

HYDRAULIC SCHEMATIC RESEARCH VESSEL

WRITTEN CONSENT OF SCOTT HARLAN P.E.

HONDA GX390 ENGINE W/ELECTRIC START

COUPLER MAGNALOY E575602A, M20010008, 20002406, M270H5

17

FILTER 5 MICRON ABSOLUTE NON-BYPASS TYPE HIGH COLLAPSE ELEMENT

2000 PSI

15

PRESSURE COMP PUMP 8 GPM @ 1500 PSI

1

HYDRAULIC TANK APPROX 20 GALLON

16

FILTER 10 MICRON ABSOLUTE BYPASS TYPE

4

SUCTION STRAINER

2

SHUT OFF VALVE FOR MAINTENANCE

3

REAR CAPSTAN

8

EXISTING REAR CAPSTAN MOTOR

13

14

13

14

QUICK DISCONNECTS

DECK WINCH (ALREADY PURCHASED)

NACHI MOTOR

RETRACT

EXTEND

BOOM CAPSTAN

8

EXISTING 22.7 cu inch CHARLYNN S SERIES Motor

RELIEF VALVE SET TO MAXIMUM SETTING (RELIEF NEAR PUMP)

MANUAL 4 WAY 4 POSITION VALVE

FLOW CONTROL SETS SPEED EXTENDING AND RETRACTING

EXISTING 22.7 cu inch CHARLYNN S series Motor?

PUMP ENABLE MANIFOLD COMPONENTS

16a	1	RDH103S30 RELIEF VALVE
16b	1	DSL103NT PUMP ENABLE MANIFOLD W/ MANUAL OVEWRITE
16c	1	CAP012H COIL 12 V
16d	1	1/4 HHP-SS ORIFICE

P/N	QTY	PART NUMBER	TITLE
17	1	PAF-WPF2100CVMK5121	PRESSURE FILTER NON COLLAPSE NON BYPASS
16	1	WIT-Q6609	PUMP ENABLE MANIFOLD W/ MANUAL OVEWRITE
15	1	PVFN-014-SUB-BGAY-F-DIV2	PUMP PRESSURE COMPENSATED OILGEAR
14	2	NS-502-10F0	PARKER QUICK DISCONNECT NO SPILL MALE
13	2	NS-501-10F0	PARKER QUICK DISCONNECT NO SPILL FEMALE
12			
11			
10			
9			
8	2	B01F6402PSC03	ROQUET 4 WAY 3 POS CLOSED CENTER P.D.
7	3	FDCB-LAN-DCI	SUN FLOW CONTROL VALVE AND BODY
6	1	MB21TKLC	BRAND 4 WAY 4 POSITION VALVE WITH F
5	2	DIVL004CN	PARKER D03 VALVE MANUAL MOTORSPDOL
4	1	SB-T-550-7-SS	LENZ SIGHT GAGE 7" SS BOLTS THERMOME
3	1	4629K480	McMASTER CARR BALL VALVE MALE TO FE
2	1	TF-2040-0-3	ZINGA SUCTION STRAINER 4" x 2"
1	1	PT42100BGG520	PARKER RETURN FILTER/HOUSING 10 micro
P/N	QTY	PART NUMBER	TITLE
DRY		DATE	ENGINEERED BY:
ENG: S. HARLAN		DATE: 4/30/15	SCOTT HARLAN P.E.
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES			19518 CREEKSIDE CT.
TOLERANCES UNLESS OTHERWISE SPECIFIED ARE:			SALINAS, CA 93908
DIMENSIONS ARE TO BE USED FOR FABRICATION			PHONE: (831)210-4645
FINISH PER			MBAN
SPECIAL TOLERANCES			
XX +/- .03 ANGLES +/- 5 DEGREE			
XXX +/- .010 FRACTIONS +/- 1/32			
PUMP			
PRESSURE HOSE, PRESSURE LINES TO ALL FUNCTIONS			
SUCTION LINES TO ALL FUNCTIONS			

NOTES:

1. DUE TO THE NATURE OF HYDRAULIC MOTORS, THERE WILL BE SOME CREEP IN WINCH POSITIONS.
2. ITEMS IN GREEN INCLUDED WITH VESSEL
3. MAKE SURE THAT HYDRAULIC PUMP IS FILLED WITH OIL BEFORE FIRST START UP. CRANK ENGINE SEVERAL TIMES WITHOUT STARTING TO INSURE FULL LUBRICATION BEFORE STARTUP.
4. RECOMMEND PLUMBING WITH 3000 PSI MINIMUM WORKING PRESSURE HOSE. PRESSURE LINES TO ALL FUNCTIONS

PUMP ENABLE MANIFOLD COMPONENTS		
16a	1 RDH103S30	RELIEF VALVE
16b	1 DSL103NT	PUMP ENABLE MANIFOLD W/ MANUAL OVEWRIDE
16c	1 CAP012H	COIL 12 V
16d	1 1/4 HHP-SS	ORIFICE

17	1	PAF-WFF2109GVRK5121	PRESSURE FILTER NON COLLAPSE NON BYPASS
16	1	WIT-Q6609	PUMP ENABLE MANIFOLD W/ MANUAL OVEWRIDE
15	1	PVM-HLB-BLUE-READY-P-1000	PUMP PRESSURE COMPENSATED OILGEAR
14	2	NS-502-10F0	PARKER QUICK DISCONNECT NO SPILL MALE
13	2	NS-501-10F0	PARKER QUICK DISCONNECT NO SPILL FEMALE
12			
11			
10			
9			
8	2	B01F6402PSC03	RDQUET 4 WAY 3 POS CLOSED CENTER P.O. CHECKS
7	3	FDCB-LAN-DCI	SUN FLOW CONTROL VALVE AND BODY
6	1	MB21TKLC	BRAND 4 WAY 4 POSITION VALVE WITH FLOAT
5	2	D1VL004CN	PARKER D03 VALVE MANUAL MOTORSPool
4	1	SB-T-550-7-SS	LENZ SIGHT GAGE 7" SS BOLTS THERMOMETER
3	1	4629K480	MCMASTER CARR BALL VALVE MALE TO FEMALE 2"
2	1	TF-2040-0-3	ZINKA SUCTION STRAINER 4" x 2"
1	1	PT42100BGS20	PARKER RETURN FILTER/HOUSING 10 micron

NOTES:

1. DUE TO THE NATURE OF HYDRAULIC MOTORS, THERE WILL BE SOME CREEP IN WINCH POSITIONS.
2. ITEMS IN GREEN INCLUDED WITH VESSEL
3. MAKE SURE THAT HYDRAULIC PUMP IS FILLED WITH OIL BEFORE FIRST START UP. CRANK ENGINE SEVERAL TIMES WITHOUT STARTING TO INSURE FULL LUBRICATION BEFORE STARTUP.
4. RECOMMEND PLUMBING WITH 3000 PSI MINIMUM WORKING PRESSURE HOSE. PRESSURE LINE TO ALL JOINTS SHOULD BE 1/2" DIAMETER. RETURN LINES SHOULD BE 5/8" DIAMETER.

INC. NO.	QTY.	PART NUMBER	TITLE	
DRN	DATE	ENGINEERED BY:		ENGINEERED FOR:
ENG. S. HARLAN	DATE 4/30/15	SCOTT HARLAN P.E.		
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		19518 CREEKSIDE CT.		
DIMENSIONAL CONTROLS PER ASME Y14.5		SALINAS, CA 93308		
MATERIALS AND FINISH: SHARP EDGES		PHONE: (831)210-4645		
FINISH PER:				
SPECIAL TOLERANCES				
XX $\pm .003$ ANGLES $\pm .5$ DEGREES				
XXX $\pm .010$ FRACTIONS $\pm .1/32$				
MATERIAL QTY AND UNIT OF MEASURE.				
		NEXT ASSY	SIZE D	PART NUMBER
				REV D
*		WEIGHT	SCALE NONE	SHEET 1 OF 1