL, MADE FROM; WIRE, 14 AWG, P/N 8491796 (12915), TERMINAL, FASTON 14-16 AWG, P/N 31906 (89110) REF. DES:	2
12	72915	8458742	CIRCUIT BREAKER, TRIPLE, 30 AMP	4
			END OF FIGURE	

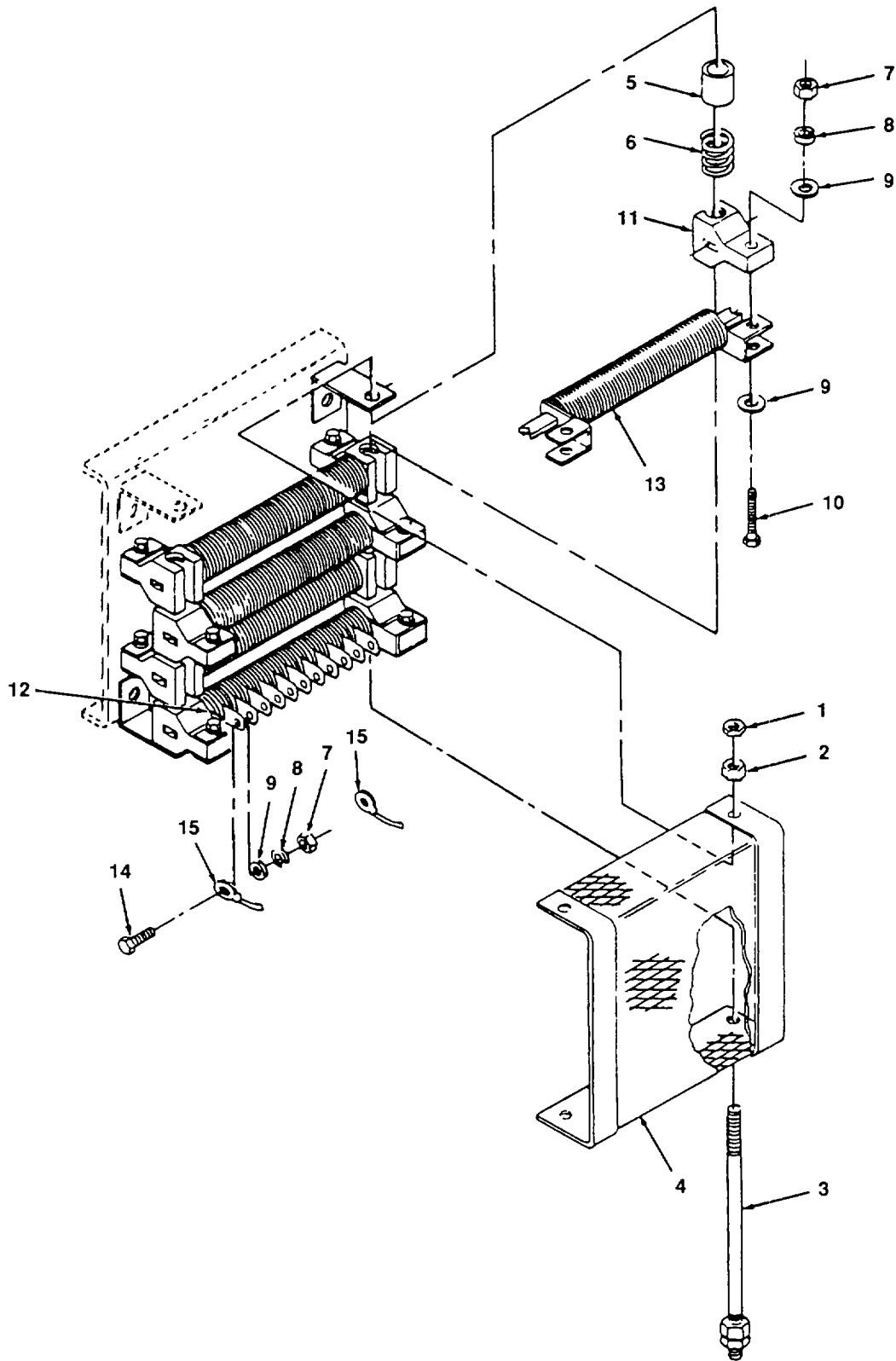
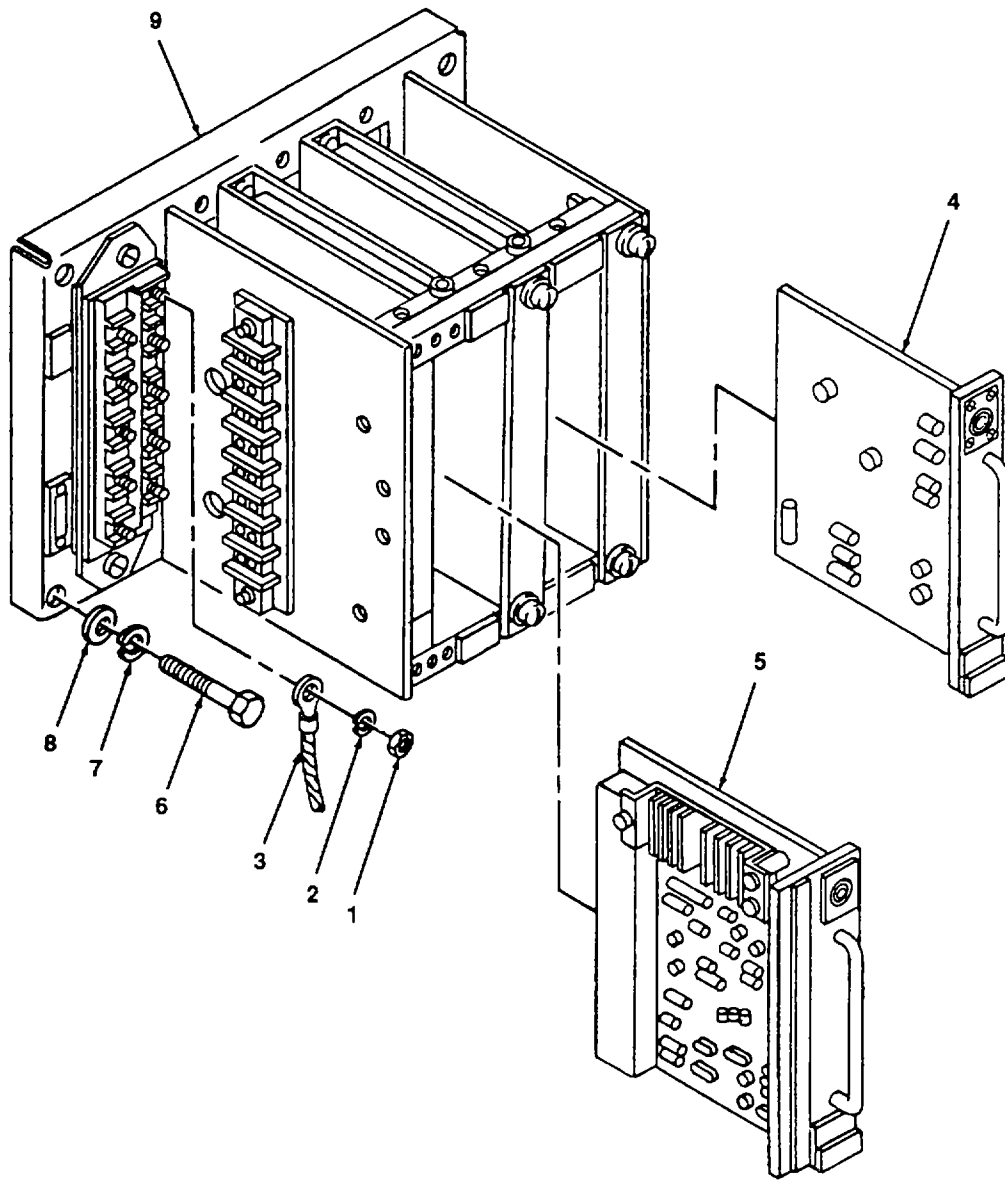


Figure 55. Resistor, Generator Field.

(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			GROUP 10 BRAKE SYSTEM, AIR	
			FIG. 55 RESISTOR, GENERATOR FIELD	
1	96906	MS51922-33	NUT, LOCK	2
2	96906	MS51967-15	NUT	2
3			STUDS	2
4	97403	13228E2151	CAGE, RESISTOR	1
5			SPACERS	4
6			SPRINGS	
7	96906	MS51967-09	NUT, 3/8	10
8	96906	MS35338-46	WASHER, LOCK, 3/8	10
9	96906	MS27183-14	WASHER, FLAT, 3/8	10
10	96906	MS90725-66	SCREWS, HEX-HEAD	8
11			INSULATORS	2
12	24446	41B556486G2	RESISTOR	8
13	24446	492A933G1	RESISTOR	2
14	96906	MS90725-55	SCREWS, HEX-HEAD, 3/8	6
15			LEADS, ELECTRICAL, MAKE FROM, 14 AWG 8491796 (72915) AND TERMINAL, 14-16 AWG, 3/8 STUD, 1434780 (594000), REF DES, 1GFR1, J1,2GFR1, 1GFR21, J1,2GFR21	
			END OF FIGURE	



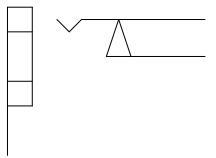
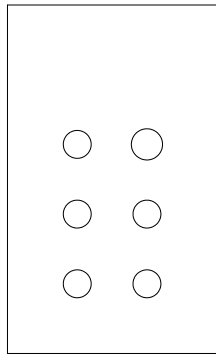
4834-062

Figure 62. Panel, Transition Relay.

(1) ITEM NO.	(2) FSCM	(3) PART NUMBER	(4) DESCRIPTION AND USABLE ON CODE	(5) QTY
			GROUP 10 BRAKE SYSTEM, AIR	
			FIG. 62 PANEL, TRANSISTOR RELAY	
1	96906	MS35649-202	NUT	17
2	96906	MS35338-43	WASHER, LOCK	17
3			LEAD, ELECTRICAL, MAKE FROM; 14 AWG 8491796 (72915), TERMINAL LUG, 14-16 AWG P/N 31906 (89110) REF DES, J-TP2, K-N45 AND N46, M-AAT, N-AA-	17
4	24446	FD1139	CARD, SPEED-EVENT (TWO-CHANNEL)	1
5	24446	FD1137	CARD, TACH RECEIVER	1
6	96906	MS90725-69	SCREW, HEX-HEAD	4
7	96906	MS35338-46	WASHER, LOCK	4
8	96906	MS27183-14	WASHER, FLAT	4
9	24446	17FL182AN1	PANEL, RELAY	1
			END OF FIG.URE	

WHEATSTONE RECITIFER BRIDGE ON FUSE TEST

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jack meter

