

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.

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

6" Trash Pump

Description

This trash pump is heavy duty, centrifugal, engine driven, self-priming (to 20 ft. lift), and transportable unit. Pump is equipped with precision lapped mechanical shaft seal to reduce the likelihood of leakage, and a clog resistant impeller capable of handling solids up to 3" in spherical diameter. Units are used to handle water containing stones, sticks, mud, and other solids (up to 20% by volume). O-ring sealed flange connection to provide leak-free low maintenance operation. Suction flange male NPT threaded for direct coupling to a standard NPS hose connector with rubber gasket. Liquid temperature range is 40° to 180° F (4° to 82° C). Maximum casing pressure if used in a flooded suction application is 50 psi. For use with nonflammable liquids that are compatible with pump component materials.

All models come equipped with a 12V electric starting system (battery not included). A fully plumbed and mounted 12 gallon marine grade plastic fuel tank is standard. All units equipped with a digital tachometer/hour meter.

Pump and engine are mounted on an easy maintenance sliding frame assembly. Frame can be mounted to transport trailer equipped with pneumatic tires, lighting system, rear stabilizer jacks, and 1-7/8" diameter ball mount tongue hitch. Trailer meets DOT requirements and is supplied with certificate of origin and VIN number. Check state and local requirements to register trailer/pump for highway towing.

Specifications

Suction Inlet 6" NPT (male)
 Discharge outlet 6" NPT (female)
 Dimensions (overall):
 7'6" L x 4'6" W x 4'6"H
 Engine: 5580-96: 27 HP B&S Vanguard
 5581-96: 24 HP Honda GX670
 Weight: 5580-96: 950 lbs.
 5581-96: 925 lbs.
 Battery (not included) 12 volt, BCI size 24
 500 min CCA @ 0°C

Basic Construction:

Cast aluminum with cast iron volute, suction flange and discharge manifold. Viton silicon carbide shaft seal, Buna O-rings, Buna/Neoprene suction check valve.

Unpacking

Refer to Repair Parts Illustration and Repair Parts List to aid in identifying parts. Unpack and separate all pump components from shipping/packaging materials, making sure all parts are accounted for. Retain all manuals for reference.

Package should contain:

1. Pump and engine completely assembled and mounted to rail assembly.
2. Trailer assembled except tail lights to prevent damage during shipping.
3. Manuals included:
 Specifications Information & Repair Parts Manual, Operating Instructions & Maintenance Manual, trailer instruction/owner's manual, engine instruction/owner's manual and tachometer/hour meter instruction sheet.

Assembly

Tail light assembly installation:

1. Install driver side tail light assembly with license plate holder to trailer frame rail with 2 carriage bolts and nuts provided.
2. Connect red wire (light) to yellow wire (trailer) with wire nut, connect two black wires (light) to yellow/brown wire (trailer) with wire nut.
3. Install passenger side tail light assembly to trailer frame rail with 2 carriage bolts and nuts provided.
4. Connect red wire (light) to brown wire (trailer) with wire nut, connect two black wire (light) to green wire (trailer) with wire nut.

NOTE: Follow all recommendations in General Operating Instruction and Maintenance Manual provided with this pump. In addition, follow the specific recommendations that follow:

Installation:

▲ CAUTION Trailer mounted pump:
To avoid trailer tipping, set rear trailer stabilizer jacks before removing trailer from vehicle hitch.

1. Always set trailer tongue stand and rear trailer stabilizer jacks before unhooking trailer hitch from vehicle tow ball.

2. Make sure pump and trailer are level and trailer wheels are blocked to prevent movement during operation.

Frame mounted pump:

3. Pump frame must be supported on a level firm surface. Anchoring pump frame to support surface is required to prevent movement during operation. A vibration dampening mounting system should be employed. Allow sufficient clearance around pump frame to perform routine maintenance.

All installations:

4. Suction line should be as short and direct as possible, have a constant slope up to the pump's suction port, and line diameter must match suction port diameter. If hose is used, it must be non-collapsible.
5. Check condition of suction hose gaskets before installation. Weak, worn, leaking gaskets will allow an air lead at suction connection. If suction connection leaks air, the pump will not prime.
6. Supports must be used to carry the weight of the suction and discharge lines. The pump should not be used to support the entire weight of the suction and discharge lines. Damage/breakage of pump ports may occur if lines are not supported.
7. If a check valve or collapsible hose is used on discharge, a means of venting air from the pump discharge manifold is required during the priming cycle. If air cannot escape from casing, the pump will not prime.

LIFTING EYES

Pump frame is equipped with four 3/8-16x1" ID lifting eye bolts (Ref. No. A6). Eye bolts provided for lifting of pump frame on and off of transport trailer and to lift complete pump/trailer assembly. Eye bolts rates for lifting pump,frame

and trailer only.

▲ WARNING *Remove suction and discharge lines and drain all liquid from pump before lifting.*

▲ WARNING *Lift pump and trailer only. Do not load piping, hoses or other equipment on trailer during lifting.* Use adequate strength chain or cable assemblies (not supplied). Chain or cable must be attached to all four lifting eyes. A center lifting rig beam (not supplied) must be used to balance load and to prevent chain or cable from contacting fuel tank, engine, battery, or pump casing during lifting.

Operation

1. Fill engine with oil according to engine manufacturer's specifications listed in engine manual supplied.
2. Fill fuel tank with appropriate fuel for engine.
3. Fill pump casing with water through discharge manifold priming port. Casing must be full of water or pump will not prime.

▲ CAUTION *Do not run pump dry as permanent damage to the mechanical seal will result.*

4. Start the engine, following instructions in engine manual.
5. Run engine at full throttle during priming cycle. Tachometer should indicate 3500 rpm or greater.
6. After pump has primed and is producing full flow, engine speed should be regulated to produce desired pump performance level. Under high lift and/or low discharge head conditions, engine speed should be decreased to retard cavitation. This will extend pump, seal, and engine service life.

▲ CAUTION *Do not operate pump unattended. Shaft seal damage will occur if prime is lost or if flow is insufficient to keep the shaft seal cool.*

PUMP END DRAIN

Pump end is equipped with an NPT drain port. The port is located on the pump adapter plate (Ref. No. 42) at the 6 o'clock position. An elbow (Ref. No. 44) is installed in the port to direct the liquid down through frame. An indented hex pipe plug (Ref. No. 45) is installed in elbow. A 9/16" L-hex wrench is provided to remove plug. A ball valve and length of pipe or hose (not supplied) may be installed to direct the drain liquid away from the pump.

ALWAYS DRAIN LIQUID:

1. After pumping operation is complete if freezing temperatures may be experienced.
2. Before transporting pump.
3. Before lifting pump.

SEAL WASH PORTS

These units are equipped with provisions for the addition of a seal wash hose (not supplied). When pumping water containing abrasive sediment or when a buildup of material on the shaft seal is encountered, a seal wash may increase seal life. The pump adapter plate is equipped with two 1/8" NPT tapped ports; one at the (high pressure volute discharge) 10 o'clock position on adapter face and one on top of the locating boss (low pressure seal cavity).

NOTE: Fittings and hose must be compatible with liquid pumped, liquid temperature, and rated for maximum discharge pressure in the installation.

NOTE: Addition of seal wash hose may affect priming performance. After installing seal wash hose monitor length of time required to reach full prime.

Standard Installation:

Remove 1/8" NPT plugs (Ref. No. 43). Install appropriate fittings and hose between the two ports.

Abrasive Installation:

Remove 1/8" NPT plugs. Install appropriate fittings and hose between the two ports. The installation of an in-line abrasives separator is recommended. Contact appropriate manufacturer for details.

Clean Water Injection Installation: Remove 1/8" NPT pipe plug from low pressure port. Connect external clean water source line to low pressure port of adapter with appropriate hose and fitting. Incoming pressure must be at least 10 psi greater than seal cavity pressure. A check valve is recommended to prevent back flow.

TRANSPORT TRAILER

Transport trailer (Ref. No. C1) supplied with pump assembly is for off road use only as shipped. Trailer registration for use on public roads is the responsibility of the owner. A Manufacturer's Certificate of Origin listing the Vehicle Identification Number (VIN) is included with the trailer. Trailer registration requirements are regulated by each state and local government. Contact your State Department of Motor Vehicles or Department of Transportation for information and guidance on licensing or titling the trailer/pump for towing on public roads in your state.

Towing safety and operational guidelines:

▲ CAUTION *Follow all safety and operational rules listed in the trailer instruction manual supplied.*

1. Make sure vehicle is capable of towing

the load. Make sure vehicle hitch is rated for the load.

2. Make sure the trailer coupler and hitch ball are the same sizes and rated for the load.
3. Make sure trailer coupler is correctly and safely connected to hitch ball.
4. Be sure to use safety chains supplied with trailer. Safety chains should be attached to towing vehicle at the same length of both sides and should not drag on the ground.
5. Never overload trailer. Trailer is rated to carry pump, pump frame and a full load of fuel. Loading other items on the trailer may cause GVW to exceed trailer rating.

▲ CAUTION *Maximum safe highway towing speed is 45 mph. Never allow passengers on the trailer.*

6. Check all lights for proper operation before each use.
7. Check tires for wear and proper inflation before each use. Inflate to psi rating on tire.
8. Check safety chains for wear and solid connection to trailer frame.

MAINTENANCE:

SLIDING ENGINE SLED OPERATION

Refer to Repair Parts pages.

▲ WARNING *Disconnect spark plug wires and battery to prevent accidental starting.*

NOTE: Drain pump casing (Ref. No. 36) by removing plug (Ref. No. 45), discharge line, and suction line of all liquid before sliding engine sled.

1. Loosen six 1/2-13 nuts (Ref. No. A13) that are pressing clamp angle (Ref. No. A5) to side angle (Ref. No. B1).

To access impeller/seal plate area:

2. Remove three 1/2-13x1-3/4" cap screws (Ref. No. 4) holding bearing housing adapter (Ref. No. 11) to pump adapter (Ref. No. 42).
3. Grasp frame spacer (Ref. No. B7) under fuel tank (Ref. No. B4) and slide engine/sled assembly back from pump adapter. Slide far enough to access impeller approximately 10" to 12".

NOTE: If engine/sled assembly will not slide back easily, the seal plate (Ref. No. 10) may be stuck in pump adapter. Remove two 1/2"-13 x

- 1" bolts (Ref. No. 12) from bearing housing adapter. Insert two 1/2"-13 x 1-3/4" bolts and tighten evenly and slowly until seal plate loosens from pump adapter.
4. Tighten 1/2-13 nuts to prevent

engine/sled from moving during maintenance procedure.

To access pump volute and inside of casing:

- Loosen four 5/8-11 hex nuts (Ref. No. 2) holding casing to adapter. Slide 5/8" bolt (Ref. No. 1) from casing ear four places.
- Grasp frame spacer under fuel tank and slide engine/sled assembly back from pump adapter. Slide far enough to access impeller approximately 10" to 12".
- Tighten 1/2-13 nuts to prevent engine/sled from moving during maintenance procedure.

MECHANICAL SEAL REPLACEMENT

NOTE: Always replace the seal assembly (Ref. No. 7) and shaft sleeve (Ref. No. 8) to ensure proper mating of mechanical components.

NOTE: Always inspect impeller stub shaft ball bearing (Ref. No. 15) during seal replacement. The bearing may have been damaged by leaking water. Refer to IMPELLER STUB SHAFT BEARING REPLACEMENT section.

- Access impeller/seal plate area as described in SLIDING ENGINE SLED OPERATION section.
- Unscrew impeller (Ref. No. 5) from the impeller stub shaft (Ref. No. 16). Turn the impeller counterclockwise. Use a rubber mallet or soft block of wood and hammer to loosen impeller. Remove any impeller shims (Ref. No. 6), shaft sleeve and seal head from impeller stub shaft.
- Remove two 1/2-13x1" cap screws (Ref. No. 12) holding seal plate (Ref. No. 10) to bearing housing adapter (Ref. No. 11). Remove seal plate from bearing housing adapter.
- Remove impeller shaft washer (Ref. No. 14) and inspect impeller stub shaft ball bearing for water damage or wear. Replace shaft washer with flat surface toward impeller.
- Push seal seat from the seat plate recess with a screwdriver.
- Clean the seal plate recess before inserting a new seal seat.
- Carefully wipe the polished surface of the seal seat with a clean cloth.
- Wet the rubber portion of the seal seat with a light coating of soapy water.
- Press the new seal seat squarely into the cavity in the seal plate. If the seal seat does not press squarely into the cavity, it can be adjusted in place by pushing on it with a piece of pipe. Always use a piece of cardboard between the pipe and the seal seat to avoid scratching the seal seat. (This is a lapped surface and must be handled

very carefully).

- After the seal seat is in place, ensure that it is clean and has not been scratched or cracked.
- Using a clean cloth, wipe the impeller stub shaft and make certain that it is clean.
- Install seal plate and secure to bearing housing adapter face with two 1/2-13x1 cap screws.
- Apply a light coating of soapy water to the inside rubber portion of seal head and slide onto the shaft sleeve. Slip the shaft sleeve and seal head onto the impeller stub shaft with seal head lapped surface towards seal seat lapped surface.
- Replace any impeller shims removed during disassembly.
- Screw the impeller back in place tightening until it is seated against shims and shaft sleeve.

NOTE: Make sure seal spring retainer is not pinched between impeller/shims and end of shaft sleeve.

- Refer to section entitled Shim Adjustment at this time if shaft sleeve or any other parts listed therein have been replaced.
- Check O-ring (Ref. 9), make sure it is not damaged or worn and is in position on seal plate.

NOTE: Always inspect O-ring seals. Replace when cracked or worn. Wet O-ring with soapy water for ease of assembly.

- Slide engine/sled back into position aligning lead diameter on seal plate with adapter inside diameter. Replace three 1/2-13x1-3/4 cap screws. Tighten six 1/2-13 hex nuts clamping side rails to frame rails.
- Remount any other parts and reconnect spark plug wires and battery.

SHIM ADJUSTMENT

Manual method:

- When installing a replacement impeller (Ref. No. 5), shaft sleeve (Ref. No. 8), bearing housing adapter (Ref. No. 11), seal plate (Ref. No. 10), or volute (Ref. No. 41), it may be necessary to vary the number of impeller shims (Ref. No. 6) that will be required. This is easily done by adding one shim more than was removed and reassembling the pump as described in Mechanical Seal Replacement section.
- Ensure that volute, adapter (Ref. No. 42), seal plate and bearing housing adapter are fitted firmly. Check tightness of all fasteners.
- Remove spark plug wires and bump

engine over slightly with electric starter. If engine does not turn freely or interference between impeller and volute can be heard, disassembly pump and remove one shim.

NOTE: When adding or removing shims, it is best to proceed with a 0.020" increment each time. If engine does not turn freely, add shims until it does strike, then remove a 0.020" shim. This will ensure maximum performance.

- Proper running clearance is 0.020" to 0.040"
- Follow the above procedure until proper clearance is obtained.

Measurement method:

- When installing a replacement impeller, shaft sleeve, bearing adapter, seal plate or volute, it may be necessary to vary the number of impeller shims that will be required. This can be accomplished by measurement with a suitable size depth micrometer or similar measuring instrument.
- Measure depth from pump adapter-seal plate mounting surface to impeller face of volute. Measurement should be close to 5.960".
- Add or remove impeller shims until height of impeller face to seal plate-pump adapter mounting surface measures 0.020" to 0.040" shorter than depth measured in previous step.
- Slide engine/sled back into position aligning lead diameter on seal plate with adapter inside diameter. Replace three 1/2-13x1-3/4 cap screws. Tighten six 1/2-13 hex nuts clamping side rails to frame rails.
- Remove spark plug wires and bump engine over slightly with electric starter. If engine does not turn freely or interference between impeller and volute can be heard, disassemble pump and remove one shim. Rotate engine again. Engine must rotate freely.

IMPELLER AND VOLUTE REPLACEMENT

Impeller and volute are subject to wear only by abrasive sand or sediment laden liquids. If badly worn, all these parts can be replaced and the pump thus restored to full efficiency.

NOTE: When the clearance between the impeller and the volute exceeds 1/16" at the face of the impeller or 1/8" on the outside diameter of the impeller, it may be necessary to take corrective action. The increased clearance can cause lengthened priming times and reduce pumping capacity. If both the priming and capacity of your unit are satisfactory for your application, it is recommended that no corrective maintenance be performed regardless of what clearances on your unit may have developed, since the increased

clearances in themselves are not generally harmful to your pump. Normally, new pump clearances can be restored by simply shimming behind the impeller. If the impeller is badly worn, it is recommended that the impeller be replaced. This is usually all that is required since only on unusually abrasive services does the cast iron volute show deterioration. Occasionally a stone or hard object might get caught in the impeller and cause damage to the volute/cutwater. In these cases, follow the instructions below for replacement.

1. Refer to SLIDING ENGINE SLED OPERATION section for procedure to access the volute and inside of the casing.
2. Remove casing O-ring (Ref. No. 39) from outside diameter of volute (Ref. No. 41) flange.

CAUTION *A mechanical means of supporting the volute during this procedure is recommended. The volute casting weighs 50 lbs.*

3. Remove three 1/2-13 cap screws (Ref. No. 40) holding volute to pump adapter (Ref. No. 42). Slide volute out of adapter machined pocket.
4. Replace worn parts as necessary.

NOTE: When replacing volute, attach new volute gasket (Ref. No. 38) to new volute with existing fasteners (Ref. No. 37).

NOTE: Before installing new parts, clean all mating surfaces thoroughly.

5. Install volute aligning flange outside diameter with adapter machined pocket. Replace three 1/2-13 cap screws. Check for interference between impeller face and volute by slowly rotating engine shaft. See SHIM ADJUSTMENT section for procedure to set impeller clearance.
6. Inspect casing O-ring for cracks or tears, replace if necessary. Install O-ring on outside diameter of volute flange.
7. Slide engine sled and engine assembly into casing, align outside diameter of volute flange with casing machined inside diameter, do not pinch casing O-ring. Install four 5/8-11 hex bolts and nuts. Tighten six 1/2-13 hex nuts clamping engine sled in position.

IMPELLER STUB SHAFT BEARING REPLACEMENT

These units are equipped with a permanently lubricated impeller shaft ball bearing (Ref. No.

15). This bearing supports the radial and axial loads produced by the impeller reducing the load on the engine crankshaft bearings. The bearing does not require lubrication but should be inspected periodically for wear or water damage from a leaking shaft seal. As part of a maintenance schedule, the bearing should be replaced periodically.

1. Refer to SLIDING ENGINE SLED OPERATION section. Access impeller as described.
2. Refer to MECHANICAL SEAL REPLACEMENT section. Follow steps 1 through 3; remove impeller, impeller shims, shaft sleeve, seal and seal plate.
3. Remove shaft washer.
4. Remove four 7/16-14 cap screws (Ref. No. 13) attaching bearing housing adapter (Ref. No. 11) to engine (Ref. No. 18). Remove adapter from engine by sliding away from engine disengaging engine PTO shaft from impeller stub shaft (Ref. No. 16). Do not lose shaft key (Ref. No. 17).
5. On appropriate bearing press, press stub shaft and bearing from bearing housing adapter. Remove bearing from stub shaft.
6. Replace bearing with equivalent ball bearing. Reassemble bearing, stub shaft and bearing adapter.
7. Insert shaft key into engine PTO shaft. Align shaft key with stub shaft key way, slide stub shaft, bearing adapter assembly onto engine and secure with fasteners.

NOTE: Apply a light coating of anti-seize compound to shaft to prevent corrosion and galling.

8. Replace shaft washer onto stub shaft. Flat surface of shaft washer must face impeller.
9. Replace seal plate, shaft sleeve, seal, impeller shims and impeller, turn clockwise to tighten. Refer to MECHANICAL SEAL REPLACEMENT section, follow step 12 and steps 14 through 19 for reassembly procedure.

CLEANING

These units are designed so that for most cleanout or clogging problems it should not be necessary to remove hoses or piping. The suction area can be reached by removing two threaded handles (Ref. No. 33) and removing suction cleanout cover plate (Ref. No. 34) and O-ring (Ref. No. 35). To reach the impeller chamber or casing discharge areas follow

procedures described in SLIDING ENGINE SLED OPERATION.

NOTE: When replacing cleanout cover plate, carefully wipe clean all surfaces on which the O-ring has contact. Also make sure the O-ring is in position in its groove.

ENGINE (DRIVER)

1. For information pertaining to the engine, engine service and engine parts, consult the Engine Manual or contact the nearest authorized service representative or the engine manufacturer.
2. Follow engine manufacturer's operating and maintenance procedures and recommendations covered in the engine manual.
3. Use tachometer-hour meter installed on the engine to log operating hours. See tachometer-hour meter instruction sheet included for operating information. Perform engine maintenance according to recommended hour intervals listed in engine manual.
4. A length of pipe and elbow has been installed in the engine oil drain port to assist in changing the engine oil. Adding longer piping, hose, or a valve to fit each individual's maintenance requirements is left to the discretion of the operator.
5. Consult engine manual for engine warranty information needed. Any warranty issues concerning the engine must be addressed through the engine manufacturer. Warranty contact phone number, website, Authorized Service Representative listing and warranty directions are listed in the engine manual.

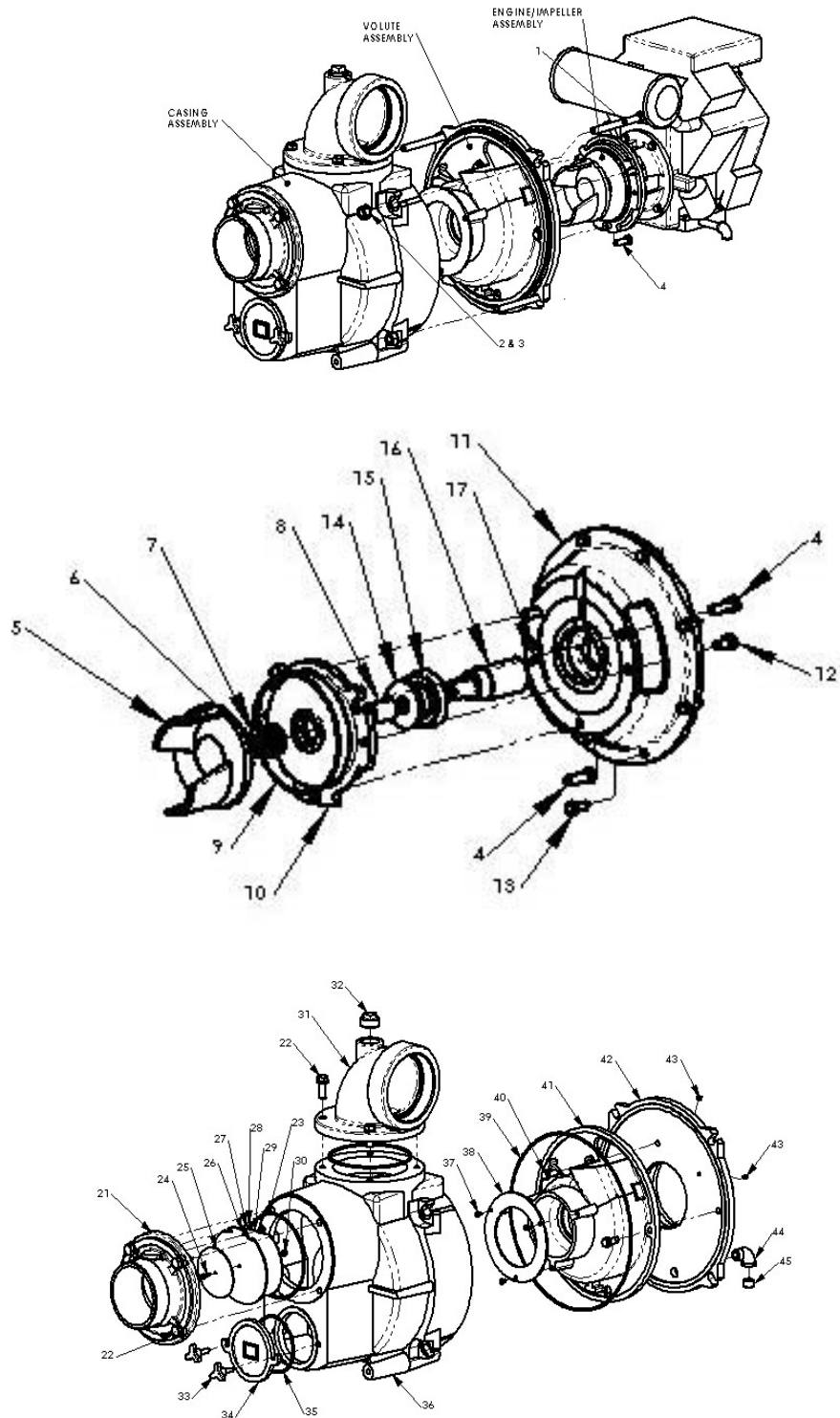
TRANSPORT TRAILER

Transport trailer supplied with pump must be used and maintained according to procedures and guidelines listed in trailer instruction manual. Accessory parts, repair parts and warranty claims should be directed through trailer manufacturer.

For Repair Parts, contact dealer where pump was purchased.

Please provide the following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list



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Please provide the following information:

-Model number

-Serial number (if any)

-Part description and number as shown in parts list

| Ref. No. | Description | Part No. | Qty. |
|----------|--|-------------|------|
| 1 | 5/8"-12UNC x 6-1/2 Hex head bolt | * | 4 |
| 2 | 5/8"-12UNC Heavy hex nut | * | 4 |
| 3 | 5/8" Flat washer | * | 4 |
| 4 | 1/2"-13UNC x 1-3/4" Hex head cap screw | * | 3 |
| 5 | Impeller | 5580-010-01 | 1 |
| 6 | Impeller shim - 1 pkg. Contains 1 each: 0.010",0.020",0.030" | 1656-000-90 | 1 |
| 7 | Seal assembly (separate part) | 1640-167-90 | 1 |
| | Seal assembly included in seal group | ◇ | 1 |
| 8 | Shaft sleeve | 1555-000-01 | 1 |
| 9 | No. 262 O-ring Buna 7.0" ID x 1/8" CS | ◇ | 1 |
| 10 | Seal plate | 5580-031-01 | 1 |
| 11 | Bearing housing adapter | 5580-091-01 | 1 |
| 12 | 1/2"-13UNC x 1" Hex head cap screw | * | 2 |
| 13 | 7/16"-14UNC x 1-1/4" Hex head cap screw | * | 4 |
| 14 | Impeller shaft washer | 5580-141-00 | 1 |
| 15 | Ball Bearing 45x85x19 #6209 double sealed | * | 1 |
| 16 | Impeller stub shaft | 5580-140-00 | 1 |
| 17 | 1/4" square x 1-1/2" long drive key | * | 1 |
| 18 | Briggs & Stratton engine (5580-96) | 1639-011-00 | |
| | Honda engine (5581-96) | 1639-012-00 | 1 |
| 19 | 1/2" Neoprene backed seal washer | 1806-002-00 | 1 |
| 20 | Oil drain adapter 14mm to 3/8" NPT | 1768-011-01 | 1 |
| 21 | Suction flange 6" NPT male | 5580-082-01 | 1 |
| 22 | 5/8-11 x 1-3/4" Hex head cap screw | * | 8 |
| 23 | No. 369 O-ring Buna 8.0" ID x 3/16" CS | ◇ | 1 |
| 24 | 1/4"-20 UNC x 3/4" Hex head bolt | * | 1 |
| 25 | Check valve weight front | 5580-072-00 | 1 |
| 26 | Check valve (separate part) | 5580-070-00 | 1 |
| | Check valve included in seal group | ◇ | 1 |
| 27 | 1/4"-20 UNC x 3/4" Hex head cap screw | * | 2 |
| 28 | 1/4" Flat washer | * | 2 |
| 29 | Check valve weight | 5580-071-00 | 1 |
| 30 | 1/4"-20 UNC Hex nut | * | 1 |
| 31 | Discharge manifold 6" NPT female | 5580-081-01 | 1 |
| 32 | 1-1/2" NPT Pipe plug | * | 1 |
| 33 | 3/8"-16 UNC x 1-1/4" Wing handle bolt | 1601-000-00 | 2 |
| 34 | Clean out cover | 5580-040-00 | 1 |
| 35 | No. 355 O-ring Buna 5-1/4" ID x 3/16" CS | ◇ | 1 |
| 36 | Casing | 5580-001-01 | 1 |
| 37 | 1/4"-20 UNC x 1/2" Flat head screw | * | 3 |
| 38 | Volute gasket | ◇ | 1 |
| 39 | No. 386 O-ring Buna 17" ID x 3/16" CS | ◇ | 1 |
| 40 | 1/2"-13 UNC x 1-1/2" Hex head cap screw | * | 3 |
| 41 | Volute | 5580-150-01 | 1 |
| 42 | Adapter | 5580-030-01 | 1 |
| 43 | 1/8" NPT Pipe plug | * | 2 |
| 44 | 3/4" NPT Street elbow | * | 1 |
| 45 | 3/4" NPT Pipe plug | * | 1 |
| ◇ | Maintenance seal group includes 7, 9, 23, 26, 35, 38, 39 | 5580-300-90 | 1 |

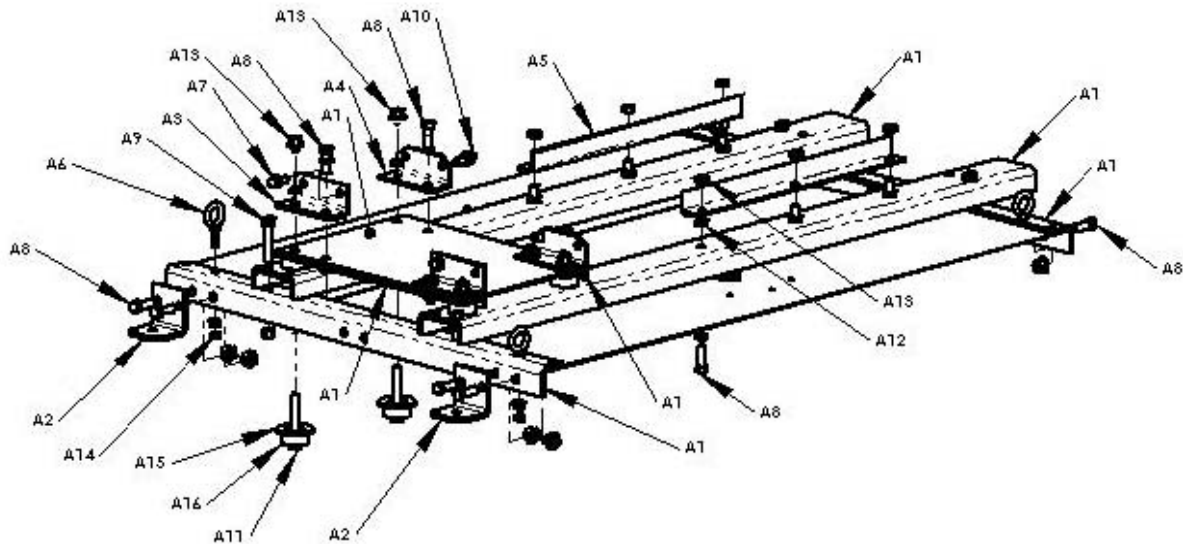
(*) Standard hardware item

(◇) Maintenance seal group

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- Serial number (if any)
- Part description and number as shown in parts list



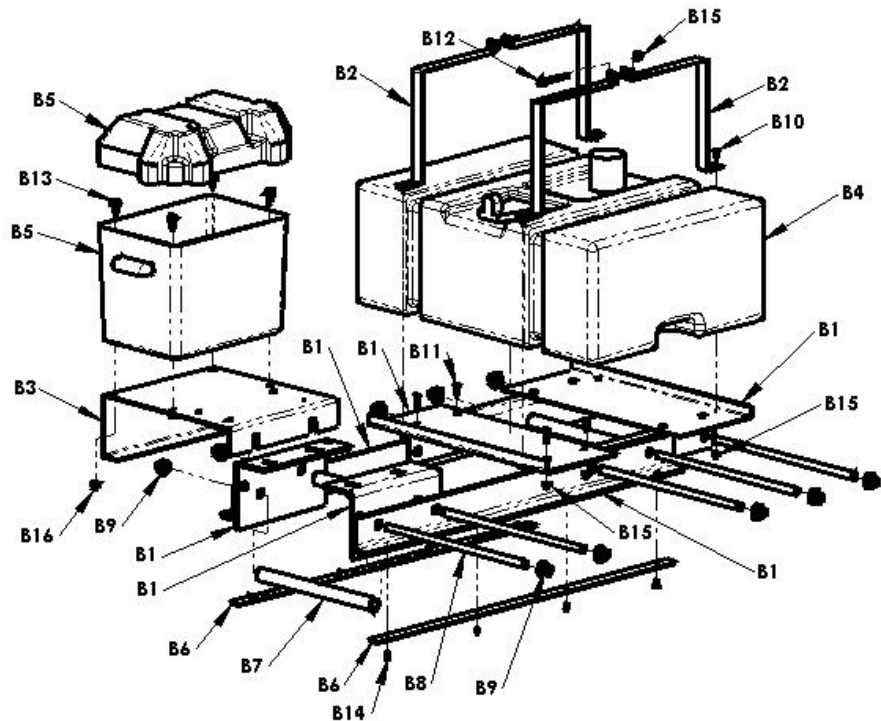
Mounting Frame Parts:

| Ref. No. | Description | Part No. | Qty. |
|----------|--|-------------|------|
| A1 | Frame includes: Frame rails, end mount angles, frame plate, side plates, plate angle, spacer | 5583-100-90 | 1 |
| A2 | Jack mount clips | 5580-121-00 | 2 |
| A3 | Casing mount angle front | 5580-105-00 | 2 |
| A4 | Casing mount angle rear | 5580-104-00 | 2 |
| A5 | Clamp angle | 5580-103-00 | 2 |
| A6 | 3/8"-16 UNC Lifting eye bolt | 1756-003-00 | 4 |
| A7 | 1/2"-13 UNC x 1" Hex head bolt | * | 2 |
| A8 | 1/2"-13 UNC x 1-1/2" Hex head bolt | * | 20 |
| A9 | 1/2"-13 UNC x 2-3/4" Hex head bolt | * | 4 |
| A10 | 1/2"-13 UNC x 1" Socket head cap screw | * | 2 |
| A11 | 1/2"-13 UNC x 3-1/2" Hex head bolt | * | 4 |
| A12 | 1/2"-13 UNC Hex jam nut | * | 6 |
| A13 | 1/2"-13 UNC Hex nut | * | 24 |
| A14 | 3/8"-18 UNC Hex nut | * | 8 |
| A15 | 1-1/4" SAE washer | * | 8 |
| A16 | 1/2" Vibration dampener, Kit includes (1) ea. A11, A15, A13, and 1/2" vibration dampener | 1800-050-90 | 4 |

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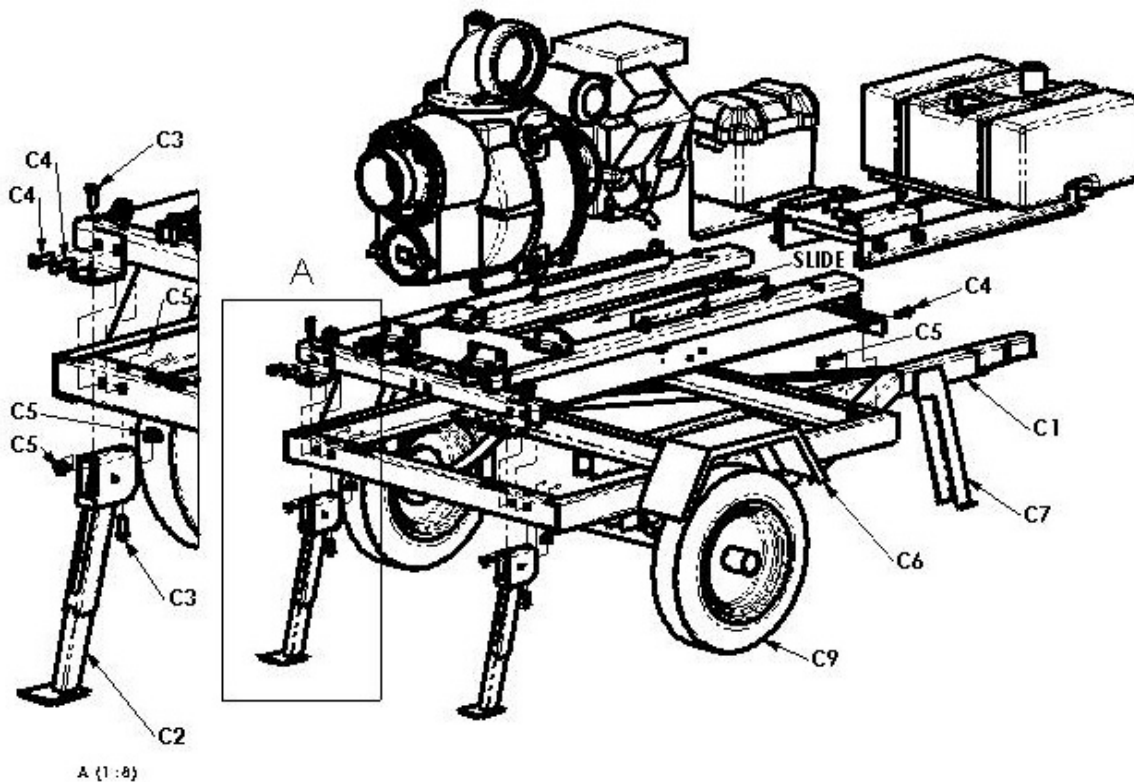
Engine Sled Parts List

| Ref. No. | Description | Part No. | Qty. |
|------------------|---|--------------|------|
| B1 | Sled includes: engine angles, tank plates, tank angles, side angles | 5580-110-90 | 1 |
| B2 | Tank Straps/Plate Kit | 5580-117-90 | 1 |
| B3 | Battery bracket & box kit (Incl. B5,B15,B3,B16) | 5580-118-91 | 4 |
| B4 | Fuel tank | — | 1 |
| B5 | Battery case for group 24 battery, See B3 | — | 1 |
| B6 | Slip strip Nylon | 5580-115-00 | 2 |
| B7 | Frame spacer | 5580-113-00 | 5 |
| B8 | Tension rod | 5580-114-00 | 5 |
| B9 | 1/2"-13 UNC Hex nut | * | 10 |
| B10 | 1/4"-20 UNC x 1/2" Hex head bolt | * | 2 |
| B11 | 1/4"-20 UNC x 3/4" Hex nut | * | 8 |
| B12 | 1/4"-20 UNC x 2-1/2" Hex head bolt | * | 2 |
| B13 | 5/16"-18 UNC x 3/4" Hex head bolt | * | 4 |
| B14 | #10-24 x 1/2 Flat head screw | * | 8 |
| B15 | 1/4"-20 UNC Hex nut | * | 14 |
| B16 | 5/16"- 18 UNC Hex nut | * | 4 |
| Parts not shown: | | | |
| B17 | Battery required: 12V 500CCA BC1 size 24 | Not Included | 1 |
| B18 | Battery cable: top post 6 AWG x 15" long | 5580-353-00 | 1 |
| B19 | Battery grounding strap: top post 4 AWG x 19" Long | 5580-352-00 | 1 |
| B20 | Fuel system kit for gasoline engines includes 1/4" hose barb x 1/4" NPT elbow 1/4" ID SAE 30R7 fuel hose 54" long 5/16" hose barb x 1/4" NPT elbow 5/16" ID SAE 30R7 fuel hose 18" long 5/16" ID SAE 30R7 fuel hose 24" long 1/4" NPTM x 1/4" NPTF shutoff valve SAE #4 hose clamp | 5583-402-90 | 1 |
| B21 | Tachometer hour meter | 5580-354-00 | 1 |

For Repair Parts, contact dealer where pump was purchased.

Please provide the following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list



Trailer Mount Repair Parts List

| Ref. No. | Description | Part No. | Qty. |
|----------|------------------------------------|-------------|------|
| C1 | Trailer | 5580-420-00 | 1 |
| C2 | Trailer stabilizer jack (1 pair) | 5580-122-00 | 1 |
| C3 | 1/2"-13 UNC x 1-1/4" Hex head bolt | * | 4 |
| C4 | 1/2"-13 UNC x 1-1/2" Hex head bolt | * | 6 |
| C5 | 1/2"-13 UNC Hex nut | * | 10 |
| C6 | Fender | 5580-422-00 | 2 |
| C7 | Tongue stand | 5580-421-00 | 1 |
| C8 | Light kit (not shown) | 5580-423-90 | 1 |
| C9 | Wheel/tire assembly | 5580-424-00 | 2 |

(* Standard hardware item

(◇) Maintenance seal group

(-) Commercially available part, contact manufacturer listed or available from industrial supply catalog