

DATE	TIME	BY	REVISION HISTORY
10/07/81	11	...	RELEASED FOR TOOL STAMPS
11/03/81	12	...	UNLION HAS ORDER (SEE SHEET #1)
12/09/81	13	...	GROUND HAS LIMITER (SEE SHEET #1)
01/05/82	14	...	RELEASED FOR PRODUCTION
02/01/82	15	...	0013 REV'D. REV ASSES + PLS
02/01/82	16	...	0013 REV'D. REV ASSES + PLS
02/01/82	17	...	NOTE REV'D
02/01/82	18	...	REV ASSES 2 PLACES
02/01/82	19	...	REV ASSES 2 PLACES
02/01/82	20	...	REV ASSES 2 PLACES
02/01/82	21	...	REV ASSES 2 PLACES
02/01/82	22	...	REV ASSES 2 PLACES
02/01/82	23	...	REV ASSES 2 PLACES
02/01/82	24	...	REV ASSES 2 PLACES
02/01/82	25	...	REV ASSES 2 PLACES
02/01/82	26	...	REV ASSES 2 PLACES
02/01/82	27	...	REV ASSES 2 PLACES
02/01/82	28	...	REV ASSES 2 PLACES
02/01/82	29	...	REV ASSES 2 PLACES
02/01/82	30	...	REV ASSES 2 PLACES
02/01/82	31	...	REV ASSES 2 PLACES
02/01/82	32	...	REV ASSES 2 PLACES
02/01/82	33	...	REV ASSES 2 PLACES
02/01/82	34	...	REV ASSES 2 PLACES
02/01/82	35	...	REV ASSES 2 PLACES
02/01/82	36	...	REV ASSES 2 PLACES
02/01/82	37	...	REV ASSES 2 PLACES
02/01/82	38	...	REV ASSES 2 PLACES
02/01/82	39	...	REV ASSES 2 PLACES
02/01/82	40	...	REV ASSES 2 PLACES
02/01/82	41	...	REV ASSES 2 PLACES
02/01/82	42	...	REV ASSES 2 PLACES
02/01/82	43	...	REV ASSES 2 PLACES
02/01/82	44	...	REV ASSES 2 PLACES
02/01/82	45	...	REV ASSES 2 PLACES
02/01/82	46	...	REV ASSES 2 PLACES
02/01/82	47	...	REV ASSES 2 PLACES
02/01/82	48	...	REV ASSES 2 PLACES
02/01/82	49	...	REV ASSES 2 PLACES
02/01/82	50	...	REV ASSES 2 PLACES

NO	TYPE	DESCRIPTION	FUNCTION	P/S	DATE
1	1177	LOADING	SAFETY COMPLIANCE	1	11/03/81
2			S/C CHECKPOINTS	3	12/09/81
3			F/F CHECKPOINTS	3	01/05/82

KEY PRODUCT CHARACTERISTICS	INITIAL OR REVISION NO.	DATE
SAFETY COMPLIANCE	1	11/03/81
S/C CHECKPOINTS	3	12/09/81
F/F CHECKPOINTS	3	01/05/82

NOTES:

1.0 INPUT REQUIREMENTS

1.1 THIS METER IS TO BE MOUNTED ON THE CLEAN AIR SIDE OF THE AIR CLEANER ASSEMBLY.

1.2 THE FLOW SHALL BE IN THE DIRECTION AS SHOWN AND SHALL ENTER THE TUBE WITH A UNIFORM VELOCITY PROFILE.

1.3 IGNITION VOLTAGE APPLIED SHALL BE BETWEEN 11 AND 16 VOLTS. THE SENSOR SHALL NOT DRAW MORE THAN 1.0 AMPS AT 13.5 VOLTS APPLIED.

2.0 DESIGN PERFORMANCE REQUIREMENTS

2.1 THIS METER MUST CONFORM TO ES-7516

2.2 THE LEAKAGE RATE MUST NOT EXCEED 0.350 liters/min at 6.5 kPa 15k

2.3 WITH A 1.2 K OHM RESISTOR FROM TERMINAL "F" TO A 5V SUPPLY. THE VOLTAGE ON TERMINAL "F" SHALL SWITCH FROM LESS THAN 0.5 VOLTS TO GREATER THAN 4.5 VOLTS AT A FREQUENCY INDICATED IN THE CHART SHOWN IN 2.4 BELOW.

2.4 THE CHART REPRESENTS THE OUTPUT FREQUENCY WHEN MEASURED AT 22°C ± 0.5°C RELATIVE HUMIDITY OF 50% ± 10% AT A SUPPLY VOLTAGE OF 13.5 ± 0.1V. USING 10 DIAMETER DUCTING. (REF ES-7516)

2.5 APPLICATION SPECIFIC DUCTING MAY RESULT IN CHANGES TO THE MEAN FREQUENCY, SLOPE, AND 3σ VALUES. CONTACT DELPHI ENGINEERING TO DETERMINE THE ACTUAL VALUES FOR A SPECIFIC APPLICATION.

ATS OUTPUT CHART

TEMPERATURE (°C)	RESISTANCE (OHMS)	PERCENT OF FULL SCALE
40	100707.6	99.01
35	72450.8	59.64
30	52684.9	43.12
25	38689.1	31.45
20	28877.7	23.63
15	21477.9	17.35
10	16178.9	13.18
5	12289.4	9.24
0	9423.1	7.04
5	7582.4	6.18
10	5971.7	4.86
15	4449.7	3.61
20	3152.4	2.57
25	2095.8	1.73
30	1537.8	1.26
35	1161.9	0.94
40	845.2	0.69
45	638.3	0.52
50	492.76	0.4
55	373.50	0.3
60	285.84	0.23
65	219.74	0.18
70	169.54	0.14
75	129.53	0.11
80	99.03	0.08
85	75.03	0.06
90	57.03	0.05
95	43.03	0.04
100	33.03	0.03
105	25.03	0.02
110	19.03	0.02
115	14.03	0.01
120	10.03	0.01
125	7.03	0.01
130	5.03	0.00
135	3.03	0.00
140	2.03	0.00
145	1.03	0.00
150	0.03	0.00

FLOW (Q/M)	MEAN FREQUENCY (Hz)	SLOPE (Hz/g/b)	LOWER (Hz)	UPPER (Hz)
3.5	2170	261.95	210.23	2176.09
5.0	2509	197.75	2502.93	2915.49
6.5	2784	166.45	2777.89	2789.84
9.0	3158	133.91	3150.40	3166.19
12.0	3528	110.60	3518.50	3536.42
16.0	3918	86.54	3906.09	3929.08
20.0	4236	72.81	4216.23	4256.64
30.0	4879	56.15	4845.92	4912.85
40.0	5400	47.02	5340.80	5440.04
55.0	6020	36.83	5974.04	6085.13
75.0	6743	31.10	6684.16	6743.88
100.0	7383	23.74	7365.24	7401.06
135.0	8157	19.95	8131.68	8182.43
185.0	9057	16.09	9019.61	9093.57
250.0	9980	12.84	9945.82	10011.97



OUTLINE DWG