U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, D.C. 20590

DEC 0 8 2015

Danny Shelton
President, HazMat Resources, Inc.
124 Rainbow Drive, Suite 2471
Livingston, TX 77399-1024

Ref. No. 15-0096

Dear Mr. Shelton:

This responds to your letter of May 8, 2015 requesting clarification of the marking requirements for pressure relief devices (PRDs) installed on cargo tank motor vehicles (CTMVs) under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Your questions are paraphrased and answered as follows:

Q1. Regarding § 178.345-10(h), may a PRD be marked with a model number comprised generically of the cargo tank specification number and the maximum allowable working pressure (MAWP) (e.g., "DOT 407 PRESSURE VENT FOR MAWP 35"), with knowledge that this model number is used to describe pressure relief devices having certain variations?

A1. Yes. The HMR do not define the term "model number." Conventional dictionaries can be used to indicate that a "model number" is an identifier for each type of product that a manufacturer makes. Therefore, the marking comprised generically of the cargo tank specification number and MAWP could serve as a model number.

Q2. Do the HMR use the terms "model number" and "part number" interchangeably?

A2. No. The HMR do not use the terms "model number" and "part number" interchangeably. See A1 in regard to the meaning of "model number." Conventional dictionaries can be used to indicate that a "part number" is an identifier of a particular part design used to reference that part. A "part number" might be used to identify a particular part across a variety of manufacturers or other entities.

Q3. Do the HMR require the PRD to be marked with a single flow rating that is specific to the PRD installed on a given CTMV or do the HMR allow the PRD to be marked with multiple flow ratings?

A3. The HMR do not state that the PRD must be marked with a single flow rating that is specific to the PRD. Thus, the HMR allow for the PRD to be marked with multiple flow ratings based on the conditions of successful flow capacity certification testing

and the certification by a responsible official of the device manufacturer as required by 178.345-10(g)(3).

Q4. Do the markings on the PRD identified in the roadside inspection report generated from the State of Ohio meet the requirements of § 178.345-10(h)?

A4. Yes. Based on the documents sent in support of your request, it is the opinion of this Office that these markings appear to meet the requirements of § 178.345-10(h).

Q5. Do the markings on the PRD identified as being manufactured by Betts Industries meet the requirements of § 178.345-10(h)?

A5. Yes. Based on the documents sent in support of your request, it is the opinion of this Office that these markings appear to meet the requirements of § 178.345-10(h).

I hope this answers your inquiry. If you need additional assistance, please contact this Office again.

Sincerely,

Dirk Der Kinderen
Acting Chief, Standards Development Branch
Standards and Rulemaking Division

Lesko
178.345
Pressure Relief
15-0096

Dodd, Alice (PHMSA)

From: Betts, Charles (PHMSA)
Sent: Friday, May 08, 2015 11:26 AM
To: Hazmat Interps
Subject: FW: Request for Interpretation
Attachments: Letter + Supporting Documents.pdf

fyi

From: Danny Shelton [mailto:shelton10104@gmail.com]
Sent: Friday, May 08, 2015 10:47 AM
To: Betts, Charles (PHMSA)
Cc: 'Forbes, William'; shorty@grammerindustries.com; 'Glen Harm'; Fleener, Arthur (FMCSA); 'Brigham A. McCown'
Subject: Request for Interpretation

Mr. Betts, sorry for the confusion, attached are the supporting documents that were used for this interpretation request.

Regards

HazMat Resources, Inc.

MAY 8, 2015

Mr. Charles Betts
Director, Office of Hazardous Materials Standards
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
East Building, 2nd Floor
Mail Stop: E21-317
1200 New Jersey Ave., SE
Washington, DC 20590

1

Mr. Betts:

Please accept this letter as an official request for an interpretation of the purpose and intent of the marking requirements identified in 49 CFR § 178.345-10(h). This requirement states the following: "(h) Marking of pressure relief devices. Each pressure relief device **must** be **permanently** marked with the following:
(h)(1) Manufacturer's name;
(h)(2) Model number;
(h)(3) Set pressure, in psig; and
(h)(4) Rated flow capacity, in SCFH at the rating pressure, in psig."

A wide range of opinions exist among pressure relief device manufacturers as to what constitutes an acceptable marking requirement that will comply with the requirements stated above.

Recently a motor carrier was cited during a roadside inspection in Ohio conducted by the Ohio Public Utilities Commission(OPUC)because the pressure relief device (PRD) failed to indicate the model number on the vent as required by (h)(2) of 178.345-10. A copy of that inspection report and photographs taken by the officer to document the violation are attached for your review. This PRD was manufactured by Girard Equipment, Inc. Also attached for your review is a document published by Girard Equipment, Inc. which indicates that all the information required by 49 CFR § 178.345-10(h) is present and legible on the pressure relief device. A copy of these documents are attached for your review.

A cursory review of the website for Girard Equipment, Inc. indicates there are many variations of PRD's offered for sale by the company. The brochures for three different types of vents are attached for your review. It appears the vent identified in the Ohio roadside inspection that is the subject of this report is a DOT 3X407 – AFLT. This number was obtained from the product information supplied by Girard Equipment, Inc. in an attempt to identify the specific model number of the PRD that was installed on the cargo tank.

124 RAINBOW DRIVE, SUITE 2471 ◆ LIVINGSTON, TX ◆ 77399-1024 ◆ SHELTON10104@GMAIL.COM ◆ 423-863-2252

HazMat Resources, Inc.

It would appear from the information provided in the product literature for Girard Equipment, Inc. that in order to get the correct PRD for this particular application one would have to identify the pressure relief device as a DOT 3X407 – AFLT, not DOT 407 Pressure Vent for MAWP 25. Girard Equipment, Inc. claims that this is a model number for the vent. One cannot dispute that "DOT 407 for a 25 MAWP tank" can be a model number but what must be decided, in my opinion, is the following: If the competent authority intends for the marking on the PRD to identify the PRD installed on the CTMV such as size (3 inch or 4 inch), connection (thread or flange) then a specific model number must be used for each PRD, so in effect the model number is really the part number. This is illustrated very clearly in the Girard Equipment, Inc. product information where it provides specific part numbers for PRD's with varying configurations.

Please provide answers to the following questions:

1. Is it the intent of the regulations to mark the pressure relief device (PRD) with the model number of the PRD that is actually ordered like a DOT 3X407 – AFLT or is it the intent to simply mark the PRD with a generic number that is the cargo tank specification number and the MAWP with knowledge that the model number covers both three inch and 4 inch PRD's with additional variations identified in the part number?

2. Is it the intent of the regulations to use model number/part number interchangeably to indicate the model number of the actual PRD that is installed on the cargo tank?

3. Is it the intent of the regulations to mark multiple flow ratings on a PRD based on the size of PRD and the pressure at which the flow rating is calculated and leave it up to the user to determine the size and test pressure in order to determine if the PRD has adequate venting capacity or is it the intent of the regulations to mark the flow rating and venting capacity for the specific PRD that is installed on the cargo tank so there is no possibility of confusion on the part of the user to determine the flow rating of the PRD installed on the cargo tank?

4. Are the markings on the PRD identified in the roadside inspection report generated from the State of Ohio correct and do they meet the requirements of 178.345-10(h)?

5. Are the markings on the PRD identified in the attachment identified as Betts Industries correct and meet the requirements of 178.345-10(h)?

124 RAINBOW DRIVE, SUITE 2471 ◆ LIVINGSTON, TX ◆ 77399-1024 ◆ SHELTON10104@GMAIL.COM ◆ 423-863-2252

HazMat Resources, Inc.

As you can clearly see from the information readily available from manufactures web sites and other information, manufactures mark PRD's differently. Just because it is different does not mean it is a violation of the marking requirements. If the violation documented by OPUC is determined by the competent authority to be a valid violation, it is the opinion of the writer this is not a motor carrier violation and should have no adverse effect on the motor carrier's CSA scores. We trust you will find this information helpful and in order, but if you need additional information or would care to discuss this request in more detail please do not hesitate to contact HazMat Resources, Inc. at 423-863-2252. We thank you in advance for your consideration to our request for interpretation.

Regards

Daniel G. Shelton
President, HazMat Resources, Inc.

Cc: Glen Harm, Girard Equipment, Inc.
Mr. Tom Forbes, OPUC
Mr. Charles Whittington, President, Grammer Industies
Mr. Arthur Fleener, HMPM, Midwest Service Center
Mr. Brigham A. McCown, McCown, P.C.

Attachments: Report from Ohio Public Utilities Commission (OPUC) plus supporting documents

124 Rainbow Drive, Suite 2471 ◆ Livingston, TX ◆ 77399-1024 ◆ Shelton10104@gmail.com ◆ 423-863-2252

DRIVER/VEHICLE EXAMINATION REPORT

Ohio

Report Number: OH3207302165
Inspection Date: 4/30/2015 **Certification Date:**
Time Started: 16:08 **Time Ended:** 16:38
Inspection Level: II - Walk-Around
HM Inspection Type: Bulk Inspection

VICKERY TRANSPORTATION INC
3956 STATE ROUTE 412
VICKERY, OH 43464
USDOT #: 00978059
MC/MX #: 416055
State #:
Phone #: (812)378-3364
Fax #:

Driver: SCHEUFLER, CHRISTOPHER A
License #: RJ526622 **State:** OH
Date of Birth: 5/30/1963

Location: ROADSIDE **MilePost:** 4
Highway: US 33 **Origin:** BRISTOL, VA **Bill of Lading:** 006460446FLE
County: HOCKING **Destination:** VICKERY, OH **Cargo:** HAZ MAT & GENERAL FREIGHT
Shipper: AZZ GALVANIZING BRISTOL

VEHICLE IDENTIFICATION:

Unit	Type	Make	Year	State	License#	Equipment ID	Unit VIN	GVWR	CVSA #	CVSA Issued #	OOS Stkr.#
1	TT	PBT	2015	IN	1161628	214	1XPBD49X5FD256140	52,000			
2	ST	CMPT	2014	IN	Z83600	613V	2C9LTA2B4EB075664	55,000			

BRAKE ADJUSTMENTS: No brake measurements recorded.

VIOLATIONS :

Vio Code	Section	Unit	OOS	State Citation Number	Verify*	Crash	Violation Description
178.345-10	178.345-10	2	N		N	N	DOT406/407/412 Pressure Relief - Girrard PRD not marked with model number as required. by 178.345-10(h)

* N - Non-OOS or Driver OOS Violation

HazMat: 8 Corrosive Material, **Placard:** Yes **Cargo Tank:** 412

Special Checks:
- ☐ Alcohol/Controlled Substance Check
- ☐ Conducted by Local Jurisdiction
- ☐ Size and Weight Enforcement
- ☐ EScreening
- ☐ Traffic Enforcement
- ☐ PASA Conducted Inspection
- ☐ Drug Interdiction Search
- ☐ Post Crash Inspection
- ☐ PBBT Inspection
- Arrests:

Locally Defined Fields:

Placards Displayed (Y/N): Y;Loaded by Carrier (Y/N): Y;Ship Doc Prep by Shipper(Y/N): Y; Haz Class A: 8;ID # A: UN1789;Packing Group A: II;Gross Weight A: 1 TT;RQ (A): Y;HW (A): Y;For-Hire Carrier: Y;Driver Address: 2668 CR 290;Driver City: VICKERY;Driver State: OH;Driver Zip: 43464;Photos Taken (Y/N): Y;Reason Code: USSP;FMCSA Credentials Verified-Y/N: N;CDL Verified (Y/N): Y;FMCSA OOS Order Issued(Y/N): U;HM Safety Permit Verified(Y/N): N

All violations of the FHMR and FMCSR or Title 49 of the Ohio Revised Code will be reviewed by the PUCO's Transportation Department to determine whether civil forfeitures should be assessed against any responsible parties in accordance with the penalty provisions of Title 49 of the Ohio Revised Code. If civil forfeitures are assessed, you will receive a separate notice by mail. These penalties may be assessed to motor carriers, shippers, and/or drivers.

ATTENTION DRIVER: This report must be sent to the motor carrier whose name appears at the top of this inspection report within 24 hours. If the inspection report cannot be delivered within 24 hours the driver must mail or fax the inspection report to the motor carrier.

ATTENTION MOTOR CARRIER: The motor carrier must examine this report and repair all the vehicle defects/violations noted above -AND- The motor carrier must sign the Certification of Repairs below and return the signed form to: Public Utilities Commission of Ohio, TASD - 4th floor, 180 E Broad St, Columbus, OH 43215-3793 -OR- Fax (614) 752-9274 within 15 days of the inspection. If " No Violations Were Discovered" then you do not need to return this report. Failure to return this report with the required certification can result in penalties up to $1,000 per day for each day the violation continues, up to a total of $10,000. If you have any questions, please contact (614) 466-0429.

MOTOR CARRIER CERTIFICATION OF COMPLETED REPAIRS: The undersigned certifies that all violations noted on this report have been corrected and action taken to assure compliance with the Federal Motor Carrier Safety & Hazardous Materials Regulations insofar as they are applicable to motor carriers and drivers. A false certification of repairs is required to be prosecuted with penalties up to $10,000.

Signature of Carrier Official: X _____ Title: _____ Date: _____

Failure to return this report with the required certification can result in penalties up to $1,000 per day for each day the violation continues, up to a total of $10,000.

Report Prepared By: W T Forbes
Badge #: 3207
Copy Received By: SCHEUFLER, CHRISTOPHER A

OH3207302165

DRIVER/VEHICLE EXAMINATION REPORT

Ohio

Report Number: OH3207302165
Inspection Date: 4/30/2015 **Certification Date:**
Time Started: 16:08 **Time Ended:** 16:38
Inspection Level: II - Walk-Around
HM Inspection Type: Bulk Inspection

VICKERY TRANSPORTATION INC
3956 STATE ROUTE 412
VICKERY, OH 43464
USDOT #: 00978059
MC/MX #: 416055
State #:
Phone #: (812)378-3364
Fax #:

Driver: SCHEUFLER, CHRISTOPHER A
License #: RJ526622 **State:** OH
Date of Birth: 5/30/1963

Signature of Repairer: X _____ Facility: _____ Date: _____

OH3207302165

Road Side Inspection Photos – April 30, 2015 @ 16:08 PM

Other Markings on the vent – S/N (Serial Number), CRN number, Gelliner only, 35

General View of Vent

Road Side Inspection Photos – April 30, 2015 @ 16:08 PM

Vent on the tank – Manufactures name 178.345-10(b)(1)

Vent on the tank – Set Pressure and rated flow 178.345-10(h)(3) & (4)

Girard Equipment, Inc. Engineering Technical Bulletin

Information Regarding Pressure Relief Devices

Manufactured to 49CFR178.345-10

49CFR178.345-10 **(h) Marking of pressure relief devices.** Each pressure relief device must be permanently marked with the following: (1) Manufacturer's name; (2) Model number; (3) Set pressure, in psig; and (4) Rated flow capacity, in SCFH at the rating pressure, in psig.

h1.

Manufacturer's Name

h2. The Model Number – DOT 407 Pressure Vent for MAWP 25

h4. This number indicates the rated flow capacity.

h3. This marking on the Rating Disc is the Vent's Set Pressure.

FUNCTION AND PURPOSE

Girard Equipment Pressure Relief Vents are now available with a 4-inch or 3-inch Swivel Connection. This valve was designed to allow easy positioning of air inlet assemblies and/or pressure gauges. Pressure Only and Pressure/ Vacuum styles are available. All common repair parts are interchangeable with all other styles of Girard DOT 407 Vents.

MATERIALS OF CONSTRUCTION

All metallic parts	Stainless Steel
"O" Ring	Teflon® encapsulated silicone
Gasket	Teflon®

PERFORMANCE SPECIFICATIONS (3" Design)

MAWP	TEST PRESSURE	FLOW (SCFH)	EXPOSED SURFACE
25	40	372,844	732
25	45	408,485	860
30	45	408,485	860
35	52.5	460,443	1061

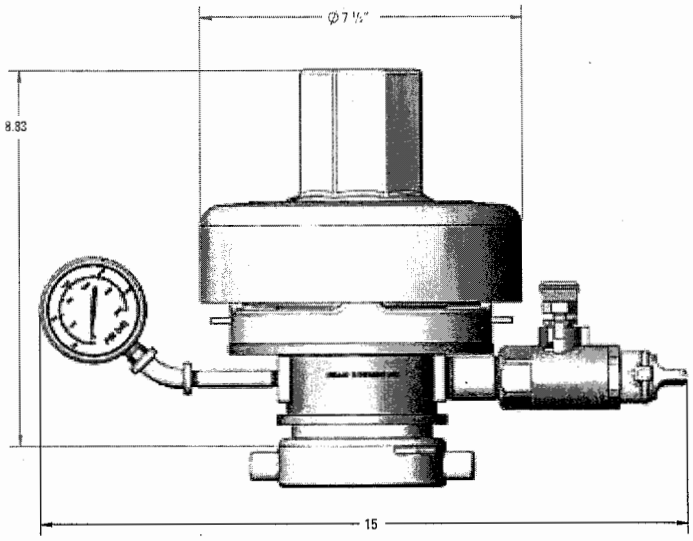
PERFORMANCE SPECIFICATIONS (4" Design)

MAWP	TEST PRESSURE	FLOW (SCFH)	EXPOSED SURFACE
25	40	374,512	737
25	45	431,308	946
30	45	431,308	946
35	52.5	484,718	1156

Vacuum Performance

3,726 SCFH AT 6" HG (EQUIVALENT TO 584 GPM)

INSTANT OPENING AT 4" HG



3-Inch DOT 407 Combo Vent with Swivel Connection

AVAILABLE CONNECTION STYLES

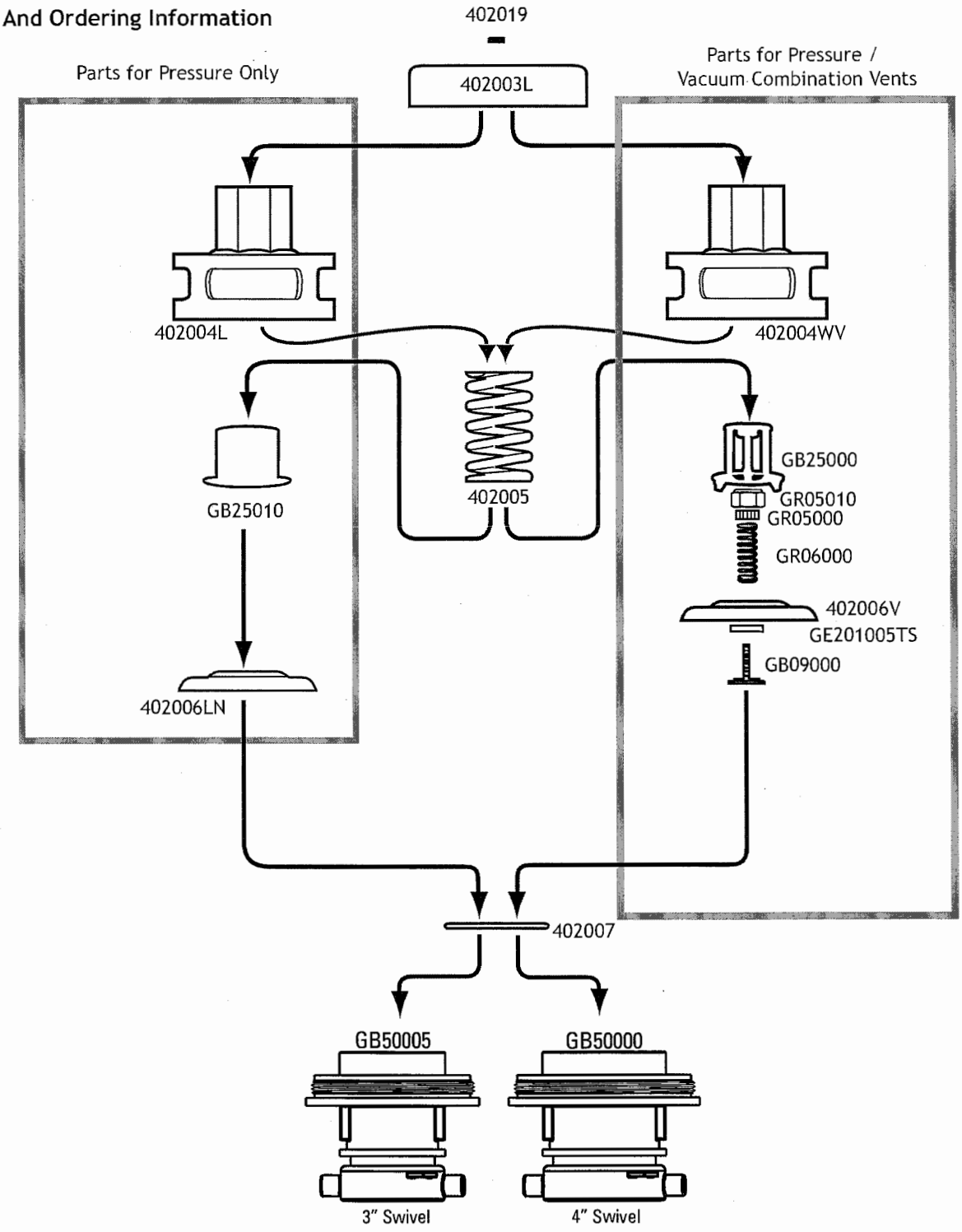
For Combination Pressure/Vacuum Vents, please add '-WV' to the part number, e.g. DOT3X407TWV-SVL.

3" CONNECTIONS	
DOT3X407T-SVL	3" NPT Swivel Connection 25# MAWP
DOT3X407T1-SVL	3" NPT Swivel Connection 30# MAWP
DOT3X407T2-SVL	3" NPT Swivel Connection 35# MAWP
DOT3X407T3-SVL	3" NPT Swivel Connection, Special Pressure Setting (Please Specify)

4" CONNECTIONS	
DOT407LT-SVL	4" NPT Swivel Connection 25# MAWP
DOT407LT1-SVL	4" NPT Swivel Connection 30# MAWP
DOT407LT2-SVL	4" NPT Swivel Connection 35# MAWP
DOT407LT3-SVL	4" NPT Swivel Connection, Special Pressure Setting (Please Specify)

Above vents include a ¾" Air Accessory Package which contains part numbers: 202016, 202017, 202018, 202019, 202021, 202022

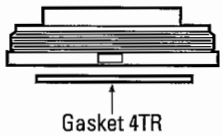
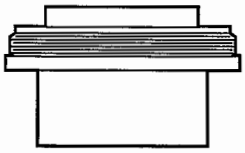
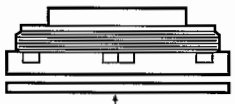
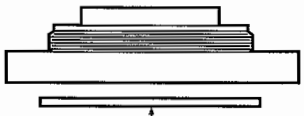
Parts And Ordering Information



FUNCTION

Our Low Profile DOT 407 Vent combines a low profile, light weight design with increased flow rates to meet the most demanding needs of virtually any DOT 407, DOT 412, MC 307 and MC 312 tank. See the table below for specific flow rates.

The stainless steel valve seat seals on a Teflon® encapsulated silicone "O" Ring. This "O" Ring provides complete chemical resistance and a bubble-tight seal to meet the latest DOT requirements. The unit also meets the surge requirements of 178.345-10 (b) (3).

Styles	Description
402011L 	DOT407LT Vent with a 4" N.P.S. female pipe thread. Attaches to a 4" pipe nipple and seals against a solid Teflon® ring gasket.
402012L 	DOT 407LS Stub end vent. Lower housing terminates in a straight stub end. Designed to be welded to the tank shell.
402014L 	DOT407LF Vent to mount on a 4" TTMA flange. Supplied with a 3/8"-16 removable thread inserts and a Teflon® envelope flange gasket.
402015L 	DOT407LAF Vent to mount on a 4" ANSI flange. Supplied with a Teflon® envelope flange gasket and a 1/4" NPT "Tell-Tale" indicator tap.

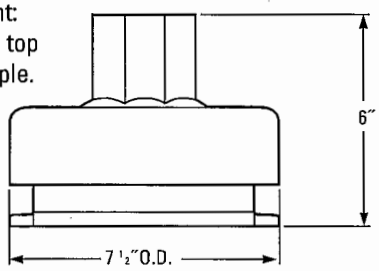
PERFORMANCE SPECIFICATIONS

MAWP	TEST PRESSURE	FLOW (SCFH)	EXPOSED SURFACE
25	40	374,512	737
25	45	431,308	946
30	45	431,308	946
35	52.5	484,718	1156

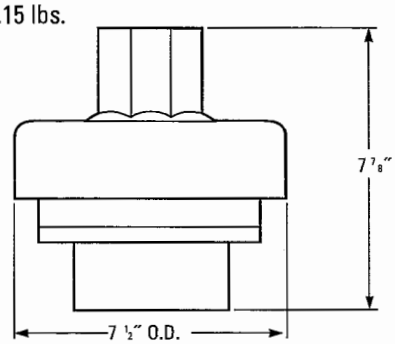
MATERIALS OF CONSTRUCTION

All metallic parts	Stainless Steel
"O" Ring	Teflon® encapsulated silicone
Gasket	Teflon®

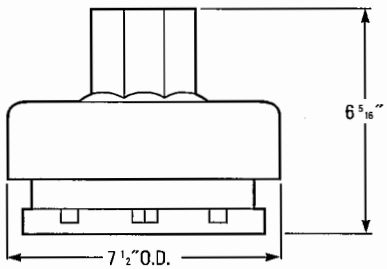
DOT 407 LT:
Weight: 11.95 lbs.
Installed Height:
5 1/2" over the top of the pipe nipple.



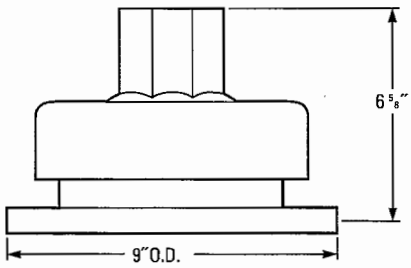
DOT407 LS:
Weight: 15.15 lbs.



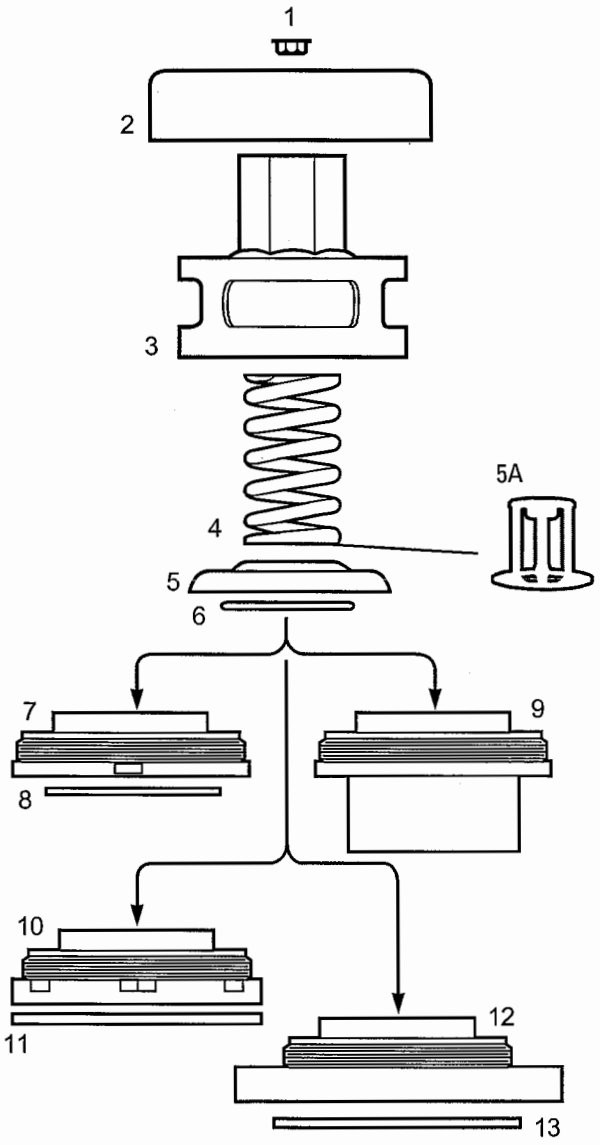
DOT 407 LF:
Weight: 13.75 lbs.



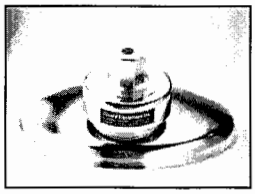
DOT407 LAF:
Weight: 24.85 lbs.



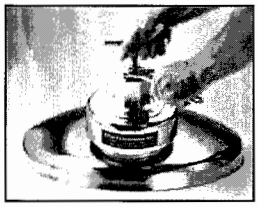
ITEMS	PART NUMBER	DESCRIPTION
1	402019	Plug
2	402003L	Rain Cover
3	402004L	Low Profile Upper Housing Specify MAWP
4	402005 402005HP	Spring (for MAWP < 45 only) Spring (for MAWP > 45 only)
5	402006LN	Low Profile Poppet with Spring Retainer (sold with GB25010)
5A	GB25010	Spring Retainer for Pressure Only Vents (sold separately)
6	402007	Teflon® Silicone "O" Ring
7	402011L	4" LT Model Lower Housing
8	4TR	Solid Teflon® Gasket
9	402012L	LS Model Lower Housing
10	402014L	4" LF Model Lower Housing
11	4CFE	Teflon® Encapsulated Flange Gasket (TTMA)
12	402015L	4" LAF Model Lower Housing
13	402016	Teflon® Envelope Flange Gasket (ANSI)



Repair And Disassembly: The disassembly feature was designed to allow users to easily disassemble the vent in one minute.

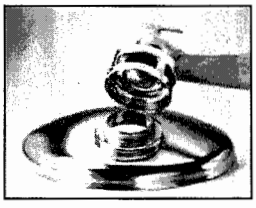


1) Remove the Plug.

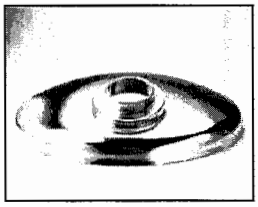


2) Insert the T-Wrench into the nut of the Poppet.

3) Tighten the Lifting Nut.



4) Remove the Upper Housing.



5) Remove and replace the "O" Ring.

FUNCTION

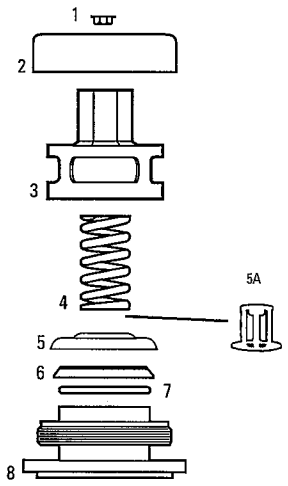
Girard Equipment, Inc.'s Teflon® lined Pressure Relief Valve is designed to protect against aggressive ladings that normally would chemically attack stainless steel.

All wetted surfaces are lined with a ⅛" thick Teflon® liner. The valve seat seals on a Teflon® encapsulated silicone "O" Ring. This "O" Ring provides complete chemical resistance and a bubble-tight seal. The vent is designed to be easily removed from the tank for inspection and or cleaning.

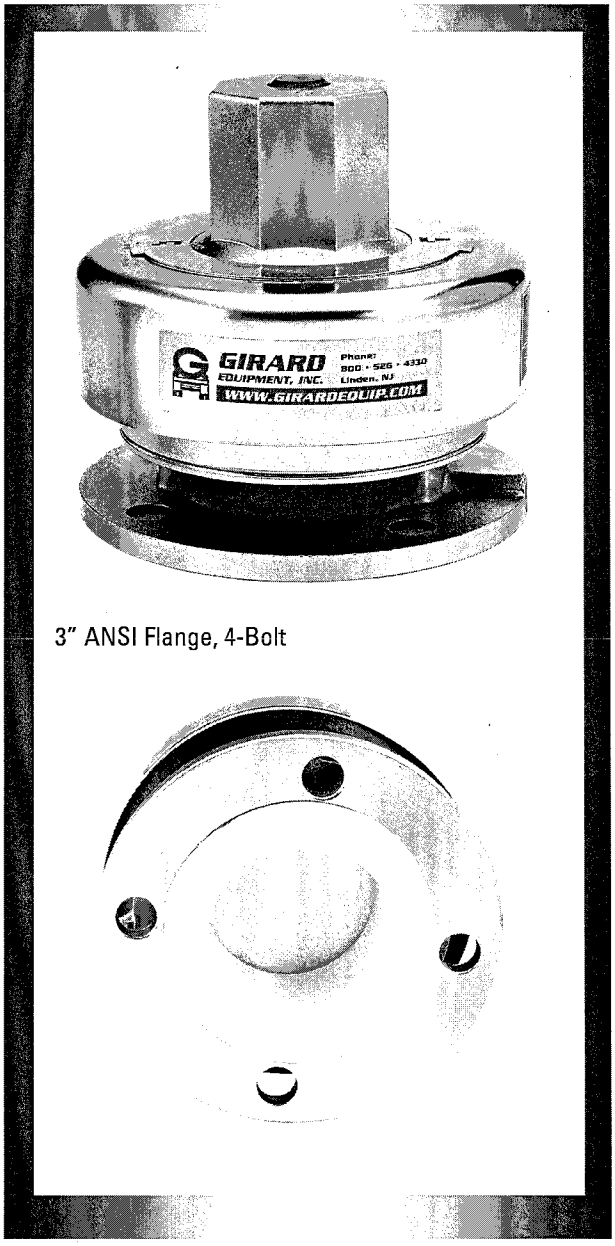
Style:	GE-DOT 3X407-AFTL
Description:	Vent to mount on a 3" ANSI, 4-Bolt Flange. Supplied with a Teflon® liner and a valve seat. ***(When ordering, please specify pressure setting.)***

MATERIALS OF CONSTRUCTION

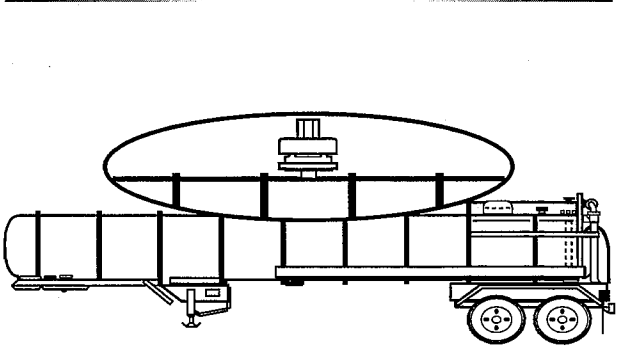
All metallic parts	Stainless Steel
"O" Ring	Teflon® encapsulated silicone
Valve Seat	White Teflon®
Liner	White Teflon®

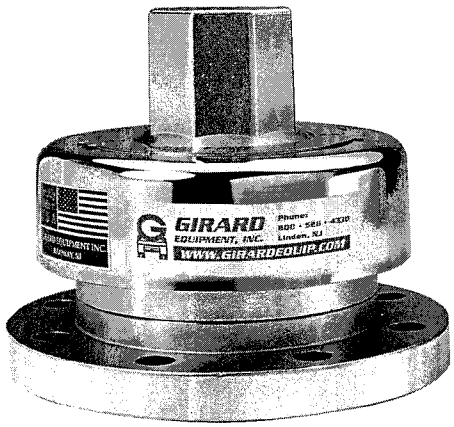


ITEMS	PART NUMBER	DESCRIPTION
1	40219	Plug
2	402003L	Rain Cover (Low Profile)
3	402004L	Upper Housing (Low Profile)
4	402005	Spring
5	402006LN	Low Profile Poppet with Spring Retainer (sold with GB25010)
5A	GB25010	Spring Retainer for Pressure Only Vents (sold separately)
6	402008	Teflon® Seat
7	402007	Teflon® Silicone "O" Ring
8	402021 TL	Teflon® lined Lower Housing

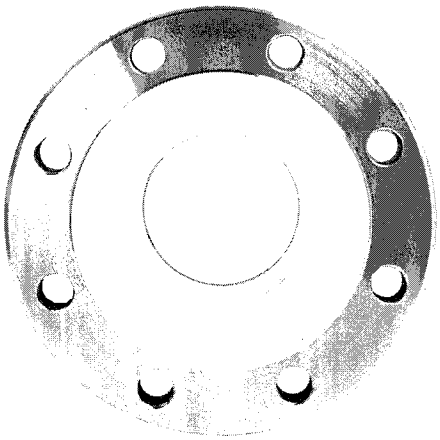


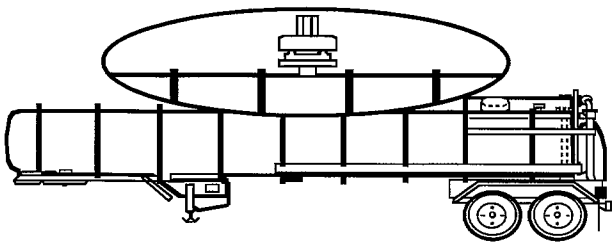
3" ANSI Flange, 4-Bolt





4" ANSI Flange, 8-Bolt

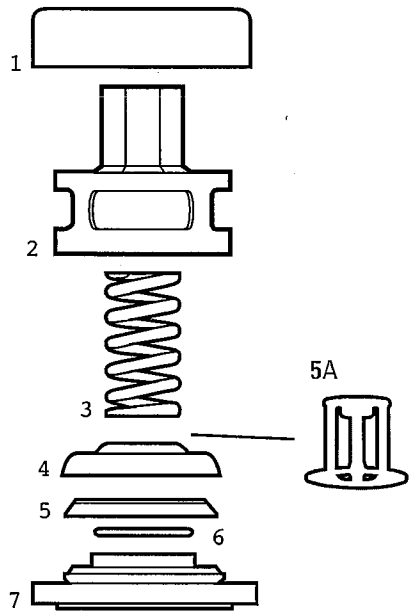




Style:	GE-DOT407-LAFTL
Description:	Vent to mount on a 4" ANSI, 8-Bolt Flange. Supplied with a Teflon® liner and a valve seat. ***(When ordering, please specify pressure setting.)***

MATERIALS OF CONSTRUCTION

All metallic parts	Stainless Steel
"O" Ring	Teflon® Encapsulated Silicone
Valve Seat	White Teflon®
Liner	White Teflon®

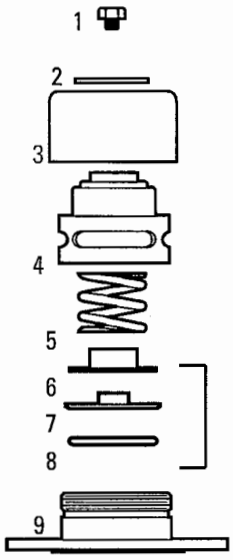


ITEMS	PART NUMBER	DESCRIPTION
1	402019	Plug
2	402003L	Rain Cover (Low Profile)
3	402004L	Upper Housing (Low Profile)
4	402005	Spring
5	402006LN	Low Profile Poppet with Spring Retainer (sold with GB25010)
5A	GB25010	Spring Retainer for Pressure Only Vents (sold separately)
6	402008	Teflon® Seat
7	402007	Teflon® Silicone "O" Ring
8	402015 LPTL	Teflon® Lined Lower Housing

Style:	GE-PV300-2AFTL
Description:	Vent to mount on a 2" ANSI, 4-Bolt Flange. Supplied with a Teflon® liner and a valve seat. ***(When ordering, please specify pressure setting.)***

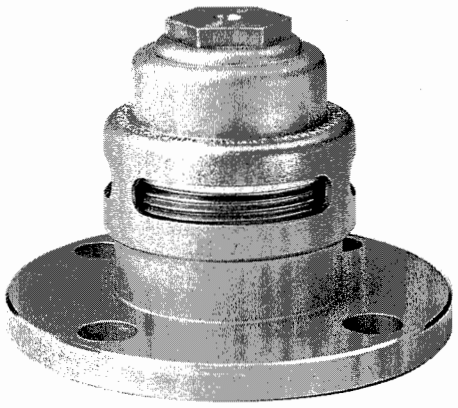
MATERIALS OF CONSTRUCTION

All metallic parts	Stainless Steel
"O" Ring	Teflon® encapsulated silicone
Valve Seat	White Teflon®
Liner	White Teflon®

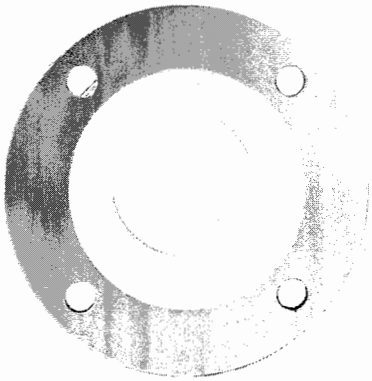


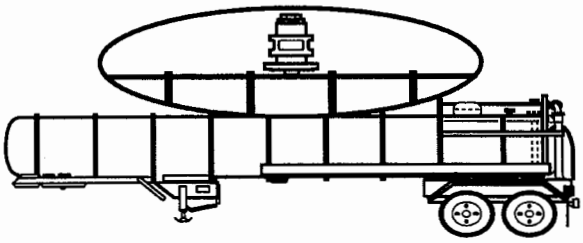
Teflon® liner doubles as the inlet gasket.

ITEMS	PARTS NUMBER	DESCRIPTION
1	202001	Bolt
2	202002PV	Identification & Rating Disc
3	202003-1	Rain Cover
4	20204-1	Upper Housing
5	202005	Pressure Spring
6	202006C	Upper Spring Retainer
7	202020C	Solid Teflon® Valve Seat
8	202008C	Teflon® Silicone "O" Ring
9	202014TL	Teflon® Lined Lower Housing

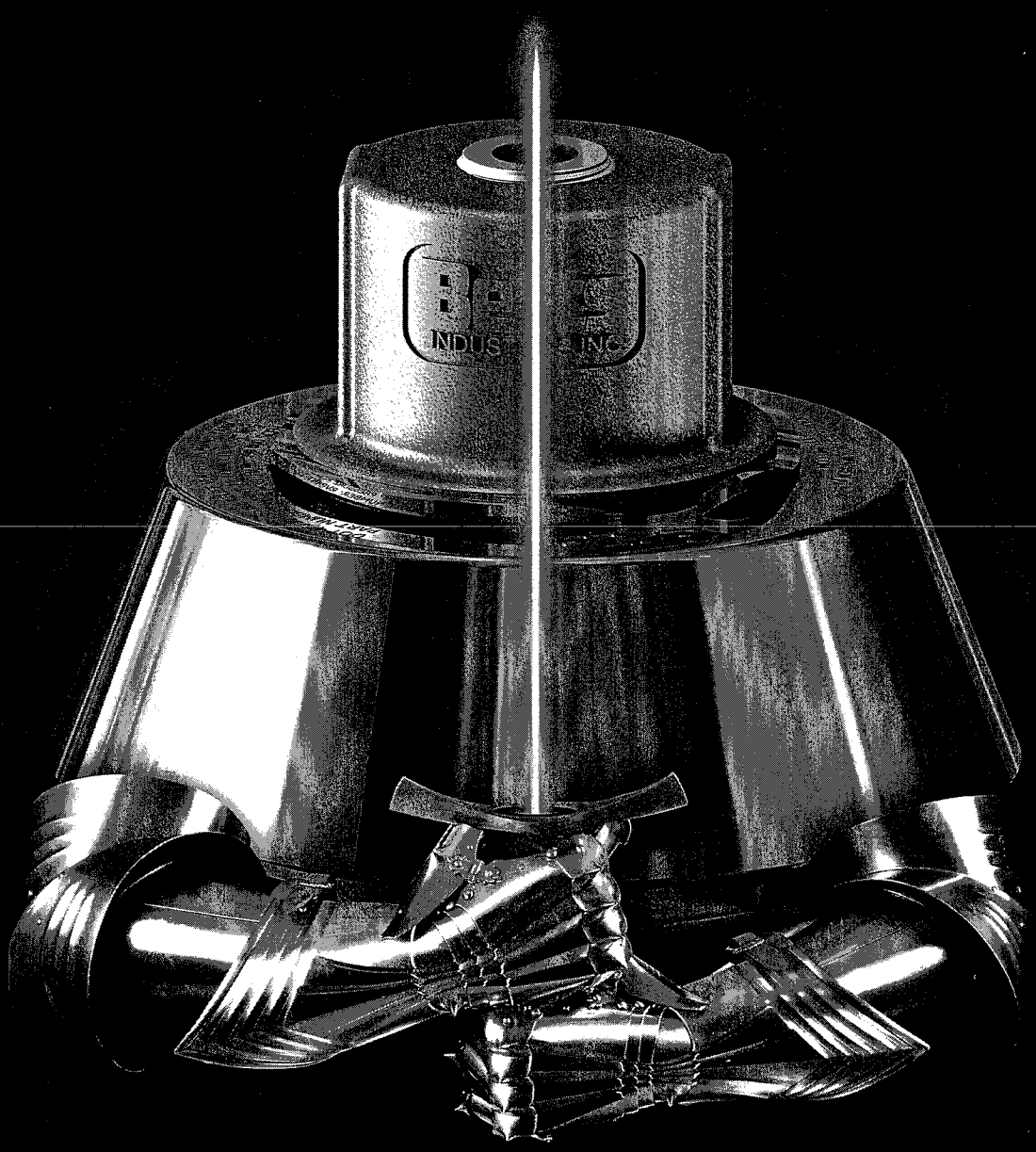


2" ANSI Flange, 4-Bolt
(Shown without Rain Cover)





GUARDIAN™ 407 Vent



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Guard your business.

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The Betts GUARDIAN 407 Vent completes the DEFENDER Package with a 21st-century vent solution designed, engineered and manufactured exclusively by Betts for the rigors of today's transport.

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Flanged, threaded or swivel
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- Meets 407 and future potential ASME standards
- Optimized efficiency for reduced chatter, wear and potential for sticking
- Modern, 21st-century design, exclusively by Betts
- Completes the DEFENDER™ Package 407 and 412—the total Betts solution
- Designed, engineered and manufactured in the USA

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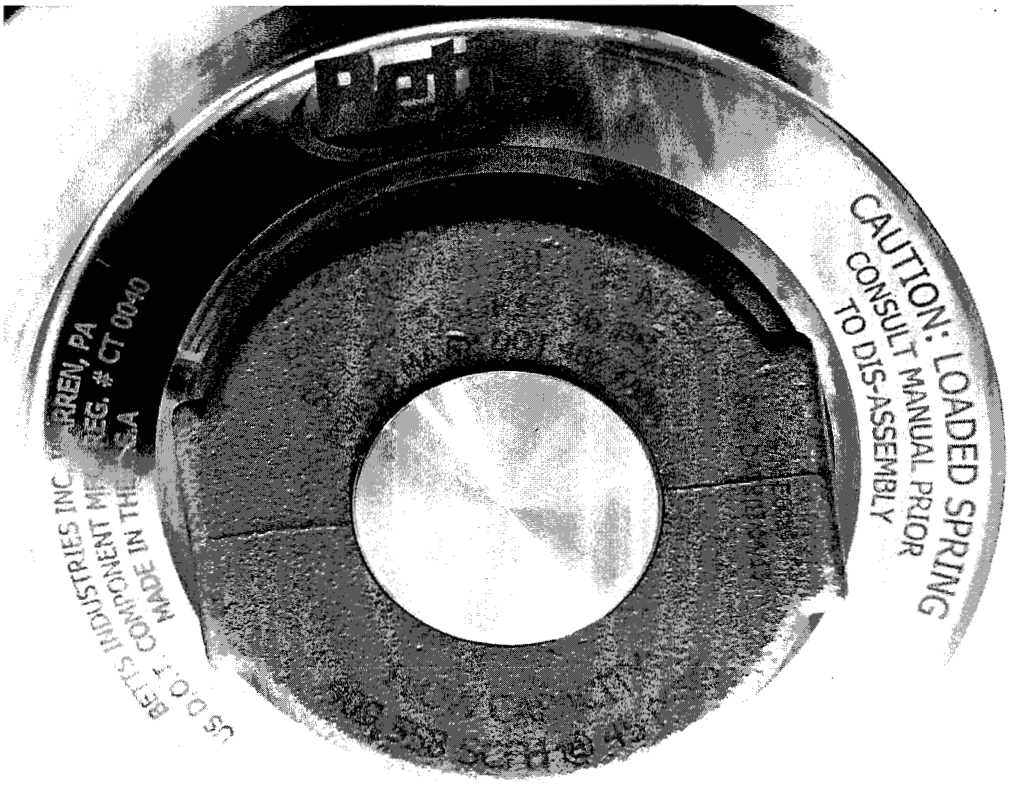
Betts Industries – Markings on DOT 407 Vent



Betts Industries, Inc. 407 Vent

Betts Marking for part number/model number, Set Pressure, 3 inch

Betts Industries – Markings on DOT 407 Vent

Betts Vent – Flow Capacity 409,558 @ rating pressure of 45 psig

Betts Vent – Additional manufacturing information