

Please read and save this Repair Parts Manual. Read this manual and the General Operating Instructions carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. The Safety Instructions are contained in the General Operating Instructions. Failure to comply with the safety instructions accompanying this product could result in personal injury and/or property damage! Retain instructions for future reference. AMT reserves the right to discontinue any model or change specifications at any time without incurring any obligation.

©2015 AMT Pump Company, A Subsidiary of The Gorman-Rupp Company, All Rights Reserved.

Periodic maintenance and inspection is required on all pumps to ensure proper operation. Unit must be clear of debris and sediment. Inspect for leaks and loose bolts. Failure to do so voids warranty.

# Industrial/Commercial Sump Pumps



Refer to pump manual 1808-634-00 for General Operating and Safety Instructions.

## DESCRIPTION

These upright sump pumps are used for drainage in industrial, residential and commercial settings. Units are completely assembled (except for float assembly) and equipped with open type impellers, TEFC motor with switch and grounding-type power cord. Handles liquids from 40° to 200° F (4° to 93° C). For use with non-flammable, non-abrasive liquids compatible with pump component materials.

## SPECIFICATIONS

### Pump

Model	Base	Impeller	Float	Shaft	Column	Bearing	Port Size*
4020-95	CI	CI	304SS	304SS	304SS	CBN	2"
4022-95	CI	CI	304SS	304SS	304SS	CBN	2"
5239-98 thru 523F-98	304SS	304SS	304SS	304SS	304SS	CBN	1-1/2"
4021-98	304SS	304SS	304SS	304SS	304SS	CBN	2"
5239-95 & 523A-95	CI	304SS	304SS	304SS	304SS	CBN	1-1/2"
5239-97 & 523A-97	BRZ	304SS	304SS	304SS	304SS	CBN	1-1/2"

(CI) Cast Iron, (BRZ) Bronze, (SS) Stainless Steel, (CBN) Carbon

(\*) NPT

## UNPACKING

When unpacking the unit, inspect for any damage that may have occurred during transit. Check for loose, missing or damaged parts.

## GENERAL SAFETY INFORMATION

1. Know the pump application, limitations and potential hazards.

### ▲ WARNING

**Do not use to pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in explosive atmospheres. Pump should only be used with liquids compatible with pump component materials. Failure to follow this warning can result in personal injury and/or property damage.**

2. Make certain that the power source conforms to the requirements of your equipment (115VAC).
3. Provide adequate protection and guarding around moving parts.
4. Disconnect power before servicing. If the power disconnect is out of sight, lock in the open position and tag it to prevent unexpected application of power. Failure to do so could result in fatal electrical shock!
5. Release all pressure within the system before servicing any component.
6. Drain all liquids from the system before servicing.
7. Secure the discharge line before starting the pump. An unsecured discharge line will whip, possibly causing personal injury and/or property damage.
8. Check hoses for weak or worn condition before each use, making certain that all connections are secure.
9. Periodically inspect pump and system components. Perform routine maintenance as required (See Maintenance section).
10. Provide a means of pressure relief for pumps whose discharge line can be shut off or obstructed.
11. **Personal Safety:**
  - a. Wear safety glasses at all times when working with pumps.
  - b. Wear a face shield and proper apparel when pumping

hazardous chemicals.

- c. Keep work area clean, uncluttered and properly lighted; replace all unused tools and equipment.
  - d. Keep visitors at a safe distance from the work area.
  - e. Make workshop childproof – with padlocks, master switches, and by removing starter keys.
12. Do not handle the pump with wet hands or when standing in water as fatal electrical shock could occur. Disconnect main power before handling unit for any reason.
  13. Do not touch an operating motor. Modern motors are designed to operate at high temperatures.
  14. It is strongly recommended that this unit is plugged into a Ground Fault Circuit Interrupter (GFCI). Consult a local electrician for installation and availability.
  15. All wiring should be performed by a qualified electrician.
  16. When wiring an electrically driven pump, follow all electrical and safety codes as well as the most recent United States National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

### ▲ WARNING

**Risk of Electric Shock! Never connect the green (or green and yellow) wire to a live terminal!**

17. This equipment is only for use on 115 volt (single phase) and is equipped with an approved 3-conductor cord and 3-prong, grounding-type plug (See Figure 1). To reduce the risk of electric shock, the motor must be securely and adequately grounded. This can be accomplished by either: 1) Inserting plug directly into a properly installed and grounded 3-prong grounding-type receptacle (See Figure 1); 2) Permanently wiring the unit with a grounded, metal raceway system; 3) Using a separate ground wire connected to the bar metal of the frame; or 4) Other suitable means.

# Industrial/Commercial Sump Pumps

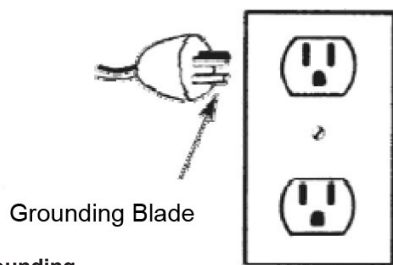


Figure 1 - Grounding

Where a 2-prong wall receptacle is encountered, it must be replaced with a properly grounded 3-prong receptacle installed in accordance with the National Electrical Code and local codes and ordinances. To ensure a proper ground, the grounding means must be tested by a qualified electrician. Use only 3-wire extension cords that have 3-prong, grounding-type plug and 3-pole receptacles that accept the equipment plug.

18. Use wire of adequate size to minimize voltage drop at the motor.
19. Protect electrical cord from sharp objects, hot surfaces, oil and chemicals. Avoid kinking the cord. Replace or repair damaged or worn cords immediately.
20. Keep fingers and foreign objects away from ventilation and other openings. Do not insert any objects into the motor.

## ▲WARNING

**The pump motor is equipped with an automatic resetting thermal protector and may restart unexpectedly. Protector tripping is an indication of motor overloading as a result of operating the pump at low heads (low discharge restriction), excessively high or low voltage, inadequate wiring, incorrect motor connections or a defective motor or pump.**

## PRE-INSTALLATION

### SUMP PIT AND GENERAL INFORMATION

This unit can be installed in a pit with a minimum diameter of 18" and a depth of 24". (Pit dimensions less than these will cause rapid cycling and shortened pump life). A pit may be constructed of tile, concrete, steel or plastic. Check local codes for approved materials. The pit should have a hard bottom. Do not place pump directly on clay, earth or sand surface. Make sure there are no small stones, gravel, sand, dirt, silt, etc. that may clog or damage the pump and/or seal and cause pump failure. If there are stones or gravel, clean these out as deep as possible by hand; do not damage or move any drain tiles below. Fill the pit to the same level as before with 3/4" to 1" stones and place either a round or square patio block (slightly smaller than pit, e.g., 18" diameter pit should have a 14" round patio block). The patio block will form a solid foundation for the pump and still allow seepage water to enter the pit from below. Test pump for proper operation (See Operation) before installing pit cover. A pit cover will prevent debris from possibly clogging or damaging the pump. It will also prevent people from falling in and causing injury.

## NEW SUMP

If you are installing a new sump:

1. Locate pump approximately 6" from basement wall in lowest point of basement floor.
2. With chalk, mark out diameter on floor.
3. Cut through floor with masonry drill or other concrete cutting tool and excavate below the floor to required depth.
4. Level bottom and set sump tile in place. Tie in any sub-floor drains. Backfill and mortar tile or sump pit in place. The top should be flush with floor for surface drainage.
5. It is recommended that bottom of tile be provided with a concrete base. However, a concrete block or bricks may be used to provide a support for

the sump pump.

## INSTALLATION

### ▲WARNING

**In installations where property damage might result because of an inoperative pump due to power outages, discharge line freezing or any other reason, backup system(s) should be used. These pumps should never be used in hazardous or explosive locations, nor in swimming pool applications.**

## PUMP LOCATION AND CONNECTIONS

1. Pump should be located and rest on a level solid foundation. Do not suspend pump by means of a discharge pipe or power cord. Keep pump inlet clear. Do not install pump directly on clay, earth or sand surfaces. Clean sump pit of small stones, gravel, sand, dirt, silt, etc. which could clog or damage pump or seal and cause pump failure. Keep pump inlet clear.
2. Locate pump in center of pit so that pump housing and any float control will not come in contact with side of pit and create operational problems. Installation should be with motor and all electrical components above the top grade level of the sump. This motor is not submersible.
3. Protect pump from extreme heat, cold and dampness. This unit is not waterproof and is not intended to be used in showers, saunas or other potentially wet locations. The motor is designed to be used in a clean, dry location with access to an adequate supply of cooling air. Ambient temperature around the motor should not exceed 104° (40° C). For outdoor installations, motor must be protected by a cover that does not block airflow to and around the motor. This unit is not weatherproof, nor is it able to be submersed in water or any other liquid.
4. Connect discharge piping and run it to nearest sewer or surface outlet. Sump pumps can be piped to discharge into the house drainage system to a dry well, splash block or to a storm drain depending on local plumbing codes. The discharge piping should be as short as possible to reduce pipe friction losses. It is recommended that the discharge pipe diameter should be equal to or larger than the discharge size of the pump. Smaller pipe diameters will restrict the capacity of the pump and reduce performance. These sump pumps are provided with an NPT discharge connection. Assure airtight pipe connections with the use of a pipe joint sealant.
5. It is recommended that a 12" nipple be installed in the discharge outlet first and the balance of the piping attached to the nipple. Install a union in the discharge line, preferably just above the sump pit to allow easy removal of the pump for cleaning or repair. To reduce motor noise and vibration transmission to the building structure, a short length of rubber hose (e.g., radiator hose) can be connected into the discharge line using suitable clamps. A discharge line check valve should not be used unless needed to prevent pump from recycling when the water level drops and pump shuts off.
6. In installations where the piping is long, the vertical discharge is above 7 or 8 feet, or a small sump has been provided, use of a check valve is recommended to prevent back flow of water into the sump. Where a check valve is used, drill a relief hole (1/8" or 3/16" diameter) in the discharge pipe. This hole should be located below the floor line between the pump discharge and the check valve. Unless such a relief hole is provided, the pump could "air lock" and will not pump water even though it will run.
7. It is strongly recommended that this pump motor be electrically connected to a ground fault interrupter. Consult your local electrician for availability and installation.
8. Power Supply: Pump is designed for 115V, 60 Hz operation and requires a circuit of 15 amperes or more capacity. Wire unit on a separate line (power). Pump is supplied with a 3-wire cord set with ground-type plug for use in a 3-wire, grounded outlet. Three wire extension cord of at least 14 AWG size is suggested; larger sizes for runs over 25 feet.

For safety, pump should always be electrically grounded to a suitable

# Industrial/Commercial Sump Pumps

electrical ground such as a grounded water pipe or a properly grounded metallic raceway or ground wire system.

**DO NOT CUT OFF THE ROUND GROUNDING PRONG.** Cutting cord or plug will void warranty. Do not bend, kink or cut power cord. Protect cord from sharp objects, hot surfaces, oil and chemicals. Replace damaged cord.

9. Float rod stop setting: (refer to figure 2)
  - a. ON high water level stop setting: With the switch arm in the OFF position, slide float rod assembly up until float is at desired high water level position.
  - b. Position lower rod stop "A": it must trip the switch arm into the ON position when float reaches high water mark.

**NOTE:** Care must be taken to ensure that rod stop "A" trips the switch arm before the float hits standoff bracket. Pump will not turn ON if float makes contact against standoff bracket before stop "A" activates motor switch.

- a. OFF low water setting: with switch arm in ON position, slide float rod assembly down until float is at desired low water level.
- b. Position upper rod stop "B" so that it trips switch arm into OFF position when float reaches low water level.

**NOTE:** Care must be taken to ensure that upper rod stop "B" trips the switch arm before lower rod stop "A" contacts standoff bracket. Pump will not turn off if lower rod stop "A" contacts the bracket before upper rod stop "B" activates motor switch.

- e. After setting all stops as described above, the sump should be filled with water. The pump should be checked for correct operation and desired ON/OFF water levels.

## ▲ WARNING

**Disconnect the power supply before attempting any servicing or adjustments to the pump.**

10. Do not allow the cord to interfere with the float control motion or to drape over the pump motor. With electrician's tape, secure the cord to the discharge pipe. This will provide protection for the cord and make a neat installation.
11. Install any auxiliary components (e.g., back-up pumps, warning systems, timer, etc.).
12. After all piping and controls have been installed, connect the pump cord cap to the electrical outlet and run water into the sump to test the pump.
13. Unit is ready for operation.

## OPERATION

### ▲ WARNING

**Do not touch sump pump, pump motor, water or discharge piping when the pump is connected to electrical power. Do not handle a pump or pump motor with wet hands or when standing on wet or damp surface, or in water. Never touch the sump pump or discharge piping when unit is operating or fails to operate. Always disconnect the pump cord (power) before handling. Do not attempt to operate pump without water! Bearings could be damaged if pump is run dry.**

1. Plug unit into 115V outlet.
2. Fill the sump with water to the normal turn-on level and allow pump to remove water to normal control turn-off point.
3. If necessary, readjust the cut-in/cut-out differential. See Step 9 under Installation for guidance.
4. The float must not touch pit walls or discharge pipe and must be able to move freely.
5. Install a sump cover. A cover will prevent matter from falling into sump, prevent odors and guard against accidental injury.
6. While the unit is draining the sump, verify that the discharge piping is carrying the water to a point several feet away from the foundation.

## MAINTENANCE

### ▲ WARNING

**Make certain that the pump is unplugged before attempting to service or remove any component. This is a difficult pump to repair, therefore, only qualified electricians or service personnel should attempt to repair this unit. Improper repair and/or assembly can cause an electrical shock hazard.**

1. Pump and motor bearings require NO lubrication.
2. Pump should be checked for proper operation weekly or monthly by filling the sump pit with water and watching the operation of the pump, the on and off locks, etc. If anything has changed since the pump was new, the pump should be removed from the pit, examined and repaired.
3. Inlet should be kept clean and free of all foreign objects and periodically inspected. Sump pit should be kept free of small stones, gravel, sand, dirt, silt, etc. These items can clog and/or damage pump and pump bearings, eventually causing pump failure.

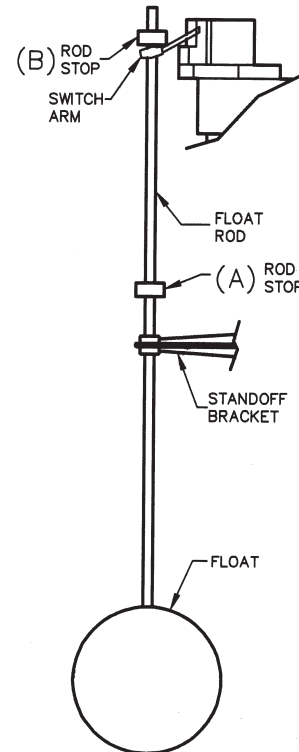


Figure 2 - Float rod start and stop

## Troubleshooting Chart

Symptom	Possible Cause(s)	Corrective Action
Pump won't start or run	1. Water level too low	1. Pump will not turn on unless float pushes collar to activate switch.
	2. Blown fuse	2. If blown, replace with fuse of proper size.
	3. Low line voltage	3. If voltage under recommended minimum, check size of wiring from main switch on property. If OK, contact power company.
	4. Defective motor	4. Replace motor.
	5. Defective float switch	5. Replace switch.
	6. Impeller clogged or jammed (pump filled with debris)	6. Disassemble and clean out. If impeller won't turn, remove housing and locate source of binding.
	7. Float water-logged	7. Replace float.
	8. Float touching or jammed up against side of pit	8. Reposition pump, move away from side of pit.
Pump starts and stops too often	1. Backflow of water from piping	1. Install check-valve.
	2. Improper positioning of float rod collars	2. Reposition.
	3. Long extension cord	3. Shorten extension cord.
	4. Low line voltage	4. Check for proper wire size. If okay, call power company.
	5. Very low discharge head or pit too small	5. Increase discharge head or restrict discharge by use of gate valve (1/2 open), make pit larger.
Pump won't shut off	1. Defective switch	1. Replace switch.
	2. Restricted discharge (rag or obstacle in piping)	2. Remove pump, clean pump and piping.
	3. Float rod jammed or defective	3. Repair or replace.
	4. Float touching or jammed up against side of pit	4. Reposition pump, move away from side of pit.
Pump operates, but delivers little of no water	1. Low line voltage	1. If voltage under recommended minimum, check size of wiring from main switch on property. If OK, contact power company.
	2. Debris caught in impeller	2. Remove and clean out.
	3. Worn or defective pump parts plugged impeller	3. Replace worn parts or entire pump. Clean parts if required.
	4. Pump air locked	4. Drill 1/8" hole in discharge piping between pump and check valve.

# Industrial/Commercial Sump Pumps

***For Repair Parts contact dealer where pump was purchased.***

*Please provide following information:*

*-Model Number*

*-Serial Number (if any)*

*Part description and number as shown in parts list*

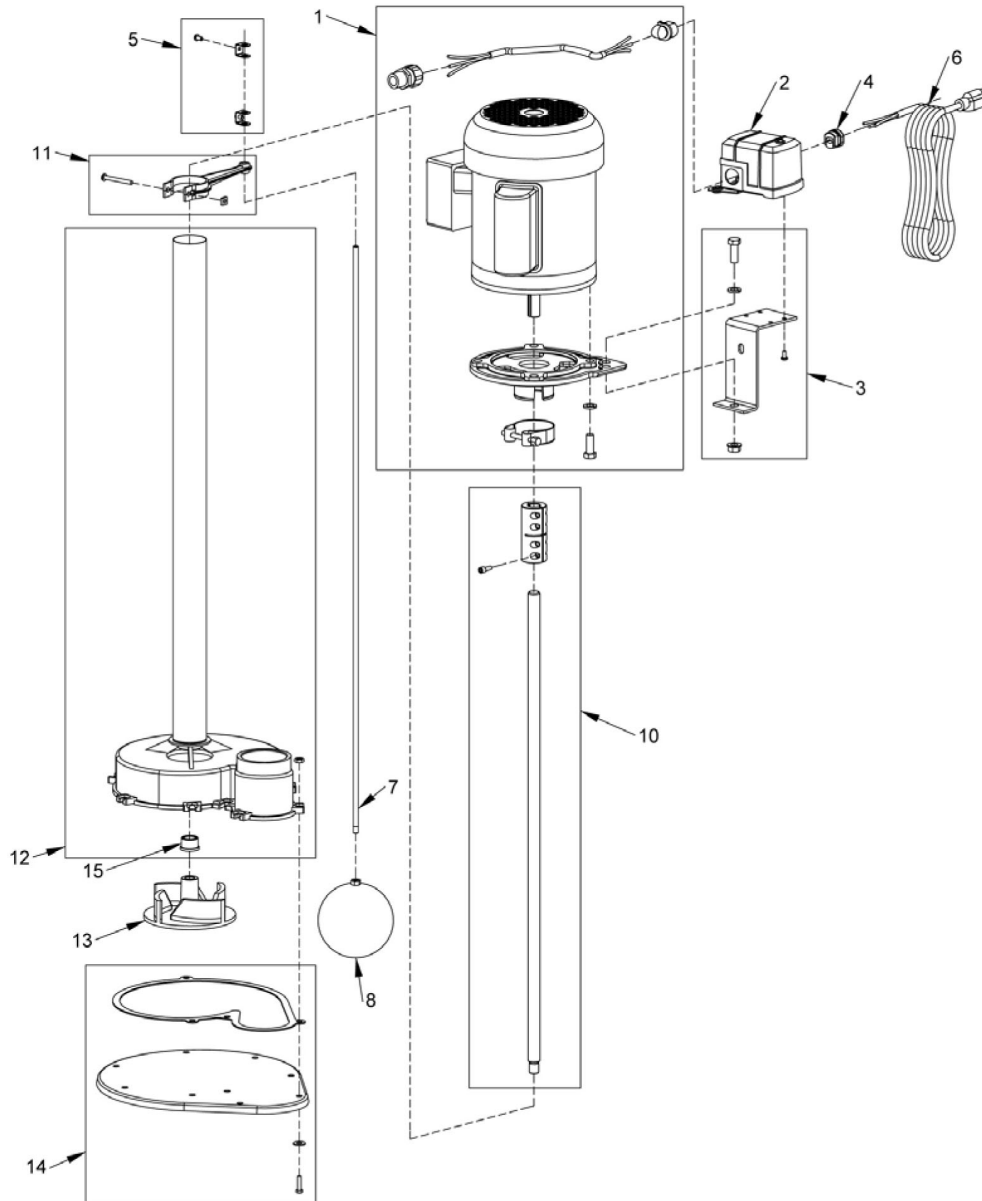


Figure 3 - Repair Parts Illustrations - 402X SERIES

# Industrial/Commercial Sump Pumps

***For Repair Parts contact dealer where pump was purchased.***

*Please provide following information:*

*-Model Number*

*-Serial Number (if any)*

*Part description and number as shown in parts list*

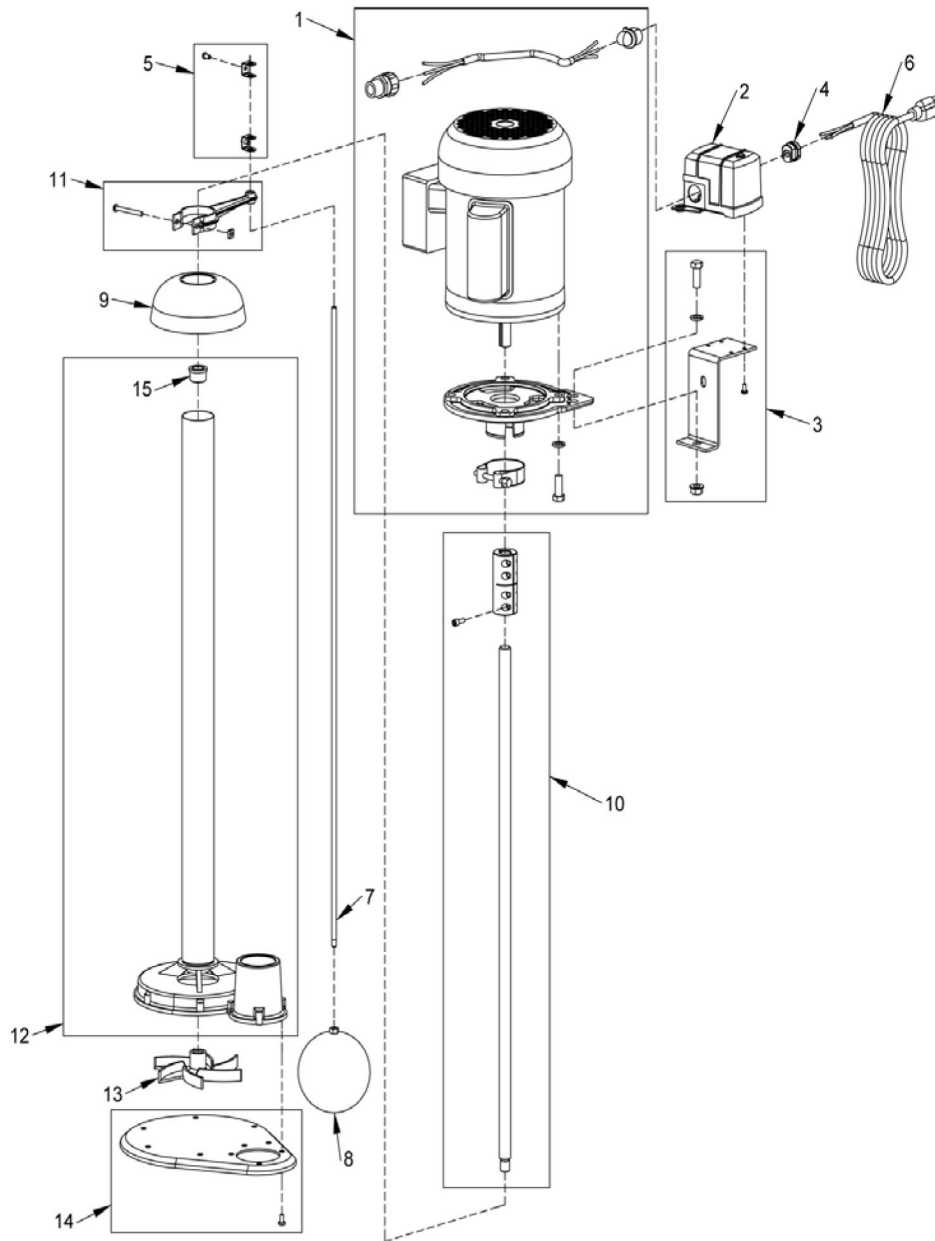


Figure 4 - Repair Parts Illustrations - 523X SERIES

**Repair Parts List**

Ref No.	Description	4020-95	4021-98	4022-95	5239-9x	523A-9x	523C-9x	523D-9x	523F-9x	523G-9x	Qty
		1/2HP 32" C.I.	1/2HP 32" S.S.	1/2HP 42"	1/3HP 29"	1/3HP 41"	1/2HP 29"	1/2HP 41"	3/4HP 29"	3/4HP 41"	
1	Motor	523C-350-90	523C-350-90	523C-350-90	5239-350-90	5239-350-90	523C-350-90	523C-350-90	523F-350-90	523F-350-90	1
2	Switch	5460-000-00	5460-000-00	5460-000-00	5460-000-00	5460-000-00	5460-000-00	5460-000-00	5460-000-00	5460-000-00	1
3	Switch Bracket Kit	5230-106-90	5230-106-90	5230-106-90	5230-106-90	5230-106-90	5230-106-90	5230-106-90	5230-106-90	5230-106-90	1
4	Strain Relief Bushing	5230-353-00	5230-353-00	5230-353-00	5230-353-00	5230-353-00	5230-353-00	5230-353-00	5230-353-00	5230-353-00	2
5	Rod Stops	5230-105-90	5230-105-90	5230-105-90	5230-105-90	5230-105-90	5230-105-90	5230-105-90	5230-105-90	5230-105-90	2
6	Power Cord	1639-077-00	1639-077-00	1639-077-00	1639-077-00	1639-077-00	1639-077-00	1639-077-00	1639-077-00	1639-077-00	1
7	Rod	5230-104-00	5230-104-00	5231-104-00	5230-104-00	5231-104-00	5230-104-00	5231-104-00	5230-104-00	5231-104-00	1
8	Float	5239-107-00	5239-107-00	5239-107-00	5239-107-00	5239-107-00	5239-107-00	5239-107-00	5239-107-00	5239-107-00	1
9	Screen	—	—	—	5230-040-00	5230-040-00	5230-040-00	5230-040-00	5230-040-00	5230-040-00	1
10	Shaft Assembly	5239-140-90	5239-140-90	523A-140-90	5239-140-90	523A-140-90	5239-140-90	523A-140-90	5239-140-90	523A-140-90	1
11	Standoff Bracket Kit	5230-102-90	5230-102-90	5230-102-90	5230-102-90	5230-102-90	5230-102-90	5230-102-90	5230-102-90	5230-102-90	1
12	Volute/Tube Kit (95)	4021-150-95	—	4022-150-95	5230-151-95	5231-151-95	5230-151-95	5231-151-95	5230-151-95	5231-151-95	1
	Volute/Tube Kit (98)	—	4021-150-98	4022-150-98	5230-150-98	5231-150-98	5230-150-98	5231-150-98	5230-150-98	5231-150-98	1
	Volute/Tube Kit (97)	—	—	—	5239-152-97	523A-152-97	5239-152-97	523A-152-97	5239-152-97	523A-152-97	1
13	Impeller Cast Iron	4021-010-95	—	4021-010-95	—	—	—	—	—	—	1
	Impeller S.S.	—	4021-010-98	4021-010-98	5230-012-98	5230-012-98	5233-011-98	5233-011-98	5236-010-98	5236-010-98	1
14	Base Kit	4020-061-90	—	4020-061-90	—	—	—	—	—	—	1
	Base Kit S.S.	—	4021-060-98	4021-060-98	5230-060-98	5230-060-98	5230-060-98	5230-060-98	5230-060-98	5230-060-98	1
15	Bearing	2196-004-00	2196-004-00	2196-004-00	2196-004-00	2196-004-00	2196-004-00	2196-004-00	2196-004-00	2196-004-00	1

Please use correct 6-digit number:

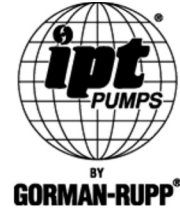
-95 = Cast Iron

-97 = Bronze

-98 = Stainless Steel



AMT Pump Company  
(herein "AMT")  
400 Spring Street  
Royersford, PA 19468  
Phone: (610) 948-3800  
Fax: (610) 948-5300  
www.amtpump.com



## General Information

**SALES POLICY:** AMT products are sold through our established Distributors. We do not sell direct to the consumer or organization not entitled to trade recognition. Therefore, possession of our catalogs and/or price list(s) does not infer an offer to sell.

**MINIMUM ORDER:** We appreciate your order, however, all orders are subject to a minimum \$35.00 net invoice charge (excluding freight). This applies to all pump and parts purchase orders.

**PRICES:** Prices are subject to change without notice. All orders accepted are subject to prices in effect at time of shipment.

**PAYMENT TERMS:** Terms, upon establishment of credit, are Net 30 days. Past due accounts may be subject to a service charge of 1.5% per month. Domestic or assignable letter of credit is required for all export trade.

**PAST DUE ACCOUNTS:** AMT reserves the right to withhold open account shipments on any past due account. Invoices are considered past due after thirty (30) days. In the interest of sound business, all orders are subject to approval of the Credit Department.

**SHIPPING INSTRUCTIONS:** All shipments will be made F.O.B. the factory. Where instructions for shipment do not appear on the order, the shipment will be made according to our best judgment. Full risk of loss (including transportation delays and losses) shall pass to the customer upon delivery of the products to the carrier at the F.O.B. point. When loss or delay occurs, primary responsibility for tracing rests with the customer. When there is LOSS or APPARENT VISIBLE DAMAGE to a shipment, when tendered for delivery, **DO NOT** give the carrier a clear receipt. Note such damage on the carrier's delivery receipt and **HAVE THE DRIVER SIGN THE RECEIPT.**

**PRODUCT REVISIONS:** AMT reserves the right to discontinue, change or improve its products or any portions thereof without being obligated to provide such a change or improvement for units sold and/or shipped prior to such a change or improvement.

**LEAD TIME:** Products designated "Quick Ship Product", also referred to as "QSP" will normally be shipped within 24 hours of receipt of a non-cancellable purchase order. Only limited quantities of "QSP" pumps are available.

**STANDARD LEAD TIME:** Lead time is two weeks for all non "QSP" product. AMT reserves the right to revise lead times as required due to availability of materials and all other causes beyond our control.

**VIP SHIPMENT:** Select AMT and IPT branded pumps are available for next day shipment for non-QSP (Quick Ship Products) items and subjected to a specific model surcharge per unit noted in the respective price book. Requires calling for availability, confirmation and a non-cancellable purchase order or credit card payment prior to shipment. The expedited shipping charges are an additional cost added separately from the VIP charges per item. AMT reserves the right to revise lead times as required due to availability of materials and all other causes beyond our control. QSP quantities are limited as determined by AMT.

ALL purchase orders must be submitted via hard copy sent to AMT customer service department by fax, EDI or e-mail.

**RETURN GOODS POLICY:** Goods shall not be returned without a return goods authorization number (RGA) issued by AMT customer service. The RGA number must be listed on the packing list. Only current model and part numbers with a valid date code may be returned (within one year from date of purchase). **A 20% restocking and packaging charge will apply to all returns. All shipping charges must be pre-paid. No exceptions.**

**ORDER CHANGES BY CUSTOMER:** Orders in process may not be changed except with written consent and may be subject to special charges.

## 12 Month Limited Warranty

### EXTENT AND DURATION OF LIMITED WARRANTY

**Coverage:** AMT Pump Company (herein "AMT") or IPT Pumps by Gorman-Rupp (herein "IPT") or Gorman-Rupp Industries Division of The Gorman-Rupp Company, Patterson, or the Gorman-Rupp Company (herein referred to as "G-R Unit") each individually warrants that its products and parts shall be free from defects in material and workmanship for twelve (12) months from the date of purchase by the original end user when installation is made and maintenance is performed in accordance with G-R Unit's recommendations. Wear and tear resulting from use and items normally consumed in use are not covered.

### EXCEPTIONS

( A ) This Limited Warranty shall not apply to mechanical seals in AMT or IPT pumps and the following products and parts: engines, motors, trade accessories and all other products, components, parts and materials not manufactured by the G-R Units. These items may, however, be covered by the warranties of their respective manufacturers. ( B ) This warranty does not extend to or apply to any unit which has been repaired or altered at any place other than by a G-R Unit, or by persons not expressly approved by a G-R Unit to make repairs or alterations, nor to any unit the serial number, model number or identification of which has been removed, defaced or altered. ( C ) This warranty does not extend to any product manufactured by a G-R Unit, which has been subjected to mis-use, neglect, accident, improper installation, or use in violation of instructions furnished by a G-R Unit. ( D ) Pump Kits: This warranty does not extend to any product sold by a G-R Unit unassembled as a Pump Kit. Pump Kits are warranted against defects in material and workmanship for 60 days from the date of shipment from a G-R Unit. Any Pump Kit parts deemed defective by a G-R Unit will be replaced free of charge within 60 days of shipment. Pump Kits are not returnable for credit.

### LIMITATIONS

**THE G-R UNITS' SOLE AND EXCLUSIVE WARRANTY WITH RESPECT TO THEIR PRODUCTS AND PARTS IS THIS LIMITED WARRANTY. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS AND/OR IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE.**

### EXCLUSIVE REMEDY AND DAMAGES

The sole and exclusive remedy for breach of this Warranty by a G-R Unit and the entire extent of its liability for such breach or for damages arising from the use of the products and parts covered under this Limited Warranty, shall be as follows:

- 1. Repair or Replacement:** If inspection shows that any G-R Unit product or part covered under this Limited Warranty is defective in materials or workmanship, the G-R Unit shall repair or replace the defective or non-conforming product or part without charge, whichever the G-R Unit chooses. You must have properly maintained and used the product or part claimed to be defective in accordance with the maintenance schedule or manual, which comes with the product. No allowance will be made for labor, installation, removal, transportation or other charges incurred by you in connection with such repair or replacement.
- 2. To obtain the above remedy:**
  - A.** Immediately notify the G-R Unit upon discovery of the claimed defect in materials or workmanship and provide the serial number or date code of the product and/or part(s) or provide the G-R Unit with the invoice or bill of sale referencing the product by no later than the expiration date of the warranty period.
  - B.** The G-R Unit will advise whether inspection will be necessary and how whether repair or replacement will be made. If inspection by the G-R Unit is necessary, the pump or defective part must be sent freight pre-paid to the G-R Unit. Return shipment will be F.O.B. the G-R Unit's plant.
  - C. Return Goods Authorization Requirement:** No product will be accepted for return or replacement without the prior written authorization of the G-R Unit. Upon such authorization, and in accordance with instructions from the G-R Unit, the product will be returned to the G-R Unit, shipping charges prepaid by the Buyer.
- 3. Damages:** The G-R Unit's liability for damages for breach of this Limited Warranty shall not exceed the amount of the purchase price of the product or part(s) in respect to which Such damages are claimed. **IN NO EVENT SHALL THE G-R UNITS BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES FOR BREACH OF THIS LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.