



CALIFORNIA AIR RESOURCES BOARD

*MONITORING AND LABORATORY DIVISION
VAPOR RECOVERY CERTIFICATION SECTION*

Proposed Vapor Recovery
Test Procedure

TP-201.4

DYNAMIC PRESSURE PERFORMANCE

Public Workshop, June 20, 2001

PRESENTATION AGENDA

- TEST METHODOLOGY
- TEST EQUIPMENT
- COMPLIANCE TESTING
- QUESTIONS, COMMENTS & SUGGESTIONS

TEST METHODOLOGY

- Includes All Test Methods Used For Certification and Compliance Tests
- Modification includes 6 Test Methods

TEST METHODOLOGY - CONTINUED

- Method 1
 - standards imposed from nozzle to UST
 - no remote vapor check valve installed
- Method 2
 - Phase II balance and Hirt VCS 200 systems
 - standards imposed from nozzle to UST
 - remote vapor check valve installed
 - vapor check valve cannot be disabled

TEST METHODOLOGY - CONTINUED

- Method 3
 - Phase II balance and Hirt VCS 200 systems
 - standards imposed from nozzle to UST
 - remote vapor check valve installed that can be disabled by removing the poppet on the fuel side
- Method 4
 - standards imposed from Phase II riser to UST
 - no vacuum-producing device between riser and UST

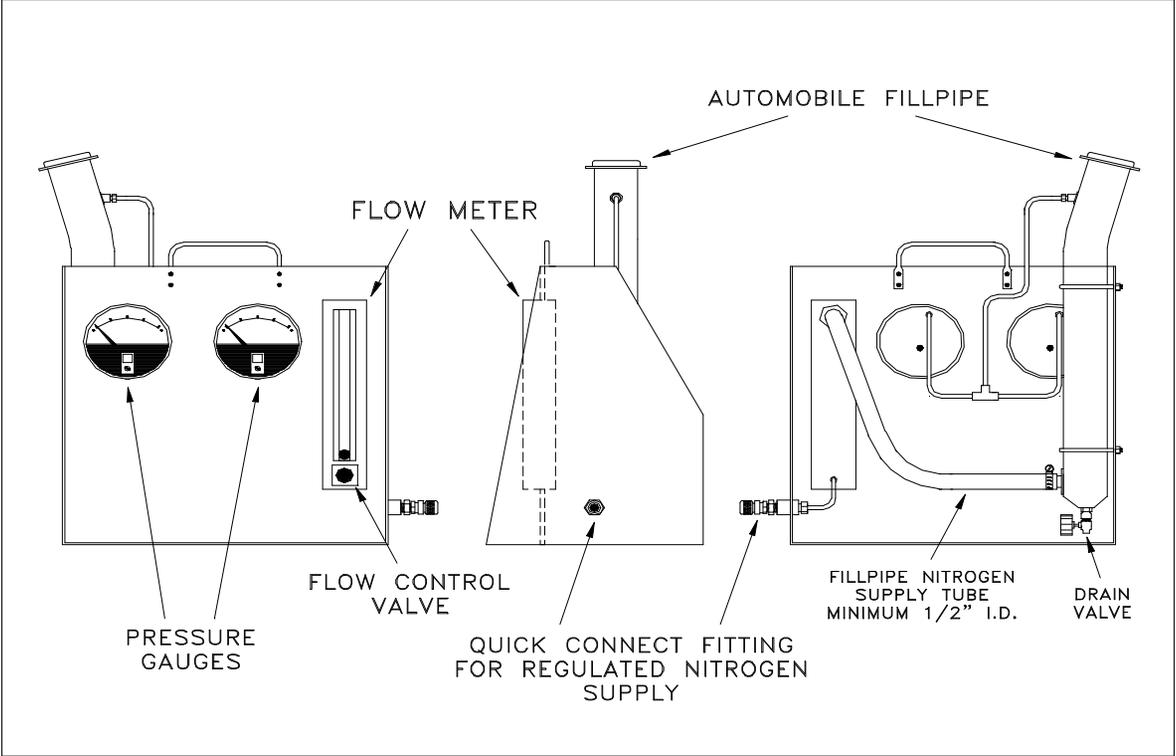
TEST METHODOLOGY - CONTINUED

- Method 5
 - bellows-equipped Phase II systems
 - standards imposed at the nozzle/fillpipe interface during vehicle fueling
- Method 6
 - verifies proper drainage of gasoline from the base of vent pipe to the UST
 - used after compliance established for system using appropriate of Methods 1-4

TEST EQUIPMENT

Methods 1, 2, 3

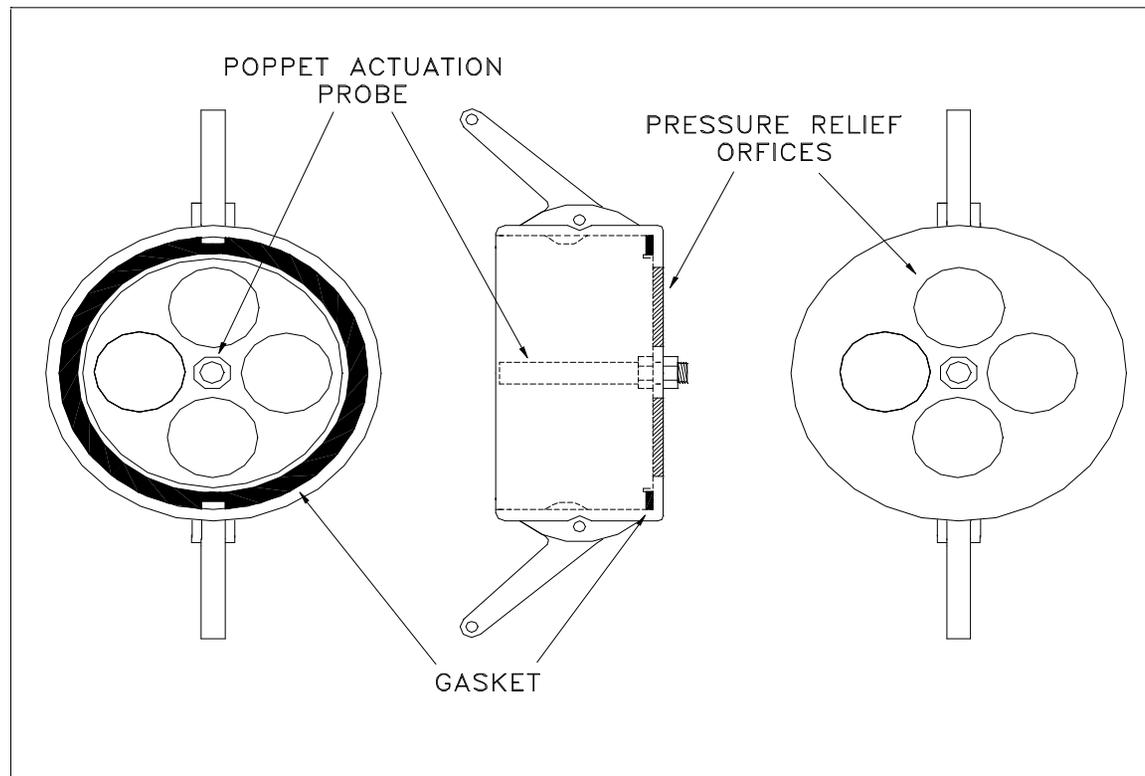
Dynamic Back Pressure Test Assembly



TEST EQUIPMENT - CONTINUED

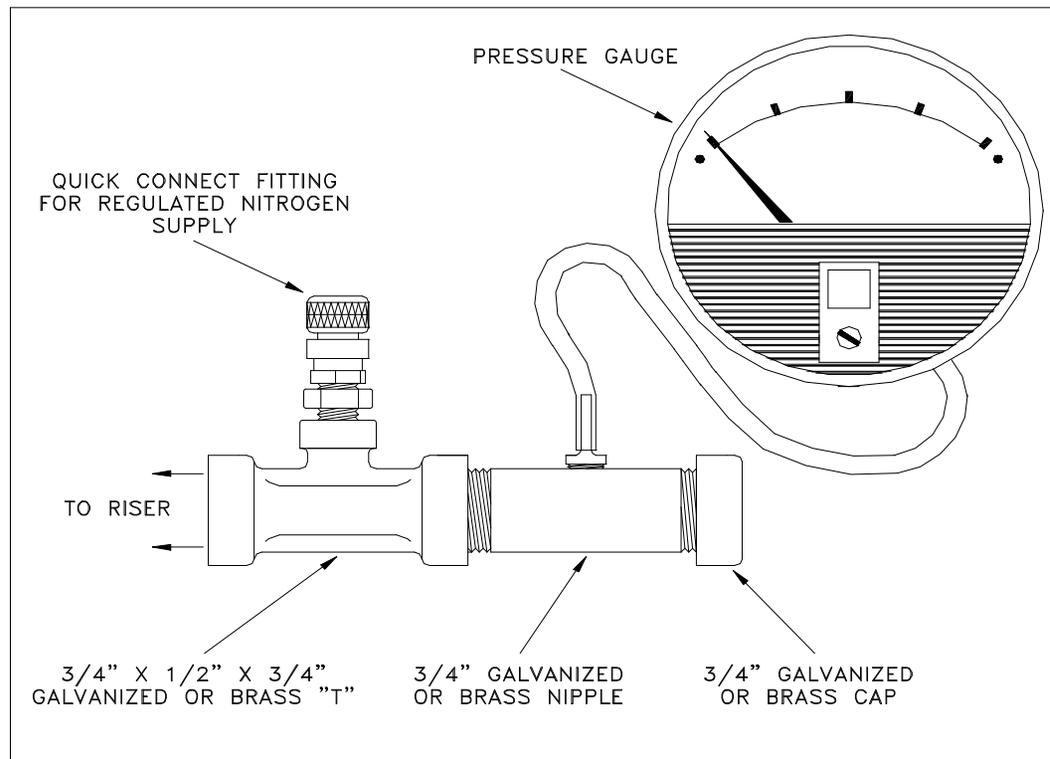
Methods 1, 2, 3, 4, 6

Dynamic Pressure Release Assembly



TEST EQUIPMENT - CONTINUED

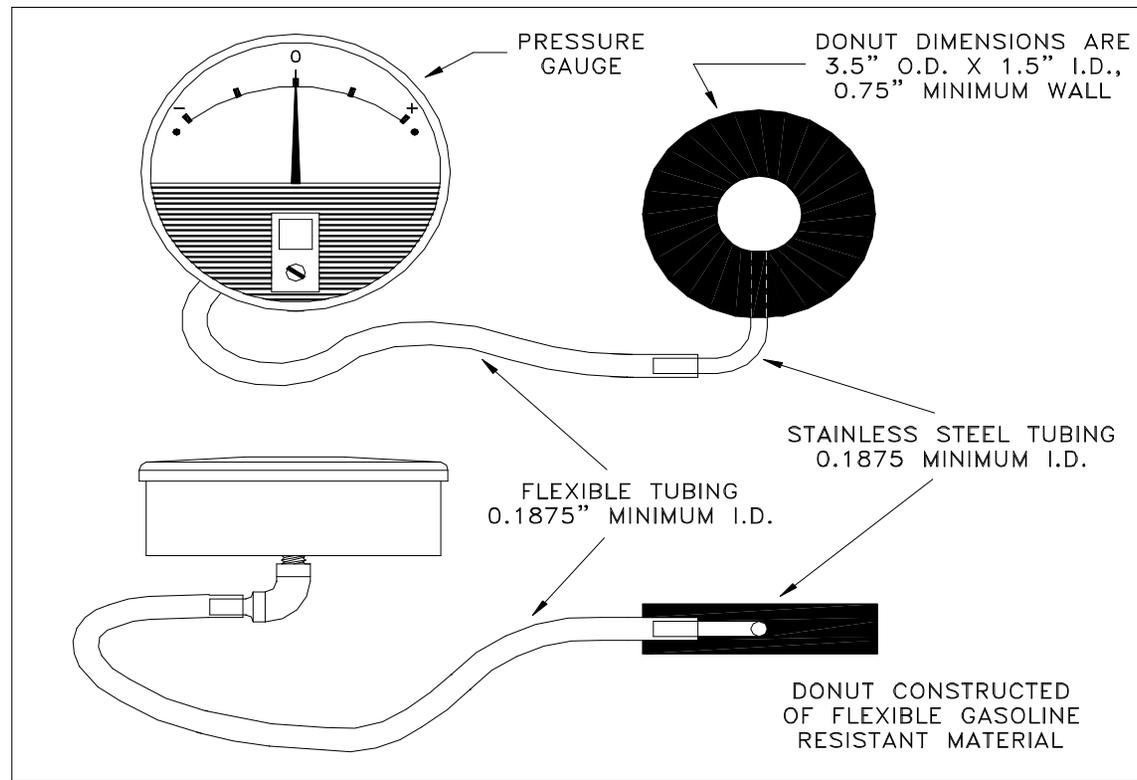
Methods 2, 4 Capped "T" Assembly



TEST EQUIPMENT - CONTINUED

Method 5

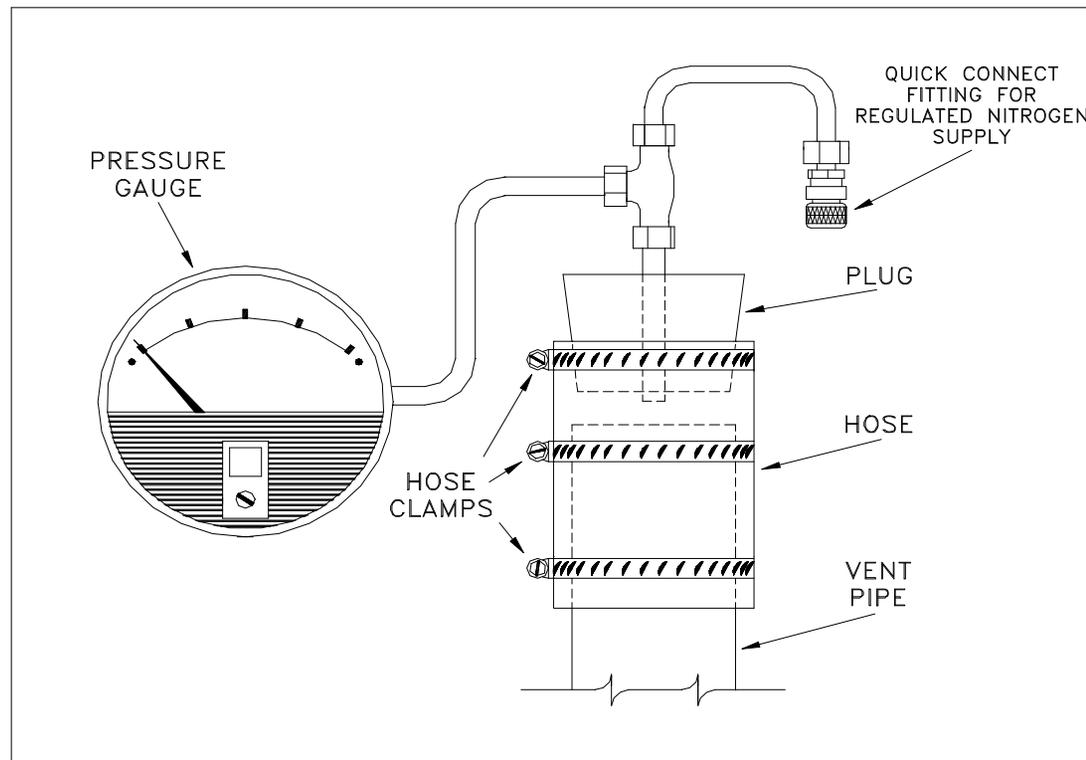
Donut Pressure Test Assembly



TEST EQUIPMENT - CONTINUED

Method 6

Vent Pipe Pressure Assembly



COMPLIANCE TESTING

- Compliance Tests = Certification Tests
- Option to Waive Requirement to Introduce Gasoline into Phase II Risers for Existing Stations
- Procedure Bias Created by Excessive Initial Flowrate Addressed

QUESTIONS, COMMENTS & SUGGESTIONS

- Written Comments
Due by **July 9, 2001**
- Send Comments To:
 - Paul Marzilli
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