

# DRUM UNLOADER SYSTEM

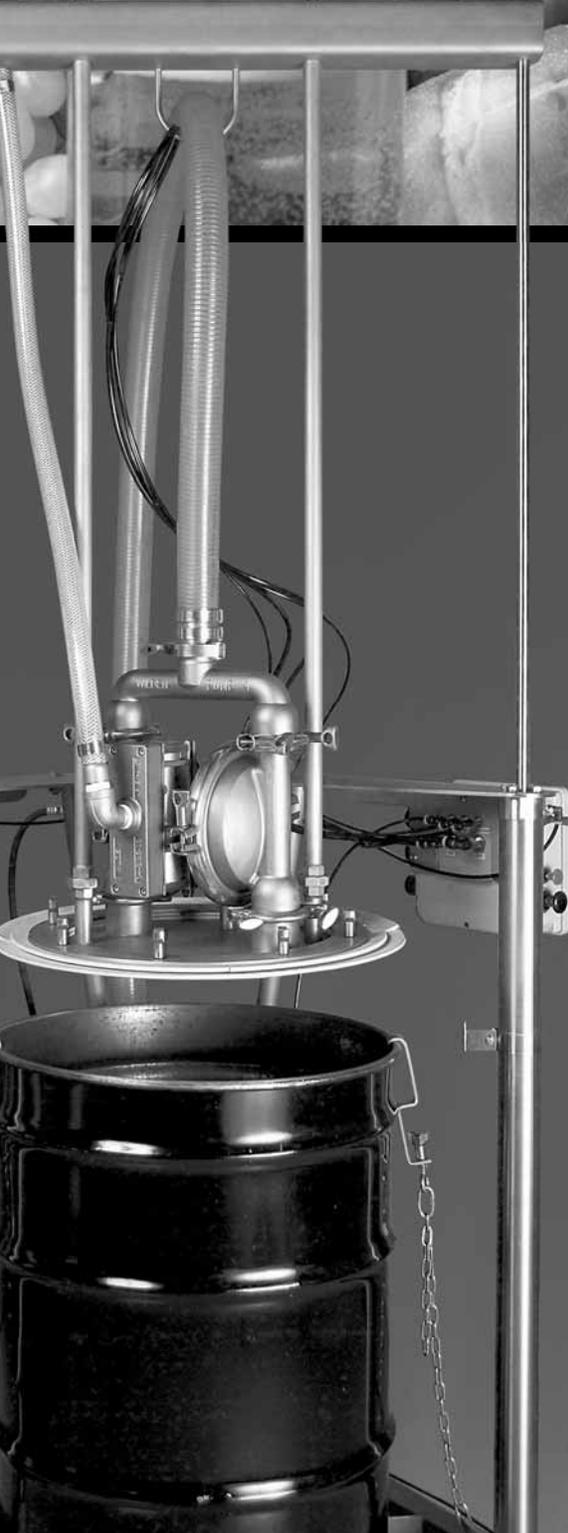
Saniflo™ Series

# EOM

Engineering  
Operation &  
Maintenance



Refine your process



**Drum  
Unloader  
System**

# WILDEN®

A DOVER COMPANY



WIL-12070-E-03  
REPLACES WIL-12070-E-02

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## CAUTIONS—READ FIRST!

## Drum Unloader System

-  **CAUTION:** Always wear safety glasses and appropriate safety gear when operating the Saniflo™ DUS unit.
-  **CAUTION:** Always perform an inspection of the entire system before each use. Ensure that all parts are in good working condition and do not show signs of wear.
-  **WARNING:** Prior to installing a Saniflo™ DUS into an application, you must first ensure that the DUS components are compatible with the process media and any cleaning or sanitation products.
-  **WARNING:** Never attempt to modify the Saniflo™ DUS unit. Modification will change the dynamics of the DUS and could damage the unit, result in failure of the unit, or cause harm to anyone in the area.
-  **CAUTION:** Always disconnect the main air supply to the Saniflo™ DUS before service or repairs are attempted. Failure to do so could result in harm to anyone in the area.
-  **CAUTION:** The Saniflo™ DUS unit must be properly secured while in use. Failure to properly secure the system while in use could result in harm to anyone in the area.
-  **CAUTION:** When using the Saniflo™ DUS unit, it is extremely important to note that the retracting downward movement can cause a pinch point at two areas of the unit.
  1. A pinch point is located at the bottom of the structure when the ram plate is lowered to the base assembly. To avoid injury to anybody operating this equipment or to anyone in the area of the equipment, keep hands, arms and head clear of plate and drum edge.
  2. Another pinch point is located at the area where the ram support bar comes in the vicinity of the header plate. To avoid injury to anybody operating this equipment or to anyone in the area of the equipment when it is in operation, a safe distance must be kept from the ram support bar/header plate area.
-  **CAUTION:** Do not exceed 8.6 bar (125 psig) air pressure to the Saniflo™ DUS unit.
 

Do not exceed 1.7 bar (25 psig) air pressure to the RAM DOWN. For normal operation, 1.0 bar (15 psig) is suggested.

Do not exceed 5.5 bar (80 psig) air pressure to the RAM UP. For normal operation, 4.1 bar (60 psig) is suggested.
-  **CAUTION:** Before attaching an air source to the DUS unit, inspect all hose connections to ensure they are secure.
-  **CAUTION:** Before operating Saniflo™ DUS unit, attach drum retention hooks to secure drum during operation. Failure to do so will result in drum being moved and/or lifted when ram assembly is moved upward.
-  **WARNING:** It is important to follow the assembly instructions provided when building the Saniflo™ DUS unit. Altering the

steps or changing the process may result in operation issues including improper rise and fall of the follower plate assembly.

## Pump

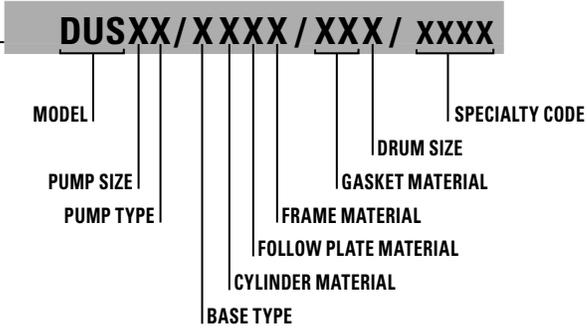
-  **NOTE:** Pump not included with Saniflo™ DUS. Pump sold separately.
-  **CAUTION:** Do not apply compressed air to the exhaust port – pump will not operate.
-  **CAUTION:** Do not exceed 8.6 bar (125 psig) air supply pressure.
-  **CAUTION:** Do not over-lubricate air supply. Excessive lubrication will reduce pump performance.
-  **TEMPERATURE LIMITS:**

Neoprene	–17.7°C to 93.3°C	0°F to 200°F
Buna-N	–12.2°C to 82.2°C	10°F to 180°F
EPDM	–51.1°C to 137.8°C	–60°F to 280°F
Viton®	–40.0°C to 176.7°C	–40°F to 350°F
Saniflex™	–28.9°C to 104.4°C	–20°F to 220°F
Polytetrafluoroethylene (PTFE)	4.4°C to 104.4°C	40°F to 220°F
Polyurethane	–12.2°C to 65.6°C	10°F to 150°F
-  **CAUTION:** Maximum temperature limits are based upon mechanical stress only. Certain chemicals will significantly reduce maximum safe operating temperatures. Consult Chemical Resistance Guide (E4) for chemical compatibility and temperature limits.
-  **WARNING:** Prevention of static sparking – if static sparking occurs, fire or explosion could result. Pump, valves, and containers must be grounded to a proper grounding point when handling flammable fluids and whenever discharge of static electricity is a hazard.
-  **CAUTION:** The process fluid and cleaning fluids must be chemically compatible with all wetted pump components. Consult Chemical Resistance Guide (E4).
-  **CAUTION:** Do not exceed 82.2°C (180.0°F) air inlet temperature for Pro-Flo V™ models.
-  **CAUTION:** Pumps should be thoroughly flushed before installing into process lines. FDA and USDA approved pumps should be cleaned and/or sanitized before use.
-  **CAUTION:** If diaphragm rupture occurs, material being pumped may be forced out air exhaust.
-  **CAUTION:** Before any maintenance or repair is attempted, the compressed air line to the pump should be disconnected and all air pressure allowed to bleed from pump. Disconnect all intake, discharge and air lines. Drain pump by turning it upside down and allowing any fluid to flow into a suitable container.

**WILDEN DESIGNATION SYSTEM**

**DRUM UNLOADER SYSTEM**

**LEGEND**



**SANIFLO™ DUS MATERIAL CODES**

**MODEL**

DUS = DRUM UNLOADER SYSTEM

**PUMP SIZE**

4 = 38 mm (1-1/2") ORIGINAL SERIES

**PUMP TYPE**

S = SIMPLEX SINGLE ACTING  
D = DUPLEX DOUBLE ACTING

**BASE TYPE**

F = FLOOR MOUNTED  
B = BASE PLATE MOUNTED

**CYLINDER MATERIAL**

S = STAINLESS STEEL

**FOLLOW PLATE MATERIAL**

S = STAINLESS STEEL

**FRAME MATERIAL**

S = STAINLESS STEEL

**GASKET MATERIAL**

FB = SANITARY BUNA-N

**DRUM SIZE (DIA.)**

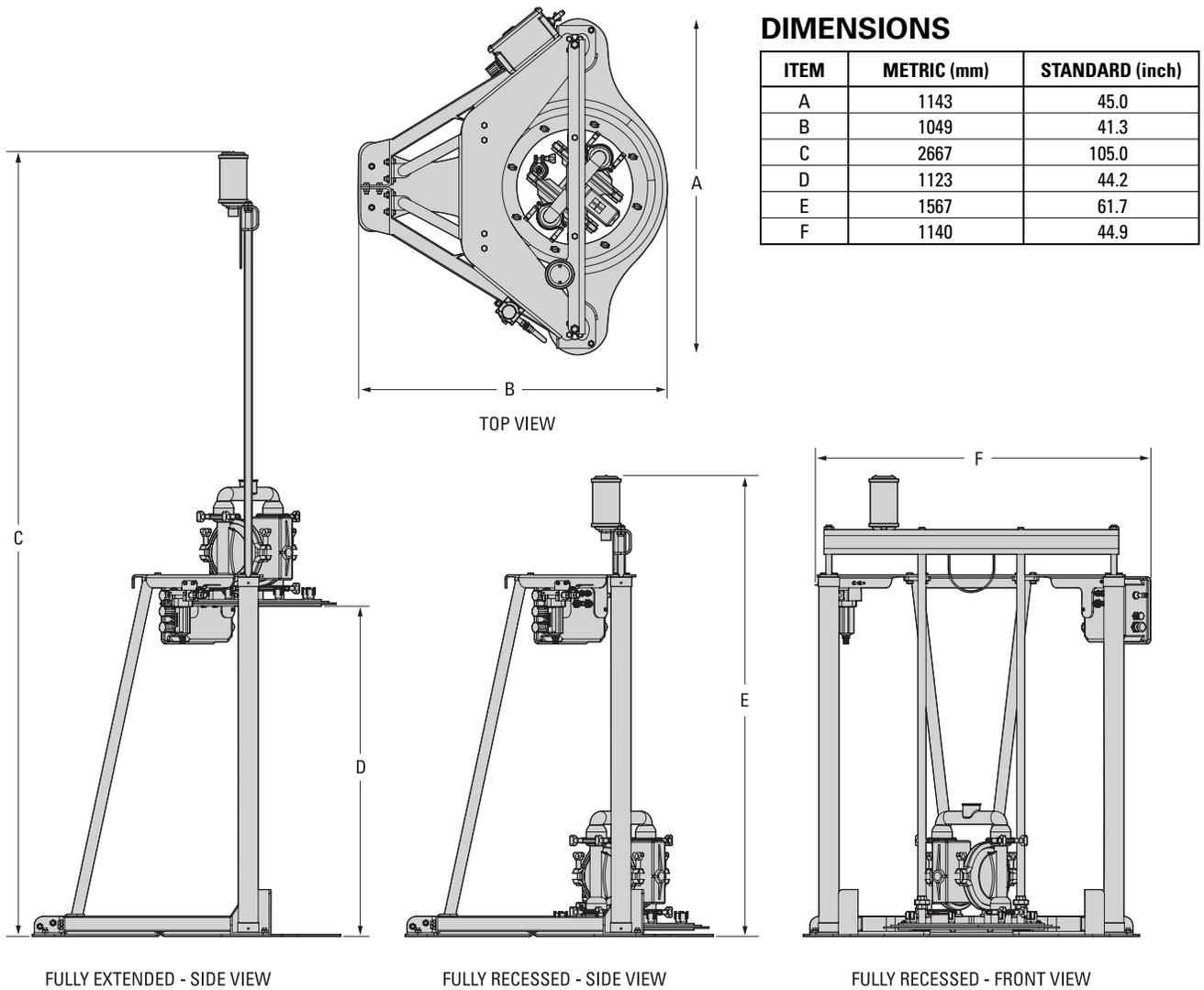
K = 533 - 557 mm (21.0"-21.9")  
L = 558 - 582 mm (22.0"-22.9")

**SPECIALTY CODES**

0070 Saniflo™

**DIMENSIONAL DRAWING**

**DRUM UNLOADER SYSTEM**



## TROUBLESHOOTING

***Uneven ram cylinder movement.***

1. Ensure that the ram cylinder down pressure is not excessive. Generally, no more than 1.0 bar (15 psig) is required to move the ram cylinders in the downward direction.
2. Check to determine whether or not the ram cylinder air hoses are connected properly. The ram down cylinder air hoses consist of two longer air hoses that are equal in length and one shorter air hose. The ram up cylinder air hoses consist of two shorter hoses that are equal in length and one longer air hose. If the ram cylinder air hoses are not connected properly, the ram cylinders will fill unevenly, causing the ram cylinder movement to be inconsistent.
3. It is important to follow the assembly process (section 5). Altering the steps or changing the process may result in operation issues including improper rise and fall of the ram cylinders. Steps 1 through 10 of the assembly process are extremely critical. Following these steps will ensure that the ram cylinder movement is unrestricted.

***Pump runs but little or no product flows.***

1. Check for pump cavitation; slow pump speed to allow thick material to flow into liquid chambers.
2. Check for sticking ball check valves. If material being pumped is not compatible with pump elastomers, swelling may occur. Replace ball check valves and seats with proper elastomers. Also, as the check valve balls wear out, they become smaller and can become stuck in the seats. In this case, replace balls and seats.
3. Check to ensure that there is sufficient air pressure supplied by the ram down regulator on the control panel.

***Excessive drum contents leaking past gaskets.***

1. Ensure that the correct gasket size is being used in accordance with the drum size.

NOTE: The gaskets are NOT designed to completely seal against sides of drum. Under normal operating conditions, there will be some slight weeping of drum contents.

***After evacuating drum contents, ram cylinders are struggling with upward movement.***

1. Check to determine whether or not drum vent button is activated. This will inject air under the ram plate and break the vacuum caused when removing the ram plate from the drum.

***Pump air valve freezes.***

1. Check for excessive moisture in compressed air. Either install a dryer or hot air generator for compressed air. Alternatively, a coalescing filter may be used to remove the water from the compressed air in some applications.

***Air bubbles in pump discharge.***

1. Check for ruptured diaphragm.
2. Check tightness of outer pistons.
3. Check tightness of fasteners and integrity of o-rings and seats, especially at intake manifold.
4. Ensure pipe connections are airtight.

***Product comes out air exhaust.***

1. Check for diaphragm rupture.
2. Check tightness of outer pistons to shaft.

## ASSEMBLY

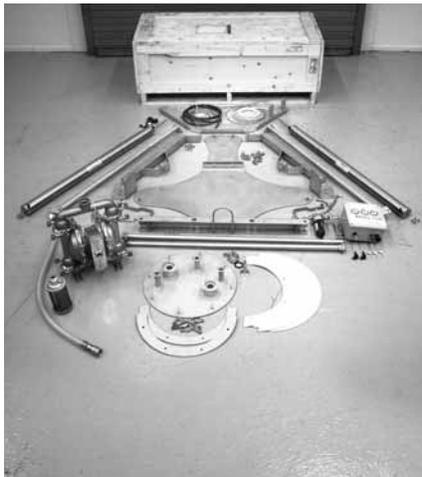
**Tools Required:**

- 10 mm Hex Head Wrench
- 12 mm Wrench
- 18 mm Wrench
- Adjustable Wrench

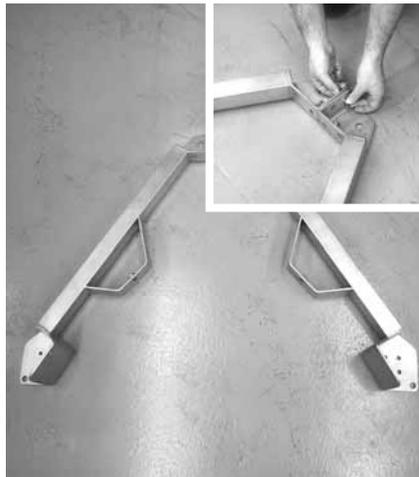
**CAUTION:** During assembly it is important not to tighten any bolts completely until specifically instructed. This will ensure system alignment and allow for proper operation. It is also recommended that an appropriate anti-seize is used on all stainless steel fasteners during assembly.

Although some air fittings may come with a pipe sealant already applied, it is recommended that a pipe sealant be used with all additional air fittings during assembly.

**NOTE:** It is important to follow the assembly instructions provided when building the Saniflo™ DUS unit. Altering the steps or changing the process may result in operation issues including improper rise and fall of the follower plate assembly.

**Step 1**

Remove all parts from shipping container and compare with Bill of Materials listing in Section 9 before beginning assembly of unit.

**Step 2**

Assemble the left and right base sections as shown, using two (2) 12 mm bolts, nuts and lock washers. Leave fasteners hand tight.

**Step 3**

Raise two connected base pieces on their side as shown and align the two pneumatic cylinders. Use the top support beam to raise the opposite end of the cylinders for proper alignment.



**Step 4**

Install four (4) 10 mm countersunk screws in the bottom of the base frame and end of the cylinders. NOTE: Once screws are snug, back off one full turn.



**Step 5**

When cylinders are installed on the base frame, ensure that the air connections are facing away from the center of the frame assembly.



**Step 6**

Install the flat header plate on the top end of the pneumatic cylinders. Ensure that the header plate is positioned as shown when compared to the base frame.



**Step 7**

Slide ram support bar over threaded ends of pneumatic cylinders and install one (1) 18 mm nut on end of threaded end until it stops at the rod shoulder then tighten. NOTE: Nut should be between upper and lower support bar holes.



**Step 8**

Slide ram support bar farther down on the cylinder rod until it bottoms out on the previously installed nut. Then add a second 18 mm nut and lock washer on the end of the rod and hand tighten.



**Step 9**

Install braces between base frame header plate. Triangle end goes up and rectangular end goes down. Use 12 mm bolts, nuts and lock washers and leave hand tight.



**Step 10**

Tighten all bolts on the sub-assembly in the following order:

1. Bottom of cylinders
2. Top of cylinders
3. Base nuts & bolts (floor mount configuration only)
4. Back braces



**Step 11**

Install vertical ram support rods to ram support bar. Use 12 mm bolts and lock washers and tighten securely.



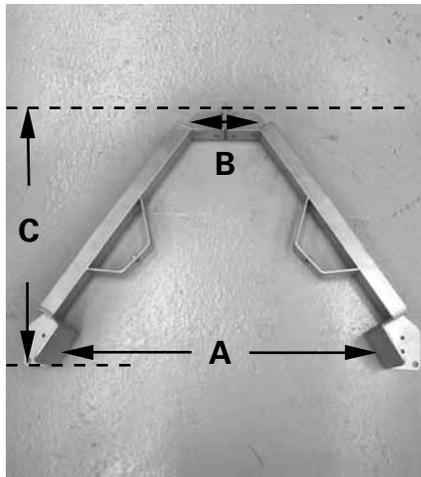
**Step 12**

Install the ram plate on the end of the vertical ram support bars as shown. NOTE: The ram plate vent connection should be toward the back of the assembly.



**Step 13**

Install the left and right drum alignment guides as shown. Final adjustment will be made later in the instructions.



**Step 14A**

**For floor mounted models,** use 13 mm (1/2") concrete floor anchors. NOTE: Proper alignment is critical to ensure proper operation of the system. Dimension A (mounting bolt holes on the front base structure) should be 1,060 mm (41.7") apart. Dimension B (mounting bolt holes at the back of the base structure where both structures are attached) should be 140 mm (5.5"). Dimension C (mounting bolt holes from front of bottom base structure to back of structure) should be 763 mm (30.0").



**Step 14B-1**

**For base plate mounted models,** assemble the two base pieces provided using two (2) 12 mm bolts, nuts and washers. NOTE: Be sure these are assembled on a flat surface to ensure proper alignment. Using 12 mm nuts, bolts and washers, attach the DUS unit onto the DUS base plate.

## ASSEMBLY



**Step 14B-2**

*For base plate mounted models,* install the sub-assembly built in steps 1 through 13 to the base plate using 12 mm bolts, nuts and washers. Tighten securely.



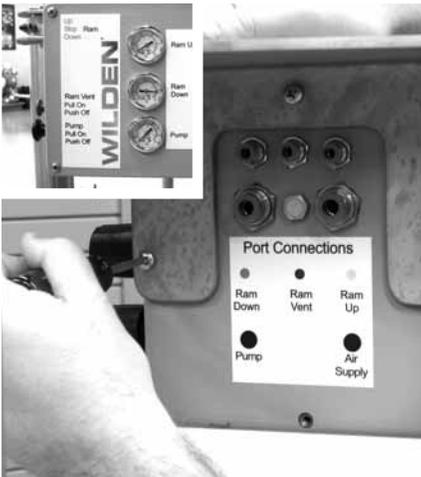
**Step 15**

Install the drum retention device and hanger as shown. NOTE: The drum hanger should be no higher than 91 cm (36") off the floor.



**Step 16**

Install the main air filter and shut off valve on the back of the header plate with fasteners provided.



**Step 17**

Install the air control panel with fasteners provided on the back of the header plate.



**Step 18**

Install all five air connection fittings on the back of the control panel as shown.



**Step 19**

Install the air line from upper left (ram down) port to the top connections on the two pneumatic cylinders.



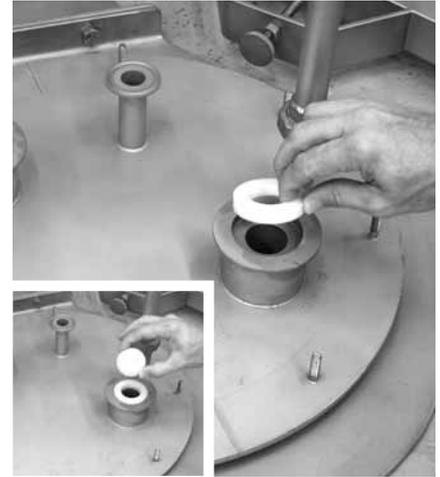
**Step 20**

Install the air line from upper right (ram up) port to the bottom connections on the two pneumatic cylinders.



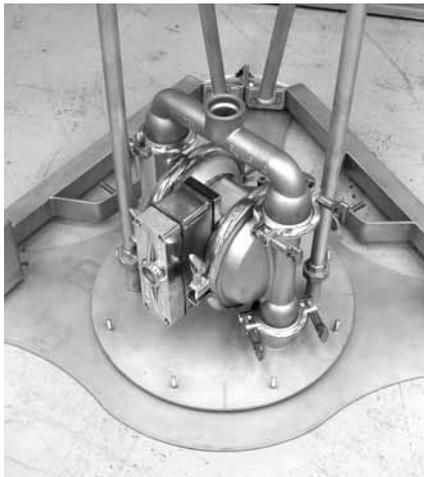
**Step 21**

To install the pump on the DUS system, first remove the inlet manifold from the pump.



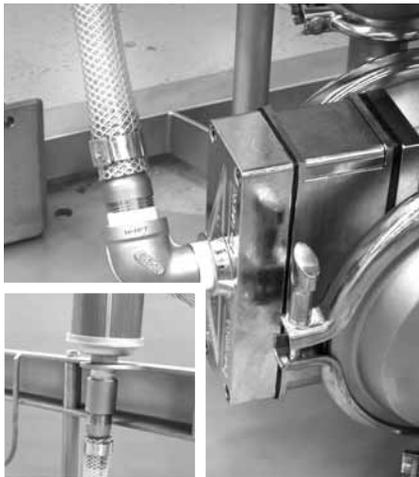
**Step 22**

Remove the inlet valve seats and check balls from the removed manifold and place in the follower plate connections.



**Step 23**

Install the pump on the follower plate using the clamp bands provided with the pump. NOTE: Face the pump exhaust away from the follower plate vent and align the bands to allow the free access to wiper seal bolt ring area.



**Step 24**

Install the exhaust discharge elbow and hose vertically, with the muffer threaded through the eyelet in the ram support bracket.



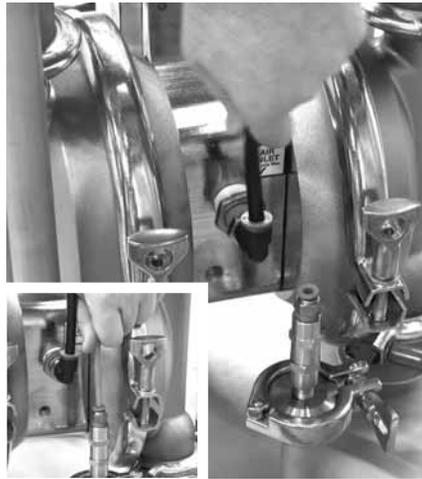
**Step 25**

Install air reducer bushing and fitting in the air inlet of the pump.



**Step 26**

Install the ram vent check valve onto the ram vent port behind the pump. Use provided clamp band assembly and o-ring.



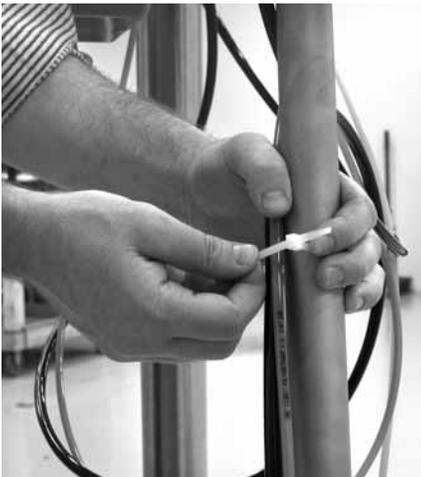
**Step 27**

Install pump air line and ram vent air lines (green) into fittings. Connect pump air line (black) to bottom left port on back of panel. Connect vent air line to upper middle port on back of panel.



**Step 28**

Install air line from main filter assembly to lower right port on back of control panel.



**Step 29**

Where possible, tie down all air lines. NOTE: Create enough slack in the air lines to allow for the ram assembly to move up and down.



**Step 30**

Install the two (2) pieces of the larger wiper seal assembly onto the bolts of the follower plate.



**Step 31**

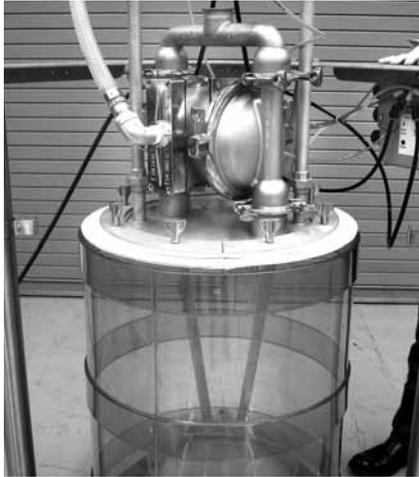
Install the two (2) pieces of the smaller wiper support seal on top of the main wiper seal. NOTE: Be sure to rotate the seams between the two gasket sets to avoid direct alignment.

## ASSEMBLY



### Step 32

Install stainless steel retaining rings on the follower plate and use the provided sanitary wing nuts to secure.



### Step 33

In order to set the drum alignment guide properly, center a drum under the complete follower plate. To do this, hook up air supply to the system and press the "RAM UP" button on the control panel.



### Step 34

Now that the drum is centered on the follower plate, adjust the alignment guides to match the drum size. NOTE: Repeat steps 33 and 34 for a new drum size or if the guides are inadvertently moved.



### Step 35

Install user supplied discharge hose on the pump using the necessary reducer, clamp band and o-rings.



### Step 36

Thread discharge hose through support loop on the bottom of the ram support bar.

## OPERATION

**Safety Equipment Suggestions:**

- Safety Glasses
- Protective Clothing
- Safety Shoes or Boots
- Gloves

**CAUTION:** Always read and familiarize yourself with these operation instructions prior to using the Saniflo™ DUS system. Improper use or misapplication could result in bodily injury or death.

**Step 1**

Before initial use, or after cleaning and reassembly, always inspect all liquid and air connections. Also, ensure that all frame and pneumatic cylinder connections are tight.

**Step 2**

Install discharge hose to discharge of pump. Always use 51 mm (2") or larger to prevent excessive friction losses with high viscosity products. A 64 mm (2-1/2") or 76 mm (3") hose is suggested for best performance.

**Step 3**

Check pump inlet air supply to ensure that regulator is set at a maximum of 8.6 bar (125 psig). NOTE: Always set the regulator at the lowest possible air pressure for the application.



**Step 4**

To begin process of adjusting RAM DOWN air supply, first set regulator to 0 bar (0 psig). Then increase air pressure until the ram plate comes in contact with the surface of the drum contents. Never exceed a maximum of 1.7 bar (25 psig).



**Step 5**

Check RAM UP air supply and ensure that regulator is set to 4.1 bar (60 psig) for normal operation. Ideally, the pressure should be set so that the ram plate will slowly move upward and out of the drum. Never exceed 5.5 bar (80 psig).



**Step 6**

Move drum into position under ram assembly, ensuring that the drum guides on the bottom of the frame stop the drum directly centered under the plate.



**Step 7**

Check to ensure the proper gasket set is installed for the drum being unloaded. NOTE: The larger gasket included in the gasket set should be 1/2" to 1" larger than the drum diameter and the smaller gasket should be the same size as the drum diameter.

The gaskets are NOT designed to completely seal against sides of drum. Under normal operating conditions, there will be some slight weeping of drum contents.



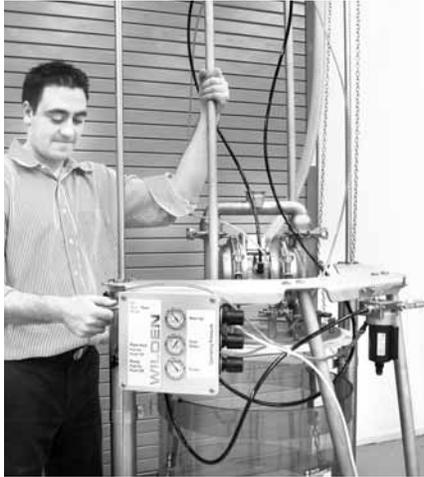
**Step 8**

Remove the drum lid to expose product being pumped and hook drum retainer hooks over upper edge of the drum.



**Step 9**

Tighten drum retainer hooks to secure the drum in the down position during operation.



**Step 10**

When moving the ram in the down direction, stand towards the right of the unit and grab the ram plate support rod with your left hand.



**Step 11**

To move the ram plate down onto the product surface, pull the red lever to the down position. This will take several seconds as the pneumatic cylinders come up to operating pressure. Ideally, the pressure should be set so that the ram plate stops automatically when coming into contact with product surface.



**Step 12**

The pump can be started after the ram plate has come into contact with the product surface. To start the pump, pull out the black button on the side of the control panel.



**Step 13**

Once the volume of product desired has been removed from the drum, or the drum is empty push in on the black knob to stop pump. NOTE: The ram control lever can remain in the down position even if the pump is not running.



**Step 14**

In preparation for removing the ram plate from the drum, move the ram control lever to the middle (off) position.



**Step 15**

Pull the green ram vent knob out to allow positive pressure below the ram plate to assist with removal.

## OPERATION



### Step 16

To remove the ram plate from the drum, move the ram control lever to the up position. Return to the middle (off) position once the ram plate has retracted to its full height. NOTE: Ensure the drum retainers are in place before starting this action.



### Step 17

Once the ram has cleared the upper edge of the drum, push in on the green ram vent knob to stop the air flow coming through the ram vent.



### Step 18

Remove drum retention hooks so that the empty drum can be removed from the system to make way for a new drum.

## CLEANING

**Safety Equipment Suggestions:**

- Safety Glasses
- Protective Clothing
- Safety Shoes or Boots
- Gloves

**CAUTION:** Always read and familiarize yourself with these operation instructions prior to using the Saniflo™ DUS system. Improper use or misapplication could result in bodily injury or death.

Do not use cleaners containing chlorides such as bleach. Consult cleaning chemical supplier for cleaning agents compatible with stainless steel and the elastomer materials used in the pump. Cleaning agents containing caustics and light acids are generally approved for stainless steel.

Pumps configured for submersible use are recommended to facilitate cleaning and reduce maintenance costs.

Avoid excessive direct water pressure contact to the control panel and the ram cylinder seals.

**Step 1**

Before starting the cleaning process, remove the product drum from the system.

**Step 2**

Before starting detailed cleaning of the unit, wash down the system to remove any build up on ram plate, exterior of pump, hoses and/or frame.

**Step 3**

Remove gasket retaining ring and both gasket sets from the ram plate and clean each item and entire area.



**Step 4**

Remove ram vent assembly, then clean and inspect.



**Step 5**

Lower ram plate with pump down into clean, empty drum. Stop the ram plate about 25 mm (1") from the bottom of the drum.



**Step 6**

Add water with cleaning solution to the drum and start pump by pulling black pump knob out on control panel. NOTE: The pump can be submerged during this cleaning process if you're using a submersible Pro-Flo V™ model.

To order a Pro-Flo V™ submersible pump use specialty code 320.



**Step 7**

Continue to supply water and cleaning solution to the pump, allowing the pump to run until the discharge of the pump/system runs clear.



**Step 8**

Once water runs clear, put discharge hose back into drum and allow system to circulate water and cleaning solution for a minimum of two minutes.



**Step 9**

After circulating cleaning solution for a minimum of two minutes, discharge remaining fluid to a suitable drain or collection system. Refill the drum one more time and allow pump to flush system until all fluid is removed.

## CLEANING



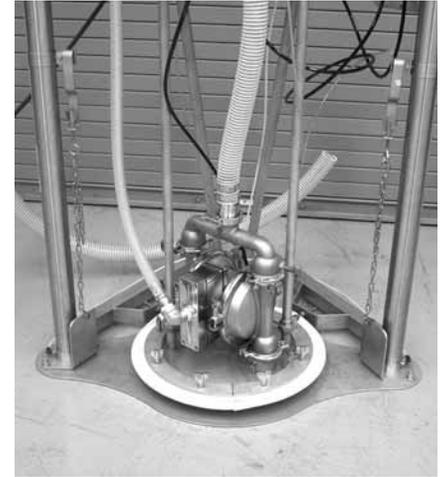
### Step 10

Raise the ram plate while the pump continues to run. This will help remove any remaining water from the pump and discharge lines. Once above the rim of the drum, turn the pump off.



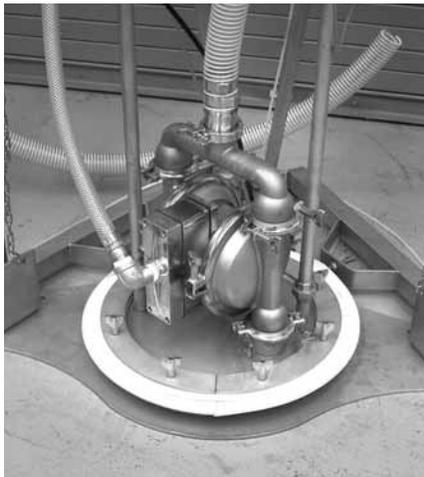
### Step 11

Reinstall the ram vent and gasket.



### Step 12

If the unit will not be used on another product immediately, lower the ram plate to the floor for safety and turn the air supply off.

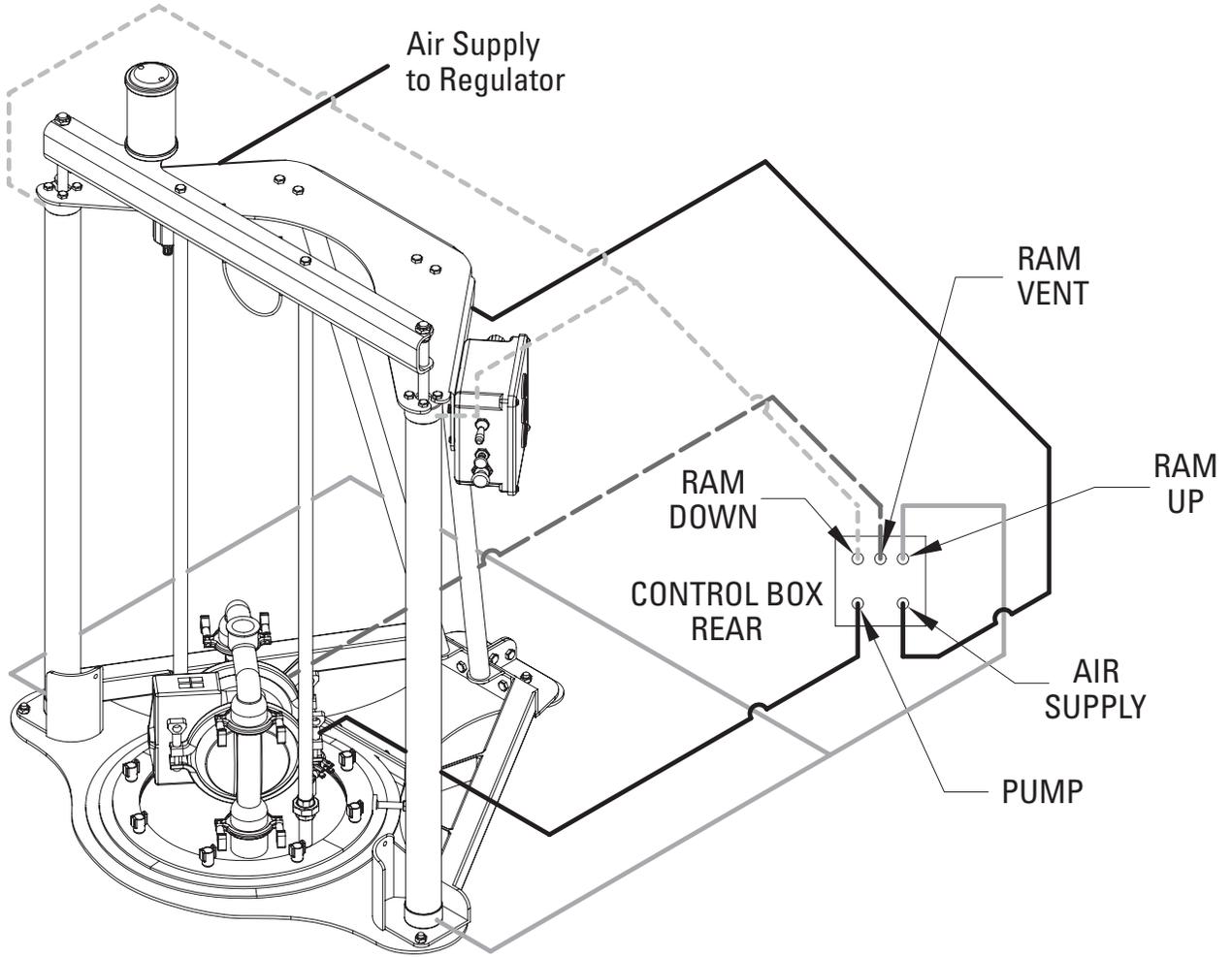


### Step 13

As each product is different, and each application may have different cleaning requirements, it may be necessary to remove and disassemble the pump to ensure proper cleaning.



**HOSE SCHEMATIC**



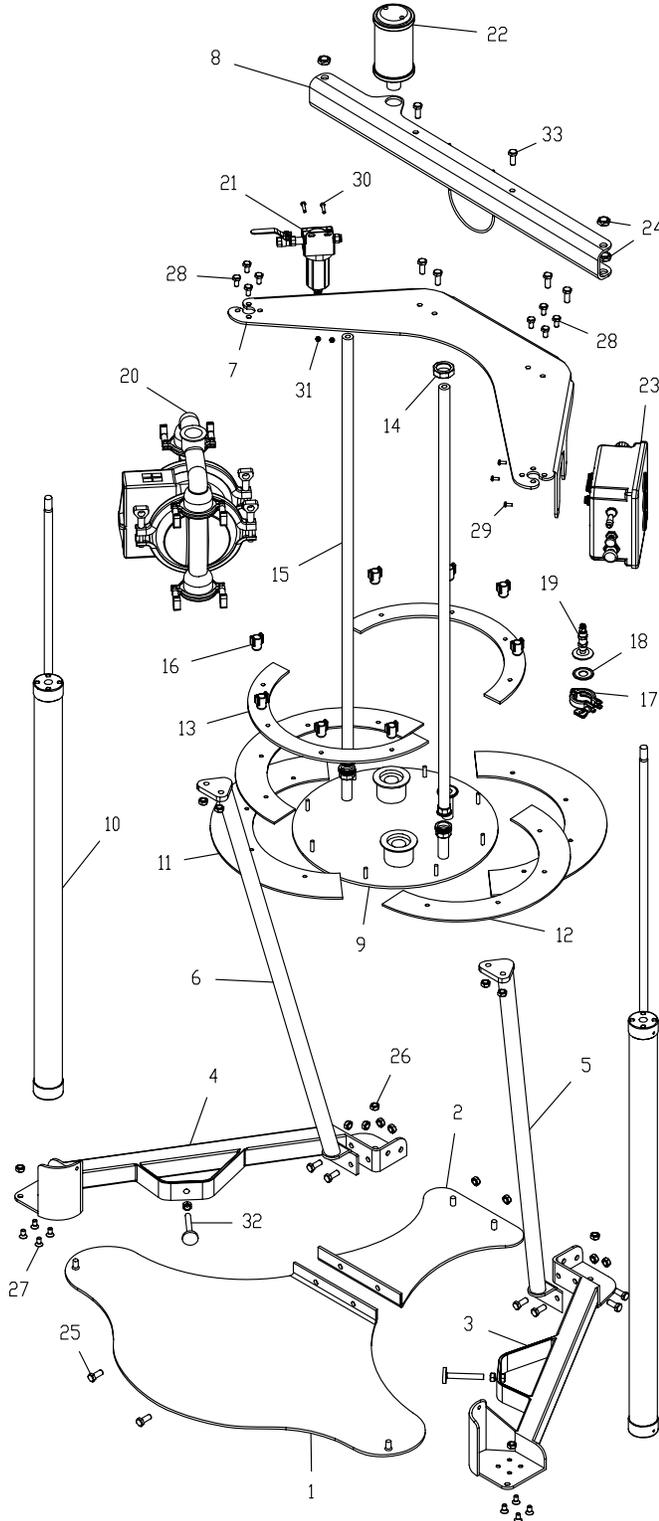
**CAUTION:** Prior to operating the DUS unit, ensure that the air hoses are connected and secured properly.  
**CAUTION:** Always wear safety glasses when operating the DUS unit.

Black	—————
Green	- - - - -
Yellow	—————
Red	- - - - -

**EXPLODED VIEW AND PARTS LISTING**

**DRUM UNLOADER SYSTEM**

**EXPLODED VIEW**



Muffler hose, air lines and lock washers not shown

**EXPLODED VIEW AND PARTS LISTING**

**DRUM UNLOADER SYSTEM**

**PARTS LISTING**

Item No.	Description	Qty.	Part No.
1	Floor Plate - Front/Barrel section; 304 SS	1	DUS-2006
2	Floor Plate - Back Section; 304 SS	1	DUS-2007
3	Right Bottom Structure, 304 SS	1	DUS-2005
4	Left Bottom Structure; 304 SS	1	DUS-2004
5	Right Back Support Braces; 304 SS	1	DUS-2003
6	Left Back Support Braces; 304 SS	1	DUS-2002
7	Header Plate, 304 SS	1	DUS-2001
8	Ram Cylinder Cross Connection Beam, 304 SS	1	DUS-2008
9	Ram Plate, 304 SS	1	DUS-2010
10	Ram Cylinder, 304 Stainless Steel	2	DUS-1001
11	Gasket - Split Food Grade Nitrile - 21-1/2" dia. ('K' Gasket)	1	DUS-3001
11	Gasket - Split Food Grade Nitrile - 22-1/2" dia. ('L' Gasket)	1	DUS-3004
12	Gasket - Split Food Grade Nitrile - 22-1/2" dia. ('K' Gasket)	1	DUS-3004
12	Gasket - Split Food Grade Nitrile - 23-1/2" dia. ('L' Gasket)	1	DUS-3002
13	Gasket retaining ring; 304 SS	1	DUS-2011
14	Support Rods Union Nuts; 304 SS	2	DUS-2013
15	Ram Plate Support Rods; 304 SS	2	DUS-2012
16	Sanitary Wing Nut - 5/16"	8	DUS-6011
17	1" Tri-Clamp with Sanitary Wing Nut	1	DUS-3006
18	Ram Vent Gasket	1	DUS-3005
19	Ram Vent Check Valve Assembly.	1	DUS-9005
20	Pump	1	Call Factory
21	3/8" Air Filter	1	DUS-5005
22	Pump Muffler	1	15-3510-06R
23	Control Box Assembly	1	Call Factory
24	M18X1.5 Hex Nut	4	DUS-1002
	Lock Washer - M18 - 18.8 Stainless Steel (not shown)	2	DUS-6034
25	M12X1.75X30 mm Hx Bolt 18.8 Stainless Steel	14	DUS-6004
26	M12X1.75 Hx Nut 18.8 Stainless Steel	18	DUS-6005
	Lock Washer - M12 - 18.8 Stainless Steel (not shown)	18	DUS-6006
27	M10X1.5X20 mm Flat Sock Cap 18.8 Stainless Steel	8	DUS-6001
28	M10X1.5X20 mm HX Bolt 18.8 Stainless Steel	8	DUS-6002
	Flat Washer - M10 - 18.8 Stainless Steel (not shown)	8	DUS-6003
29	M6X16 Pan Phillips 18.8 Stainless Steel	7	DUS-6007
	Lock Washer - M6 - 18.8 Stainless Steel (not shown)	5	DUS-6008
30	M6X1X30 Hx Bolt 18.8 Stainless Steel	2	DUS-6010
	M6 Lock Washer 18.8 Stainless Steel (not shown)	5	DUS-6008
31	M6X1.00 Hx Nut 18.8 Stainless Steel	2	DUS-6009
32	Barrel Centering device; 304 SS	2	DUS-2009
33	M12X1.75X30 mm Hx Bolt 18.8 Stainless Steel	2	DUS-6004

# Finding spares a nightmare?

Sleep easier with



## PRODUCTS:

### AODDP

(Air Operated Double Diaphragm Pumps)

- Warren-Rupp
- ARO
- Other



## PUMP PARTS

(Low Cost)

- Diaphragms
- Valve balls
- Valve seats



## KNOWLEDGE & SERVICE

- Competitive pricing
- Delivery
- Service
- Inventory



Spectrom is not your typical after market part supplier. We do not simply sell pump parts; we provide value added procurement solutions.

Our unique network enables us to purchase effectively, resulting in low cost solutions. We also know that low purchase price is not enough - quality, integrity and inventory are also important. Spectrom is structured to provide Pre and Post sales support, giving our customers value added application and pump knowledge.

Contact us to have a procurement solution developed for you. We don't just fit you into a generic system, we develop specific solutions that achieve results.

***Spectrom will ship your order from our facility within 3 working days!***

## WARNING

These parts may exhibit better life than OEM parts.

1-909-512-1261



[www.spectromparts.com](http://www.spectromparts.com)

## WARRANTY

Each and every product manufactured by Wilden Pump and Engineering, LLC is built to meet the highest standards of quality. Every pump is functionally tested to insure integrity of operation.

Wilden Pump and Engineering, LLC warrants that pumps, accessories and parts manufactured or supplied by it to be free from defects in material and workmanship for a period of five (5) years from date of installation or six (6) years from date of manufacture, whichever comes first. Failure due to normal wear, misapplication, or abuse is, of course, excluded from this warranty.

Since the use of Wilden pumps and parts is beyond our control, we cannot guarantee the suitability of any pump or part for a particular application and Wilden Pump and Engineering, LLC shall not be liable for any consequential damage or expense arising from the use or misuse of its products on any application. Responsibility is limited solely to replacement or repair of defective Wilden pumps and parts.

All decisions as to the cause of failure are the sole determination of Wilden Pump and Engineering, LLC.

Prior approval must be obtained from Wilden for return of any items for warranty consideration and must be accompanied by the appropriate MSDS for the product(s) involved. A Return Goods Tag, obtained from an authorized Wilden distributor, must be included with the items which must be shipped freight prepaid.

The foregoing warranty is exclusive and in lieu of all other warranties expressed or implied (whether written or oral) including all implied warranties of merchantability and fitness for any particular purpose. No distributor or other person is authorized to assume any liability or obligation for Wilden Pump and Engineering, LLC other than expressly provided herein.

### PLEASE PRINT OR TYPE AND FAX TO WILDEN

PUMP INFORMATION			
Item # _____		Serial # _____	
Company Where Purchased _____			
YOUR INFORMATION			
Company Name _____			
Industry _____			
Name _____		Title _____	
Street Address _____			
City _____	State _____	Postal Code _____	Country _____
Telephone _____	Fax _____	E-mail _____	Web Address _____
Number of pumps in facility? _____		Number of Wilden pumps? _____	
Types of pumps in facility (check all that apply): <input type="checkbox"/> Diaphragm <input type="checkbox"/> Centrifugal <input type="checkbox"/> Gear <input type="checkbox"/> Submersible <input type="checkbox"/> Lobe			
<input type="checkbox"/> Other _____			
Media being pumped? _____			
How did you hear of Wilden Pump? <input type="checkbox"/> Trade Journal <input type="checkbox"/> Trade Show <input type="checkbox"/> Internet/E-mail <input type="checkbox"/> Distributor			
<input type="checkbox"/> Other _____			

**ONCE COMPLETE, FAX TO (909) 783-3440**

NOTE: WARRANTY VOID IF PAGE IS NOT FAXED TO WILDEN  
WILDEN PUMP & ENGINEERING, LLC