



02-029B
2 May, 2007

INSTALLING DIODE MODIFICATION FOR VALVES IN M300E

I. PURPOSE:

A failure of the M300E valve driver board has been traced to insufficient snubbing of the IZS valve drive coil especially when disconnecting the valve wiring when the valve is energized. The addition of a diode in the cable between the valve driver board and the valves cures this problem.

II. TOOLS:

#2 Phillips head screw

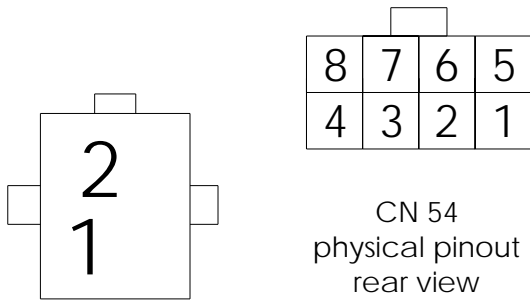
III. PARTS:

Teledyne API PN#04386-0000 Quantity one each per valve

IV. PROCEDURE:

1. Remove power to the analyzer.
2. Remove top cover from the analyzer.
3. Locate the IZS valves in the chassis.
4. Verify that the wiring between the valve driver board and the connectors for each of the valves is proper per the table below. Please use the illustrations below to identify the proper pin number.

IZS Valves		SNs <99 Valve Driver (03134)		SNs 100> Valve Driver (04134)	
Valve	Pin	Jack	Pin	Jack	Pin
Sample	1	J7	1	J7	2
	2		2		4
Span	1	J8	1		6
	2		2		8
Shutoff	1	J9	1		5
	2		2		7



5. For each valve you will have to follow the cable from the valve to the connector. In each case you must separate the two halves of the connector and insert the Teledyne API PN#04386-0000 patch cable inline with the valve wires.
6. Install the cover and the analyzer is ready to return to normal operation.