INSTRUCTIONS:

A - REFER TO TYPICAL WIRING DIAGRAM AT RIGHT.

① IF THE GATE CONTACT IS SUBJECT TO THE PROTECTIVE DEVICES (GOVERNOR, FINALS, ETC.) IT MUST BE SEPARATED AND RECONNECTED AHEAD OF ALL PROTECTIVE DEVICES SO THAT RELAYS DLK-DLKX-DLKM WILL BE SUBJECT TO THE GATE CONTACT ONLY.
AFTER SEPARATING THE GATE CONTACT FROM THE PROTECTIVE DEVICES, CONTACT ONE SIDE OF THE CONTACT TO THE CIRCUIT LINE AHEAD OF THE PROTECTIVE DEVICES, AND THE OTHER SIDE TO TERMINAL 1. CONNECT TERMINAL 2 TO THE OTHER SIDE OF THE LINE.
CONNECT TERMINALS 5 AND RG7 TO THE CIRCUIT LINES WHICH THE GATE CONTACT WAS ORIGINALLY CONNECTED TO. CONNECT CONTROL PANEL TERMINAL RG5 TO ROPE GRIPPER TERMINAL RG5 AND TO THE LEVELING RELAY CONTACTS THAT BYPASS DOOR LOCKS.

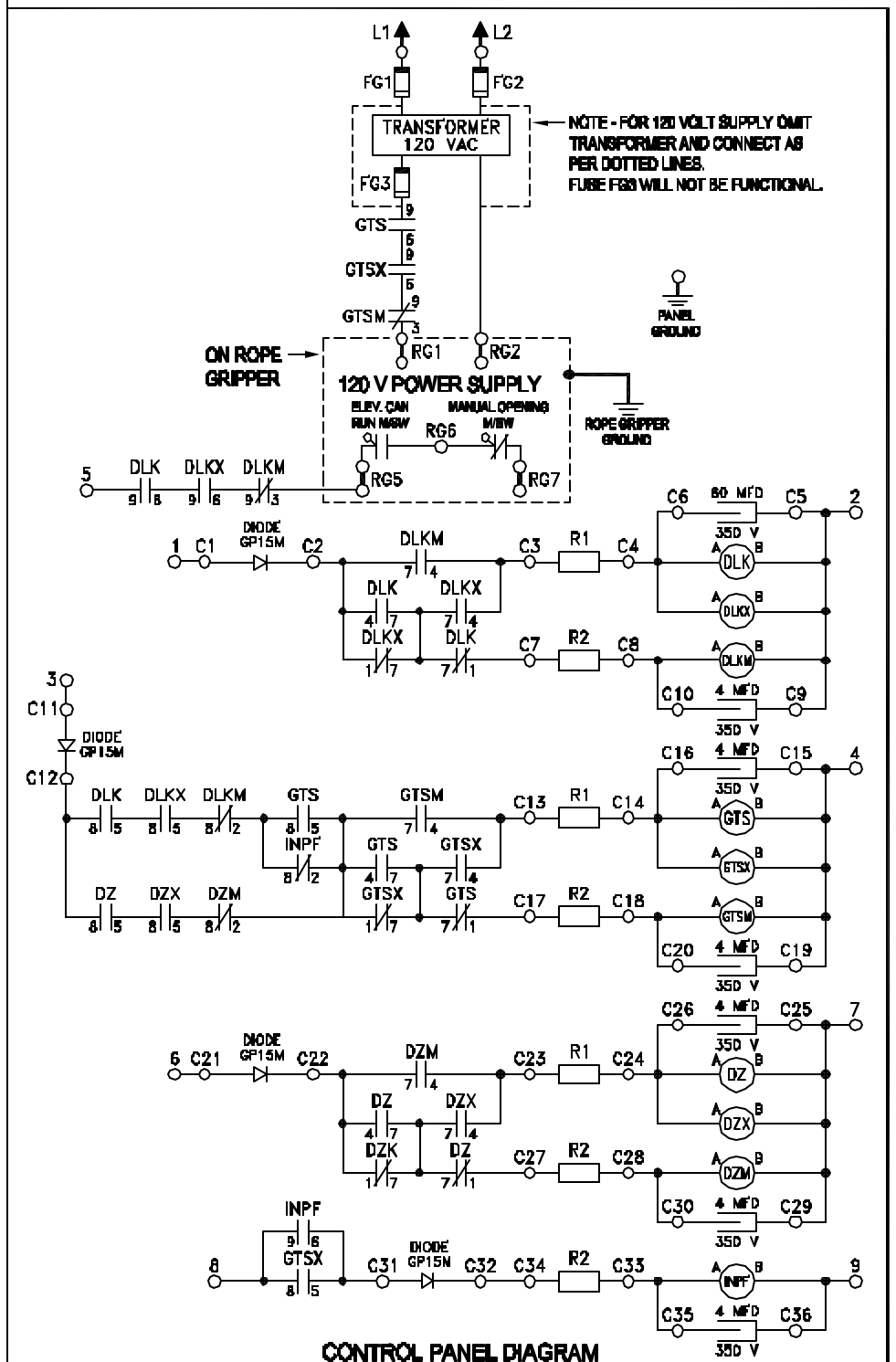
② CONNECT TERMINAL 3 SO THAT IT IS SUBJECT TO THE GOVERNOR OVER SPEED SWITCH ONLY.
CONNECT TERMINAL 4 TO THE OTHER SIDE OF THE LINE.
TERMINAL 3 MAY BE SUBJECT TO BOTH THE GOVERNOR SWITCH AND OTHER PROTECTIVE DEVICES IF DESIRED. HOWEVER, TERMINAL 3 MUST NOT BE SUBJECT TO THE IN-CAR EMERGENCY STOP SWITCH.
LOSS OF POWER AT TERMINAL 3 WILL TRIP THE ROPE GRIPPER. THE IN-CAR EMERGENCY STOP SWITCH MUST NOT TRIP THE ROPE GRIPPER.

③ CONNECT TERMINALS 6-7 IN PARALLEL WITH THE EXISTING DOOR ZONE RELAY. RELAYS DZ-DZX-DZM MUST BE ACTIVATED WITHIN THE DOOR ZONE ONLY. JOBS THAT DO NOT HAVE A DOOR ZONE UNIT REQUIRE THE INSTALLATION OF THE UNIT. THIS CAN BE A MAGNETIC SWITCH MOUNTED ON THE CAR (SUCH AS G.A.L. TYPE LU LEVELING UNIT) WITH A VANE AT EACH LANDING.

④ CONNECT TERMINALS 8-9 IN PARALLEL WITH THE EXISTING INSPECTION RELAY.
RELAY INPF MUST DROP OUT WHEN ON INSPECTION OPERATION.

B- REFER TO CONTROL PANEL DIAGRAM BELOW.
1 - CONNECT AC POWER TO TERMINALS L1-L2 AND GROUND ROPE GRIPPER AND CONTROL PANEL.
2 - CONNECT TRANSFORMER PRIMARY AND SECONDARY AS PER TABLE 2.

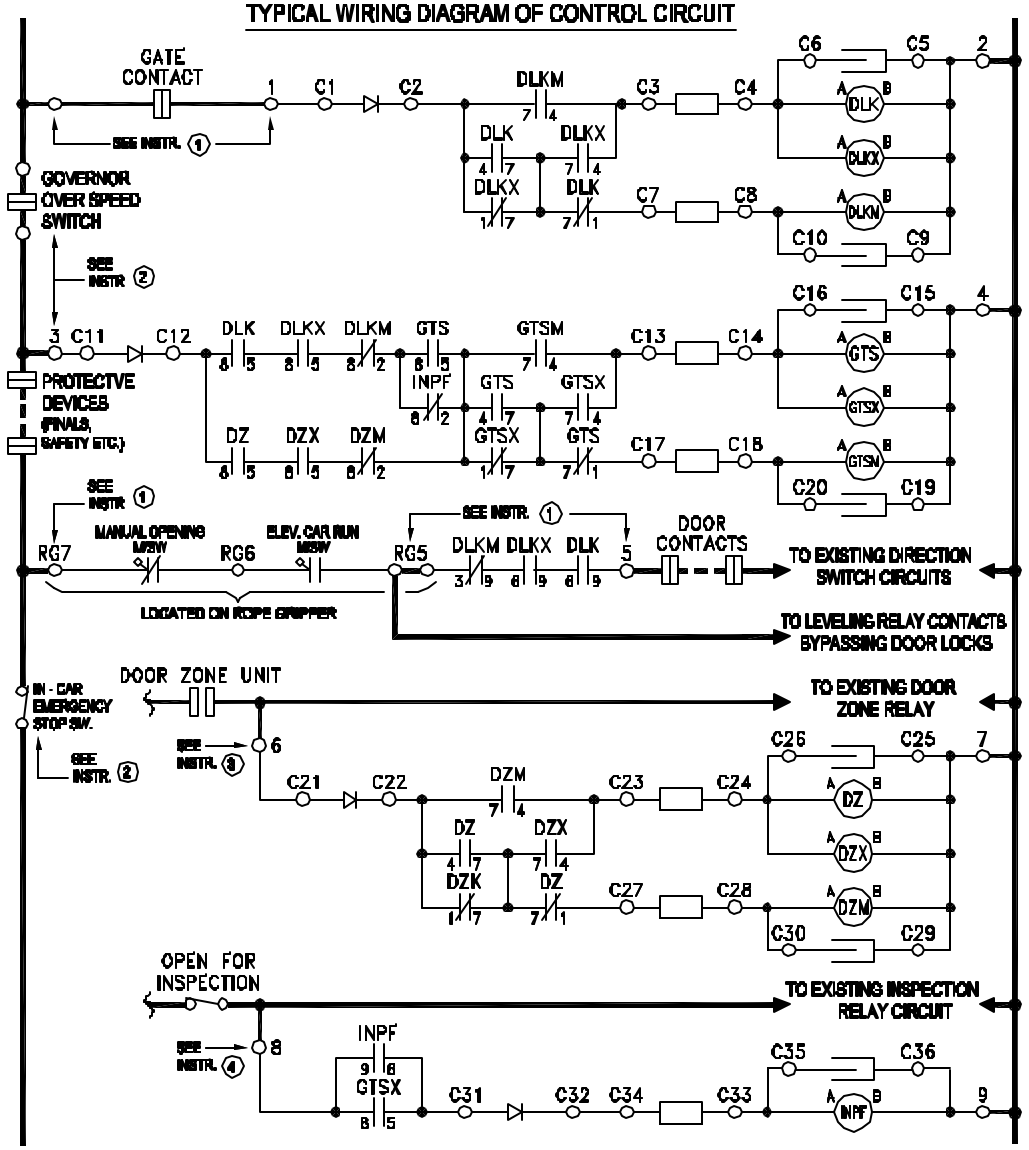
C - REFER TO NOTE 1 AND TABLE 1 FOR RELAY AND RESISTOR VALUES.



CONTROL PANEL DIAGRAM

(FOR INTERCONNECTIONS SEE TYPICAL WIRING DIAGRAM AT RIGHT)

TYPICAL WIRING DIAGRAM OF CONTROL CIRCUIT



CONTROL CIRCUIT SYMBOLS:

HEAVY LINES DENOTE EXTERNAL WIRING BY OTHERS.

LIGHT LINES DENOTE CONTROL PANEL WIRING BY G.A.L.

SYMBOL	DESCRIPTION	COIL No.	CONTACT PAIRS N.O.	N.C.	N.O.	N.C.	N.O.	N.C.
			7 4	7 1	8 5	8 2	9 6	9 3
DZ	DOOR ZONE	F	DZ	DZM	GTS			
DZX	DOOR ZONE AUX.	F	DZ	DZM	GTS			
DZM	DOOR ZONE MONITOR	F	DZ			GTS		
DLK	DOOR LOCKS	F	DLK	DLKM	GTS		RUN	
DLKX	DOOR LOCKS AUX.	F	DLK	DLKM	GTS		RUN	
DLKM	DOOR LOCKS MONITOR	F	DLK			GTS		RUN
GTS	GRIPPER ACTIVATOR	F	GTS	GTSM	GTS		GRIP	
GTSX	GRIPPER ACTIVATOR AUX.	F	GTS	GTSM	INPF		GRIP	
GTSM	GRIPPER ACTIVATOR MONITOR	F	GTS					GRIP
INPF	INSPECTION AND POWER FAILURE	F				GTS	INPF	

LEGEND SYMBOLS

F - RELY-0007N-110VDC

FUSES: FG1 - FG2 - FG3 - 3 AMP. 600 VOLTS. TYPE FNQ - R3

TRANSFORMER: 1/2 KVA SINGLE PHASE. TYPE 1 - 0138

NOTE 1: CONTROL PANEL IS SUPPLIED WITH 110 VOLT DC RELAYS AND 500 OHM, 20 WATT RESISTORS. RELAYS AND RESISTORS MAY HAVE TO BE CHANGED TO ACCOMODATE OTHER CONTROL CIRCUIT VOLTAGES PER TABLE 1 BELOW.

TABLE 1

CONTROL CIRCUIT VOLTS	RELAY COIL VOLTS	RESISTOR VALUE IN OHMS - 20 WATT R1	R2
UNDER 110 V	CONSULT FACTORY		
110 VAC/DC	110 VDC	500	500
220 VAC/DC	110 VDC	6,000	18,000
256 VDC	110 VDC	7,500	18,000

SEQUENCE OF OPERATION:

A - RELAYS DLK - DLKX ARE ENERGIZED WHEN THE GATE CONTACT CLOSES.
B - RELAYS DZ - DZX ARE ENERGIZED WHEN THE CAR IS IN THE DOOR ZONE.
C - RELAY INPF IS ENERGIZED WHEN THE CAR IS NOT ON INSPECTION OPERATION.
D - RELAYS GTS - GTSX ARE ENERGIZED TO KEEP THE ROPE GRIPPER OPEN.
E - IF THE CAR MOVES OUTSIDE OF THE DOOR ZONE WITH THE DOORS OPEN, OR IF THE GOVERNOR OVER SPEED SWITCH OPENS, RELAYS GTS AND GTSX WILL DROP OUT AND ACTIVATE THE ROPE GRIPPER. THESE WILL BE ENERGIZED AUTOMATICALLY AND THE ROPE GRIPPER WILL RESET WHEN THE CAR IS IN THE DOOR ZONE OR WHEN THE CAR IS ON INSPECTION OPERATION AND THE DOORS ARE CLOSED.
THEY CAN BE ENERGIZED BY MOMENTARILY OPENING THE MAIN LINE SWITCH.

TABLE 2 - TRANSFORMER CONNECTIONS

FIG. A	FIG. B	FIG. C	FIG. D	FIG. E	FIG. F	FIG. G	LINE VOLTS L1 - L2	CONNECT AS PER FIGURE	TRANSFORMER VOLTS PRIMARY	SECONDARY	ACTUAL OUTPUT
FG1 FG2 0 220 240 300	FG1 FG2 0 220 240 300	FG1 FG2 0 220 240 300	FG1 FG2 0 220 240 300	FG1 FG2 0 220 240 300	FG1 FG2 0 220 240 300	FG1 FG2 0 220 240 300	200	A	220	120	122
0 110 120 130 FG3 RG2	0 110 120 130 FG3 RG2	0 110 120 130 FG3 RG2	0 110 120 130 FG3 RG2	0 110 120 130 FG3 RG2	0 110 120 130 FG3 RG2	0 110 120 130 FG3 RG2	208	B	220	120	117
							220	B	220	120	124
							230	C	240	120	119
							240	C	240	120	124
							440	D	440	120	124
							480	E	480	120	124
							480	F	480	120	123
							575	G	600	120	117
							600	G	600	120	123

NOTE :
AFTER ALL WIRING CHANGES HAVE BEEN COMPLETED, CHECK PROTECTIVE DEVICES, GOVERNOR SWITCHES, GATE AND DOOR CONTACTS FOR PROPER OPERATION.

REV	DESCRIPTION	DATE	ECN
2	MOVED DOOR CONTACTS TO EXIST. DIRECT. SW. CIRCUITS.	—	11/11/03
1	RECONNECTED WIRES RG7 & 5	—	4/17/95

G.A.L. MANUFACTURING CORP.
50 E. 153rd STREET BRONX, N.Y. 10451

CONTROL PANEL FOR ADDING ROPE GRIPPER TO EXISTING CONTROLLER

F/N: L-10,210 GRIPPER PANEL WIRING.dwg

DRAWN BY	T.P.	DATE	1-23-95
ENGINEER	G.D.C.	SHEET	1 OF 1
SCALE		SIZE	
PART No.			REV
DOCUMENT No.	L-10,210		