



**TELEDYNE
INSTRUMENTS**

Advanced Pollution Instrumentation

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Service Note

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**M300 HIGH FLOW OPTION FOR ANALYZERS WITHOUT IZS OPTION
FIELD INSTALLATION PROCEDURE**

Scope: To provide instructions for a field retrofittable kit to double the sample flow through the white cell. The purpose of this modification is to reduce response time of the M300. Target response time is 0 to 100% in less than 60 seconds.

Parts:

Part Number	Description	Quantity
00176-04	FLOW CONTROL, 80OCC/MIN	1
FT-12	1/4 X 1/8 MALE CONNECTOR, SS	2
FT-17	1/4 X 1/8 MALE 90 ELBOW, SS	1
FT-35	TEE, TTT, B, 1/4"	2
FT-45	FERRULE, FRONT, B, 1/4"	1
FT-46	FERRULE, REAR, B, 1/4"	1
FT- 113	NUT, B, 1/4"	3
FT- 1 15	G 4 PC	2
TU-6	TUBING, CLEAR, FEP, 1/4"	48
FT-67	TUBE FITTING	6

Procedure:

See attached drawing for correct pneumatic diagram. Remove 1/8" tube from sample filter housing to elbow on bench. Remove 1/8" tube from sample inlet bulkhead to filter housing. Remove 2 ea. 1/8" fittings from sample filter housing. Remove 1/8" elbow from bench (located next to filter housing). Install 1/4" elbow (FT-17) into bench hole next to filter housing. Install 1/4 " fittings (FT- 1 2) into sample filter housing. Install 3 " long, 1/4 " tube from filter housing to bench. Install 20" long, 1/4" tube from filter housing to sample bulkhead. Disconnect tube from flowmeter to tee on bench at the tee. Using a nut, (FT-113), connect an FT-115 to the tee on the bench. Using a nut, and front and rear ferrules, connect a tee, (FT-35), to the unused end of the FT-115 on the bench tee. Connect tube from flowmeter to one side of the newly installed tee. Remove the orifice housing from the pump elbow fitting. Using a nut, (FT-113), connect an FT-115 to the elbow on the pump. Using a nut, and front and rear ferrules, connect a tee, (FT-35), to the unused end of the FT-115 on the pump. Connect existing and new orifice housings to the ends of the tee just installed. Connect a 12 " long, 1/4 " tube from the tee on the bench to the unconnected orifice housing. Contact the Factory if there are any questions or difficulties.

After installing the high flow option, do a leak check of the analyzer to make sure there are no pneumatic problems. Then run the quick cal procedure on the analyzer.

