FRUITLAND ELIMINATOR DUAL LIQUID RING PACKAGE

ASSEMBLY, PARTS LIST & START-UP INSTRUCTIONS

PART # ELH-25R-DUAL

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MATERIAL

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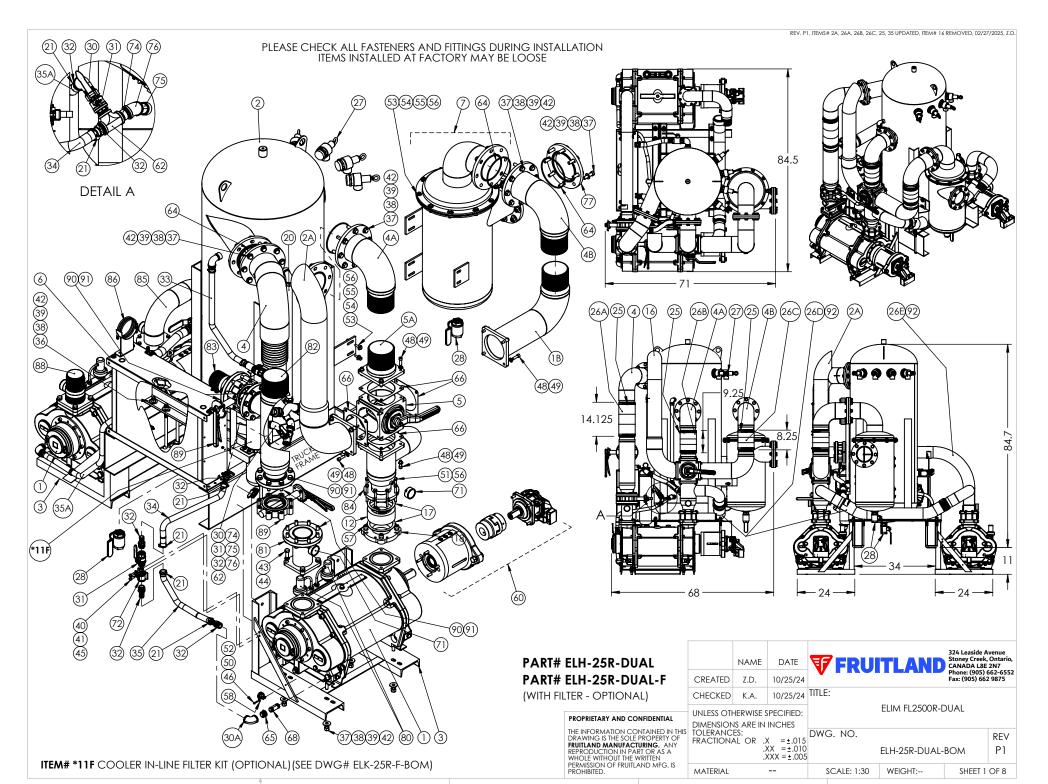
CANADA L8E 2N7 Phone: (905) 662-6552 11/24/2025 **DUAL LIQUID RING PACKAGE** ASSEMBLY & START-UP INSTRUCTIONS

DWG. NO. .XX =±.010 $.XXX = \pm .005$

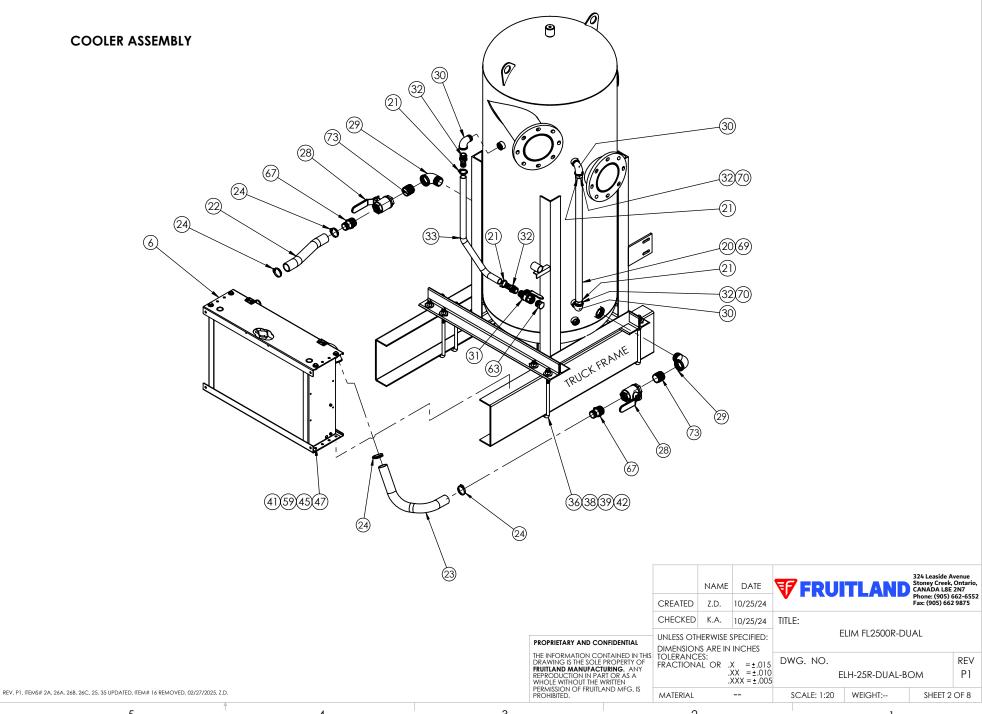
DATE

NAME

REV ELH-25R-DUAL-CC SCALE: 1:30 WEIGHT:--



4 3



3

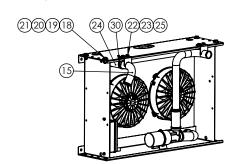
Item #	Part #	Description	Qty.
*11	ELX-25R-27	Mounting Bracket Weldment for Cooler In-Line Filter	1
*14	ELX-25R-FA	In-Line Filter Assembly 20in Long 1-1/4in NPT	1
*15	ELX-TM3R-FA01	In-Line Filter Mounting Bracket	1
*15A	HCI-500-SM	Stack Mounting Bracket Ø 5in	1
*19	FGC-021-PVP	Pressure Gauge 1/4in NPT	1
*22A	RHS-150-EXF	Hose Ø1.5in Extremeflex, 13.5in Lg (Cooler Inlet)	1
*23A	RHS-150-EXF	Hose Ø1.5in Extremeflex, 12in Lg (Cooler Outlet 1)	1
*23B	RHS-150-EXF	Hose Ø1.5in Extremeflex, 7.25in Lg (Cooler Outlet 2)	1
*24	HCM-080-048	Hose Clamp M8 (48-51mm)	4
*40	HBI-380-101	Hex Bolt 3/8-16 x 1in Lg	6
*41	HNI-380-N2	Nylock Nut 3/8in NC YZP	6
*45	HWI-380-31	Flat Washer SAE 3/8in ZP	12
*61	FPN-121-060-CS	Nipple 1-1/4in NPT x 6in Lg	1
*62	FPE-122-90-CS	Elbow 90° 1-1/4in NPT Steel F x F	1
*68	FPE-120-91-CS	Street Elbow 90° 1.25in NPT	1
*74	HBM-080-201	Hex Bolt M8 x 20mm Lg ZP	4
*75	HWM-080-21	Lock Washer M8 ZP	4
*76	FPE-050-91-CS	Street Elbow 90° 1/2in NPT	1
*78	FVB-051-052-BR	Ball Valve 1/2in NPT MxF	1
*79	FPA-121-155-BR	Adaptor 1.25in NPT x 1.5in Barb	2

*XX) ITEMS# COOLER IN-LINE FILTER KIT

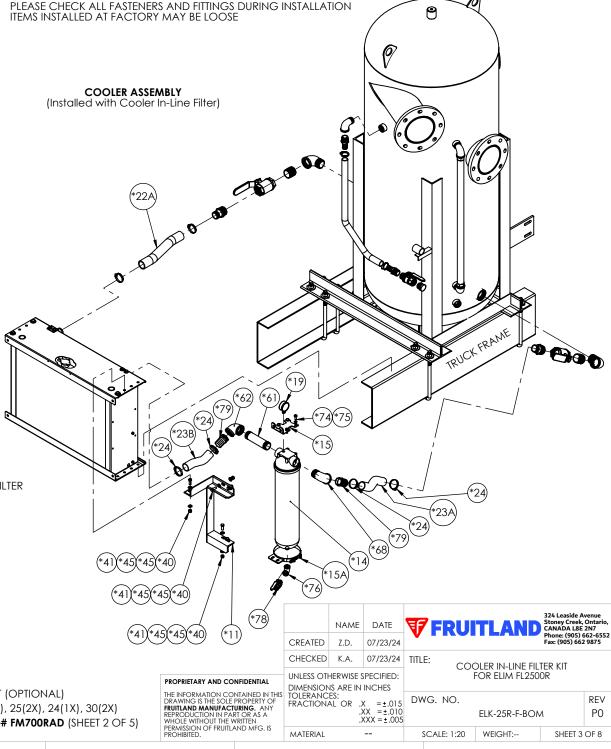
COOLER IN-LINE FILTER KIT

PART# ELK-25R-F

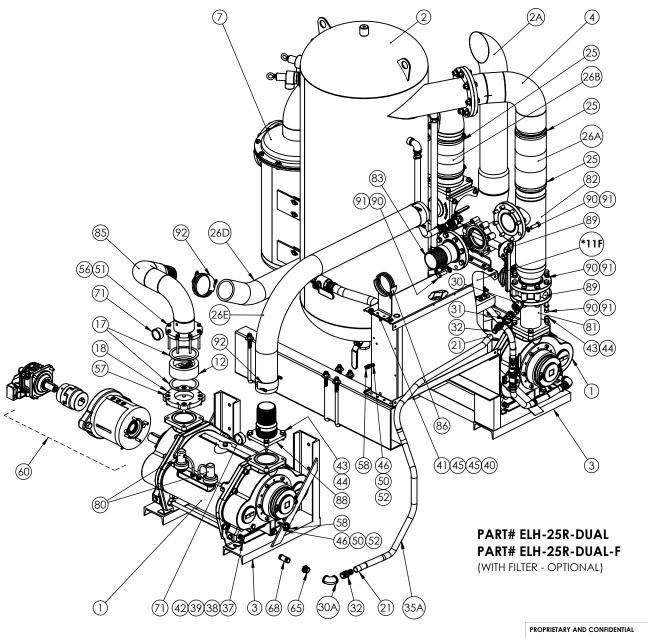
ITEM# *11F (SEE DWG# <u>ELH-25R-BOM</u>, <u>SHEET 1 OF 4</u>)
ITEMS# FOR COOLER ASSEMBLY INSTALLED W/O COOLER IN-LINE FILTER
(SEE DWG# <u>ELH-25R-DUAL-BOM</u>, <u>SHEET 2 OF 4</u>)



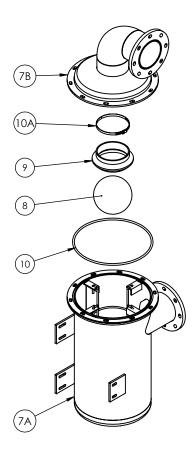
NOTE: FOR COOLER ASSEMBLY INSTALLED WITH COOLER IN-LINE FILTER KIT (OPTIONAL) REMOVE ITEM# 15(1X), 18(1X), 19(1X), 20(1X), 21(1X), 22(2X), 23(2X), 25(2X), 24(1X), 30(2X) FROM 75 KW COOLER ASSEMBLY (PART# FM700RAD-WR), SEE DWG# FM700RAD (SHEET 2 OF 5)



PLEASE CHECK ALL FASTENERS AND FITTINGS DURING INSTALLATION ITEMS INSTALLED AT FACTORY MAY BE LOOSE



SECONDARY SHUT-OFF ASSEMBLY



	NAME	DATE	FRUITLAND
CREATED			
CHECKED	K.A.	10/25/24	TITLE:

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MATERIAL

FRACTIONAL OR .X = \pm .015 DWG. NO. .XX = \pm .005

REV Ρ1 ELH-25R-DUAL-BOM SCALE: 1:20 WEIGHT:--SHEET 4 OF 8

ELIM FL2500R-DUAL

Stoney Creek, Ontario, CANADA L8E 2N7 Phone: (905) 662-6552 Fax: (905) 662 9875

ITEM# *11F COOLER IN-LINE FILTER KIT (OPTIONAL) (SEE DWG# ELK-25R-F-BOM)

3

Item#	Part #	Description	Qty.	
1	PLA-25R	2500 Fruitland Liquid Ring Pump (CW Rotation)	2	
1B	ELX-34R-04	S3400R Flange DV to Secondary		
2	ELX-34R-11	Tank & Frame Weldment	1	
2A	ELX-34R-12E	Flange DV to Exhaust with Muffler Exhaust	1	
3	ELX-25R-01	Pedestal Frame S2500R Pump	2	
4	ELX-25R-23	Reservoir Inlet Flange \$2500	1	
4A	ELX-25R-24	Reservoir Outlet Flange \$2500	1	
4B	ELX-25R-25	Secondary Flange \$2500	1	
5	DVA-06	4-Way Diverter Valve Assembly - 6"	1	
5A	ELX-34R-05	S3400R Flange DV to Reservoir	1	
6	FM700RAD-WR	Fruitland Pump Cooler Assembly	1	
7	ELX-34R-10	Secondary Shut Off 6"	1	
7A	ELX-34R-101	Secondary Body Weldment 6"	1	
7B	ELX-34R-102	Secondary Lid Weldment 6"	1	
8	8-SSBALL	Float Ball Ø8" SS	1	
9	6-RUBBERSEAT	Rubber Seat 6"	1	
10	6S13-ORING	O Ring Ø16" ID Buna-N	1	
10A	HCM-140-216	Hose Clamp M14 (165-216mm) (for Ø6" Rubber Seat)	1	
*11F	ELK-25R-F	Cooler In-Line Filter Kit (Optional, See DWG# ELK-25R-F-BOM)	1	
12	BVA-100-SA	Back-Up Valve DN100 with EPDM Gasket	2	
17	RF120-65	Gasket Pump Outlet	4	
18	ELX-17R-02	\$1700R NRV Pump Flange	2	
20	1-HOSE-CLR	Clear PVC Hose Ø1" ID, 31.5" Length	1	
21	HCM-060-035	Hose Clamp M6 (32-35mm) (for Ø1" Hose)	10	
22	ELX-25R-29	Hose Ø1.5" Extremeflex, 12" Lg (Cooler Inlet)	1	
23	ELX-25R-30	Hose Ø1.5" Extremeflex, 36" Lg (Cooler Outlet)	1	
24	HCM-080-048	Hose Clamp M8 (48-51mm) (for Ø1-1/2" Hose)	4	
25	HCM-100-174L	Hose Clamp 6" M10 (162-174mm) with M10x130 Bolt	6	
26A	ELX-25R-31	Hose Ø6" x 15.5" Lg (Reservoir to Tee)	1	
26B	ELX-25R-32	Hose Ø6" x 9.5" Lg (Diverter to Reservoir)	1	
26C	ELX-25R-33	Hose Ø6" x 6.5" Lg (Diverter to Secondary)	1	
26D	ELX-25R-34	Corrugated Hose Ø4" x 50.5" Lg (Second Pump to NRV Flange)	1	
26E	ELX-25R-35	Corrugated Hose Ø4" x 68.5" Lg (Second Pump to On-Off Valve)	1	
27	PRV-2	Pressure Relief Valve 2" NPT	4	
28	FVB-152-BR	Ball Valve 1-1/2" NPT F x F	4	
29	FPE-150-91-CS	Street Elbow 90° 1-1/2" NPT	2	
30	FPE-100-91-CS	Street Elbow 90° 1" NPT	4	
30A	FPE-102-90-CS	Elbow 90° 1" NPT Steel F x F	1	
31	FVB-101-102-BR	Ball Valve 1" NPT M x F	2	
32	FPA-101-105-BR	Adaptor 1" NPT x 1" Barb	8	
33	ELX-25R-15	Rubber Hose Ø1" x 29.5" Lg (Reservoir Filling Hose)	1	
34	ELX-25R-16	Rubber Hose Ø1" x 26" Lg (Reservoir to Pump 1)	1	
35	ELX-25R-17	Clear PVC Hose Ø1" ID, 21.5" Length (Reservoir to Pump 2)	1	
35A	ELX-25R-37	Rubber Hose Ø1" x 81" Lg (Reservoir to Second Pump)	1	
36	TFM-11-A3	U-Bolt Regular	6	
37	HBI-620-252	Hex Bolt 5/8" NC x 2-1/2" YZ (8 Pcs to Mount Item#77)	40	
38	HWI-620-42	Flat Washer USS 5/8" YZP (8 Pcs to Mount Item#77)	52	
39	HWI-620-32	Flat Washer SAE 5/8" YZP (8 Pcs to Mount Item#77)	52	
40	HBI-380-101	Hex Bolt 3/8-16 x 1" Lg	2	
41	HNI-380-N2	Nylock Nut 3/8" NC YZP (4 Pcs to Mount Item#6)	6	
42	HNI-620-N2	Nylock Nut 5/8" NC YZP (8 Pcs to Mount Item#77)	52	
43	HBM-160-451	Hex Bolt M16 x 45mm ZP	4	
44	HWM-160-21	Lock Washer M16 ZP	4	
45	HWI-380-31	Flat Washer SAE 3/8" ZP (4 Pcs to Mount Item#6)	6	

Item #	Part #	Description	Qty.
46	HBI-100-101	Hex Bolt #10-24 x 1" Lg ZP	3
47	HBI-380-122	Hex Bolt 3/8 NC x 1-1/4" Lg YZP (4 Pcs to Mount Item#6)	4
48	HBM-120-406	SHCS M12 x 40mm BO	16
49	HWM-120-21	Lock Washer M12 ZP	16
50	HNI-100-N1	Nylock Nut #10-24 ZP	3
51	HBM-100-1101	Hex Bolt M10 x 110mm ZP (for Check Valve)	8
52	HWI-100-01	Flat Washer #10 ZP	3
53	HBM-100-401	Hex Bolt M10 x 40mm ZP	16
54	HNM-100-H1	Hex Nut M10 x 1.5mm ZP	16
55	HWM-100-01	Flat Washer M10 ZP	16
56	HWM-100-21	Lock Washer M10 ZP	24
57	HBM-160-306	SHCS M16 x 30mm Lg BO	4
58	HCI-120-SVD	Loop Clamp 1.25" ID Snug-Fit Vibration-Damp. (3177T57)	3
59	HWI-380-41	Flat Washer USS 3/8" ZP (4 Pcs to Mount Item#6)	4
60	PLK-250-HM	Hydraulic Motor Kit including Motor, Adaptor, Coupling + Hardware	1
62	FPA-102-T	Pipe Tee 1" NPT	1
63	FPP-101-BSQ	Pipe Plug 1" NPT	1
64	ELX-25R-26	O-Ring 6in Flange Ø7.225in ID, 0.210" CS (DASH# 366) (9452K391) (1 Pc Added with Item#77)	4
65	FPR-101-072-CS	Reducer 1" x 3/4" NPT Steel MxF	2
66	DVG-06-01	Gasket FTM Diverter Flange 6in	4
67	FPA-151-155-BR	Adaptor 1.5" NPT x 1.5" Barb	2
68	FPN-071-025-CS	Nipple 3/4" NPT x 2.5" Lg	2
69	3/4-AL-FB	Float Ball Ø3/4" Aluminum for Level Indicator	1
70	HPI-18R-100	Roll Pin Ø3/16" x 1" Lg for Indicator Ball Retention	2
71	FGC-021-PVP	Pressure Vaccum Gauge 1/4" NPT (3941K63)	4
72	ELX-25R-28	Bracket with Pipe Coupling 1" NPT	1
73	FPN-151-015-CS	Nipple 1.5" NPT x 1.5" Lg	2
74	FPN-101-025-CS	Nipple 1" NPT x 2.5" Lg	1
75	FPN-101-030-CS	Nipple 1" NPT x 3" Lg	1
76	FPE-102-45-CS	Elbow 45° 1" NPT Steel	1
77	6PIPE FL-OR	Slip On Flange 6" with O-Ring Groove	1
80	SP-1634666	Vacuum Control Valve with Rubber Hose, 2 BSPP - Barb Adaptors and 2 Hose Clamps	4
81	ELX-25R-38	Flange Pump to Flow-Adjustment Valve	1
82	ELX-25R-39	Reservoir to Pump Tee Connection	1
83	ELX-25R-40	4" Flow-Adjustment Valve to Hose Connection	1
84	ELX-25R-41	Flange NRV to Diverter Valve	1
85	ELX-25R-42	Flange NRV to Hose Connection (Second Pump)	1
86	ELX-25R-43	Hose Support Bracket	1
88	ELX-17R-03	\$1700R Reservoir to Pump Connection (Second Pump)	1
89	FVG-40-BI	4" Flow-Adjustment Valve (5158K642)	2
90	HBI-620-202	Hex Bolt 5/8" NC x 2" YZP	32
91	HWI-620-22	Lock Washer 5/8" YZP	32
92	HCI-400-PLD	Power Lock Hose Clamp 4" (Double Bolt)	4

PART# ELH-25R-DUAL PART# ELH-25R-DUAL-F

(WITH FILTER - OPTIONAL)

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DIMENSIONS ARE IN INCHES

TOLERANCES:

FRACTIONAL OR .X = ±.015

XXX = ±.010

XXX = ±.005

MATERIAI

NAME DATE CREATED Z.D. 10/25/24 CHECKED K.A.

324 Leaside Avenue Stoney Creek, Ontario, CANADA L8E 2N7 Phone: (905) 662-6552 Fax: (905) 662 9875

SHEET 5 OF 8

REV Р1

10/25/24 TITLE:

ELIM FL2500R-DUAL

SCALE: 1:20

ELH-25R-DUAL-BOM WEIGHT:--

REV. P1, ITEMS# 2A, 26A, 26B, 26C, 25, 35 UPDATED, ITEM# 16 REMOVED, 02/27/2025, Z.D. REV, P2, HOSE LENGHTS UPDATED (ITEMS 22, 23, 26A-E, 33, 10/22/2025, I.P.

FRUITLAND DUAL LIQUID RING PACKAGE - START-UP INSTRUCTIONS **BEFORE START-UP: IMPORTANT:** 1. CHECK LIQUID LEVEL IN TANK #1. ADD LIQUID UP TO THE FILL LINE THROUGH FILLING CONNECTION #7 IF REQUIRED. PLEASE READ LIQUID RING PUMP INSTALLATION, OPERATION. 2. CHECK LIQUID LEVELS IN PUMPS THROUGH HOSE LOCATIONS #4A & #4B & MAINTENANCE MANUAL TO UNDERSTAND PUMP OPERATION 3. USE VALVE #2A TO ADD LIQUID TO VACUUM PUMP 1 (#3A) 4. USE VALVE #2B TO ADD LIQUID TO VACUUM PUMP 2 (#3B) VOL. TOTAL: 623 L (164 GAL) WATER CAPACITY: 445 L (117.5 GAL) 5. BEFORE STARTING, VERIFY THAT THE ISOLATION VALVE OF THE RESPECTIVE PUMP WATER CONSUMPTION: 184 USG/8 HRS @77°F IS OPEN: #6A FOR PUMP 1 AND #6B FOR PUMP 2 TIME TO EMPTY: 5 HRS START-UP: 4-WAY ANY PUMP CAN RUN INDEPENDENTLY OR TOGETHER DIVERTER PUMP 1: LIQUID RESERVOIR **VALVE** 1. OPEN #6A, ISOLATION VALVE PUMP 1 LEVEL INDICATION 2. CLOSE #6B, ISOLATION VALVE PUMP 2 3. START THE PUMP 4. OPEN #2A, PUMP 1 LIQUID LINE VALVE, WITHIN 10 SEC OF STARTING THE WATER FILL LINE PUMP PUMP 2: **RESERVOIR** 1. OPEN #6B, ISOLATION VALVE PUMP 2 #6B FILL PLUG/VALVE 2. CLOSE #6A, ISOLATION VALVE PUMP 1 ISOLATION VALVE 3. START THE PUMP TO PUMP 2 4. OPEN #2B, PUMP 2 LIQUID LINE VALVE, WITHIN 10 SEC OF STARTING THE PUMP BOTH PUMP 1 & 2: 1. OPEN #6A, ISOLATION VALVE PUMP 1 2. OPEN #6B, ISOLATION VALVE PUMP 2 3. START THE PUMP 4. OPEN #2A & #2B, LIQUID LINE VALVES, WITHIN 10 SEC OF STARTING THE *FAILURE TO OPEN LIQUID LINE VALVES #2A & #2B WILL RESULT IN SERIOUS PUMP #3B DAMAGE* **PUMP COOLER** PROCEED WITH REGULAR PUMPING OPERATIONS. # 2 SHUT-OFF SHUT-DOWN: VALVE 1. CLOSE LIQUID LINE VALVES #2A & #2B. 2. PROCEED TO SHUT-OFF THE PUMPS WITHIN 10 SEC OF SHUTTING-OFF THE LIQUID LINE VALVES. 3. IT IS IMPORTANT TO SHUT OFF THE WATER WHEN THE PUMPS ARE NOT RUNNING TO PREVENT THE FLOODING OF THE PUMPS, DIVERTER VALVE, AND OTHER PARTS OF THE SYSTEM. PUMP 2 #6A LIQUID LEVEL INSTALL DRAIN VALVES #8 AT THE BOTTOM OF THE PUMPS TO DRAIN A FLOODED ISOLATION VALVE SIGHT TUBE **PUMP** TO PUMP 1 Stoney Creek, Ontario, CANADA L8E 2N7 Phone: (905) 662-6552 Fax: (905) 662 9875 NAME DATE PUMP 1 LIQUID FILL / CREATED Z.D. 10/25/24 PUMP # 1 PUMP 2 LIQUID FILL/ SHUT-OFF VALVE 10/25/24 |TITLE: CHECKED ELIM LR2500R-DUAL SHUT-OFF VALVE (MAIN) STARTUP OPERATION #4A UNLESS OTHERWISE SPECIFIED: PROPRIETARY AND CONFIDENTIAL DIMENSIONS ARE IN INCHES PUMP 1 LIQUID LEVEL DRAIN VALVE LOCATION THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TOI FRANCES: DWG. NO. REV FRACTIONAL OR SIGHT TUBE (ON BOTH PUMPS) .X = +.015FRUITLAND MANUFACTURING. ANY $.XX = \pm .010$ ELH-25R-DUAL-STARTUP 0 REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FRUITLAND MFG. IS $.XXX = \pm .005$ SEE DWG # ELH-25R-DUAL FOR COMPLETE PARTS LIST SCALE: 1:18 WEIGHT:--SHEET 6 OF 8 MATERIAL 3

