



# RL~E50

## PARTS LIST # 102690I

USE THIS PARTS LIST FOR:

Hoist Serial Number 11896 to \_\_\_\_\_

For older hoists use the following:  
Parts List No. 102690H for Serial Number 5105 to 11895

IF YOUR HOIST DOES NOT FALL WITHIN THE SERIAL NUMBERS BREAKS,  
CONTACT HARSH TO GET THE APPROPRIATE MANUAL

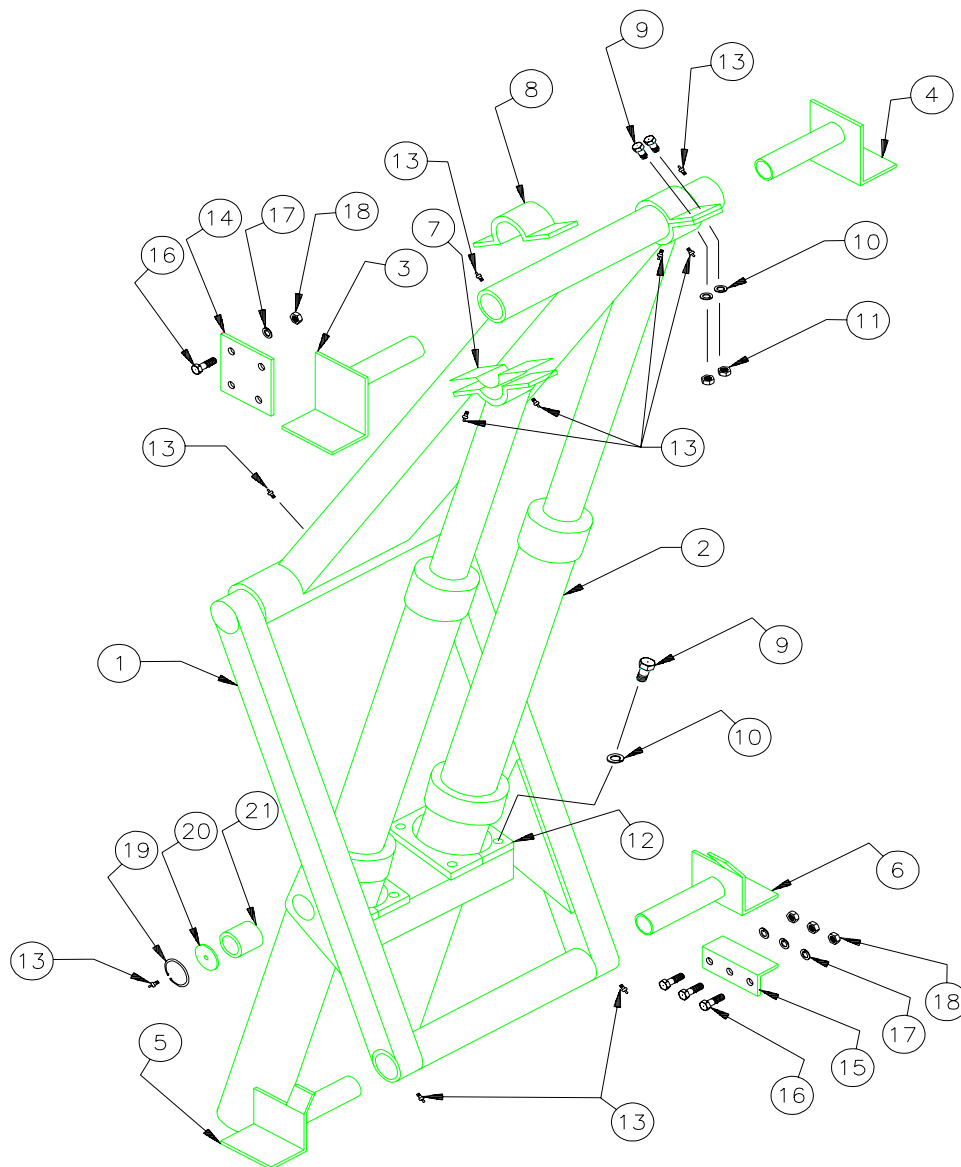
*For pump replacement part numbers, consult the parts lists supplied with the pump*

**IT IS RECOMMENDED THAT THIS HOIST  
BE INSTALLED BY A QUALIFIED  
TRUCK EQUIPMENT INSTALLER**

Harsh International, Inc.  
600 Oak Avenue  
Eaton, Colorado 80615

PHONE: (877) 427-7448 Toll-Free  
(970) 454-1755 Local

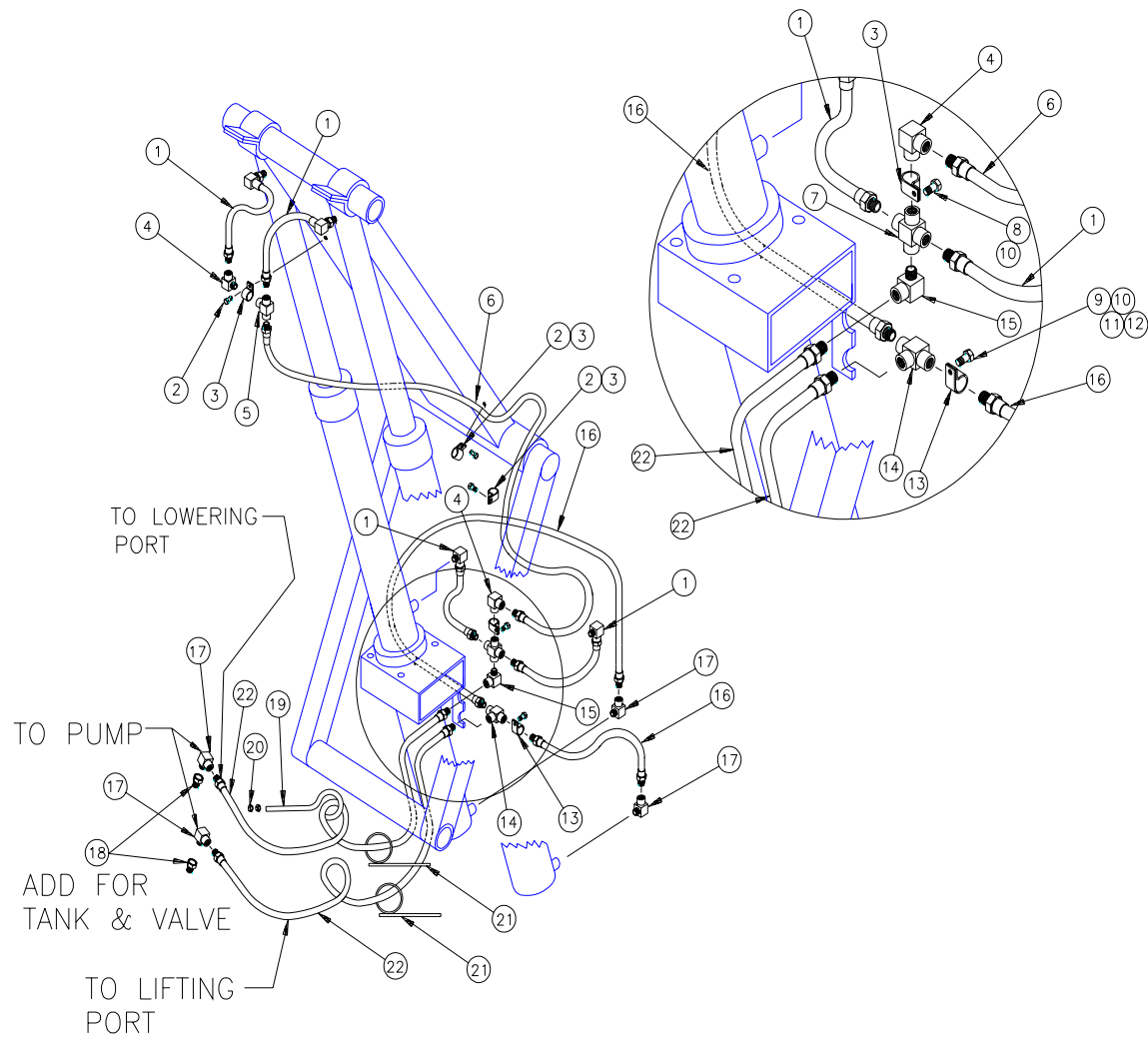
FAX: (970) 454-1761  
EMAIL: [customersupport@harshenviro.com](mailto:customersupport@harshenviro.com)



**E50 HOIST  
SCISSOR ASSEMBLY**

ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	A12903	1	SCISSOR ASSEMBLY	12	16344	4	MOUNTING FLANGE HALF
*2	A1249	2	CYLINDER ASSEMBLY (COMPLETE)	13	100037	11	GREASE FITTING, DRIVE IN
3	A11610-2	1	UPPER MOUNT	14	11126	2	STRINGER ATTACHMENT PLATE
4	A11610-1	1	UPPER MOUNT	15	11127	2	ANGLE, FRAME ATTACHMENT
5	A11611-1	1	LOWER MOUNT	16	100230	14	SCREW, HEX HD CAP
6	A11611-2	1	LOWER MOUNT	17	100272	14	WASHER, LOCK
7	12907	2	BUSHING, BRASS	18	100250	14	NUT, HEX
8	18631	2	UPPER CYLINDER MOUNT	19	100147	2	SNAP RING
9	100240	16	SCREW, HEX HD CAP	20	12899	2	PLATE, GREASE RETAINING
10	100271	16	WASHER, LOCK	21	12900	2	BUSHING
11	100254	8	NUT, HEX	*22	A9777	1	DECAL KIT

**NOTE:** \*2 - A1249 INCLUDES CYLINDER ASSY, MOUNTING FLANGE HALVES, CYLINDER TOP MOUNT, BRASS BUSHING, SCREWS, LOCK WASHERS AND NUTS.  
 \*22 - A9777 INCLUDES ALL DECALS USED ON HOIST.  
 SOME HOISTS MAY HAVE SELF TAPPING ZERKS IN VARIOUS LOCATIONS.



### E50 HOIST HOSE ASSEMBLY

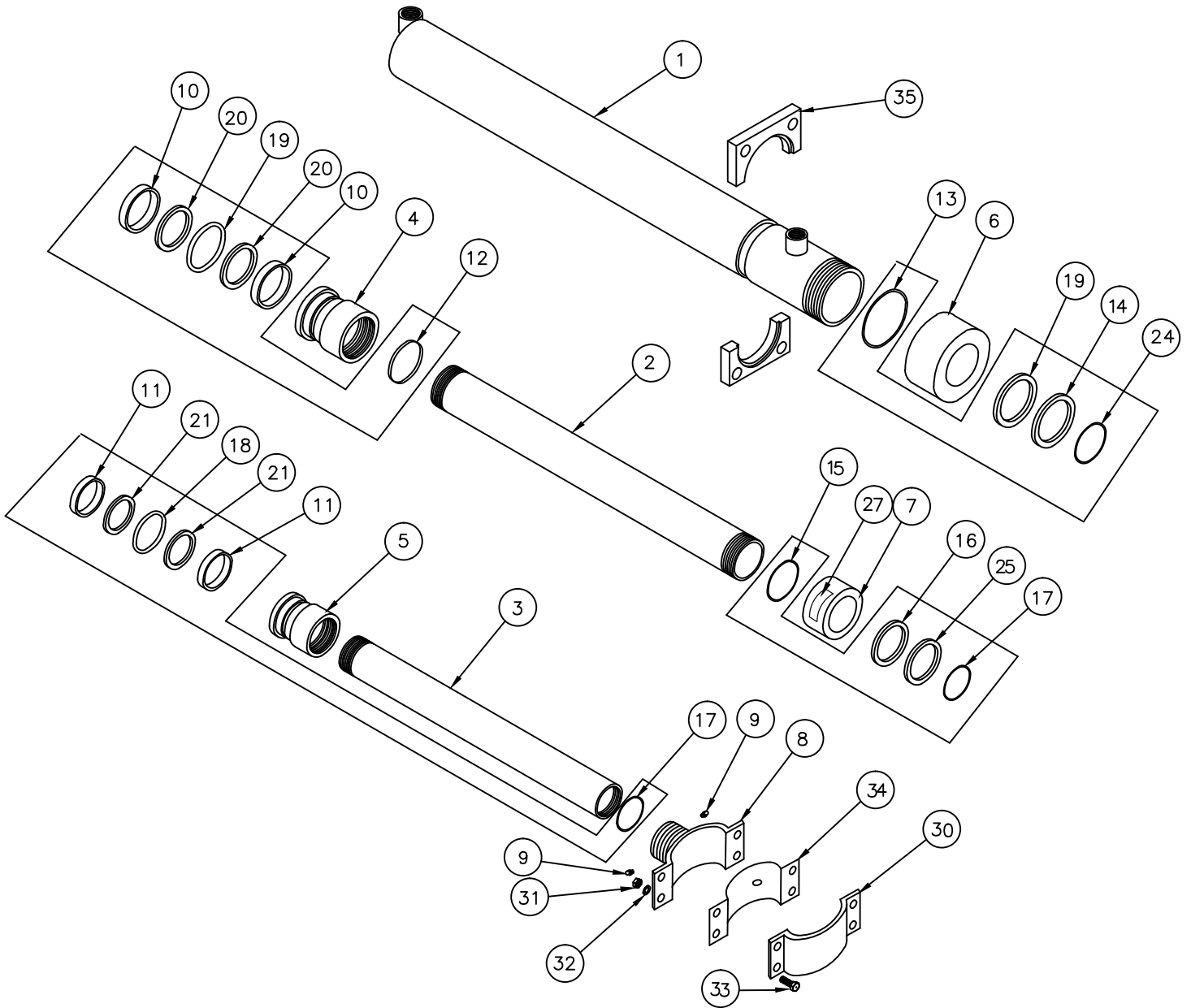
ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	100937	4	HOSE ASSEMBLY	12	100221	1	NUT, HEX
2	100544	3	SCREW, HEX HD CAP	13	100935	1	HOSE CLAMP, 13/16 ID
3	100547	4	HOSE CLAMP, 11/16 ID	14	100010	1	TEE
4	100531	2	ELBOW	15	100527	1	ELBOW
5	100526	1	TEE	16	100939	2	HOSE ASSEMBLY
6	100938	1	HOSE ASSEMBLY	*17	100451	4	ELBOW
7	100936	1	CROSS	*18	100015	2	BUSHING
8	101819	1	SCREW, HEX HD	*19	100563	1	EYE BOLT
9	100109	1	SCREW, RND HD	*20	100254	2	NUT, HEX
10	100304	2	WASHER, LOCK	*21	A11166	2	HOSE SUPPORT
11	100443	1	WASHER, FLAT	22	100973	2	HOSE ASSEMBLY

**NOTE:** \*17 - FOR PUMP USE 100451 QTY. 4.

\*18 - FOR TANK & VALVE ADD BUSHINGS (100015) TO ELBOW (100451) BEFORE CONNECTING TO VALVE.

\*19,20,21 - USED TO SUPPORT ITEM #22 (100973) HOSE ASSEMBLY TO CHASSIS.

# E50 HOIST CYLINDER PARTS



NOTE:  
ITEMS 22,23 - NOT USED  
ITEMS 26,28,29 - NOT SHOWN

## E50 HOIST CYLINDER PARTS LIST

QTY	ITEM #	PART #	DESCRIPTION
2	33	16344	MOUNTING FLANGE HALF
1	32	12907	BUSHING, BRASS
4	31	100240	SCREW, HEX HEAD CAP, 3/8-16 UNC x 1-1/4 GR5
4	30	100271	WASHER, LOCK, 3/8
4	29	100254	NUT, HEX, 3/8
1	28	18631	CYLINDER TOP MOUNT
1	27	100442	PLUG, PIPE, 3/8 NPT BLACK PIPE
2	26	101165	PLUG, PIPE, 1/4 NPT PLASTIC
1	25	101045	DECAL, MAX CYL PRESSURE 3300 PSI
1	24	100552	ADHESIVE SEALANT
1	23	100135	WIPER RING, 1-1/2 ID—17
1	22	100383	WIPER RING, 2-3/8 ID—24
2	21	100732	BACK-UP RING, 1-5/8 ID—326
2	20	100731	BACK-UP RING, 2-5/8 ID—334
1	19	100157	O-RING, 2-5/8 ID x 3/16 CS—334
1	18	100153	O-RING, 1-5/8 ID x 3/16 CS—326
1	17	100748	O-RING, 15/16 ID x 1/8 CS—213
1	16	103215	SEAL, LOADED U-CUP POLYPAK, 1-1/2 ID x 1-7/8 OD
1	15	100190	O-RING, 2-1/4 ID x 1/8 CS—228
1	14	103579	SEAL, LOADED U-CUP POLYPAK, 2-3/8 ID x 2-3/4 ID
1	13	100192	O-RING, 3-1/4 ID x 1/8 CS—236
1	12	100749	O-RING, 2 ID x 1/16 CS—033
2	11	100575	WEAR RING, 2 OD x 1/2 LG
2	10	100576	WEAR RING, 3 OD x 1/2 LG
2	9	101983	GREASE FITTING, 1/4—28 SELF TAPPING
1	8	A11616	CYLINDER TOP MNT ASSY
1	7	11623	GLAND NUT, 3 OD (2-3/8 THRD)
1	6	19763	GLAND NUT, 4 OD (3-3/8 THRD)
1	5	11621	PISTON, 1-59/64 OD x 2-1/2 LG
1	4	11622	PISTON, 2-59/64 OD x 3 LG
1	3	11625	TUBE, CYLINDER, 1-1/2 OD x 28-11/32 LG
1	2	11626	TUBE, CYLINDER, 2-3/8 OD x 28-3/8 LG
1	1	A16345	CYLINDER BODY ASSY

**GLAND NUT (19723) SEAL KIT  
PART # A**

QTY	ITEM #	PART #	DESCRIPTION
1	4	100383	WIPER RING, 2-3/8 ID—24
1	3	100157	O-RING, 2-5/8 ID x 3/16 CS—334
1	2	103579	SEAL, LOADED U-CUP POLYPAK, 2-3/8 x 2-3/4 ID
1	1	100192	O-RING, 3-1/4 x 1/8 CS—236

**PISTON (11622) SEAL KIT  
PART # A9168**

QTY	ITEM #	PART #	DESCRIPTION
1	4	100576	WEAR RING, 3 OD
1	3	100731	BACK-UP RING, 2-5/8 ID—334
1	2	100157	O-RING, 2-5/8 ID x 3/16 CS—334
1	1	100749	O-RING, 2 ID x 1/16 CS—033

**GLAND NUT (11623) SEAL KIT  
PART # A9169**

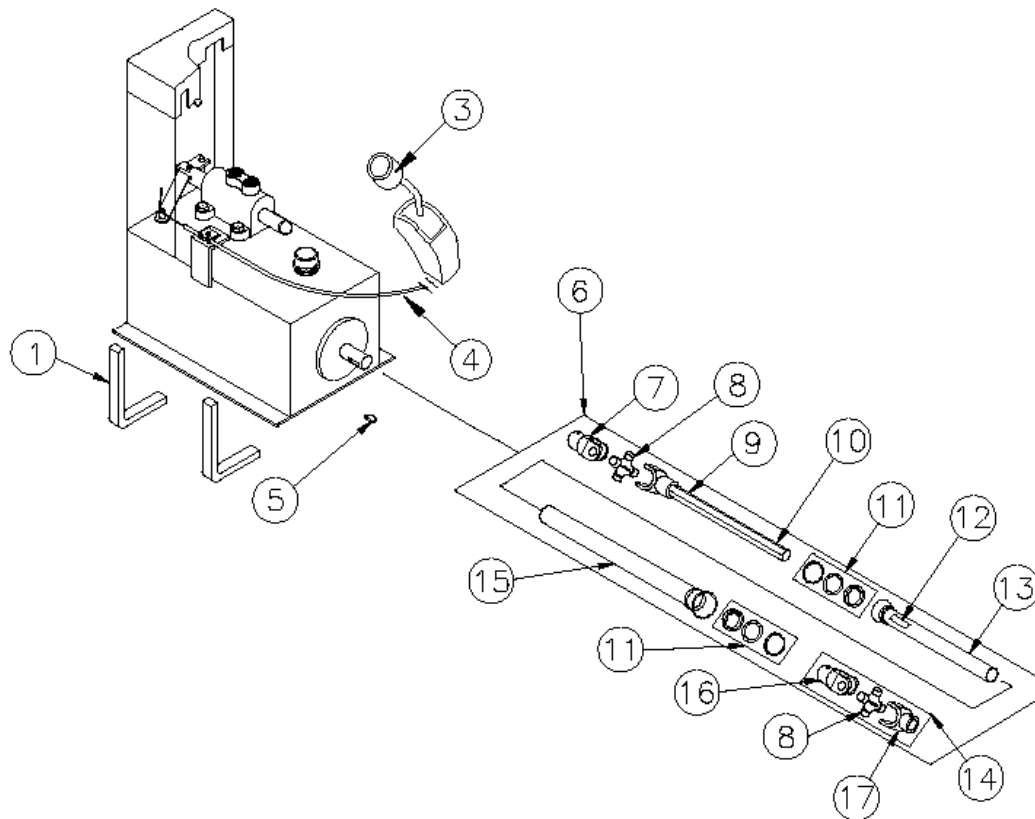
QTY	ITEM #	PART #	DESCRIPTION
1	4	100135	WIPER RING, 1-1/2 ID—17
1	3	100748	O-RING, 15/16 ID x 1/8 CS—326
1	2	103215	SEAL, LOADED U-CUP POLYPAK, 1-1/2 ID x 1-7/8 ID
1	1	100190	O-RING, 2-1/4 x 1/8 CS—228

**PISTON (11621) SEAL KIT  
PART # A9170**

QTY	ITEM #	PART #	DESCRIPTION
1	4	100575	WEAR RING, 2 OD
1	3	100732	BACK-UP RING, 1-5/8 ID—326
1	2	100153	O-RING, 1-5/8 ID x 3/16 CS—326
1	1	100748	O-RING, 15/16 ID x 1/8 CS—213

**DECAL KIT, E50 & E55  
PART # A9777**

QTY	ITEM #	PART #	DESCRIPTION
1	6	101045	DECAL, MAX CYL PRESSURE 3300 PSI
1	5	101117	DECAL, PUMP-PTO
1	4	101102	DECAL, BOX PROF
1	3	101101	DECAL, BOX PROF
1	2	100974	DECAL, TAIL HINGE
1	1	100896	DECAL, HOIST OPERATION (PTO PUMP)



### PTO SHAFT AND PUMP ACCESSORIES

ITEM #	PART #	QTY	DESCRIPTION	ITEM #	PART #	QTY	DESCRIPTION
1	10062	2	PUMP BRACKET	7	9802	1	YOKE,PUMP 1RND BORE
*2	103057	1	KIT, RVC BONNET	8	9788	2	CROSS & BEARING KIT
*3	103058	1	CABLE HEAD,CURVED HANDLE	9	9801	1	DECAL,DANGER (SHAFT)
	104071	1	CABLE HEAD,STRAIGHT HANDLE	10	A9840	1	YOKE & SHAFT ASSY
*4	103060	1	CABLE, 6' W/SHORT FITTING	11	9795	2	KIT, BEARING SHIELD
	103056	1	CABLE, 7' W/SHORT FITTING	12	9800	1	DECAL, DANGER OUTER SHIELD
	103061	1	CABLE, 8' W/SHORT FITTING	13	9793	1	SHIELD, OUTER
	103062	1	CABLE, 10' W/SHORT FITTING	14	102999	1	U-JOINT ASSY,1-1/8 HEX
	103075	1	CABLE, 12' W/SHORT FITTING	15	9794	1	SHIELD, INNER
	104072	1	CABLE, 15' W/SHORT FITTING	16	9797	1	YOKE,HEX BORE,1-1/8
5	4451	1	KEY,1/4x4/8 WOODRUFF	17	9799	1	YOKE, PTO 1-1/4 RND BORE
*6	102943	1	DRIVE SHAFT	*18	100896	1	DECAL, HOIST OPER-PTO PUMP

NOTE: \*2—CONNECTION HARDWARE NOT SHOWN

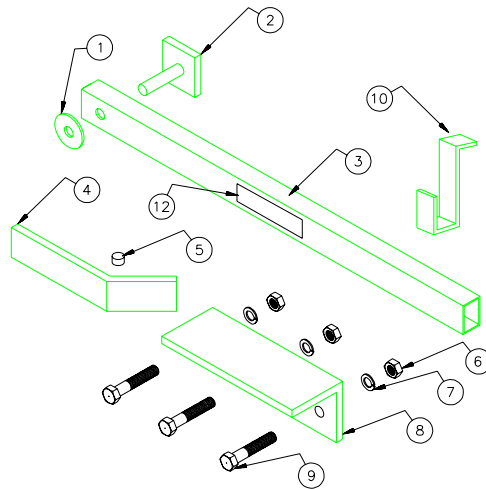
\*3—UNIT IS SHIPPED WITH PART # 103058

\*4—VARIOUS LENGTHS AVAILABLE.

\*6—INCLUDES ITEMS 7 THROUGH 15.

\*18—APPLY DECAL #100896 ON DASHBOARD AS NEAR AS POSSIBLE TO HOIST CONTROLS.  
DECAL IS INCLUDED IN DECAL KIT #A9775.

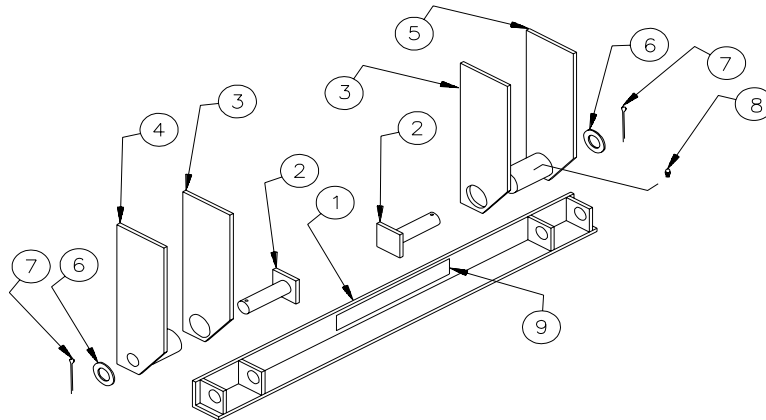
**NEVER OPERATE PTO WITHOUT SHIELDS IN PLACE**



**E50 HOIST  
SAFETY PROP PARTS LIST**

ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
	A1387	1	SAFETY PROP ASSEMBLY	7	100272	3	WASHER, LOCK
1	101123	1	WASHER, FLAT	8	12251	1	BOTTOM ANGLE
2	A12245	1	PIN PLATE ASSEMBLY	9	100230	3	SCREW, HEX HD CAP
3	12243	1	SAFETY BOX PROP	10	12256	1	BRACKET, LATCHING
4	12249	1	SIDE PLATE	*11	101101	2	DECAL, BOX PROP (10 x 4 3/4)
5	12248	1	STOP PEG	12	101102	1	DECAL, BOX PROP (9 1/4 x 1 1/2)
6	100250	3	NUT				

NOTE: \*11 - APPLY ON OUTSIDE RUB RAIL IN AREA OF THE SERVICE SAFETY PROP. ONE DECAL ON EACH SIDE OF BOX.



**TAIL HINGE PARTS LIST**

ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
	A1282	1	TAIL HINGE ASSY	5	A10167-2	1	VERTICAL PLATE ASSY
1	A10170	1	TAIL HINGE ANGLE ASSY	6	101123	2	WASHER, FLAT
2	A10164	2	PIN ASSY	7	101077	2	COTTER PIN, 2" LG.
3	10165	2	VERTICAL PLATE	8	100037	2	GREASE ZERK
4	A10167-1	1	VERTICAL PLATE ASSY	9	100974	1	DECAL, TAIL HINGE



## HOIST SHIPPING GROUP

OPTION	PUMP	DESCRIPTION	SCISSOR	SM PARTS	PTO SHAFT	TAIL- HINGE	BOX PROP	QTY
E50-00	~~	NO PUMP	A1497	A1784			A1387	1
E50-03	103067	8 PISTON-2 4W VALVES-27 QT	A1497	A1744	A1837	A1282	A1387	1
		WMS#F98-6-6R-27 QT						
E50-04	103066	8 PISTON-4W VALVE-27QT	A1497	A1744	A1837	A1282	A1387	1
		WMS#F98-6-27 QT						
E50-08	102912	TANK & VALVE-4W-27 QT	A1497	A1744		A1282	A1387	1
		WMS#15-6C-27 QT						
E50-10	102912	TANK & VALVE-4W-27 QT	A1497	A1744		A1282	A1387	1
	103053	PUMP, GP2025, WILLIAMS						
E50-11	102915	TANK & VALVE	A1497	A1744		A1282	A1387	
	103053	PUMP, GP2025, WILLIAMS						
E50-20	~~	ENGLAND	A1727	A1569				1

PUMP, 8P 2-4W VALVE, WMS# F98-6-6R-27QT-2416-7  
PART # 103067

QTY	ITEM #	PART #	DESCRIPTION
1	15	9843	MANUAL, SAFETY/MAINTENANCE
1	14	100182	CAP, BREATHER
1	13	4451	KEY, WOODRUFF 1/4 x 7/8
1	12	103055	CABLE CONTROL
1	11	9661	PRESSURE LINE
1	10	9331	PRESSURE LINE
2	9	9037	SEAL, SHAFT
2	8	101273	GASKET, VALVE (4-BOLT)
1	7	9036	GASKET, PUMP-RESERVOIR
1	6	9783	KIT, F98 PUMP
1	5	9785	KIT, F98R PUMP
1	4	9844	VALVE, RELIEF (AUX)
2	3	9282	VALVE, RELIEF (SYSTEM)
1	2	101275	KIT, #6 R VALVE
1	1	103068	KIT, #6 VALVE, 4-WAY

PUMP, 8P-4W VALVE, WMS# F98-6-27QT-2416-7  
PART # 103066

QTY	ITEM #	PART #	DESCRIPTION
1	12	9843	MANUAL, SAFETY/MAINTENANCE
1	11	103055	CABLE CONTROL
1	10	100182	CAP, BREATHER
1	9	4451	KEY, WOODRUFF 1/4 x 7/8
1	8	9661	PRESSURE LINE
2	7	9037	SEAL, SHAFT
2	6	101273	GASKET, VALVE (4-BOLT)
1	5	9036	GASKET, PUMP-RESERVOIR
1	4	9783	KIT, F98 PUMP
1	3	9785	KIT, F98R PUMP
2	2	9282	VALVE, RELIEF (SYSTEM)
1	1	103068	KIT, #6 VALVE, 4-WAY

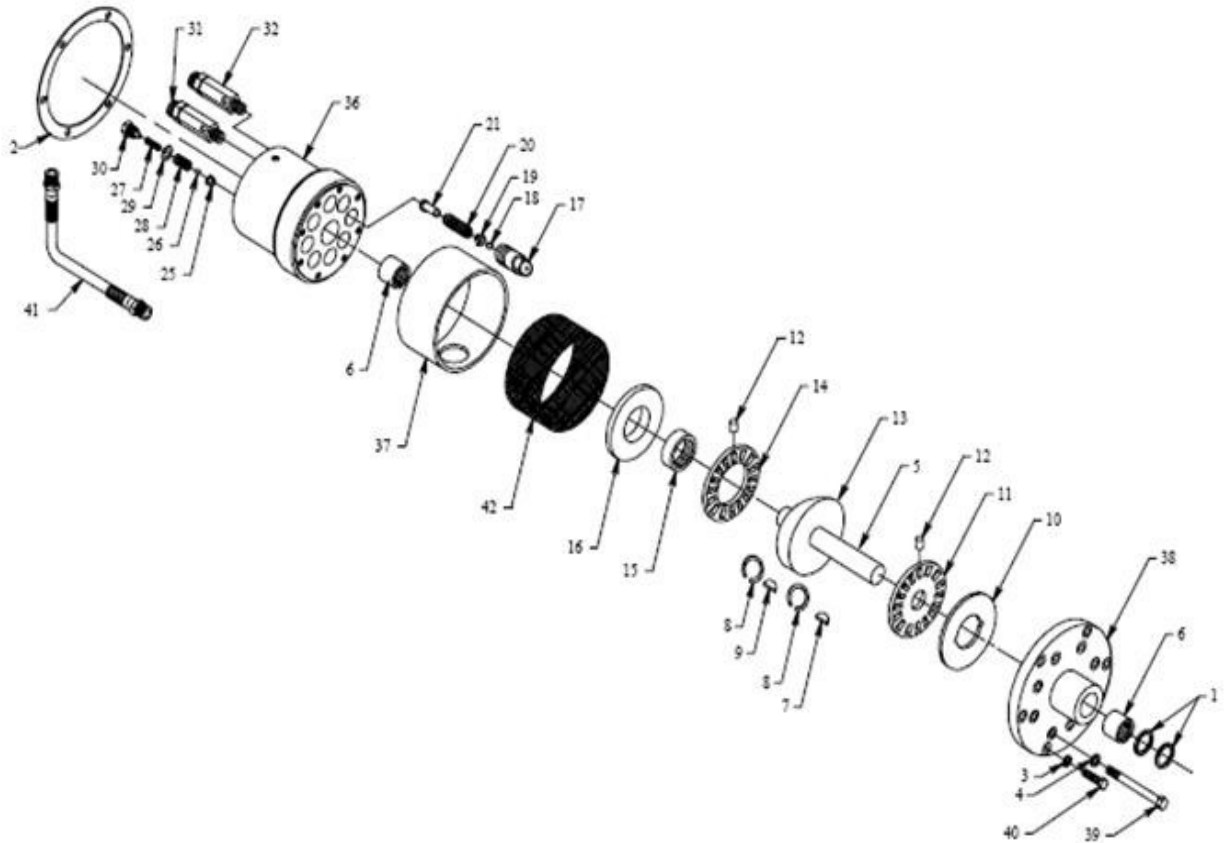
**TANK & VALVE,4W VALVE,WMS#W15-6C-27QT-2416-7  
PART # 102912**

QTY	ITEM #	PART #	DESCRIPTION
1	10	9843	MANUAL, SAFETY/MAINTENANCE
1	9	103055	CONTROL CABLE
1	8	100182	CAP, BREATHER
1	7	9842	SCREEN, INTAKE FILTER (W15)
	6		
	5		
2	4	101273	GASKET, VALVE (4-BOLT)
1	3	9279	VALVE, RELIEF (AUX)
2	2	9282	VALVE, RELIEF (SYSTEM)
1	1	102671	KIT, #6WRC VALVE 4-WAY

**TANK & VALVE, 2-4W VALVES, WMS#W15-6-6R-27QT-2416-7  
PART# 102915**

QTY	ITEM #	PART #	DESCRIPTION
1	11	9843	MANUAL, SAFETY/MAINTENANCE
1	10	103055	CONTROL CABLE
1	9	100182	CAP, BREATHER
1	8	9101	SCREEN, INTAKE FILTER
	7		
	6		
2	5	101273	GASKET, VALVE (4-BOLT)
1	4	8744	VALVE, RELIEF (AUX)
2	3	9282	VALVE, RELIEF (SYSTEM)
1	2	101275	KIT, #6R VALVE 4-WAY
1	1	102959	KIT, #6WR VALVE 2-4 WAY

MODEL F98 DIRECT MOUNT PUMP  
PART # 9783



QTY	ITEM#	PART#	DESCRIPTION
			SEAL KIT
	1		OIL SEAL
	2		PUMP GASKET
	3		ALUMINUM WASHER
	4		ALUMINUM WASHER
			SHAFT and BEARING KIT
	5		SHAFT
	6		NEEDLE BEARING
	7		SHAFT KEY
	8		SNAP RING
	9		WOBBLE KEY
			THRUST BEARING KIT
	10		THRUST RACE
	11		FRONT ROLLER RETAINER
	12		THRUST ROLLER RETAINER
	13		WOBBLE PLATE
	14		REAR ROLLER RETAINER
	15		THRUST PLATE BEARING
	16		PISTON THRUST PLATE

QTY	ITEM#	PART#	DESCRIPTION
			PISTON KIT
	17		PISTON
	18		BALL
	19		BALL STOP
	20		SPRING
	21		SPRING PIVOT
			EXHAUST VALVE KIT
	25		SEAT
	26		BALL
	27		EXHAUST SPRING
	28		CAGE SPRING
	29		WASHER
	30		PORT STUD
			REMAINING PUMP PARTS
	31,32		DUAL RELIEF VALVE
			*PUMP CASTING
	37		INTAKE HOUSING TUBE
	38		FRONT CASTING
	39		PUMP ASSEMBLY BOLT
	40		WASHER
	42		INTAKE SCREEN

\*NOT SOLD SEPARATELY

SEAL KIT, P20 PUMP  
PART # A9558

QTY	ITEM #	PART #	DESCRIPTION
2	3	102464	SEAL, GASKET P20 PUMP
1	2	102463	SEAL, POCKET STRIP P20 PUMP
1	1	102462	SEAL, SHAFT P20 PUMP

PUMP, P-20 (GP2025)  
PART # 103053

- 1) Lip seal
- 2) Shaft end cover
- 3) Checks (2)
- 4) Ring seals (2)
- 5) Bearings (4)
- 6) Thrust plates (2)
- 7) Pocket seal strips (2)
- 8) Section seals (2)
- 9) Gear set
- 10) Gear housing
- 11) Port end cover
- 12) Washers (4)
- 13) Cap screws (4)
- \*Not required on all units
- 14) \*Outboard bearing
- 15) \*Spiral lock

