

## PRECISION REFERENCE MODIFICATION

(KITS: MODEL 73447J, MODEL 73492)

**PCB 46S02270-0010 SCHEMATIC 45S02270-0010**

### DESCRIPTION

This modification is one of a series available for Louis Allis Saber DC drives. It consists of components necessary for modifying the basic Controller for a precision reference circuit. It also includes a modification overlay for the basic schematic in the Controller instruction manual.

This modification provides a highly stable (low temperature drift) reference source capable of delivering  $\pm 10V$  at 40mA maximum load on each polarity output.

### INSTALLATION

#### WARNING

REMOVE ALL INPUT POWER TO DRIVE BEFORE INSTALLING MODIFICATION KIT.

The modification PCB is to be installed to the Volt/Speed Main PCB, as shown in Figure 1, after removing the jumper plug from 8CONN. Installation instructions are contained in the Controller instruction manual.

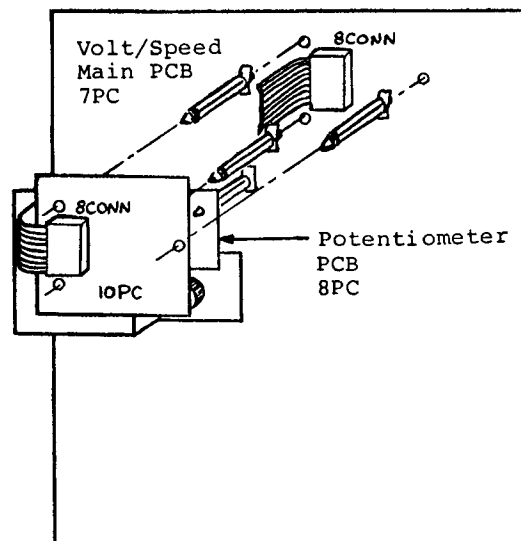


Figure 1.

#### CHANGE RECORD

1	STD-1430	3/4/82
2	STD-2666	2-3-82 RR
3	STD-2733	3-20-82 RCD

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After installing the modification PCB, apply the overlay to the basic schematic diagram as described in the Controller instruction manual.

#### INTERCONNECTION

No interconnections are required for this modification.

#### ADJUSTMENTS

1. Apply AC power to the drive.
2. Adjust TRIM potentiometer for -10.0V from 3TP to 2TP (common).

#### MODIFICATION RECORDS

After completing installation of all modifications:

- A. Modify the Controller identification number using Method 1 in the Controller instruction manual. Insert the appropriate designator in block 3.
- B. If not already present, affix the OPTION ADJUSTMENTS label to the inside of the Power Cube cover, to the right of the STANDARD ADJUSTMENTS label.

C. On the OPTION ADJUSTMENTS label, record the final settings of all pots or switches on this modification.

D. Insert this instruction sheet immediately behind the front cover of the Controller instruction manual.

#### TROUBLESHOOTING

Troubleshooting consists of checking the input and output voltages of the circuit.

If other mod boards have been installed, troubleshoot them thoroughly before discarding this board as faulty.

1. With Mod PCB removed, and power applied, measure the input voltage from 8CONN(14) to 8CONN(7). Voltage should be  $+15V \pm 75V$ . Measure the input voltage from 8CONN(1) to 8CONN(7). Voltage should be  $-15V \pm 75V$ . If voltages are not present, check Volt/Speed Main PCB  $\pm 15V$  supply voltages or interconnect cable.

2. With mod PCB in place, check outputs from 1TP to 2TP. They should be +10V and -10V respectively. If not, replace the Precision Reference PCB or connector 8CONN.

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