

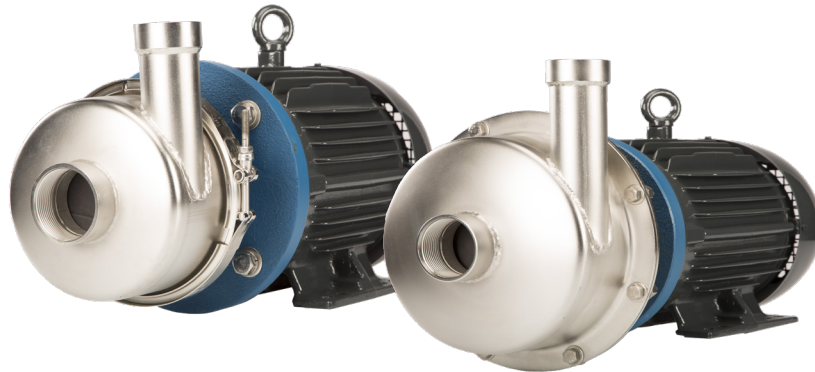


**FINISH THOMPSON INC.**

# AC6/6H & AC8/8H Horizontal Metric Models

## ASSEMBLY, INSTALLATION AND OPERATION MANUAL

Part No. 108203 Rev 5





**FINISH THOMPSON INC.**

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**EU Declaration of Conformity**



Finish Thompson Inc. hereby declares that the following machine(s) fully comply with the applicable health and safety requirements as specified by the EU Directives listed. The product may not be taken into service until it has been established that the drive motor for the centrifugal pump complies with the provisions of all relevant EU Directives. The complete product complies with the provisions of the EC Directive on machinery safety provided motors carry CE marking.

This declaration is valid provided that the devices are fully assembled and no modifications are made to these devices.

**Type of Device:**

Centrifugal Pumps

**Models:**

AC/AK/AV - 400/500/600/800	GP-11/22/32	VKC-5.5/6/6H/7/8/10
DB-3/4/5/5.5/6/6H/7/8/9/10/11/15/22	MSKC	SP-10/11/15/22
KC-3/4/5/5.5/6/6H/8/10/11/22/32	MSVVC	
UC-1516/1516L/1518/1518L/2110/3158/326/326H/328/436/438/4310H/326H/4310H/6410		

**EU Directives:**

Machinery Safety (2006/42/EC)

**Applied Harmonized Standards:**

EN ISO 12100  
 EN 809

Manufacturer: Finish  
 Thompson Inc.  
 921 Greengarden Road  
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Signed,



President

1 August 2016

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## EU Declaration of Conformity

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FINISH THOMPSON INC.



1026

**II 2GD**  
**Ex h IIC TX Gb**  
**Ex h IIIC TX Db**  
**FTZU 05 A127-05**

This declaration applies to Finish Thompson **AC Series pumps**.

Finish Thompson declares under our sole responsibility that the product listed above conforms to the relevant provisions of EU directive **2014/34/EU of 26 February 2014** for equipment and protective systems intended for use in potentially explosive atmospheres, and is certified for safe use in **Atmosphere Group IIC/IIIC category 2 areas**.

This product has used the following harmonized standards to verify conformance:

Non-electrical equipment for potentially explosive atmospheres: **EN ISO 80079-36:2016**  
Basic Methods and Requirements.

Non-electrical equipment intended for use in potentially explosive atmospheres: **EN ISO 80079-37:2016**  
Protection by construction safety "ch." and control of ignition source "bh"

**This product must not be used in areas other than specified above. If in doubt consult an authorized distributor, or refer to the manufacturer Finish Thompson.**

Approved by:



Date: 5/5/2017

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For factory assistance with repairs or maintenance, call 1-800-888-3743.

**FTI Contacts:**

Tech Service: 800-888-3743 or [techservice@finishthompson.com](mailto:techservice@finishthompson.com)  
 Order Fax: 814 459-3460 or 814-455-8518  
 Sales: 814-455-4478; 800-934-9384 (U.S. & Canada)

Order Online: [www.PumpCatalog.com](http://www.PumpCatalog.com)

## Model Number and Serial Number

Record the model number and serial number below for future reference. This is important information when ordering replacement parts or when technical assistance is required. The numbers are found on a label located on the motor adapter.

MODEL NUMBER \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

## Chemical Reaction Disclaimer

The user must exercise primary responsibility in selecting the products materials of construction, which are compatible with the fluid(s) that come(s) in contact with the product. The user may consult Finish Thompson, Inc. (manufacturer) and a manufacturer's representative/distributor agent to seek a recommendation of the products material of construction that offers the optimum available chemical compatibility.

However neither manufacturer nor agent shall be liable for product damage or failure, injuries, or any other damage or loss arising out of a reaction, interaction or any chemical effect that occurs between the materials of the products construction and fluids that come into contact with the products components.

## Safety Precautions

**⚠️ WARNING:** READ THIS MANUAL COMPLETELY BEFORE INSTALLING AND OPERATING THIS UNIT. FAILURE TO FOLLOW THESE PRECAUTIONS CAN RESULT IN SERIOUS INJURY OR DEATH.

**⚠️ WARNING:** Hot surfaces. This pump is capable of handling liquids with temperatures as high as 300°F (149°C). This may cause the outer areas of the pump to become hot as well and could cause burns.

**⚠️ WARNING:** Rotating Parts. This pump has components that rotate while in operation. Follow local safety standards for locking out the motor from the power supply during maintenance or service.

**⚠️ WARNING:** Chemical Hazard. This pump is used for transferring many types of potentially dangerous chemicals. Always wear protective clothing, eye protection and follow standard safety procedures when handling corrosive or personally harmful materials. Proper procedures should be followed for draining and decontaminating the pump before disassembly and inspection of the pump. There may be small quantities of chemicals present during inspection.

**⚠️ WARNING:** Never run pump at less than minimum flow or with the discharge valve closed. This could lead to pump failure.

**⚠️ WARNING:** The pump and associated components are heavy. Failure to properly support the pump during lifting and movement could result in serious injury or damage to the pump and components.

**⚠️ CAUTION:** This pump should never be started without liquid in the casing. IT CANNOT BE RUN DRY WITHOUT CAUSING DAMAGE TO THE PUMP. It is recommended that run dry protection be used. Optional electronic power monitors are available to help protect against run dry.

**⚠️ CAUTION:** Never start or operate with a closed suction valve.

**⚠️ WARNING:** Operation without priming or against a closed discharge valve can result in high temperatures that can result in injury or damage to pump components.

**⚠️ CAUTION:** Always provide adequate NPSHa (net positive suction head available). It is recommended to provide at least 2 feet (61 cm) above the NPSHr (net positive suction head required).

**⚠️ CAUTION:** If pump is used on variable speed drive, do not exceed the frequency for which the pump was designed (for example, if the pump is a 50 Hz model, do not exceed 50 Hz).

## Safety Precautions for ATEX Pumps

**⚠ WARNING:** The surface temperature of the pump depends upon the temperature of the fluid that is being pumped. The chart below lists different fluid temperatures and the corresponding pump surface temperatures, which determines the Temperature Class when used in a hazardous area.

Fluid Temperature	Maximum Surface Temperature	Temperature Class	Maximum Allowable Surface Temperature
172°F (78°C)	172°F (78°C)	T6	85°C
203°F (95°C)	203°F (95°C)	T5	100°C
266°F (130°C)	266°F (130°C)	T4	135°C
300°F (149°C)	300°F (149°C)	T3	200°C

**⚠ CAUTION:** Proper o-ring material must be chosen for the fluid being pumped. Improper material selection could lead to swelling and be a possible source of leaks. This is the responsibility of the end user.

**⚠ WARNING:** The pump must be checked for leaks on a regular basis. If leaks are noticed, the pump must be repaired or replaced immediately.

**⚠ WARNING:** The pump must be cleaned on a regular basis to avoid dust buildup greater than 5 mm.

**⚠ WARNING:** ATEX pumps must use a power monitor, flow switch, pressure switch or similar device to help protect against running dry or closed discharge valve. Any of these conditions could lead to a rise in surface temperature of the pump.

**⚠ WARNING:** The surface temperature of AC6 & 8 Series pumps is completely dependent on operating conditions. Pump will transfer heat from the piping system, motor and fluid. These items must be considered as a system when assessing an ATEX application.

**⚠ WARNING:** In the event of a motor bearing failure, the ceramic stationary seal face will protect the pump shaft from making metal on metal contact until the power monitor shuts the pump down. Pump must be fitted with a power monitor that will shut down the pump within 3 seconds of a motor bearing failure.

**⚠ WARNING:** The surface temperature of the pump depends upon the temperature of the fluid that is being pumped. The chart below lists different fluid temperatures and the corresponding pump surface temperatures, which determine the Temperature Class when used in a hazardous area.

## AC6 & 8 Capabilities

**Maximum Working Pressure:** AC6 - 100psi (6.9 bar)  
AC8 - 120psi (8.3 bar)

**Maximum Temperature:** 300°F (149°C)

**NOTE:** Maximum temperature is application dependent. Consult a chemical resistance guide or the chemical manufacturer for chemical compatibility and temperature limits.

**Solids:** Maximum particle size is 100 microns for slurries and 1/64 (0.4 mm) for occasional solids.  
Maximum hardness is 80 HS. Maximum concentration is 10% by weight.

**NOTE:** If solids are being pumped, it is recommended that the pump have a Silicon Carbide mechanical seal. Pumping solids may lead to increased wear.

**Minimum Allowable Flow Rate:** AC6 = 10 gpm (2.3 m<sup>3</sup>/hr)  
AC6H = 3 gpm (0.7 m<sup>3</sup>/hr)  
AC8 = 20 gpm (4.5 m<sup>3</sup>/hr)  
AC8H = 5 gpm (1.1 m<sup>3</sup>/hr)

## AC6 & 8 Assembly, Installation and Operation

### Unpacking and Inspection

- Unpack the pump and examine for any signs of shipping damage.
- If damage is detected, save the packaging and notify the carrier immediately.

### Section I - Assembly

Tools Required: Metric box wrench set & metric deep well socket set

#### - Pumps with Motors

1. No assembly required. Unpack the pump and motor and examine for any signs of shipping damage. If damage is detected, save the packaging and notify the carrier immediately.
2. Proceed to the "Installation" section of these instructions.

#### - Pumps without Motors - 90, 100/112, 132 & 160 frame with B5 flange: All motors must have motor feet.

**Very Important:** Do not remove shipping plug located in suction port of the pump until the pump is completely assembled onto the motor.

**Note:** B5 flange motors require customer supplied hardware

1. Unpack the pump and examine for any signs of shipping damage. If damage is detected, save the packaging and notify the carrier immediately.
2. Insert key into motor keyway. (See Figure 1). Visually determine key location in pump end. Align keyway slots on motor shaft and pump impeller sleeve. Slide pump assembly over the motor shaft until the pump motor adapter (item 8 for AC6 or 22 for AC8) is completely seated over the motor rabbet. Install 4 bolts with flat washers and lock washers (items 9, 10 & 11 for AC6 or 19, 20 & 21 for AC8) through the face of the motor & into the motor adapter. Securely tighten bolts using the torque specifications in the table below.
3. Lubricate o-ring of self-sealing bolt (item 6) with suitable, compatible lubricant. Insert self-sealing bolt through shipping plug and into the eye of the impeller using a deep well socket. Insert a screwdriver into the motor fan to prevent motor shaft from rotating. Securely tighten bolt using the torque specifications in the table below.
4. Remove the shipping plug from the suction port.
5. Rotate the motor fan by hand and check for impeller rubbing. If the impeller rubs, verify that the self-sealing bolt is properly installed.
6. Proceed to the "Installation" section of these instructions.

#### Motor flange hole thread size:

Motor Frame 90 B5 = M10 x 1.5

Motor Frame 100/112/132 B5 = M12 x 1.75

Motor Frame 160 B5 = M18 x 2.5

#### Torque motor flange bolts to the following:

Motor Frame 90 frame B5 (M10) = 376 in-lbs (42.5 N-m) dry, 301 in-lbs (34 N-m) lubricated.

Motor Frame 100/112/132 B5 (M12) = 517 in-lbs (58.4 N-m) dry, 414 in-lbs (46.8 N-m) lubricated.

Motor Frame 160 B5 (M16) = 1110 in-lbs (125.4 N-m) dry, 888 in-lbs (100.3 N-m) lubricated.

#### Torque impeller bolt to the following:

Motor Frame 90 frame B5 (M8) = 236 in-lbs (26.7 N-m) dry, 1.89 in-lbs (21.4 N-m) lubricated.

Motor Frame 100/112 B5 (M10) = 376 in-lbs (42.5 N-m) dry, 301 in-lbs (34 N-m) lubricated.

Motor Frame 132 B5 (M12) = 517 in-lbs (58.4 N-m) dry, 414 in-lbs (46.8 N-m) lubricated.

Motor Frame 160 B5 (M16) = 1110 in-lbs (125.4 N-m) dry, 888 in-lbs (100.3 N-m) lubricated.

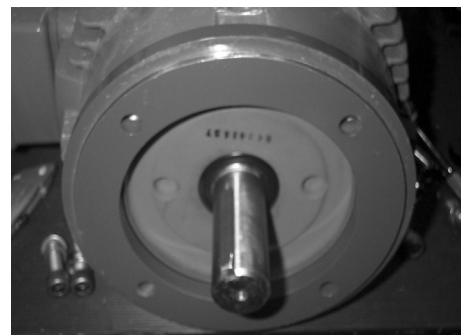


Fig 1

## **Section II - Installation**

Pump motor base should be securely fastened to a solid foundation.

**⚠ CAUTION:** The NPSH available to the pump must be greater than the NPSH required. NPSH available should be two feet (.6 meters) greater than NPSH required.

- Install the pump as close to the suction source as possible.
- Support the piping independently near the pump to eliminate any strain on the pump casing. In addition, the piping should be aligned to avoid placing stress on the pump casing.
- The suction side of the pump should be as straight and short as possible to minimize pipe friction.
- The suction line should not have any high spots. This can create air pockets that can reduce pump performance. The suction piping should be level or slope slightly upward to the pump.
- If flexible hose is preferred over pipe, use a reinforced hose rated for the proper temperature, pressure and is chemically resistant against the fluid being pumped.
- The suction valve must be completely open to avoid restricting the suction flow.
- When installing pumps with flanges, we recommend use of low seating stress gaskets such as Gore-Tex or Gylon (expanded PTFE).

## **Motor/Electrical**

Only qualified personnel trained in the safe installation and operation of this equipment should install the motor. Install the motor according to National Electric Code, NEMA MG-2, IEC standards requirements and/or applicable local electrical codes. The voltage and frequency variations of the power supply should never exceed the limits established in the applicable standard. Prior to connecting to the power line, check nameplate voltage, rotation connection and ensure proper grounding. Sufficient ventilation area should be provided to insure proper operation and cooling of the motor. The motor must be installed with a suitable overload protection circuit. For three phase motors it is recommended to install a phase failure protection device. Download the motor manual from the specific motor manufacturers' website for additional information concerning motor installation, safety and maintenance instructions.

Wire the motor for clockwise rotation when facing the fan end of the motor.

**⚠ CAUTION:** Do not operate the pump to check rotation until the pump is full of liquid or damage may occur even if the motor is "bumped" to check motor rotation direction.

Check all electrical connections with the wiring diagram on the motor. Make sure the voltage, frequency, phase and amp draw comply with the supply circuit.

If utilized, verify that power monitors or variable frequency drives have been properly installed according to the manufacturer's instructions.

**NOTE:** A pump running backwards will pump, but a greatly reduced flow and pressure.

## **Section III - Start-up and Operation**

**⚠ CAUTION:** Do not run the pump dry. This pump should never be started without liquid in the casing. The fluid being transferred by the pump lubricates the pump components. Even short periods of running the pump dry could damage the pump. It is recommended that run dry protection is used. Optional electronic power monitors are available to help protect against run dry.

1. This pump must be filled from a flooded suction tank (gravity) or primed with liquid from an outside source. The AC6 & 8 pumps are not self-priming.
2. Open the inlet (suction) and discharge valves completely and allow the pump to fill with liquid.
3. Close the discharge valve.
4. Turn the pump on. Slowly open the discharge valve. Adjust the flow rate and pressure by regulating the discharge valve. Do not attempt to adjust the flow with the suction valve.

### **Shutdown**

1. Use the following procedure to shutdown the pump.
2. Slowly close the discharge valve.
3. Turn off the motor.
4. Close the suction valve.



## Flush Systems

**⚠ CAUTION:** Some fluids react with water; use compatible flushing fluid.

1. Turn off the pump.
2. Completely close the suction and discharge valves
3. Connect flushing fluid supply to flush inlet valve.
4. Connect flushing fluid drain to flush drain valve.
5. Open flushing inlet and outlet valves. Flush system until the pump is clean.

## Section IV – Maintenance

### Recommended Maintenance Schedule

The recommended maintenance schedule depends upon the nature of the fluid being pumped and the specific application. If the pump is used on a clean fluid, it is recommended that the pump be removed from service and examined after six months of operation or after 2,000 hours of operation. If the pump is used on fluids with solids, high temperatures or other items that could cause accelerated wear, then this initial examination should be sooner.

After the initial examination of the internal components and wear items are measured, a specific maintenance schedule can be determined. For best results, it is recommended that the pump be removed from service annually for examination.

### Disassembly

**⚠ WARNING:** Rotating Parts. This pump has components that rotate while in operation. Follow local safety standards for locking out the motor from the power supply during maintenance or service.

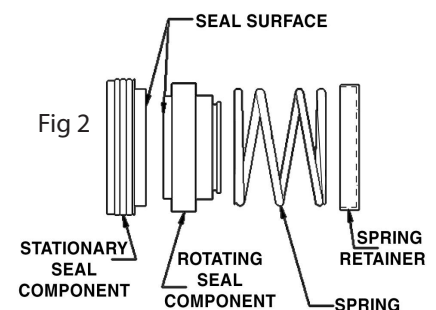
**⚠ WARNING:** Chemical Hazard. This pump is used for transferring many types of potentially dangerous chemicals. Always wear protective clothing, eye protection and follow standard safety procedures when handling corrosive or personally harmful materials. Proper procedures should be followed for draining and decontaminating the pump before disassembly and inspection of the pump. There may be small quantities of chemicals present during inspection.

**⚠ WARNING:** Stop the pump, lock out the motor starter, close all the valves that are connected to the pump, and drain/decontaminate the pump.

**⚠ WARNING:** The pump must be thoroughly flushed of any hazardous materials and all internal pressure relieved prior to opening the pump. Allow the pump to reach ambient temperatures prior to performing maintenance.

### Seal Replacement & Disassembly

1. Disconnect power. Remove electrical wiring.
2. Close the suction and the discharge valves. Disconnect the piping. Remove any mounting bolts.
3. For AC6 pumps - Remove the v-clamp (item 2) and the impeller housing (item 1), first apply a thread lubricant to the threaded rod portion of the v-clamp then remove the nut. Remove the v-clamp, the housing, and the o-ring (item 3).  
For AC8 pumps - Remove the 8 housing bolts and all the hardware (items 15, 16, 17, 18). Remove the impeller housing (item 1) and the o-ring (item 3).
4. Place a screwdriver in the motor fan to prevent rotation and remove the self-sealing bolt (item 6).  
Note: Do not reuse the self-sealing bolt.
5. Remove impeller (item 4), rotating seal component, seal spring and seal spring retainer. Discard seal components after removal. (See Figure 2).
6. Remove back head assembly (item 7) and press out the stationary seal component. Discard stationary seal component after removal.



**Reassembly**

1. Lubricate the rubber portion of the new stationary seal (item 5) with P-80 (or equivalent) or use soapy water. Do not use petroleum products to lubricate the rubber.  
**Note:** Keep the polished surface of the seal face clean. Use a piece of cardboard to protect the seal while pressing against the stationary face.
2. Press the stationary seal into the seal seat of the back head assembly so that the seal surface points away from the motor face. Place the back head into the motor adapter.
3. For Standard T-21 and T-31 seals, place the spring retainer and seal spring onto the impeller sleeve. For 8T seals see Step 4.
4. Lubricate the inside diameter of the rotating seal component with P-80 (or equivalent) or soapy water and press it over the impeller sleeve (item 4) with the rotating face pointed away from the impeller as shown in Figure 2 (towards the stationary face). For 8T (type 8) seals. lubricate the seal o-ring with P80 (or Equivalent) or soapy water and press it over the impeller shaft (item 4). With the sealing surface facing out press the seal all the way down until the bottoms out on the impeller shoulder. Hand-tighten the 4 set screws.
5. Insert key into the motor keyway. Visually determine key location in impeller sleeve. Align keyway slots on motor shaft and impeller sleeve. Slide impeller assembly over the motor shaft. Lubricate o-ring of new self-sealing bolt (item 6) with suitable, compatible lubricant. Insert self-sealing bolt into the eye of the impeller using a deep well socket. Insert a screwdriver into the motor fan to prevent motor shaft from rotating. Tighten the bolt to torque specification on page 7.
6. Place impeller housing (item 1) over back head (item 7) and o-ring (item 3) and make sure discharge is in the correct orientation (usually 12 o'clock).
7. **For AC6 pumps** - Place the v-clamp (item 2) over the impeller housing, back head, and the mounting plate (item 14). Make sure the discharge is level and in the correct orientation. (See Figure 3). Tighten the nut on the v-clamp. Firmly tap the v-clamp with a mallet in several spots, and then retighten the nut.

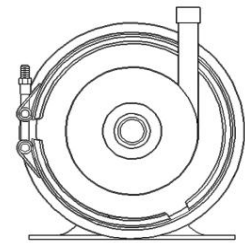
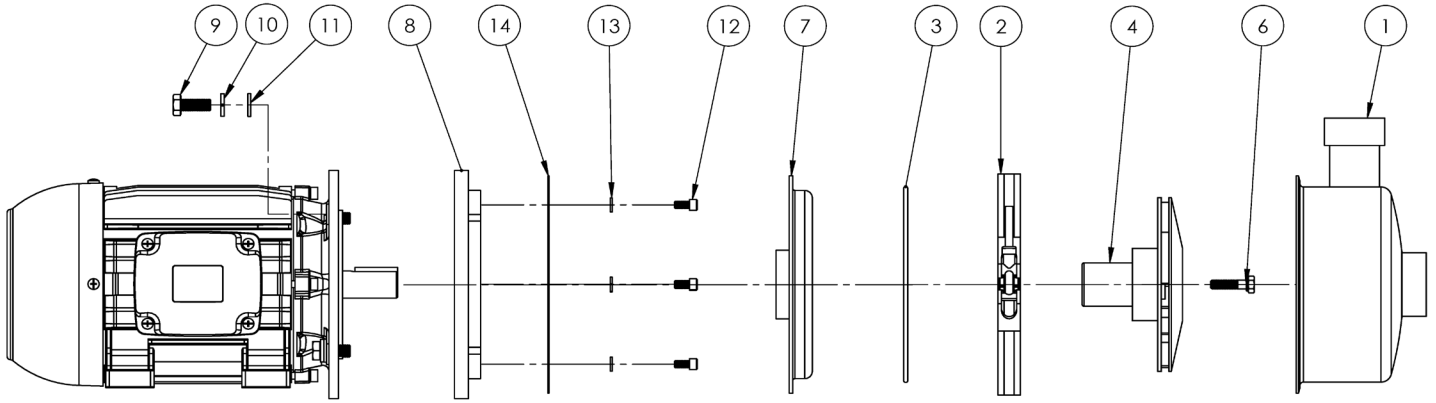


Fig 3

**For AC8 pumps** - Insert the mounting bolts with flat washer (items 15 & 16) through the impeller housing (item 1), the back head (item 7), and the mounting plate (item 14), and tighten with the correct hardware (items 15, 17, & 18) and torque to the specifications on page 7.

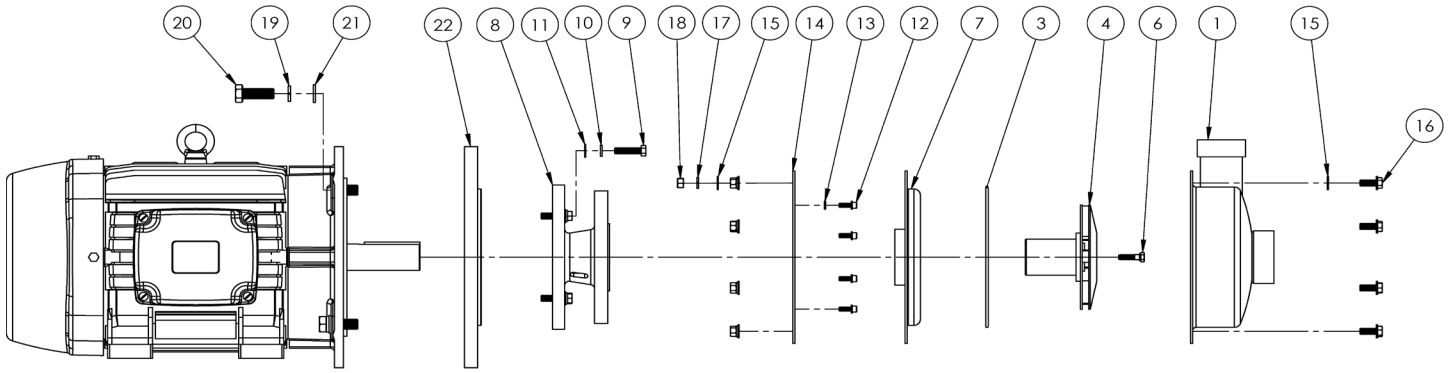
- Note:** Stainless Steel hardware can gall, be damaged and become very difficult to remove. To prevent galling use a lubricant like Loctite Anti-Seize or some other compatible lubricant or coating material, use a slow RPM speed to tighten and immediately stop tightening if galling is noticed. If galled remove & replace the hardware.
8. Rotate the motor fan by hand and check for impeller rubbing. If the impeller rubs, verify that the self-sealing bolt is properly installed.
  9. Reinstall the pump into the system.



AC6-AC6H Spare Parts		
Item	Description	Part No.
1	<b>Impeller Housing</b>	
	AC6SJS - 1-1/2" x 1-1/4" FBSP	A102184-3
	AC6SJS - 2" X 1-1/2" FBSP	A102184-4
	AC6HJS - 1-1/4" x 3/4" FBSP	A102232-1
	AC6SJS - 1-1/2" x 1-1/4" FNPT	A102184-1
	AC6SJS - 2" X 1-1/2" FNPT	A102184-2
	AC6HJS - 1-1/4" x 3/4" FNPT	A102232
2	<b>V Clamp</b>	
	304 stainless steel	J103090
3	<b>Housing O-Ring</b>	
	FKM	J103084
	EPDM	J103085
4	<b>Impeller 316 Stainless Steel</b>	
	5.25" Standard w/ IEC 90 B5 (AC6)	106185-2
	5.75" Standard w/ IEC 90 B5 (AC6)	106185-1
	6.00" Standard w/ IEC 90 B5 (AC6)	106185
	5.25" Standard w/ IEC 100/112 B5 (AC6)	105981-2
	5.75" Standard w/ IEC 100/112 B5 (AC6)	105981-1
	6.00" Standard w/ IEC 100/112 B5 (AC6)	105981
	6.25" High Head w/ IEC 90 B5 (AC6H)	A102735-4
5	<b>Mechanical Seal (Not Shown)</b>	
	See AC6 Seal Options Table on this page	
6	<b>Impeller Bolt w/ O-ring</b>	
	with FKM for AC6 IEC 90 B5	107885
	with EPDM for AC6 IEC 90 B5	107886
	with PTFE for AC6 IEC 90 B5	107887
	with FKM for AC6 IEC 100/112 B5	107251
	with EPDM for AC6 IEC 100/112 B5	107252
	with PTFE for AC6 IEC 100/112 B5	107268
	with FKM for AC6H IEC 90 B5	J103555
	with EPDM for AC6H IEC 90 B5	J103561
with PTFE for AC6H IEC 90 B5	110843	
7	<b>Backhead</b>	
	IEC 90 B5 316 stainless steel	A102677-3
8	<b>Cast Iron Motor Adapter</b>	
	AC6SJS	106184
9	<b>Hex Head Cap Screw (4 req'd.)</b>	
	Customer to supply	-
10	<b>Lock Washer (4 req'd.)</b>	
	Customer to supply	-
11	<b>Flat Washer (4 req'd)</b>	
	Customer to supply	-
12	<b>Socket Head Cap Screw (4 req'd)</b>	
	1/4" stainless steel	J103396

AC6-AC6H Spare Parts - cont.		
Item	Description	Part No.
13	<b>Lock Washer (4 req'd)</b>	
	1/4" stainless steel	J100672
14	<b>Mounting Plate</b>	
	IEC 90 B5	J103389-2
	IEC 100/112 B5	105993

AC6-AC6H Mechanical Seal Options				
Option	Part Number	Seals for 90 Frame Only		
		Rotating Face	Stationary Face	Elastomer
D01	J103556	Carbon	Ceramic	FKM
D02	J103557	Carbon	Ceramic	EPDM
D04	J103560	Carbon	Ceramic	FFKM
D05	J103558	Silicon Carbide	Silicon Carbide	FKM
D06	J103559	Silicon Carbide	Silicon Carbide	EPDM
Option	Part Number	Seals for 100/112 Frame Only		
		Rotating Face	Stationary Face	Elastomer
D01	105995	Carbon	Ceramic	FKM
D02	106395	Carbon	Ceramic	EPDM
D05	107940	Silicon Carbide	Silicon Carbide	FKM



**AC8-AC8H Spare Parts**

Item	Description	Part No.
1	<b>Impeller Housing</b>	
	AC8HJS - 1-1/4" x 3/4" FBSP	A102528-1
	AC8SJS - 2" x 1-1/2" FBSP	A102747-4
	AC8SJS - 2-1/2" x 2" FBSP	A102747-3
	AC8HJS - 1-1/4" x 3/4" FNPT	A102528
	AC8SJS - 2" x 1-1/2" FNPT	A102747-1
3	<b>Housing O-Ring</b>	
	FKM	J103087
	EPDM	J103088
4	<b>Impeller 316 Stainless Steel</b>	
	6.25" High Head (AC8H)	107164
	7.00" High Head (AC8H)	107164-1
	8.00" High Head (AC8H)	107164-2
	6.50" Standard (AC8 IEC 100/112 B5)	108046-1
	7.00" Standard (AC8 IEC 100/112 B5)	108046
	7.50" Standard (AC8 IEC 100/112 B5)	108046-2
	8.00" Standard (AC8 IEC 100/112 B5)	108046-3
	6.50" Standard (AC8 IEC 132 B5)	105340-1
	7.00" Standard (AC8 IEC 132 B5)	105340-3
	7.50" Standard (AC8 IEC 132 B5)	105340-2
	8.00" Standard (AC8 IEC 132 B5)	105340-4
	6.50" Standard (AC8 IEC 160 B5)	107096-2
	7.00" Standard (AC8 IEC 160 B5)	107096-3
	7.50" Standard (AC8 IEC 160 B5)	107096-4
	8.00" Standard (AC8 IEC 160 B5)	107096-5
	6.50" Standard (AC8 high flow IEC 100/112 B5)	108046-4
	7.00" Standard (AC8 high flow IEC 100/112 B5)	108046-5
	6.50" Standard (AC8 high flow IEC 132 B5)	105340
	7.00" Standard (AC8 high flow IEC 132 B5)	105340-5
6.50" Standard (AC8 high flow IEC 160 B5)	107096-1	
7.00" Standard (AC8 high flow IEC 160 B5)	107096	
5	<b>Mechanical Seal (Not Shown)</b> See AC8 Seal Options Table on this page	
6	<b>Impeller Bolt w/ O-ring</b>	
	with FKM for AC8/AC8H IEC 100/112 B5	107259
	with EPDM for AC8/AC8H IEC 100/112 B5	107260
	with PTFE for AC8/AC8H IEC 100/112 B5	108047-1
	with FKM for AC8 IEC 132 B5	107253
	with EPDM for AC8 IEC 132 B5	107254
	with PTFE for AC8 IEC 132 B5	107272
with FKM for AC8 IEC 160 B5	107257	
with EPDM for AC8 IEC 160 B5	107258	
with PTFE for AC8 IEC 160 B5	Contact FTI	
7	<b>Backhead 316 Stainless Steel</b>	
	AC8H IEC 100/112 B5	A102677-5
	AC8 IEC 100/112 & 132 B5	105336
	AC8 IEC 160 B5	107092

**AC8-AC8H Spare Parts**

Item	Description	Part No.
8	<b>Motor Adapter</b>	
	AC8H IEC 100/112 B5 - painted steel	107166
	AC8 IEC 100/112 B5 - painted steel	108041
	AC8 IEC 132 B5 - painted steel	105333
	AC8 IEC 160 B5 - painted cast iron	107089
9	<b>Hex Head Cap Screw (4 req'd.)</b> IEC 160 B5*	J103782
10	<b>Lock Washer (4 req'd.)</b> IEC 160 B5*	J101023
11	<b>Flat Washer (4 req'd.)</b> IEC 160 B5*	J101360
12	<b>Socket Head Cap Screw (8 req'd.)</b> 1/4" stainless steel	J100320
13	<b>Lock Washer (8 req'd.)</b> 1/4" stainless steel	J100672
14	<b>Mounting Plate</b> IEC 100/112, 132, & 160 B5	J103857
15	<b>Flat Washer (16 req'd.)</b> 3/8" stainless steel	J100128
16	<b>Hex Head Cap Screw (8 req'd.)</b> 3/8x1 stainless steel	J100114
17	<b>Lock Washers (8 req'd.)</b> 3/8" stainless steel	J100115
18	<b>Hex Nut (8 req'd.)</b> 3/8" stainless steel	J100135
19	<b>Lock Washer (4 req'd.)</b> Customer to supply	-
20	<b>Hex Head Cap Screw (4 req'd.)</b> Customer to supply	-
21	<b>Flat Washer (4 req'd.)</b> Customer to supply	-
22	<b>Motor Adapter Flange</b> IEC 160 B5 only - painted steel	107088

\*Customer responsible for supplying this hardware for all other frame sizes.

**AC8 Mechanical Seal Options**

Option	Part Number	AC8H Seals for 100/112 Frame Only		
		Rotating Face	Stationary Face	Elastomer
D01	105995	Carbon	Ceramic	FKM
D02	106395	Carbon	Ceramic	EPDM
D05	107940	Silicon Carbide	Silicon Carbide	FKM
Option	Part Number	AC8 Seals for 100/112 & 132 Frame		
D01	105339	Carbon	Ceramic	FKM
D02	106518	Carbon	Ceramic	EPDM
D04	105605	Carbon	Ceramic	FFKM
Option	Part Number	AC8 Seals for 160 Frame Only		
D01	107152	Carbon	Ceramic	FKM
D02	107153	Carbon	Ceramic	EPDM

## Section V - Troubleshooting

### General Notes:

- Contact our Technical Service Department if you have any questions regarding product operation or repair:  
Phone: 1-800-888-3743  
E-mail: [techservice@finishthompson.com](mailto:techservice@finishthompson.com).

### No or Insufficient Discharge

- Air leaks in suction piping
- Pump not primed
- System head higher than anticipated
- Closed valve
- Viscosity or specific gravity too high
- Suction lift too high or insufficient NPSH
- Clogged suction line or impeller vanes
- Motor rotation incorrect (correct rotation when viewed from the fan end is clockwise)

### Insufficient Pressure

- Air or gas in liquid
- Impeller diameter too small
- System head lower than anticipated
- Motors speed insufficient (too low) or motor rotation incorrect (correct rotation when viewed from the fan end is clockwise)

### Loss of Prime

- Leak in suction piping
- Foot valve or suction opening not submerged enough
- Foot valve too small or leaking
- Air or gas in liquid
- Foreign matter in impeller
- Leaking valve. Suction lift too high or insufficient NPSHa.

### Excessive Power Consumption

- Head lower than rating
- Excessive flow
- Specific gravity or viscosity too high.

### Vibration/Noise

- Pump cavitating from improper suction or feed
- Motor or piping not properly secured
- Foreign object in impeller

## Section VI - Warranty

Finish Thompson, Inc (manufacturer) warrants this pump product to be free of defects in materials and workmanship for a period of one year from date of purchase by original purchaser. If a warranted defect, which is determined by manufacturer's inspection, occurs within this period, it will be repaired or replaced at the manufacturer's option, provided (1) the product is submitted with proof of purchase date and (2) transportation charges are prepaid to the manufacturer. Liability under this warranty is expressly limited to repairing or replacing the product or parts thereof and is in lieu of any other warranties, either expressed or implied. This warranty does apply only to normal wear of the product or components. This warranty does not apply to products or parts broken due to, in whole or in part, accident, overload, abuse, chemical attack, tampering, or alteration. The warranty does not apply to any other equipment used or purchased in combination with this product. The manufacturer accepts no responsibility for product damage or personal injuries sustained when the product is modified in any way. If this warranty does not apply, the purchaser shall bear all cost for labor, material and transportation.

Manufacturer shall not be liable for incidental or consequential damages including, but not limited to process down time, transportation costs, costs associated with replacement or substitution products, labor costs, product installation or removal costs, or loss of profit. In any and all events, manufacturer's liability shall not exceed the purchase price of the product and/or accessories.

### **Warranty Registration**

Thank you for your purchase of this quality Finish Thompson product. Be sure to take a minute to register your pump at [Finishthompson.com/warranty](http://Finishthompson.com/warranty). Simply provide the model number, serial number and a few other pieces of information.

### **Ordering Spare Parts**

Spare parts can be ordered from your local distributor. Always refer to the pump model to avoid error.



### **FINISH THOMPSON INC.**

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