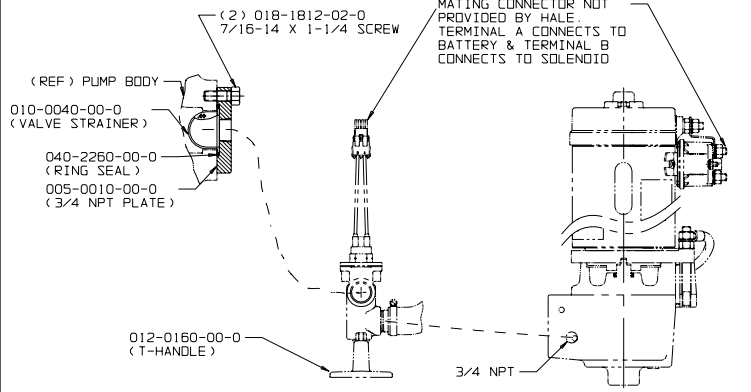


THIS PRODUCT AND ITS COMPONENTS MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS AND OTHER PATENTS PENDING: 4,337,830, 4,587,862, 4,653,978, 5,018,665, 5,139,393

SN
SERIAL NUMBER LOCATION

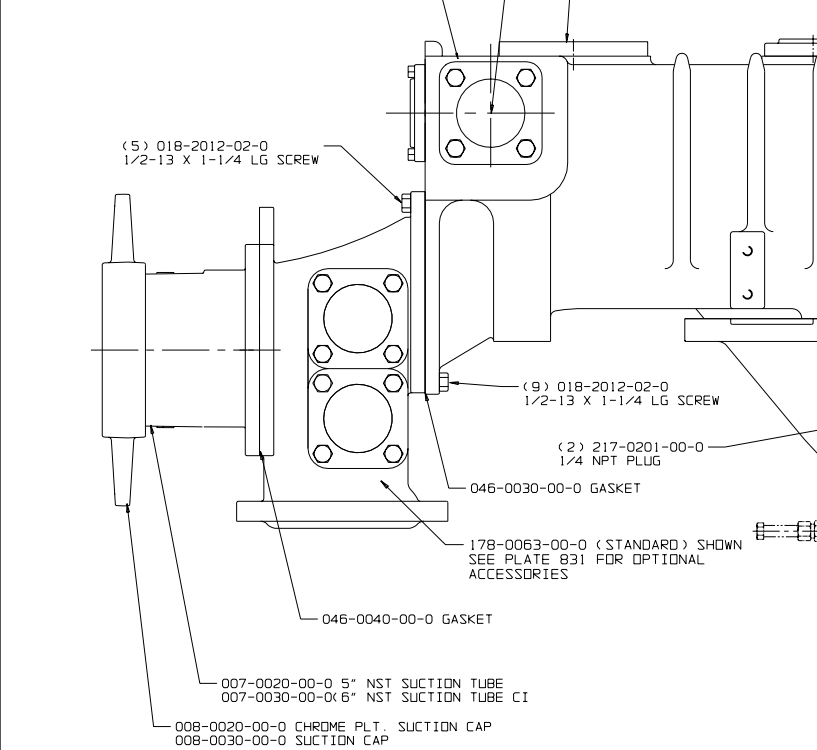


PVG PRIMING VALVE ESP PRIMING PUMP
SEE PLATE NO. 480 FOR INSTALLATION DETAILS

VALVE ESP PRIMING PUMP
SEE PLATE NO. 821 FOR INSTALLATION DETAILS

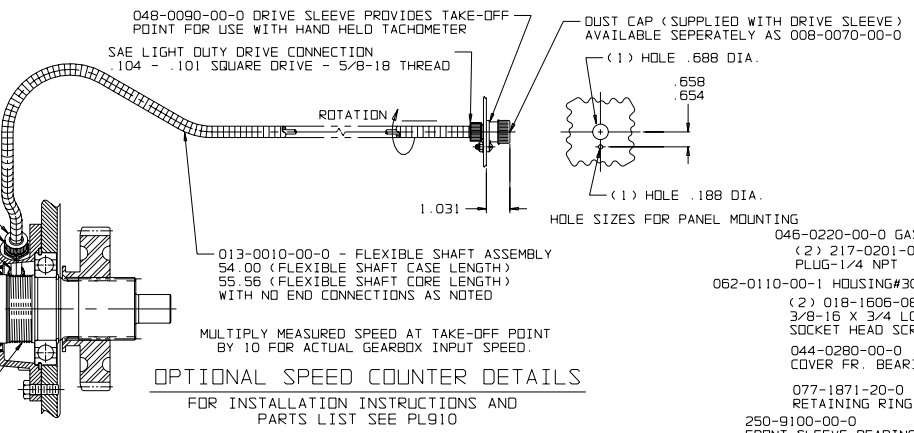
- (4) 115-0050-00-0 FRONT FLANGE
- (4) 115-0050-00-0 REAR FLANGE
- (8) 142-0390-00-0 SEAL RING
- (16) 018-1812-02-0 FRONT 7/16-14 X 1-1/4 LG SCREW
- (16) 018-1812-02-0 REAR 7/16-14 X 1-1/4 LG SCREW
- (2) 115-0010-00-0 FLANGE
- (2) 046-0060-00-0 GASKET
- (16) 018-1812-02-0 7/16-14 X 1-1/4 LG SCREW
- (1) 115-0010-00-0 BLANK FLANGE
- (1) 046-0060-00-0 GASKET
- (8) 018-1812-02-0 7/16-14 X 1-1/4 LG CAP SCREW

- OPTIONAL
- 115-0030-00-0 3NPT FLANGE
- 115-0040-00-0 4NPT FLANGE
- 3 INCH DR 4 INCH SVS VALVE AND/OR CHECK VALVE

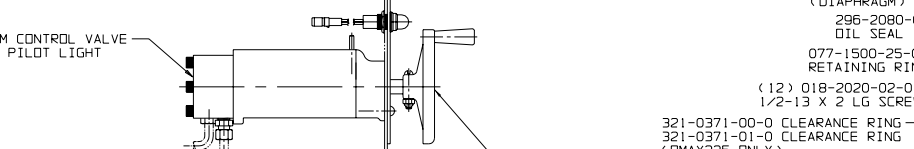


007-0020-00-0 5" NST SUCTION TUBE
007-0030-00-0 6" NST SUCTION TUBE CI

008-0020-00-0 CHROME PLT. SUCTION CAP
008-0030-00-0 SUCTION CAP



OPTIONAL SPEED COUNTER DETAILS
FOR INSTALLATION INSTRUCTIONS AND PARTS LIST SEE PL910



PM CONTROL VALVE & PILOT LIGHT

THROTTLE INDICATOR LIGHT

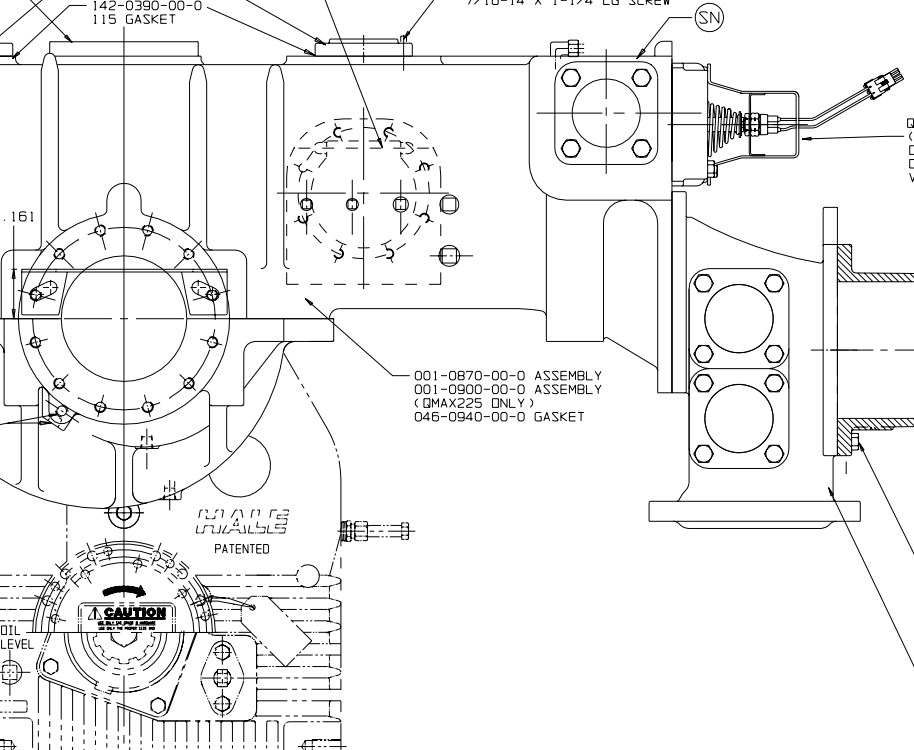
PUMP OPERATOR'S PANEL

101-0381-00-0 (OPERATOR PANEL PLATE)

PM CONTROL VALVE FOR QD RELIEF VALVE WITH RELIEF VALVE PILOT LIGHT. INSTALL THE CONTROL VALVE AT A LEVEL HIGHER THAN THE MAIN RELIEF VALVE SO THAT THE CONTROL VALVE AND TUBING LINES WILL DRAIN NATURALLY AND COMPLETELY. THIS IS IMPORTANT TO PREVENT DAMAGE FROM FREEZING.

TPM RELIEF VALVE SYSTEM AVAILABLE. SEE PLATE NO. 742.

TPM RELIEF VALVE SYSTEM STANDARD ON 2000 GPM PUMP. FOR QD RELIEF VALVE SYSTEM SEE PLATE NO. 404.

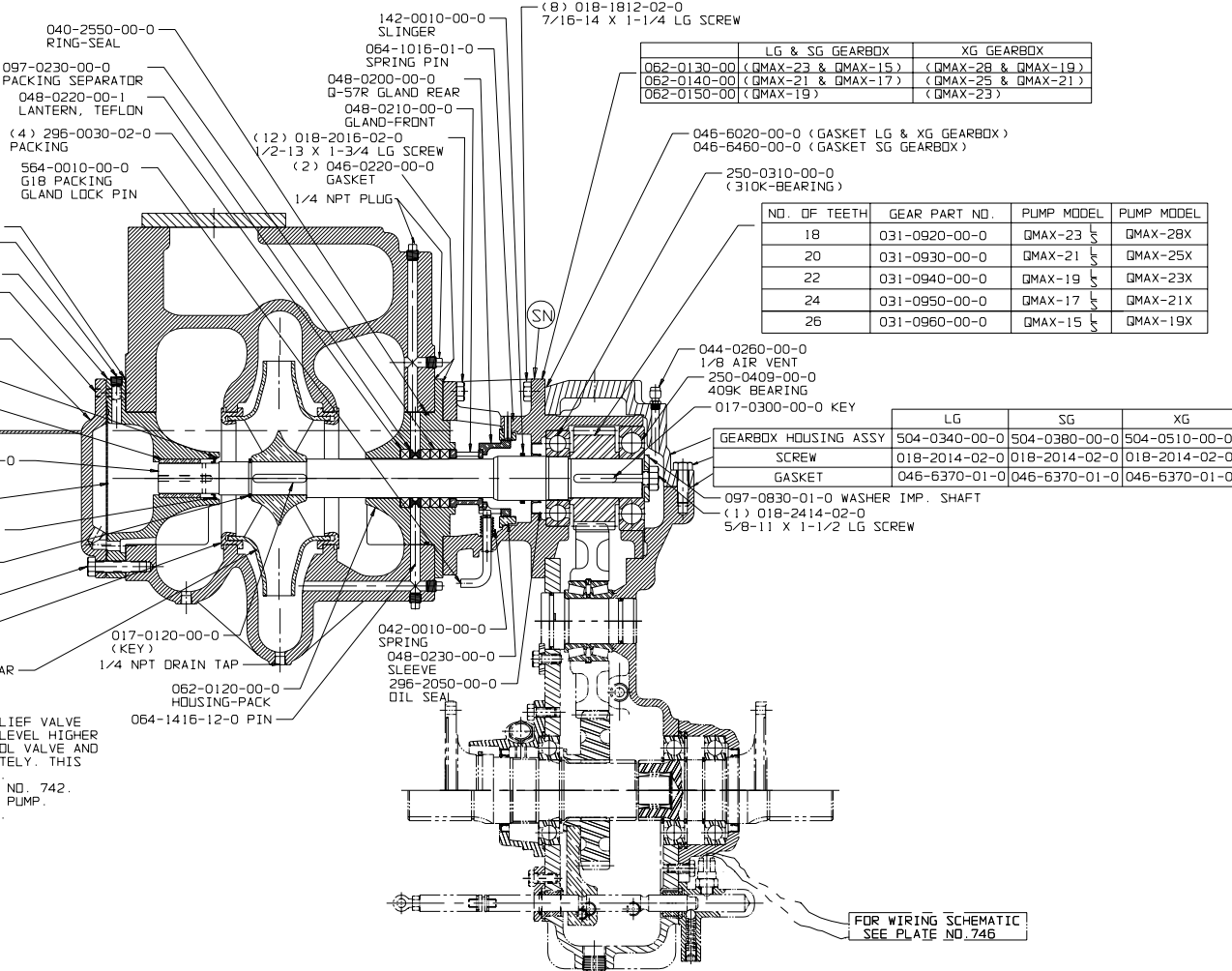


PUMP OPERATOR'S PANEL

DRIVING COMPARTMENT PANEL

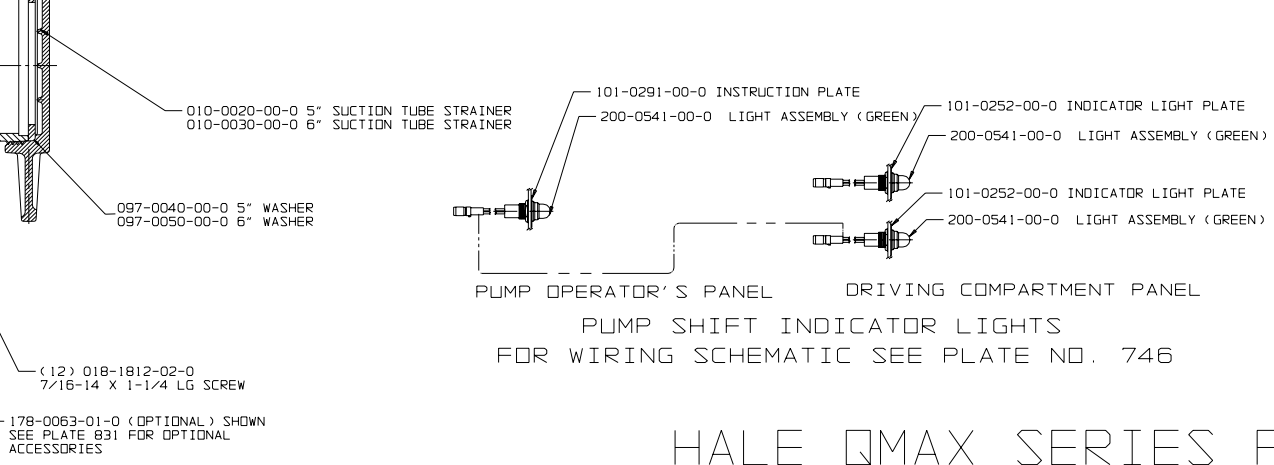
PUMP SHIFT INDICATOR LIGHTS

FOR WIRING SCHEMATIC SEE PLATE NO. 746



SEE PLATE NO. 914 FOR "G" SERIES GEARBOX

- NOTES:**
- SEE LIMIT CHART, HALE DOCUMENT F-72 FOR MAXIMUM ALLOWABLE PUMP PRESSURE, ENGINE HORSEPOWER AND TORQUE LIMITS FOR HALE CENTRIFUGAL PUMPS.
 - APPLY LOCTITE # 246 HIGH TEMPERATURE THREAD LOCKER OR EQUIVALENT TO SCREW THREADS AND TORQUE SCREWS PER HALE ENGINEERING STANDARD ES018-002
 - UNLESS OTHERWISE INDICATED FASTENERS ARE GRADE 5 ZINC PLATED STEEL



PUMP OPERATOR'S PANEL

DRIVING COMPARTMENT PANEL

PUMP SHIFT INDICATOR LIGHTS

FOR WIRING SCHEMATIC SEE PLATE NO. 746

	LG & SG GEARBOX	XG GEARBOX
062-0130-00 (QMAX-23 & QMAX-15)	(QMAX-23 & QMAX-15)	(QMAX-28 & QMAX-19)
062-0140-00 (QMAX-21 & QMAX-17)	(QMAX-21 & QMAX-17)	(QMAX-25 & QMAX-21)
062-0150-00 (QMAX-19)	(QMAX-19)	(QMAX-23)

NO. OF TEETH	GEAR PART NO.	PUMP MODEL	PUMP MODEL
18	031-0920-00-0	QMAX-23	QMAX-28X
20	031-0930-00-0	QMAX-21	QMAX-25X
22	031-0940-00-0	QMAX-19	QMAX-23X
24	031-0950-00-0	QMAX-17	QMAX-21X
26	031-0960-00-0	QMAX-15	QMAX-19X

	LG	SG	XG
GEARBOX HOUSING ASSY	504-0340-00-0	504-0380-00-0	504-0510-00-0
SCREW	018-2014-02-0	018-2014-02-0	018-2014-02-0
GASKET	046-6370-01-0	046-6370-01-0	046-6370-01-0

PLATE NO. 886AF

ECD NO	REV	CHANGED FROM	BY	DATE	APVD	ECD NO	REV	CHANGED FROM	BY	DATE	APVD
0303	F	UPDATE DRAWING TO MATCH CURRENT PRODUCTION	DBH	01-25-06	MAL	00-458	D	UPDATED DRAWING	DJK	5-18-00	MAL
00-665	E	UPDATED DRAWING	TKC	10-31-00	MAL	00-445	C	UPDATED DRAWING	DJK	4-10-00	MAL
						99-121	B	UPDATE DRAWING	DPL	6-15-99	RET
						98-49	A	RELEASE FOR PRODUCTION	MD	4-1-98	RET

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

HALE QMAX SERIES PUMP WITH "G" SERIES GEARBOX

DATE 2-13-98 SCALE: .25