

Model 2010-Z2A

SGL Adapter

**INSTRUCTION MANUAL**

June, 1990

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Model 2010  
(Rev. 6/90)

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WARRANTY  
PLM:rem(wp)

# KineticSystems Corporation

Standardized Data Acquisition and Control Systems

2010

## SGL Adapter

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(Rev. Dec. 89)

### FEATURES

- Adapts 40-contact auxiliary controller bus (ACB) connector to 52-pin "D" connector on L-2 serial crate controller (SCC)
- Arranged for patching LAMs between SCC and ACB
- Patching SCC "demand control" signals

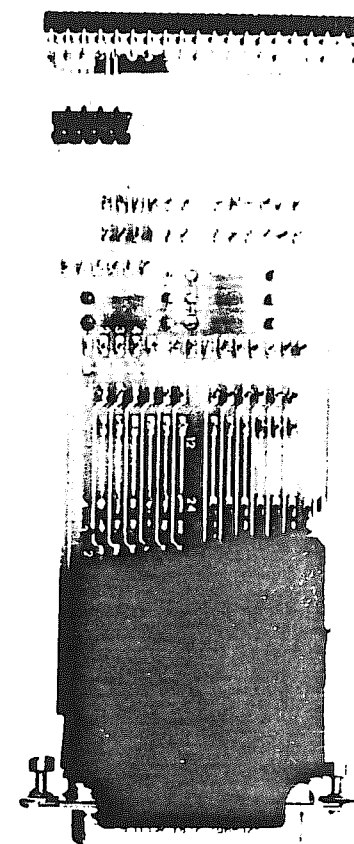
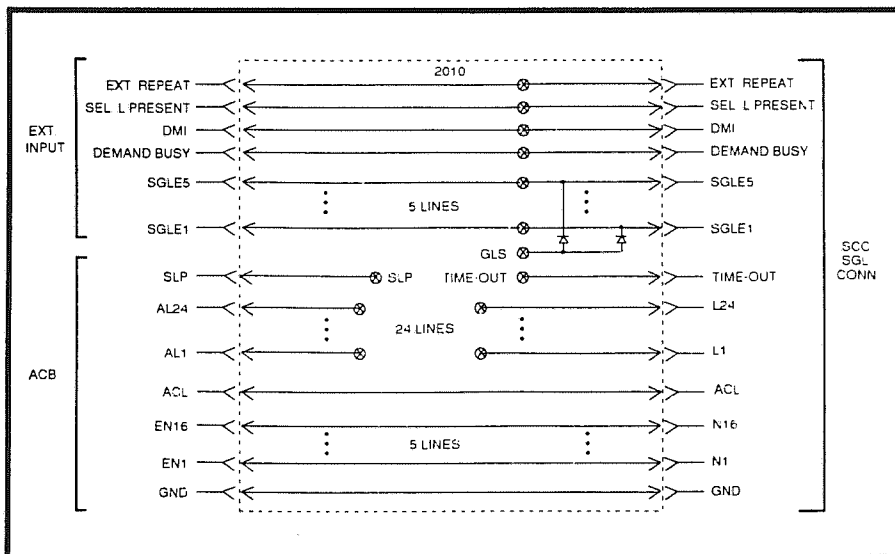
### APPLICATIONS

- Adapts SGL connector on L-2 SCC to auxiliary controller bus
- Provides for patching of selected LAMs for SCC ("mini LAM grader" function)

### GENERAL DESCRIPTION

The Model 2010 adapter card interconnects the auxiliary controller bus and a Type L-2 serial crate controller in accordance with ANSI/IEEE Standard 675 for multiple controllers in a CAMAC crate.

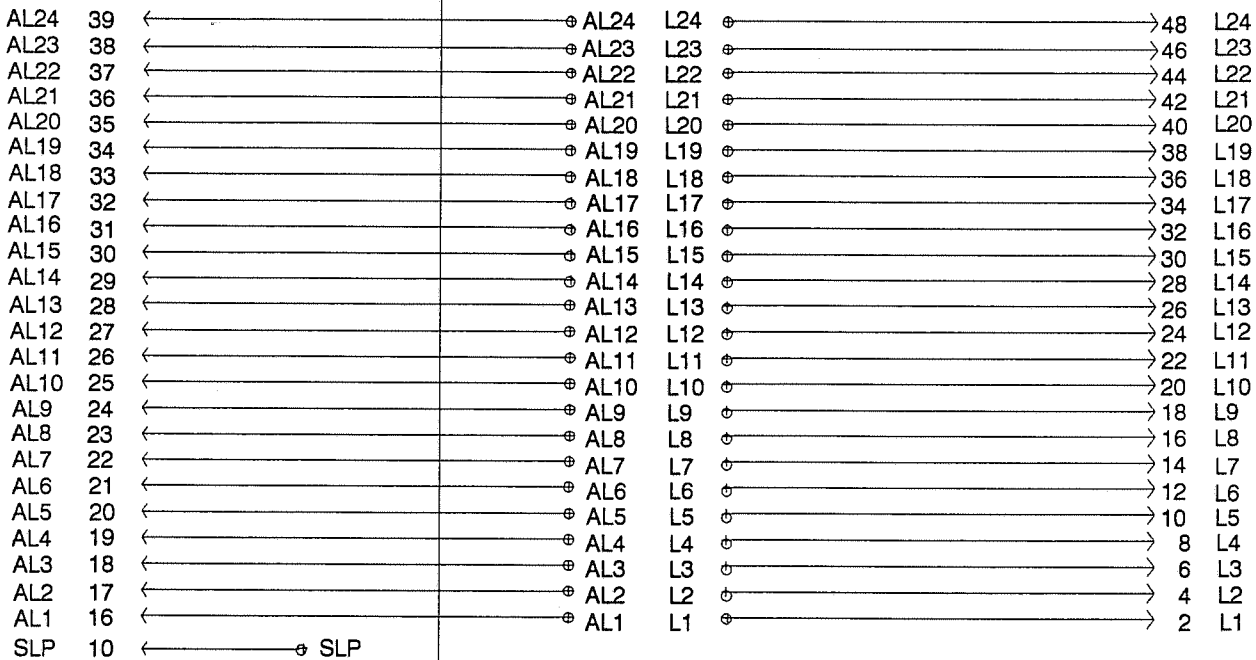
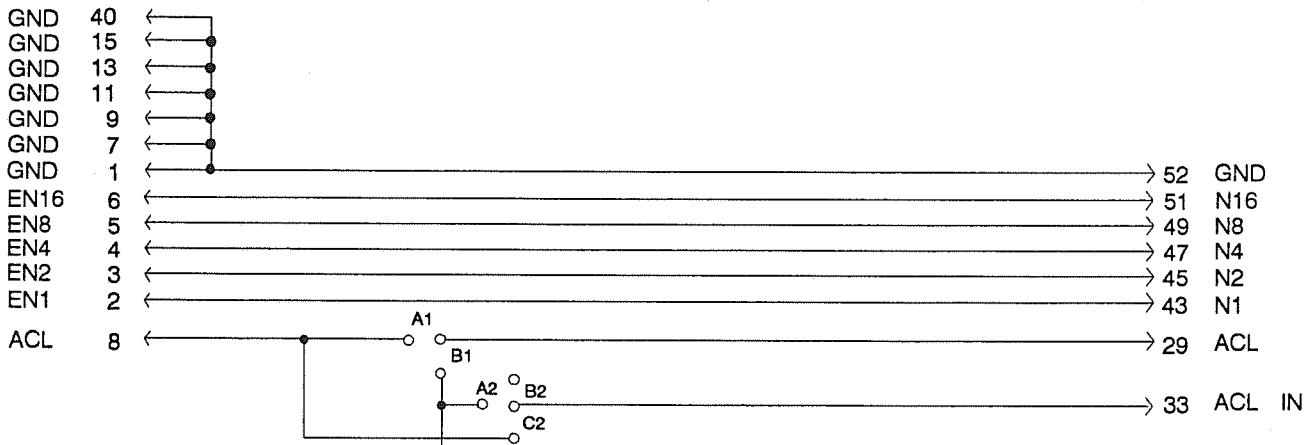
The auxiliary controller bus is terminated on a 40-contact connector using 40-wire flat cable. The SGL connector on the Type L-2 SCC (such as our 3952) is a 52-contact "D" connector with pins. The 2010 provides for the orderly interconnection of the ACB and SGL connector (passing of encoded Ns to the SCC from the ACB, Auxiliary Controller Lockout from the SCC, and patching of the LAM interrupts and other signals). For configurations using a 3952 Type L-2 SCC and a 3924 LAM Encoder, two 2010s and one 2010-001 SGL Patch Cable are required.



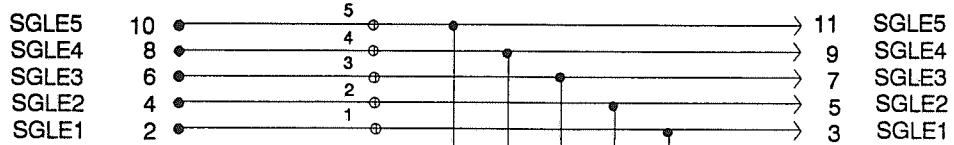
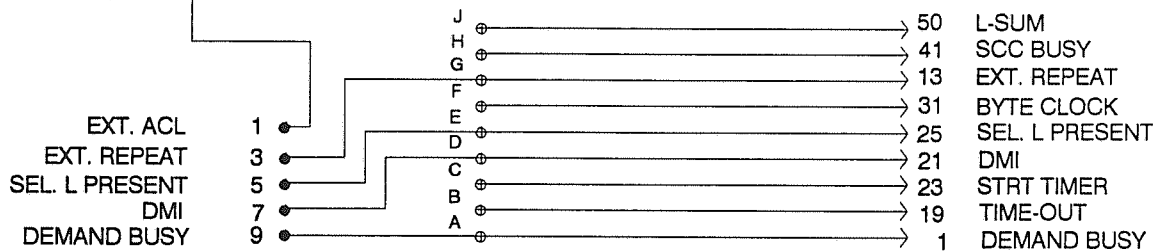
Weight: 28 grams (1 oz.)

### ORDERING INFORMATION

- Model 2010-Z2A** — SGL Adapter
- Accessories** — Model 5843-Series Auxiliary Controller Bus Cable Assemblies  
Model 2010-001 SGL Patch Cable Assembly



40 PIN ACB CONN.



2010-Z2A

P.L.M

12/05/89 REV. 3

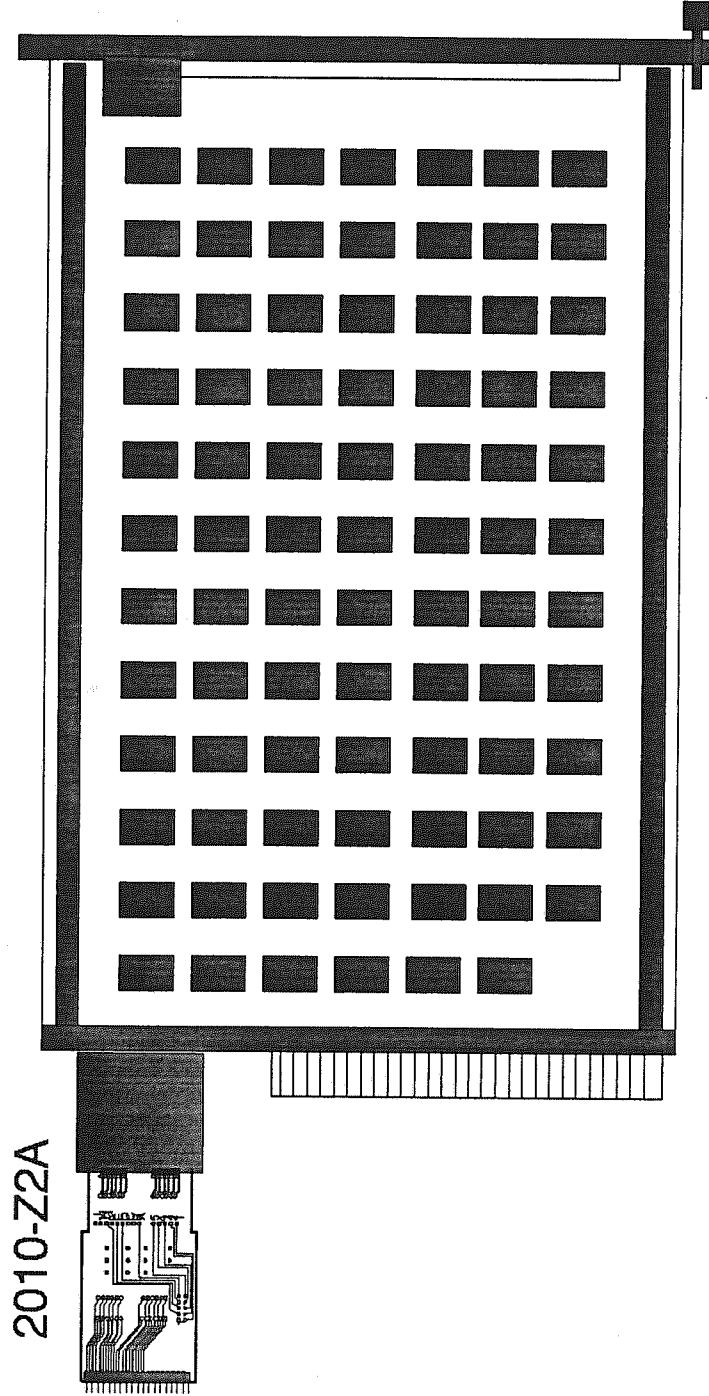
10 PIN CONN.

GLS

5-IN5817

52 "D"

3952



Configuration using the 2010 for simple LAM grading.

Refer to figure one for wiring diagram.

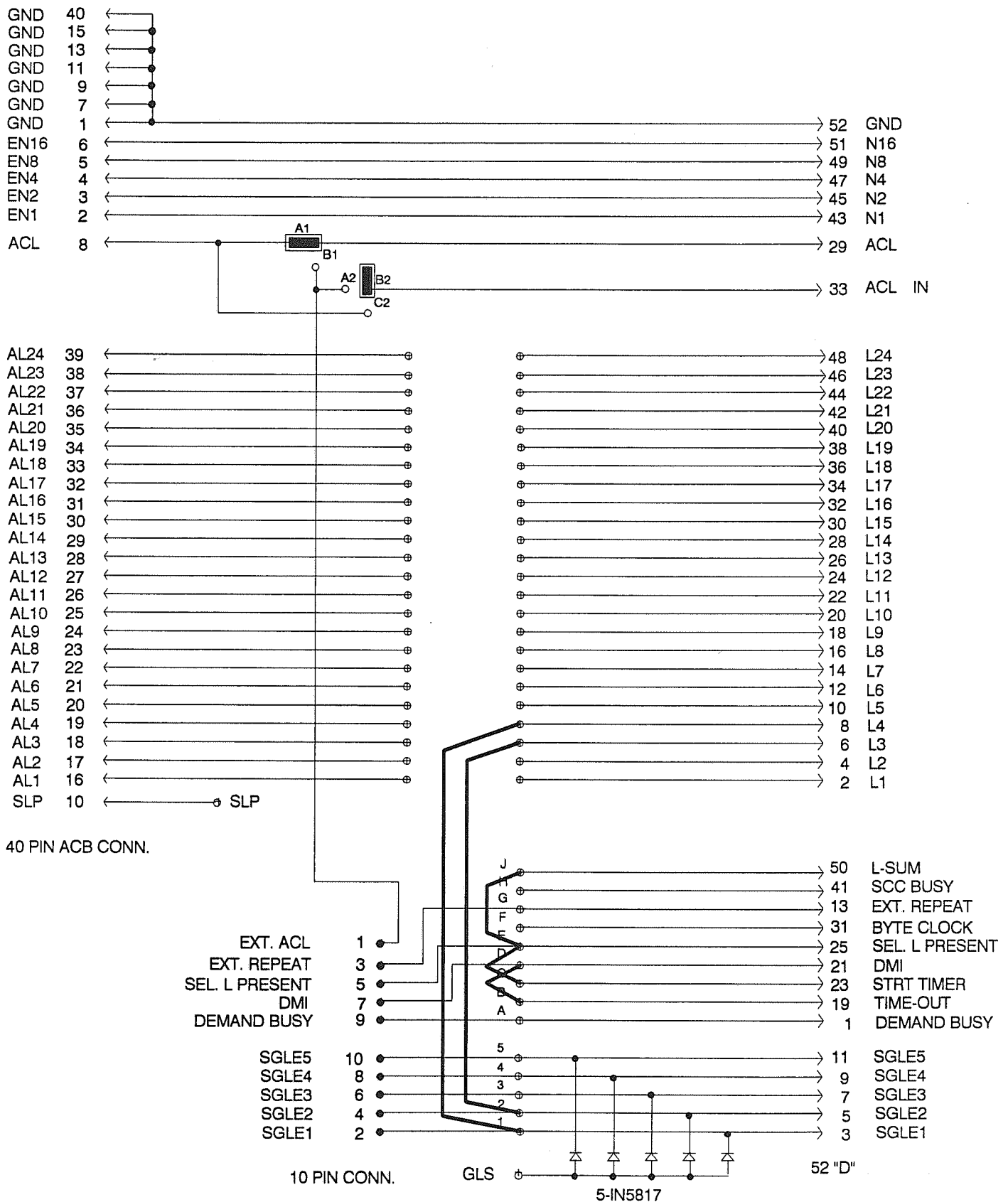
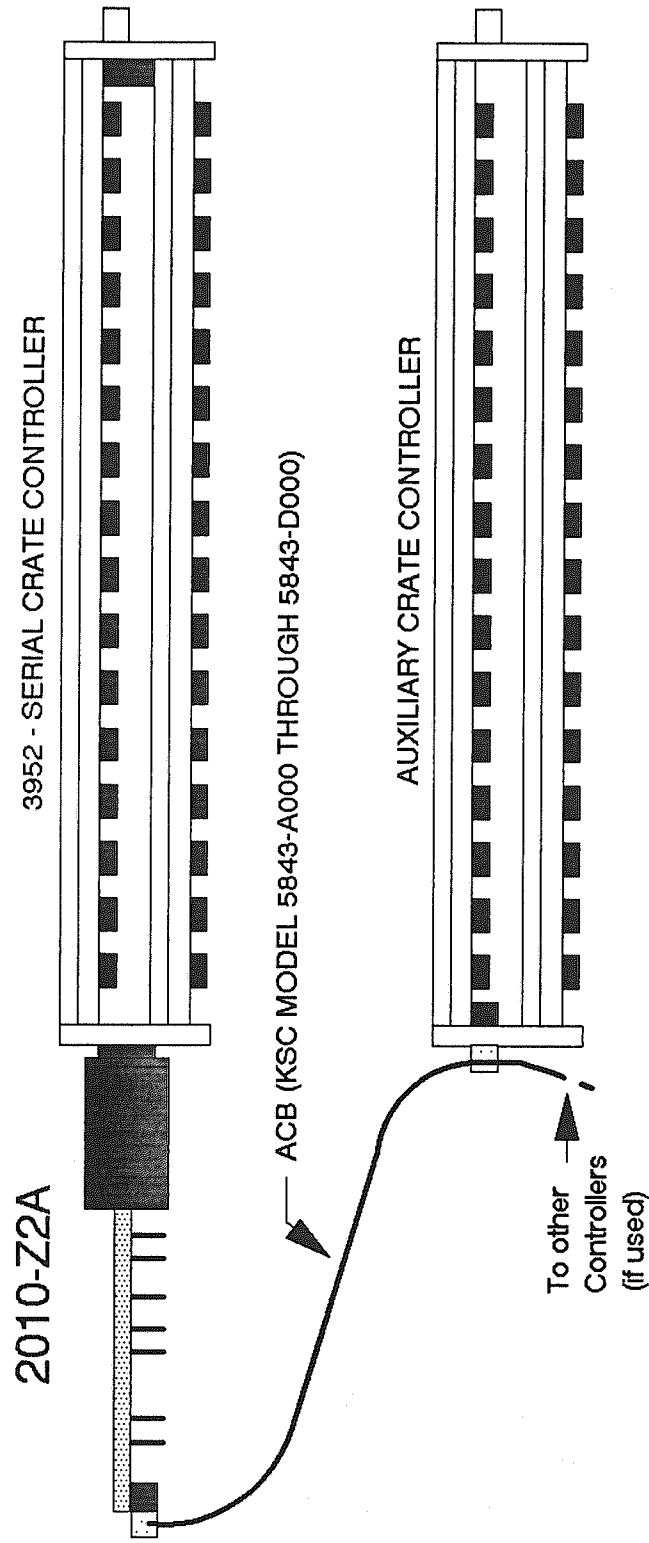


FIGURE 1

Simple patching LAM grader. No ACB modules are used.

# 3952 and ACC



Using a 2010 in a multiple controller configuration.

Refer to figure two for wiring diagram.

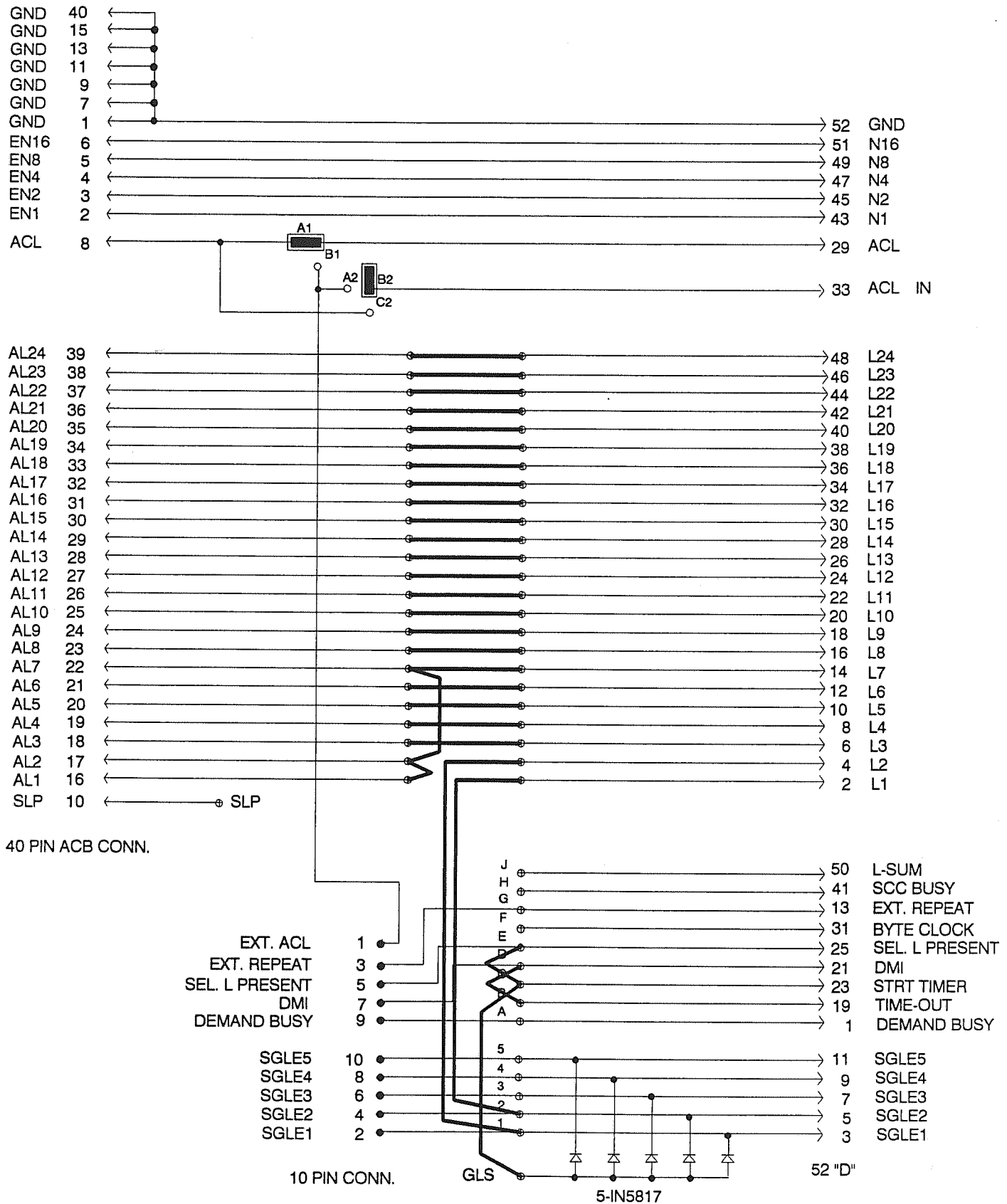


FIGURE 2

LAM's split between SCC and Auxillary Controllers. Note, slot 7 is not asserting a LAM and is used to pull-up LAM lines 1 and 2 which are used by the SCC.



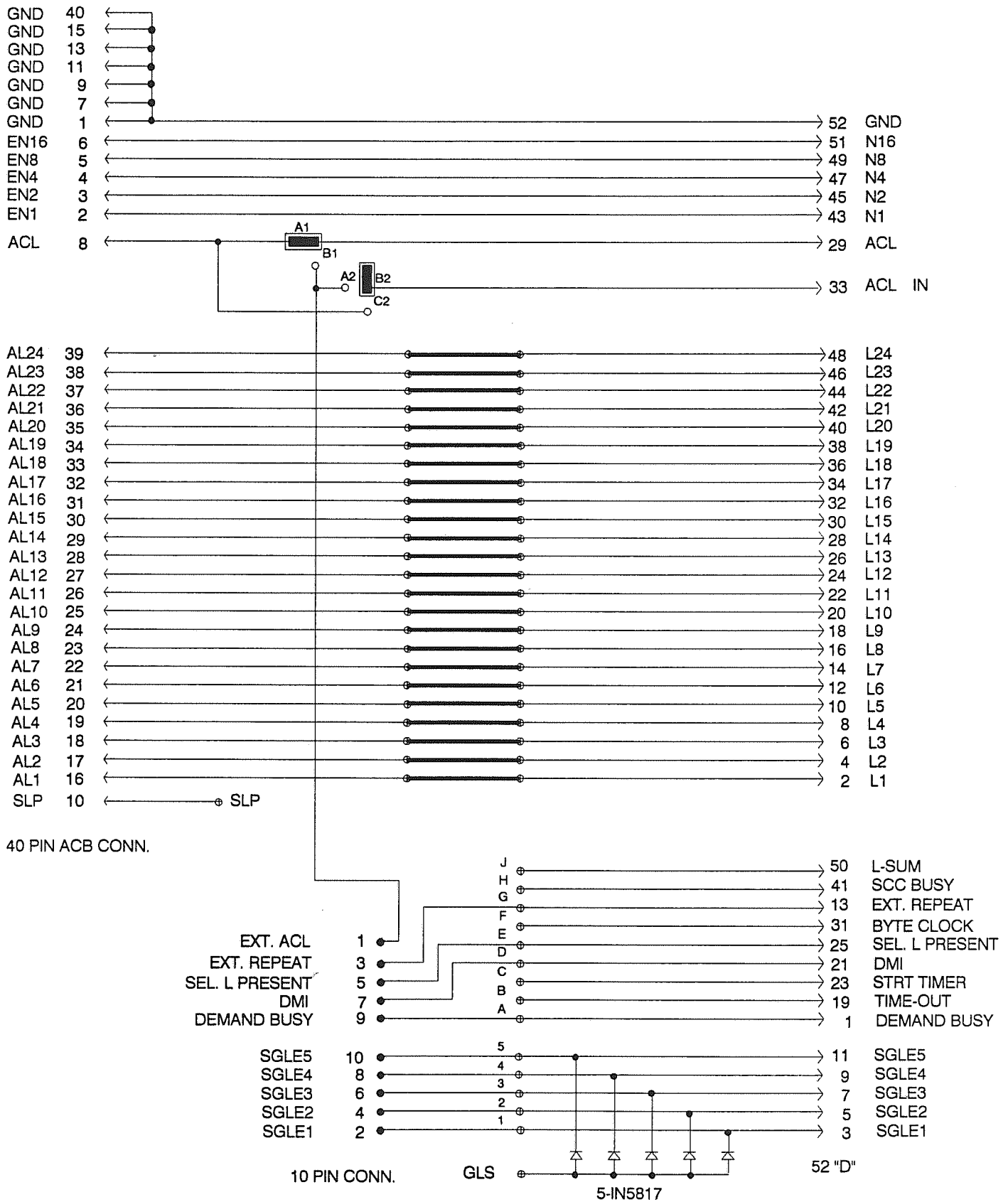
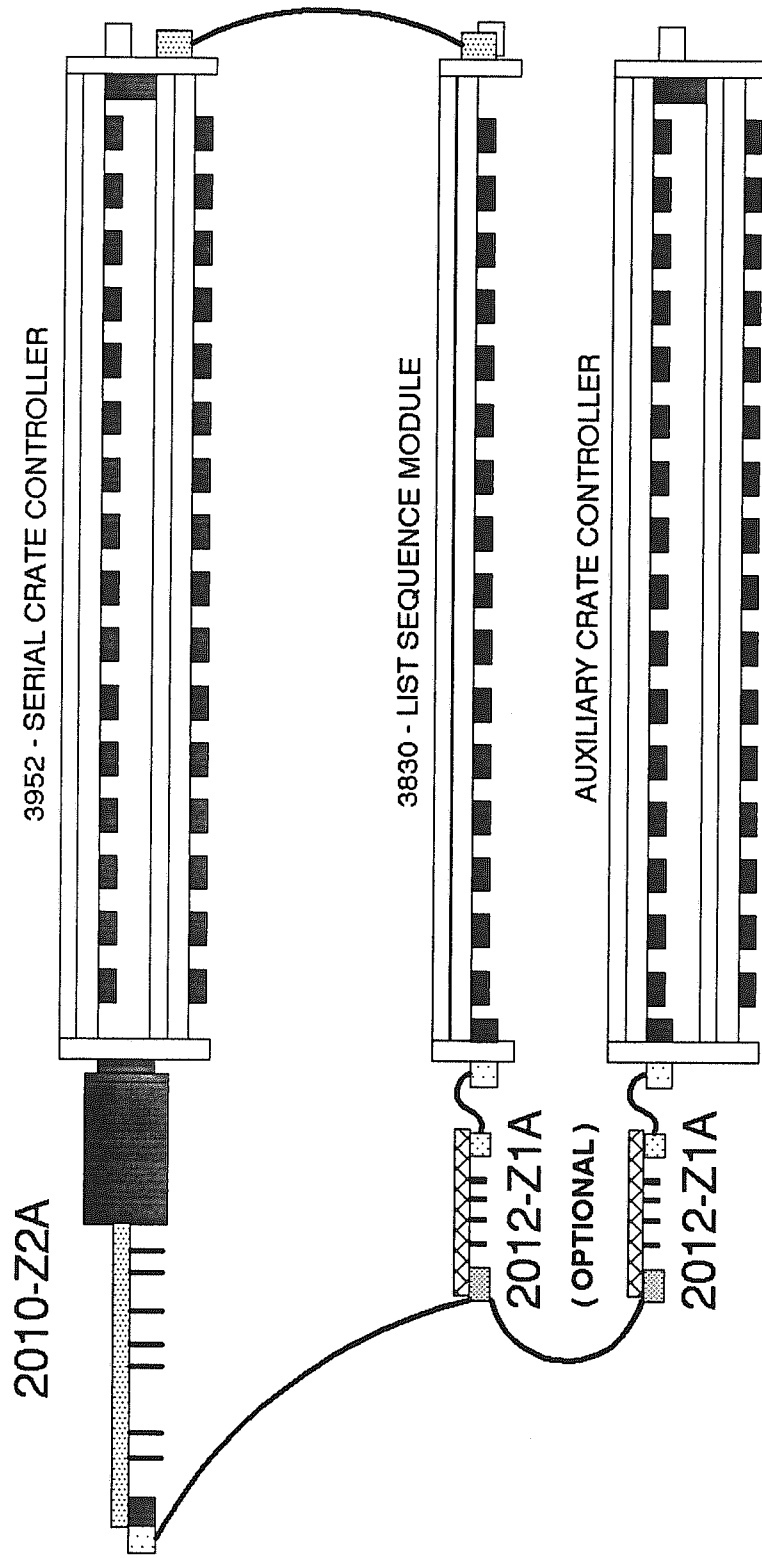


FIGURE 3

All LAM's Pacted to Auxiliary Controller. SCC will not respond to any LAM's in the crate.

# 3952 and 3830



Configuration using multiple Crate Controllers  
and the List Sequence Module.

Refer to wiring diagram 4a, 4b and 4c.

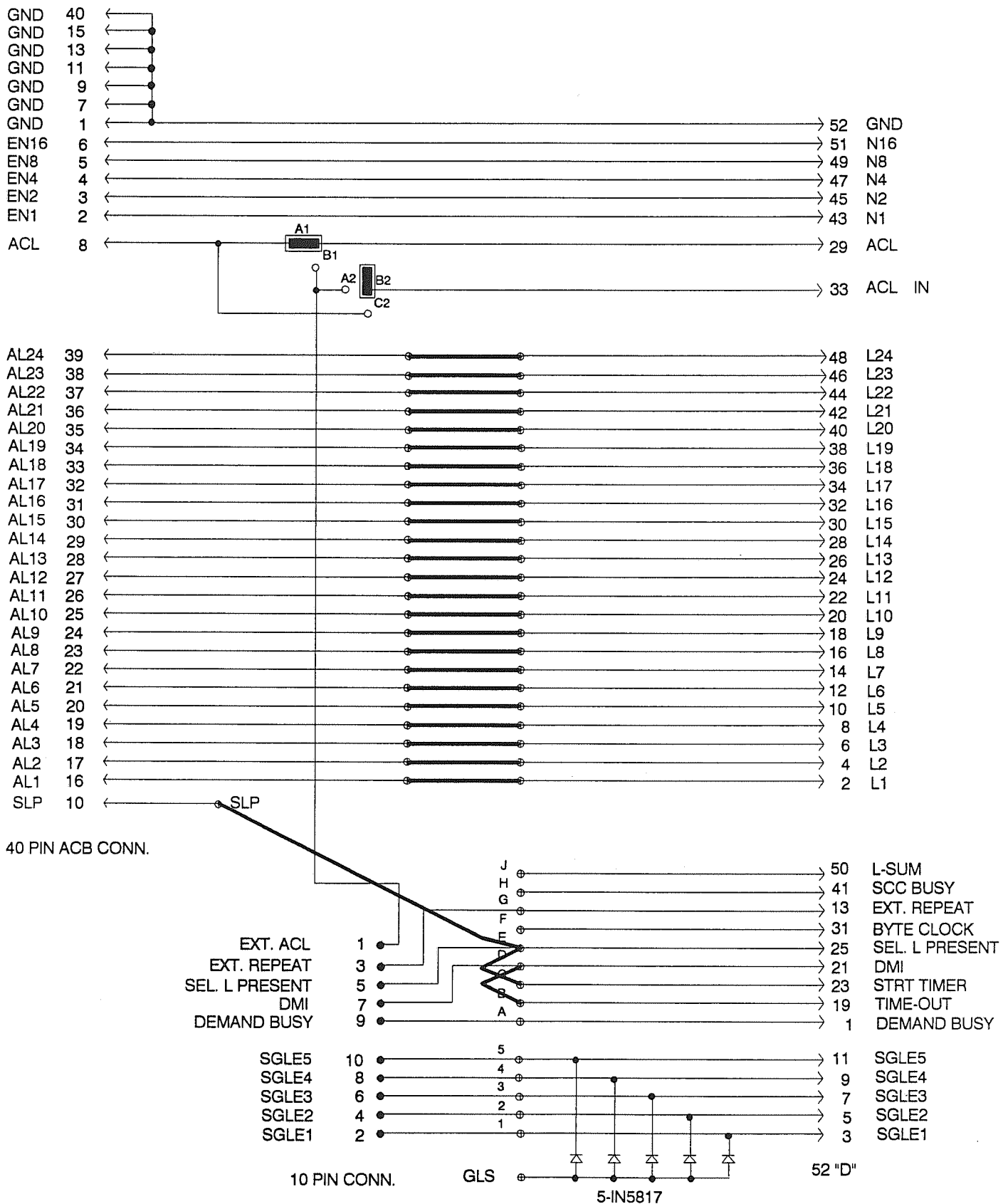


FIGURE 4a (3952/3830/ACC)

The SCC has all LAM's Patched to the ACB, and will generate a DEMAND upon SLP from the 3830 (LSM) going true.

# 2012-Z1A List Sequence Module Location (OPTIONAL)

● = W/W PINS

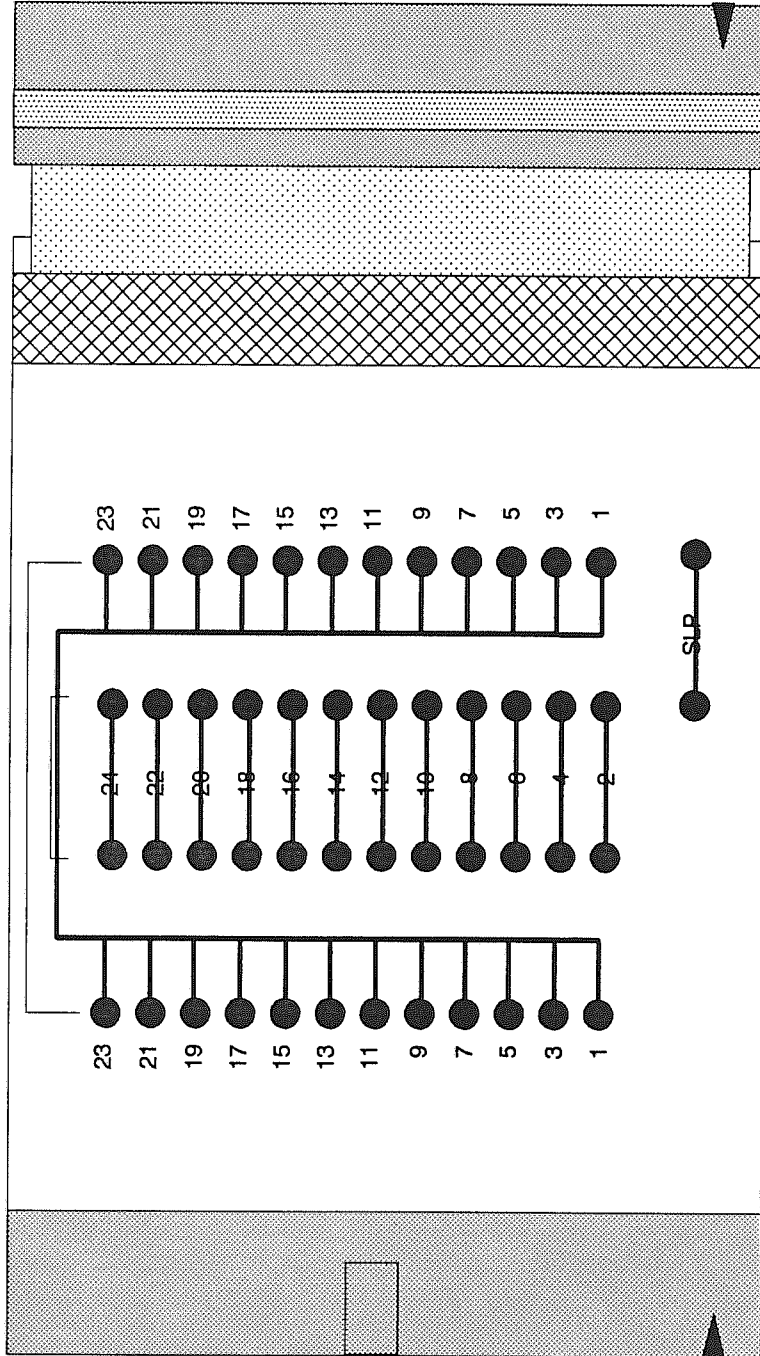


Figure 4b

All LAM's passed to LSM. Unused LAM's will be blocked by internal LAM MASK register. Upon receipt on Selected LAM SLP will be passed back to SCC.

# 2012-Z1A Auxiliary Controller Position (OPTIONAL)

● = W/W PINS

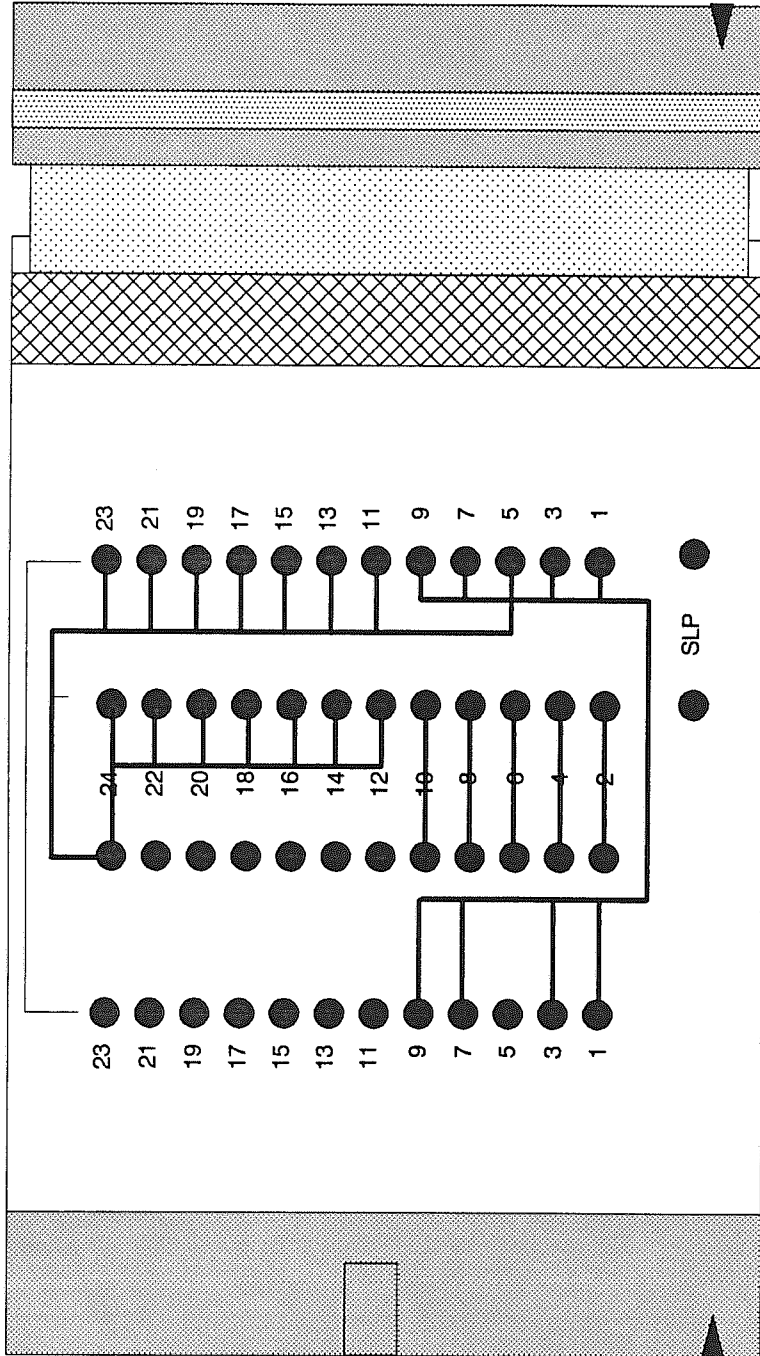
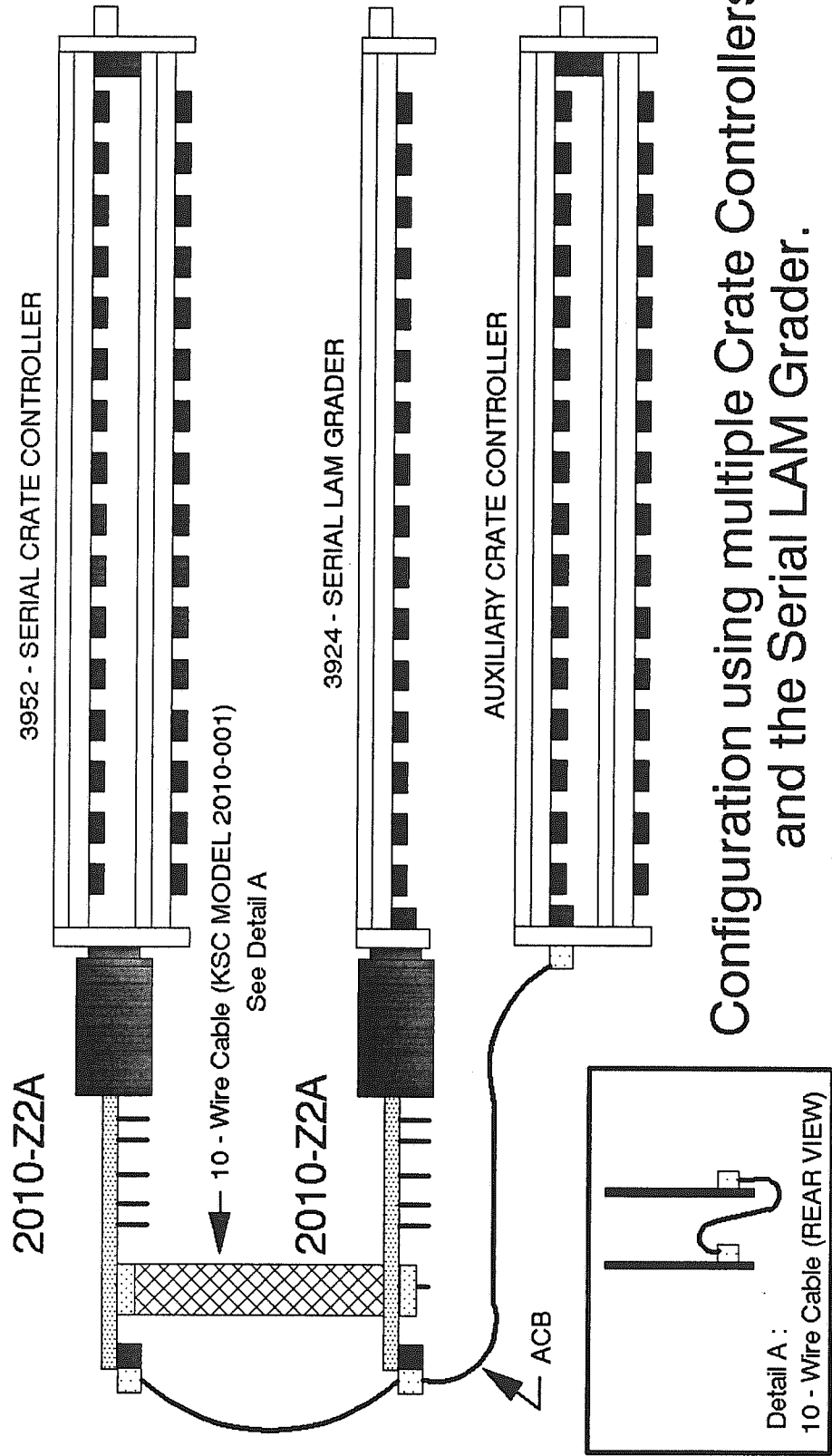


Figure 4c ( Auxiliary Controller without LAM MASK Register )  
 Selective LAM patching. In this case only the LAM's which the  
 Auxiliary Controller will respond to are patched. All unused LAM's  
 are tied to a LAM line that is not used by a module.

# 3952 and 3924



Configuration using multiple Crate Controllers  
and the Serial LAM Grader.  
Refer to wiring diagram 5a and 5b.

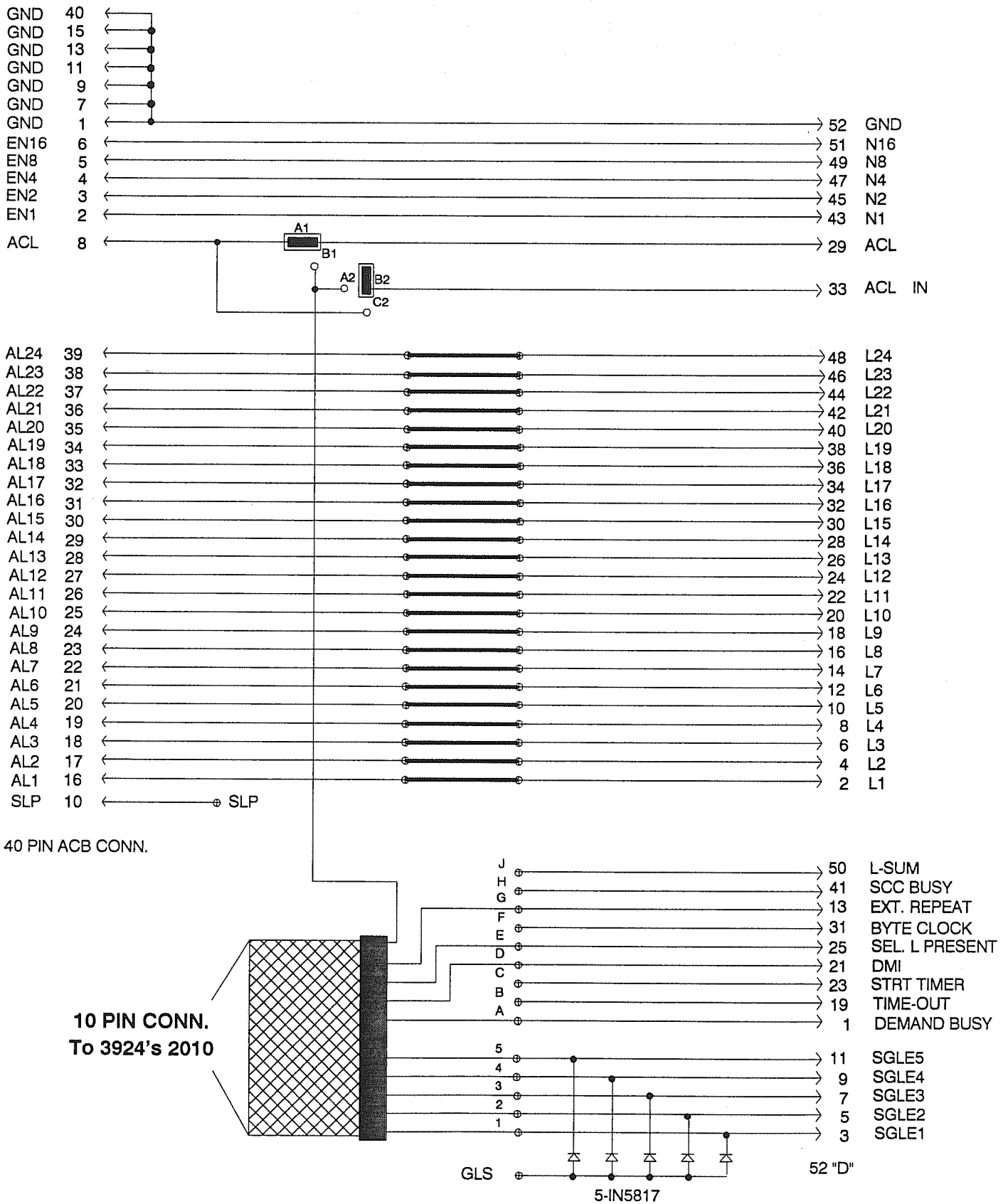


FIGURE 5a (3952/3924/ACC)

This configuration requires a 2010 on both the 3952 and 3924. The 3952's 2010 requires all LAM's to be Patched to the ACB. A separate 10 wire cable is used to carry signals generated by the 3924 to the 3952.

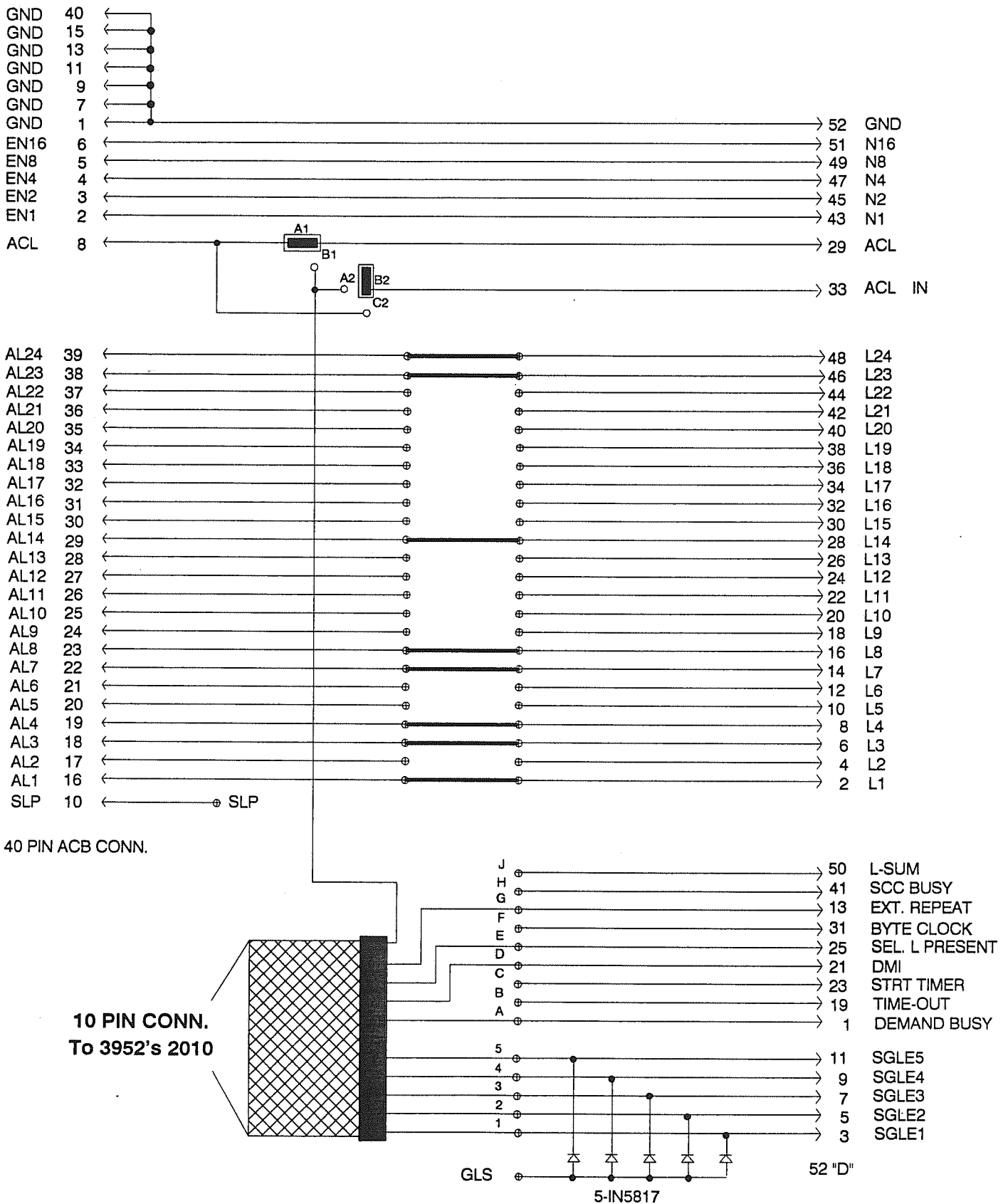
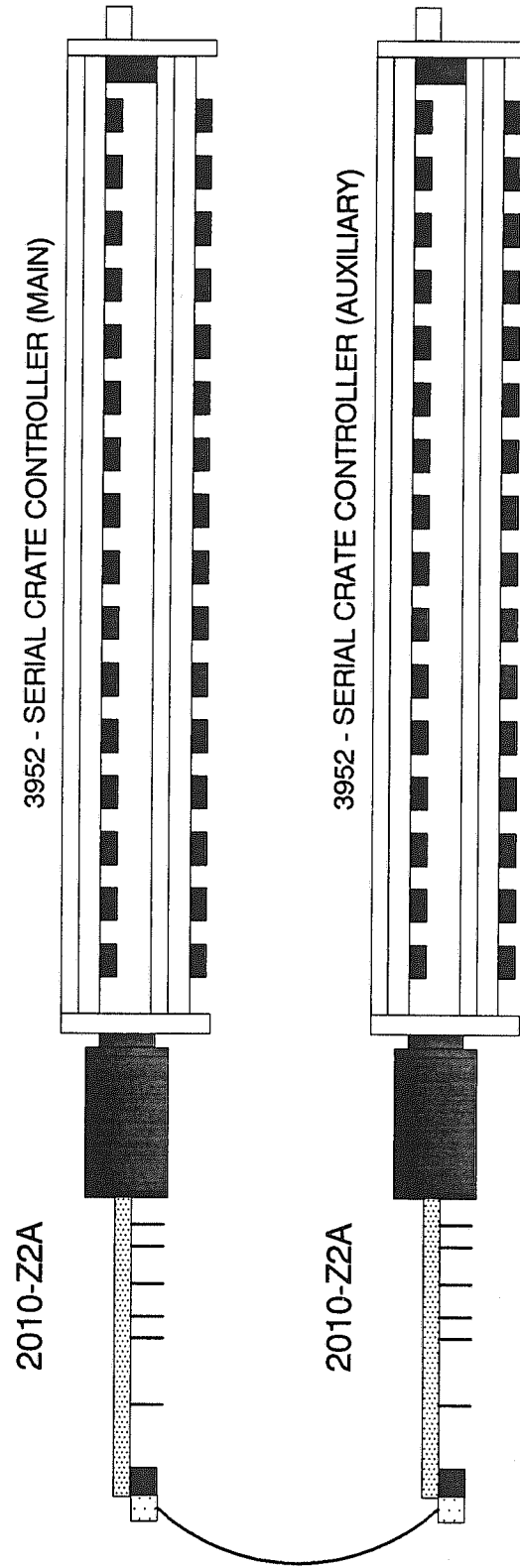


FIGURE 5b (3952/3924/ACC)

In this example the 3924's 2010 has only the LAM's which the 3952 will respond to Patched. All LAM's could be patched if needed. A separate 10 wire cable is used to carry signals generated by the 3924 to the 3952.



# 3952 Main and 3952 Auxiliary



Configuration using multiple Crate Controllers  
and the Serial LAM Grader.

Refer to wiring diagram 6a, 6b AND 6c.

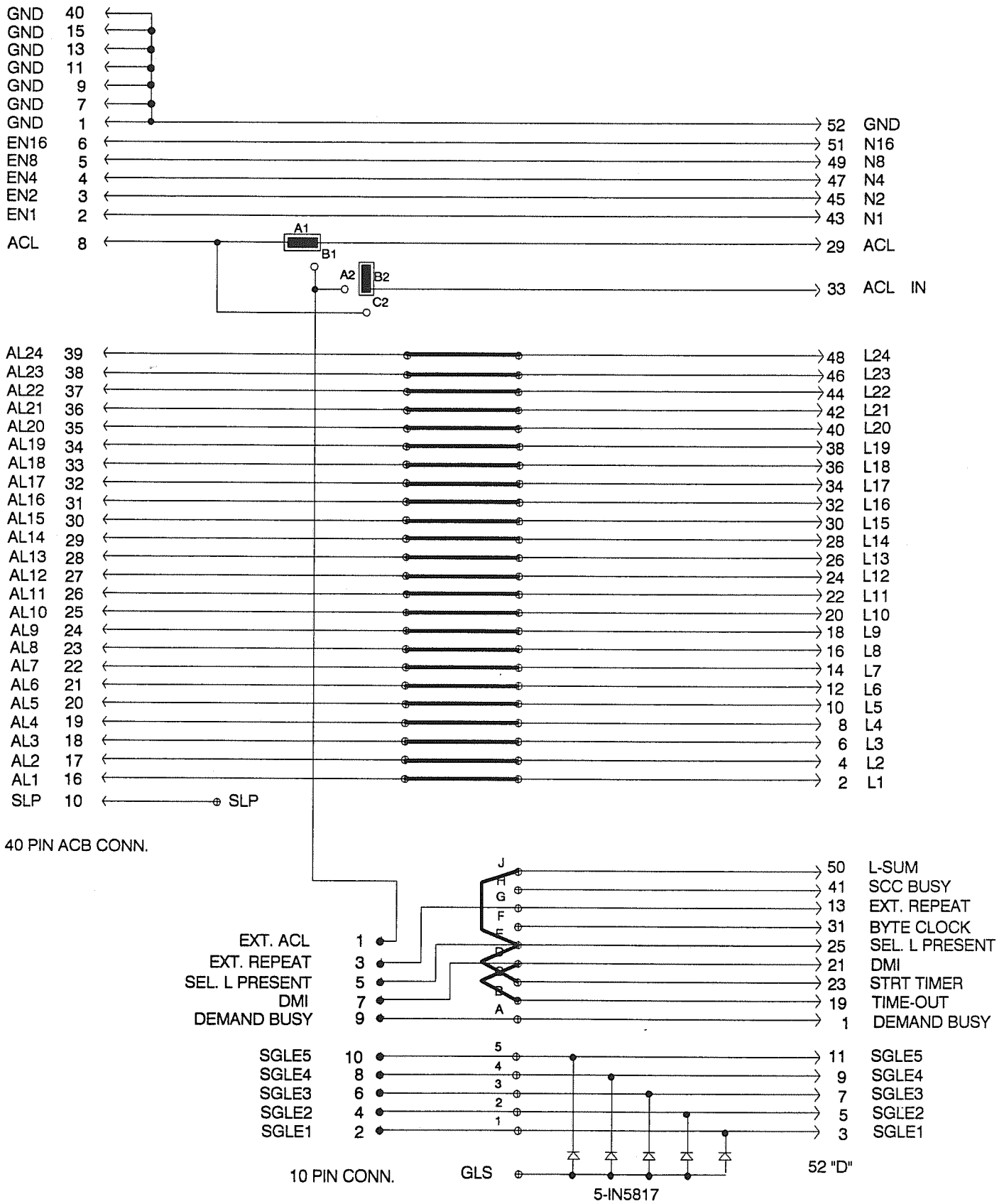


FIGURE 6a (3952 MAIN/3952 AUXILIARY)

**This configuration requires a 2010 on both the 3952's.  
The MAIN 3952's 2010 has ALL LAMs Patched. Jumpers A1 and B2 are installed.  
The SCC will respond to all LAM's in the remote crate.**

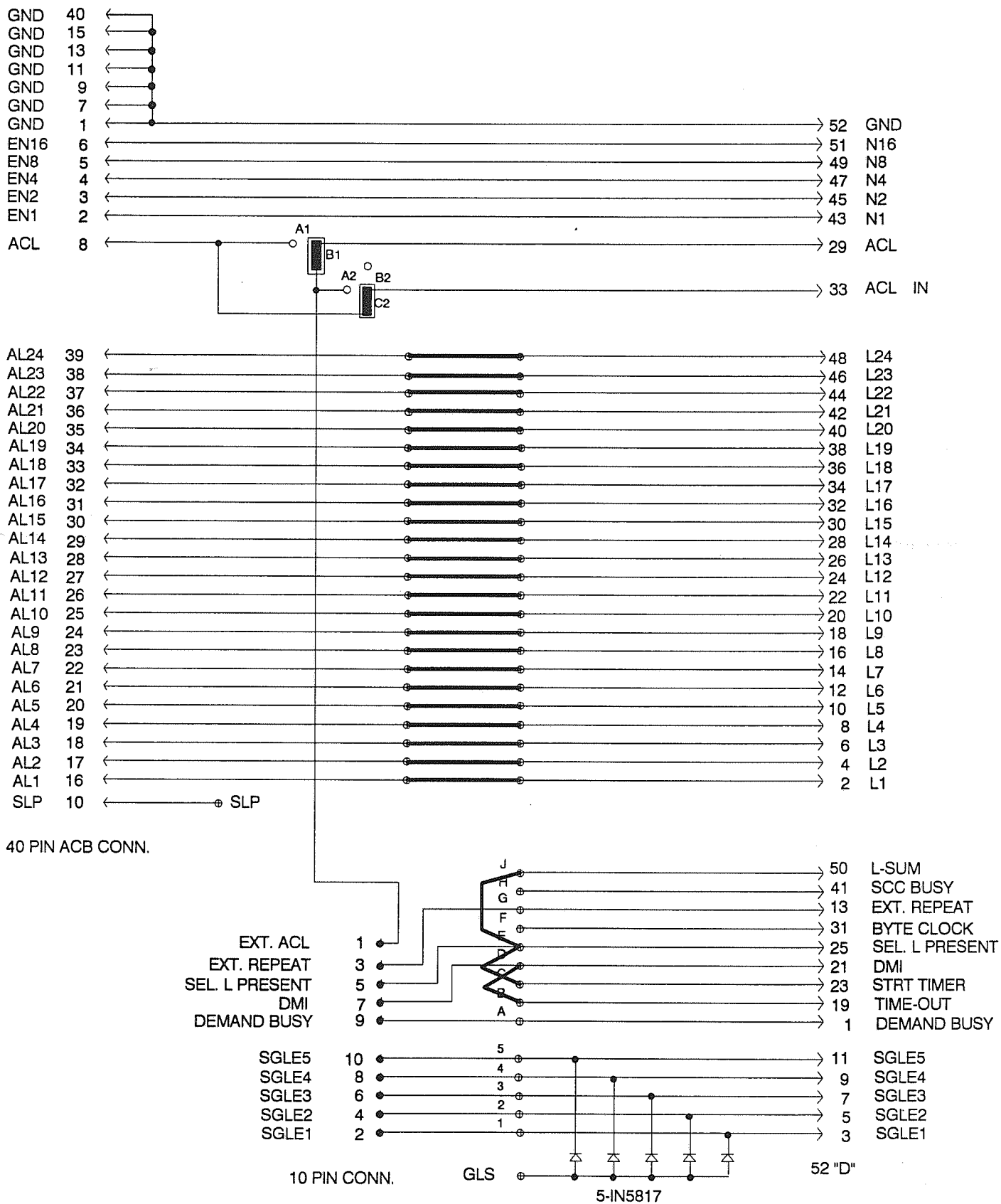


FIGURE 6b (3952 MAIN/3952 AUXILIARY)

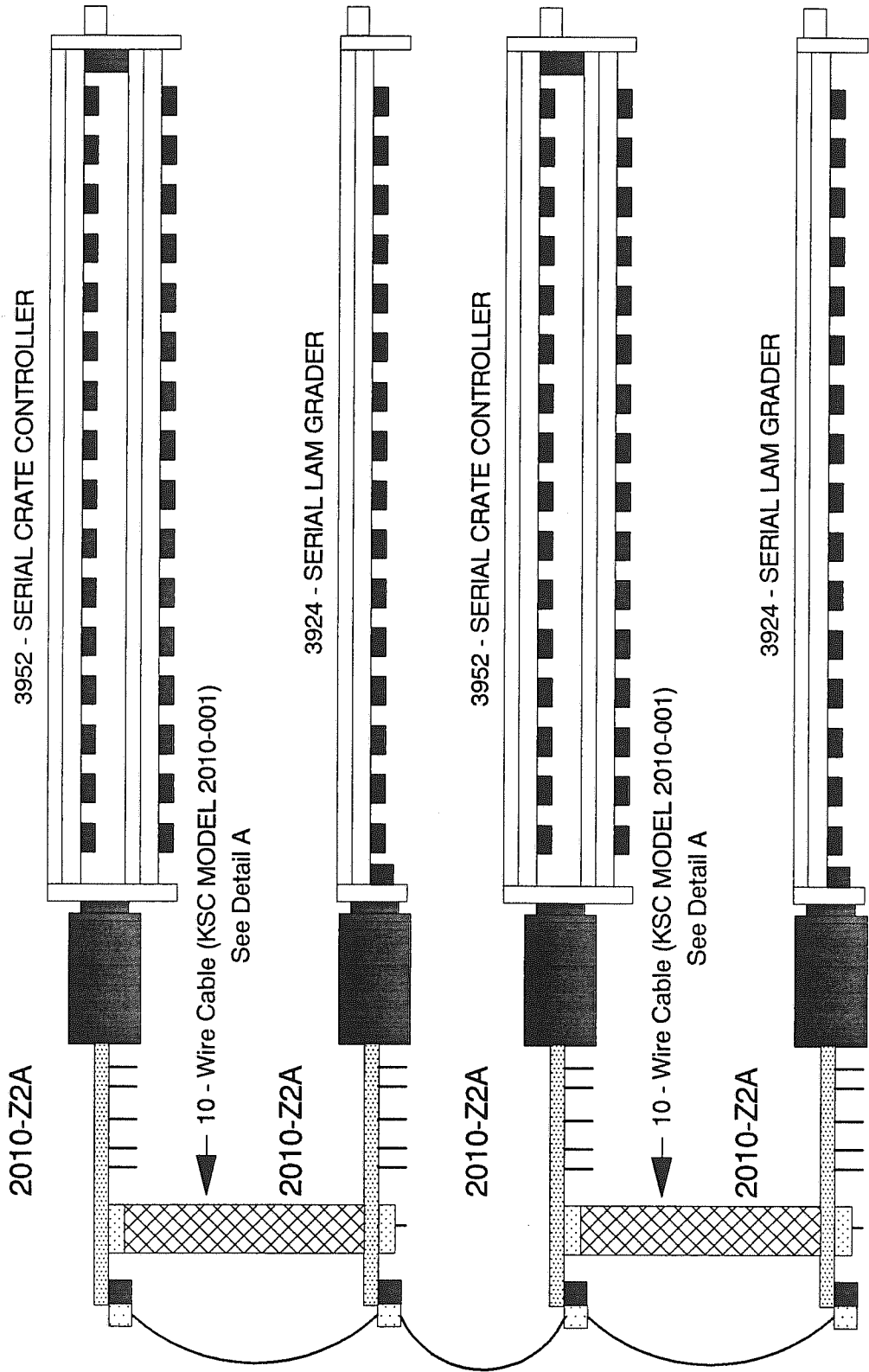
This configuration requires a 2010 on both the 3952's.  
 The AUXILIARY 3952's 2010 has ALL LAMs Patched. Jumpers B1 and C2 are installed.  
 The Auxiliary SCC will respond to all LAM's. ACL from MAIN is passed to ACL IN.

## CONFIGURATION REQUIREMENTS WHEN USING MULTIPLE SCC's

MAIN SCC			AUXILIARY SCC			SHD
SPEED	MODE	ACL (note 2)	SPEED	MODE	ACL (note 2)	REFERENCE
5 Mhz	BYTE	B	5 Mhz	BIT	A	
5 Mhz	BYTE	B	5 Mhz	BIT	B	
5 Mhz	BYTE	B	2.5Mhz	BYTE	A or B	(see note 1)
5 Mhz	BYTE	B	1 Mhz	BYTE	A or B	(see note 1)
5 Mhz	BIT	A or B	5 Mhz	BIT	A or B	(see note 1)
5 Mhz	BIT	A	2.5Mhz	BIT	A	
5 Mhz	BIT	A or B	2.5Mhz	BIT	A or B	(see note 1)
<p><b>Note 1:</b> These configurations require the SHD driving the Auxiliary SCC to have either ISB enabled (2165), or by ordering a special Space Byte Pal for the 2160.</p> <p><b>Note 2:</b> ACL refers to the jumper on board the SCC that selects when Auxiliary Controller Lockout is asserted. A and B reference the 3952's jumper selection. On 3954's A = G and B = H.</p>						

FIGURE 6c (3952 MAIN/3952 AUXILIARY) Configuration Requirements

# REDUNDANT SERIAL HIGHWAY



Configuration using multiple 3952's and 3924's.

Refer to figure 7a, 7b, 7c and 7d.

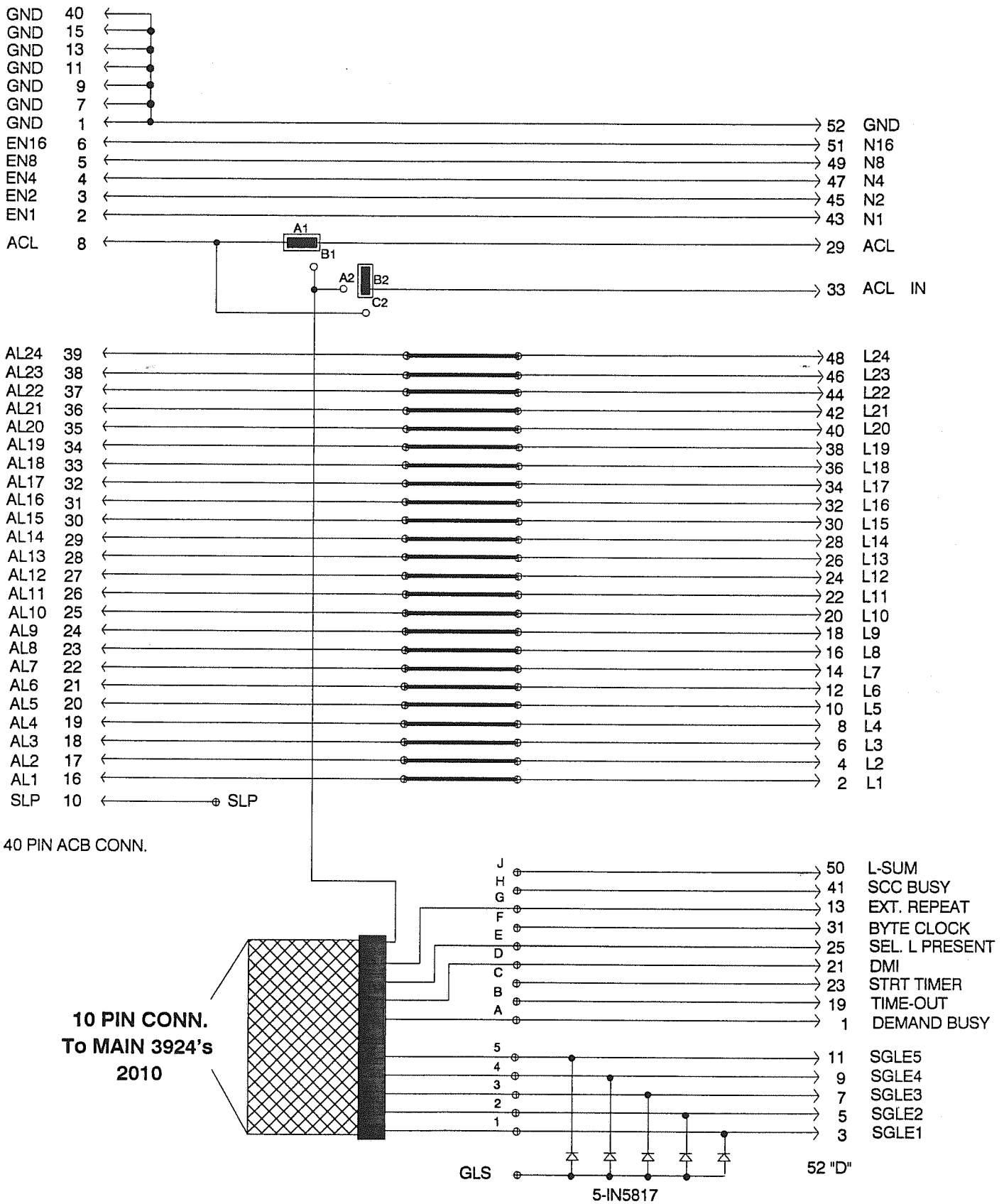


FIGURE 7a 2010 MAIN SCC

MAIN 3952 and MAIN 3924 require a 2010. Jumpers A1 and B2 are installed. The MAIN 3952's 2010 has all the LAM's Patched to the ACB. A separate 10 wire cable is used to carry signals generated by the MAIN 3924 to the MAIN 3952.

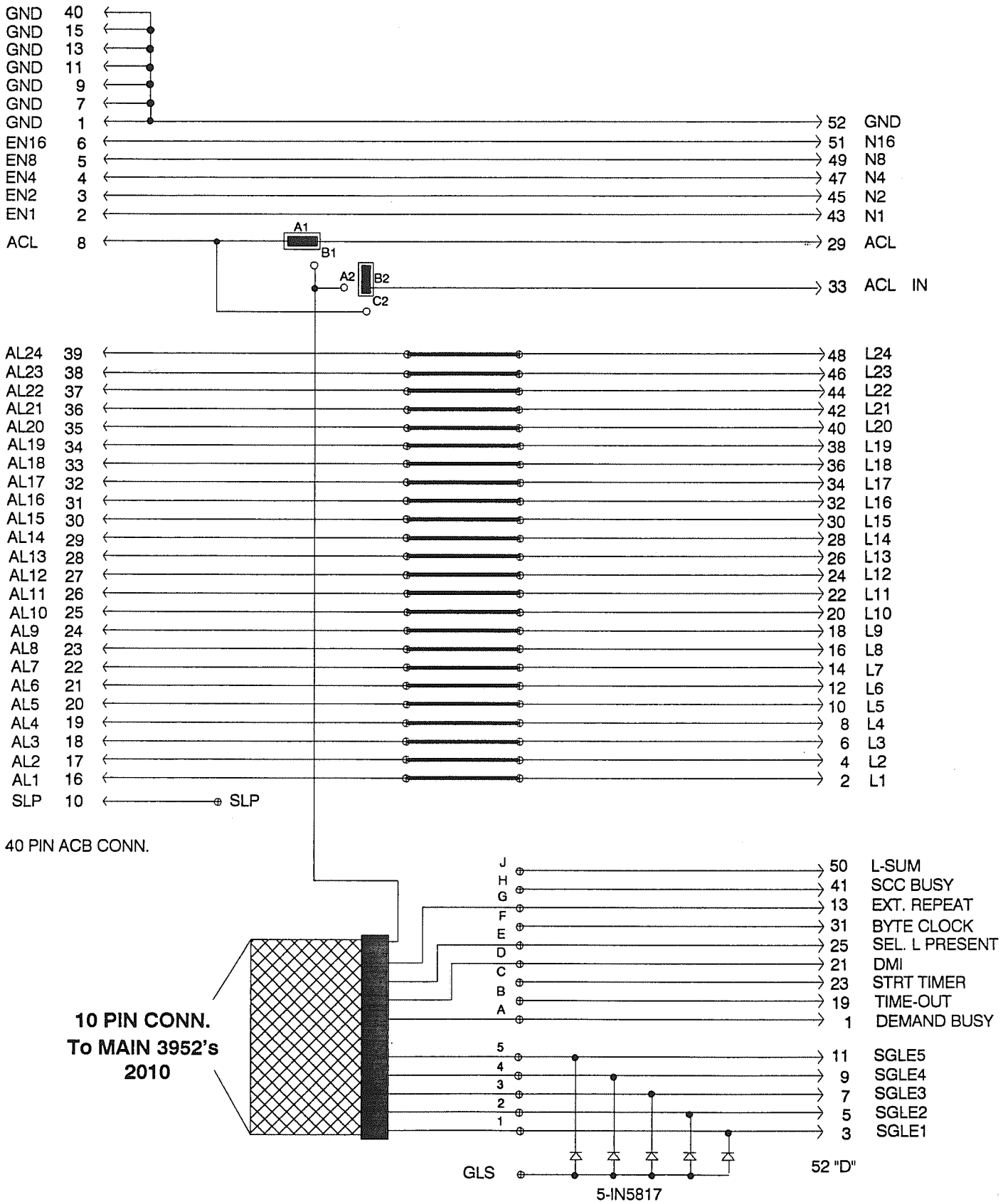


FIGURE 7b 2010 MAIN 3924

In this example, the MAIN 3924's 2010 has all the LAM's Patched. A separate 10 wire cable is used to carry signals generated by the MAIN 3924 to the MAIN 3952. Jumpers A1 and B2 are installed.

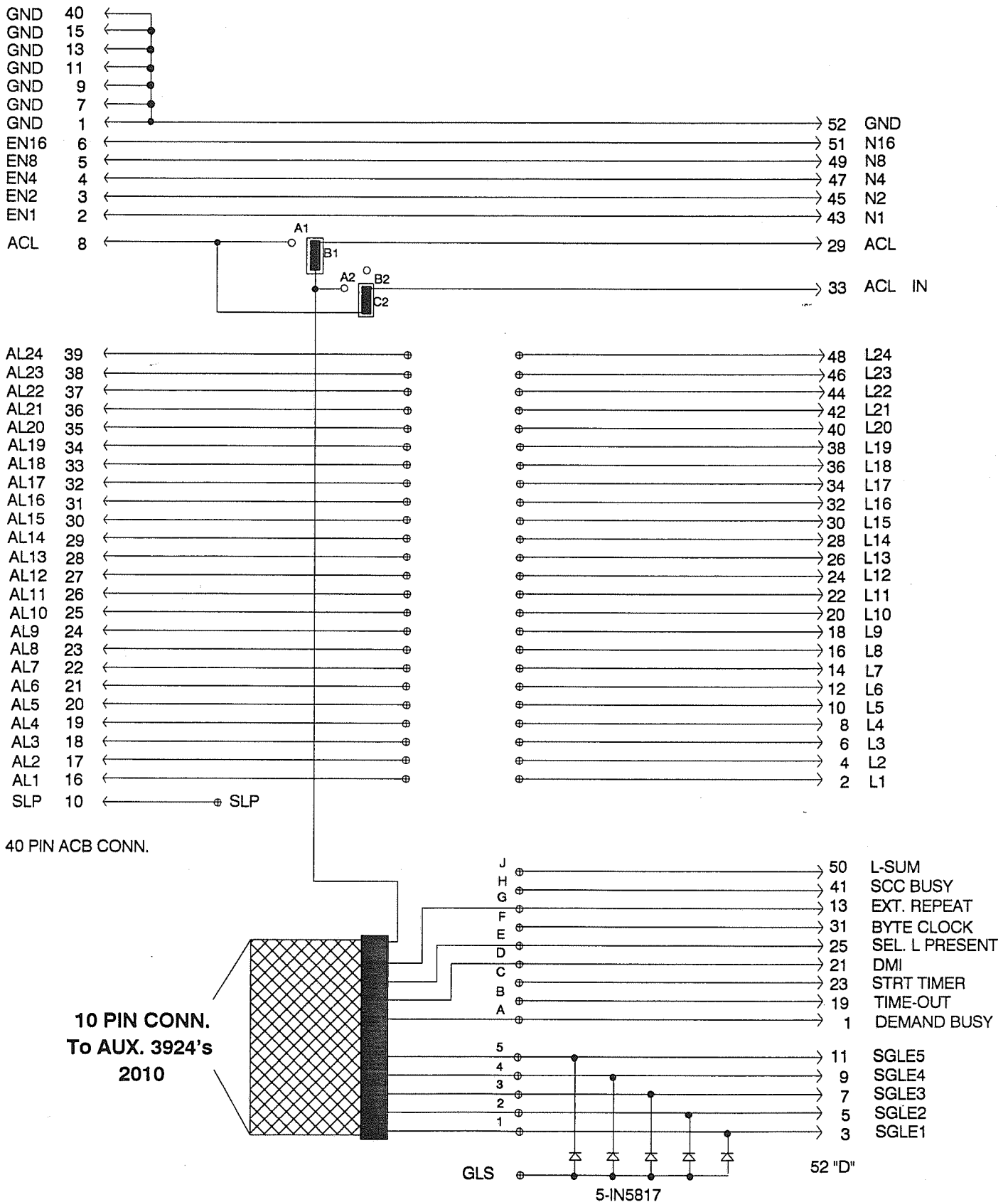


FIGURE 7c 2010 AUX. SCC

AUX. 3952 and AUX. 3924 require a 2010. Jumpers B1 and C2 are installed. The Auxiliary 3952's 2010 has no LAM's Patched from the ACB. A separate 10 wire cable is used to carry signals generated by the AUX. 3924 to the AUX. 3952.



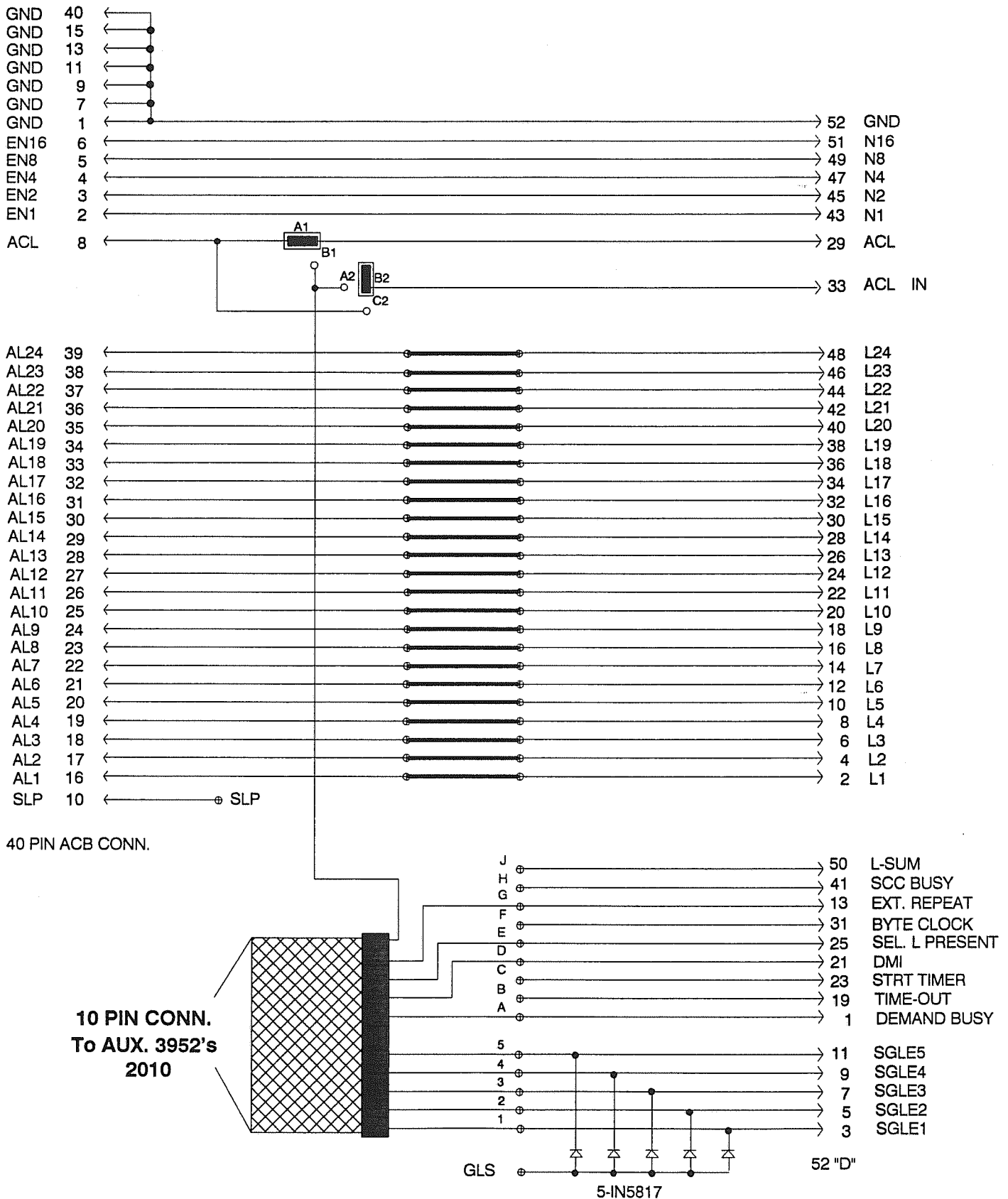
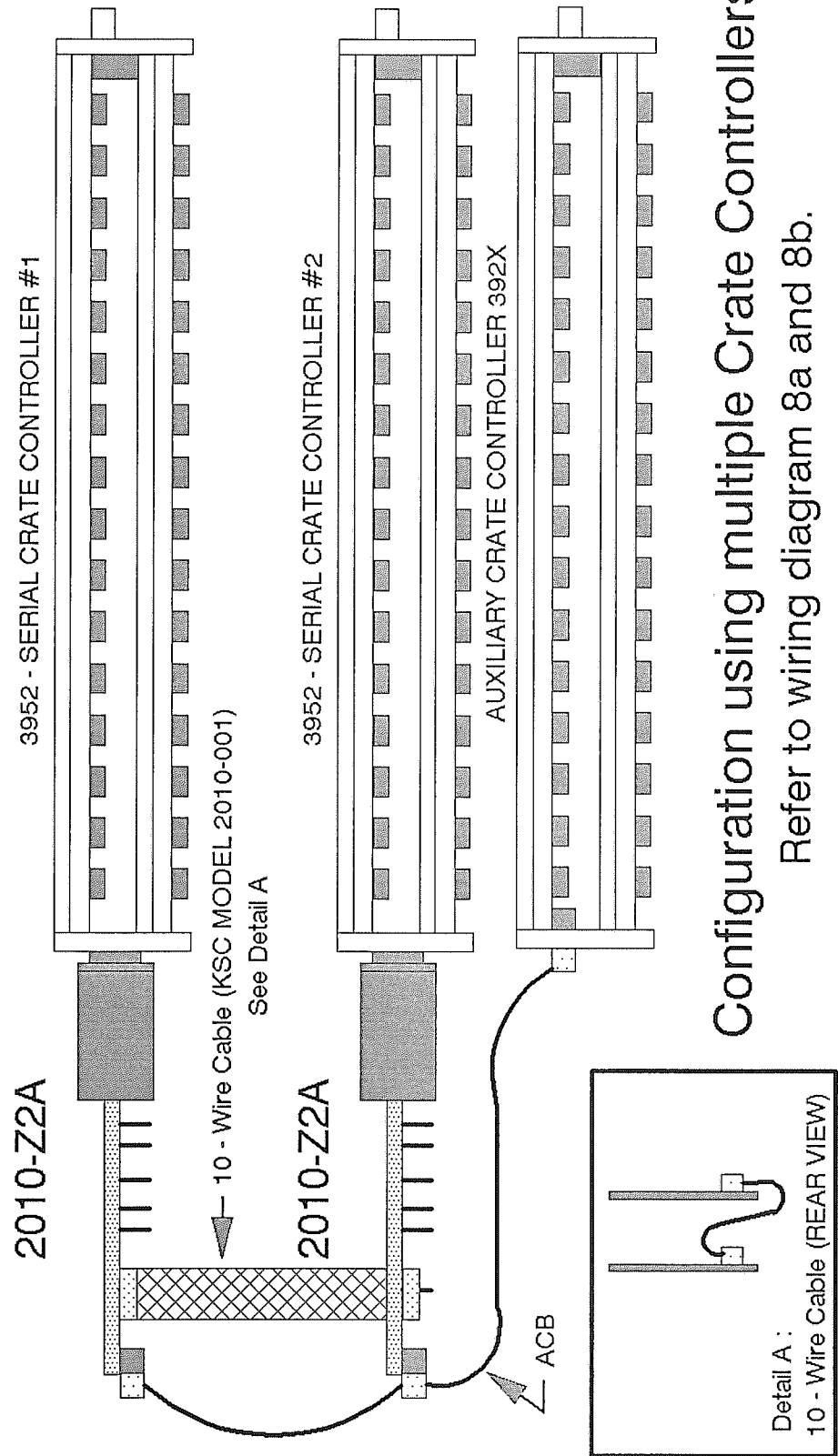


FIGURE 7d 2010 AUX. 3924

In this example, the AUX. 3924's 2010 has all the LAM's Patched. A separate 10 wire cable is used to carry signals generated by the AUX. 3924 to the AUX. 3952. Jumpers A1 and B2 are installed.

# (2) 3952's and (1) 392X



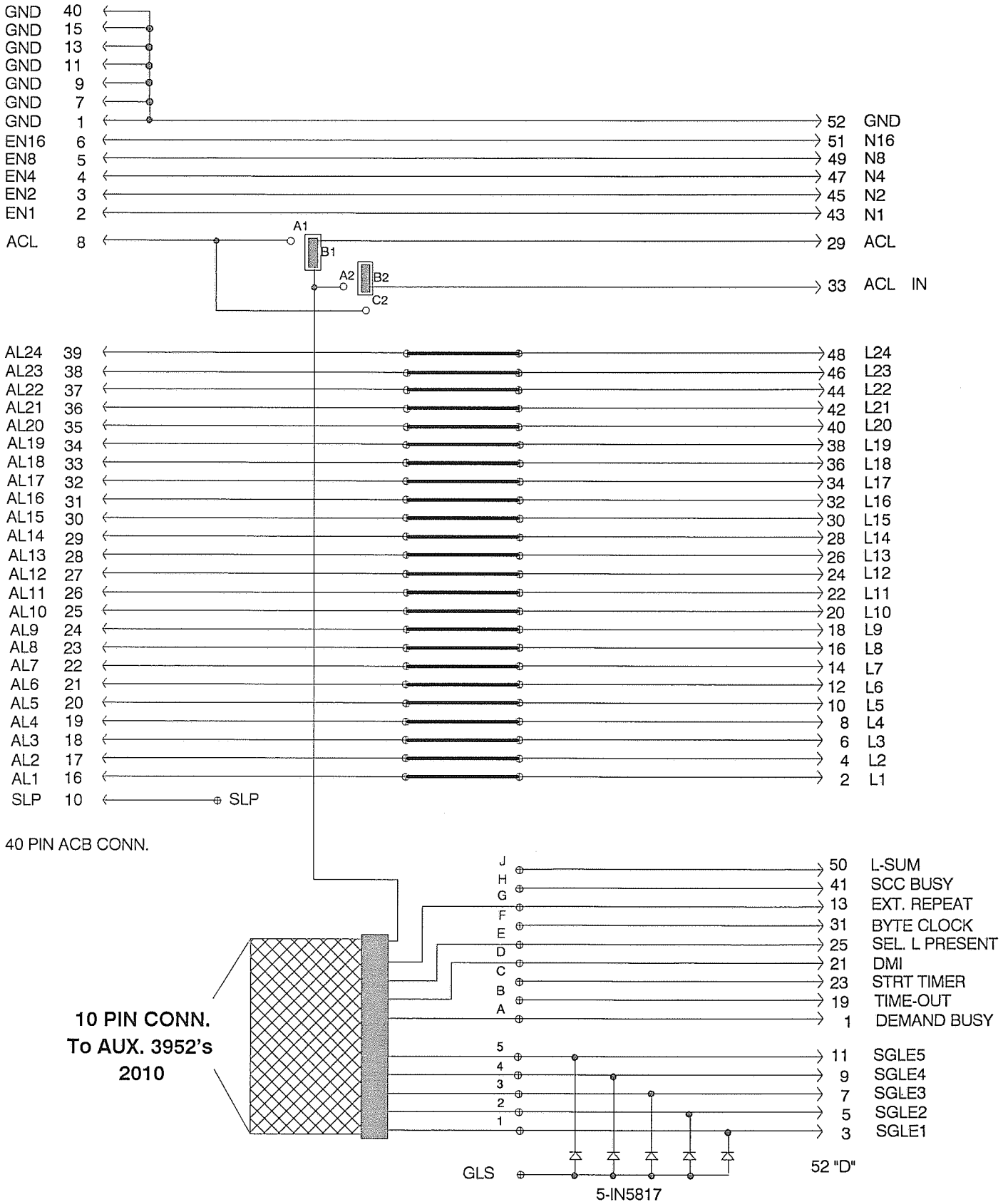


FIGURE 8a (3952 MAIN/3952 AUX/ 392X AUX)

MAIN 3952 and AUX. 3952 require a 2010. Jumpers B1 and B2 are installed. The MAIN 3952's 2010 has all the LAM's Patched to the ACB. A separate 10 wire cable is used to carry signals generated by the MAIN 3952 to the AUX. 3952.

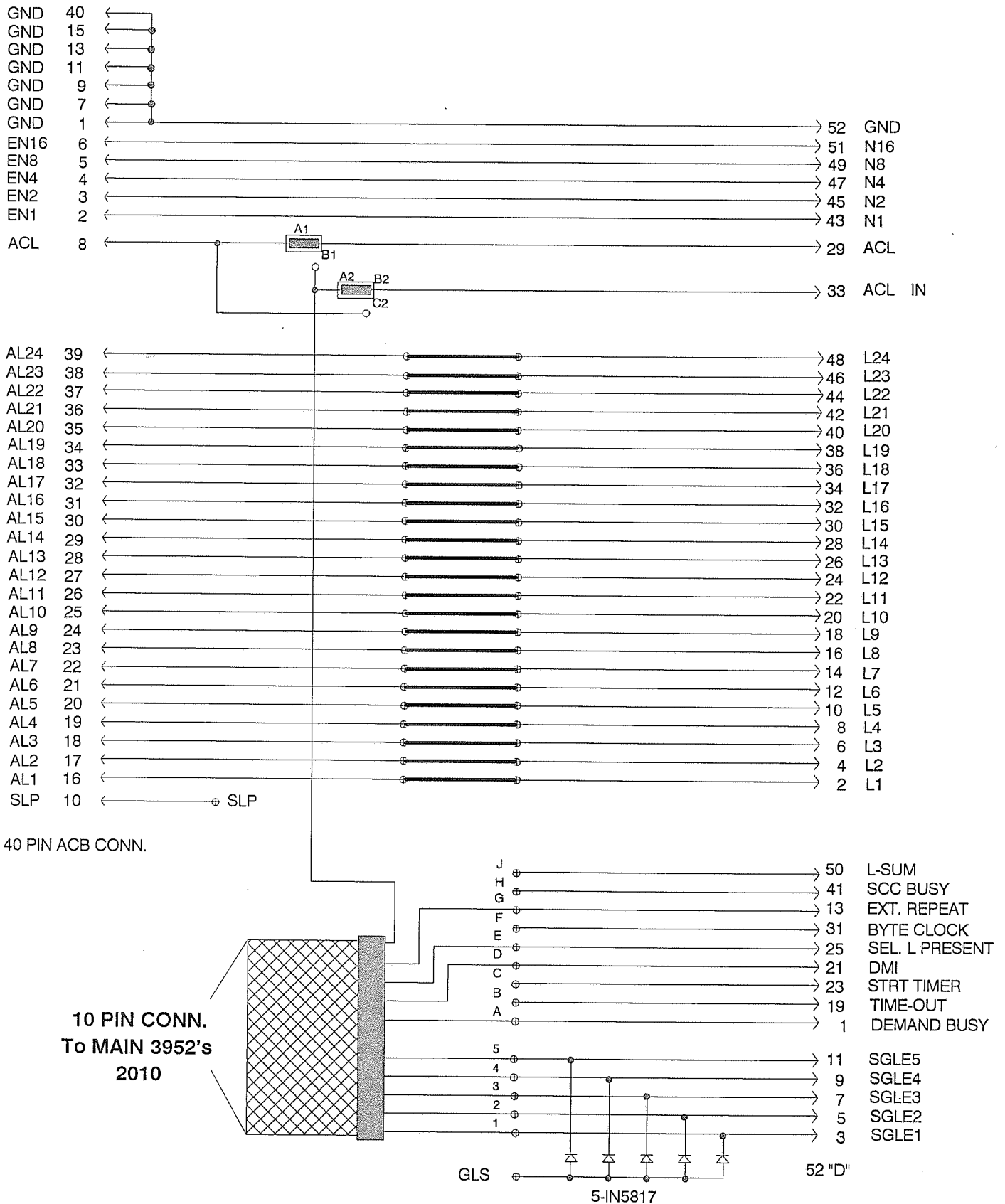


FIGURE 8b 2010 AUXILIARY SCC

MAIN 3952 and AUX. 3952 require a 2010. Jumpers A1 and A2 are installed. The AUX. 3952's 2010 has all the LAM's Patched to the ACB. A separate 10 wire cable is used to carry signals generated by the MAIN 3952 to the AUX. 3952.