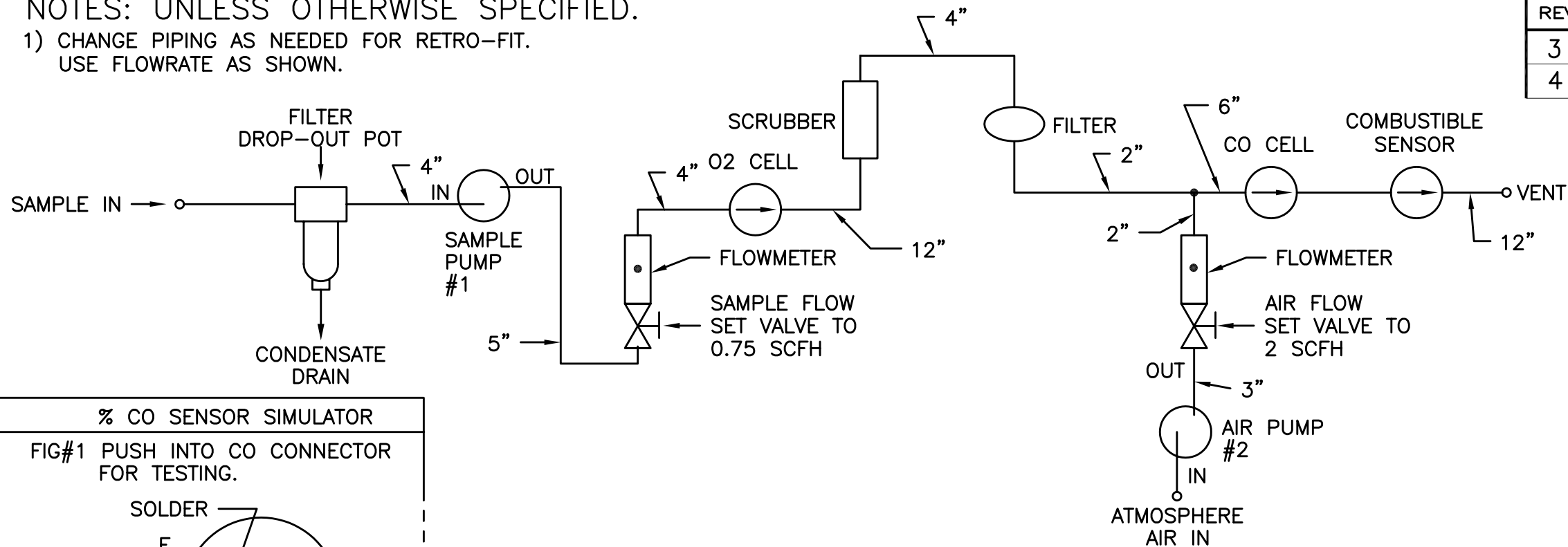


NOTES: UNLESS OTHERWISE SPECIFIED.

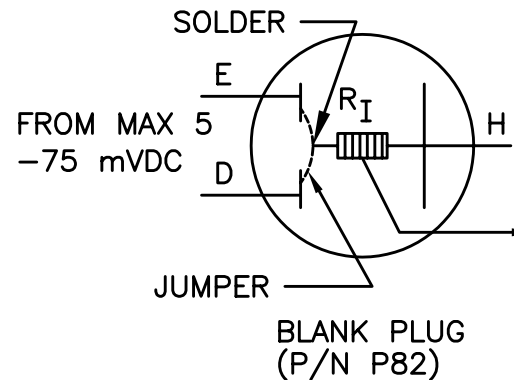
1) CHANGE PIPING AS NEEDED FOR RETRO-FIT.
USE FLOWRATE AS SHOWN.



REVISIONS				
REV	DESCRIPTION	DATE	APP.	REV. BY
3	ECO 89-0051	3/22/89	CWB	--
4	INC ECO 96-1210	1/16/97	S.B.	VF

% CO SENSOR SIMULATOR

FIG#1 PUSH INTO CO CONNECTOR FOR TESTING.



$R_{I1} = 49.9$ (P/N R385)	$R_{I2} = 100\Omega$ (P/N R443)
= 1.5mADC	= 0.75mADC
= 2.5% CO	= 1.25% CO

*FOR ANALOG PCB-4 OR LOWER USE PROCEDURE (A)
SEE DIGITAL CIRCUIT WARNING IN MAX5 MANUAL! STATIC SENSITIVE!

(A) RETRO-FIT TO % CO UNIT

REPLACE: U6 IC WITH P/N A-41475- MICROPROCESSOR PCB (D-38584)
CO. SECT. - R4 AND R13 WITH 1.5K (P/N R427) ANALOG PCB (C-38370)
COMB. SECT. - R12 WITH 4.02K Ω (P/N R452) ANALOG PCB (C-38370)
- R23 TO 100K Ω (P/N R358) ANALOG PCB (C-38370)

RE-ADJUSTMENT/TESTING:

- ① WITH A INPUT OF 1.5 mADC. (SEE FIG #1) CO SECTION-PCB C-38370
- ② ADJUST P1-SLIDER (J7-7) TO 4.5 VDC.
- ③ ADJUST MAX 5 DISPLAY TO 2.5% CO. (SPAN AFTER ZEROING UNIT)
- ④ WITH AN INPUT OF 0.75mADC. (SEE FIG #1)
- ⑤ MAX 5 DISPLAY SHOULD READ 1.25% CO $\pm 2\%$ FS
- COMB. SECTION ⑥ ADJUST P2 (ZERO POT) AT J7-8 TO 2 VDC WITH AIR INPUT.
- ⑦ ADJUST P5 (SPAN POT) AT J7-8 TO 4.5 VDC WITH 5% CH4 INPUT.
- ⑧ REPEAT AS NEEDED! STEP #6 AND #7

SEE TABLE FIG.#2 FOR OTHER %CH4 USING COMB. SENSOR

COMB. SECTION
FIG#2 USING SPAN GAS OTHER THAN 5% CH4
ADJUST P3 AT J7-8 TO VOLTAGE LISTED.
CH4 (METHANE)

5%	= 4.50 VDC ± 90 mVDC
4.75%	= 4.28 VDC ± 85 mVDC
4.50%	= 4.05 VDC ± 81 mVDC
4.25%	= 3.83 VDC ± 76 mVDC
4%	= 3.60 VDC ± 72 mVDC
3.75%	= 3.38 VDC ± 67 mVDC
3.50%	= 3.15 VDC ± 63 mVDC
0% COMB	= 2 VDC
5% COMB	= 4.5 VDC

* FOR ANALOG PCB -5 OR HIGHER
USE PROCEDURE (B)
(B) RETRO-FIT TO % CO UNIT
REPLACE: U6 IC WITH P/N A-41475
ON MICROPROCESSOR PCB D-38584.

CO SECTION:

R4 AND R13 WITH 1.5K P/N R427
(ANALOG BOARD)

COMB SECTION:

R12 WITH 4.02K P/N R452 (ANALOG BOARD)
R23 WITH 100K P/N R358

RE-ADJUSTMENT/TESTING:

- ① WITH INPUT OF 1.5mA (SEE FIG 1)
AT J7-7 (ANALOG BOARD).
YOU SHOULD READ 4.40V TO 4.60VDC
- COMB. SECTION:
② ADJUST P2 (ZERO POT) AT J7-8 FOR
1.90 TO 2.10 VDC WITH AIR INPUT
- ③ ADJUST P5 (SPAN POT) AT J7-8 FOR
4.40V TO 4.60 VDC WITH 5% COMB.
INPUT
- ④ REPEAT AS NEEDED STEP #2 AND #3

ITEM	QTY	PART No.	DESCRIPTION
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BILL OF MATERIAL

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TOLERANCE UNLESS OTHERWISE SPECIFIED: ANGULAR $\pm 1/2^\circ$	<p>Teledyne Analytical Instruments A business unit of Teledyne Electronic Technologies CITY OF INDUSTRY, CALIFORNIA 91748</p>
LINEAR { .X = ± 0.1 .XX = ± 0.02 .XXX = ± 0.010	

S/	SIGNATURES	DATE	TITLE	SCALE	NTS
N/	DRFT: <i>VFg</i>	1/14/97	SCHEMATIC, PIPING MAX5 MONITOR PERCENT CO/ REFTR0-FIT	SIM	B-39430
I/	CHK: M. VENEGAS	1/15/97			
P/	APPR:				
O/	ENGR:		MATL. -----	DWG NO.	REV
F/ D-39218	S.O.:				
REFERENCE	CAD I.D. 43108RF4				
				SHEET 1 OF 1	
				B-43108RF 4	