

11-24-76 9-16-77 7-26-78 10-11-79 ISS.: #18 ISS.: #19 ISS.: #20 ISS.: #21 2/11/76 2/29/77 2/21/78 2/10/79				AH-850678-A	
*	DESCRIPTION	MFG.ADJ.	FIELD GTEP	EXPLANATION OF TERMS	
*	RELAY ADJUST. (AH) DRG.		040-002-100	- *DENOTES APPLICABLE ADJUSTMENTS. - #1-INSIDE OR ARMATURE END WINDING. - #2-OUTSIDE OR HEEL END WINDING. - S.L.A.=SHORT LEVER ARMATURE. S.R.=SLOW TO RELEASE. S.O.= SLOW TO OPERATE. - A.C.=ALTERNATING CURRENT. O=OPERATE. N.O.=NON-OPERATE. H=HOLD. R=RELEASE. O.C.=OPEN CIRCUIT. - RESID.=RESIDUAL ADJUSTMENT VALUE. - TEST VALUES ARE FOR INSPECTION ONLY. - READJ. VALUES ARE FOR ADJUSTING ONLY. - CURRENT IS SHOWN IN AMPERES. - POS.=TEST WITH POSITIVE BAT.THROUGH RESIST OF TEST SET. - NEG.=TEST WITH NEGATIVE BAT.THROUGH RESIST OF TEST SET. RELAYS PREFIXED BY GR OR GT HAVE WIRE WRAP TERMS. RELAYS PREFIXED BY R OR RT HAVE SOLDER TERMINALS. THIS ADJUSTMENT APPLIES IN EITHER CASE. - NOTES - 1-TEST WITH BOTH WINDINGS IN SERIES. 2-#1 WINDING TO OPERATE #1 SPRING ONLY. 3-SPRINGS NEED ONLY MAKE CONTACT ON OPERATE TESTS. 4-BOTH TESTS MADE ON #1 WINDING. #1 TEST IS FOR #1 SPRING ONLY. 5-CONNECT RESISTANCE ACROSS TEST JACKS 1 & 2. 6-SHORT LEVER ARM. RESIDUAL MIN..0015", MAX..004". GEN.:OPERATE BUSY KEY WHILE TESTING. AH AGREES WITH CIRCUIT ISSUE 29 OR LATER. SWITCH STAND: ROT.SW.TEST POSITION DIAL SPEED AND/OR TCMF SUBSET AND PARTY IDENT. CKT. SELECTOR LEVEL & TEST DESK ACCESS	
*	GENERAL REQUIREMENTS	100			
*	SW.TEST & SH. JKS.,ETC.	101	230-005-703		
	CLASS A & Z	110	040-500-706		
*	" B	300	040-500-502		
*	" C	301	040-500-504		
	" W	784	040-500-102		
	TYPE 10 A.C.	118	040-502-702		
	TYPE 59 CODEL UNIT	783	040-500-501		
	V.O.N.	120			
	CUP & SHAFT SPGS.	121			
	CAM SPGS.	122			
	NORMAL POST	123			
	RLSE. SPGS.	124			
	R.O.N.	126	230-005-703		
	VERT. MECH.	130			
	DOGS	131			
	ROT. MECH.	132			
	RLSE. MECH.	133			
	SHAFTS, WIPERS, ETC.	135			
	MINOR SW	136	230-007-708		
	TESTING LP PULSED SWS.	144			
	TESTING SX PULSED SWS.	145	230-200-504		
	TIMING SWITCHES & RLYS.	146			
*	44 ROT. SW.	163	230-007-706		
	45 " "	162	230-007-705		
	SHUNT FIELD RELAY	175	040-500-706		
*	280 POLAR RLY.	201	040-401-701		
*	KEYS	753	032-305-700		
	SWITCHBOARD JACKS	754	032-320-700		
	BAR RELAY	55585	040-500-704		
*	80 ROT. SW.	165			
			REF.:GTEP-108-104-102		

GTE AUTOMATIC ELECTRIC
NORTH LAKE ILLINOIS 70164 INCORPORATED

ENG.:VEAE APP'D.:RAF
CIRCUIT OR SWITCH ADJUSTMENT

CKT.:H-850678-A

20 SHEETS 1
AH-850678-A

FX-2880-A 1/76 ISSUE:2

10-2-75 11-24-76 9-16-77 7-26-78 10-11-79
 ISS:#17 ISS:#18 ISS:#19 ISS:#20 ISS:#21

ISSUE

SIZE

AH-850678-A

A

SHEET

TOTAL

AUTOMATIC ELECTRIC COMPANY
 NORTHLAKE, ILL., U.S.A. ○ GENOA, ILL., U.S.A. ○ WAUKESHA, WISC., U.S.A. ○

NOTES CONTINUED:

- 7- #1 OPERATE AND NON-OPERATE TESTS MADE WITH PRI. WDGS. P1 & P2 IN SERIES AFTER A REVERSE SOAK PRIOR TO TEST.
 #2 OPERATE TEST MADE ON SEC. WDG. S.

TESTING INSTRUCTIONS

REVERSE SOAK

GRD. TO COIL TERM. #6 OF RLY. PA.
 NEG. TO COIL TERM. #2 OF RLY. PA.

#1 TEST

GRD. TO COIL TERM. #2 OF RLY. PA.
 NEG. TO COIL TERM. #6 OF RLY. PA.

#2 TEST

POS. TO COIL TERM. #8 OF RLY. PA.

- 8- SPECIAL ADJUSTMENT NOTE FOR RELAYS PM1, PM2 & PM3.

(A) FOR MANUFACTURE ONLY:

THE OUTPUT ACROSS SPRINGS 5 & 6 (LEFT TEST JACK PULSE MEASURING SPRINGS 1 & 2) OF RELAY PM1 AT 48.5 TO 50 VOLTS SHALL HAVE A PULSE RATIO OF 55 TO 70 PERCENT BREAK, AND SPEED OF 10 ± 0.3 PULSES PER SECOND. TO OBTAIN THIS OUTPUT, VARY RESIDUALS OF RELAYS PM1 & PM2 WITHIN SPECIFIED LIMITS.

(B) FOR MAINTENANCE ONLY:

SPEED TO BE 60 ± 2 PULSES PER MINUTE MEASURED VISUALLY AT SPEED KEY LAMP WITH SPEED KEY OPERATED. VARY RESIDUAL OF RELAY PM2 TO OBTAIN DESIRED SPEED. (PULSES MAY BE MEASURED WITH TEST SET AT PULSE MEASURING JACK).

- 9- SPECIAL ADJUSTMENT NOTE FOR RELAY A.

#2 TEST TO BE USED WHEN VARISTOR VRI IS PROVIDED.

- 10- THIS ADJUSTMENT CAN BE APPLIED TO DESIGNATED RELAY SUPPLIED PRIOR TO ASSOCIATED AH ISSUES.

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RELAYS	SPRING GAUGING						TEST FOR:		RESIST. AT BOV.		CURRENT		REC. NOTE	TESTING INSTRUCTIONS	
							READJ.	TEST	READJ.	TEST					
A, FIGS. 1 & 11 GT-12122-G12 D-284475-B #1-195 #2-195	.009 RESID.	.014	.008	.005			NO. 1	O	2710	2620	.0161	.0166	1	INS. UPPER SPGS. 1 & 2 OF RLY. DC. CONNECT RESISTANCE ACROSS COIL TERM. NEAREST TO SPGS. & LOWER COIL TERM. FIG. 11 - MFG. NOTES: GRD. TO UPPER COIL TERM. NEG. BAT. TO COIL TERM. FARTHEST FROM SPGS.	
							NO	2800	2900	.0157	.0152	3			
							NO. 2	O	2880	2770	.0153	.0158	9		
							NO	2960	3080	.0149	.0144				
NIC-IRON CORE & HEELPIECE															
	RESID.						NO. 1								
							NO. 2								
B GT-16023-B19 D-282349-B #1-600	.003D RESID.	.044	.024	.016	.016	.016	.016	.016	NO. 1	O	1600	1400	.0228	.0250	10 INS. UPPER SPGS. 1 & 2 OF RLY. DC. GRD. TO TERM. A. POS. TO SPG. 3 OF RLY. A.
									NO	2150	2400	.0183	.0166		
									NO. 2						
SR															
SHORT LEVER ARM. PRIOR TO AH ISS. 18 RLY. WAS GT-16023-A17.															
BSD GT-24145-B11 D-283896-B #1-750 #2-1250	.003D RESID.	.046	.026	.024	.016	.016	NO. 1	O	1170	1000	.0260	.0286		POS. TO LOWER SPG. 1 OF RLY. DC.	
							NO	1650	1880	.0208	.0190				
							NO. 2								
SR															
SHORT LEVER ARM.															
	RESID.	.046	.026	.016	.016	.016	NO. 1							DOUBLE ARM. RELAY	
							NO. 2								
PRIOR TO AH ISS. 15 (FIG. 1) RLY. WAS GT-16120-B13.															
C GT-16109-C23 D-284314-B #1-5 #2-500	.006D RESID.	.04	.024	.016	.022	.020	NO. 1						10	POS. TO O.N. SPG. 5 OF ROT. SW. RS	
							O	600	500	.0455	.0500				
							NO	750	850	.0400	.0370				
SR															
SHORT LEVER ARM. PRIOR TO AH ISS. 19 RLY. WAS GT-16109-A18															

GE AUTOMATIC ELECTRIC
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CIRCUIT OR SWITCH ADJUSTMENT

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RELAYS	SPRING GAUGING							TEST FOR:		RESIST. AT 50V.		CURRENT		REL. NOTE	TESTING INSTRUCTIONS
	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	NO. 1	NO. 2	READJ.	TEST	READJ.	TEST		
CS FIGS. 1 & 11 GT-16119-C18 D-282224-B #1-231 (300-1000 NI) SR	.005D	.044	.024	.016	.022	.020	.018	0 NO		1250 1450	1150 1600	.0335 .0298	.0365 .0273	10	POS. TO LOWER SPG. 7 OF RLY. TC.
SHORT LEVER ARM. PRIOR TO AH ISS. 18 RLY. WAS GT-16119-A15.															
DC GT-30045-B11 D-281536-B #1-788 (1300-2000 NI)	.003D	.024	.016	.008	.008	.012	.005	0 NO		800 1100	600 1300	.0315 .0264	.0345 .0239		POS. TO UPPER SPG. 1 OF RLY. BSD.
DOUBLE ARM. RELAY															
RS PW-193005-DAAA PP-70295-A15 #1-68	RESID.							0 NO		100 120	95 130	.295 .265	.305 .255		INS. SPGS. 1 & 2 OF RLY. A. POS. TO INT. SPG. 2 OF ROT. SW. RS.
PRIOR TO AH ISS. 11 ROT. SW. WAS SW-83005-DAAA. COIL D-284522-A.															
TC GT-22143-B11 D-281536-B #1-788 (1300-2000 NI)	.003D	.022	.013	.008	.012	.008	.008	0 NO		600 960	480 1130	.0360 .0286	.0395 .0260		POS. TO UPPER COIL TERM. IN AN OPERATING EXCHANGE: WHEN TERMINALS "DC" AND "TC" ARE STRAPPED, TEST IN MULT. WITH 788 NI.
DOUBLE ARM. RELAY															

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CIRCUIT OR SWITCH ADJUSTMENT

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RELAYS	SPRING GAUGING								TEST FOR:	RESIST. AT BOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS				
	.006D RESID.	.026	.020	.013	.012	.008	.006	.004		READJ.	TEST	READJ.	TEST						
TCS, FIGS.1&11 GT-12079-C19 D-281536-B #1-788 (1300-2000 & NI)																NO.1	O NO	1250 1600	1050 1850
									NO.2										
PNG FIG.2 GT-12109-C14 D-281619-B #1-490 (650-2000 & NI) #2-200	.006D RESID.	.032	.026	.014	.013	.012	.008	.008	.008	NO.1	O NO	1150 1500	1000 1600	.0272 .0228	.0296 .0219	1	#1 TEST TO OPERATE ALL SPGS. INS. LOWER SPGS.9&10 OF RLY.BTO. POS. TO SPG.1 OF RLY. PNG. #2 WDG.TO OPERATE SPG.#1 ONLY. INS. LOWER SPGS.9&10 OF RLY.BTO. POS. TO SPG.6 OF RLY. PNG.		
										NO.2	O NO	200 350	180 370	.125 .091	.132 .088				
PA, etc. D-555022-K PRI. #1-30 PRI. #2-30 SEC. 3000	RESID.	POLARIZED RELAY								NO.1	S O NO	1190 49950 71450		.040 .001 .007		.0018 O.C.	7	FIGS.2 & 12: INS. UPPER SPGS.1&2 OF RLY.TC1. FIGS.4 & 13: INS. SPGS.1 & 2 OF RLY. BA. REMOVE LEADS FROM COIL TERMS. 3 & 7 OF RLY. PA. STRAP COIL TERMS.3 & 7 OF RLY. PA. FIGS.4 & 13: REMOVE LEADS FROM COIL TERM.8 OF RLY. PA.	
											O		27750 O.C.		.001 .007				.0018 O.C.
											O			23300					.0019
FIGS.2,4,12 & 13.																			
	RESID.									NO.1									
										NO.2									
ADT, FIGS.2&12 GT-12058-C57A D-280028-B #1-1300	.006D RESID.	.014	.008	.008	.008					NO.1	O NO	3750 4800	3300 5450	.0099 .0082	.0108 .0074		POS. TO UPPER SPG.12 OF RLY.TD.		
										NO.2									
PRIOR TO AH ISS.5 RLY. WAS GT-12154-C14.																			
AI GT-10507-D58 D-283998-B #1-195 #2-195	-0- RESID.	SPRINGLESS RELAY								NO.1									
										NO.2									

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RELAYS	SPRING GAUGING							TEST FOR:	RESIST. AT SOV.		CURRENT		SPEC. NOTE	TESTING INSTRUCTIONS
	.003D RESID.	.026	.016	.015	.014	.013	.012		READJ.	TEST	READJ.	TEST		
BMF, FIGS. 2 & 12 GT-22238-B11 D-283084-B #1-1200 Ω #2-1200 Ω								NO. 1	0	800	650	.0250	.0270	FIG. 2: POS. TO LOWER SPG. 12 OF RLY. BMF. FIG. 12: TEST IN MULT. WITH 1200 Ω . POS. TO LOWER SPG. 12 OF RLY. BMF.
								NO. 2	NO	1100	1300	.0217	.0200	
								NO. 1	0	400	325	.0500	.0540	DOUBLE ARM. RELAY
								NO. 2	NO	550	650	.0434	.0400	
BTO GT-22051-B12 D-284016-B #1-2000 Ω								NO. 1	0	1500	1200	.0143	.0156	INS. LOWER SPGS. 1 & 2 OF RLY. PC. INS. UPPER SPGS. 6 & 7 OF RLY. BTO. POS. TO UPPER SPG. 9 OF RLY. BTO.
								NO. 2	NO	2000	2300	.0125	.0116	
								NO. 1	0	700	580	.0335	.0365	DOUBLE ARM. RELAY
								NO. 2	NO	910	1060	.0294	.0271	
CON GT-22241-B11 D-282731-B #1-1300 Ω #2-500 Ω								NO. 1	0	230	160	.068	.076	TEST IN MULT. WITH 2000 Ω . INS. SPGS. 3 & 4 OF RLY. EOT. NEG. BAT. TO UPPER SPG. 8 OF RLY. CON. POS. TO UPPER SPG. 4 OF RLY. CON. #2 TEST ON #2 WDG. TO OPERATE UPPER SPGS. 2 & 3 ONLY. INS. SPGS. 3 & 4 OF RLY. EOT. POS. TO UPPER SPG. 8 OF RLY. CON.
								NO. 2	NO	300	380	.063	.057	
								NO. 1	0					DOUBLE ARM. RELAY
								NO. 2	NO					

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CIRCUIT OR SWITCH ADJUSTMENT

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AH-850678-A

RELAYS	SPRING GAUGING						TEST FOR:	RESIST. AT BOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS
	RESID.	NO. 1	NO. 2	NO. 1	NO. 2	TEST		READJ.	TEST	READJ.	TEST		
E01, FIGS. 2 & 12 GT-16108-B18 D-282137-B #1-800 SR	.003D RESID. .038 .018 .016 .014	NO. 1 O NO	NO. 2	2500 2900	2250 3300	.0151 .0135	.0164 .0122	10	POS. TO SPG. 12 OF RLY. T4. PRIOR TO AH ISS. 18 RLY. WAS GT-16108-A13A.				
PB & PC GT-21101-B12 D-282337-B #1-250 #2-700 & NI	.003D RESID. .032 .026 .014 .013 .008 .012 .008	NO. 1 O NO	NO. 2 O NO	3000 3300	2750 3650	.0154 .0141	.0167 .0128		BOTH TESTS MADE ON #1 WDG. #1 TEST IS FOR UPPER SPG. #1 ONLY. INS. LOWER SPGS. 5 & 6 OF RLY. BMF. POS. TO COIL TERM. NEAREST TO SPGS. OF RLY. UNDER TEST.				
	-- RESID. .032 .014 .013 .008 .012 .008 .008	NO. 1	NO. 2						DOUBLE ARM. RELAY				
POK GT-22169-B13 D-281619-B #1-490 (650-2000 & NI) #2-200	.003D RESID. .032 .026 .014 .013 .008	NO. 1 O NO	NO. 2 O NO	1150 1500	1000 1600	.0272 .0228	.0296 .0219	1	#1 TEST TO OPERATE ALL SPGS. INS. LOWER SPGS. 1 & 2 OF RLY. BTO. INS. UPPER SPGS. 7 & 8 OF RLY. POK. POS. TO UPPER SPG. 1 OF RLY. POK. #2 WDG. TO OPERATE UPPER SPG. #1 ONLY. INS. LOWER SPGS. 1 & 2 OF RLY. BTO. POS. TO LOWER SPG. 5 OF RLY. POK.				
	-- RESID. .032 .014 .013 .012 .008	NO. 1	NO. 2						DOUBLE ARM. RELAY				
SQ GT-12023-C41 D-281909-B #1-700	.006D RESID. .022 .014 .013 .008 .012 .008 .008 .008	NO. 1 O NO	NO. 2	1000 1250	850 1450	.0294 .0256	.0320 .0233	10	POS. TO UPPER SPG. 2 OF RLY. CON.				

PRIOR TO AH ISS. 19 RLY. WAS GT-12023-A33.
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RELAYS		SPRING GAUGING								TEST FOR:	RESIST. AT BOV.		CURRENT		SEC. NOTE	TESTING INSTRUCTIONS			
											READJ.	TEST	READJ.	TEST					
SEQ, FIGS. 2 & 12 PW-172121-EADA PP-70105-A16 #1-140		RESID.									NO. 1	O 90 110	80 120	.220 .200	.230 .190		INS. UPPER SPGS. 5 & 6 OF RLY. BTQ. POS. TO LOWER SPG. 7 OF RLY. PC.		
PRIOR TO AH ISS. 10 ROT. SW. WAS SW-72-CDAE, COIL D-283560-A.																			
SQS GT-16021-B23 D-282340-B #1-600 SR		RESID.									NO. 1	O 2900 3500	2550 3900	.0143 .0122	.0158 .0111		INS. SPGS. 1 & 2 OF RLY. SQT. POS. TO SPG. 10 OF RLY. SQ.		
SHORT LEVER ARM.																			
SQT GT-12018-C17 D-281821-B #1-3400 SO		RESID.									NO. 1	O 1800 2600	1300 3200	.0096 .0083	.0106 .0076		POS. TO SPG. 4 OF RLY. SQS.		
T1 GT-12003-C50 D-281821-B #1-3400 SO		RESID.									NO. 1	O 1500 2700	1100 3300	.0102 .0082	.0111 .0075	10	INS. SPGS. 3 & 4 OF RLY. T4. POS. TO SPG. 2 OF RLY. T4.		
PRIOR TO AH ISS. 18 RLY. WAS GT-12003-A33.																			
T2 GT-21083-C20 D-280431-B #1-1300 SO		RESID.									NO. 1	O 520 840	390 1060	.0275 .0234	.0296 .0212	10	POS. TO SPG. 4 OF RLY. T4.		
		RESID.									NO. 1							DOUBLE ARM. RELAY	
PRIOR TO AH ISS. 17 RLY. WAS GT-21083-A21.																			

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RELAYS	SPRING GAUGING							TEST FOR:	RESIST. AT SOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS		
	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.		READJ.	TEST	READJ.	TEST				
T3, FIGS.2 & 12 GT-16027-B27 D-280438-B #1-2000 SO	.003D	.044	.024	.016	.016	.016	.016	NO.1	O NO	1700 2300	1400 2700	.0135 .0116	.0147 .0106	10	POS. TO LOWER SPG.3 OF RLY. T2. PRIOR TO AH ISS.18 RLY. WAS GT-16027-A23.	
								NO.2								
T4 GT-12091-C15 D-280440-B #1-2200 SO	.006D	.026	.015	.014	.013	.012	.008	.008	NO.1	O NO	950 1500	700 1900	.0158 .0135	.0173 .0122	10	POS. TO SPG.3 OF RLY. T3. PRIOR TO AH ISS.17 RLY. WAS GT-12091-A20.
									NO.2							
TCL GT-24144-B13 D-283236-B #1-1250 SR	.003D	.046	.026	.024	.016	.016			NO.1	O NO	2200 2700	1900 3100	.0145 .0126	.0159 .0115		POS. TO LOWER SPG.3 OF RLY. BMF.
									NO.2							
	RESID.	.046	.026	.024	.016	.016			NO.1							DOUBLE ARM. RELAY
									NO.2							
TD GT-22166-B11 D-281536-B #1-788 (1300-2000 & ND)	.003D	.022	.014	.008	.013	.008	.008	.008	NO.1	O NO	330 485	240 575	.0620 .0525	.0695 .0475		TEST IN MULT. WITH 1200 Ω. POS. TO UPPER SPG.12 OF RLY. BMF.
									NO.2							
	RESID.	.022	.014	.013	.012	.008	.008	.008	NO.1							DOUBLE ARM. RELAY
									NO.2							

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ISS. #21

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RELAYS	SPRING GAUGING						TEST FOR:		RESIST. AT SOV.		CURRENT		REMARKS	TESTING INSTRUCTIONS
							NO. 1	NO. 2	READJ.	TEST	READJ.	TEST		
B FIG. 3 GT-16009-B29 D-282349-B #1-600 Ω SR	.003D RESID.	.028	.016	.016	.016	.016	NO	NO	2360 2800	2090 3160	.0169 .0147	.0186 .0133	10	INS. SPGS. 1 & 2 OF RLY. SS. POS. TO SPG. 3 OF RLY. A.
SHORT LEVER ARM. PRIOR TO AH ISS. 11 & 18 RLY. WAS GT-16013-A16 & GT-16009-A14. RESP.														
CA GT-16117-B21 D-282169-B #1-280 Ω #2-500 Ω SR	.003D RESID.	.046	.026	.024	.016	.016	NO	NO	900 1050	800 1200	.0355 .0320	.0385 .0294	10	POS. TO O.N. SPG. 3 OF ROT. SW. RS.
SHORT LEVER ARM. PRIOR TO AH ISS. 19 RLY. WAS GT-16117-A15.														
CB GT-16152-B12 D-281919-B #1-1300 Ω #2-1250 Ω	.003D RESID.	.046	.030	.022	.012	.016	NO	NO	480 620	420 700	.0700 .0590	.0770 .0535	10	TEST IN MULT. WITH 280 Ω. INS. SPGS. 4 & 5 OF RLY. CA. POS. TO SPG. 9 OF RLY. CA.
SHORT LEVER ARM. PRIOR TO AH ISS. 19 RLY. WAS GT-16152-A11.														
CC GT-16126-B20 D-283242-B #1-1000 Ω SR	.003D RESID.	.048	.028	.026	.024	.016	NO	NO	1900 2350	1650 2650	.0172 .0149	.0189 .0137	10	POS. TO SPG. 8 OF RLY. CB.
SHORT LEVER ARM. PRIOR TO AH ISS. 18 RLY. WAS GT-16126-A16.														
CHA, etc. GT-26116-B20 D-283680-B #1-400 Ω (500-2000 Ω NI)	.003D RESID.	.032	.018	.012	.016		NO	NO	1700 2000	1500 2200	.0238 .0208	.0263 .0192		CHA-CHD: INS. SPGS. 1 & 2 OF RLY. PM3. CHA: GRD. TO SPG. 4 OF RLY. CHD. NEG. TO SPG. 1 OF RLY. CH6. CHB: GRD. TO SPG. 5 OF RLY. CHA. NEG. TO SPG. 1 OF RLY. CH2. CHC: GRD. TO SPG. 5 OF RLY. CHB. NEG. TO SPG. 1 OF RLY. CH4. CHD: GRD. TO SPG. 5 OF RLY. CHC. NEG. TO SPG. 5 OF RLY. CH0
CHA, CHB, CHC & CHD														
	RESID.						NO. 1	NO. 2						

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NORTH AVE. ILLINOIS 60164

CIRCUIT OR SWITCH ADJUSTMENT

 CKT: H-850678-A 20 SHEETS 10
 AH-850678-A

FX-2880-C (8/75) ISSUE. 1

10-11-79
ISS. #21

AH-850678-A

RELAYS	SPRING GAUGING							TEST FOR:	REGIST. AT BOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS
	RESID.	READJ.	TEST	READJ.	TEST	READJ.	TEST		READJ.	TEST	READJ.	TEST		
CH0 FIG. 3 GT-26022-B22 D-283680-B #1-400 (500-2000 & NI)	.003D RESID. .032 .018 .012 .012 .012 .012							NO. 1 O NO	1200 1500	1050 1700	.0315 .0263	.0345 .0238		INS. SPGS. 4 & 5 OF RLY. CHC. POS. TO SPG. 8 OF RLY. CH9.
CH1 GT-26037-B23A D-283680-B #1-400 (500-2000 & NI)	.003D RESID. .032 .018 .012 .012 .012							NO. 1 O NO	1200 1500	1050 1700	.0315 .0263	.0345 .0238		INS. SPGS. 1 & 2 OF RLY. PM3. POS. TO SPG. 1 OF RLY. CHC.
CH2, CH5 & CH8 GT-26027-B24 D-283680-B #1-400 (500-2000 & NI)	.003D RESID. .022 .012 .012 .012 .012 .012							NO. 1 O NO	1200 1500	1050 1700	.0315 .0263	.0345 .0238		CH2, CH5 & CH8: INS. SPGS. 1 & 2 OF RLY. PM3. CH2: POS. TO SPG. 6 OF RLY. CH1. CH5 & CH8: POS. TO SPG. 4 OF RLYS. CH4 & CH7 RESP.
CH3, etc. GT-26030-B37 D-283680-B #1-400 (500-2000 & NI)	.003D RESID. .022 .012 .012 .012 .012							NO. 1 O NO	1200 1500	1050 1700	.0315 .0263	.0345 .0238		CH3, CH4, CH6, CH7 & CH9: INS. SPGS. 1 & 2 OF RLY. PM3. CH3: POS. TO SPG. 4 OF RLY. CH2. CH4: POS. TO SPG. 2 OF RLY. CH3. CH6: POS. TO SPG. 4 OF RLY. CH5. CH7: POS. TO SPG. 8 OF RLY. CH6. CH9: POS. TO SPG. 4 OF RLY. CH8.
CH3, CH4, CH6, CH7 & CH9	RESID.							NO. 1						
								NO. 2						
PF GT-12114-B17 D-282661-B #1-428 (600-1500 & NI)	.003D RESID. .022 .014 .013 .012 .008 .008 .008							NO. 1 O NO	900 1150	800 1300	.0375 .0320	.0410 .0289		INS. SPGS. 3 & 4 OF RLY. TD. POS. TO SPG. 12 OF RLY. PF.

GTE AUTOMATIC ELECTRIC
NORTH AVE. ILLINOIS 60184

CIRCUIT OR SWITCH ADJUSTMENT

CKT.: H-850678-A 20 SHEETS 11
AH-850678-A

10-11-79

ISS. #21

AH-850678-A

RELAYS	SPRING GAUGING					TEST FOR:	RESIST. AT SOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS	
							READJ.	TEST	READJ.	TEST			
PM1 FIG.3 GT-12239-G21 D-281462-B #1-181 (210-1300 NI)	.009 RESID.	.016	.008	.008	.008	NO.1	O NO	500 555	450 600	.073 .068	.079 .064	3 8 10	INS. SPGS.1 & 2 OF RLY. PM3. POS. TO SPG.1 OF RLY. PM3.
PRIOR TO AH ISS.21 RLY. WAS GT-12239-F11.													
PM2 GT-12069-G27 D-280268-B #1-1000	.006 RESID.	.026	.011			NO.1	O NO	1470 1600	1400 1680	.0234 .0220	.0242 .0214	3 8 10	TEST IN MULT. WITH 2000 POS. TO SPG.1 OF RLY. PM1.
PRIOR TO AH ISS.21 RLY. WAS GT-12069-F12.													
PM3 GT-12089-G27 D-281536-B #1-788 (1300-2000 NI)	.006 RESID.	.016	.010			NO.1	O NO	1700 1840	1600 1940	.0201 .0190	.0209 .0183	8 10	POS. TO SPG.1 OF RLY. PM2.
PRIOR TO AH ISS.21 RLY. WAS GT-12089-F11.													
RS PW-152101-BADA PP-70105-A16 #1-140	RESID.				.003 .005	NO.1	O NO	90 110	80 120	.220 .200	.230 .190		INS. SPGS.3 & 4 OF RLY. CA. INS. INT. SPGS.2 & 3 OF ROT. SW. RS. POS. TO SPG.7 OF RLY. CA.
PRIOR TO AH ISS.10 ROT. SW. WAS SW-52-ADAB, COIL D-283560-A.													
SS GT-12092-C32 D-280028-B #1-1300	.006D RESID.	.024	.014	.013 .008	.012 .008 .008	NO.1	O NO	2250 2800	1900 3150	.0141 .0122	.0156 .0112		INS. O.N. SPGS.3 & 4 OF ROT. SW. RS. POS. TO SPG.10 OF RLY. SS.
TA GT-12058-C57A D-280028-B #1-1300	.006D RESID.	.014	.008	.008	.008	NO.1	O NO	3750 4800	3300 5450	.0099 .0082	.0108 .0074		INS. SPGS.1 & 2 OF RLY. PM3. INS. O.N. SPGS.3 & 4 OF ROT. SW. RS. POS. TO SPG.4 OF RLY. TB.

GE AUTOMATIC ELECTRIC
NORTH AVE. ILLINOIS 60144
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CIRCUIT OR SWITCH ADJUSTMENT

 CKT:H-850678-A 20 SHEETS 12
 AH-850678-A

10-11-79
ISS. #21

AH-850678-A

RELAYS	SPRING GAUGING						TEST FOR:		RESIST. AT SOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS	
							READJ.	TEST	READJ.	TEST					
TB FIG. 3 GT-12046-C55A D-280028-B #1-1300	.006D RESID.	.014	.008	.008	.008	.008	NO. 1	O	2500	2150	.0132	.0145		INS. SPGS. 1 & 2 OF RLY. PM3. INS. SPGS. 3 & 4 OF RLY. TB. INS. O.N. SPGS. 3 & 4 OF ROT. SW. RS. POS. TO SPG. 7 OF RLY. TC.	
							NO.	NO	3250	3700	.0110	.0100			
							NO. 2								
TC GT-12112-C11A D-280290-B #1-600 #2-600	.006D RESID.	.030	.024	.013	.012	.011	.010	NO. 1	O	4400	3900	.0089	.0098		BOTH TESTS MADE WITH BOTH WDGS. IN SERIES. #1 TEST IS FOR SPG. #1 ONLY. INS. SPGS. 1 & 2 OF RLY. TD. INS. SPGS. 3 & 4 OF RLY. TC. POS. TO SPG. 6 OF RLY. TE.
								NO.	NO	5400	6050	.0076	.0069		
								NO. 2	O	2350	2000	.0141	.0156		
TD GT-12203-B16 D-282655-B #1-1300 #2-2000 NI	.003D RESID.	.026	.015	.014	.013	.012	.008	NO. 1	O	3050	2800	.0115	.0122		INS. SPGS. 1 & 2 OF RLY. CB. POS. TO SPG. 5 OF RLY. TE.
								NO.	NO	3750	4250	.0099	.0090		
								NO. 2							
TE GT-12003-E51 D-280431-B #1-1300 SO	.009D RESID.	.020	.012	.008	.008	.008	.008	NO. 1	O	600	400	.0263	.0294	10	INS. SPGS. 1 & 2 OF RLY. PM3. INS. SPGS. 1 & 2 OF RLY. CHØ. POS. TO SPG. 8 OF RLY. PF.
								NO.	NO	1350	1700	.0188	.0166		
								NO. 2							
PRIOR TO AH ISS. 18 RLY. WAS GT-12003-A15A.															
A & AA, etc. GT-12238-G12B D-283998-B #1-195 #2-195	.009 RESID.	.014	.008	.005	.008	.005		NO. 1	O	3840	3800	.0118	.0119	1 3 10	A: INS. SPGS. 1 & 2 OF RLY. SS. CONNECT RESISTANCE ACROSS SPGS. 1 & 3 OF RLY. CC. AA: INS. SPGS. 5 & 6 OF RLY. AA. GRD. TO UPPER SPG. 4 OF RLY. HD. CONNECT RESISTANCE ACROSS COIL TERM. NEAREST TO SPGS. AND LOWER COIL TERM.
								NO.	NO	3950	4060	.0115	.0112		
								NO. 2							
A: FIG. 3 & AA: FIGS. 4 & 13.															
	RESID.							NO. 1							
								NO.							
								NO. 2							
PRIOR TO AH ISS. 6 & 18 RLY. WAS GT-21060-G23 & GT-12238-A15B, RESP.															

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GE AUTOMATIC ELECTRIC
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INCORPORATED

CIRCUIT OR SWITCH ADJUSTMENT

CKT.: H-850678-A 20 SHEETS 13
AH-850678-A

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ISS. #21

AH-850678-A

RELAYS	SPRING GAUGING						TEST FOR:	RESIST. AT SOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS			
	RESID.	0.034	0.020	0.018	0.012			READJ.	TEST	READJ.	TEST					
CP FIG.4 GT-26024-C19A D-283679-B #1-855 Ω (1500-2000 Ω NI)	.006D	RESID.	0.034	0.020	0.018	0.012		NO.1	O NO	1400 1750	1100 2000	.0221 .0192	.0255 .0175	POS. TO SPG.6 OF RLY. PC.		
								NO.2								
GT GT-26176-C11A D-283679-B #1-855 Ω (1500-2000 Ω NI)	.006D	RESID.	0.034	0.024	0.018	0.012	0.017	0.016		NO.1	O NO	650 900	530 1050	.0330 .0286	.0360 .0263	POS. TO SPG.2 OF RLY. GT.
										NO.2						
H GT-12268-C12A D-280290-B #1-600 Ω #2-600 Ω	.006D	RESID.	0.034	0.028	0.015	0.014	0.013	0.012	0.008	NO.1	O NO	4400 5400	3900 6050	.0089 .0076	.0098 .0069	BOTH TESTS MADE WITH BOTH WDGS. IN SERIES. #1 TEST IS FOR SPG.#1 ONLY. POS. TO SPG.2 OF RLY. H.
										NO.2	O NO	1800 2250	1550 2600	.0167 .0145	.0182 .0132	
BA, FIGS.4 & 13 GT-24191-B13 D-282349-B #1-600 Ω SR	.003D	RESID.	0.044	0.024	0.016	0.016	0.016			NO.1	O NO	1350 1650	1200 1900	.0256 .0222	.0278 .0200	10 POS. TO SPG.6 OF RLY. AA.
SHORT LEVER ARM.																
	--	RESID.	0.044	0.024	0.016	0.016	0.016			NO.1						DOUBLE ARM. RELAY
										NO.2						
PRIOR TO AH ISS.19 RLY. WAS GT-24191-A11A.																
BS GT-26018-C19 D-283812-B #1-1800 Ω	.006D	RESID.	0.032	0.018	0.012	0.012				NO.1	O NO	3100 4080	2660 4700	.0102 .0085	.0112 .0077	INS. SPGS.4 & 5 OF RLY. CA. POS. TO UPPER SPG.1 OF RLY. HD.
										NO.2						
GTE AUTOMATIC ELECTRIC INCORPORATED NORTHLAKE, ILLINOIS 60164																
CIRCUIT OR SWITCH ADJUSTMENT																
CKT.:H-850678-A 20 SHEETS 14 AH-850678-A																

GE AUTOMATIC ELECTRIC
NORTHLAKE, ILLINOIS 60164

CIRCUIT OR SWITCH ADJUSTMENT

 CKT.: H-850678-A 20 SHEETS 14
 AH-850678-A

FX-2880-C (8/75) ISSUE. 1

10-11-79

ISS. #21

AH-850678-A

RELAYS	SPRING GAUGING						TEST FOR.	RESIST. AT SOV.		CURRENT		SEC. NOTE	TESTING INSTRUCTIONS		
								READJ.	TEST	READJ.	TEST				
CA, FIGS. 4 & 13 GT-16017-B26 D-281676-B #1-231 (300-1000 NI) SR	.003D RESID.	.046	.026	.016	.024	.016	NO. 1	O	1440	1280	.0299	.0330	10	POS. TO UPPER SPG. 3 OF RLY. G.	
							NO.	NO	1760	1960	.0251	.0228			
							NO. 2								
SHORT LEVER ARM. PRIOR TO AH ISS. 19 RLY. WAS GT-16017-A13.															
CB GT-16039-B18 D-281675-B #1-231 (300-1000 NI) SR	.003D RESID.	.028	.016	.016	.016	.016	NO. 1	O	1300	1200	.0325	.0350	10	POS. TO SPG. 3 OF RLY. CA.	
							NO.	NO	1550	1700	.0281	.0259			
							NO. 2								
SHORT LEVER ARM. PRIOR TO AH ISS. 19 RLY. WAS GT-16039-A16.															
DN GT-26056-C18A D-283679-B #1-855 (1500-2000 NI)	.006D RESID.	.036	.022	.020	.018	.012	NO. 1	O	1050	900	.0263	.0285		POS. TO SPG. 9 OF RLY. DN.	
							NO.	NO	1300	1500	.0232	.0212			
							NO. 2								
DO GT-26025-C39A D-283679-B #1-855 (1500-2000 NI)	.006D RESID.	.022	.012	.012			NO. 1	O	1800	1550	.0188	.0207		POS. TO SPG. 3 OF RLY. DO.	
							NO.	NO	2200	2450	.0164	.0151			
							NO. 2								
G GT-22184-C12A D-280290-B #1-600 #2-600	.006D RESID.	.032	.026	.014	.008	.013	NO. 1	O	4400	3900	.0089	.0098		BOTH TESTS MADE WITH BOTH WDGS. IN SERIES. #1 TEST IS FOR UPPER SPG. #1 ONLY. INS. LOWER SPGS. 7 & 8 OF RLY. G. POS. TO UPPER SPG. 2 OF RLY. G.	
							NO.	NO	5400	6050	.0076	.0069			
							NO. 2	O	1800	1550	.0167	.0182			
							NO.	NO	2250	2600	.0145	.0132			
	RESID.	.032	.014	.008	.013	.008	.012	.008	NO. 1						
									NO. 2						
DOUBLE ARM. RELAY															

GTB AUTOMATIC ELECTRIC
 NORTH LAKE, ILLINOIS 60164

CIRCUIT OR SWITCH ADJUSTMENT

 CKT.: H-850678-A 20 SHEETS 15
 AH-850678-A

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ISS. #21

AH-850678-A

RELAYS	SPRING GAUGING							TEST FOR:		RESIST. AT BOV.		CURRENT		USE NOTE	TESTING INSTRUCTIONS
	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	NO. 1	NO. 2	READJ.	TEST	READJ.	TEST		
HD, FIGS. 4 & 13 GT-22102-B12 D-280077-B #1-700	.003D	.026	.020	.013	.008	.012	.008	NO		1380 2000	1200 2170	.0240 .0185	.0263 .0174		INS. UPPER SPGS. 1 & 2 OF RLY. HD. POS. TO SPG. 6 OF RLY. CA.
	RESID.	.026	.013	.012	.008	.008	.008	NO. 1	NO. 2						DOUBLE ARM. RELAY
PC & PB GT-12080-C14 D-282337-B #1-250 #2-700	.005D	.032	.026	.014	.013	.008	.012	NO	NO	3000 3300	2750 3650	.0154 .0141	.0167 .0128	4	PC: INS. LOWER SPGS. 1 & 2 OF RLY. BA. POS. TO SPG. 3 OF RLY. PB. PB: POS. TO LOWER SPG. 3 OF RLY. HD.
PS PW-152101-JADA PP-70105-A16 #1-140	RESID.						.003 .005	NO	NO	90 110	80 120	.220 .200	.230 .190		INS. SPGS. 1 & 2 OF RLY. BS. POS. TO SPG. 4 OF RLY. BS.
PRIOR TO AH ISS. 10 ROT. SW. WAS H-870267-8. COIL D-283560-A.															
MF FIG. 5 GT-22079-B12 D-281536-B #1-788 (1300-2000 NI)	.003D	.024	.016	.008	.008	.008	.008	NO	NO	500 950	350 1100	.0390 .0288	.0435 .0265		POS. TO UPPER COIL TERM.
	RESID.	.024	.016	.016	.008	.008	.008	NO. 1	NO. 2						DOUBLE ARM. RELAY

GTE AUTOMATIC ELECTRIC
NORTH LAKE, ILLINOIS 60164

CIRCUIT OR SWITCH ADJUSTMENT

CKT. H-850678-A 20 SHEETS 16
AH-850678-A

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ISS. #21

AH-850678-A

RELAYS	SPRING GAUGING							TEST FOR:	RESIST. AT SOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS
	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.		READJ.	TEST	READJ.	TEST		
MFS, etc. GT-21004-B17A D-280077-B #1-700 Ω	.003D	.014	.008	.008	.008	.008	.008	NO	1350 2050	1100 2400	.0182 .0145	.0200 .0132		TEST IN SERIES WITH 700 ... FIG.5: POS. TO UPPER SPG.7 OF RLY.MF. FIG.10: POS. TO UPPER SPG.6 OF RLY.MF.
MFS & MFD: FIGS.5 & 10.														
	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	NO.1						DOUBLE ARM. RELAY
	.014	.008	.008	.008	.008	.008	.008	NO.2						
ALT1 FIG.7 GT-12068-E29 D-281887-B #1-750 Ω (1200-2000 Ω NI) #2-1000 Ω	.000D	.016	.009	.008				NO	2110 2560	1850 2870	.0175 .0151	.0192 .0138		NO VARIATION SHALL BE ALLOWED WHICH WILL CHANGE THE SEQUENCE OF THE MAKES AS INDICATED BY THE GAUGING. INS. SPGS.1 & 2 OF RLY. ALT1. POS. TO LOWER SPG.7 OF RLY. ALT2.
ALT2 GT-21059-B18 D-281673-B #1-1300 Ω #2-750 Ω	.003D	.024	.014	.008	.013	.008	.012	NO	1850 2600	1550 3000	.0158 .0128	.0175 .0116		GRD. TO COIL TERM. NEAREST TO SPGS. NEG. TO SPG.1 OF RLY. ALT1.
	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	RESID.	NO.1						DOUBLE ARM. RELAY
	.024	.014	.008	.013	.008	.012	.008	NO.2						
DT1 GT-12026-C43A D-281536-B #1-788 Ω (1300-2000 Ω NI)	.006D	.024	.013	.008	.012	.008		NO	2200 2650	1900 2950	.0168 .0146	.0186 .0134		POS. TO UPPER SPG.11 OF RLY. ALT2.

PRIOR TO AH ISS.16 RLY. WAS GT-12026-C39A.

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CIRCUIT OR SWITCH ADJUSTMENT

CKT.:H-850678-A 20 SHEETS 17
AH-850678-A

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ISS. #21

AH-850678-A

RELAYS	SPRING GAUGING								TEST FOR:	RESIST. AT SOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS			
										READJ.	TEST	READJ.	TEST					
TT1, etc. GT-21096-B28 D-280077-B #1-700	.003D RESID.	.026	.015	.008	.014	.008	.013	.008	.012	.008	0 NO	1150 1600	900 1900	.0196 .0167	.0217 .0151		TEST IN SERIES WITH 700 Ω POS. TO LOWER SPG.11 OF RLY. ALT2.	
TT1 & TT2: FIG. 7																		
	RESID.	.026	.015	.008	.014	.008	.013	.008	.012	.008	NO. 1						DOUBLE ARM. RELAY	
ACC FIG. 8 PW-156121-EDDA PP-70105-A15 #1-120	RESID.										NO. 1	0 NO	70 90	65 100	.260 .240	.270 .230	INS. SPGS. 3 & 4 OF RLY. INP. POS. TO SPG. 4 OF RLY. INP.	
PRIOR TO AH ISS. 10 ROT. SW. WAS SW-56-CDAE. COIL D-283927-A.																		
INP GT-12060-E23 D-283578-B #1-428 (500-3000 & NI)	.009D RESID.	.014	.008	.005							NO. 1	0 NO	980 1080	920 1160	.0355 .0330	.0370 .0315	3	INS. SPGS. 3 & 4 OF RLY. INP. POS. TO UPPER COIL TERM.
PRIOR TO AH ISS. 18 RLY. WAS GT-12060-A19																		
SW GT-21266-C21 D-284016-B #1-2000	.006D RESID.	.020	.012	.008	.008	.008					NO. 1	0 NO	1800 2500	1450 2900	.0132 .0111	.0145 .0102	GRD. TO UPPER COIL TERM. NEG. TO SPG. 1 OF RLY. INP.	
	RESID.	.020	.012	.008	.003						NO. 1						DOUBLE ARM. RELAY	

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AH-850678-A

RELAYS	SPRING GAUGING							TEST FOR:	REGIST. AT BOV.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS	
									READJ.	TEST	READJ.	TEST			
BL FIG.9 GT-12072-C39A D-281536-B #1-788 Ω (1300-2000 Ω NI)	.006D RESID.	.014	.008	.008	.008	.008	.008	NO.1	O NO	1400 1850	1200 2100	.0228 .0190	.0251 .0173		POS. TO UPPER COIL TERM.
								NO.2							
MF FIG.10 GT-22056-C11A D-281536-B #1-788 Ω (1300-2000 Ω NI)	.006D RESID.	.020	.012	.008	.008	.008	.008	NO.1	O NO	680 1250	550 1450	.0340 .0245	.0375 .0223		POS. TO UPPER COIL TERM.
								NO.2							
	-- RESID.	.020	.008	.008	.008	.008	.008	NO.1							DOUBLE ARM. RELAY
								NO.2							
PNG FIG.11 GT-22222-B18 D-281619-B #1-490 Ω (650-2000 Ω NI) #2-200 Ω	.003D RESID.	.032	.026	.013	.012	.008		NO.1	O NO	1150 1500	1000 1600	.0272 .0228	.0296 .0219	1	#1 TEST TO OPERATE ALL SPGS. INS. LOWER SPGS.9&10 OF RLY.BTO. POS. TO UPPER SPG.1 OF RLY.PNG. #2 WDG. TO OPERATE UPPER SPG. #1 ONLY. INS. LOWER SPGS.9&10 OF RLY.BTO. POS. TO UPPER SPG.6 OF RLY.PNG.
								NO.2	O NO	200 350	180 370	.125 .091	.132 .088		
	-- RESID.	.032	.013	.008	.008	.008		NO.1							DOUBLE ARM. RELAY
								NO.2							
BMS FIG.12 GT-12005-C94 D-283084-B #1-1200 Ω #2-1200 Ω	.006D RESID.	.014	.008	.008				NO.1	O NO	2125 2575	1875 2875	.0184 .0158	.0202 .0144		TEST IN MULT. WITH 1200 Ω . POS. TO LOWER SPG.12 OF RLY.BMF.
								NO.2							

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ISS. #21

AH-850678-A

RELAYS	SPRING GAUGING										TEST FOR:	RESIST. AT 50V.		CURRENT		SEE NOTE	TESTING INSTRUCTIONS
	RESID.	.036	.022	.020	.018	.012						READJ.	TEST	READJ.	TEST		
CP FIG.13 GT-26121-C15 D-283679-B #1-855 (1500-2000 Ω NI)	.006D										NO.1	O NO	820 1100	660 1300	.0298 .0256	.0330 .0232	POS. TO SPG.6 OF RLY. PC.
DN GT-26138-B12 D-283679-B #1-855 (1500-2000 Ω NI)	.003D	.038	.024	.022	.020	.018	.012	.012			NO.2						POS. TO SPG.13 OF RLY. DN.
GT GT-26167-B13 D-283679-B #1-855 (1500-2000 Ω NI)	.003D	.038	.028	.022	.020	.018	.012	.012			NO.1	O NO	330 600	270 700	.0425 .0345	.0445 .0325	POS. TO SPG.2 OF RLY. GT.
H GT-22119-C11A D-280290-B #1-600 #2-600	.006D	.032	.026	.013	.012	.008					NO.2	O NO	4400 5400	3900 6050	.0089 .0076	.0098 .0069	BOTH TESTS MADE WITH BOTH WDGS. IN SERIES. #1 TEST IS FOR UPPER SPG.#1 ONLY. POS. TO UPPER SPG.2 OF RLY. H.
													1850 2300	1600 2650	.0164 .0143	.0179 .0130	
	RESID.	.032	.013	.012	.008						NO.1						DOUBLE ARM. RELAY
											NO.2						
	RESID.										NO.1						
											NO.2						