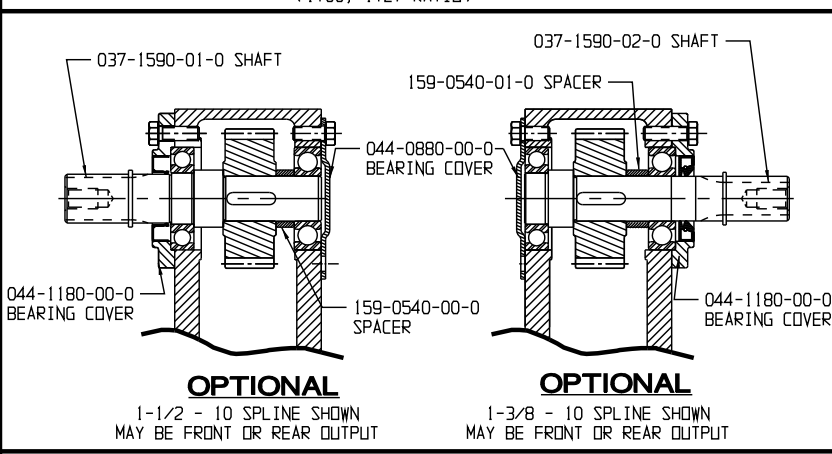
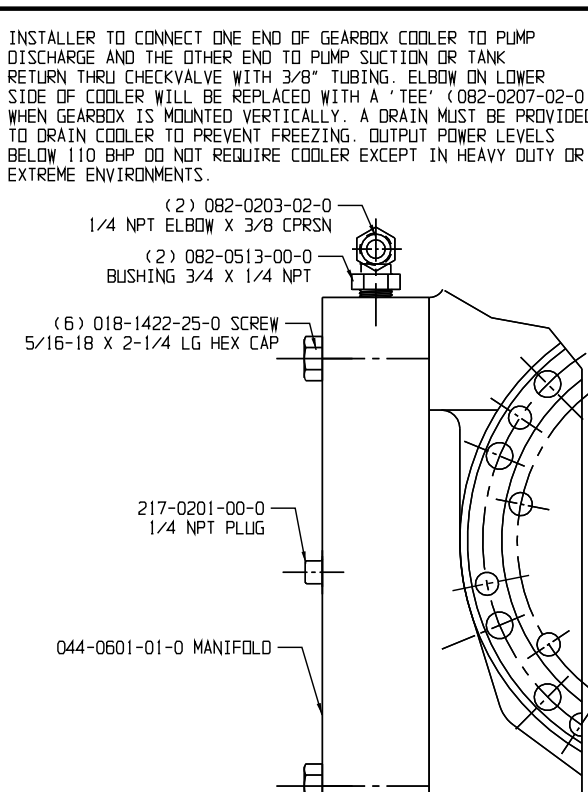
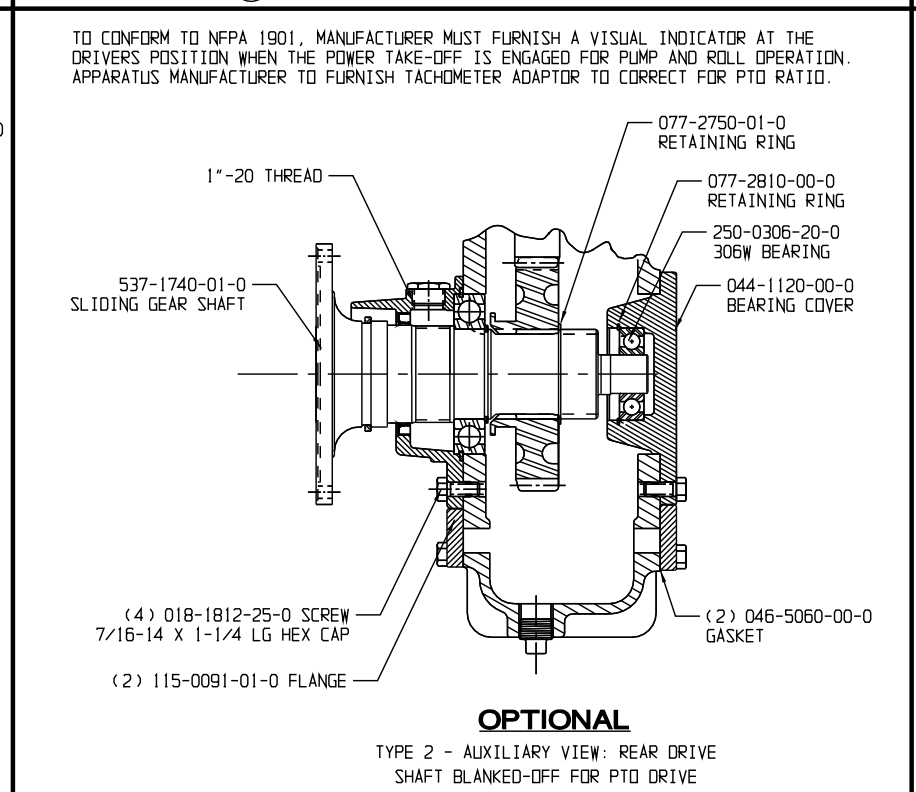
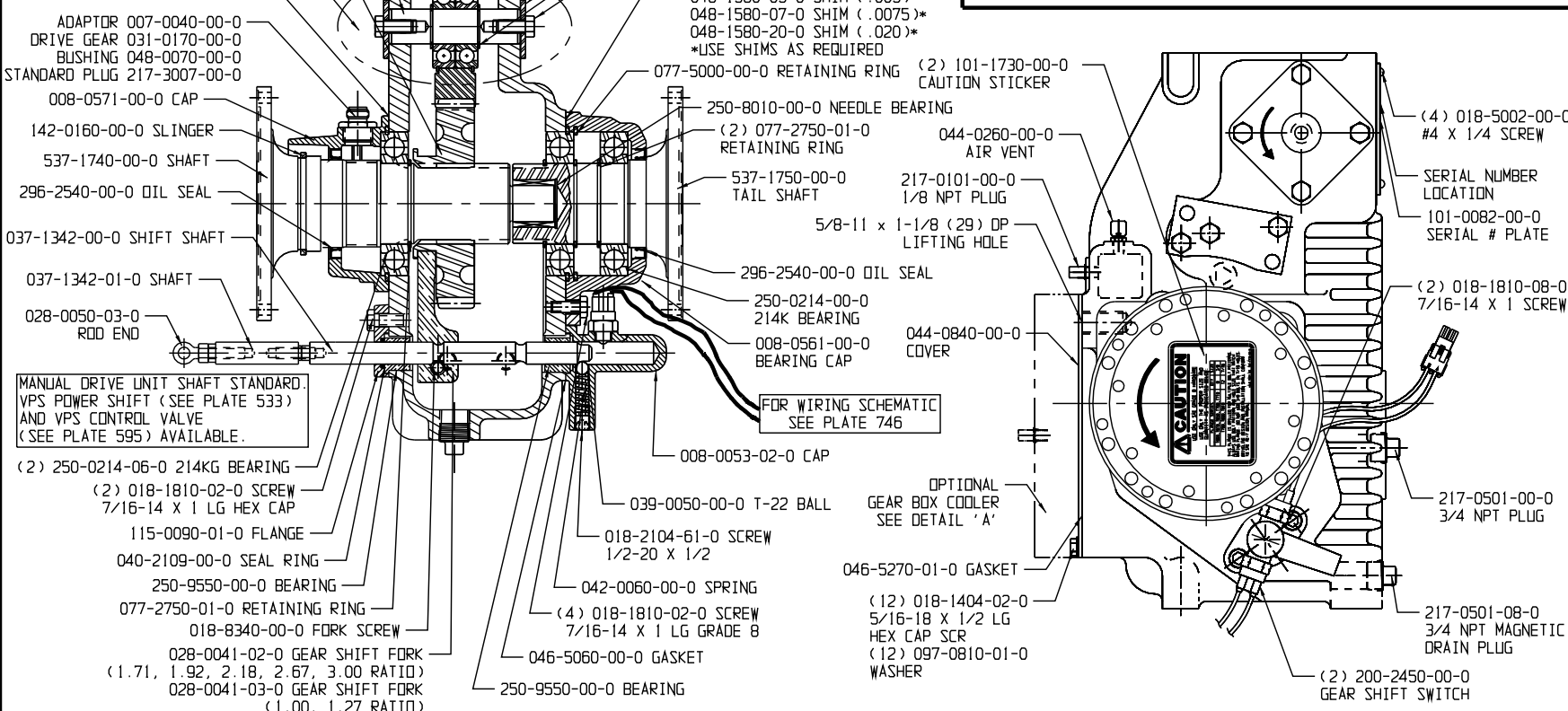
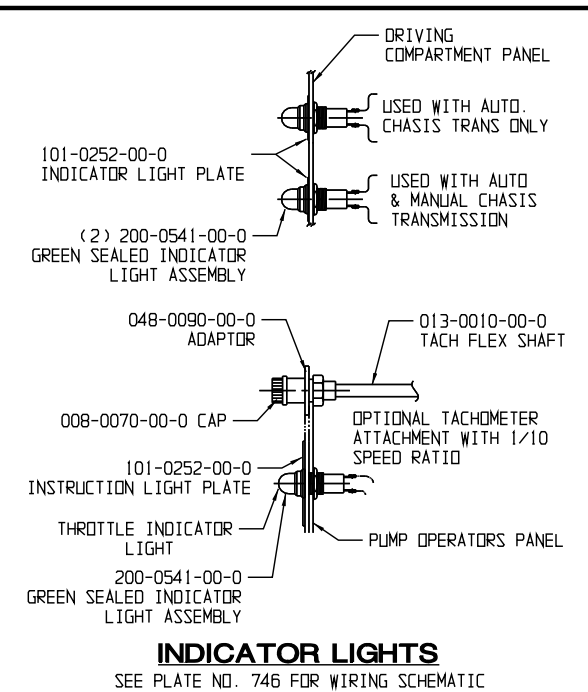
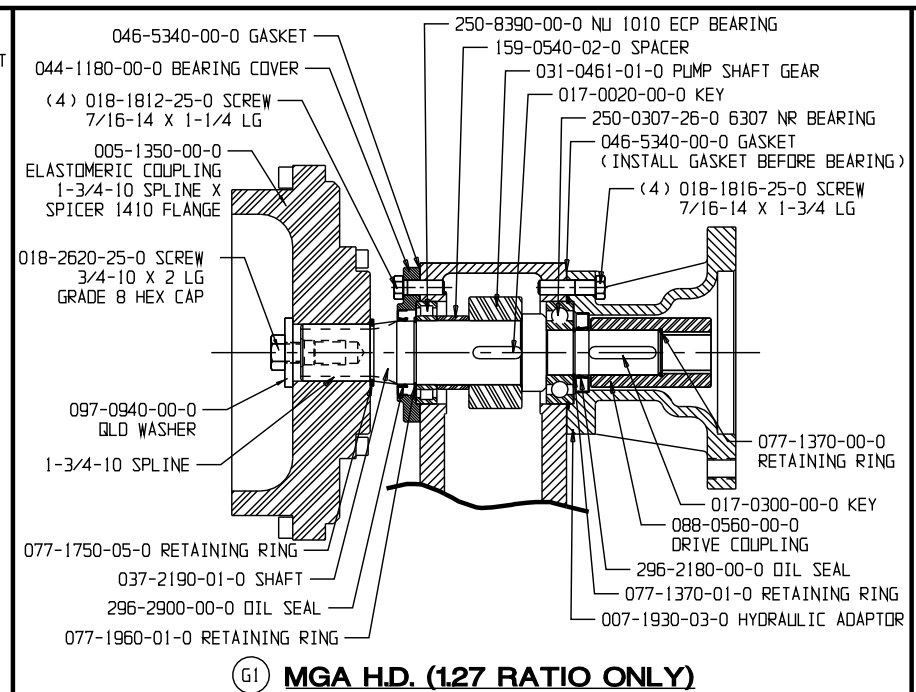
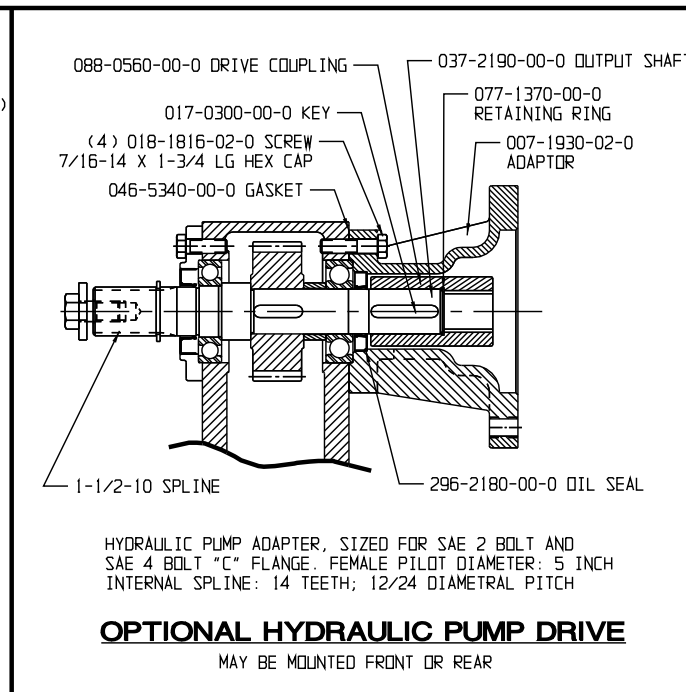
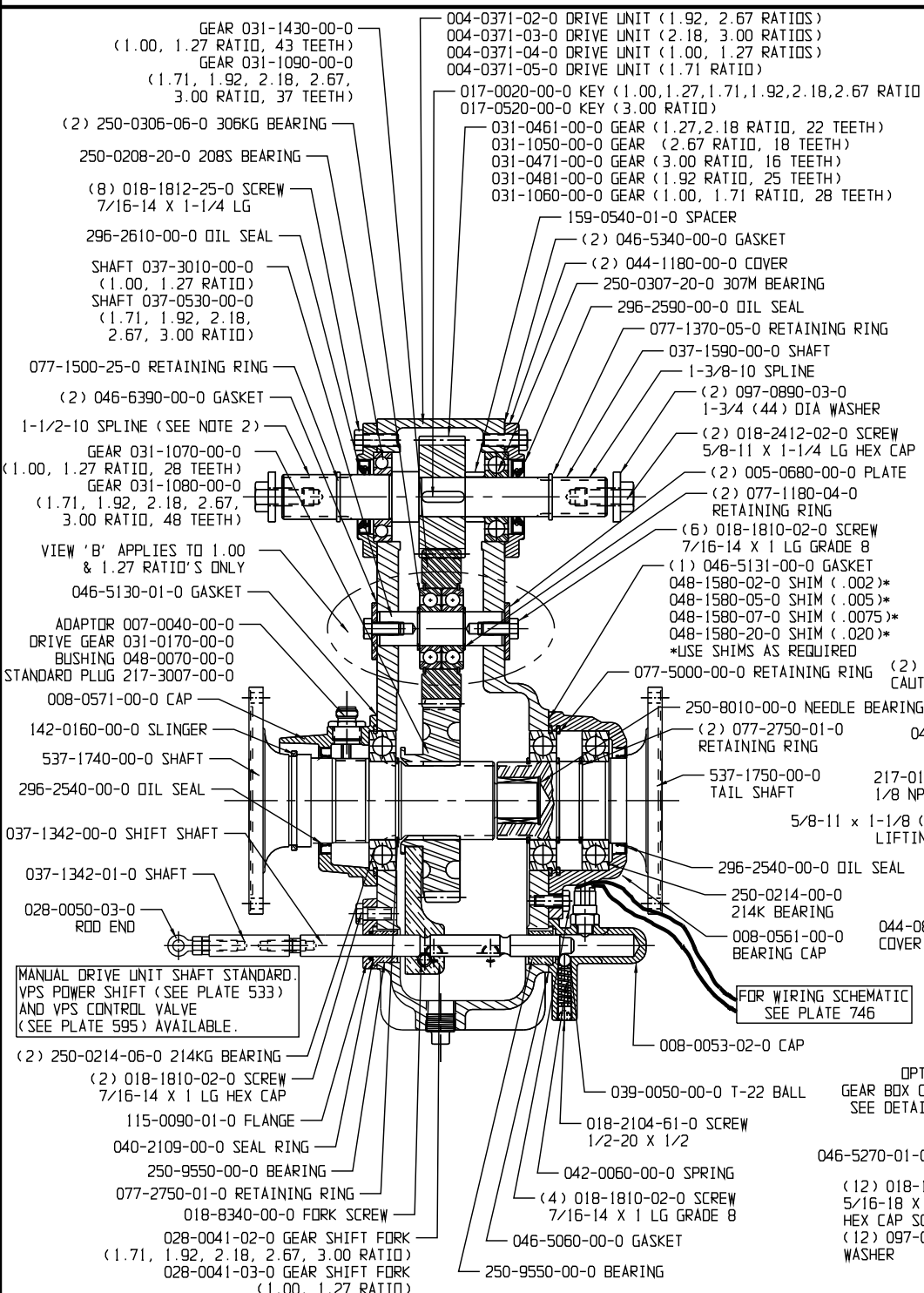
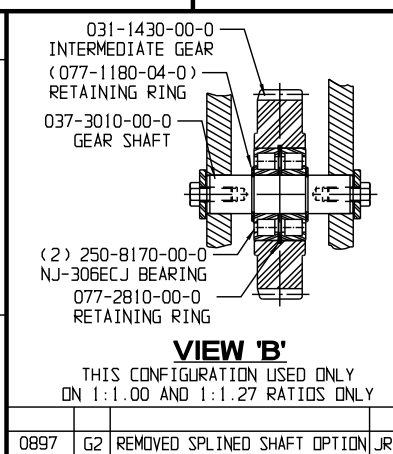


# HALE TYPE MGA SERIES SPLIT SHAFT/PTO TRANSFER CASE

Friday, December 04, 2009 11:29:25



**WARNING**  
EXCEEDING THESE LIMITS OR FAILURE TO FOLLOW THE RECOMMENDATIONS OUTLINED IN THIS DRAWING COULD DAMAGE THE GEARBOX AND RESULT IN PERSONAL INJURY.  
MAX PTO OUTPUT POWER: 250 BHP (186 KW)  
MAX OUTPUT TORQUE: 625 LBS-FT (847 N-m)  
MAX GEARBOX SHAFT THRU TORQUE (ROAD): 16,000 LBS-FT (21,693 N-m)  
SEE HALE TORQUE LIMIT CHART F-72 FOR ADDITIONAL DATA  
**DRIVE LINE RECOMMENDATIONS**  
APPARATUS BUILDER SUPPLIED DRIVELINES SHALL BE OF APPROPRIATE SIZE TO MATCH THE CHASSIS AND PUMP REQUIREMENTS WITH INDIVIDUAL JOINT CANCELLATION AND PHASING BEFORE AND AFTER THE PUMP. DRIVE SHAFT BALANCE (INCLUDING YOKES) SHALL NOT EXCEED THE RECOMMENDED LIMIT OF EITHER THE DRIVE SHAFT OR CHASSIS TRANS MANUFACTURER'S SPECIFICATIONS. DRIVE SHAFT FULL RANGE OPERATING SPEEDS SHALL NOT EXCEED 42% OF ITS CRITICAL SPEED.



NOTES:  
1) 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    4,653,978    5,139,393  
4,587,862    5,018,665  
2) AUXILIARY OUTPUT SHAFT AND INTERNAL PARTS MAY BE ASSEMBLED SO THAT 1-1/2-10 SPLINE IS ON FRONT OF GEARBOX AS SHOWN AND 1-3/8-10 SPLINE IS ON OPPOSITE END OR WITH EITHER SPLINE ON EITHER END WITH THE OPPOSITE END BLANKED OFF. FURNISHED AS SHOWN UNLESS SPECIFIED OTHERWISE.  
3) OIL TYPE: SAE EP-90, 80W-90 OR 75W-140 SYNTHETIC. LUBRICANTS MUST MEET SERVICE RATING API GL-5.  
4) APPROX. OIL CAP: 5.5 PINTS (2.6 LITERS) VERTICAL GEARBOX; 6 PINTS (2.8 LITERS) HORIZONTAL GEARBOX.  
5) REFER TO PLATE NO. 915 FOR INSTALLATION DIMENSIONS

0427	E	046-5130-01-0 TO 046-5431-00-0 & SHIMS	KSM	8-31-06	MAL
0897	G2	REMOVED SPLINED SHAFT OPTION	JRP	07-22-09	MAL
0897	G1	ADDED MGA H.D. INFORMATION	JRP	07-22-09	MAL
0477	F	UPDATED TO CURRENT PRODUCTION	MJP	11-20-06	MAL
ECD NO	REV	CHANGED FROM	BY	DATE	APVD

**TORQUE TABLE**

SCREW SIZE	GRADE 5		GRADE 8	
	lbs-ft	Nm	lbs-ft	Nm
1/4-20	8	11	12	16
5/16-18	17	22	25	33
3/8-16	30	41	45	61
7/16-14	50	67	70	94
1/2-20	90	122	120	162
3/4-10	260	352	380	514

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

DATE 7/30/99  
SCALE: FULL

## PLATE NO. 722AG