DIAGRAM OF (TYPICAL) AUXILIARY CIRCUITS

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USE DIMENSIONS ONLY

3-11d 4

ABBREVIATIONS

DT – DOUBLE THROW SW.
B.C. – BRAKE CONTR.
M.C. – MASTER CONTR.
SR – SPRING RETURN SW.
T – TOGGLE SW.
C.R. – CURRENT REG RELAY
M.G. – MOTOR GEN
REG – REGULATOR RELAY
G.C. – GENERATOR CONTACTOR
V.R. – VOLTAGE REG. RELAY

CIRCUIT BREAKERS IN CTR DOOR SWITCH CABINET

AMPS	NO. ON C.B. BAR	NAME
35	9	TRACK BRK-FRT.
35	10	TRACK BRK-REAR
50	11	GEN.
32 VOLT		

AMPS	NO. ON C.B. BAR	NAME
35	12	M.G.
35	13	LIGHTS & HEATERS
60	14	TRACK SW.
15	15	V'NTILATING CONTROL
600 VOLT		

NO. ON GANG SW.	TYPE OF SW.	NAME
1	SR	GONG
2	T	FRONT #1 DOOR
3	T	FRONT #2 DOOR
4	T	CENTER DOORS #3 & #4

1	SR	TRACK SW.
2	DT	HD. LT. DIMMER
3	D.T.	WIND SHIELD WIPER
4	SR	SANDER

AMP	NO. CIR. BRK.	NAME
35	1	M.G. CONTR. STOP LT. SIG. LTS.
35	2	DOORS VEST. LTS.
35	3	GONG-T.S.T. BUZZER SANDER
20	4	DRUM BRK'S
35	5	DOOR MOTORS
10	6	AUX. HT.
10	7	HEAT & VENT CONTROL
35	8	HD. & MRK LTS RUN NO. DASH LT.

32 VOLT CIRCUIT BREAKERS IN FRONT SWITCH CABINET

NO. ON GANG SW.	TYPE SW.	NAME
1	T	HEAD LIGHT
–	–	–
2	T	LIGHTS
3	T	CAB HEATER

32 VOLTS & 600 VOLTS GANG SW. AT OPER. POSITION

CABLE SIZE	
SYM.	AWG.
A	3/0 R
B	1R
C	1F
D	3A
E	4R
F	6R
G	6F
H	8R
J	8A
K	12R
L	14R
M	6A
N	10R

NOTE: DOORS BALANCED ONLY WHEN GENERATOR VOLTAGE IS REMOVED SUCH AS BY OPENING M.G. SWITCH OR BRAKE PEDAL EMERGENCY BY RELEASE OF FOOT INTERLOCK. EACH DOOR OPERATOR REQUIRES 6 AMPS TO OPEN & CLOSE DOORS.

GANG SW. (32V.) AT OPER. POSITION

STARTING RESISTOR
SERIES CP
SHUNT NA
GENERAL ELECTRIC GENERATOR REGULATOR CONTROL
SERIES COIL
INTERLOCK
BATTERY SW.
RR SHUNT COIL
SERIES FIELD
COMM. FIELD
WESTINGHOUSE GENERATOR REGULATOR CONTROL
REG. SERIES COIL
REG. SHUNT COIL
GEN. SHUNT FLD
32 V. STORAGE BATTERY
VOLTMETER AT OPERATORS POSITION
BUZZER
B.C. IN EMERGENCY CIRCUIT CLOSED
PULL CORD SWITCHES (PASSENGER SIGNAL) (2 OR 3 SWITCHES)
GONG
G.W. LT.
DOOR SW.
CTR. DOOR SW. CABT.
FR'T STEP WELL LTS
TRACK SW. CONTACTOR COIL
THERMAL CUT OUT CONTACTS
FOR NO.1, NO.2, & NO.3 DOOR CIRCUITS
ENERGIZE TO OPEN DOOR
MOTOR
TOP CONTACT FINGER
OPEN IN EMERGENCY
B.C. ON
FUSE TRON
#4 OPER.
TO OPER. #3
TO DOOR OPER. #1 & #2
B.C. IN EMERG. CIRCUIT CLOSED
SANDER SOL. COILS
CAM SW. ON MOTOR
EMERGENCY SW.
L.S. OPER. COIL
O.L.
CIRCUIT CLOSED
STOP LIGHTS 21 CP 12V.
STOP
WINDSHIELD WIPER MOTOR (GEARED HEAD)
DRUM BRK. SIGNAL LTS. OR BUZZER
3 CP 12V. (RED)
CLOSED WITH BKR. IN RELEASE
S.P. SWITCH ON TRUCKS
M.G. CONT. COIL
DRUM BRAKE RELEASE COILS
FRONT TRUCK MAGNET
3.72 Ω EACH
REAR TRUCK MAGNET
AUX. HT. CONT. COIL
DAMPER INTERLOCK SW.
HEATING CONTROL (32 VOLTS)
VENTILATING CONTROL (32 VOLTS)
DASH LTS. 21 CP 12-16V.
MARKER LTS. REAR 12V.
3 CP RUN NO. LTS
HD. LT. RESIST.
HEAD LIGHT 32-32 C.P. 125V.
SW. LIGHT IN FRONT CABT. LOCKER
AUX. HT. CONT.
AUX. HEAT 10 KW
CAR LIGHTS
2 CIRCUITS OF 20 IN SERIES 30 VOLT 1.6 AMP LAMPS RESISTORS TO COMPENSATE FOR LIGHTS
CAB HEATER 1000 W.
VENTILATING CONTROL (600 VOLTS)
TROLLEY
LIGHTNING ARRESTER
TO L.S. G.E. TI WEST T2
T.S.T. CONT.
T.S.T. RESIST.
THERMAL CUTOUT
TA2 GE NAA WEST