

**TEST PROCEDURE:**

1. CLOSE ALL DISCHARGE VALVES INCLUDING PUMP AND ENGINE COOLERS SO THERE IS NO FLOW THROUGH THE PUMP.
2. USE CARE THAT ENGINE DOES NOT OVERHEAT. SET THE PUMP DISCHARGE PRESSURE TO ONE OF THE PRESSURES LISTED.
3. THE THERMAL RELIEF VALVE SHOULD DISCHARGE WATER THROUGH THE 1/8 NPT OR ISO DISCHARGE LINE WITHIN THE TIME SPECIFIED.
4. THE TABLE IS FOR MIDSHIP TYPE PUMPS. THE THERMAL RELIEF VALVE WILL OPEN FASTER ON SMALLER PUMPS.
5. THE TABLE IS BASED ON 70°F(21°C) WATER AND 70°F(21°C) AIR TEMPERATURE. THE THERMAL RELIEF VALVE WILL OPEN FASTER IN HOTTER CONDITIONS AND SLOWER IN COOLER CONDITIONS.
6. UNITS EQUIPPED W/TRV-L KIT WILL FLOW UP TO 1-2 GPM OF WATER BEFORE LAMP TURNS ON.

PRESSURE	TIME IN MINUTES	
	TRV120/TRVM120/TRV170/TRVM170	TRV170
200 PSIG(13.8 BAR)	10	20
400 PSIG(27.6 BAR)	4	8
600 PSIG(41.4 BAR)	2	4

018-1607-58-0 ADJUSTING SCREW. THIS SCREW IS PRESET AND LOCKED IN PLACE. IF A PART OF THE RELIEF VALVE IS REPLACED, IT MAY NEED READJUSTMENT. ATTACH A WATER SUPPLY OF 30-60 PSIG (2-4 BARS) TO THE 1/8 NPT OR ISO HOLE. APPLY A THREAD SEALING ADHESIVE TO THE THREADS AND TURN SCREW CLOCKWISE UNTIL INCOMING WATER PASSES THRU HOLE "X" AND STARTS TO FLOW OUT OF THE STRAINER. AT THIS POINT, TURN THE ADJUSTING SCREW COUNTERCLOCKWISE 2-1/2 TURNS SO THE FLOW STOPS AND THE PISTON IS POSITIONED.

1/8 N.P.T. OR ISO 228/1-G 1/8 CONNECTION FOR RELIEF VALVE DISCHARGE LINE. USE 3/8 (10) TUBING TO ATMOSPHERE OR RETURN LINE TO THE TRUCK TANK. A DRAIN VALVE MUST BE PROVIDED IN THIS LINE TO DRAIN IN FREEZING WEATHER. IF THE VALVE IS MOUNTED HORIZONTAL, THIS CONNECTION SHOULD BE IN A DOWNWARD POSITION TO AID IN DRAINING OF THE TUBING LINE.

082-4032-02-0 1/8 FNPT X 1/8 FBSP SUPPLIED WITH TRVM ONLY FITTING IS HAND TIGHTENED FROM MANUFACTURER OEM MUST USE LOCTITE PST OR EQUAL AND TIGHTEN

- 077-9024-20-0 RETAINING RING
- 073-0100-00-0 PISTON
- 042-0540-00-0 SPRING
- 077-1180-20-0 RETAINING RING

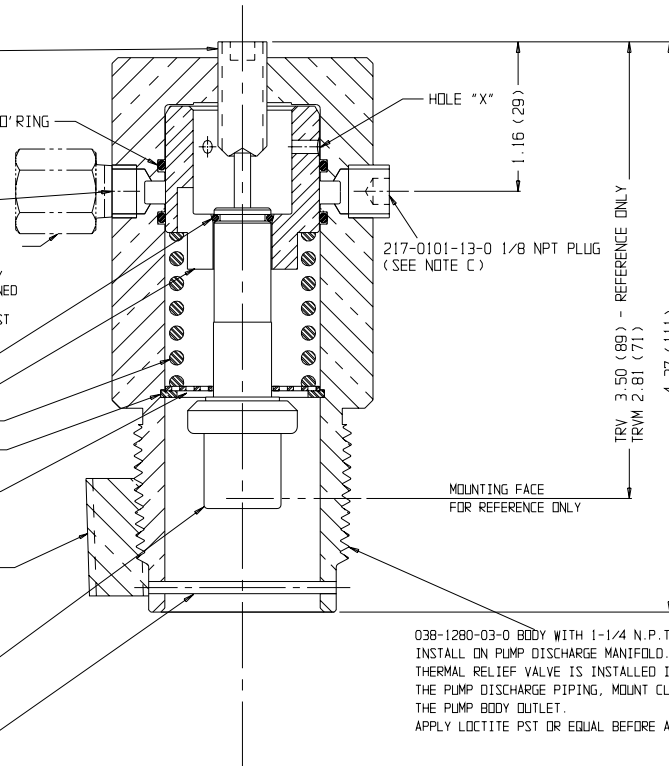
010-0580-00-0 INLET STRAINER. CHECK FOR BLOCKAGE ONCE A YEAR OR MORE FREQUENTLY IF PUMPING WATER WITH IMPURITIES. THE BODY, PISTON & O-RINGS, AT THIS TIME, SHOULD BE CLEANED, INSPECTED AND LUBRICATED WITH DOW 55M SILICONE GREASE OR EQUIVALENT SILICONE GREASE.

082-4032-02-0 2" MALE BSPT ADAPTER FOR TRVM ONLY FITTING IS HAND TIGHTENED FROM MANUFACTURER OEM MUST USE LOCTITE PST OR EQUAL AND TIGHTEN

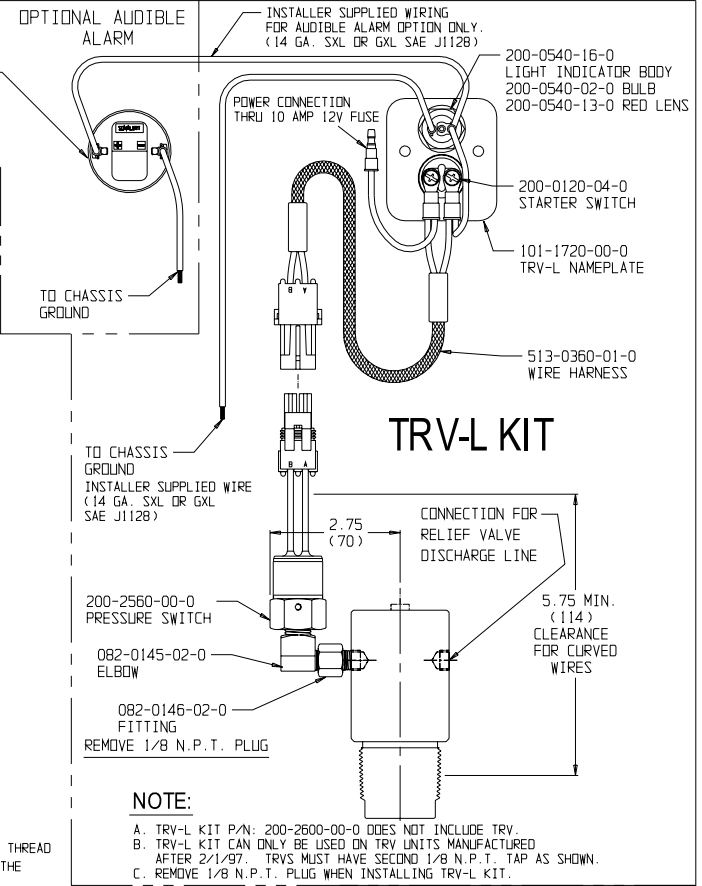
SENSING ELEMENT 038-1251-00-0 (120°F x 49°C)  
038-1251-01-0 (170°F x 77°C)

064-0322-02-0 SPRING PIN

INSTALL THIS END IN UPWARDS POSITION SO THE RELIEF VALVE DRAINS IN FREEZING WEATHER OR USE DRAIN AS NOTED.



038-1280-03-0 BODY WITH 1-1/4 N.P.T. THREAD INSTALL ON PUMP DISCHARGE MANIFOLD. THE THERMAL RELIEF VALVE IS INSTALLED IN THE PUMP DISCHARGE PIPING, MOUNT CLOSE TO THE PUMP BODY OUTLET. APPLY LOCTITE PST OR EQUAL BEFORE ASSEMBLY.



DIMENSIONS ARE IN INCHES. DIMENSIONS IN ( ) ARE MM.

**NOTE:**

- A. TRV-L KIT P/N: 200-2600-00-0 DOES NOT INCLUDE TRV.
- B. TRV-L KIT CAN ONLY BE USED ON TRV UNITS MANUFACTURED AFTER 2/1/97. TRVS MUST HAVE SECOND 1/8 N.P.T. TAP AS SHOWN.
- C. REMOVE 1/8 N.P.T. PLUG WHEN INSTALLING TRV-L KIT.

MODEL	TEMPERATURE RATING
TRV120/TRVM120	120° F. (49° C)
TRV170/TRVM170	170° F. (77° C)

**HALE TYPE TRV/TRVM THERMAL RELIEF VALVE  
PLATE NO. 729AG**

PATENT NO. 5,018,665

ECO NO	REV	CHANGED FROM	BY	DATE	APVD
97-225	D	CHANGED BODY FROM 038-1280-00-0 TO 038-1280-03-0 (TRV170 ONLY)	MD	12-4-97	RET
00-540	E	ADDED TRV WITH FLANGE (TRVF)	DK	07-31-00	MAL
04-106	F	ADDED 082-4032-02-0 REMOVED 038-1280-00-0 FLANGE	TC	5-16-04	MAL
0128	G	ADDED "200-1310-01-0 24VAC/VDC" NOTE	AB	7-1-05	MAL



HALE PRODUCTS, INC.  
A Unit of IDEX Corporation  
Conshohocken, PA 19428 USA

COPYRIGHT ©	DRAWN	DJK	DATE	7-31-00	SIZE	9.5 X 13	SCALE:	FULL
NOT TO BE REPRODUCED OR USED TO MAKE OTHER DRAWINGS OR MACHINERY	CHECKED	MAL						