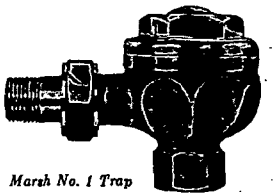
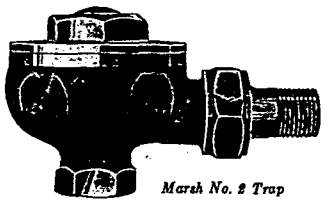
MARSH SYSTEM UNIT THERMOSTATIC RADIATOR TRAPS

Like Marsh System Unit Valves, these traps are made in two-tone lustrous polished and satin finish in either chrome or nickel. It is the function of the Marsh System Unit Radiator Trap, installed at the outlet of the radiator, to retain steam within the radiator until it has given up its heat units. It is equally essential that all water of condensate, air and gases be passed out of the radiator into the return system. This is dependent upon the sensitive operation of the thermostatic diaphragm within ranges where steam, water and air are at temperatures varying only slightly from each other.



Marsh No. 1 Trap



Marsh No. 2 Trap

Installed upon the radiator it has a second important function; that of automatically maintaining the necessary difference in pressure or vacuum between supply and return systems, assuring circulation throughout the heating system.

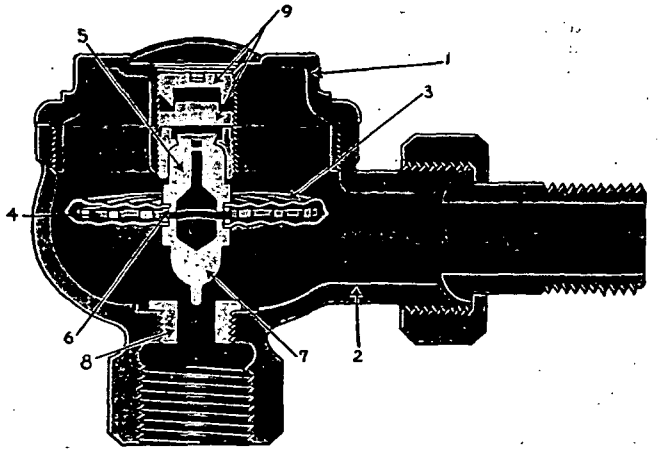
Marsh System Unit Thermostatic Traps are manufactured in two styles: The Marsh No. 1 Series, made in ½ in. connection size only, and the No. 2 Series, made in three sizes, ½, ¾, and 1 in. The No. 1 Series is obtainable in the following patterns: Angle, Straightway, Right Hand, Left Hand and Back Offset. The same patterns are supplied in the ½ in. No. 2 Series. The ¾ and 1 in. sizes of No. 2 Series have the following patterns: Angle, Right Hand, Left Hand and Back Offset.

CAPACITIES
No. 1 Series Radiator Trap

Sizes	Sq. Ft. C. I. Radiation
½" x ½" connection	150

No. 2 Series Radiator Trap

Sizes	Sq. Ft. C. I. Radiation
½" x ½" connection	200
¾" x ¾" connection	500
1" x 1" connection	1000

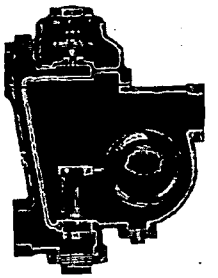


The body (2) is a steam bronze casting accurately machined and tested to 125 pounds working pressure. Modern methods of machining on all parts, including the body (2) and bonnet (1) are employed, gauged by micrometer scale with a tolerance of .007 inches. The traps are built with renewable seat (8) made of a hard brass screw machine part.

The expansible portion of the thermostatic diaphragm assembly consists of an upper and lower wafer of tinned phosphor bronze, drawn and spun to perfection of temper. The lower wafer is fastened to the valve needle (7) which consists of a tinned brass screw machine part spun and sweated to the diaphragm wafer. The upper diaphragm wafer is spun and sweated to the adjustment screw assembly consisting of two parts combined to form the adjustment screw (5) and swivel. When the two wafers are assembled, projection on both the upper post (5) and the valve needle (7) combine to form a matched fit when the diaphragm is completely compressed. An interior reinforcement arrangement (4) forms a perfect inner ring reinforcement between the upper and lower wafers.

MARSH SYSTEM UNIT TRAPS

Marsh No. 8 Drip Trap

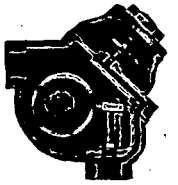


This trap is continuous in discharge and is designed to quickly remove condensation and air from drip points on steam mains, steam risers, steam coils, or blast heaters or for any like service within the capacity of the trap. The design permits a deep water seal on the discharge. The thermostatic bypass member is the same as in the Marsh No. 1 Radiator Trap. Body of trap is provided with one 1¼ in. tapped inlet and two 1¼ in. outlet openings. It may be suspended directly in the piping.

Capacities

Steam Pressure, lb.	Capacities Water per Hour, lb.
½	500
1	900
2	1400
3	1600
4	1800
5	2000
10	3200
15	4000

Marsh No. 12 Drip Trap



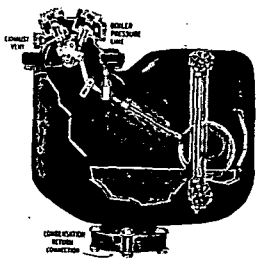
Designed for removal of air and condensation from short steam mains, branches or risers, unit heaters, steam coils, etc. Condensation is removed through a float operated valve located at the lowest point inside the body. Air removal is located in a thermostatic bypass in the cap of the trap. The thermostatic member is interchangeable with the member of the standard No. 1 Radiator Trap.

Capacities

Steam Pressure, lb.	Capacities Water per Hour, lb.
½	350
1	600
2	800
3	1200
4	1400
5	1600
10	2000
15	2800

Marsh No. 10 System Unit Equalizer and Boiler Return Trap

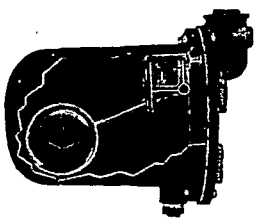
This unit, installed on Marsh Vapor Systems, performs the two functions of equalizing the vacuum between the supply and return piping and returning water to the boiler. It eliminates the installation of additional piping and guarantees protection to the boiler. This trap is made in sizes up to 10,000 sq. ft. capacity and can be installed in series for large installations.



Equalizer and Boiler Return Trap

Marsh System Unit Air Trap

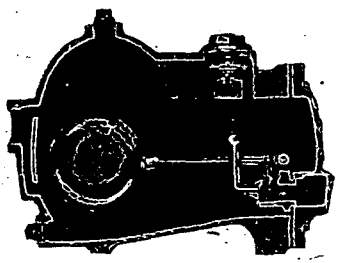
This unit vents the air from return piping of Marsh Vapor Systems. It also vents air and exhaust vapor from the return trap. A ball float mechanism permits the escape of air and prevents the leakage of water.



This trap is made in one size to handle installations up to 10,000 sq. ft. of radiation.

Marsh System Unit No. 14 Heavy Duty Trap

The Marsh No. 14 Float and Thermostatic Heavy Duty Trap is designed to handle very large volumes of water and air and for service on air heating coils, hot water and storage heaters, steam headers, large steam mains, etc.



Capacities

Size	1 lb.	3 lb.	5 lb.	10 lb.	15 lb.	20 lb.	25 lb.
1 in.	1900	3260	4180	5800	7100	8000	9200
1¼ in.	4180	7140	9170	12000	14600	17700	19700
1½ in.	6200	8400	12000	18400	24000	29450	34800
2 in.	8200	14500	19000	26500	34900	38400	44700