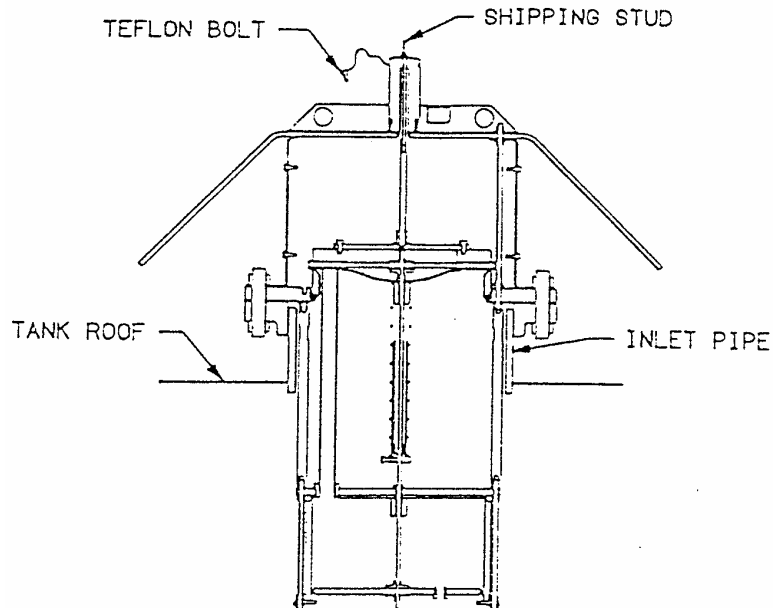


DWN	S.WILLIS	3-15-93	INSTALLATION INSTRUCTIONS SEVERE SERVICE EMERGENCY VENT SERIES 9700 LESS THAN OR EQUAL 1 PSI SET WEIGHT LOADED ONLY		
CHK	R.VIRGIL	3-25-93			
APPR	T.HIGGINS	3-29-93			
APPR			SIZE A	05.9040.224	REV C
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APPR			PAGE 1 OF 4		

REVISIONS		
REV.	DESCRIPTION	APPROVALS/DATE
A	ECR #93-214-03 Revised entire report.	S.WILLIS 8-03-94 R.VIRGIL 8-03-94 T.HIGGINS 8-05-94 G.FEHLER 8-05-94
B	ECR #93-288-02	J.SMITH 10-19-93 R.VIRGIL 10-20-93 T.HIGGINS 10-20-93 G.FEHLER 10-20-93
C	ECR #94-237-05	S.WILLIS 8-31-94

INSTALLATION INSTRUCTIONS
TYPE 9700 SEVERE SERVICE EMERGENCY VENT



1.0 PRINCIPLE OF OPERATION

The AGCO Severe Service Emergency Relief Vents utilize the principle of a weight loaded vent for pressure relief, and a spring loaded vent for vacuum relief. Pressure relief opening is augmented by an adductor tube that reduces the pressure above a piston when the vent begins to flow. The bottom of the piston is subjected to full tank pressure and this differential pressure on the piston causes a force which assists in opening the vent, allowing full opening with less than fifteen percent overpressure.

2.0 CONNECTIONS

The tank connection may be a standard ANSI flange or a standard API 651 manway. Maximum length of the inlet is 12 inches measured from the top of the flange. Minimum inside diameter is equivalent to Schedule 40 pipe.

3.0 PREINSTALLATION HANDLING

Dirt, whether in a vent or associated piping can be damaging and can cause a relief vent to leak or become inoperative. Vents which are not installed immediately should remain packaged in the shipping cover. All relief vents should be handled with care and not subject to heavy shocks.

4.0 INSTALLATION

Before installation, remove the shipping stud and washers protruding above the Teflon guide on top of the vent. This stud holds the weighted seat plate above the nozzle during shipment to prevent damage to the seat film and cushion. Loosen the upper nut and back off both nuts until the rod is loose. The rod may then be unscrewed and removed. If it is tight in the vent, jam the nuts together and remove with a wrench. Screw the attached teflon bolt into the top of the guide finger tight to provide a weather seal.

If the vent was shipped with the pressure setting counterweights uninstalled, remove the lifting bracket and shield by removing the 3/8-16 hex nuts, lockwashers, and flat washers on top of the shield. Remove the green-coated guide rod in the center of the vent using a small screwdriver or rod through the hole in the guide as a wrench. Place the weight/s on the seat plate with the small holes aligned. Insert the two studs on the counterweight bracket in the holes in the weights. Make sure the nuts locking the studs to the bracket are on top. Insert the guide rod through the center hole in the bracket and screw it back on the central operating rod, moving the weights to allow alignment if necessary. **Caution:** Do not overtighten, the threads on the operating rod. Reinstall the shield and bracket on the threaded rods and tighten them in place with the nuts and washers.

The use of washers under the flange nuts and an elastomer flange gasket is recommended to prevent damage to the Halar coating on the flange.

5.0 PRESSURIZING THE VENT

Since the AGCO vent is weight loaded, tank pressures not required to "load" the vent closed.

6.0 USING BLOCK VALVES UNDER THE VENT

Block valves are often used under relief vents to isolate them when maintenance is required. However, they are not permitted under these Emergency Relief Vents due to the inlet piping length restrictions.