

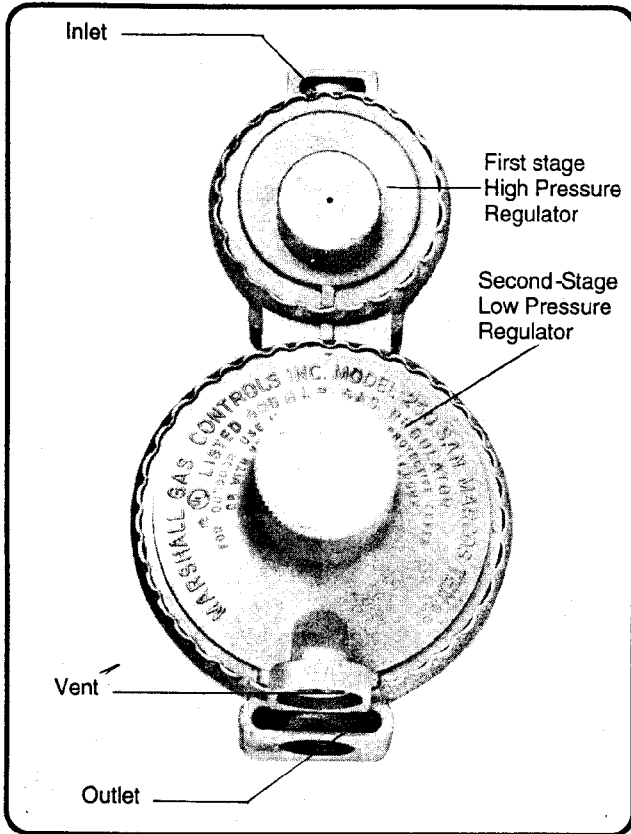


Marshall Gas Controls

PRODUCT INFORMATION

PART NO.
290-00

TWO-STAGE
L.P.G. REGULATOR



TWO-STAGE REGULATOR

SPECIFICATIONS

Capacity: 160,000 BTU per hour
 Inlet: 1/4" FNPT
 Outlet: 3/8" FNPT
 Relief: Second-stage relief mechanism per UL 144
 Vent: 6:00 and 9:00 o'clock standard
 Body: ASTM B86 AG40A
 Dimensions: 5 3/4"L. 3 1/4"W. 2 5/8"D.
 Weight: 1 lb.
 Diaphragm: High Pressure, nitrile with fabric reinforced.
 Second-stage, molded nitrile.

Regulator is listed with Underwriters Laboratories
 Mounting Holes: 3 1/2" on center

The Marshall 290 Series Integral Two-Stage Regulator is a high pressure regulator combined with a second-stage regulator. The high pressure regulator reduces the full cylinder pressure within a 10-13 psig range. The second-stage then reduces this inlet pressure down to 11 inches of water column outlet pressure (0.4 psig).

WHY TWO-STAGE REGULATION?

With single-stage regulation, the regulator functions under extreme variations of inlet pressure caused by changes in outside temperatures. As a result of these variations in inlet pressure, minor variations in outlet pressures are possible. Two-stage regulation results in a consistent inlet pressure to the second-stage, thereby minimizing minor outlet pressure variations from the second-stage regulator.

Additionally, moisture caused by water in the L.P. gas or condensation can result in ice forming at the orifice. This can result in a gas stoppage. The possibility of freeze up is greatly reduced with two-stage L.P. gas regulation.

INSTALLATION

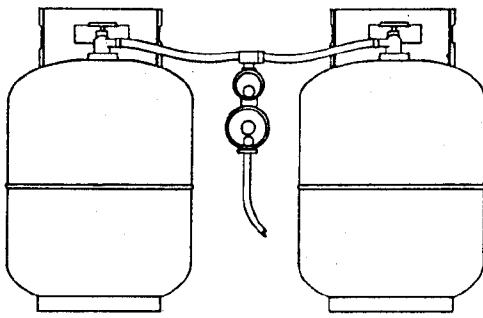
All regulators must be installed in accordance and compliance with federal, state, local codes and laws and N.F.P.A. pamphlet 58. In addition they should be protected from the elements with proper vent orientation and protective covers. See back of this sheet for typical installations.

IMPORTANT

Only qualified persons should install, adjust or service L.P. gas regulators. If service is needed, contact a qualified L.P. dealer.

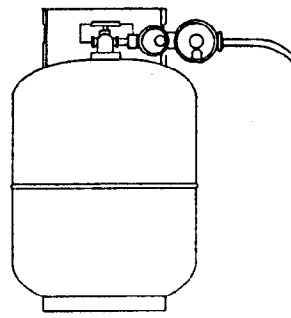
NOTE:

Low pressure regulators are designed to regulate L.P. vapor only. Use of these regulators on systems that allow liquid to enter the regulator will nullify the warranty.



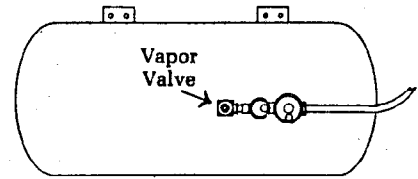
TRAVEL TRAILER

A. Vertical 290 regulator, with tee check installed, on two cylinder system with vent pointing down towards the ground.



TENT CAMPER

B. 294 regulator on single cylinder with vent pointing down towards the ground.



MOTORHOME

C. 294 regulator on horizontal ASME tank with vent pointing down towards the ground. 294-00 comes with listed excess flow P.O.L. fitting installed.

The model 290 is designed for systems that require the regulator to be mounted vertically. A typical example is on an R.V. with two cylinders (fig A). A tee check fitting is installed in the inlet and the 290 regulator is mounted vertically between the two cylinders with its vent pointing down towards the ground.

The model 294 is designed to meet all the standards and safety codes for use on horizontal A.S.M.E. tanks (fig C) or a single vertical cylinder (fig B). Its brass connecting fitting is an approved excess flow P.O.L. and the vent is oriented to be pointing down towards the ground when the regulator is mounted horizontally.

LIMITED WARRANTY

MARSHALL BRASS/MARSHALL GAS CONTROLS warrants its products to be free from defects in material and workmanship under conditions of normal use for a term of ONE YEAR from the date of purchase. Proof of purchase must accompany return.

This warranty does not apply to products which have been damaged for any reason after leaving the control of Marshall Brass/Marshall Gas Controls including, but not limited to damage caused by abuse, misuse, negligence, accident, modification, installation, alteration or repair.

During the warranty period, if a product is found to be defective in material or workmanship, it will be replaced or repaired without charge if returned in accordance with the following instructions:

The product should be packed carefully and returned, postal charges prepaid to: MARSHALL GAS CONTROLS 1000 CIVIC CENTER DR., SAN MARCOS, TX 78666 ATTN: QUALITY MANAGER

A note should be included advising the nature of the malfunction. Damage to the product incurred during packing or shipping the product to Marshall Gas Controls is not covered under this warranty.

The foregoing obligations state Marshall Brass/Marshall Gas Controls entire and exclusive liability and the buyer's exclusive remedy for any claim of damages in connection with the sale of furnishing of products or parts, their design, installation or operation.

MARSHALL BRASS/MARSHALL GAS CONTROLS WILL IN NO EVENT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY WARRANTIES, EXPRESS OR IMPLIED IN FACT OR BY LAW WHATSOEVER, AND ITS LIABILITY UNDER NO CIRCUMSTANCES WILL EXCEED THE PURCHASE PRICE FOR THE PRODUCT.

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This warranty is designed as a LIMITED WARRANTY under the provisions of applicable federal law.

Some states do not allow limitation on how long an implied warranty lasts or do not allow exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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