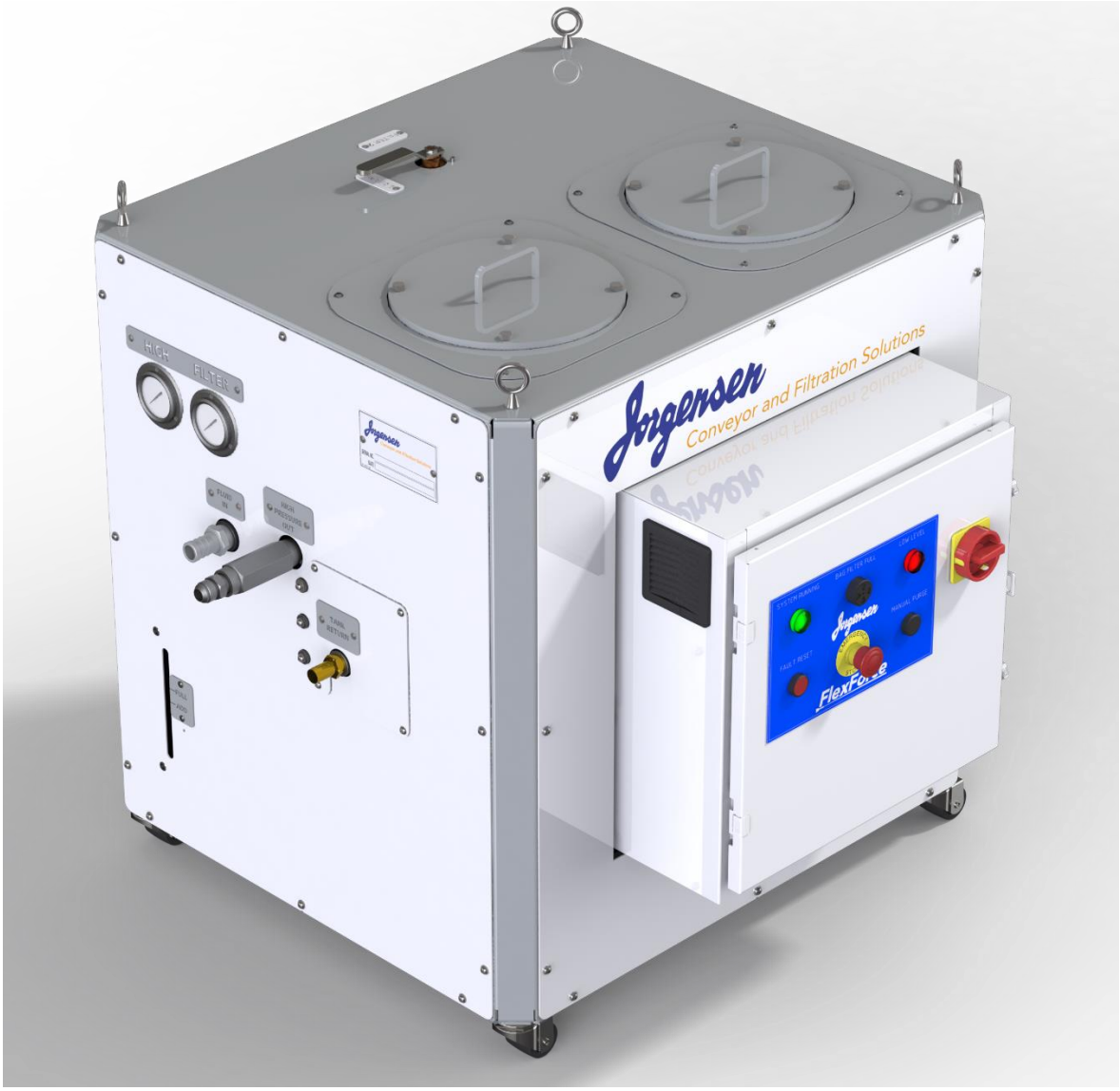
Jorgensen
Conveyor and Filtration Solutions

OPERATOR MANUAL

FlexForce



Proud member of... AMT THE ASSOCIATION FOR MANUFACTURING TECHNOLOGY 703.893.2900 · www.AMTonline.org

CEMA

Quality Management System ISO 9001 Certified

Document Title: Operator Manual: FlexForce			
Document ID: FLXFRC-10-5-V10-09-2023			
Rev.	Revision Description	Date Issued	Document Nomenclature
0	Created operator manual	10/9/2023	FLXFRC-10-5-V-10-09-2023

Table of Contents

1 GENERAL INFORMATION 4

1.1 Introduction 4

1.2 Theory of Operation 4

1.3 Disposable Filter Media 4

2 UNIT SPECIFICATIONS 5

3 STORAGE 6

3.1 Moving Machine 6

3.2 Final Placement of Unit 7

3.3 Prior to Installation 7

4 MECHANICAL INSTALLATION 8

4.1 Standpipe Installation 8

4.2 Suction Strainer Cleaning 9

4.3 Hose Connections 9

4.3.1 Suction Hose and Pump Priming 9

4.3.2 High Pressure Outlet Hose 9

4.3.3 Return Hose 9

5 ELECTRICAL INSTALLATION 10

5.1 Power Interface 10

5.2 Control Interface 10

5.3 Variable Speed 11

6 START UP 12

6.1 Tank Charge and Motor Priming 12

6.2 Flush System 12

6.3 Pressure Adjustment 12

7 PREVENTATIVE MAINTENANCE 13

7.1 Preventative Maintenance Schedule 13

7.2 High Pressure Pump – Oil Level Check 14

7.3 High Pressure Pump – Oil Change 14

7.4 High Pressure Pump – Leak Checks 14

7.5 Filter Unit – Check Pressure Gauge 15

7.6 Filter Unit – Bag Replacement 15

7.7 Filter Unit – Leak Checks 15

7.8 Transfer Pump – Leak Checks 15

7.9 Transfer Pump – Blockage Checks 16

7.10 Pump Mounting – Check Bolts 16

7.11 Suction Strainer – Clean and Examine 16

7.12 High Pressure Pump – Fluid End Seals 16

7.13 Troubleshooting Guide 17

8 REPLACEMENT COMPONENTS 18

8.1 Manifold Assembly 18

8.2 Motors and Pumps 19

8.3 Sensors 20

8.4 Bag Filter 20

8.5 Miscellaneous 21

8.6 Consumable Items 21

9 APPENDIX 22

9.1 Warranty 22

9.2 A Word About Jorgensen Conveyors… 23

9.3 Standpipe Assembly Mounting Pattern 24

1 General Information

1.1 Introduction

Thank you for purchasing a FlexForce high pressure coolant system!

To ensure safe, reliable, and long-term operation of the FlexForce unit, please follow all guidelines and warnings detailed within this manual.

The FlexForce unit is used as a roll up high-pressure system to provide high pressure coolant so whichever machine the unit is rolled up to and installed on.

1.2 Theory of Operation

The Jorgensen Conveyors FlexForce unit has multiple configurations consisting of two output pressures (500 and 1000 psi), filtration options (single or duplex bag filters at various micron values), and flow rate options (fixed or variable). The FlexForce unit operates by sucking coolant from the customers tank and pumping it into the filter units mounted on the internal 30-gallon tank. The coolant is then gravity fed to the high-pressure pump which then pumps the coolant through the manifold which regulates the pressure and when the customer calls for a tool change dumps the coolant back to the customers tank.

The FlexForce unit uses bag filters that will fill with particulate and eventually increase the incoming pressure. This increase in pressure will eventually set off an audible alarm signaling that the bag filter needs to be changed.

The internal tank has a level sensor that will toggle the transfer pump which fills the tank. The level sensor will also activate a full system shut down if the coolant level in the tank gets too low. If this happens the tank will need to be refilled before the system can be run again. This can be done using the "CHARGE TANK" button on the electrical enclosure.

1.3 Disposable Filter Media

The filter media that is being used in the FlexForce unit is a size #1 bag filter from CSD. Replacement filters can be purchased through Jorgensen by emailing jci-parts@jorgensenconveyors.com. Use *Table 1.3.1* to determine what filter to order. This table is also on the top of the FlexForce unit.

Table 1.3.1

Micron Size	Jorgensen Part Number
5 Micron	68-2625
10 Micron	68-2489
25 Micron	68-2472

2 Unit Specifications

For a specific model, please refer to the name plate.

Single Pressure FlexForce Data	
Model Number: FLXFRC-F-500	
Bar	35
psig	500

Model Number: FLXFRC-F-1000 FLXFRC-V-1000	
Bar	70
psig	1000

Coolant Volume	**FLXFRC-V**	**FLXFRC-F**
Liters per Minute	7.6 - 30	30 is standard
GPM	2 – 8	8 is standard

Filter Element	
Water	10 Micron Standard
Oil	10 Micron Standard

Unit Dimensions L x W x H	
Millimeters	1019 x 978 x 971
Inches	40.1 x 38.5 x 38.25

Recommended Area L x W x H	
Millimeters	1524 x 1143 x 1524
Inches	60 x 45 x 60

Weight of the Unit: 500 psi	
Kilograms	318
Pounds	700

Weight of the Unit: 1000 psi	
Kilograms	363
Pounds	800

3 Storage

If the FlexForce unit is to be stored for any period of time it must be kept in an area that will not experience either freezing or temperatures exceeding 55°C (131°F). Cover the FlexForce unit until ready to move to site of use.

3.1 Moving Machine

When moving the FlexForce unit to the site of use, adhere to the following steps:

1. The FlexForce unit should ONLY be lifted using the corner eyebolts. Not doing so will result in damage to the machine. *Refer to Figure 3.1.1.*
2. Lifting capacity of fork truck must be sufficient to safely lift the FlexForce unit.

MOVE THE UNIT SLOWLY TO ENSURE IT DOES NOT GET DROPPED
DO NOT TRY TO MOVE WITH FLUID IN THE TANK
DO NOT STAND UNDER THE FLEXFORCE UNIT ANY TIME DURING MOVING

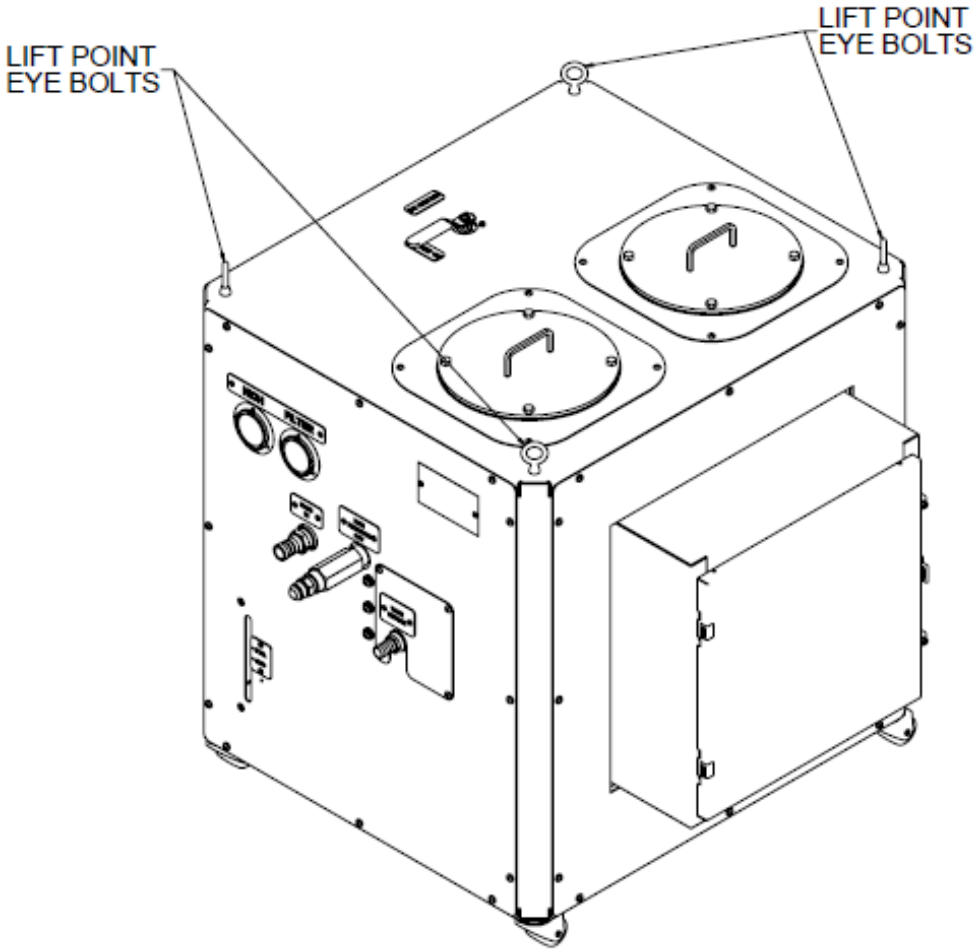


Figure 3.1.1

3.2 Final Placement of Unit

1. After receiving a FlexForce unit, prepare the site of use. Ensure that there is the correct power for the unit. The site must be flat and level.
2. The FlexForce unit must be kept within three (3) meters (10 Feet) of the machining center.
3. Ensure that the unit is in place so that maintenance can access the filter housings and electrical cabinet of the FlexForce unit.
4. Once the site is clear the FlexForce unit can be placed.
5. When lifting the FlexForce unit, locate and use the lifting points (*Figure 3.1.1*). Use the proper lifting straps (not supplied) and lift slowly.
6. After removing the FlexForce unit from the skid, place the unit in the site of use.
7. When positioning the unit, ensure that it is level. The FlexForce unit must be level to ensure proper operation.

3.3 Prior to Installation

The following steps should be taken prior to the installation of the FlexForce unit:

1. Power up the machine tool to check for alarms.
2. If there are any alarms, have the operator clear them.
3. Shut down the machine center and turn off the main power disconnect for the machine.
4. Verify that the 3 phase power source that will be wired to the unit is the same voltage as the FlexForce requires.
5. Verify the hose from the FlexForce unit to the machine center is rated for at least 1000 psi (68.9 Bar).
6. Locate the following components that were shipped loose:
   - (1) FlexForce Manual
   - (1) 1" Accuflex Hose – 10 feet (3 Meters)
   - (1) 3/4" Accuflex Hose – 10 feet (3 Meters)
   - (4) Hose clamps
   - (1) High pressure hose
   - (1) Power and control interface receptacle and Cable
   - (1) Standpipe assembly
7. Locate following components of machine tool:
   - Electrical circuit schematic
   - Through-tool-coolant pump (if any)
   - Blank cover plate on machine tool tank

4 Mechanical Installation

Installer must comply with all local and national codes and safety guidelines.

4.1 Standpipe Installation

1. In the machine tool sump/chip conveyor, locate a blank cover plate on the filtered side of the tank. The required room is 7" x 7" (178mm x 178mm).
2. Remove the tank cover plate to allow for working room.
3. Align and attach standpipe mounting hole drawing on tank cover plate. *Refer to Figure 4.1.1 in appendix.*
4. Cut a 4.25" (108mm) diameter hole through the tank cover plate.
5. Drill 1/8" (3mm) pilot hole for self-tapping screws.
6. Measure the depth of the tank from the bottom of the tank to the cover plate.
7. Subtract 0.5" (12.5mm) from the measurement in Step 6.
8. Loosen the set screw on the standpipe assembly.
9. Move the pipe up or down so that the measurement from the bottom of the suction screen to the bottom of the standpipe bracket is the value that was calculated in Step 7. *See Figure 4.1.2.*
10. Tighten the set screw so that the pipe is firmly held in place.
11. Install the standpipe assembly on the modified cover plate using the supplied #10 self-tapping screws.
12. Reinstall the modified tank cover plate and standpipe assembly on the tank.
13. Repeat Steps 1-12 for all additional standpipe assemblies.

SUCTION STRAINER MUST NOT SIT ON THE BOTTOM OF THE TANK. If it does repeat Steps 8-10 until approximately 0.5" (12.5mm) is between the bottom of the strainer and the bottom of the tank.

CHANGE MINIMUM COOLANT LEVEL TO 3" (76.2 mm). This will ensure that there is no aeration.

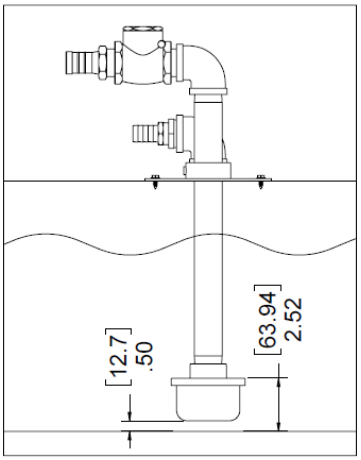


Figure 4.1.2

4.2 Suction Strainer Cleaning

1. Locate and remove the four (4) 1/4-20 bolts that hold the standpipe assembly in place.
2. Remove the standpipe assembly from tank cover plate.
3. Remove the suction strainer from the pipe using an adjustable wrench.
4. Wash the suction strainer with a heavy-duty degreaser to remove any debris attached to the filter element. Rinse thoroughly with water. For extremely clogged screens, soak in degreaser and scrub with a stiff brush.
5. Inspect the suction strainer for cracks, tears, or other damage. If there is damage, contact Jorgensen service department for a replacement.
6. Wrap the threads in Teflon Tape.
7. Reattach the suction trainer to the pipe using an adjustable wrench. Be sure to not overtighten and strip the threads.
8. Reinstall the standpipe assembly on the tank cover plate, reinstall the four (4) 1/4-20 bolts.

4.3 Hose Connections

4.3.1 Suction Hose and Pump Priming

1. Using the supplied 1 inch Accuflex Hose, connect the hose to the inlet on the FlexForce unit using the supplied hose clamp. The inlet is labeled "FLUID IN".
2. Fill the hose with clean coolant until coolant begins to show in the hose.
3. Connect the other end of the hose to the standpipe assembly on the side with the check valve.

4.3.2 High Pressure Outlet Hose

1. Locate the supplied high-pressure hose, connect this hose to the fitting labeled "HIGH PRESSURE OUT" on the FlexForce unit.
2. Connect the other end of the hose to the machine center spindle, turret, or other designated tool/orifice.

4.3.3 Return Hose

1. Using the supplied 3/4 inch Accuflex Hose, connect the hose to the outlet on the FlexForce unit using the supplied hose clamp. The outlet is labeled "TANK RETURN"
2. Connect the other end of the hose to the standpipe assembly on the side WITHOUT the check valve using the supplied hose clamp.

5 Electrical Installation

Installer must comply with all local and national codes and safety guidelines.

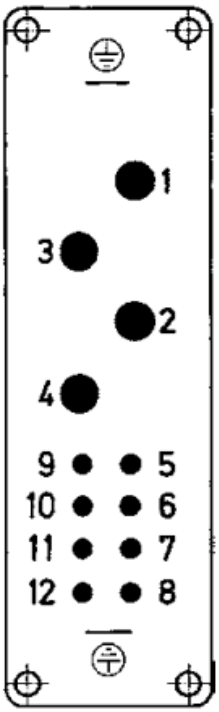


Figure 5.1.1

5.1 Power Interface

Refer to *Figure 5.1.*1 for power connections. Verify required voltage of the FlexForce unit matches the machine center voltage.

1. Connect 3 phase power wires (L1, L2, and L3) to pins 1, 2, and 3 for the supplied 12 pin Din connector.
2. Connect the Ground wire to the PE (ground) tab of the 12 pin connector.

5.2 Control Interface

Refer to *Figure 5.1.1* for control connections. All wires should be 24V.

1. Connect control wires to the supplied 12 pin Din connector following *Table 4.2.1*.

Table 4.2.1

Pin Number	Description	Wire Color
5	Call for Coolant	Black
6	Common	Green
7	Index	Brown
8	VFD Speed 1	Blue
9	VFD Speed 2	White
10	Error Signal	Red
11	NO Error Signal (Closed = OK)	Yellow
12	NC Error Signal (Open = OK)	Orange

VFD Speed pins are only active on versions that have variable flow.

Error signal circuit checks to ensure that the system is fully functional. This requires a 24V signal from the customers machine going into Pin #10. If the system is healthy a signal will be returned through Pin #11 and no signal will be returned through Pin #12. If the system is unhealthy either Pin #11 will have no signal or Pin #12 will have a signal or both conditions will happen

IF AN ERROR SIGNAL OCCURS THE MACHINE SHOULD BE SHUT DOWN AND JORGENSEN SHOULD BE CONTACTED.

5.3 Variable Speed

The variable speed option is only avalible on units that have variable flow. This utilizes the VFD speed pins (pins 8 and 9) in the control. The machine "M" codes should activate the VFD speed pins following *Table 5.3.1* to correctly activate the coresponding flow rate.

Table 5.3.1

GPM	LPM	VFD SPEED 1 (PIN 8)	VFD SPEED 2 (PIN 9)
2	7.6	O	O
4	15.1	X	O
6	22.7	O	X
8	30.3	X	X

The "O" symbol coresponds to having no power and the "X" coresponds to the pin having power. All signal power should be 24 volts DC.

6 Start Up

6.1 Tank Charge and Motor Priming

1. Connect system to power.
2. Follow set up steps per section 4.3.1
3. Tap the "CHARGE TANK" button and confirm the transfer pump is rotating clockwise.
4. If the transfer pump is rotating COUNTER-clockwise, switch the phase of power entering the FlexForce unit.
5. Press the "CHARGE TANK" button until when the "FAULT RESET" button is pressed the red light turns off (Approximately 12 Gallons).
6. Jog the call coolant button for 1 second at a time until fluid comes out.

6.2 Flush System

1. Turn off unit.
2. Remove cover plate opposite control panel.
3. Attach hose to tank return fitting and have the hose empty into a bucket.
4. Manually rotate coupling between high pressure motor and pump
5. Rotate until coolant comes out of tank return hose the same color as the incoming coolant.
6. Replace cover plate and attach tank return hose to the tank/ standpipe assembly.

6.3 Pressure Adjustment

7. Turn off unit.
8. Remove small cover plate with "TANK RETURN" label attached.
9. Remove plug from relief valve using 5/16 right angle hex key.
10. Adjust the pressure of the relief valve using a 3/16 right angle hex key (clockwise for higher, Counterclockwise for lower).
11. Reinstall plug from relief valve.
12. Check the adjusted pressure by running the unit.
13. Repeat steps 2 – 5 until pressure is at desired level.

7 Preventative Maintenance

7.1 Preventative Maintenance Schedule

Refer to *Table 7.1.1* for the schedule of when to do checks and preventative maintenance.

Table 7.1.1

MAINTENANCE CHART						
	HOURS	40	172	688	1376	2752
COMPONENT	TASK	WEEKLY	MONTHLY	QUARTERLY	SEMIANNUAL	ANNUALLY
High Pressure Pump	Check oil level	X				
	Replace oil every 1500 hours				X	
	Check coupling for wear				X	
	Check for coolant leaks			X		
	Replace seals on pump at 8000 hours					X
Filter Unit	Check "FILTER" pressure gauge	X				
	Replace bag filter when alarm goes off			X		
	Check for leaks and chip migration			X		
Transfer Pump	Check for leaks			X		
	Check all plumbing for blockage			X		
Pump Motor	Check mounting bolts					X
Suction Strainer	Check for damage and clean			X		
This is based off of a standard single 8-hour shift. If you are running more than one shift per day, use the hour values must be used.						

7.2 High Pressure Pump – Oil Level Check

1. Locate the viewing port on the gauge side panel (side where pressure gauges can be read).
2. Check to see the oil level. Level must be at the FULL level. Add oil as required.

Must use 10W-30 synthetic oil. This is required by the pump manufacturer.

7.3 High Pressure Pump – Oil Change

1. Change oil in high pressure pump after 1500 hours of operation.
2. Locate side panel on rear of machine (opposite from electrical cabinet).
3. Remove the twelve (12) bolts holding the side panel on using a 5/32-inch hex key.
4. Remove the side panel on rear of machine.
5. Place a container capable of holding at least one (1) quart (32oz) of oil under the opening in the casing near the pump.
6. Locate and remove the **RED** oil fill cap.
7. Locate and remove drain cap located at the end of the copper tube at the bottom of the pump.
8. Allow oil to drain into the container.
9. After the oil is drained reinstall the cap that was removed in step 7.
10. Locate the opening where the red oil fill cap was installed and place a funnel in the hole.
11. Fill with 10W-30 synthetic oil. Fill unit the oil level is 1/4 inch below the bottom of the top of the pump.
12. Reinstall the red oil fill cap.
13. Reinstall side panel. Tighten bolts on panels.

7.4 High Pressure Pump – Leak Checks

1. Locate side panel on rear of machine (opposite from electrical cabinet).
2. Remove the twelve (12) bolts holding the side panel on using a 5/32-inch hex key.
3. Remove the side panel on rear of machine.
4. Check for fluid around the high-pressure pump.
5. Check for leaks from fittings or hoses. If a fitting is leaking check to make sure the fitting is tight. If a hose is leaking shut down the machine and replace the hose.
6. If fluid is leaking from the pump, the pump will need to be replaced. Contact Jorgensen's parts department at jci-parts@jorgensenconveyors.com.
7. Reinstall the side panel before operating the FlexForce unit.

7.5 Filter Unit – Check Pressure Gauge

1. When the transfer pump is running, the pressure gauge labeled "FILTER" should show a reading below 3 psi (0.2 bar).
2. If the pressure ever exceeds 3 psi an audible alarm will sound indicating that the filter needs to be changed.

7.6 Filter Unit – Bag Replacement

When the filter alarm goes off the filter needs to be replaced. System designed to only use CSD bag filters.

USE OF ANY OTHER FILTER BRANDS MAY CAUSE DAMAGE TO THE FLEXFORCE UNIT.

1. **(If single filter)** Shut down the FlexForce unit. Lock Out / Tag Out all electrical energy sources.
1. **(If dual filter)** Ensure the ball valve handle is pointing towards the opposite filter.
2. Remove the 3/8 inch bolts and filter lid.
3. Slowly pull the filter out of the housing allowing for the coolant to drain.
4. Install the new filter bag in the housing, ensure it fully seals, and that the bag fills the supporting basket.
5. Inspect the O-ring for cracks or tears. Replace the O-ring if it is damaged.
6. Reinstall the filter lid and torque the 3/8 inch bolts to 10 FT-LBS.

7.7 Filter Unit – Leak Checks

1. Check the inlet hose for leaks, especially near the hose clamps.
2. If leaks are detected replace the hose. THE FlexForce UNIT MUST BE SHUT DOWN UNTIL THE LEAK IS FIXED.
3. Check where the filter assembly mounts to the tank for any signs of coolant.
4. If there is a leak in the filter unit housing, the housing needs to be replaced. Contact Jorgensen's parts department at jci-parts@jorgensenconveyors.com to get a replacement part.

7.8 Transfer Pump – Leak Checks

1. Locate side panel on rear of machine (opposite from electrical cabinet).
2. Remove the twelve (12) bolts holding the side panel on using a 5/32-inch hex key.
3. Remove the side panel on rear of machine.
4. Check for fluid around the transfer pump.
5. Check for leaks from fittings or hoses. If a fitting is leaking check to make sure the fitting is tight. If a hose is leaking shut down the machine and replace the hose.
6. If fluid is leaking from the pump, the pump will need to be replaced. Contact Jorgensen's parts department at jci-parts@jorgensenconveyors.com.
7. Reinstall the side panel before operating the FlexForce unit.

7.9 Transfer Pump – Blockage Checks

Check for pump blockage if system frequently enters a low coolant shutdown state or if the psi on the "FILTER" gauge is below 2 psi when the transfer pump is running.

1. Locate side panel on rear of machine (opposite from electrical cabinet).
2. Remove the twelve (12) bolts holding the side panel on using a 5/32-inch hex key.
3. Remove the side panel on rear of machine.
4. Locate the plug on the front face of the transfer pump near the bottom.
5. Place a container capable of holding at least one (1) quart (32oz) underneath the plug where coolant will drain into it.
6. Remove the plug using a 3/8 inch hex key.
7. Allow all coolant to drain.
8. Reinstall the plug.
9. Prime the pump following the steps outlined in section 4.3.1.

7.10 Pump Mounting – Check Bolts

1. Transfer pump mounting bolts should be checked to ensure they are tight. The 3/8 bolts should be tightened to 10 FT-LBS and the 5/16 bolts should be tightened to 66 IN-LBS.
2. High pressure motor and pump bolts should be checked to ensure they are secure. The bolts should be tightened to 10 FT-LBS.

7.11 Suction Strainer – Clean and Examine

1. Refer to section 4.2 of manual.

7.12 High Pressure Pump – Fluid End Seals

1. Locate and remove the panel of the rear of the machine (opposite from electrical cabinet).
2. Drain coolant tank completely.
3. Remove hose connections. (Accuflex hose and ¾" JIC hose
4. Remove the (4) 3/8-16 holding Hydra-cell pump in place.
5. Remove Hydra-cell pump.
6. Follow the steps shows on Hydra-cell's website at the following link: Hydra-Cell Service & Maintenance - Heavy Duty Industrial Pumps from Hydra-Cell Pumps
7. Once repairs are completed reinstall pump and hoses.
8. Reinstall rear panel.

7.13 Troubleshooting Guide

Table 7.12.1

Issues	Causes	Solutions
System Has No Power	Disconnect Switch is Off	Turn main power on.
	Machine Tool is Off	Turn Machine center on.
	Overloads Are Tripped	Reset Tripped overload in Electrical Cabinet. If they trip again, shut down machine and contact Jorgensen's part department at jci-parts@jorgensenconveyors.com.
	Wired Incorrectly in Machine Center	Check wiring of connector to machine center is correct.
System Is Not Running	"M" Code Not Energized	Energize "M" code in machine center.
	Low Level Light Tripped	Follow Troubleshooting guide for "Low Level Light Activates".
	Wired Incorrectly in Machine Center	Check wiring of connector to machine center is correct.
	Overloads Are Tripped	Reset Tripped overload in Electrical Cabinet. If they trip again, shut down machine and contact Jorgensen's part department at jci-parts@jorgensenconveyors.com.
Low Level Light Activates	Clogged Filter	Replace Bag filter following Section 7.6. Then reset light by pressing "FAULT RESET" button.
	Clogged Suction Strainer	Clean Suction Strainer following Section 7.11. Then reset light by pressing "FAULT RESET" button.
	Transfer Pump Overload Tripped	Reset Tripped overload in Electrical Cabinet. Then reset light by pressing "FAULT RESET" button.
	Transfer Pump Rotating Wrong Direction	Inspect fan rotation and resolve by following Section 6.1. Then reset light by pressing "FAULT RESET" button.
	Clogged Flow Reducer / Transfer Pump	Check the hose leaving the transfer pump for blockages. Clean Transfer pump following Section 7.9. Then reset light by pressing "FAULT RESET" button.
Filter Full Alarm	Clogged Filter	Replace Bag filter following Section 7.6.
	Damaged Flow reducer	if Filter bag is cleaner than normal check flow reducer for damage. Contact Jorgensen's parts department at jci-parts@jorgensenconveyors.com.

8 Replacement Components

8.1 Manifold Assembly

Refer to *Figure 8.1.1* for the component number and then use *Table 8.1.2* to determine the Jorgensen part number for any component.

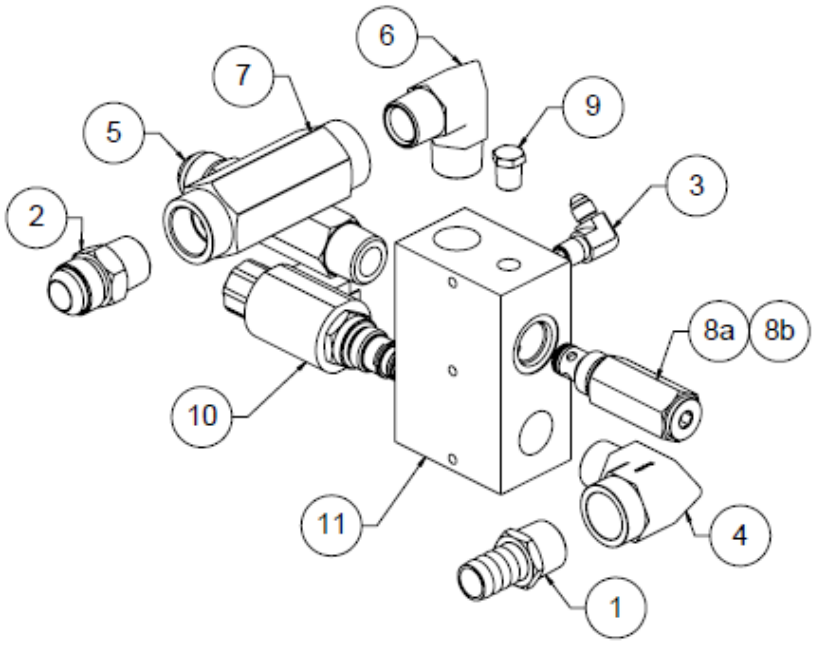


Figure 8.1.1

Table 8.1.2

Drawing Number	Description	Part Number
1	3/4"Barb Fitting for 3/4"Hose	68-1416
2	3/4"JIC Fitting	68-2540
3	1/4"JIC Angle Fitting	68-2541
4	3/4" Angle MF Fitting	68-2543
5	3/4" JIC Extra Long Fitting	68-2545
6	3/4"Angle MM Fitting	68-2547
7	3/4"Check Valve	68-2548
8a 8b	Size 10 Pressure Relief Set to 500 psi Size 10 Pressure Relief Set to 1000 psi	68-2569 68-2570
9	1/4"Plug	68-2579
10	Size 10 Solenoid Valve w/ Coil	72-2585
11	Manifold Block	73-1401

8.2 Motors and Pumps

Refer to *Figure 8.2.1* for the component number and then use *Table 8.2.2* to determine the Jorgensen part number for any component.

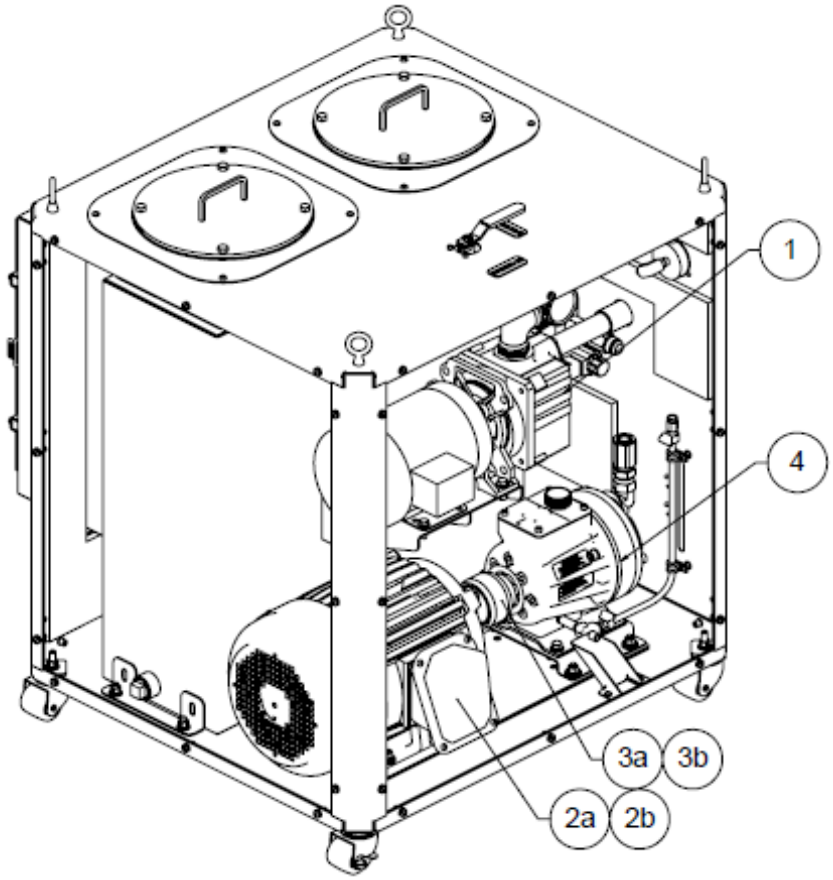


Figure 8.2.1

Table 8.2.2

Drawing Number	Description	Part Number
1	Transfer Pump	50-1982
2a 2b	High Pressure Motor 5 HP High Pressure Motor 7.5 HP	50-1985 50-1986
3a 3b	Coupling 1-1/8 to 7/8 Coupling 1-3/8 to 7/8	73-1371 73-1375
4	High Pressure Pump	50-1983

8.3 Sensors

Refer to *Table 8.3.1* to determine the Jorgensen part number for any of the easily damaged components and any filter media.

Table 8.3.1

Description	Part Number
Level Sensor (Mounted on Tank)	72-2513
Level Sensor Probe	72-2100
Pressure Sensor (Mounted in Distribution Plumbing)	72-2514

8.4 Bag Filter

Refer to *Table 8.4.1* to determine the Jorgensen part number for any of the easily damaged components and any filter media.

Table 8.4.1

Description	Part Number
Bag Filter 5 Micron Size 1	68-2625
Bag Filter 10 Micron Size 1	68-2489
Bag Filter 25 Micron Size 1	68-2472
Lid Seal O-Ring	70-2294
Bag Filter Support Basket	73-2087

8.5 Miscellaneous

Refer to *Table 8.5.1* to determine the Jorgensen part number for any of the easily damaged components.

Table 8.5.1

Description	Part Number
Pressure Gauge 0-1500 psi	68-2539
Pressure Gauge 0-15 psi	68-2571
HP Unit Caster	70-1240
HP Unit Caster Locking	70-1241
Flow Restrictor	68-2626
1" Hose Accuflex K-3150-16 (Internal)	68-1346
1" Hose Kuri Tec K7160-16 (Suction)	68-2629
3/4" Hose Accuflex K-3150-12	68-1347
1/4" Hose Kuri Tec K010-0406	68-2575
3/4" High Pressure Hose	68-2555
Hose Clamp	70-1688
Standpipe Suction Strainer	68-2624

8.6 Consumable Items

Refer to *Table 8.6.1* to determine the Jorgensen part number for any commonly replaced items.

Table 8.6.1

Description	Part Number
Bag Filter 5 Micron Size 1	68-2625
Bag Filter 10 Micron Size 1	68-2489
Bag Filter 25 Micron Size 1	68-2472
Lid Seal O-Ring	70-2294
1" Hose Accuflex K-3150-16 (Internal)	68-1346
1" Hose Kuri Tec K7160-16 (Suction)	68-2629
3/4" Hose Accuflex K-3150-12	68-1347
1/4" Hose Kuri Tec K010-0406	68-2575
3/4" High Pressure Hose	68-2555
Hose Clamp	70-1688
Standpipe Suction Strainer	68-2624
Hydra-cell End Seal Kit	73-1404

9 Appendix

9.1 Warranty

Jorgensen Conveyors, Inc. guarantees the material of our manufacture against defects in material or workmanship under normal and proper use for one year in service or eighteen months from shipment, whichever occurs first. Material which we purchase can be guaranteed by use only to the extent of the original manufacturer's guarantee. We shall not be held liable for damages or delay caused by defective material, or contingent claims of any kind arising from loss of production owing to failure of shipment. Our obligation under this warranty is limited to furnishing new or replacing defective material without charge f.o.b. factory. No allowance will be made for repairs or alterations unless made with our written consent.

Caution should be used in the care and application of our products as the guarantee recited above does not apply where lack of proper maintenance or misapplication exists. We will not be liable for improper storage or handling of our products prior to placement in service.

The within equipment will be specifically designed and manufactured for and will be sold to purchaser for the sole purpose of transporting and conveying raw materials, work in process and finished goods of purchaser. Purchaser does hereby agree to exonerate, indemnify, defend and hold seller harmless of and from all loss, liability and damages which may be suffered by or asserted against the seller, and all costs and expenses which seller may incur because of any claim or claims which may be asserted against seller by any person for death or injury to anyone sustained while riding or attempting to ride upon said equipment.

9.2 A Word About Jorgensen Conveyors…

Founded in 1950, Jorgensen Conveyors has evolved into a leading machine tool conveyor specialist, supplying high quality, custom designed conveyor and coolant filtration systems to a variety of leading machine tool builders and end user manufacturers in the metal working industry.

A key factor in this growth was the development of our patented chain belt design. None of the parts are welded. Instead, each part, made of extra heavy gauge steel, is held by an axle that passes through the part. If a part should become damaged, the belt assembly is completely detachable so that the part can be replaced quickly. This design also features fewer parts, making it more cost effective.

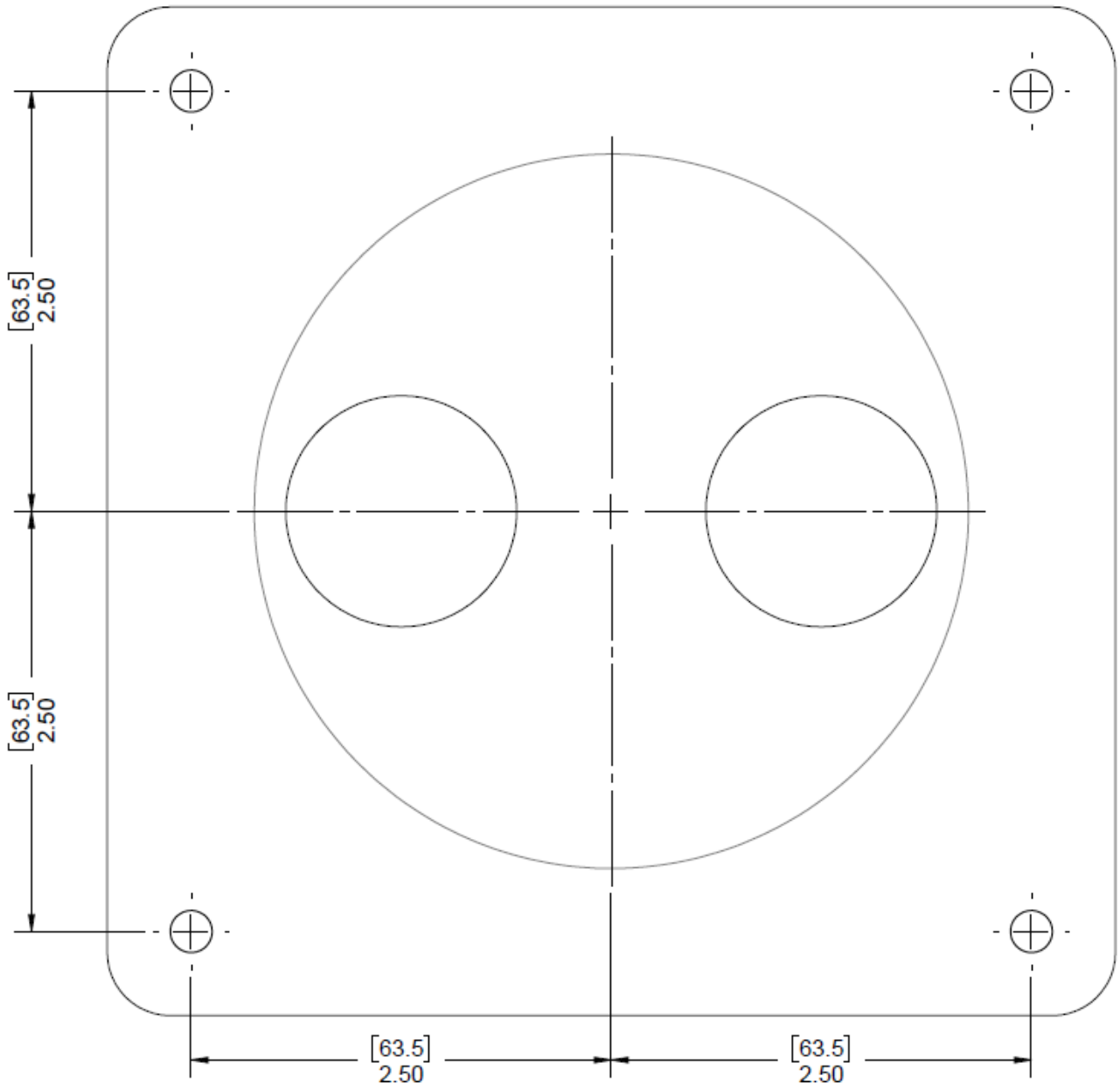
What really sets Jorgensen apart today is our design capability across the broad range of chip removal applications for CNC (Computer Numerically Controlled) machine tools. Today, Jorgensen Conveyors supplies chip conveyors and coolant filtration systems to machine tool builders and end users in manufacturing sectors such as automotive, heavy equipment, and aerospace, and to contract machine shops that supply parts to these manufacturers.

Jorgensen has also built its reputation in the industry with a responsive warranty service. It is a service-oriented philosophy that worked in 1950, works today, and will keep working into the next century.

Jorgensen
Conveyor and Filtration Solutions

JORGENSEN CONVEYORS, INC. • 10303 N. Baehr Road • Mequon, Wisconsin 53092-0156
P.O. Box 09156
Phone: 262-242-3089
Fax: 262-242-4382
www.jorgensenconveyors.com

9.3 Standpipe Assembly Mounting Pattern



ATTACH TO BLANK COVER PLATE AND CENTER PUNCH ON ALL CENTER POINTS
DRILL CENTER HOLE AT 4.25 INCHES (108MM)
DRILL 0.125 INCH (3MM) PILOT HOLE FOR #10 SELF-TAPPING SCREWS