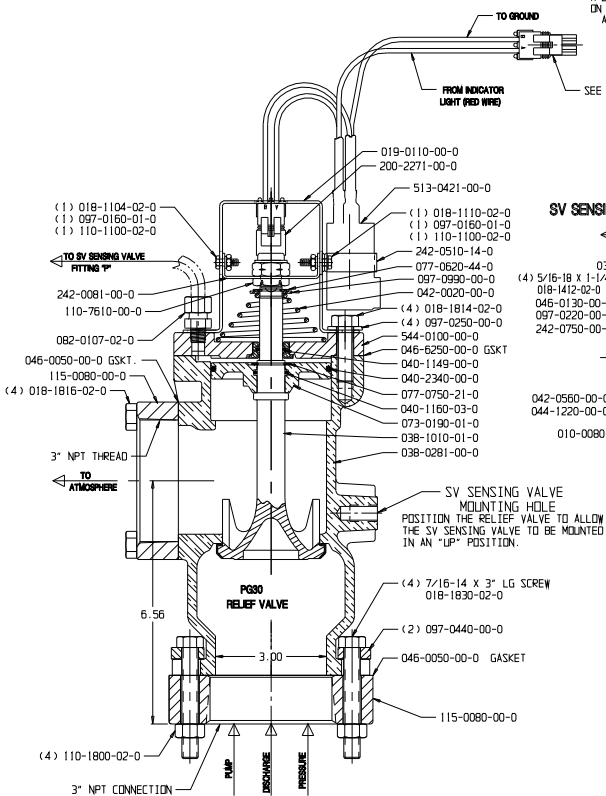


THIS PRODUCT AND ITS COMPONENTS ARE PROTECTED BY U.S. PATENT NO. 4,653,978.

HALE TYPE TPM/P35 RELIEF VALVE SYSTEM (1500 GPM CAPACITY)



- INSTRUCTIONS FOR SETTING TPM RELIEF VALVE SYSTEM**
- 1- SET THE WHITE PRESSURE INDICATOR ON THE PMD CONTROL VALVE TO A POSITION SLIGHTLY ABOVE THE NORMAL OPERATING PRESSURE. DO THIS EVEN BEFORE YOU INCREASE THE PUMP ENGINE RPM.
 - 2- ONCE YOU HAVE REACHED THE NORMAL OPERATING PRESSURE USING THE PUMP DISCHARGE PRESSURE GAGE (WITH OR WITHOUT THE PUMP DISCHARGING WATER) SLOWLY MOVE THE ADJUSTING HANDWHEEL COUNTERCLOCKWISE UNTIL THE RELIEF VALVE OPENS AND THE PILOT LIGHT COMES ON AND PRESSURE GAGE GOES DOWN A COUPLE OF PSI.
 - 3- SLOWLY TURN HANDWHEEL COUNTERCLOCKWISE UNTIL THE PILOT LIGHT GOES OFF AND PRESSURE GAGE RETURNS TO SET. THE RELIEF VALVE WILL NOW OPERATE AT THE SET PRESSURE.
 - 4- WHEN THE PUMP IS NOT IN OPERATION THE HANDWHEEL SHOULD BE TURNED COUNTERCLOCKWISE BACK TO A POSITION SLIGHTLY ABOVE THE NORMAL OPERATING PRESSURE.
 - 5- WHEN THE PUMP IS RUNNING, A NON FLASHING PILOT LIGHT INDICATES THE INTERNAL DG RELIEF VALVE IS IN OPERATION. THE PILOT LIGHT WILL FLASH WHEN BOTH THE INTERNAL DG RELIEF VALVE AND THE EXTERNAL P35 DUMP VALVE ARE OPERATING.
 - 6- READ INSTALLATION AND OPERATION MANUAL FOR ADDITIONAL OPERATING INSTRUCTIONS.
 - 7- IF THE TPM RELIEF VALVE SYSTEM IS TO BE USED WITH DETROIT DIESEL ELECTRONIC CONTROLS (CODE), BE SURE TO READ THE SPECIAL INSTRUCTIONS IN THE MANUAL.

- INSTRUCTIONS FOR INSTALLING LIGHT SWITCH**
- 1- MAKE SURE 200-2650-00-0 COLLET FITTING IS TIGHTENED INTO THE 044-0123-00-0 VALVE COVER. BACK OFF 1 TO 1-1/2 TURNS.
 - 2- INSTALL THE 200-2262-00-0 LIGHT SWITCH IN THE COLLET FITTING. LEAVE THE COLLET HOLDING THE LIGHT SWITCH SLIGHTLY LOOSE SO THAT LIGHT SWITCH CAN BE MOVED IN AND OUT FOR ADJUSTMENT.
 - 3- CONNECT THE PANEL MOUNTED INDICATOR LIGHT OR A SUITABLE TEST LIGHT TO THE SWITCH TERMINALS. WITH THE LIGHT SWITCH PULLED NEARLY ALL THE WAY OUT, THE LIGHT SHOULD BE LIT.
 - 4- WITH THE PUMP NOT RUNNING AND THE RELIEF VALVE FULLY CLOSED (AS SHOWN), PUSH THE LIGHT SWITCH IN UNTIL THE LIGHT GOES OUT. HOLD THE COLLET FITTING WITH A WRENCH TO PREVENT IT FROM TURNING, AND TIGHTEN THE COLLET.
 - 5- DISCONNECT THE ELECTRICAL CONNECTOR. TIGHTEN THE ENTIRE COLLET FITTING 1 TO 1-1/2 TURNS. THE SWITCH IS NOW IN THE PROPER POSITION. RECONNECT THE ELECTRICAL CONNECTOR.
 - 6- VERIFY PROPER OPERATION OF THE RELIEF VALVE AND INDICATOR LIGHT BEFORE PLACING APPARATUS IN SERVICE.

PLATE NO. 799BC

MAINTENANCE

TEST THE RELIEF VALVE OFTEN TO BE SURE IT MOVES FREELY. THIS IS DONE BY TURNING THE CONTROL VALVE ADJUSTING HANDWHEEL COUNTERCLOCKWISE AS FAR AS POSSIBLE. BRING THE PUMP PRESSURE UP TO 150 PSI AND TURN HANDWHEEL COUNTERCLOCKWISE UNTIL THE RELIEF VALVE OPENS. TURNING THE HANDWHEEL COUNTERCLOCKWISE AND COUNTERCLOCKWISE AT 150 PSI WILL CAUSE THE RELIEF VALVE AND CONTROL TO OPERATE. THIS WORKING ACTION FREES THE VALVE AND HELPS TO INSURE PROPER OPERATION. THE PM CONTROL SHOULD BE LUBRICATED AT LEAST EVERY SIX MONTHS. TURN THE HANDWHEEL COUNTERCLOCKWISE AS FAR AS POSSIBLE AND BRUSH A LITHIUM BASE GREASE WITH 1-3% MOLYBDENUM DISULFIDE ON THE THREADED SHAFT WHERE INDICATED.

APPROVED GREASES ARE:
CON CORNING BR-2 PLUS
LUBRIPLATE #F3000
SHELL SUPER DUTY GREASE

IMPERIAL #777
MOBIL-MOLGREASE SPECIAL
SUN OIL-SUNOCO MOLY #2EP

SV SENSING VALVE

FROM PMD CONTROL VALVE

TO DRAIN VALVE

TO P35 RELIEF VALVE

TO P35 RELIEF VALVE

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DRAIN CONNECTION NOTES

BOTH THE PRIMARY AND SECONDARY DRAIN CONNECTION REQUIRE SEPARATE AND INDEPENDENT DRAIN VALVES. DO NOT CONNECT TO A COMMON DRAIN, INCLUDING PUMP MASTER DRAIN.

THE PRIMARY DRAIN ALLOWS THE DG RELIEF VALVE AND THE PM CONTROL VALVE TO DRAIN. THE SECONDARY DRAIN ALLOWS THE VENT LINE TO THE WATER TANK TO DRAIN. THE VENT LINE CAN NOT DRAIN THROUGH THE PRIMARY DRAIN BECAUSE OF THE CHECK VALVE, WHICH CLOSES THE VENT LINE TO HOLD VACUUM WHEN PRIMING THE PUMP.

THE HALE DVT DRAIN VALVE IS RECOMMENDED. THE DVT HAS 7 INDEPENDENT DRAIN PORTS CONTROLLED BY A SINGLE KNOB AND IS INTENDED FOR THIS TYPE OF APPLICATION. FOR MORE INFORMATION, SEE CURRENT REVISION OF HALE PLATE NO. 800.

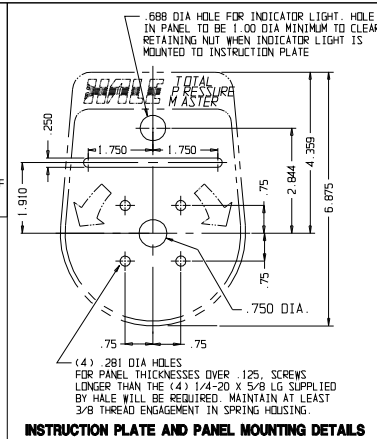
ELECTRICAL INFORMATION

THE HALE 200-2262-00-0 LIGHT SWITCH IS INTENDED FOR USE ONLY WITH THE HALE PROVIDED INDICATOR LIGHT. ELECTRICAL CHARACTERISTICS: 3 AMPS AT 28 VOLTS DC, NORMALLY CLOSED.

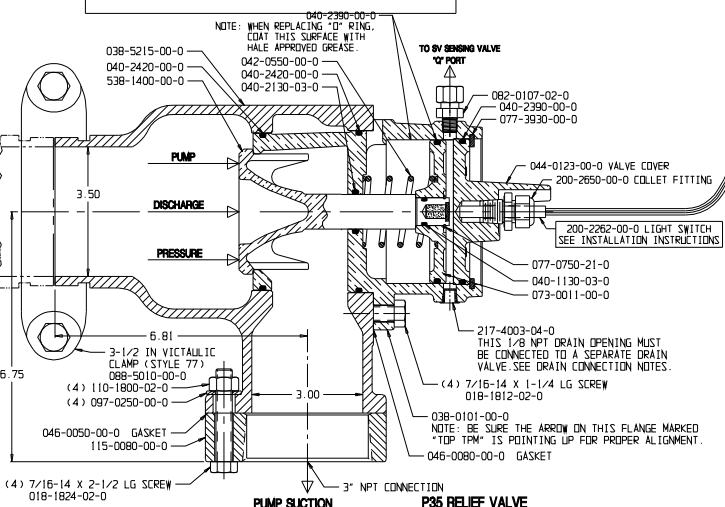
THE STANDARD HALE 200-0540-03-0 AMBER INDICATOR LIGHT IS INTENDED FOR 12 VOLT DC SERVICE. REPLACEMENT 12 VOLT BULB IS HALE PART NO. 200-0540-02-0. FOR 24 VOLT DC SERVICE USE BULB PART NO. 200-0540-09-0.

CIRCUIT PROTECTION (FUSE, CIRCUIT BREAKERS, ECT.) IS RECOMMENDED, BUT IS NOT THE RESPONSIBILITY OF HALE PRODUCTS.

SELECTION AND INSTALLATION OF ELECTRICAL COMPONENTS AND WIRING OTHER THAN THAT PROVIDED IS NOT THE RESPONSIBILITY OF HALE PRODUCTS. SYSTEM DESIGN AND INSTALLATION MUST BE DONE ONLY BY PROPERLY QUALIFIED PERSONS.



OBsolete DATE 12-14-07
SEE NEW DRWG. REV: --
ECN NUMBER: 0396
REPLACE WITH:
THIS PLATE WAS COMBINED
WITH PLATE NO. 742



WARNING

FAILURE TO FOLLOW THE INSTALLATION, OPERATION, LUBRICATION AND MAINTENANCE REQUIREMENTS SET FORTH HERE AND IN THE OPERATING AND INSTRUCTION MANUAL MAY RESULT IN SERIOUS PERSONAL INJURY AND / OR DAMAGE TO EQUIPMENT.

ALL INSTALLATION DETAILS MUST CONFORM TO APPLICABLE NFPA AND SAE STANDARDS. VERIFY PROPER RELIEF VALVE OPERATION BEFORE PLACING APPARATUS IN SERVICE.

REV	DESCRIPTION	DATE	BY	DATE	APPROVED
00-000	ORIGINAL	01-13-94	HALE	01-13-94	HALE
01-000	REDESIGNED PLATE NO. 799AA	03-12-97	HALE	03-12-97	HALE
02-000	UPDATED PART REQUIREMENTS	02-26-99	HALE	02-26-99	HALE
03-000	UPDATED PART REQUIREMENTS	04-05-00	HALE	04-05-00	HALE



HALE PRODUCTS, INC.
A Unit of IDEX Corporation
Conshohocken, PA 19348 USA

DATE: 01-13-94
SCALE: FULL
SHEET: 40 OF 40