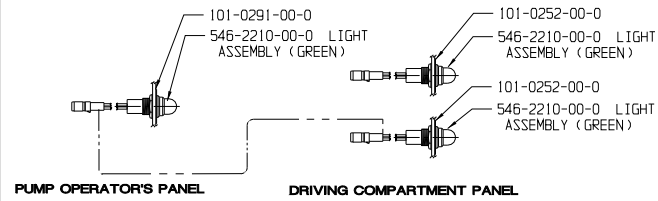


**GEARBOX INDICATOR LIGHTS**  
FOR WIRING SCHEMATIC SEE PLATE NO. 746



*K* PORT FLANGE OPTIONS		
FLANGE TYPE	IRON P/N	BRONZE P/N
BLANK (STANDARD)	115-0050-00-0	115-0050-01-0
1-1/4" NPT	115-1260-00-0	115-1260-01-0
2" NPT	115-0060-00-0	115-0060-02-0
2-1/2" NPT	115-0070-00-0	115-0070-01-0
3" NPT	115-0080-00-0	115-0080-01-0
TRV	SEE PLATE 729	SEE PLATE 729
ZINC OR MAGNESIUM ANODE*	SEE PLATE 869	SEE PLATE 869

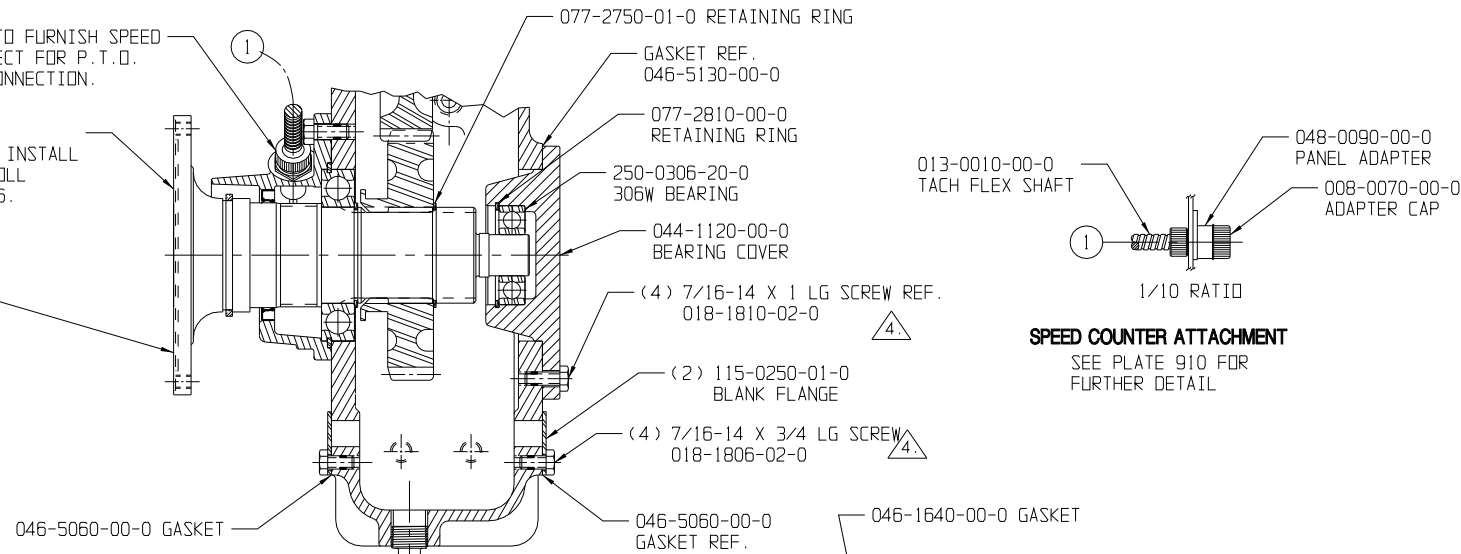
\*REQUIRES SPACER 159-0010-01-0 (IRON) OR 159-0010-21-0 (BRONZE) AND (4) 018-1820-02-0 OR (4) 018-1820-05-0 (BRONZE)

NOTE: APPARATUS MANUFACTURER TO FURNISH SPEED COUNTER ADAPTER TO CORRECT FOR P.T.O. RATIO: 1"-20 THREADED CONNECTION.

NOTE: TO CONFORM TO NFPA 1901, THE APPARATUS MANUFACTURER MUST INSTALL INDICATOR LIGHTS FOR PUMP AND ROLL OPERATION PER HALE PLATE NO. 746.

FRONT INPUT SHAFT

537-1740-01-0  
INPUT SHAFT ASSEMBLY



**SPEED COUNTER ATTACHMENT**  
SEE PLATE 910 FOR FURTHER DETAIL

**PTO DRIVE OPTION**  
REAR OUTPUT SHAFT BLANKED-OFF

(3) 217-0301-00-0 3/8 NPT PLUG

(3) 217-0301-01-0 3/8 NPT PLUG BRASS

(4) 018-1812-02-0 7/16 X 1-1/4 LG SCREW

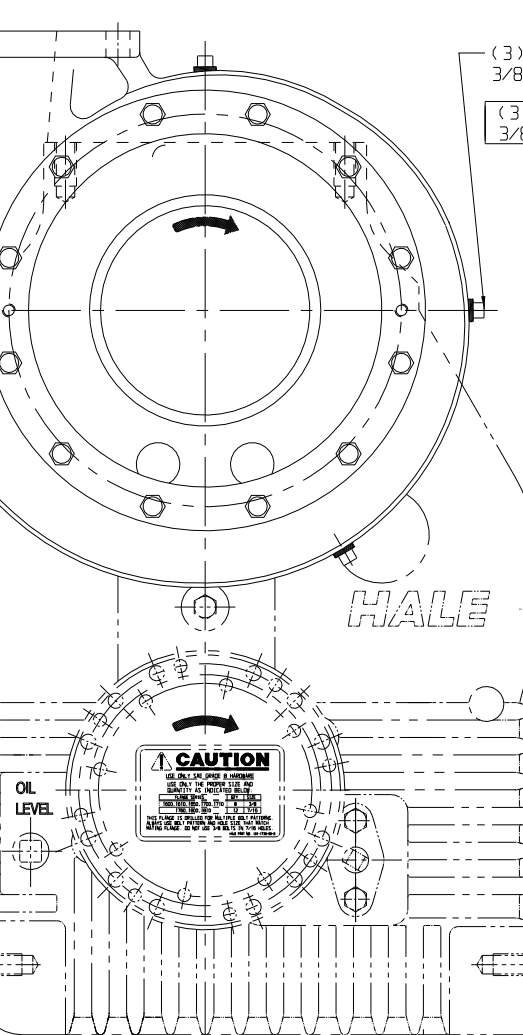
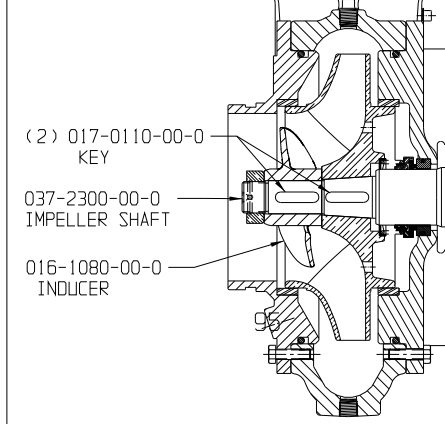
(4) 018-1812-05-0 7/16 X 1-1/4 LG SILICON BRONZE SCREW

046-0050-00-0 GASKET

001-5132-00-0 PUMP BODY (CI)

001-5132-01-0 PUMP BODY BRONZE

**1500GPM OPTION**  
(ALTERNATE PARTS AVAILABLE IN ENGINE ROTATION ONLY)



SEE PLATE 914 FOR 'G' SERIES GEARBOX DATA

110-7040-00-0 NUT  
NOTE: TORQUE IMPELLER NUT TO 210 LB-FT (285 N-m) MINIMUM

064-5070-01-0 COTTER PIN

037-5140-00-0 PUMP SHAFT

002-5401-00-0 SUCTION HEAD CAST IRON

002-5401-01-0 SUCTION HEAD BRASS

016-1050-00-0 IMPELLER

296-2090-00-0 OIL SEAL

(24) 018-1812-05-0 7/16-14 X 1-1/4 LG SILICON BRONZE SCR

(24) 018-1812-02-0 7/16-14 X 1-1/4 LG SCREW

(2) 250-0211-20-0 211W BEARING

(8) 018-1812-25-0 7/16-14 X 1-1/4 LG SCREW GRADE 8

046-6020-00-0 GASKET

(2) 040-4490-00-0 SEAL RING

046-1640-00-0 GASKET

296-5210-03-0 MECHANICAL SEAL

(2) 321-0040-00-0 CLEARANCE RING

017-0110-00-0 KEY

017-0300-00-0 KEY

	BEARING HOUSING P/N	'LG' GEARBOX	'XG' GEARBOX
CI	062-0770-00-0	DSD-23 & DSD-15	DSD-19 & DSD-28
	062-0770-01-0	DSD-21 & DSD-17	DSD-25 & DSD-21
BRASS	062-0770-02-0	DSD-19	DSD-23
	062-0770-20-0	DSD-23 & DSD-15	DSD-19 & DSD-28
	062-0770-21-0	DSD-21 & DSD-17	DSD-25 & DSD-21
	062-0770-22-0	DSD-19	DSD-23

250-0409-00-0 409K BEARING

097-0830-01-0 WASHER

018-2412-02-0 5/8-11 X 1-1/4 LG SCREW

077-2120-01-0 RETAINING RING

048-0170-00-0 SHIM AS REQUIRED

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

048-0150-00-0 SHIM

REAR OUTPUT SHAFT

- NOTES:
- 1) PRIMING SYSTEM, DISCHARGE & SUCTION VALVES ARE AVAILABLE.
  - 2) ALL FASTENERS SHALL BE INSTALLED WITH A NUT LOCKING ANAEROBIC ADHESIVE/SEALANT: LOCTITE #246 HIGH TEMPERATURE THREADLOCKER OR EQUIVALENT.
  - 3) CAUTION: ALL FASTENERS ON THIS UNIT HAVE BEEN SELECTED PER THEIR APPLICATION. HALE PRODUCTS DOES NOT RECOMMEND REPLACING FASTENERS WITH ANYTHING OTHER THAN HALE PART NUMBERS PROVIDED. REPLACING WITH A WEAKER ALTERNATIVE POSES A SAFETY RISK.
  - 4) FOR ALL TORQUE SPECIFICATIONS REFERENCE TABLE- "A"
  - 5) ITEMS SHOWN IN [ ] ARE FOR BRONZE VERSION ONLY

TABLE-"A" TORQUE SPECIFICATIONS		TORQUE	
SIZE		LB-FT	N-m
7/16-14 GRADE 8		70	95
7/16-14 CARBON STEEL SAE GRADE 5		50	68
7/16-14 SILICON BRONZE		29	39
5/8-11 CARBON STEEL SAE GRADE 5		150	203
5/8-11 SILICON BRONZE		85	115

**HALE TYPE DSD SERIES PUMP**  
**WITH "G" SERIES GEARBOX**

PLATE NO. 789AF

ECD NO/REV	CHANGED FROM	BY	DATE	APVD
0213	E	DEW	11-15-05	MAL
0459	F	MJP	10-06-06	MAL

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

HALE

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DATE 8-6-99  
SIZE [ ]  
SCALE: .25