# **ECO** Gearchem®

# Installation Operation Maintenance Instruction

**Bulletin No. IMG-96** 



A Unit of IDEX Corporation

ENGINEERED PUMP OPERATIONS 2883 Brighton-Henrietta Town Line Road Rochester. New York 14623

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PUMP MODEL #\_\_\_\_\_

### INTRODUCTION

Eco Gearchem pumps are constructed in 316SS, Alloy 20 and Alloy C. Gears are available in Alloy C, Alloy 20, glass filled TFE, Carbon/Graphite and PEEK. These pumps are used for the reliable handling of clear lubricating and non-lubricating fluids. These pumps operate over a broad range of temperatures, pressures and corrosive services for transfer applications, cyclic operations or continuous production systems.

Self priming Gearchem pumps can be operated over the entire pH range, for indoor and outdoor service, at system pressures from as low as 1mm Hg abs (vacuum) to 100 psi differential pressure and over a temperature range from -100°F to +450°F (-73°C to +232°C). Gearchem pumps are available in flows up to 55 GPM and can be used to pump liquids with viscosities ranging from less than 1 cps up to 100,000 cps with reduced speeds.

Gearchem pumps may be quickly inspected in the field. All that is required to inspect the internal components is the removal of the rear housing. Before attempting an inspection or repair be sure to read and thoroughly understand this maintenance manual.

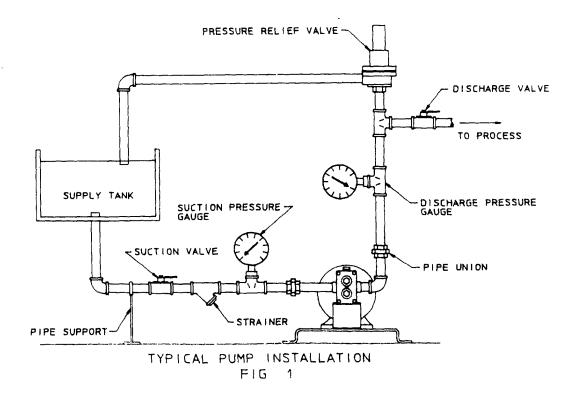
Pumps may be repaired either in the field or at an authorized Eco Repair Center (contact your Eco distributor for details). Field repairs can be done very quickly using Eco Kopkits which include all the parts necessary to cover practically all routine maintenance requirements.

### **EQUIPMENT INSPECTION**

- Check all equipment for completeness against the order and for any evidence of shipping damage. Shortages or damage should be reported immediately to the carrier and to your Eco distributor.
- 2. If the pump is not going to be installed immediately, the following steps should be taken.
  - Leave pump in original shipping carton.
  - Store indoors in a dry ambient

atmosphere. Avoid temperature variations.

- Leave all shipping plugs in place.
- Contact the motor manufacturer for specific motor storage information.
- Occasionally during shipment, possible misalignment or other damage such as cracked mechanical seal faces can occur. For this reason it is recommended that each unit be tested with water in some convenient area prior to piping into the actual process system.
- 4. These instructions should be read carefully by the personnel responsible for installation, operation and maintenance of the equipment and kept in a convenient place for ready reference. It is recommended that a copy of the Eco order be kept with this manual as well as a written record of the pump model number which is on the name tag attached to the pump. A space has been provided inside the front cover of the manual to record this number.



### **INSTALLATION (SEE FIGURE 1)**

- Pump installation site should be selected to provide easy access for routine maintenance and to protect the pump from damage by the elements or from leaks or drips from nearby process equipment.
- Suction and discharge ports of Eco Gearchem pumps can be determined as follows:
  - a. Looking at the pump drive shaft, the suction port is to the right of the shaft, when the shaft rotates clockwise and the drive shaft is located below the ports for standard configuration on Model G2, G4, G6, G8 and GH8.
  - b. Looking at the pump drive shaft, the suction port is to the left of the shaft, when the shaft rotates clockwise and the drive shaft is located above the ports for standard configuration on Models GA12 and GA 16.
  - c. Reversing drive shaft rotation reverses flow and thus suction and discharge ports for all models.

- Keep suction lines short, straight and of sufficient size to minimize friction loss to the pump. Make sure there is sufficient suction supply, so that pump will not starve or run dry. Flooded suction or gravity feed of fluid to pump inlet is generally preferred.
- Use only full-bore ball valves or gate valves in the suction piping. If suction strainers are required, size them to minimize pressure drop and select those of a type that are easily cleaned.
- Arrange all suction piping and fittings to prevent formation of air pockets. Make sure all joints are tight.
- Flush and blow out all suction lines prior to mating up to pump. Use nipples and unions, or spool pieces with flanged pumps, for ease of maintenance.
- Do not spring piping, either suction or discharge, when mating up to pump. Use supports or hangars at intervals as required. When necessary, provide for thermal expansion and contraction so that

no strain is placed upon the pump.

- Check carefully alignment of pump and motor or drive system. Improper alignment is one of the most common causes of seal and stuffing box problems, as well as a major cause of rapid bearing wear and eventual pump failure.
- Check all bolts and nuts for tightness.
   Correct any conditions which could cause destructive vibration or leakage.
- Where required, provide proper system for seal flush, and/or drain. Observe any special instructions for packing lubrication.
- 11. If start-up screens are used, be sure they do not clog and starve suction. Start up screens should be removed prior to placing system into regular operation.
- If flexible suction lines are used, be sure their selection and installation will prevent wall collapse and thus a starved suction condition.
- 13. When taking suction from a tank or vessel, avoid entry of sludge, solids, etc. into suction line by placing suction line inlet above maximum expected level of solids.
- 14. Discharge lines from Gearchem pumps should be fitted with properly sized relief valves to protect both pump and discharge system. Relief valve outlet should be piped back to suction vessel.
- 15. When a by-pass system is used to control flow from the pump, the bypassed fluid should be piped back to the suction vessel to prevent heat build-up due to recirculation. If it is absolutely necessary to pipe by-pass back to the pump suction line, the point of entry should be at least 10 pipe diameters away from the suction inlet. Provision for cooling should be made in the event of excessive heat buildup through fluid recirculation.
- 16. Where pumped fluids may solidify, crystalize, precipitate etc., provision should be made to thoroughly flush pump and piping during periods of shutdown. Pay particular attention to proper flushing of

seal or stuffing box area.

### MECHANICAL SEALS

Three basic seal types are offered as standard: internal, external, and double seal. All mechanical seals require cooling and lubrication. For long and troublefree seal life:

- Do not run pump dry. Make sure pump is primed, suction is not starved, sufficient NPSH is available and your system is such that seal surfaces are wet. If a seal flush system is used, make sure that it is operating while the pump is operating. Double seals require a seal flush.
- Keep abrasives out of the seal area. Dirty flush streams, whether piped from the pump discharge or from a separate source, will destroy the rotating and stationary seal mating surfaces.
- Make sure pump and driver are properly aligned. Misaligned seal mating surfaces will not function. Excessive vibration will also prevent proper seal function and cause early failure.
- Determine that seal materials of construction are compatible with pumped fluid. Be sure to check this when changing application.

### PACKED STUFFING BOXES

The basic housekeeping procedures for mechanical seals also apply to packed pumps. For proper operation, the stuffing box area must be cooled and lubricated. Do not overtighten packing. Where packing lubricant is required, use it. Run in new packing carefully. Care and time taken at this stage will minimize down time and maintenance costs. Misalignment and vibration also shorten packing life. Flush streams to lantern ring stuffing boxes are as important as flush streams to mechanical seals.

### **OPERATION**

- Prior to operation, recheck installation according to instructions. Be sure electrical service to motor agrees with nameplate requirements. Jog to check rotation and rewire motor if necessary.
- Lubricate packing, if required, using suitable lubricant. Where pump is equipped with lantern ring stuffing box, and recirculating flush check for proper piping from pump discharge to lantern ring nipple. Where thorough flush of lantern ring stuffing box is intended, check flush stream piping to and from stuffing box.
- 3. Check mechanical seal flush arrangements where used. Pressurized flush to double seal chamber must be in operation, at an inlet pressure of 10 to 15 psi above intended pump discharge pressure, prior to and when operating pump. Flush must continue when pump is stopped until pump pressure is reduced to within 20 psi of double seal chamber pressure.

Where external seal cooling is required, provide for drip feed of cooling liquid over rotating seal head. Where internal seal cooling and lubrication by flush stream is intended, check piping from pump discharge to seal housing or from external source to seal housing. Make sure all flush streams are clean.

- 4. Make sure discharge valves are open, start pump and check for proper operation. Adjust packing as necessary, but allow sufficient time for proper run in. Check flush streams for proper operating pressure and flow. If pump bearing areas run hot, or seal/stuffing box areas run hot, shut pump down and determine cause.
- 5. Do not run dry.
  - Do not pump abrasives.
  - Do not run metal/metal gears below 100 cps or faster than 1450.

### MAINTENANCE

The timing for maintenance of the pump is established primarily on past performance Each installation is different. Therefore detailed

maintenance records of past performance can be invaluable for determining future preventative maintenance intervals. During routine pump inspections pay particular attention to the mechanical seal and bearing areas because those areas will determine future maintenance intervals. For motor maintenance instructions consult the motor manufacturer.

### CAUTION

Before performing any maintenance requiring pump disassembly, be sure to flush pump thoroughly with a neutralizing fluid. Wear protective clothing and handle equipment with proper care.

### 1. Changing Service

When changing a pump from one service to another, be sure to check that all wetted pans of the pump (including seals) are compatible with the fluid to be handled and that the motor is sufficiently sized for the application. If in doubt contact your Eco distributor.

### 2. Inspect for Wear

Whenever gear pumps exhibit reduced flow rates, inability to maintain pressures, noisy or otherwise abnormal operation, first refer to the troubleshooting section. If the problem cannot be resolved the pump must be inspected for wear or damage. Eco Gearchem pumps can be easily opened for cleaning and inspection without disturbing piping connections by removing the pump rear housing.

Where inspection shows wear, rebuilding the pump using an Eco KOPkit is strongly recommended. Where pumps are equipped with two metallic or plastic gears, replacement with a new set is preferred. Pumps have a metallic drive gear and plastic idler gear can often be restored to original performance by replacing the idler gear alone.

### 3. Mechanical Seal Design

Eco Gearchem pumps equipped with mechanical seals use either single internal, single external or a double seal. In addition there is a variation, for vacuum service, of the external seal whereby the seal housing is lengthened between the seal and the pump. All seals are Type 9. These configurations are illustrated in Drawing SD-2652 and SD-2778.

All mechanical seal types used in Eco Gearchem pumps consist of a rotating seal head fixed to the shaft with set screws and a stationary seal face (or faces in the case of double seals) mounted in the seal housing with a TFE O-ring gasket.

### 4. Mechanical Seal Maintenance

For proper seal functioning, the following conditions must be met:

- a. The seal faces must be smooth, free of cracks, chips, or ridges and free of score marks particularly those which emanate radially. Seal faces showing only light scratches or marks may be relapped. Eco lapping standards are smooth and flat to 3 helium light bands. Avoid touching sealing faces.
- b. The seal faces must be perpendicular to the shaft axis and run true. A bent shaft can prevent proper sealing.
- c. Secondary sealing elements such as O-rings and Teflon wedges must be installed so as not to pinch, cut or damage them. The use of a "bullet" to introduce the seal head onto the shaft helps prevent damage Also the use of a lubricant that is compatible with the fluid being pumped is helpful.
- d. The shaft must be free of nicks and scratches in the sealing area, particularly spiral scratches. When reinstalling a Type 9 seal head make sure the setscrews are backed out so as not to damage the shaft when sliding the seal on.
- e. Install the seal with the correct compressive contact. Dimensions and directions are given for each model in the Reassembly Section.
- f. A seal flush must be used for all double seal installations. The flush must be clean and introduced at a pressure about 10 to 15 psi higher than discharge pump pressure. For best results the flush inlet should be connected to the lowest of the two flush connections.

g. When reinstalling refurbished seal seats, always use a new seal seat O-ring Slowly heat TFE o-ring in water or other suitable solution until temperature reaches 160° -175°F. Slip over seal set into position on Oring groove and let cool.

Do not use any pointed or sharp edged instruments that might cut or damage the O-ring during this operation. New seal seats shipped from the factory include the O-ring already fitted to the seat.

### 5. Stuffing Box Design

Eco Gearchem pumps with packing use either a plain stuffing box or one equipped with a lantern ring. GH8, GA-12 and GA-16 packed pumps are supplied only in the later configuration

### 6. Stuffing Box Maintenance

Install packing rings carefully in the sequence noted on the drawings. Be sure gland is clean and that shaft is not scored. New packing on a damaged shaft will not see!. Where lantern rings are used, check to make sure they are properly positioned under the fitting so that flush streams or lubricants will have access to the lantern ring.

Recommended lubricants are:

### **SERVICE**

- 1 Solvents
- 2. Acids/Alkalies
- 3. High temperatures

LUBRICANT

- 1. Soap-free grease
- 2. Fluorocarbon grease
- 3 Silicone/Carbon/Graphite TYPICAL SOURCE
- 1. Keystone 5P9
- 2 Halocarbon 25/20M
- Dow Corning 41

Do not overtighten packing. Run in a new set carefully, taking up on the gland nut a little at a time. If the gland runs hot, it is generally a sign that the packing is too tight. Damage to both shaft and packing will result. A properly packed and adjusted stuffing box will leak perhaps 10 drops every 3 to 5 minutes.

### 7. Significant Model Number

The significant model number stamped on the pump name plate, identifies the pump type, the seal arrangement, and other details, Refer to the significant model number chart in this manual if you are unsure of exactly what type of pump or seal you have.

Always refer to the full model number in any correspondence with your Eco distributor. Drawings and a consolidated parts list for each Gearchem pump are included in this manual. Recommended spare parts are denoted on the consolidated parts list.

### **RECOMMENDED SPARES**

KOPkits. The basic Gearchem KOPkit consists of the following parts which are recommended as spares:

Drive Shaft
Idler Shaft
Drive Gear
Idler Gear
Drive Gear Key
Idler Gear Key
Bearings
Wear Plates
Bearing Lock Pins
Housing O-Rings
Drive Gear Retaining Rings
Idler Gear Retaining Rings
Shaft Seal Arrangement as Required\*
\*(Packing or Mechanical)

A KOPkit is completely identified by placing the letter "K" before the pump significant model number and deleting the hyphens. Example: A KOPkit for G6-ACT-KKT would be KG6ACTKKT.

### DISASSEMBLY

Prior to any disassembly please:

- Close discharge and suction valves.
- Disconnect power source to motor.
- Flush and drain pump.

I. Single Internal Mechanical Seal (G2, G4, G6, G8).

### Reference Drawing SD-2537, SD-2538.

- 1. Loosen gland lock nut (Item 35) and unscrew gland nut (Item 36).
- Pull out seal seat (Item 55) with seat O-ring. Inspect as noted previously.
- Remove either pipe plug (Item 62) and rotate shaft to allow access to seal head set screws.
   Loosen screws sufficiently to allow removal of seal head (Item 60).
- Turn pump so that drive shaft is pointing down thereby allowing seal head to slide off shaft.
   If seal head does not come out easily, it will be necessary to remove seal housing (Item 30)
  - a. Back off seal housing lock nut (Item 32).
  - b. Unscrew seal housing (Item 30) to expose seal head (Item 60).
  - When reassembling, fit new seal housing gasket (Item 31).
- 5. Inspect seal head as noted previously.
- II. Single Internal Mechanical Seal (GH8, GA12, GA16).

### Reference Drawing SD-2613, SD-2775

- Remove seat retainer bolts (Item 39A) and seat retainer (Item 36) with seat retainer pin, drive end seal seat (Item 55) with seat ring and seat retainer O-ring (Item 37).
- 2. Visually inspect drive end seal seat (Item 55).
- If replacement is required, carefully remove drive end seal seat (Item 55) by inserting a "L" shaped tool between seal seat and seat retainer (Item 36) and exert a firm pulling action.
- 4. Remove pipe plug (Item 62 or 63) on top of drive end of front housing (Item 1) and rotate shaft to allow access to seal head (Item 60) set screws Loosen screws sufficiently to allow removal of seal head (Item 60) and withdraw over shaft. Inspect seal head. Replace if necessary.

- III. Single External Mechanical Seal (G2, G4, G6, G8).
- Loosen set screws in seal head and slide seal head off shaft.
- Loosen gland lock nut (Item 35) and unscrew gland nut (Item 36).
- 3. Pull out seal seat (Item 55) with seat O-ring.
- Inspect seal seat and seal head as noted previously.
- IV. Double Mechanical Seal (G2, G4, G6, G8).

### Reference Drawings SD-2537, SD-2538

- Loosen gland lock nut (Item 35) and unscrew gland nut (Item 36).
- Pull out drive end seal seat (Item 55) with seat O-ring. Inspect as noted previously.
- Remove flush connection so as to give access to seal head set screws. Rotate shaft to allow access to seal head set screws, and loosen set screws to allow removal of seal head (Item 60). With G6 pumps, seal housing must be unscrewed to allow access to set screws. (See Step5).
- Remove seal head (Item 60) and inspect as noted above.
- 5. Loosen seal housing lock nut (Item 32) and unscrew seal housing (Item 30).
- 6. Pull out pump end seal seat (Item 56) with seat O-ring. Inspect as noted previously.
- V. Double Mechanical Seal (GH8, GA12, GA16).

### Reference Drawing SD-2613, SD-2775

- Remove seat retainer bolts (Item 39A) and seat retainer (Item 36) with seat retainer pin holding the drive end seal seat with seat ring and seat retainer O-ring.
- 2. Visually inspect drive end seal seat.

- If replacement is required, carefully remove drive end seal seat by inserting a "L" shaped tool between seal seat and seat retainer (Item 36) and exert a firm pulling action.
- 4. Remove pipe plug (Item 62 or 63) on top of drive end of front housing (Item 1) and rotate shaft to allow access to seal head and withdraw over drive shaft (Item 4). Inspect seal head. Replace if necessary.
- 5. Visually inspect pump end seal seat.
- If replacement is required, it will be necessary to remove front housing (Item 1) from the pump. (Disconnect any piping from front housing to allow disassembly).
- Unbolt front housing (Item 1) from center housing (Item 2) and carefully slide the front housing over drive shaft(Item 4).
- To replace pump end seal seat carefully remove by inserting an "L" shaped tool between seal seat and front housing and exert a firm pulling action.

### VI. Pump Internals

Reference Drawings SD-2537, SD-2538, SD 2613, SD-2775

- After removing the mechanical seal assembly, if it is necessary to either inspect or repair the pump internals, remove the pump housing bolts and rear housing (Item 3).
- The gears (Items 6, 7) and wear plates (Item 15) are now accessible and can readily be removed along with the drive and idler shafts (Items 4, 5) from the center/front housings (Items 2, 1).
- The gears can be removed from the shafts by removing one of the retaining rings and sliding the gears off their respective shafts.
- 4. Inspect all parts for signs of wear or damage. The maximum diametral clearance (bearing I.D. shaft O.D.) that is acceptable is .010 inches. Shafts and bearings that are scored or worn must be replaced. Gears and wear plates with excessive wear or scoring must also be replaced.
- 5. Clean all parts before reassembly.

### REASSEMBLY

### I. Pump Internals

It is recommended that an Eco KOPkit be used when repairing a pump. The KOPkit comes with gears already assembled to the shafts and significantly reduces the repair time. If a KOPkit is being used proceed to Step 2.

- Install the drive and idler gear (Items 6, 7) onto their respective shafts (Items 4, 5) using keys (Items 8, 9) and retaining rings (Items 10, 11). Take care not to scratch the shafts when installing the rings. Check the ends of the rings for sharp burrs. If a plastic and metal gear set are being used, the plastic gear is always the idler gear.
- Install new bearings (Items 12, 13) in both the front and rear housing. Make sure that bearing lock pins (Item 14) are installed on each bearing.
- 3. Install (2) new O-rings (Item 16) in the groove on each side of the center housing.
- 4. Instail a pair of wear plates (item 15) on the front housing. Bring the front and center housing together with the (2) housing pins (Item 17) installed in their location holes.
- Install the drive and idler gear shaft assemblies into the center/front housings assembly.
- 6. Install a pair of wear plates (Item 15) into the rear housing and assemble the rear housing to the pump along with (2) more housing pins
- Install the 4 housing bolts and nuts and tighten.

# II. Single Internal Mechanical Seal (G2, G4, G6, G8).

### Reference Drawings SD-2537, SD-2538

- 1 Prior to installation of new seal, clean seal housing (Item 30) and shaft. Burrs, etc. on shaft may damage the TFE wedge when passing over the shaft.
- Lightly coat seal head face and I.D. with oil or TFE spray and carefully slip over shaft and into seal housing with the face end out.

- If using a refurbished seal seat (Item 55), install new TFE O-ring (Item 55A) and pass over shaft, pushing seal head (Item 60) in front of it until inboard side of O-ring groove in seal seat (Item 55) comes flush with end of seal housing (Item 30)
- 4 Carefully tighten seal head set screws through pipe plug port in seal housing, taking up on each gradually while rotating shaft.
- 5 Reinstall gland nut (Item 36) and tighten, thereby compressing seal seat surface against spring loaded seal face.
- 6. Tighten gland nut and gland lock nut (Item 35).

# III. Single Internal Mechanical Seal (GH8, GA12, GA16).

### Reference Drawing SD-2613, SD-2775

- Before replacing seat assembly, lubricate seal ring with lightweight machine oil or other lubricant compatible with pumped fluid. Then carefully align slot in seal seat (Item 55) with seat retainer pin. Place protective material over polished seal seat surface and press seal seat into seat retainer (Item 36).
- To reassemble, install seal head (Item 60) on drive shaft and remove holding clips. Adjust seal head so that seal face is approximately 145 inches back from the front surface of the front housing on GA12/16 models. On GH8 model center set screw on seal head in pipe plug port
- 3. Tighten seal head set screws through tapped port. Replace pipe plug (Item 62 or 63).
- 4. Assemble seat retainer (Item 36) with seal seat installed and a <u>new</u> seat retainer O-ring (Item 55A) over drive shaft (Item 4).
- 5. Tighten seat retainer bolts (Item 39A) which will set proper compression on seal head.

## IV. Single External Mechanical Seal (G2, G4, G6, G8).

### Reference Drawing SD-2537, SD-2538

- Prior to installation of either refurbished or new seal parts, clean housing and shaft. Remove any burns or buildup which could damage TFE wedge. Make sure there are no sharp edges on end of shaft or on shaft flat.
- If using refurbished seal seat install with a new TFE O-ring, and slide over shaft into the front housing (Item 1) with the lapped side facing out.
- 3. Screw on gland nut (Item 36) to position seat and tighten.
- 4. Tighten gland lock nut (Item 35)
- Lightly coat seal head face and I.D. with oil or TFE spray. Carefully and gently, push seal head over shaft, taking care not to damage TFE wedge or seal face.
- Pull shaft away from pump as far as built-in end play will allow it, then fully compress seal head face against seal seat, and then back off seal head until 1/32" of seal face becomes visible. Tighten seal head set screws securely.
- V. Double Mechanical Seal (G2, G4, G6, G8).

### Reference Drawing SD-2537, SD-2538

- Install new seal housing gasket (Item 31), screwing it down the front housing hub until it meets the lock nut.
- Install new or refurbished pump end seal seat (!tem 56) with new O-ring. Slide seal seat over shaft until O-ring is still visible and has not yet entered front housing (Item 1).
- 3a. For G2 & G4 pumps, replace seal housing (Item 30) and install new or refurbished seal head (Item 60), making sure set screws are backed out and will not mar shaft. Do not tighten set screws.

- 3b. For G6 and G8 pumps, install new seal head as above, but prior to replacing seal housing (Item 30), push seal head against pump end seal seat (Item 56) compressing seal face as far as it will go. Tighten seal head set screws.
- 4 Screw seal housing tightly on pump hub, compressing O-ring and locking pump end seal seat firmly in place.
- Push seal housing gasket (Item 31) up against recessed bore in seal housing and tighten lock nut (Item 32).
- Install new or refurbished drive end seal seat (Item 55) with new seat O-ring.
- 7. Screw on gland nut (Item 36) and tighten firmly compressing seat O-ring and locking drive end seal seat in place. Tighten gland lock nut (Item 35).
- With G2 & G4 pumps, center seal head setscrews with seal housing port and tighten set screws.
- 9. Reinstall flush connections.

Note. It is recommended that seal be tested at this point by pressurizing seal housing with suitable fluid at 10-15 psi above pump discharge pressure. Rotate shaft by hand and observe for any leakage along the shaft in either direction. If leakage rate is small sometimes a run in period of 5-20 minutes will cause everything to seat properly.

# VI. Double Mechanical Seal (GH8, GA12, GA16).

### Reference Drawing SD-2613, SD-2775

 Before replacing seat, lightly lubricate seat nng. Then carefully align slot in seal seat with pump end seat pin. Place protective material over polished seal seat surface and press seal seat into front housing (Item 1).

- Reassemble front housing to pump. Replacement of housing O-ring (Item 16) is recommended, Install seal head on drive shaft (Item 4). Remove holding clips. Adjust seal head so that contact is made with pump end seal seat. Assembly seat retainer with drive end seal seat, previously installed and a new seat retainer O-ring (Item 37). Tighten seat retainer bolts (Item 39A) which will set proper compression on seal head.
- Tighten seal head set screws through port.
   Replace pipe plug (Item 62 or 63) and previous piping for flushing of double seal.
- 4. Test seal installation before returning pump to service. Using flush connections in front housing, pressurize the seal cavity in the front housing at 10-15 psi above pump discharge pressure. To be sure components are seated properly, rotate shaft by hand several times. Remove front drive bearing flush plug to observe pump end of shaft. Observe shaft and gland at coupling end. There should be zero leakage from either end.

# BOLT-ON THERMAL JACKETS INSTALLATION

The following tools are required:

- Suitable wrenches (open end socket or adjustable) to bolt jacket halves together with 1/4", 3/8", or ½". Bolts provided with jacket.
- Heat transfer cement (Termon "standard grade: or equivalent) to fill any slight clearance between the interior surface of the bolt-on jacket and the exterior surface of the pump.
- A suitable mason's trowel to apply heat transfer cement to the interior surface of the jacket.
- · Damp paper towels or rags for clean-up.
- 1. Install Gearchem pump that is to be jacketed in the process line.
- Visually inspect pump to be jacketed and remove any foreign material (debris, packing lists, or identification tags) which might come between the inner jacket surface and the pump. NOTE: Pumps having painted surfaces require no special preparation. Paint should be dry.

- Check for proper fit of the bolt-on jacket halves by removing bolts which hold the halves together, and place both halves around the pump. Normally there is a slight clearance between the inner jacket surface and the pump.
- Remove jacket halves from the pump and lay them on a clean, dry, work area, inner surfaces face up.
- 5. With a trowel, coat the inner surfaces of the jacket halves with heat transfer cement. Coating should be approximately 1/8" to 1/4" thick. Also dab a small quantity of the cement on the back of the pump flanges in three or four places.
- Place jacket halves with heat transfer cement on pump and press firmly in place. Bolt jacket halves together with jacket bolts removed in Step 3.
- 7. Tighten bolts alternately to assure snug, even seating of the jacket halves on the pump. NOTE: As bolts are tightened alternately excess heat transfer cement will extrude from edges of the jackets and at flange interfaces. Remove this excess cement with trowel.
- Use damp rags or paper towels to clean any excess heat transfer cement from the installation. Make sure there is no heat transfer cement on the threads of the valve stems.
- Allow heat transfer cement to dry for 24 hours (above 32°F) before applying heating medium to the bolt-on jacket

### REMOVAL

The following tools are required:

- Rubber or plastic mallet to dislodge jacket halves form heat transfer cement and pump.
- Suitable wrenches (open-end, socket or adjustable) to remove bolts holding jacket halves on pump.
- A hand chisel to remove any chunks of heat transfer cement that adhered to the inner surfaces of the bolt-on jacket.

- 1. Turn off heating medium supply and allow jacket/pump to cool to ambient temperature. Remove heating medium jumpovers from jacket halves with suitable wrenches. NOTE: If jacket halves are being removed to repair the pump or replace it with an identical component and flexible metal hoses are used as jumpovers, it is normally unnecessary to remove the jumpovers. Work on the pump can proceed with the jacket halves dislodged from the pump while the heating medium jumpovers remain connected to the drain and supply couplings.
- Remove bolts holding jacket halves on the pump. Tap the jacket halves lightly with a rubber or plastic mallet to dislodge them from the pump. NOTE: Jacket halves may be pried apart with a screwdriver or hand chisel, but this should be done very carefully with only norminal force.
- 3. In most instances, the heat transfer cement adheres to the pump and not the inner surfaces of the jacket. The cement can be easily chipped away from the pump surface with a hand chisel. Any chunks of the heat transfer cement adjoining to the inner surface of the jacket halves should be removed also. Residual traces of heat transfer cement on the inner surfaces of the jacket halves need not be removed. These traces neither affect a good fit nor inhibit good thermal performance.
- 4. When inside surfaces of jacket halves are clean, the jacket is ready for re-use. If the gear pump is to be repaired and reused, be sure to remove heat transfer cement adhering to its surface before reinstalling the ECO bolton jacket.

## **TROUBLESHOOTING**

DIFFICULTY	PROBABLE CAUSE	REMEDY
NO LIQUID DELIVERY	Pump not primed     Suction and/or discharge valve closed     Wrong direction or rotation     Suction plugged     Air leak in suction     Suction lift too high      Motor incorrectly wired	1 Prime pump 2 Open valves 3 Reverse rotation 4 Eliminate plug 5 Locate and repair leak 6 Do not exceed vapor pressure of liquid 7 Check wiring diagram
LOW LIQUID DELIVERY	Discharge pressure higher than expected.     Air leak in suction     Rotational speed incorrect     Pump worn or damaged internal parts	1 Reduce pressure 2 Locate and repair leak 3 Check speed and wiring 4 inspect and repair as required
PUMP GRADUALLY LOSES PRIME	Air leak in suction     Suction lift too high     Air or gas in liquid     Pump worn or damaged	Locate and repair leak     Increase suction pressure     Eliminate air or gas     Inspect and repair as required
PUMP NOISY	Pump cavitating  Pump worn or damaged Air or gas in liquid Foreign particles in liquid	Increase suction pressure to provide sufficient NPSH     Inspect and repair as required     Eliminate air or gas     Install (or clean) strainer in inlet pipe
MOTOR RUNS HOT OR OVERLOADS	1 It is normal for motors to feel hot even when not overloading 2 Discharge pressure too high 3 Liquid viscosity higher than expected 4 Rotational speed too high 5 Binding internal pump parts 6 Motor wired incorrectly	1 Check motor amp draw to be sure 2 Lower pressure Check pressure relief valve setting and for defective discharge pressure gauge 3 Thin liquid or install larger motor 4 Reduce speed 5 Inspect and correct condition 6 Check wiring diagram
SEAL LEAKS	Operated pump dry (starved suction, dry prime)     Solids in product     Material incompatibility with product     Viscosity	Open valves and prime pump     Add strainer in suction piping (100 mesh)     Consult Factory     Consult Factory

# PUMP SPECIFICATION CHART

6.8	22 0 (S D) 14.5 (S 3) 26 (3 45) 50 (3 45) 50 (10.3) 150 (10.3) 150 (10.3) 150 (10.3) 150 (10.3) 150 (10.3) 150 (10.3)	0 TO +210 °F (-18 TO +99 °C)	S00000 (1000) S00 (100) S00 (100) 1750 RPH 1 THD 1 THD REVERSIBLE S00 (12 7) INTERNAL SIEEVE BY PUMPED FLUID STD OR LANTERN RING VITON SGL. DBL. STERNAL SGL. DBL. (5)
	.3) 22 5.89) 136 9.9) 136 .90 3.7 -100 32 °C) (-73	ů.Û	NG SGL
99	10 0 (2 68 4 (2) 68 1 (2) 100 10 100 10 10 10 10 10 10 10 10 10 10 10 10 10 1	0 TO +210 (-18 TO +99	S00000 (100000) 500 (100) 1750 RPH 1750 RPH 3/4 THD 8/4 THD REVERSIBLE 500 (12.7) INTERNAL SLEEVE BY PUMPED FLUIT STD OR LANTERN R: VITON SGL, DBL, ETENAL SGL, DBL, ETENAL
64	3 0 ( 60 ) 2 0 ( 45 ) 189 (7 15 ) 100 (6.9 ) 150 (10 3 ) -100 TO 450 °F (-73 TO +232 °C)	0 TO +210 °F (-18 TO +99 °C)	S00000 (100000) 500 (100) 500 (100) 1750 RPH 1750 RPH 172 THD 173 THD 173 THD 174 THD
62	1 5 (.34) 10 (.23) 10 (4.08) 50 (3.45) 50 (3.45) -100 TO -450 °F (-73 TO -232 °C)	0 T0 +210 •F (-18 T0 +99 •C)	500000 (100000) 500 (1000) 500 (1000) 1750 RPH 1/4 THD
PUMP SIZE	MAXIMUM FLOW 0 1750 RPH, 0 PRESSURE GPH (M3/HR) MAXIMUM FLOW 0 1500 RPH, 0 PRESSURE MAXIMUM CONTROL OF 1500 RPH, 10 PPLACE MAXIMUM DIFFERENTIAL PRESSURE MAXIMUM DIFFERENTIAL PRESSURE MAXIMUM DIFFERENTIAL PRESSURE MAXIMUM CASING PRESSURE TEMPERATURE RANGE : METAL/METAL GEARS TEMPERATURE RANGE : METAL/METAL GEARS METAL/CARBON GEARS METAL/CARBON GEARS PEEK/PEEK GEARS	METAL/PLASTIC GEARS PLASTIC/PLASTIC GEARS	HAXIMUM VISCOSITY HINIMUM VISCOSITY CERAMIC WEAR PLATES SSU (CPS) HAXIMUM ROTATIONAL SPEED HAX ROTATION DIRECTION ROTATION DIRECTION ROTATION DIRECTION ROTATION DIRECTION ROTATION STREET BEARING LUBRICATION AVAILABLE SEALING ARRANGEMENTS PUMP WEIGHT LES (Kg)
	<del></del>	55	(3)

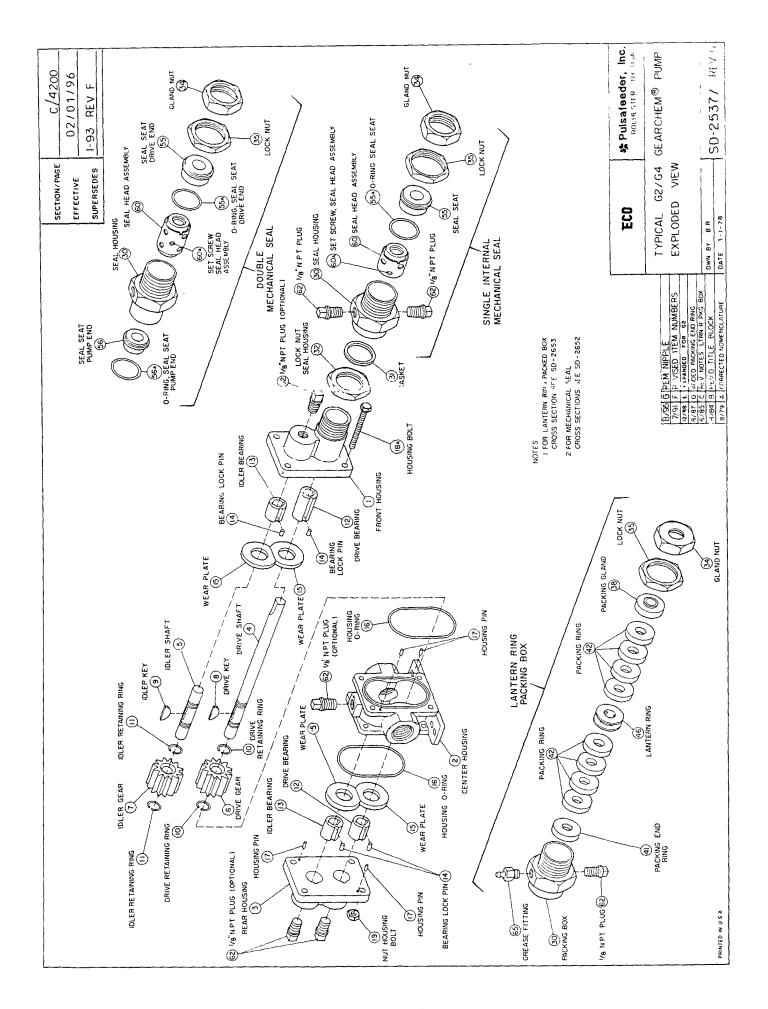
PUMP SIZE	GHB	GA 12	GA16
PRESSURE GPM (PRESSURE GPM (PR	22 0 (5.0) 14.5 (3.3) 1.3687 (51.78) 100 (6.9)	NA 28.0 (6.4 2.792 (105.7)	NA 55 0 (12 5) 5.584 (211 4) 100 (6 9)
GEARS PSIG METAL GEARS CARBON GEARS	100 (6.9) 150 (10.3) -100 TO +50 *F (-73 TO +232 *C)	150 (10.7) 150 (10.3) -50 10 +450 *F (-45 T0 +232 °C)	100 (6.9) 150 (10.3) -50 TO +450 °F (-45 TO +232 °C)
METAL/PLASTIC GEARS	0 TO +210 +F (-18 TO +99 +C)	0 TO +210 °F (-18 TO +99 °C)	0 TO +210 +F (-18 TO +99 *C)
SSU (CPS) SCOSITY METAL/METAL GEARS SSU (CPS) SCOSITY CERAMIC WEAR PLATES SSU (CPS) [ATIONAL SPEED METAL/METAL GEARS	500000 (100000) 500 (100) 500 (100) 1750 RPH 1450 RPH	500 (1000:0) 500 (100) 500 (100) 1150 RPH	\$00000 (100000) \$00 (100) \$00 (102) 1150 RPH 1150 RPH
BSPT, 19	THD 1 THD REVERSIBLE	문문》	2 FLG 2 FLG REVERSIBLE
PACKING TECHANICAL	750 (19 05) INTERNAL SLEEVE BY PUMPED FLUID LANTERN RING INTERNAL SGL, DBL		1 000 (25 4) INTERNAL SLEEVE BY PUMPED FLUID LANTERN RING INTERNAL SGL. DBL
<u>                                    </u>	SSU SSU SSU SSU SSU SSU SSU SSU SSU SSU	RE GPH (H3/HR)  LT00 REV (CC/REV) PS1 (BARS) PS1 (BARS) PS1G (BARS) PS1G (BARS) GEARS  GEARS  GEARS  L GEARS  R GEARS  L GEARS  L GEARS  R	RE   GPH (H3/HR)   22 0 (5.0)   14.5 (3.3)   14.5 (3.3)   14.5 (3.3)   14.5 (3.3)   14.5 (3.3)   14.5 (3.3)   14.5 (3.3)   14.5 (3.3)   14.5 (3.3)   14.5 (3.3)   14.5 (3.3)   15.5 (3.3)

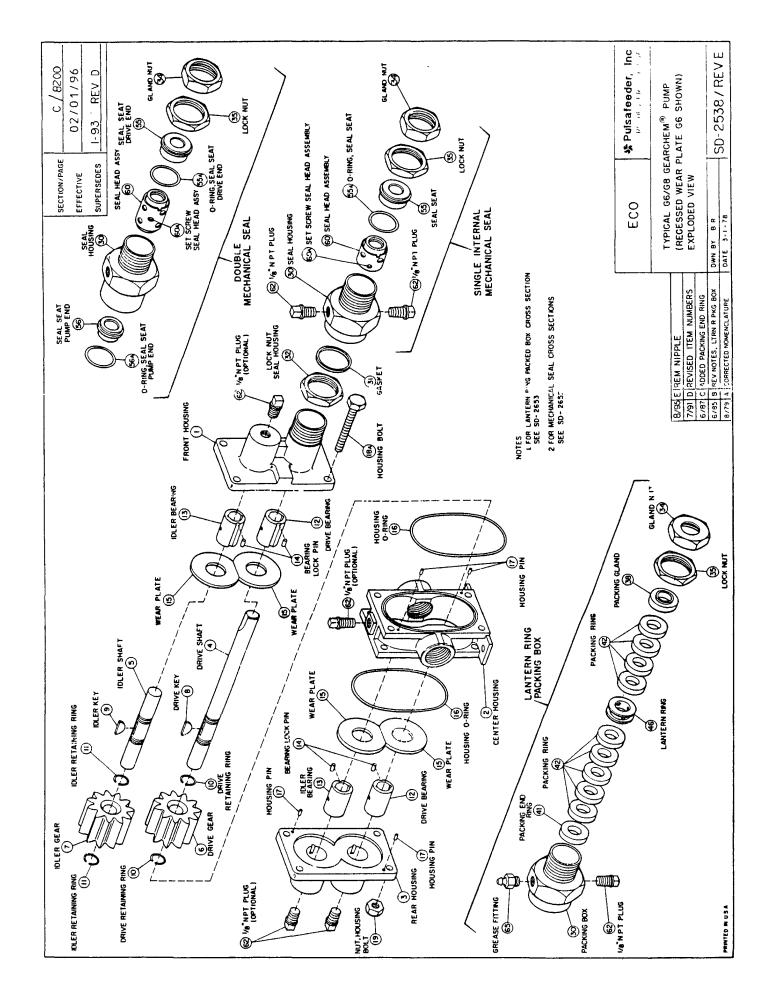
NOTES

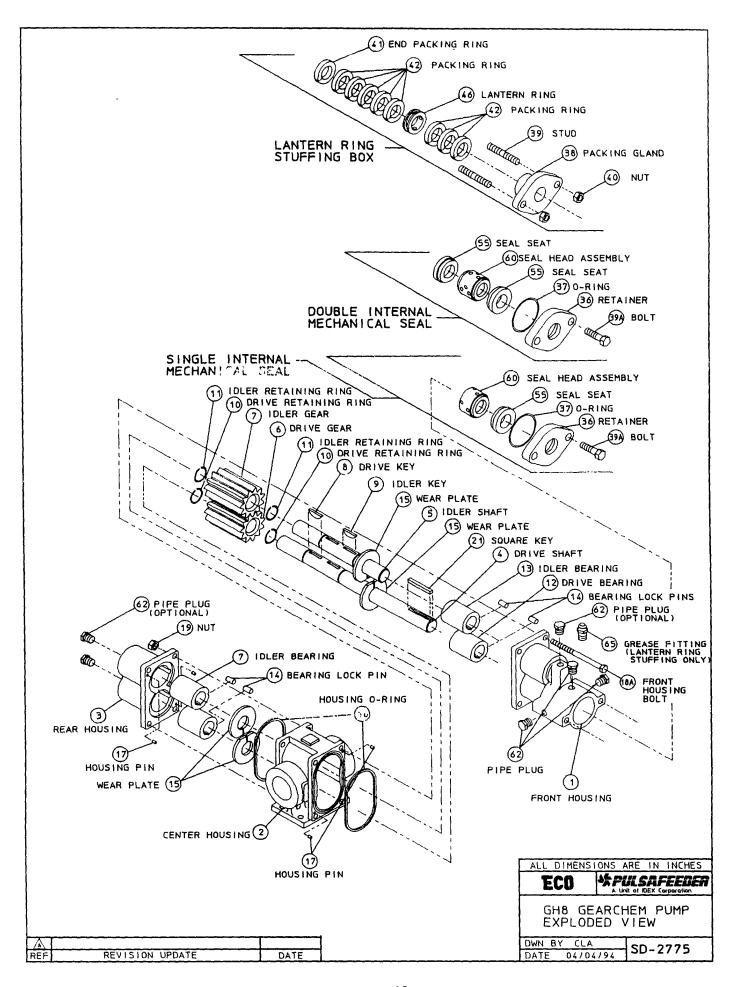
(1) FOR TEMPERATURES OVER 110 °F TRIMMED PLASTIC GEARS ARE REQUIRED

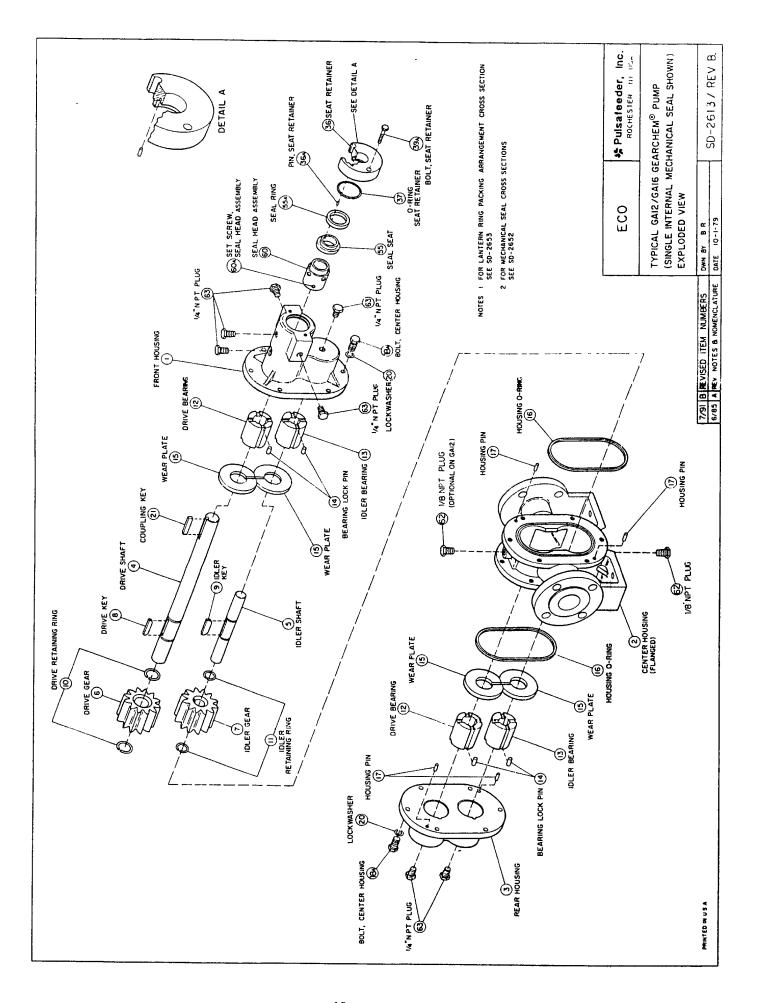
(2) HIGHER VISCOSITIES REQUIRE REDUCED SPEEDS

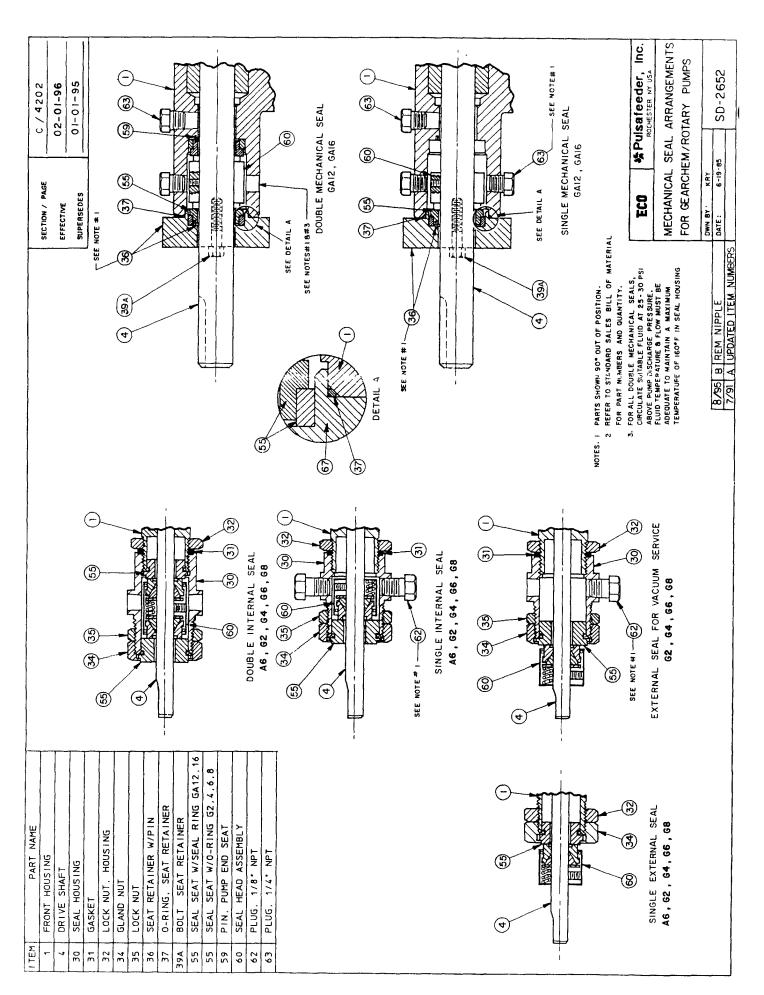
(3) THE ISOCHEM SERIES OF PUMPS OFFERS SEALLESS DESIGNS

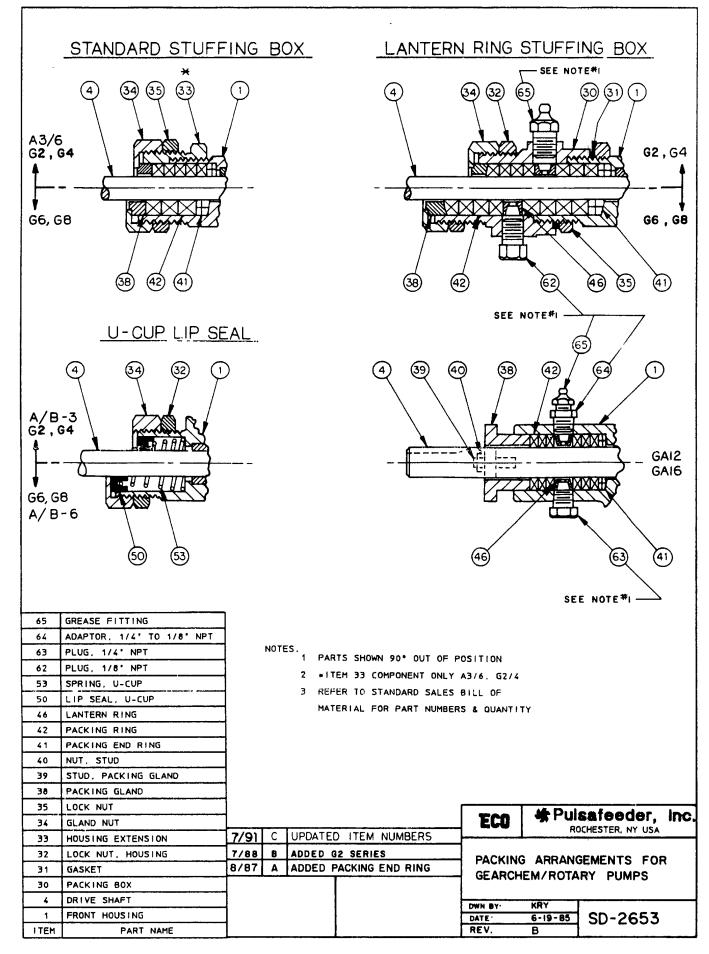








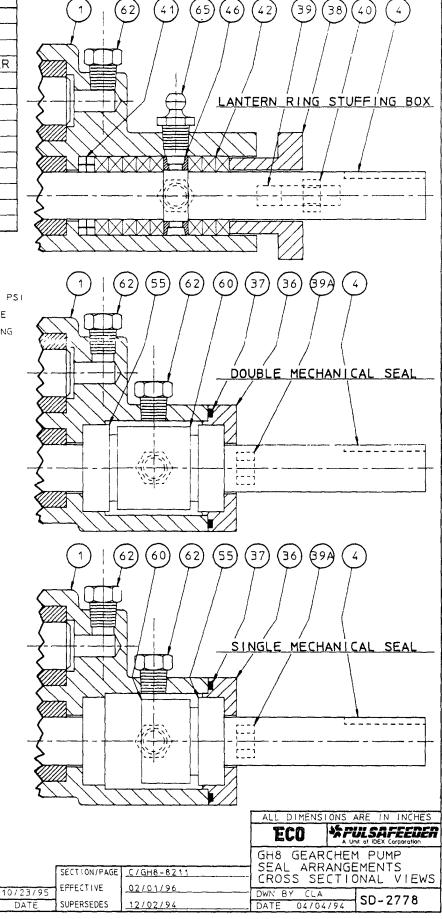




ITEM	PART NAME
1	FRONT HOUSING
4	DRIVE SHAFT
36	SEAT RETAINER
37	O RING, SEAT RETAINER
38	PACKING GLAND
39	STUD, PACKING GLAND
39A	BOLT, SEAT RETAINER
40	NUT, STUD
41	PACKING END RING
42	PACKING RING
46	LANTERN RING
55	SEAT W/SEAL RING
60	SEAL HEAD ASSEMBLY
62	PLUG, 1/8° NPT
NOTES	

### NOTES

- 1 ) REFER TO STANDARD SALES BILL OF MATERIALS
- 2 ) FOR ALL DOUBLE MECHANICAL SEALS, CIRCULATE SUITABLE FLUID AT 25-30 PSI ABOVE PUMP DISCHARGE PRESSURE FLUID TEMPERATURE AND FLOW MUST BE ADEQUATE TO MAINTAIN A MAXIMUM TEMPERATURE OF 160° IN SEAL HOUSING



A DRAWING UPDATE REVISION UPDATE

### GEARCHEM PUMP

### SIGNIFICANT MODEL NUMBER SYSTEM AND AVAILABILITY TABLE

G2, G4, G6, G8, GH8	G								
GA12, GA16	GA								
POSITION NO	1	2	3	4	5	6	7	8	9

POSITION NO 1 2	3	4 5	6	7	8	9	
POSITION 1 SERIES G - GEARCHEM+ E	XTERNAL	SPUR G	EAR PUM	Р			
POSITION 2 PUMP SIZE	2	4	6	8	нв	12	16
Port Size Capacity (GPM MAX)	25°	50'	75°	1 00'	1 00°	1 50.	2 00.
Discharge pressure (PSIG MAX)	100	100	100	50	100	100	100
POSITION 3 AVAILABLE PUMP METALLU	RGIES A	ND TYPE	PORT C	ONNECTI	0N		
A = 316SS FNPT C = ALLOY C FNPT	X	X	X	×	X	X	
D = ALLOY 20 FNPT K = 316SS FBSPT	X X X	×××	××××	l ŝ	\	l ŝ	
M - ALLOY C FBSPT N - ALLOY 20 FBSPT	X X	Î x	X X	××××	X X X X	× × × × × × ×	
U - 316SS FLANGED V - ALLOY C FLANGED	^	^	^	^	<b>^</b>	l ŝ	X X
W - ALLOY 20 FLANGED				l		<u> </u>	×
POSITION 4 DRIVE GEAR MATERIAL	,						
C - ALLOY C D - ALLOY 20	×	X	×	×	×	×	×
T - TFE (Glass Filled) (1) E - PEEK (1)	×	×	×××	X X X			
POSITION 5 IDLER GEAR MATERIAL	L	L	L	L	I		
C - ALLOY C (2)	х	X	X	×	X	х	Х
D = ALLOY 20 (2) K = Carbon	×	X X X	×××××××××××××××××××××××××××××××××××××××	X X X	×××××××××××××××××××××××××××××××××××××××	×	×
T = TFE (Glass Filled) E = PEEK	×	×	×	×	×	X	X
POSITION 6 WEAR PLATE MATERIAL	L	1	L—	·	·		<u></u>
K - Carbon	×	X	X	X	X	X	X
T = TFE (Glass Filled) 7 = Ceromic (3)	X	×	X X X	X	X	X	×
E - Peek	×	x		×	X	l	<u> </u>
POSITION 7 BEARING MATERIAL	<del></del>	1 0	T U	<del></del>	1 0		
K - Carbon T - TFE (Glass Filled)	X	X	×	X	×	X X X	×××
4 - Carbon - Slotted	l	l	l	L	l	×	
POSITION 8 SEAL ARRANGEMENT STANDARD STUFFING BOX	Ι	r	Ι	ı	<del>,</del>	Γ	
B - Spill TFE Rings	×	××	×	×		l I	
G - Grafall(*) Rings	^	^	^	^			
U-CUP LIP SEAL J = Viton Lip Seal. (4)	×	×	×	×		,	
H-C Spring		^	^	^			
LANTERN RING STUFFING BOX							
N = Split TFE Rings R = Grafoll (*) Rings	X	X	X	×			
13 - Braided TFE Rings 15 - Grafoll (*) Rings	^		^	_ ^	X X	X	X X
is - statott (#/ Kings				1		\ ^	<b>1</b> ^
MECHANICAL SEALS (5) K = Internal Seat	X .	×	×	×			
TFE Face, MILC Seat Q = Internal Seat TFE Face,	x	x	×	×	×		ļ
Silicon CBD Seat T = Internal Seat	×	×	×	×	^		
CBN Face, MTLC Seat U = Internal Seal: CBN Face,	x	x	x	x	×		
Silicon CBD Seat  V - External Seat	x	×	x	×	^		
CBN Face, MTLC Seat W = External Seat CBN Face,	^	^	×	x			
Silicon CBD Seal  Y - Double Seal (6)	×	×	×	x			
CBN Face, MTLC Seat  2 - External Seal for	^	×	l ^	^			
Vacuum Service CBN Face, MTLC Sea!	^	^	^	^			
22 - Internal Seal						×	×
CBN Face, Ceramic Seat 24 = Internal Seat CBN Face, MTLC Seat				ļ		×	х
CBN Face, MTLC Seat 42 - Double Seat CBN Face, Ceramic Seat		}	\		-	×	×
44 - Double Seal (6) CBN Face. MTLC Seat				}		×	×
E = Double Seal: (6) CBN Face, Sillcon CBD Seal	.]				х		
Con race, Stricon Can Sea	1	<u></u>	J	<u> </u>	L	<u> </u>	l

### **GEARCHEM PUMP**

### SIGNIFICANT MODEL NUMBER SYSTEM AND AVAILABILITY TABLE

### (CONTINUED)

(CONTINUED)	<del> </del>		<del></del>		· · · · · ·	<u> </u>	<del></del>
PUMP SIZE	2	4	6	8	H8	12	16
POSITION 9 OPTIONS							
A - Bearing Flush Ports	×	х	×	×	×	STD	STD
B - PFA Coated, SS Hsg O-Rings, Metallic Bearing Lock Pins	×	×	x	×	×	×	×
C - Bearing Flush Ports, PFA Coated, SS Hsg O-Rings, Metallic Bearing Lock Pins	×	×	x	×	X		
D - Bearing Flush Ports, PFA Coaled, SS Hsg O-Rings, Metallic Bearing Lock Pins, Stotted Bearings (8)	×	×	×	×	×		
E - Bearing Flush Ports, PFA Coated, SS Hsg O-Rings, Metallic Bearing Lock Pins Stotted Bearings, (8) Slotted Wear Plates (9)	×	×	×	×			
J = GA12 with 1° Idler Shaft, (10) (Metallic Gear Only)						x	
N - Narrow Width Gears (11)		×	×		•		
T - Temperature Trimmed Plastic Sear	×	×	×	×	×	×	×
V = Center Hsg - Vent	×	×	×	×	×	×	STD
X - Special (12)	×	×	×	×	×	×	×

### NOTES

- (1) Maximum differential pressure allowed for plastic/plastic gears is 50 PSIG
- (2) Pumps with metallic drive and idler gears require minimum viscosity of 100 cps and are limited to 1440 RPM maximum speed for G2-H8 pumps and 1150 RPM for GA12-16 pumps
- (3) Ceramic wear plates with metallic gears require minimum viscosity of 100 cps
- (4) Viton U-Cup lip seals are limited to 1150 RPM maximum speed
- (5) Not all mechanical seals available in all metallurgies
- (6) Double mechanical seals must be pressurized with seal fluid 15 to 20 PSIG above the pump discharge pressure
- (7) Standard GA12 and GA16 pumps furnished with bearing flush ports, metallic bearing lock pins, and slotted wear  $\rho lates$
- (8) Slotted bearings (GA12 and GA16) listed POSITION 7
- 19) Slotted wear plates reduce volumetric efficiency
- (10) J OPTION available only with metal idler gear
- (11) Designation for reduced capacity pump
- (12) Consult Factory
- (13) Specifications and availability subject to change without notice
- (\*) Registered Trademark

### G2 SERIES PUMP CONSOLIDATED B/M

	-				S	TANDARD PUMP	MATERIAL			
				316S: (A) OR	(K)	ALLOY (C) OF		ALLO	Y 20 R (N)	1
		DESCRIPTION	OTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
OSITIO	F 14	STANDARD PUMP - NON-VARIABLE CO	MPONE	NTS						
		HOUSING, FRONT	T	70109	31655	70110	ALLOY C	70111	ALLOY 20	1
		HOUSING, FRONT - LIP SEAL	1 1	70145	316SS	70146	ALLOY C	70147	ALLOY 20	1
		HOUSING, CENTER FNPT	<del>                                     </del>	70026	31655	70027	ALLOY C	70028	ALLOY 20	2
		HOUSING, CENTER FBSPT	1	70029	31655	70030	ALLOY C	70031	ALLOY 20	2
		HOUSING, REAR	1	70214	31655	70215	ALLOY C	70216	ALLOY 20	3
		+SHAFT, DRIVE	1	70372	31655	70373	ALLOY C	70374	ALLOY 20	4
		+SHAFT IDLER	1	70378	31655	70379	ALLOY C	70380	ALLOY 20	<del>-</del> _5
		+RING, RETAINING	1	7-6702	ALLOY 20	76701	ALLOY C	76702	ALLOY 20	10 1
		+KEY, METAL DRIVE GEAR	-	71910	ALLOY 20	71911	ALLOY C	71910	ALLOY 20	8
		+KEY, PLASTIC DRIVE GEAR	H 1	71916	ALLOY 20	71917	ALLOY C	71916	ALLOY 20	8
		+KEY, MTL/CBN IDLER GEAR	}	71910	ALLOY 20	71917	ALLOY C	71910	ALLOY 20	9
		+KEY, PLASTIC IDLER GEAR	<b>#1</b>	71916		71917	<del> </del>	71916	ALLOY 20	9
		<u></u>	<del>  ,                                   </del>	<del></del>	ALLOY 20		ALLOY C		TFE TFE	
		+PIN, BEARING LOCK	4	41801	TFE	41801	TFE	41801	<del> </del>	14
		+O-RING, HOUSING	2	61101	TFE	61101	TFE	61101	TFE	16
		PIN. HOUSING	4	40801	31655	40801	316SS	40801	316\$\$	17
		BOLT, HOUSING	4	72006	18855	72006	188SS	72006	188SS	18A
		NUT, HOUSING BOLT		72101	18855	72101	18855	72101	188SS	19
		NAMEPLATE	1 1	41201	188SS	41201	18855	41201	18855	
	V	HOUSING CENTER - VENT FREPT HOUSING CENTER - VENT FREPT	1	70026-2 70029-2	316SS 316SS	70027 - 2 70030 - 2	ALLOY C	70028-2 70031-2	ALLOY 20 ALLOY 20	2
	1	PLUG, 1/8' NPT	<b>±</b> 1	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
		HOUSING, FRONT - BRG FLUSH	,	70115	31688	70117	ALLOY C	70123	ALLOY 20	1
11	١.	HOUSING, FRONT-BRG FLUSH LIP SEAL	1 1	70148	31655	70149	ALLOY C	70150	ALLOY 20	1
	1^	HOUSING, REAR - BRG FLUSH	1	70212	31655	70234	ALLOY C	70233	ALLOY 20	3
C	:	PLUG, 1/8' NPT	*3	W772565-316	31688	52301	ALLOY C	52300	ALLOY 20	62
1 1		+PIN. BEARING LOCK	4	41802	ALLOY 20	41806	ALLOY C	41802	ALLOY 20	14
11_		+O-RING. HOUSING	2	61104	SS/PFA	61104	SS/PFA	61104	SS/PFA	16
D		+BEARING SLOTTED	5	70419	CARBON	70419	CARBON	70419	CARBON	12 1
Ξ		+WEAR PLATE, SLOTTED	4	70526	CARBON	70526	CARBON	70526	CARBON	15
	148	5 DRIVE AND IDLER GEAR								
		+GEAR, DRIVE/IDLER	1-2	70672	ALLOY C	70672	ALLOY C	70672	ALLOY C	6,7
		+GEAR, DRIVE/IDLER	1-2	70673	ALLOY 20			70673	ALLOY ZO	6,7
OSITION		+GEAR, IDLER	1	70674	CARBON	70674	CARBON	70674	CARBON	7
OSITION C									TFE (GF)	6.7
OSITION C		+GEAR. DRIVE/IDLER	1-2	70675	TFE(GF)	70675	TFE(GF)	70675	1	
DSITION C D K			1-2	70675 70676	TFE (GF)	70675 70676	PEEK	70675	PEEK	67
DSITION C D K T	1 6	+GEAR. DRIVE/IDLER		···						6 7
DSITION C D K T	1 6	+GEAR. DRIVE/IDLER +GEAR. DRIVE/IDLER		···						6 7
OSITION C D K T E	16	+GEAR. DRIVE/IDLER +GEAR. DRIVE/IDLER WEAR PLATE MATERIAL	1-2	70676	PEEK	70676	PEEK	70676	PEEK	
D K T E DSITION	16	+GEAR. DRIVE/IDLER +GEAR. DRIVE/IDLER WEAR PLATE MATERIAL +WEAR PLATE		70676	PEEK CARBON	70676 70523	PEEK CARBON	70676	PEEK CARBON	15
DSITION C D K T E DSITION K T	TTION 9 O	+GEAR. DRIVE/IDLER +GEAR. DRIVE/IDLER WEAR PLATE MATERIAL +WEAR PLATE +WEAR PLATE	1-2	70676 70523 70524	CARBON TFE (GF)	70676 70523 70524	CARBON TFE(GF)	70523 70524	CARBON TFE(GF)	15 15
DSITION C D K T E DSITION K T Z E		+GEAR. DRIVE/IDLER  +GEAR. DRIVE/IDLER  WEAR PLATE MATERIAL  -WEAR PLATE  -WEAR PLATE  -WEAR PLATE	1-2	70676 70523 70524 70525	CARBON TFE (GF) CERAMIC	70676 70523 70524 70525	CARBON TFE(GF) CERAMIC	70523 70524 70525	CARBON TFE(GF) CERAMIC	15 15
DSITION C D K T E DSITION K T Z E		•GEAR. DRIVE/IDLER •GEAR. DRIVE/IDLER  WEAR PLATE MATERIAL •WEAR PLATE •WEAR PLATE •WEAR PLATE •WEAR PLATE	1-2	70676 70523 70524 70525	CARBON TFE (GF) CERAMIC	70676 70523 70524 70525	CARBON TFE(GF) CERAMIC	70523 70524 70525	CARBON TFE(GF) CERAMIC	15 15 15
OSITION  C  D  K  T  E  OSITION  K  T  Z  E  OSITION  K		+GEAR. DRIVE/IDLER +GEAR. DRIVE/IDLER  WEAR PLATE MATERIAL -WEAR PLATE +WEAR PLATE -WEAR PLATE -WEAR PLATE -WEAR PLATE -WEAR PLATE -WEAR PLATE	1-2	70676 70523 70524 70525 70534	CARBON TFE(GF) CERAMIC PEEK	70523 70524 70525 70534	CARBON TFE (GF) CERAMIC PEEK	70523 70524 70525 70534	CARBON TFE(GF) CERAMIC PEEK	15 15 15

<sup>&</sup>quot;COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

### G2 SERIES PUMP CONSOLIDATED B/M

		{	_ <del> </del>	STA	NDARD PUMP MA	TERIAL			
			27 E (A)	(K)	ALLOY (C) OR	(M)	ALLOY	( 20 R (N)	
	DESCRIPTION	OTY	PART NO	MATL	PART NO	MATL	PART NO	MATL.	ITEM
SITION 8	SEAL ARRANGEMENT								
STANDARD :	STUFFING BOX		······································						
<del></del>	GLAND NUT	1	11710	ALLOY 20	11709	ALLOY C	11710	ALLOY 20	34
COMMON	LOCK NUT	1	21602	316SS	21602	31655	21602	316SS	35
PARTS	HOUSING EXTENSION	1-1	14503	ALLOY 20	74501	ALLOY C	14503	ALLOY 20	33
	PACKING GLAND	<del>-</del>	71506	ALLOY 20	71504	ALLOY C	71506	ALLOY 20	38
	*PACKING RING	5	62608	TFE (BRD)	62608	TFE (BRD)	62608	TFE(BRD)	42
В	PACKING END RING	1	62702	TFE(GF)	62702	TFE (GF)	62702	TFE (GF)	41
G	PACKING RING	6	62606	GRAFOIL	62606	GRAFOIL	62606	GRAFOIL	42
			····	l				.4	
U-CUP LIP	SEAL	·		·				7	
COMMON	LOCK NUT, HOUSING	1	11603	31655	11603	31655	11603	31688	32
PARTS	GLAND NUT	1	11724	ALLOY 20	11728	ALLOY C	11724	ALLOY 20	34
	+LIP SEAL	1	71402	VITON	71402	VITON	71402	VITON	50
1	SPRING, LIP SEAL	1	11206	ALLOY C	11706	ALLOY C	11206	ALLOY C	53
				-					
LANTERN R	ING STUFFING BOX								
	PACKING BOX	1	74504	ALLOY 20	74503	ALLOY (	74504	ALLOY 20	30
	GASKET	1	71101	TFE	71101	TFE	71101	TFE	31
	LOCK NUT, HOUSING	1	11603	31655	11603	31655	11603	31655	32
COMMON	GLAND NUT	1	11710	ALLOY 20	11709	ALLOY C	11710	ALLOY 20	34
PARTS	LOCK NUT	1	21602	31655	21602	31655	21602	316\$\$	35
	LANTERN RING	1	77113	TFE	77115	THE	77113	TFE	46
	PACKING GLAND	1	71506	ALLOY 20	71504	ALLOY C	7 1506	ALLOY 20	38
	GREASE FITTING	1	27201	310SS	27201	31055	27201	310SS	65
	PLUG. 1/8' NPT	*1	W772565-316	31655	52301	ALLOY C	52300	ALLOY ZO	62
N	+PACKING RING	8	62608	TFE(BRD)	62608	TFE(BRD)	62608	TFE(BRD)	42
	+PACKING END RING	1	62702	TFE(GF)	62702	TFE(GF)	62702	TFE(GF)	41
R	+PACKING RING	9	62606	GRAFOIL	62606	GRAFOIL	62606	GRAFOIL	42
INTERNAL	MECHANICAL SEAL		<del>,</del>				<del></del>		
	SEAL HOUSING	1	74509	ALLOY 20	74510	ALLOY C	74509	ALLOY 20	30
	GASKET	1	71101	TFE	71101	TFE	71101	TFE	31
COMMON	LOCK NUT, HOUSING	_ 1	11603	31655	11603	31655	11603	31655	32
PARTS	GLAND NUT	11	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
	LOCK NUT	1	21602	316SS	21602	316SS	21602	316SS	35
	PLUG, 1/8" NPT	*2	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
K	+SEAL HEAD ASSEMBLY	1	77033	020/TFE	77034	HCO/TFE	77033	020/TFE	60
	+SEAL SEAT W/ O-RING (TFE)	1	71551	ALLOY 20	71553	ALLOY C	71551	ALLOY 20	55
Q	+SEAL HEAD ASSEMBLY	1	77033	020/TFE	77034	HCO/TFE	77033	020/TFE	60
· · · · · · · · · · · · · · · · · · ·	+SEAL SEAT W/ O-RING (TFE)	1	7 1557	SICBD	71557	SICBD	71557	SICBD	55
T	+SEAL HEAD ASSEMBLY	1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
	+SEAL SEAT W/ O-RING (TFE)	1	71551	ALLOY 20	71553	ALLOY C	71551	ALLOY 20	55
U	+SEAL HEAD ASSEMBLY	1	77033	020/CBN	77037	HCO/CBN	77036	020/CBN	60
	+SEAL SEAT W/ O-RING (TFE)	1 1	7 1557	SICBD	71557	SICBD	71557	SICBD	55

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# G2 SERIES PUMP CONSOLIDATED B/M

-				STA	NDARD PUMP MA	ATERIAL			
			316SS (A) OR	s (K)	ALLO' (C) OF	( C ( M )	ALLO (D) D	Y 20 R (N)	
	DESCRIPTION	aTY	PART NO	MATL	PART NO	MATL	PART NO	MATL.	ITE
00171011	ef								
OSITION 8	SEAL ARRANGEMENT (CONT'D)								
	MECHANICAL SEAL	7	11719	111.07.20	11716	1 11 07 6	11719	ALLOY 20	34
COMMON	GLAND NUT	1 1		ALLOY 20		ALLOY C			32
PARTS	LOCK NUT, HOUSING	1 1	11603	316\$5	11603	31655	11603	31655	60
V	+SEAL HEAD ASSEMBLY	1-	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	
	+SEAL SEAT W/ O-RING (TFE)	1	71554	ALLOY 20	71556	ALLOY C	71554	ALLOY 20	55
DOUBLE ME	CHANICAL SEAL			1		1		T	
	SEAL HOUSING	1	74523	ALLOY 20	74519	ALLOY C	74523	ALLOY 20	30
	GASKET	1 1	71101	TFE	71101	TFE	71101	TFE	31
COMMON	LOCK NUT, HOUSING	1 1	11603	31655	11603	31655	11603	31655	32
PARTS	GLAND NUT	<u> </u>	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
	LOCK NUT	11	21602	31655	21602	31655	21602	31655	35
	+SEAL HEAD ASSEMBLY	1 1	77051	316/CBN	77051	316/CBN	77051	316/CBN	60
Y	+SEAL SEAT W/ O-RING (TFE) DR	1	71551	ALLOY 20	71553	ALLDY C	71551	AL! OY 20	55
<u> </u>	+SEAL SEAT W/ O-RING (THE) PUMP	1	71554	ALLUT 20	7 1556	ALLOY C	71554	ALLOY 20	56
EXTERNAL	MECHANICAL SEAL FOR VACUUM SERVICE								
	SEAL HOUSING	1	74509	ALLOY 20	74510	ALLOY C	74509	ALLOY 20	30
	GASKET	1	71101	TFE	71101	TFE	71101	1.56	31
COMMON	LOCK NUT, HOUSING	1	11603	31655	11603	31655	11603	31655	32
PARTS	GLAND NUT	1	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
	LOCK NUT	1	21602	31655	21602	31655	21602	31655	35
	PLUG. 1/8' NPT	#1	W772565-316	316SS	52301	ALLOY C	52300	ALLOY 20	62
	<del></del>	<del></del>		<del> </del>	<del></del>	<del> </del>	<del></del>		<del></del>

77036

71551

1

020/CBN

ALLOY 20

77037

71553

77036

71551

HCO/CBN

ALLOY C

020/CBN

ALLOY 20

60

55

+SEAL SEAT W/ O-RING (TFE)

Z

+SEAL HEAD ASSEMBLY

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

### G4 SERIES PUMP CONSOLIDATED B/M

			STA	NOARD PUMP MA	TERIAL			
		316SS (AL OR (K)		ALLOY (C) OR		ALLO (D) 0	Y 20 R (N)	
DESCRIPTION	YTO	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
OD BARIARAY - NON-VARIABLE CO	MPONEN	its						
HOUSING, FRONT		70109	31655	70110	ALLOY C	70111	ALLOY 20	1
HOUSING FRONT - LIP SEAL	1 1	70145	31655	70146	ALLOY C	70147	ALLOY 20	1
HOUSING CENTER FNPT	1	70014	316SS	70016	ALLOY C	70015	ALLOY 20	2
HOUSING, CENTER FBSPT	] ' ]	70020	31655	70022	ALLOY C	70021	ALLOY 20	2
HOUSING REAR	1	70214	31655	70215	ALLOY C	70216	ALLOY 20	3
+SHAFT, DRIVE	1	70372	31655	70373	ALLOY C	70374	ALLOY 20	4
+SHAFT IDLER	1	70378	316SS	70379	ALLOY C	70380	ALLOY 20	5
+RING RETAINING	4	76702	ALLOY 20	76701	ALLOY C	76702	ALLOY 20	10 11
+KEY METAL DRIVE GEAR		71906	ALLOY 20	71904	ALLOY C	71906	ALLOY 20	8
+KEY, PLASTIC DRIVE GEAR	1 • 1	71905	ALLOY 20	71903	ALLOY C	71905	ALLOY 20	8
+KEY MTL/CBN IDLER GEAR	Τ.	71906	ALLOY 20	7 1904	ALLOY C	71906	ALLOY 20	9
+KEY, PLASTIC IDLER GEAR	*1	71905	ALLOY 20	71903	ALLOY C	71905	ALLOY 20	9
PIN. BEARING LOCK	4	41801	TFE	41801	TFE	41801	TFE	14
+O-RING. HOUSING	7	61101	TFE	61101	TFE	61101	TFE	16
PIN HOUSING	6	U80:	31655	40801	31655	40801	31055	17
BOLT HOUSING	4	72006	188SS	72006	18855	72006	188SS	18A
NUT HOUSING BOLT	4	72101	18855	72101	18855	72101	18855	19
NAMEPLATE	1	41201	18855	41201	18855	41201	18855	

### NON-VARIABLE COMPONENTS FOR POSITION 9 OPTIONAL PUMPS

POSITION 9 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M

				HOUSING CENTER - VENT FNPT	1	70014-2	31655	70010-2	ALLOY C	70015-2	ALLOY 20	2
		-	٧	HOUSING, CENTER - VENT FBSPT	•	70020-2	31655	70022-2	ALLOY C	70021-2	ALLOY 20	2
				PLUG, 1/8' NPT	<b>×</b> 1	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
				HOUSING, FRONT - BRG FLUSH		70115	31655	70117	ALLOY C	70123	ALLOY 20	1
	- 1			HOUSING, FRONT-BRG FLUSH LIP SEAL	1	70148	31655	70149	ALLOY C	70150	ALLOY 20	1
	1		Α	HOUSING, REAR - BRG FLUSH	1	70212	316SS	70234	ALLOY C	70233	ALLOY 20	3
		c		PLUG, 1/8' NPT	ьЭ	52300	ALLOY 20	52301	ALLOY C	52300	ALLOY 20	62
			В	+PIN, BEARING LOCK	4	41802	ALLOY 20	41806	ALLOY C	41802	ALLOY 20	14
			٦	+O-RING, HOUSING	2	61104	SS/PFA	61104	SS/PFA	61104	SS/PFA	16
	ם			*BEARING, SLOTTED	5	70419	CARBON	70419	CARBON	70419	CARBON	12,13
E				+WEAR PLATE, SLOTIED	4	70509	CARBON	70509	CARBON	70509	CARBON	15
		$\top$		+GEAR, DRIVE/IDLER	1-2	70613	ALLOY C	70613	ALLOY C	70613	ALLOY (	6,7
		- (	- [	+GEAR DRIVE/IDLER	1-2	70633	ALLOY 20			70633	ALLOY 20	6 7
		- (	[	+GEAR, IDLER	1	70651	CARBON	70651	CARBON	70651	CARBON	7
				•GEAR, DRIVE/IDLER	1 - 2	70623	TFE (GF)	70623	TFE (GF)	70623	TFE (GF)	6,7
		ļ	. [	+GEAR, DRIVE/IDLER	1-2	70677	PEEK	70677	PEEK	70677	PEEK	6.7
		- (	N	KEY METAL DRIVE GEAR	*1	71910	ALLOY 20	71911	ALLOY C	71910	ALLOY 20	8
				+KEY, PLASTIC DRIVE GEAR	* '	71916	ALLOY 20	7 19 17	ALLOY C	7 19 16	ALLOY 20	8
		ļ		+KEY, MTL/CBN IOLER GEAR		71910	ALLOY 20	71911	ALLOY C	71910	ALLOY 20	9
		-		KEY, PLASTIC IDLER GEAR	*1	71916	ALLOY 20	7 19 17	ALLOY C	71916	ALLOY 20	9

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# G4 SERIES PUMP CONSOLIDATED B/M

				STA	NDARD PUMP MA	TERIAL			
			316SS (A) OR		ALLOY (C) OF		ALLO	Y 20 R (N)	
	DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
OSITION A	& 5 DRIVE AND IDLER GEAR								
C	+GEAR, DRIVE/IDLER	1-2	70638	ALLOY C	70638	ALLOY C	70638	ALLOY C	6 7
D	+GEAR, DRIVE/IDLER	1-2	70642	ALLOY 20			70642	ALLOY 20	6 7
K	+GEAR, IDLER	1	70611	CARBON	70611	CARBON	70611	CARBON	7
T	+GEAR, DRIVE/IDLER	1-2	70600	TFE (GF)	70600	TFE (GF)	70600	TFE (GF)	6.7
E	+GEAR, DRIVE/IDLER	1-2	70671	PEEK	70671	PEEK	70671	PEEK	6.7
OSITION 6	WEAR PLATE MATERIAL - **QTY 8 WHEN	USING	NARROW WINTH	GEARS		. <del> </del>			
	+WEAR PLATE	4	70501	CARBON	70501	CARBON	70501	CARBON	15
K	+WEAR PLATE, NARROW WIDTH GEARS	4	70536	CARBON	70536	CARBON	70536	CARBON	15
т	+WEAR PLATE	u = 4	70504	TFE (GF)	70504	TFE(GF)	70504	TFE (GF)	15
z	+WEAR PLATE	**4	70503	CERAMIC	70503	CERAMIC	70503	CERAMIC	15
E	+WEAR PLATE	w = 4	70535	PEEK	70535	PEEK	70535	PEEK	15
OSITION 7	BEARING MATERIAL		L	<del>                                     </del>					
K K	+BEARING	5	70404	CARBON	70404	CARBON	70404	CARBON	12 13
	+BEARING		70~01	IFE (GF)	70401	TFE(GF)	70-01	11-E (GF)	12
Ť	+BEARING	3	70402	TFE(GF)	70402	TFE (GF)	70402	TFE (GF)	12,1
			<u> </u>	<del></del>		<del>                                     </del>		<del></del>	
	SEAL ARRANGEMENT			·		············			
STANDARD	STUFFING BOX	<del></del>		1		T		1	
	GLAND NUT	1	11710	ALLOY 20	11709	ALLOY C	11710	ALLOY 20	34
COMMON	LOCK NUT	1	21602	31655	21602	31655	21602	31655	35
PARTS	HOUSING EXTENSION	1	14503	ALLOY 20	74501	ALLOY C	14503	ALLOY 20	
	PACKING GLAND	1	71506	ALLOY 20	71504	ALLOY C	71506	ALLOY 20	38
В	+PACKING RING	5	62608	TFE(BRD)	62608	TFE (BRD)	62608	TFE (BRO)	42
G	+PACKING END RING +PACKING RING	6	62702	GRAFOIL	62702	GRAFOIL	62702	GRAFOIL	41
	*FACKING KING	l.°	02000	drar ott	02000	GRAFOIL	02000	dicar or L	
U-CUP LIP	SEAL								
COMMON	LOCK NUT, HOUSING	1	11603	31655	11603	31655	11603	316SS	32
PARTS	GLAND NUT	1	11724	ALLOY 20	11728	ALLOY C	11724	ALLOY 20	34
j	+LIP SEAL	1	71402	VITON	71402	VITON	71402	VITON	50
	SPRING, LIP SEAL	1	11206	ALLOY C	11206	ALLOY C	11206	ALL DY C	53
							_		
LANTERN R	ING STUFFING BOX		·	<del>, ,</del>		<del> </del>	· · · · · ·	<del></del>	
	PACKING BOX	1	74504	ALLOY 20	74503	ALLOY C	74504	ALLOY 20	30
	GASKET	+1	71101	TFE	71101	TFE	71101	TFE	31
	LOCK NUT, HOUSING	1	11603	31655	11603	316SS	11603	31655	32
COMMON	GLAND NUT	1	11710	ALLOY 20	11709	ALLOY C	11710	ALLOY 20	34
PARTS	LOCK NUT	1	21602	31655	21602	31655	21602	316SS	35
	LANTERN RING	1	77113	TFE	77113	TFE	77113	TFE	46
	PACKING GLAND	1	71506	ALLOY 20	71504	ALLOY C	71506	ALLOY 20	38
	GREASE FITTING	1	27201	31055	27201	31055	27201	31055	65
	PLUG, 1/8' NPT	<u>⊬1</u>	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
И	+PACKING RING	8	62608	TFE (BRD)	62608	TFE (BRD)	62608	TFE (BRD)	42
	+PACKING END RING	1	62702	TFE (GF)	62702	TFE(GF)	62702	TFE(GF)	41

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

### G4 SERIES PUMP CONSOLIDATED B/M

			[	STA	NDARD PUMP MA	TERIAL			
	-		31655 (A) OR	ik)	ALLOY	( C ( H)	ALLO	Y 20 R (N)	
	DESCRIPTION	OTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
OSTITION 8	SEAL ARRANGEMENT (CONT'D)								
	MECHANICAL SEAL								
	SEAL HOUSING	1	74509	ALLOY 20	74510	ALLOY C	74509	ALIOY 20	30
	GASKET	1	71101	TFE	71101	TFE	71101	TFE	31
COMMON	LOCK NUT HOUSING	+-	11603	316SS	11603	31655	11603	31688	32
PARTS	GLAND NUT	1	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
	LOCK NUT	+	21602	31655	21602	31655	21602	316\$\$	35
	PLUG 1/8' NPT	*2	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
	+SEAL HEAD ASSEMBLY	1	77033	020/TFE	77034	HCO/TFE	77033	020/TFE	60
К	+SEAL SEAT W/ O-RING (TFE)	1	71551	ALLOY 20	71553	ALLOY C	7 155 1	ALLOY 20	55
	+SEAL HEAD ASSEMBLY	+	77033	020/TFE	77034	HCO/TFE	77033	020/TFE	60
û	+SEAL SEAT W/ O-RING (TFE)	1	71557	SICBD	7 1557	SICBD	71557	SICBD	55
	+SEAL HEAD ASSEMBLY	1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
T	+SEAL SEAT W/ O-RING (TFE)	1	71551	ALLOY 20	71553	ALLOY C	71551	ALLOY 20	55
	+SEAL HEAD ASSEMBLY	1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
U	SEAL SEAT W/ O-RING (TEE)	+	/1557	51(50	71507	SITBU	7 1557	SICBD	55
		<u> </u>		1 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1 37 40 1	7,1557	1 31200	
FXTERNAL	MECHANICAL SEAL							· · · · · · · · · · · · · · · · · · ·	
COMMON	GLAND NUT	1	11719	ALLOY 20	11716	ALLOY C	11719	ALLOY 20	34
PARTS	LOCK NUT HOUSING	1	11603	31655	11603	31655	11603	31655	32
	SEAL HEAD ASSEMBLY	1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
٧	+SEAL SEAT W/ O-RING (TFE)	+	71554	ALLOY 20	71556	ALLOY C	71554	ALLOY 20	55
		<u> </u>		1		1		1,,,,,,	
DOUBLE ME	CHANICAL SEAL								
	SEAL HOUSING	1	74523	ALLOY 20	74519	ALLOY C	74523	ALLOY 20	Э0
	GASKET	1	71101	TFE	71101	TFE	71101	TFE	31
COMMON	LOCK NUT HOUSING	1	11603	316SS	11603	31655	11603	31oSS	32
PARTS	GLAND NUT	1	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
	LOCK NUT	1	21602	31655	21602	31655	21602	316SS	35
	+SEAL HEAD ASSEMBLY	1	77051	316/CBN	77051	316/CBN	77051	316/CBN	60
·····	+SEAL SEAT W/ O-RING (TFE) DR	1 1	71551	ALLOY 20	71553	ALLOY C	7 155 1	ALLOY 20	55
Y	SEAL SEAT W/ O-RING (THE) PUMP	1	71554	ALLOY 20	71556	ALLOY C	71554	ALLOY 20	56
	- <del> </del>		I	ll		l		<u> </u>	
EXTERNAL I	MECHANICAL SEAL FOR VACUUM SERVICE				<del></del>		~		
	SEAL HOUSING	1	74509	ALLOY 20	74510	ALLOY C	74509	ALLOY 20	30
	GASKET	1	71101	TFE	71101	TFE	71101	TFE	31
COMMON	LOCK NUT HOUSING	1	11603	31655	11603	31655	11603	31655	32
PARTS	GLAND NUT	1	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
	LOCK NUT	1	21602	31655	21602	J1655	21602	310\$\$	35
	PLUG, 1/8' NPT	-1	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
	+SEAL HEAD ASSEMBLY	1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
Z			//050	UZU/LDN I	11031			1 020/CBN I	

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# G6 SERIES PUMP CONSOLIDATED B/M

			STAN	IDARD PUMP MA	TERIAL		,	
		316S RO (A)		ALLOY (C) OR		ALLO (D) 0	Y 20 R (N)	
DESCR+PT+ON	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
POSITION 3 STANDARD PUMP - NON-VARIABLE COM	PONENTS							
HOUSING, FRONT	1	40111	31655	40112	ALLOY C	40113	ALLOY 20	1
HOUSING, CENTER FNPT		40002	31655	40006	ALLOY C	40008	ALLOY 20	2
HOUSING, CENTER FBSPT	7 1	40011	31655	40023	ALLOY C	40017	ALLOY 20	2
. HOUSING, REAR	1	40218	31655	40219	ALLOY C	40220	ALLOY 20	3
+SHAFT, DRIVE	1	40359	31655	40361	ALLOY C	40373	ALLOY 20	4
+SHAFT, IDLER	1	40360	31655	40362	ALLOY C	40374	ALLOY 20	5
+RING. RETAINING	4	46702	ALLOY 20	46701	ALLOY C	46702	ALLOY 20	10,11
+KEY, METAL DRIVE GEAR		41905	ALLOY 20	41903	ALLOY C	41905	ALLOY 20	8
+KEY, PLASTIC DRIVE GEAR	~   • 1	41906	ALLOY 20	41904	ALLOY C	41906	ALLOY 20	6
+KEY, MTL/CBN IDLER GEAR		41905	ALLOY 20	41903	ALLOY C	41905	ALLOY 20	9
+KEY, PLASTIC IDLER GEAR	- 1 1	41906	ALLOY 20	41904	ALLOY C	41906	ALLOY 20	9
+PIN, BEARING LOCK	4	41801	TFE	41801	TFE	41801	TFE	14
+O-RING, HOUSING	2	41101	TFE	41101	TFE	41101	TFE	16
PIN, HOUSING	4	40801	31655	40801	31655	40801	31655	17
BOLT, HOUSING	4	62005	18855	62005	18855	62005	18855	184
NUT, HOUSING BOLT	4	62101	18855	62101	18855	62101	18855	19
NAMEPLATE	1	41201	18855	41201	18855	41201	18855	

### 41201 NON-VARIABLE COMPONENTS FOR POSITION 9 OPTIONAL PUMPS

POSITION 9 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M

		HOUSING, CENTER - VENT FNPT		40002-2	31655	40006-2	ALLOY C	40008-2	ALLOY 20	2	
		V	HOUSING, CENTER - VENT FBSPT	7 '	40011-2	31655	40023-2	ALLOY C	40017-2	ALLOY 20	2
			PLUG, 1/8" NPT	*1	W772565-316	316SS	52301	ALLOY C	52300	ALLOY 20	62
			HOUSING, FRONT - BRG FLUSH	1	40117	316SS	40123	ALLOY C	40125	ALLOY 20	1
		A	HOUSING, REAR - BRG FLUSH	1	40224	316SS	40231	ALLOY C	40234	ALLOY 20	3
	c		PLUG, 1/8° NPT	•3	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
			+PIN, BEARING LOCK	4	41802	ALLDY 20	41806	ALLOY C	41802	ALLOY 20	14
	-	-	+O-RING, HOUSING	2	41107	SS/PFA	41107	SS/PFA	41107	SS/PFA	16
┨ ┨	. —		+BEARING, SLOTTED		40428	CARBON	40428	CARBON	40428	CARBON	12.13
	)		+BEARING, SLOTTED	- 4	40417	TFE (GF)	40417	TFE (GF)	40417	TFE (GF)	12,13
			+WEAR PLATE, SLOTTED		40511	CARBON	40511	CARBON	40511	CARBON	15
E			+WEAR PLATE, SLOTTED	4	40513	TFE(GF)	40513	TFE(GF)	40513	TFE (GF)	15
		T	+GEAR, DRIVE/IDLER	1-2	40604	ALLOY C	40604	ALLOY C	40604	ALLOY C	6.7
			+GEAR, IDLER	1	40681	CARBON	40681	CARBON	40681	CARBON	7
			+GEAR. DRIVE/IDLER	1-2	40648	TFE (GF)	40648	TFE (GF)	40648	TFE(GF)	6.7
		١	+GEAR. DRIVE/IDLER	1-2	40717	PEEK	40717	PEEK	40717	PEEK	6.7
		N	+KEY, METAL DRIVE GEAR		41920	ALLOY 20	41913	ALLOY C	41920	ALLOY 20	8
		+KEY, PLASTIC DRIVE GEAR	<b>-</b> '	41921	ALLOY 20	41914	ALLOY C	41921	ALLOY 20	8	
			+KEY, MIL/CBN IDLER GEAR		41920	ALLOY 20	41913	ALLOY C	41920	ALLOY 20	9
			+KEY, PLASTIC IDLER GEAR	-  •1	41921	ALLOY 20	41914	ALLOY C	41921	ALLOY 20	9

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

### G6 SERIES PUMP CONSOLIDATED B/M

				STAN	OARD PUMP MA	TERIAL			
			316SS (A) OR	5 (K)	ALLOY (C) OF	( C (M)	ALLO	Y 20 R (N)	
	DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
051710111	• F 001//5 AND 101 FD 6645								
C C	+GEAR, DRIVE/IDLER	1-2	40668	ALLOY C	40668	ALLOY C	40668	ALLOY C	6.7
D	+GEAR, DRIVE/IDLER	1-2	40674	ALLOY 20			40674	ALLOY 20	6.7
K	+GEAR, IDLER	1	40622	CARBON	40622	CARBON	40622	CARBON	7
	+GEAR, DRIVE/IDLER	1-2	40600	TFE(GF)	40600	TFE (GF)	40600	TFE (GF)	6.7
E	+GEAR, DRIVE/IDLER	1-2	40715	PEEK	40715	PEEK	40715	PEEK	6.7
			· · · · · · · · · · · · · · · · · · ·	· <del>1</del>	<del></del>	<del> </del>			-
05 IT 10N 6	WEAR PLATE MATERIAL - **QTY 8 W	HEN USING		7	/0504	CARRON	40501	CARBON	15
<u>к</u>	+WEAR PLATE		40501	TFE(GF)	40501	TFE(GF)	40504	TFE (GF)	15
<u>T</u>	+WEAR PLATE		40503	<del></del>	40503	CERAMIC	40503	CERAMIC	15
<u>z</u>	+WEAR PLATE		40523	PEEK	40523	PEEK	40523	PEEK	15
Ε	+WEAR PLATE		40323	PEEK	40323	FEEK	40323	FEER	
OSITION 7	BEARING MATERIAL								
к	+BEARING		40426	CARBON	40426	CARBON	40426	CARBON	12.1
T	+BEAP I'IĞ	- 1 4	40425	TFE (GF)	40425	TFE(GF)	40425	TFE (GF)	12,1
				<del></del>		<del></del>		- <del></del>	
	SEAL ARRANGEMENT STUFFING BOX							<del></del>	
COMMON	GLAND NUT	1	21716	ALLOY 20	21711	ALLOY C	21716	ALLOY 20	34
PARTS	LOCK NUT	1	21602	316SS	21602	31655	21602	31655	35
	PACKING GLAND	1	21514	ALLOY 20	21512	ALLOY C	21514	ALLOY 20	38
В	+PACKING RING	- 4	26408	TFE(BRD)	26408	TFE (BRD)	26408	TFE (BRO)	42
	+PACKING END RING		26301	TFE	26301	TFE	26301	TFE	41
<u> </u>	+PACKING RING	- 4	26409	GRAFOIL	26409	GRAFOIL	26409	GRAFOIL	42
U-CUP LIP	SEAL								
COMMON	LOCK NUT	1	21602	31655	21602	31655	21602	316SS	35
PARTS	GLAND NUT	1	11710	ALLOY 20	11709	ALLOY C	11710	ALLOY 20	34
	+LIP SEAL	1	21417	VITON	21417	VITON	21417	VITON	50
1	SPRING. LIP SEAL	1	21206	ALLOY C	21206	ALLOY C	21206	ALLOY C	53
				A		LL			
LANTERN R	ING STUFFING BOX								
	PACKING BOX	1	24510	ALLOY 20	24509	ALLOY C	24510	ALLOY 20	30
	GASKET	1	21106	TFE	21106	TFE	21106	TFE	31
	GLAND NUT	1	21716	ALLOY 20	21711	ALLOY C	21716	ALLOY 20	34
COMMON	LOCK NUT	2	21602	31655	21602	31655	21602	316SS	35
PARTS	LANTERN RING	1	27103	ALLOY 20	27111	TFE	27103	ALLOY 20	46
	PACKING GLAND	1	21514	ALLOY 20	21512	ALLOY C	21514	ALLOY 20	38
	GREASE FITTING	1	27201	310SS	27201	310\$5	27201	310SS	65
	PLUG, 1/8" NPT	<b>+</b> 1	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
				1		1			
, pl	+PACKING RING	9	26408	TFE (BRD)	26408	TEE(BRD)	26408	TFE(BRD)	42
И	+PACKING RING +PACKING END RING	9	26408 26301	TFE (BRD)	26408 26301	TFE (BRD)	26408	TFE (BRD)	41

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

### G6 SERIES PUMP CONSOLIDATED B/M

DESCRIPTION		91635 (A) OR	i	ALLO'	Y C	ALLO	Y 20	
DESCRIPTION		I IAI UN	(K)	(C) O	R (M)	(0)	R (N)	ſ
	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	IΤE
SEAL ARRANGEMENT (CONT'D)								
1ECHANICAL SEAL								
<del></del>	1	24518	ALLOY 20	24519	ALLOY C	24518	ALLOY 20	30
	1		<del> </del>		TFE	21106	TFE	31
	2		<del> </del>		316SS		31655	35
			}		<del> </del>			34
			<del> </del>					62
<del></del>			<del> </del>		<del> </del>			60
	<del></del>				<del> </del>			55
<del> </del>	<del></del>			····			·- <del></del>	60
	<del></del>				<del> </del>		· <del> </del>	55
·	·	<del> </del>	·		<del> </del>			60
<del></del>	<del></del>		<del></del>		<del>  </del>			
·	<del></del>		<del> </del>	<del> </del>	<del>  </del>			55
<del></del>			<del> </del>		<del> </del>			60
+SEAL SEAT W/ U-RING (TFE)		21571	SICED	21571	SICED	215/1	SICRO	55
FCHANICAL SEAL								
7 <del></del>	1	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
		ļ	<del> </del>		<del> </del>			35
<del> </del>					+			60
<del></del>	<del></del>		<del></del>		<del>                                     </del>		,	55
			<del> </del>		<del> </del>			60
}			<del></del>		<del> </del>		<del></del>	55
			1		0.000		1 3.655	
HANICAL SEAL				· · · · · · · · · · · · · · · · · · ·	····	<del></del>	,	
SEAL HOUSING	1	24518	ALLOY 20	24519	ALLOY C	24518	ALLOY 20	30
GASKET	1	21106	TFE	21106	TFE	21106	TFE	31
LOCK NUT	2		31655		31655	<del></del>	31655	35
GLAND NUT	1		ALLOY 20		ALLOY C	21727	ALLOY 20	34
+SEAL HEAD ASSEMBLY		27092	316/CBN			27092	+	60
	2		<del></del>		<del> </del>		+	55
			l		l		,1:1	
ECHANICAL SEAL FOR VACUUM SERVIC	E							
SEAL HOUSING	1	24518	ALLOY 20	24519	ALLOY C	24518	ALLOY 20	30
GASKET	1	21106	TFE	21106	TFE	21106	TFE	31
LOCK NUT	2	21602	31655	21602	316SS	21602	31655	35
GLAND NUT	1	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
PLUG, 1/8' NPT	<b>u</b> 1	W772565-316	31655		<del></del>	52300		62
			<del></del>		<del> </del>		· <del> </del>	
<del></del>				<del></del>	<del> </del>			60
			<del> </del>		<del> </del>		<del></del>	55
	SEAL HOUSING GASKET LOCK NUT GLAND NUT  SEAL HEAD ASSEMBLY  SEAL SEAT W/ O-RING (TFE)  ECHANICAL SEAL FOR VACUUM SERVICE SEAL HOUSING GASKET LOCK NUT GLAND NUT PLUG, 1/8' NPT  SHAFT, DRIVE - 10'LG,  SEAL HEAD ASSEMBLY  SEAL SEAT W/ O-RING (TFE)	GASKET  LOCK NUT  CLAND NUT  PLUG. 1/8' NPT  SEAL SEAT W/ O-RING (TFE)  SEAL HEAD ASSEMBLY  SEAL SEAT W/ O-RING (TFE)  SEAL HEAD ASSEMBLY  SEAL HOUSING  GASKET  LOCK NUT  CLAND NUT  SEAL SEAT W/ O-RING (TFE)  SEAL HOUSING  SEAL HEAD ASSEMBLY  SEAL SEAT W/ O-RING (TFE)  SEAL SEAT W/ O-RING (TFE)	GASKET 1 21106  LOCK NUT 2 21602  GLAND NUT 1 21727  PLUG. 1/8' NPT -2 W772565-316  -SEAL HEAD ASSEMBLY 1 27097  -SEAL SEAT W O-RING (TFE) 1 21563  -SEAL HEAD ASSEMBLY 1 27097  -SEAL SEAT W O-RING (TFE) 1 21571  -SEAL SEAT W O-RING (TFE) 1 21563  -SEAL HEAD ASSEMBLY 1 27089  -SEAL SEAT W O-RING (TFE) 1 21563  -SEAL HEAD ASSEMBLY 1 27089  -SEAL SEAT W O-RING (TFE) 1 21571	GASKET 1 21106 TFE  LOCK NUT 2 21602 3165S  GLAND NUT 1 21727 ALLOY 20  PLUG. 1/8' NPT = 2 W772565-316 316SS  *SEAL HEAD ASSEMBLY 1 27097 020/TFE  *SEAL SEAT W/ 0-RING (TFE) 1 21563 ALLOY 20  *SEAL HEAD ASSEMBLY 1 27089 020/CBN  *SEAL SEAT W/ 0-RING (TFE) 1 21563 ALLOY 20  *SEAL HEAD ASSEMBLY 1 27089 020/CBN  *SEAL SEAT W/ 0-RING (TFE) 1 21563 ALLOY 20  *SEAL HEAD ASSEMBLY 1 27089 020/CBN  *SEAL SEAT W/ 0-RING (TFE) 1 21571 SICBD  *SEAL SEAT W/ 0-RING (TFE) 1 21571 SICBD  *SEAL SEAT W/ 0-RING (TFE) 1 21571 SICBD  **SEAL SEAT W/ 0-RING (TFE) 1 21571 SICBD  **SEAL SEAT W/ 0-RING (TFE) 1 21571 SICBD  **SEAL SEAT W/ 0-RING (TFE) 1 21563 ALLOY 20  **SEAL HEAD ASSEMBLY 1 27089 020/CBN  **SEAL SEAT W/ 0-RING (TFE) 1 21563 ALLOY 20  **SEAL SEAT W/ 0-RING (TFE) 1 21563 ALLOY 20  **SEAL SEAT W/ 0-RING (TFE) 1 21563 ALLOY 20  **SEAL SEAT W/ 0-RING (TFE) 1 21571 SICBD  ***HANICAL SEAL SEAT W/ 0-RING (TFE) 1 21571 SICBD  ***HANICAL SEAL SEAT W/ 0-RING (TFE) 1 21571 SICBD  ****HANICAL SEAL SEAT W/ 0-RING (TFE) 1 21564 ALLOY 20  ***SEAL HEAD ASSEMBLY 1 27089 020/CBN  ****SEAL HEAD ASSEMBLY 1 27092 316/CBN  ****SEAL HEAD ASSEMBLY 1 27092 316/CBN  *****SEAL SEAT W/ 0-RING (TFE) 2 21566 ALLOY 20  *****ECHANICAL SEAL FOR VACUUM SERVICE  ***********************************	GASKET 1 21106 TFE 21106  LOCK NUT 2 21602 3165S 21602  GLAND NUT 1 21727 ALLOY 20 21726  PLUG, 1/8' NPT -2 W772565-316 316SS 52301  **SEAL HEAD ASSEHBLY 1 27097 020/TFE 27099  **SEAL SEAT W**O-RING (TFE) 1 21543 ALLOY 20 21545  **SEAL HEAD ASSEHBLY 1 27097 020/TFE 27099  **SEAL SEAT W**O-RING (TFE) 1 21571 \$ICBD 21571  **SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 1 21571 \$ICBD 21571  **SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 1 21571 \$ICBD 21571  **SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 1 21571 \$ICBD 21571  **SEAL SEAT W**O-RING (TFE) 1 21571 \$ICBD 21571  **SEAL SEAT W**O-RING (TFE) 1 21571 \$ICBD 21571  **SEAL SEAT W**O-RING (TFE) 1 21563 ALLOY 20 21726  **SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 1 21563 ALLOY 20 21565  **SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 1 21563 ALLOY 20 21565  **SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 1 21563 ALLOY 20 21565  **SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 1 21571 \$ICBD 21571  **ANAICAL SEAL  SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 1 21571 \$ICBD 21571  **ANAICAL SEAL  SEAL HOUSING 1 24516 ALLOY 20 24519  GASKET 1 21106 TFE 21106  **LOCK NUT 2 21602 3165S 21602  GLAND NUT 1 27092 316/CBN 27092  **SEAL HEAD ASSEHBLY 1 27092 316/CBN 27092  **SEAL SEAT W**O-RING (TFE) 2 21566 ALLOY 20 21726  **SEAL HEAD ASSEHBLY 1 27092 316/CBN 27092  **SEAL SEAT W**O-RING (TFE) 2 21566 ALLOY 20 24519  GASKET 1 21106 TFE 21106  **SEAL HEAD ASSEHBLY 1 27092 316/CBN 27092  **SEAL SEAT W**O-RING (TFE) 2 21566 ALLOY 20 21726  **SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 2 21566 ALLOY 20 21726  **SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  **SEAL SEAT W**O-RING (TFE) 2 21566 ALLOY 20 21726  ***SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  ***SEAL SEAT W**O-RING (TFE) 1 21563 ALLOY 20 21726  ***SEAL HEAD ASSEHBLY 1 27089 020/CBN 27090  ***SEAL SEAT W	GASKET 1 21106 TFE 21106 TFE 21106 TFE LOCK NOT 2 21202 3165S 21602 3165S 21602 3165S GLAND NOT 1 21727 ALLOY 20 21726 ALLOY CO 21726 ALLOY CO 25EAL HEAD ASSEMBLY 1 27097 020/TFE 27099 HCO/TFE SEAL SEAT W O-RING (TFE) 1 21543 ALLOY 20 21565 ALLOY CO SEAL HEAD ASSEMBLY 1 27097 020/TFE 27099 HCO/TFE SEAL SEAT W O-RING (TFE) 1 21543 ALLOY 20 21565 ALLOY CO SEAL HEAD ASSEMBLY 1 27097 020/TFE 27099 HCO/TFE SEAL SEAT W O-RING (TFE) 1 21571 SICBD 21571	GASKET	GASKET

<sup>\*\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M
\*\*DELETE CORRESPONDING STANDARD PUMP COMPONENT, POSITION 3
\*DENOTES RECOMMENDED SPARE PART

### G8 SERIES PUMP CONSOLIDATED B/M

	-			STA	NDARD PUMP MA	TERIAL			
			316S (A) OR		ALLOY (C) OF		ALLO (D) 0	Y 20 R (N)	
	DESCRIPTION	OTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
POSITION 3	STANDARD PUMP - NON-VARIABI	LE COMPONE	NTS						
	HOUSING, FRONT	1	40111	31655	40112	ALLOY C	40113	ALLOY 20	1
	HOUSING, CENTER FI	NPT	40052	31655	40053	ALLOY C	40054	ALLOY 20	2
	HOUSING, CENTER FI	BSPT	40064	316SS	40065	ALLOY C	40066	ALLOY 20	2
	HOUSING, REAR	1	40218	31655	40219	ALLOY C	40220	ALLOY 20	3
	+SHAFT, DRIVE	1	40351	ALLOY 20	40347	ALLOY C	40351	ALLOY 20	۷
	+SHAFT, IDLER	1	40350	ALLOY 20	40346	ALLOY C	40350	ALLOY 20	5
	RING, RETAINING	4	46702	ALLOY 20	46701	ALLOY C	46702	ALLOY 20	10 1
	+KEY, METAL DRIVE GEAR		41905	ALLOY 20	41903	ALLOY C	4 1905	ALLOY 20	8
	+KEY, PLASTIC DRIVE GEAR	*2	41906	ALLOY 20	41904	ALLOY C	41906	ALLOY 20	8
	+KEY, MTL/CBN IDLER GEAR		41905	ALLOY 20	41903	ALLOY C	41905	ALLOY 20	9
	+KEY, PLASTIC IDLER GEAR	*2	41906	ALLOY 20	41904	ALLOY C	41906	ALLOY 20	9
	+PIN, BEARING LOCK	4	41801	TFE	41801	TFE	41801	TFE	14
	+O-RING, HOUSING	2	41101	TFE	41101	TFE	41101	TFE	16
	PIN. HOUSING	4	40801	31655	40801	31655	40801	₹1655	) <sup>7</sup>
	BOL : HOUSING	4	62006	18855	62006	18855	62006	18855	18A
	NUT, HOUSING BOLT	4	62101	18855	62101	18855	62101	18855	19
	NAMEPLATE	1	41201	18855	41201	18855	41201	18855	

### NON-VARIABLE COMPONENTS FOR POSITION 9 OPTIONAL PUMPS

POSITION 9 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M

			HOUSING, CENTER - VENT FNPT		40052-2	31655	40053-2	ALLOY C	40054-2	ALLOY 20	2
		V	HUUSING CENTER - VENT FESPT	]_ '_	40064-2	31655	40065-2	ALLOY C	40066-2	ALLOY 20	2
			PLUG 1/8' NPT	-1	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
$\prod$			HOUSING, FRONT- BRG FLUSH	1	40117	316\$\$	40123	ALLOY C	40125	ALLOY 20	1
1		A	HOUSING, REAR - BRG FLUSH	1	40224	316\$\$	40231	ALLOY C	40234	ALLOY 20	3
11	C		PLUG 1/8" NPT	*3	W772565-316	316SS	52301	ALLOY C	52300	ALLOY 20	62
	- (		+PIN BEARING LOCK	4	41802	ALLOY 20	41806	ALLOY C	41802	ALLOY 20	14
		L"	+0-RING, HOUSING	2	41107	SS/PFA	41107	SS/PFA	41107	SS/PFA	16
1	n		+BEARING, SLOTTED		40428	CARBON	40428	CARBON	40428	CARBON	12,13
			+BEARING, SLOTTED	1	40417	TFE (GF)	40417	TFE(GF)	40417	TFE (GF)	12,13
_ `			+WEAR PLATE, SLOTTED		40511	CARBON	40511	CARBON	40511	CARBON	15
15			+WEAR PLATE, SLOTTED	] *	40513	TFE (GF)	40513	TFE (GF)	40513	TFE(GF)	15

<sup>\*</sup>COMPONENT DUANTITY MAY BE CUMULATIVE GVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

### G8 SERIES PUMP CONSOLIDATED B/M

		ſ		STAI	NDARD PUMP H	ATERIAL			
-		Ī	316SS	S (K)	(C) 0(	( C R (M)		Y 20 R (N)	
	DESCRIPTION	YTO	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
	8 5 DRIVE AND IDLER GEAR	1.21	40689	ALLOY C	40689	ALLOY C	40689	ALLOY C	6 7
	+GEAR DRIVE/IDLER	1-2		<del> </del>		ALEOT C	40691	ALLOY 20	6 7
<u>D</u>	+GEAR, DRIVE/IDLER	1-2	40691	ALLOY 20		<del> </del>			7
K	+GEAR, IDLER		40623	CARBON	40623	CARBON	40623	TFE (GF)	6,7
T	+GEAR, DRIVE/IDLER	1-2	40701	TFE(GF)	40701	TFE (GF)			6 7
E	+GEAR, DRIVE/IDLER	1-2	40716	PEEK	40716	PEEK	40716	PEEK	B /
0511100 6	WEAR PLATE MATERIAL								
K	+WEAR PLATE		40501	CARBON	40501	CARBON	40501	CARBON	15
7	-WEAR PLATE		40504	TFE(GF)	40504	TFE (GF)	40504	TFE (GF)	15
Z	-WEAR PLATE	- 4	40503	CERAMIC	40503	CERAMIC	40503	CERAMIC	15
E	+WEAR PLATE		40523	PEEK	40523	PEEK	40523	PEEK	15
					_				
OSITION 7	BEARING MATERIAL								
K	+BEARING		40426	CARBON	40426	CARBON	40426	CARBON	12.13
T	+BEARING	4	40425	TEL OF	40/25	TETIGE)	61 /25	JEE (GE)	12 13
STANDARD	STUFFING BOX	1	21716	ALLOY 20	21711	ALIOY C	21716	ALLOY 20	34
STANDARD	STUFFING BOX			<del></del>		<del>,</del>		·	
COMMON	GLAND NUT	<del></del>		<del> </del>	21711	ALLOY C	21716	ALLOY 20	
PARTS	PACKING GLAND	1	21602	31655	21602	31655	21602	31655	35
	I ACK HAD GENIAD				21512	I ALLOY CI		I ALL DY 20 I	3.6
	-PACKING PING			ALLOY 20	21512	TEE (BDD)	21514	ALLOY 20	38
В	+PACKING RING	4	26408	TFE(BRD)	26408	TFE (BRD)	26408	TFE(BRD)	42
	+PACKING END RING	4	26408 26301	TFE(BRD)	26408 26301	TFE (BRD)	26408 26301	TFE(BRD)	42
G G		4	26408	TFE(BRD)	26408	TFE (BRD)	26408	TFE(BRD)	42
G	+PACKING END RING +PACKING RING	4	26408 26301	TFE(BRD)	26408 26301	TFE (BRD)	26408 26301	TFE(BRD)	42
G U-CUP LIP	+PACKING END RING +PACKING RING  SEAL	4	26408 26301	TFE (BRD) TFE GRAFOIL	26408 26301 26409	TFE (BRD) TFE GRAFOIL	26408 26301 26409	TFE(BRD) TFE GRAFOIL	42
G	+PACKING END RING +PACKING RING	1 4	26408 26301 26409	TFE (BRD) TFE GRAFOIL 316SS	26408 26301	TFE (BRD) TFE GRAFOIL 316SS	26408 26301 26409	TFE(BRD) TFE GRAFOIL 316SS	42 41 42
G U-CUP LIP COMMON	PACKING END RING PACKING RING  SEAL LDCK NUT	1	26408 26301 26409 21602	TFE (BRD) TFE GRAFOIL	26408 26301 26409 21602	TFE (BRD) TFE GRAFOIL	26408 26301 26409	TFE(BRD) TFE GRAFOIL	42 41 42 35
G U-CUP LIP COMMON	PACKING END RING PACKING RING  SEAL LOCK NUT GLAND NUT	1 1 1	26408 26301 26409 21602 11710	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20	26408 26301 26409 21602 11709	TFE(BRD) TFE GRAFOIL  316SS ALLOY C	26408 26301 26409 21602 11710	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20	42 41 42 35 34
G U-CUP LIP COMMON PARTS	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  +LIP SEAL	1 1 1 1	26408 26301 26409 21602 11710 21417	TFE(BRO) TFE GRAFOIL  316SS ALLOY 20 VITON	26408 26301 26409 21602 11709 21417	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON	26408 26301 26409 21602 11710 21417	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON	42 41 42 35 34 50
G U-CUP LIP COMMON PARTS J	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  *LIP SEAL  SPRING LIP SEAL	1 1 1 1	26408 26301 26409 21602 11710 21417	TFE(BRO) TFE GRAFOIL  316SS ALLOY 20 VITON	26408 26301 26409 21602 11709 21417	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON	26408 26301 26409 21602 11710 21417	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON	42 41 42 35 34 50
G U-CUP LIP COMMON PARTS J	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  +LIP SEAL	1 1 1 1	26408 26301 26409 21602 11710 21417	TFE(BRO) TFE GRAFOIL  316SS ALLOY 20 VITON	26408 26301 26409 21602 11709 21417	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON	26408 26301 26409 21602 11710 21417	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON	42 41 42 35 34 50
G U-CUP LIP COMMON PARTS J	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  +LIP SEAL  SPRING LIP SEAL  ING STUFFING BOX	1 1 1 1 1	26408 26301 26409 21602 11710 21417 21206	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C	26408 26301 26409 21602 11709 21417 21206	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON ALLOY C	26408 26301 26409 21602 11710 21417 21206	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C	42 41 42 35 34 50 53
G U-CUP LIP COMMON PARTS J	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  *LIP SEAL  SPRING LIP SEAL  ING STUFFING BOX  PACKING BOX	1 1 1 1	26408 26301 26409 21602 11710 21417 21206	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C	26408 26301 26409 21602 11709 21417 21206	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON ALLOY C	26408 26301 26409 21602 11710 21417 21206	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C	42 41 42 35 34 50 53
G U-CUP LIP COMMON PARTS J	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  *LIP SEAL  SPRING LIP SEAL  ING STUFFING BOX  PACKING BOX  GASKET	1 1 1 1 1 1	26408 26301 26409 21602 11710 21417 21206	TFE(BRO) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE	26408 26301 26409 21602 11709 21417 21206	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON ALLOY C  ALLOY C	26408 26301 26409 21602 11710 21417 21206	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C	42 41 42 35 34 50 53 30 31
G U-CUP LIP COMMON PARTS J LANTERN R	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  *LIP SEAL  SPRING LIP SEAL  ING STUFFING BOX  PACKING BOX  GASKET  GLAND NUT	1 1 1 1 1 1	26408 26301 26409 21602 11710 21417 21206 24510 21106 21716	TFE(BRO) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20	26408 26301 26409 21602 11709 21417 21206 24509 21106 21711	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON ALLOY C TFE ALLOY C	26408 26301 26409 21602 11710 21417 21206 24510 21106 21716	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20	42 41 42 35 34 50 53 30 31 34
G U-CUP LIP COMMON PARTS J LANTERN R	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  *LIP SEAL  SPRING LIP SEAL  ING STUFFING BOX  PACKING BOX  GASKET  GLAND NUT  LOCK NUT	1 1 1 1 1 1 2	26408 26301 26409 21602 11710 21417 21206 24510 21106 21716 21602	TFE(BRO) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20 316SS	26408 26301 26409 21602 11709 21417 21206 24509 21106 21711 21602	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON ALLOY C  TFE ALLOY C  316SS	26408 26301 26409 21602 11710 21417 21206 24510 21106 21716 21602	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20 316SS	42 41 42 35 34 50 53 30 31 34 35
G U-CUP LIP COMMON PARTS J LANTERN R	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  *LIP SEAL  SPRING LIP SEAL  ING STUFFING BOX  PACKING BOX  GASKET  GLAND NUT  LOCK NUT  LANTERN RING	1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1	26408 26301 26409 21602 11710 21417 21206 24510 21106 21716 21602 27103	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20 316SS ALLOY 20	26408 26301 26409 21402 11709 21417 21206 24509 21106 21711 21602 27111	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON ALLOY C  TFE ALLOY C  316SS TFE	26408 26301 26409 21602 11710 21417 21206 24510 21106 21716 21602 27103	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20 316SS ALLOY 20	42 41 42 35 34 50 53 30 31 34 35 46
G U-CUP LIP COMMON PARTS J LANTERN R	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  *LIP SEAL  SPRING LIP SEAL  ING STUFFING BOX  PACKING BOX  GASKET  GLAND NUT  LOCK NUT  LANTERN RING  PACKING GLAND	1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	26408 26301 26409 21602 11710 21417 21206 24510 21106 21716 21602 27103 21514	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20 316SS ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	26408 26301 26409 21602 11709 21417 21206 24509 21106 21711 21602 27111 21512	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON ALLOY C TFE ALLOY C 316SS TFE ALLOY C	26408 26301 26409 21602 11710 21417 21206 24510 21106 21716 21602 27103 21514	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20 316SS ALLOY 20 ALLOY 20 ALLOY 20	42 41 42 35 34 50 53 30 31 34 35 46
G U-CUP LIP COMMON PARTS  J LANTERN R COMMON PARTS	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  *LIP SEAL  SPRING LIP SEAL  ING STUFFING BOX  PACKING BOX  GASKET  GLAND NUT  LOCK NUT  LANTERN RING  PACKING GLAND  GREASE FITTING	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	26408 26301 26409 21602 11710 21417 21206 24510 21106 21716 21602 27103 21514 27201	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20 316SS ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	26408 26301 26409  21602 11709 21417 21206  24509 21106 21711 21602 27111 21512 27201	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON ALLOY C TFE ALLOY C 316SS TFE ALLOY C 310SS	26408 26301 26409  21602 11710 21417 21206  24510 21106 21716 21602 27103 21514 27201	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	42 41 42 35 34 50 53 30 31 34 35 46 38 65
G U-CUP LIP COMMON PARTS J LANTERN R	*PACKING END RING  *PACKING RING  SEAL  LOCK NUT  GLAND NUT  *LIP SEAL  SPRING LIP SEAL  ING STUFFING BOX  PACKING BOX  GASKET  GLAND NUT  LOCK NUT  LANTERN RING  PACKING GLAND  GREASE FITTING  PLUG. 1/8 NPT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	26408 26301 26409  21602 11710 21417 21206  24510 21106 21716 21602 27103 21514 27201  w772565-316	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20	26408 26301 26409  21602 11709 21417 21206  24509 21106 21711 21602 27111 21512 27201 52301	TFE(BRD) TFE GRAFOIL  316SS ALLOY C VITON ALLOY C TFE ALLOY C 316SS TFE ALLOY C 310SS ALLOY C	26408 26301 26409  21602 11710 21417 21206  24510 21106 21716 21602 27103 21514 27201 52300	TFE(BRD) TFE GRAFOIL  316SS ALLOY 20 VITON ALLOY C  ALLOY 20 TFE ALLOY 20	42 41 42 35 34 50 53 30 31 34 35 46 38 65

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

### G8 SERIES PUMP CONSOLIDATED B/M

				STA	NDARD PUMP MA	TERIAL			
	-		31655 (A) OR	(K)	ALLD'	( C R (M)	ALLOY 20 (D) OR (N)		
	DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
SITION 8	SEAL ARRANGEMENT (CONT'D)				-				
INTERNAL	MECHANICAL SEAL		·						
	SEAL HOUSING	1	24518	ALLOY 20	24519	ALLOY C	24518	ALLOY 20	30
	GASKET	1	21106	TFE	21106	TFE	21106	TFE	31
COMMON	LOCK NUT	2	21602	31655	21602	31655	21602	316SS	35
PARTS	GLAND NUT	1	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
	PLUG, 1/8' NPT	#2	W772565-316	316SS	52301	ALLOY C	52300	ALLOY 20	62
	+SEAL HEAD ASSEMBLY	1	27097	020/TFE	27099	HCO/TFE	27097	020/TFE	60
K	+SEAL SEAT W/ O-RING (TFE)	1	21563	ALLOY 20	21565	ALLOY C	21563	ALLOY 20	55
	+SEAL HEAD ASSEMBLY	1	27097	020/TFE	27099	HCO/TFE	27097	020/TFE	60
Q	+SEAL SEAT W/ D-RING (TFE)	1	21571	SICBO	21571	SICBD	21571	SICBD	55
	+SEAL HEAD ASSEMBLY	1	27089	020/CBN	27090	HC0/CBN	27089	020/CBN	60
7	+SEAL SEAT W/ O-RING (TFE)	1	21563	ALLOY 20	21565	ALLOY C	21563	ALLOY 20	55
	+SEAL HEAD ASSEMBLY	1	27089	020/CBN	27090	HC0/CBN	27089	020/CBN	60
υ	+SEAL SEAT W/ O-RING (TFE)	1	21571	SICBD	21571	SICBD	21571	SICBD	55
	MECHANICAL SEAL		24727	ALLOY 20	24724		24722	Tallov 20 I	34
COMMON		1-	21727		21726	ALLOY C	21727	ALLOY 20	
PARTS	LOCK NUT	1-1-	21602	316\$\$	21602	31655	21602	31655	35
٧	+SEAL HEAD ASSEMBLY	1	27089	020/CBN	27090	HCO/CBN	27089	ALLOY 20	60
	+SEAL SEAT W/ O-RING (TFE)	1	21563	ALLOY 20	21565	ALLOY C	21563	ALLOY 20	55
W	+SEAL HEAD ASSEMBLY	1	27089	020/CBN	27090	HCO/CBN	27089	ALLOY 20	60
	ASEA! SEAT W/ C-RING (TFE)	1_1_	21571	SICBO	21571	SICED	21571	SICBO	<u> </u>
DOUBLE ME	CHANICAL SEAL								
DOODLE TIE	SEAL HOUSING	T 1	24518	ALLOY 20	24519	ALLOY C	24518	ALLOY 20	30
COMMON	GASKET	1	21106	TFE	21106	TFE	21106	TFE	31
PARTS	LOCK NUT	2	21602	31655	21602	31655	21602	316SS	35
, ,	GLAND NUT	1	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
<del></del>	+SEAL HEAD ASSEMBLY	+-	27092	316/CBN	27092	316/CBN	27092	316/CBN	60
Y	+SEAL SEAT W/ O-RING (TFE)	2	21566	ALLOY 20	21568	ALLOY C	21566	ALLOY 20	55
· · · · · · · · · · · · · · · · · · ·		ــــــــــــــــــــــــــــــــــــــ	1	1		1		1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
EXTERNAL I	MECHANICAL SEAL FOR VACUUM SERVICE		<del></del>	<del></del>			·		
	SEAL HOUSING	1	24518	ALLOY 20	24519	ALLOY C	24518	ALLOY 20	30
	GASKET	1	21106	TFE	21106	TPE	21106	TFE	31
COMMON	LOCK NUT	2	21602	31655	21602	31655	21602	31655	35
PARTS	GLAND NUT	1	21727	ALLOY 20	21726	ALLOY C	21727	ALLOY 20	34
	PLUG. 1/8° NPT	41	W772565-316	316SS	52301	ALLOY C	52300	ALLOY 20	62
	1 : -: -: · · · · · · · · · · · · · · · ·			1		1		1	
	+SEAL HEAD ASSEMBLY	1	27089	020/CBN	27090	HCO/CBN	27089	020/CBN	60

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# GH8 SERIES PUMP CONSOLIDATED B/M

=		L		STANDARD PUN	P MATERIA	L		
		316SS (A) OR	(K)	ALLOY (C) OR	(M)	ALLOY (D) OR		
DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
OSITION 3 STANDARD PUMP - NON-VARIABLE	COMPO	DNENTS					***	
HOUSING, FRONT - HECH SEAL		40150	316SS	40151	ALLOY C	40152	ALLOY 20	1
HOUSING, FRONT - LRS SEAL	1 1	40153	31655	40154	ALLOY C	40155	ALLOY 20	1
HOUSING, CENTER FNPT		40052	31655	40053	ALLOY C	40054	ALLOY 20	2
HOUSING, CENTER FBSPT	1	40064	31655	40065	ALLOY C	40066	ALLOY 20	2
HOUSING, REAR	1	40247	31655	40248	ALLOY C	40749	ALLOY 20	3
+SHAFT, DRIVE	1	41327	31655	41328	ALLOY C	41329	ALLOY 20	4
+SHAFT IDLER 5/8°		41337	316SS	41338	ALLOY C	41339	ALLOY 20	5
+SHAFT, IDLER (METAL) 3/4"	1	41342	31655	41343	ALLOY C	41344	ALLOY 20	5
+RING. RETAINING 5/8"	0-2	Y9901400-020	ALLOY 20	Y9901400-HC0	ALLOY C	Y9901400-020	ALLOY 20	11
FRING. RETAINING 3/4"	2-4	46710	ALLOY 20	46711	ALLOY C	467 10	ALLOY 20	10
+KEY, METAL DRIVE GEAR	*2	41905	ALLOY 20	41903	ALLOY C	4 1905	ALLOY 20	8
+KEY, MTL/CBN IDLER GEAR	_	41905	ALLOY 20	41903	ALLOY C	41905	ALLOY 20	9
+KEY, PLASTIC IDLER GEAR	<b>*</b> 2	4 1906	ALLOY 20	41904	ALLOY C	41906	ALLOY 20	9
+KEY COUPLING	1	W773098-008	STL	W773098-008	STL	W773098-008	STL	21
PIN. BEARING LOCK	4	41811	TFE	41811	TFE	41811	TFE	14
+O-RING, HOUSING	2	41101	TFE	41101	1FE	41101	TFE	16
PIN, HOUSING	4	40801	316SS	40801	316SS	40801	316SS	17
BOLT, HOUSING	4	62006	188SS	62006	18855	62006	18855	18A
NUT, HOUSING BOLT	4	62101	18855	62101	18855	62101	18855	19
NAMEPLATE	1	41210	18855	41210	18855	41210	18855	

NON-VARIABLE COMPONENTS FOR POSITION 9 OPTIONAL PUMPS

POSITION 9 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M

	-		HOUSING, CENTER - VENT FNPT	1	40052-2	316SS	40053-2	ALLOY C	40054-2	ALLOY 20	2
	}	٧	HOUSING, CENTER - VENT FBSPT		40064-2	31655	40065-2	ALLOY C	40066-2	ALLOY 20	2
			PLUG, 1/8' NPT	+1	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
			HOUSING, FRONT MECH - BRG FLUSH		40150-2	31655	40151-2	ALLOY C	40152-2	ALLOY 20	1
1			HOUSING, FRONT LRS - BRG FLUSH	L'	40153-2	316SS	40154-2	ALLOY C	40155-2	ALLOY 20	1
11.	ا ہ	^	HOUSING, REAR - BRG FLUSH	1	40247-2	316\$\$	40248-2	ALLOY C	40249-2	ALLOY 20	3
	۱ ٔ		PLUG, 1/8' NPT	мЭ	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
1 1		A	+PIN, BEARING LOCK	4	41812	31655	41813	ALLOY C	41814	ALLOY 20	14
		-	+0-RING, HOUSING	2	61107	SS/PFA	41107	SS/PFA	41107	SS/PFA	16
"			+BEARING, SLOTTED 3/4"		40443	TFE (GF)	40443	TFE (GF)	40443	TFE(GF)	12
		-	+BEARING. SLOTTED 3/4"	2-4	40442	CARBON	40442	CARBON	40442	CARBON	12
١٠			+BEARING. SLOTTED 5/8"	2.0	40440	CARBON	40440	CARBON	40440	CARBON	13
			+BEARING. SLOTTED 5/8"	0-2	40441	TFE (GF)	40441	TFE (GF)	40441	TFE(GF)	13

<sup>-</sup> COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/H DENOTES RECOMMENDED SPARE PART

## GH8 SERIES PUMP CONSOLIDATED B/M

						STANDARD PUR	P MATERIAL			]
				316SS (A) OR	(K)	ALLOY (C) OR	C (M)	ALLOY (D) OR	20 (N)	1
	DESCRIPTION		ату	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
OSITION 4	& 5 DRIVE AND IDLER GEAR MAT	FRIAL		<u> </u>	<del></del>	·	h	<del>}</del>	· · · · · · · · · · · · · · · · · · ·	<b></b>
C C	<del>,</del>	3/41	1-2	40605	ALLOY C	40605	ALLOY C	40605	ALLOY C	6.7
K	<del></del>	5/8'		40606	CARBON	40606	CARBON	40606	CARBON	7
т		5/8*	0-1	40608	TFE (GF)	40608	TFE (GF)	40608	TFE (GF)	7
E		5/8'		40609	PEEK	40609	PEEK	40609	PEEK	7
OSITION 6	WEAR PLATE MATERIAL									•
К	+WEAR PLATE, SLOTTED			40511	CARBON	40511	CARBON	40511	CARBON	15
Ť	+WEAR PLATE, SLOTTED			40513	TFE (GF)	40513	TFE (GF)	40513	TFE (GF)	15
Z	+WEAR PLATE, SLOTTED		4	40525	CERAMIC	40525	CERAMIC	40525	CERAMIC	15
E	+WEAR PLATE, SLOTTED			40526	PEEK	40526	PEEK	40526	PEEK	15
				V		1	1			1
051110N /	+BEARING MATERIAL  +BEARING DRIVE/IDLER SHAFT	3/4.	2-4	40436	CARBON	40436	CARBON	40436	CARBON	12
K		5/8'	0-2	40432	CARBON	40432	CARBON	40432	CARBON	13
	+BEARING, DRIVE/IDLER SHAFT		2-4	40438	TFE (GF)	40438	TFE (GF)	40438	TFE (GF)	12
T			7-2	40474	TFE (SF)	40454	TFE(GF)	+0434	TFEIGH	ور ا
	100011				1,,,,,,,		172107.		1, 2, 3, 7	1
	SEAL ARRANGEMENT				<u></u>					
LANTERN	RING STUFFING BOX				<del>,</del>	r	·			·
	PACKING GLAND		1	21572	31655	21573	ALLOY C	21574	ALLOY 20	38
	+RING, LANTERN		1	27112	TFE(GF)	27112	TFE (GF)	27112	TFE (GF)	46
COMMON	STUD, PACKING GLAND		2	92014	ALLOY 20	92012	ALLOY C	91014	ALLOY 20	39
PARTS	NUT, STUD		2	92103	ALLOY 20	92102	ALLOY C	92103	ALLOY 20	40
	GREASE FITTING 1/8' NPT		1	27201	31055	27201	310SS	27201	31055	65
	PLUG, 1/8° NPT		<u>*2</u>	W772565-316	316SS	52301	ALLOY C	52300	ALLOY 20	62
13	+RING, PACKING		8	26144	TFE	26144	TFE	26144	TFE	42
	PEND RING PACKING		1	26303	TFE	26303	TFE	26303	TFE	41
15	+RING. PACKING		9	26415	GRAFOIL	26415	GRAFOIL	26415	GRAFOIL	42
INTERNA	L MECHANICAL SEAL									
	RETAINER, SEAT		1	21752	31655	21753	ALLOY C	21754	ALLOY 20	36
COMMON	SCREW, RETAINER		2	W770412-188	18855	W770412-188	18855	W770412-188	18855	394
PARTS	+O RING, SEAT RETAINER		1	W212170-TFE	TFE	W212170-TFE	TFE	W212170-TFE	TFE	37
1 71110	PLUG, 1/8° NPT		<b>*</b> 3	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
	+HEAD ASSEMBLY, SEAL		1	27187	316/TFE	27 189	HCO/TFE	27188	020/TFE	60
Q	+SEAT, SEAL W/ TFE RING			21575	SICBD	21575	SICBD	21575	SICBD	55
	+HEAD ASSEMBLY, SEAL		1	27181	316/CBN	27182	HCO/CBN	27186	020/CBN	60
υ	+SEAT, SEAL W/ TFE RING		1	21575	SICBD	21575	SICBO	21575	SICED	55
					L	L			1	1
DOUBLE	MECHANICAL SEAL				<del></del>					
	RETAINER, SEAT		1	21752	31655	21753	ALLOY C	21754	ALLOY 20	36
	SCREW, RETAINER		2	W770412-188	18855	W770412-188	18655	W770412-188	18855	39A
	+O RING, SEAT RETAINER		1	W212170-TFE	TFE	W212170-TFE	TFE	W212170-TFE	TFE	37
Ε	PLUG, 1/8' NPT		<b>#</b> 1	W772565-316	316SS	52301	ALLOY C	52300	ALLOY 20	62
}	+HEAD ASSEMBLY, SEAL		1	27183	316/CBN	27183	316/CBN	27183	316/CBN	60
						1		i		1

<sup>.</sup> COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M DENOTES RECOMMENDED SPARE PART

## GA12 SERIES PUMP CONSOLIDATED B/M

						i			
				SS DR U;	ALLOY (C. M. OF		ALLOY Z		1
	DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
POSITION 3	STANDARD PUMP - NON-VARIA	BLE COMPONENTS							

STANDARD PUMP - NON-VARIABLE C	OMPONENT	S						
HOUSING, FRONT - MECH SEAL		90129	316SS	90130	ALLOY C	90131	ALLOY 20	1
HOUSING, FRONT - LRS SEAL	1	90138	31655	90140	ALLOY C	90139	ALLOY 20	1
HOUSING, CENTER FNPT		90001	31655	90006	ALLOY C	90005	ALLOY 20	2
HOUSING, CENTER FBSPT	1	90012	31655	90013	ALLOY C	90014	ALLOY 20	2
HOUSING, CENTER FLGD		90003	316SS	90007	ALLOY C	90010	ALLOY 20	2
HOUSING, REAR	1	90201	31655	90205	ALLOY C	90204	ALLOY 20	3
+SHAFT, MTL DRIVE GR 1 DIA	1	90307	31655	90317	ALLOY C	90315	ALLOY 20	4
+SHAFT, IDLER 3/4" DIA	1	90306	31655	90322	ALLOY C	90334	ALLOY 20	5
+SHAFT, CON IDLER GR 3/4" DIA	1	90346	31655	90347	ALLOY C	90348	ALLOY 20	5
+RING, RETAINING - DR/IDLR 1"	2-4	96702	316SS	96708	ALLOY C	96708	ALLOY C	10
+RING, RETAINING - IDLER 3/4"	0-2	96701	31655	96709	ALLOY C	96709	ALLOY C	11
+KEY, DRIVE/IDLER GR 1" BORE	1-2	91904	31655	91910	ALLOY C	91910	ALLOY C	8.9
+KEY, MTL IOLER GR 3/4" BORE	0-1	91903	31655	91911	ALLOY C	91911	ALLOY C	9
+KEY, CBN IDLER GR 3/4" BORE	0-2	91925	31655	91926	ALLOY C	91926	ALLOY C	9
+KEY, PLSTC IDL GR 3/4" BORE	0-2	91901	31655	91912	ALLOY C	91912	ALLOY C	9
PIN. BEARING LOCK	• 4	90801	31655	90813	ALLOY C	E0802	ALLOY C	1.4
+C-RING, HOUSING	2	91101	TFE	91101	TFE	91101	TFE	16
PIN, HOUSING	#4	90801	31655	90801	316SS	90801	31655	17
BOLT, CTR HSG FNPT, FBSPT	<b>+10</b>	W770413-188	18855	W770413-188	18855	W770413-188	18855	18A
BOLT, CTR HSG FNPT, FBSPT	1	W770422-188	18855	W770422-188	18655	W770422-186	18855	18A
NUT. HSG BOLT FNPT, FBSPT	11	W771214-188	18855	W771214-188	18855	W771214-188	18855	19
LOCK WASHER FNPT. FBSPT	11	W771107-188	18855	W771107-188	18855	W771107-188	18855	20
BOLT, CENTER HSG FLGD	12	W770412-188	18855	W770412-188	18855	W770412-188	18855	18A
LOCK WASHER FLGD	12	W771107-188	18855	W771107-188	18855	W771107-188	188SS	20
PLUG, 1/4" NPT	44	16432	ALLOY 20	16422	ALLOY C	16432	ALLOY 20	63
KEY, COUPLING/DRIVE SHAFT	1	91924	STL	91924	STL	91924	STL	21
PLUG, 1/8' NPT	ww1	W772565-316	316SS	52301	ALLDY C	52300	ALLOY 20	62
NAMEPLATE	1	41201	18855	41201	18855	41201	18855	

#### NON-VARIABLE COMPONENTS FOR POSITION 9 OPTIONAL PUMPS

POSITION 9 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M

	OF FIGURE - DEED TO CONTINUE	01711107111				<del></del>			
	HOUSING, CENTER - VENT FNPT		90001-2	316SS	90006-2	ALLOY C	90005-2	ALLOY 20	2
	HOUSING, CENTER - VENT FBSPT	1	90012-2	31655	90013-2	ALLOY C	90014-2	ALLOY 20	2
1	HOUSING, CENTER - VENT FLGD		90003-2	31655	90007-2	ALLOY C	90010-2	ALLOY 20	2
	PLUG, 1/8' NPT	<b>u</b> 1	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
В	+0-RING, HOUSING	2	91106	SS/PFA	91106	SS/PFA	91106	SS/PFA	16
J	+SHAFT, MTL IDLER GR 1" DIA	1	90308	316SS	90318	ALLOY C	90364	ALLOY 20	5

#### POSITION 4 & 5 DRIVE AND IDLER GEAR

1001110114	S J DRIVE AND IDEER									
_	+GEAR, DRIVE/IDLER	1' BORE	1-2	90627	ALLOY C	90627	ALLOY C	90627	ALLOY C	6.7
	+GEAR, IDLER	3/4' BORE	0-1	90626	ALLOY C	90626	ALLOY C	90626	ALLOY C	7
K	+GEAR, IDLER	3/4' BORE		90664	CARBON	90664	CARBON	90664	CARBON	7
T	+GEAR, IDLER	3/4' BORE	0-1	90663	TFE (GF)	90663	TFE (GF)	90663	TFE (GF)	7
E	+GEAR, IDLER	3/4' BORE	Γ	90677	PEEK	90677	PEEK	90677	PEEK	7

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M

<sup>&</sup>quot;"QTY (2) WHEN PUMP HAS FNPT OR FBSPT CENTER HOUSING, COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M

<sup>+</sup>DENOTES RECOMMENDED SPARE PART

## GA12 SERIES PUMP -CONSOLIDATED B/M

			CONSOLIDATED B/M							
					STANDARD PI	UMP MATERIA	L			
	-		316S		(C, M, OR	C V)	ALLOY (D, N. OR	20 W)		
	DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM	
SITION 6	*WEAR PLATE MATERIAL *WEAR PLATE, SLOTTED		90503	CARBON	90503	CARBON	90503	CARBON	15	
<u> </u>	WEAR PLATE, SLOTTED	4	90510	TFE(GF)	90510	TFE (GF)	90510	TFE(GF)	15	
<u>'</u>	+WEAR PLATE, SLOTTED		90512	CERAMIC	90512	CERAMIC	90512	CERAMIC	15	
	TWEAT FEATE, SEATIES			1						
SITION 7	BEARING MATERIAL									
	+BEARING 1' BORE	2-4	90424	CARBON	90424	CARBON	90424	CARBON	12,1	
K	+BEARING 3/4" BORE	0-2	90429	CARBON	90429	CARBON	90429	CARBON	13	
	+BEARING 1' BORE	2-4	90428	TFE(GF)	90428	TFE (GF)	90428	TFE (GF)	12,1	
т	+BEARING 3/4' BORE	0-2	90430	TFE(GF)	90430	TFE(GF)	90430	TFE (GF)	13	
4	+BEARING, SLOTTED 1' BORE	2-4	90431	CARBON	90431	CARBON	90431	CARBON	12,1	
•	+BEARING, SLOTTED 3/4' BORE	0-2	90432	CARBON	90432	CARBON	90432	CARBON	13	
	SEAL ARRANGEMENT									
LANIERN R	ING STUFFING BOX	1	104545	1 41 07 30 1	A91517	ALLOY C	A91515	ALLOY 20	38	
	PACKING GLAND		A91515	ALLOY 20		ALLOY C	9/104	ALLOY 20	46	
	LANTERN RING		9710-	ALLOY ZO	97105	ALLUY C		<del> </del>	39	
COMMON	STUD PACKING GLAND	2	92014	ALLOY 20	92012	ALLOY C	92014	ALLOY 20	40	
PARTS	NUT STUD	• 2	92103	ALLOY 20	92102	ALLOY C	92103	31055	65	
	PLUG, 1/4' NPT	<u>1</u>	16432	31055 ALLOY 20	16422	ALLOY C	16432	ALLOY 20	63	
	ADAPTOR 1/4" TO 1/8" NPT	1	27217	ALLOY 20	27216	ALLOY C	27217	ALLOY 20	64	
	+PACKING RING	6	96515	TFE(BRD)	96515	TFE(BRD)	96515	TFE (BRD)	42	
13	-PACKING END RING	1	96505	TFE	26505	TFE	96505	TEE	41	
15	*PACKING RING	7	96510	GRAFOIL	96510	GRAFOIL	96510	GRAFOIL	42	
	TACKING KING	L	30310	1 0/12/012	70310	- draror	70310	T GILL		
INTERNAL	MECHANICAL SEAL					<del></del>				
	SEAT RETAINER W/ PIN	1	A91564	ALLOY 20	A91560	ALLOY C	A9 1564	ALLOY 20	36	
	BOLT, SEAT RETAINER	*2	W770413-186	18855	92007	ALLOY C	W770413-188	18855	39A	
COMMON	D-RING SEAT RETAINER	1	19031	TFE	19031	TFE	19031	TFE	37	
PARTS	PLUG, 1/4" NPT	• 3	16432	ALLOY 20	16422	ALLOY C	16432	ALLOY 20	63	
	+SEAL HEAD ASSEMBLY	1	A97011	020/CBN	A97023	HCO/CBN	A97011	020/CBN	60	
22	+SEAL SEAT W/ SEAL RING (TFE)	1	A97044	CER 99%	A97044	CER 99%	A97044	CER 99%	55	
24	+SEAL SEAT W/ SEAL RING (TFE)	1	A91569	ALLOY 20	A91570	ALLOY C	A91569	ALLOY 20	55	
DOUBLE ME	CHANICAL SEAL									
	SEAT RETAINER W/ PIN	1	A91564	ALLOY ZO	A91560	ALLOY C	A91564	ALLOY 20	36	
	BOLT, SEAT RETAINER	*2	W770413-188	18855	92007	ALLOY C	W770413-168	18855	39/	
COMMON	O-RING, SEAT RETAINER	1	19031	TFE	19031	TFE	19031	TFE	37	
PARTS	PLUG, 1/4" NPT	• 1	16432	ALLOY 20	16422	ALLOY C	16432	ALLOY 20	63	
	PIN PUMP END SEAT	1	91565	ALLOY 40	91561	ALLOY C	91565	ALLOY 20	59	
	+SEAL HEAD ASSEMBLY	1	A97022	020/CBN	A97027	HCO/CBN	A97022	020/CBN	60	
42	+SEAL SEAT W/ SEAL RING (TFE)	2	A97044	CER 99%	A97044	CER 99%	A97044	CER 99%	55	
44	+SEAL SEAT W/ SEAL RING (TFE)	2	A91569	ALLOY 20	A91570	ALLOY C	A91569	ALLOY 20	55	

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# GA16 SERIES PUMP CONSOLIDATED B/M

		[		STANDARD PUMP MATERIAL					1
		ļ	316S:	\$	ALLOY (V)	c	ALLOY (W)	20	
	DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITE
SITION 3	STANDARD PUMP - NON-VARIABLE CO	MPONENT		74405		11107 6	20474	ALLOY 30	1
	HOUSING, FRONT - MECH SEAL	1	90129	31655	90130	ALLOY C	90131	ALLOY 20	ļ
	HOUSING, FRONT - LRS SEAL		90136	31655	90140	ALLOY C	90139	ALLOY 20	1
	HOUSING, CENTER FLGD	1	90020	3165S	90021	ALLOY C	90022	ALLOY 20	
	HOUSING, REAR		90201	31655	90205	ALLOY C	90204	ALLOY 20	<u></u>
	+SHAFT, DRIVE 1"	1	90355	31655	90357	ALLOY C	90356	ALLOY 20	<u></u>
	+SHAFT, CBN/PLSTC IDLER 3/4"	, ,	90362	ALLOY 20	90361	ALLOY C	90362	ALLOY ZO	- 5
	+SHAFT, MTL IDLER 1"		90349	31655	90351	ALLOY C	90350	ALLOY 20	
	+RING, RETAINING - DR/IDLER 1"	2-4	96702	31655	96708	ALLOY C	96708	ALLOY C	10
	+RING, RETAINING - IDLER 3/4"	0-2	96701	31655	96709	ALLOY C	96709	ALLOY C	11
	+KEY, MTL DR/IDLER GR 1' BORE	2-4	91904	31655	91910	ALLOY C	91910	ALLOY C	8.
	+KEY, CBN/PLSTC GEAR 3/4' BORE	0-2	91929	ALLOY C	91929	ALLOY C	91929	ALLOY C	5
	+PIN, BEARING LOCK	=4	90801	31655	90803	ALLOY C	90803	ALLOY C	14
	+0-RING, HOUSING	2	91101	TFE	91101	TFE	91101	TFE	16
	PIN, HOUSING	<b>#4</b>	90801	31655	90801	316SS	90801	31655	17
	BOLT, CTR HSG FLGD	12	W770412-188	18855	W770412-188	18855	W770412-188	18855	16
	LOCK WASHER	12	W771107-168	18855	W771107-186	18855	W771107 188	19855	20
	PLUG, 1/4" NPT	<b>#6</b>	16432	ALLOY ZO	16422	ALLOY C	16432	ALLOY 20	63
	KEY, COUPLING/DRIVE SHAFT	1	91924	STL	91924	STL	91924	STL	2 1
	KEY, COUPLING/DRIVE SHAFT NAMEPLATE	1	91924 41201	18855	41201	STL 18855	91924 41201	STL 188SS	
	KEY, COUPLING/DRIVE SMAFT NAMEPLATE  NON-VARIABLE OPTIONS - DELETE CORRESPONDING	1 1 COMPONE STANDAR	91924 41201 NTS FOR POSITION D PUMP COMPONEN	188SS N 9 OPTIONAL T FROM B/M	41201 PUMPS	18855	41201	18855	
SITION 9 B	KEY, COUPLING/DRIVE SMAFT NAMEPLATE NON-VARIABLE	1 1 COMPONE	91924 41201 NTS FOR POSITION	188SS	41201		<del></del>		
8	KEY, COUPLING/DRIVE SMAFT NAMEPLATE  NON-VARIABLE OPTIONS - DELETE CORRESPONDING	1 1 COMPONE STANDAR	91924 41201 NTS FOR POSITION D PUMP COMPONEN	188SS N 9 OPTIONAL T FROM B/M	41201 PUMPS	18855	41201	18855	
В	KEY, COUPLING/DRIVE SHAFT NAMEPLATE  NON-VARIABLE OPTIONS - DELETE CORRESPONDING +O-RING, HOUSING	1 1 COMPONE STANDAR	91924 41201 NTS FOR POSITION D PUMP COMPONEN	188SS N 9 OPTIONAL T FROM B/M	41201 PUMPS	18855	41201	18855	16
B SITION 4	KEY, COUPLING/DRIVE SHAFT NAMEPLATE  NON-VARIABLE OPTIONS - DELETE CORRESPONDING +0-RING, HOUSING  5 DRIVE AND IDLER GEAR	1 1 COMPONE STANDAR 2	91924 41201 NTS FOR POSITION D PUMP COMPONEN 91106	188SS N 9 OPTIONAL T FROM B/M SS/PFA	41201 - PUMPS - 91106	188SS SS/PFA	91106	188SS SS/PFA	16
B SITION 4	KEY, COUPLING/DRIVE SHAFT NAMEPLATE  NON-VARIABLE OPTIONS - DELETE CORRESPONDING +O-RING, HOUSING  5 DRIVE AND IDLER GEAR +GEAR, DRIVE/IDLER 1° BORE	1 1 COMPONE STANDAR 2	91924 41201 NTS FOR POSITION D PUMP COMPONEN 91106	188SS  9 OPTIONAL FROM B/M  SS/PFA  ALLOY C	41201 PUMPS 91106 90667	SS/PFA	91106	188SS SS/PFA ALLOY C	6.
B SITION 4 C K	KEY, COUPLING/DRIVE SHAFT NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  +O-RING, HOUSING  5 DRIVE AND IDLER GEAR  +GEAR, DRIVE/IDLER 1° BORE  +GEAR, IDLER 3/4° BORE	1 1 COMPONE STANDAR 2	91924 41201 NTS FOR POSITION D PUMP COMPONEN 91106 90667	188SS N 9 OPTIONAL T FROM B/M SS/PFA ALLOY C CARBON	41201 PUMPS 91106 90667 90676	SS/PFA ALLOY C CARBON	91106 90667 90676	SS/PFA  ALLOY C CARBON	6.
B SITION 4 C K T E	KEY, COUPLING/DRIVE SHAFT  NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  +O-RING, HOUSING  5 DRIVE AND IDLER GEAR  +GEAR, DRIVE/IDLER 1° BORE  +GEAR, IDLER 3/4° BORE  +GEAR, IDLER 3/4° BORE  +GEAR, IDLER 3/4° BORE	1 1 COMPONE STANDAR 2	91924 41201 NTS FOR POSITION D PUMP COMPONEN 91106 90667 90676 90670	188SS N 9 OPTIONAL T FROM B/M SS/PFA ALLOY C CARBON TFE(GF)	41201 PUMPS 91106 90667 90676 90670	SS/PFA  ALLOY C CARBON TFE(GF)	91106 90667 90676 90670	SS/PFA  ALLOY C  CARBON  TFE(GF)	16
B SITION 4 C K T E	KEY, COUPLING/DRIVE SHAFT  NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  *O-RING, HOUSING  \$ 5 DRIVE AND IDLER GEAR  *GEAR, DRIVE/IDLER 1* BORE  *GEAR, IDLER 3/4* BORE  *GEAR, IDLER 3/4* BORE  *GEAR, IDLER 3/4* BORE	1 1 COMPONE STANDAR 2	91924 41201 NTS FOR POSITIOI D PUMP COMPONEN 91106 90667 90676 90678	188SS N 9 OPTIONAL I FROM B/M SS/PFA ALLOY C CARBON TFE(GF) PEEK	41201 PUMPS 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE(GF) PEEK	91106 90667 90676 90670 90678	SS/PFA  ALLOY C  CARBON  TFE(GF)  PEEK	6.
B SITION 4 C K T E SITION 6 K	KEY, COUPLING/DRIVE SHAFT  NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  *O-RING, HOUSING  & 5 DRIVE AND IDLER GEAR  *GEAR, DRIVE/IDLER 1* BORE  *GEAR, IDLER 3/4* BORE	1 1 COMPONE STANDAR 2 1-2 0-1	91924 41201  NTS FOR POSITIOI D PUMP COMPONEN 91106  90667 90676 90670 90678	188SS N 9 OPTIONAL I FROM B/M SS/PFA ALLOY C CARBON TFE(GF) PEEK CARBON	41201 PUMPS 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE (GF) PEEK  CARBON	91106 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON	16
B SITION 4 C K T E SITION 6 K T	KEY, COUPLING/DRIVE SHAFT NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  *O-RING, HOUSING   * 5 DRIVE AND IDLER GEAR  *GEAR, DRIVE/IDLER 1* BORE  *GEAR, IDLER 3/4* BORE  *GEAR, IDLER 3/4* BORE  *GEAR, IDLER 3/4* BORE  *GEAR, IDLER 3/4* BORE  *WEAR PLATE MATERIAL  *WEAR PLATE, SLOTTED  *WEAR PLATE, SLOTTED	1 1 COMPONE STANDAR 2	91924 41201  NTS FOR POSITIOI D PUMP COMPONEN 91106  90667 90676 90670 90678	188SS N 9 OPTIONAL I FROM B/M SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF)	41201 PUMPS 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE (GF) PEEK  CARBON TFE(GF)	91106 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF)	16
B SITION 4 C K T E SITION 6 K	KEY, COUPLING/DRIVE SHAFT  NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  *O-RING, HOUSING  & 5 DRIVE AND IDLER GEAR  *GEAR, DRIVE/IDLER 1* BORE  *GEAR, IDLER 3/4* BORE	1 1 COMPONE STANDAR 2 1-2 0-1	91924 41201  NTS FOR POSITIOI D PUMP COMPONEN 91106  90667 90676 90670 90678	188SS N 9 OPTIONAL I FROM B/M SS/PFA ALLOY C CARBON TFE(GF) PEEK CARBON	41201 PUMPS 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE (GF) PEEK  CARBON	91106 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON	10
B SITION 4 C K T E SITION 6 K T Z	KEY, COUPLING/DRIVE SHAFT NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  *O-RING, HOUSING   5 DRIVE AND IDLER GEAR  *GEAR, DRIVE/IDLER 1° BORE  *GEAR, IDLER 3/4° BORE  *GEAR, IDLER 3/4° BORE  *GEAR, IDLER 3/4° BORE  *GEAR, IDLER 3/4° BORE  *WEAR PLATE MATERIAL  *WEAR PLATE, SLOTTED  *WEAR PLATE, SLOTTED  *WEAR PLATE, SLOTTED	1 1 COMPONE STANDAR 2 1-2 0-1	91924 41201  NTS FOR POSITIOI D PUMP COMPONEN 91106  90667 90676 90670 90678	188SS N 9 OPTIONAL I FROM B/M SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF)	41201 PUMPS 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE (GF) PEEK  CARBON TFE(GF)	91106 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF)	16 6. 77 7 7 15 15 15 15 15 15 15 15 15 15 15 15 15
B SITION 4 C K T E SITION 6 K T Z	KEY, COUPLING/DRIVE SHAFT NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  *O-RING, HOUSING   5 DRIVE AND IDLER GEAR  *GEAR, DRIVE/IDLER 1° BORE  *GEAR, IDLER 3/4° BORE  *GEAR, IDLER 3/4° BORE  *GEAR, IDLER 3/4° BORE  *GEAR, IDLER 3/4° BORE  *WEAR PLATE MATERIAL  *WEAR PLATE, SLOTTED  *WEAR PLATE, SLOTTED	1 1 COMPONE STANDAR 2 1-2 0-1	91924 41201  NTS FOR POSITIOI D PUMP COMPONEN 91106  90667 90676 90670 90678	188SS N 9 OPTIONAL I FROM B/M SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF)	41201 PUMPS 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE (GF) PEEK  CARBON TFE(GF)	91106 91106 90667 90676 90670 90678	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF)	16 6. 77 7 7 15 15 15 15 15 15 15 15 15 15 15 15 15
B SITION 4 C K T E SITION 6 K T Z	KEY, COUPLING/DRIVE SHAFT NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  +O-RING, HOUSING  5 DRIVE AND IDLER GEAR  •GEAR, DRIVE/IDLER 1° BORE  •GEAR, IDLER 3/4° BORE  •GEAR, IDLER 3/4° BORE  •GEAR, IDLER 3/4° BORE  •GEAR, IDLER 3/4° BORE  •WEAR PLATE MATERIAL  •WEAR PLATE, SLOTTED  •WEAR PLATE, SLOTTED  •WEAR PLATE, SLOTTED	1 1 1 COMPONE STANDAR 2 1-2 0-1	91924 41201  NTS FOR POSITION D PUMP COMPONEN 91106  90667 90676 90670 90678  90503 90510 90512	188SS N 9 OPTIONAL T FROM B/M SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAMIC	90667 90667 90676 90670 90678 90503 90510 90512	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAMIC	91106 90667 90676 90670 90678 90503 90510 90512	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAMIC	16 6. 77
B SITION 4 C K T E SITION 6 K T Z SITION 7	KEY, COUPLING/DRIVE SHAFT  NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  +0-RING, HOUSING  5 DRIVE AND IDLER GEAR  •GEAR, DRIVE/IDLER 1° BORE  •GEAR, IDLER 3/4° BORE  •GEAR, IDLER 3/4° BORE  •GEAR, IDLER 3/4° BORE  •GEAR, IDLER 3/4° BORE  •WEAR PLATE MATERIAL  •WEAR PLATE, SLOTTED  •WEAR PLATE, SLOTTED  •WEAR PLATE, SLOTTED  •WEAR PLATE, SLOTTED  BEARING MATERIAL  •BEARING 1° BORE	1 1 1 COMPONE STANDAR 2 1-2 0-1	91924 41201  NTS FOR POSITION D PUMP COMPONEN 91106  90667 90676 90670 90678  90503 90510 90512	188SS N 9 OPTIONAL T FROM B/M SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAMIC	41201 PUMPS 91106  90667 90676 90670 90678  90503 90510 90512	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAMIC	91106 90667 90676 90676 90678 90503 90510 90512	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAHIC	16 6. 7 7 7 19 19 19 19 19 19 19 19 19 19 19 19 19
B SITION 4 C K T E SITION 6 K T Z	KEY, COUPLING/DRIVE SHAFT  NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  +0-RING, HOUSING   5 DRIVE AND IDLER GEAR  •GEAR, DRIVE/IDLER 1° BORE  •GEAR, IDLER 3/4° BORE  •GEAR, IDLER 3/4° BORE  •GEAR, IDLER 3/4° BORE  •WEAR PLATE MATERIAL  •WEAR PLATE, SLOTTED  •WEAR PLATE, SLOTTED  •WEAR PLATE, SLOTTED  BEARING MATERIAL  •BEARING 1° BORE  •BEARING 3/4° BORE	1 1 1 COMPONE STANDAR 2 1-2 0-1	91924 41201  NTS FOR POSITION D PUMP COMPONEN 91106  90667 90676 90670 90678  90503 90510 90512	188SS N 9 OPTIONAL T FROM B/M SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAMIC  CARBON CARBON	41201 PUMPS 91106  90667 90676 90670 90678  90503 90510 90512	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAMIC  CARBON CARBON	91106 90667 90676 90676 90678 90503 90510 90512	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAHIC  CARBON CARBON	166.77777777777777777777777777777777777
B SITION 4 C K T E SITION 6 K T Z	KEY, COUPLING/DRIVE SHAFT NAMEPLATE  NON-VARIABLE  OPTIONS - DELETE CORRESPONDING  +0-RING, HOUSING   5 DRIVE AND IDLER GEAR  -GEAR, DRIVE/IDLER 1° BORE  -GEAR, IDLER 3/4° BORE  -WEAR PLATE, SLOTTED  -WEAR PLATE, SLOTTED  -WEAR PLATE, SLOTTED  -BEARING 1° BORE  -BEARING 3/4° BORE  -BEARING 3/4° BORE  -BEARING 1° BORE	1 1 1 1 COMPONE 2 2 1-2 0-1 4 4 2-4 0-2 2-4	91924 41201  NTS FOR POSITION D PUMP COMPONEN 91106  90667 90676 90670 90678  90503 90510 90512  90424 90429 90428	188SS N 9 OPTIONAL T FROM B/M SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAMIC  CARBON CARBON TFE(GF)	90424 90428	SS/PFA  ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAHIC  CARBON CARBON TFE(GF)	91106 90667 90676 90676 90678 90503 90510 90512 90424 90429 90428	ALLOY C CARBON TFE(GF) PEEK  CARBON TFE(GF) CERAHIC  CARBON CARBON TFE(GF)	21 

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

## GA16 SERIES PUMP CONSOLIDATED B/M

				STANDARD PUM	P MATERIAL			
		31655 (U)	;	ALLOY (V)	c	ALLOY (W)	20	
DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM

## POSITION 8 SEAL ARRANGEMENT

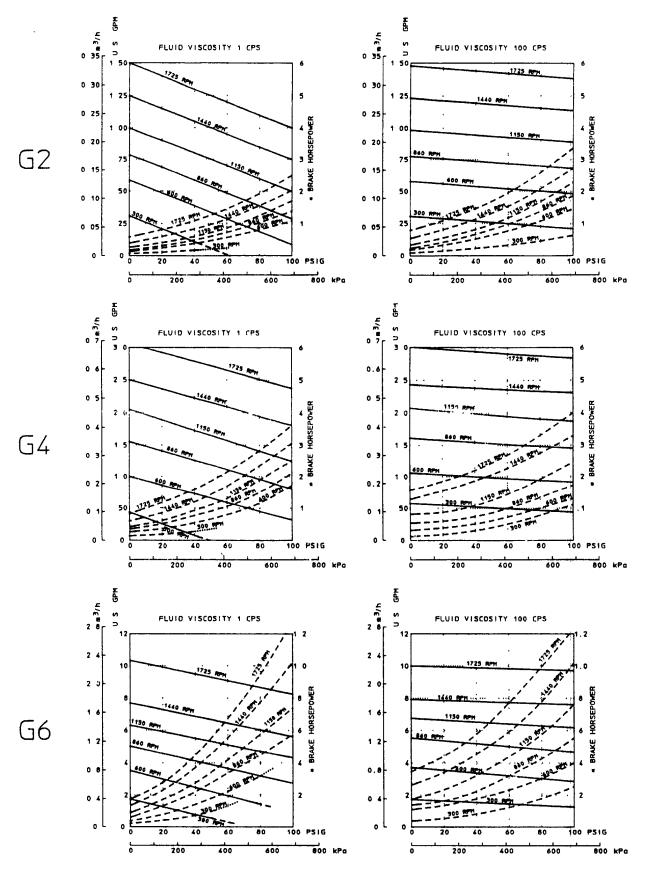
	PACKING GLAND	1 1	A91515	ALLOY 20	A91517	ALLOY C	A91515	ALLOY 20	38
	LANTERN RING	1	97104	ALLOY 20	97105	ALLOY C	97104	ALLOY 20	46
C0444041	STUD. PACKING GLAND	2	92014	ALLOY 20	92012	ALLOY C	92014	ALLOY 20	39
COMMON PARTS	NUT. STUD	2	92103	ALLOY 20	92102	ALLOY C	92103	ALLOY 20	40
PARIS	GREASE FITTING	1	27201	31055	27201	31055	27201	31055	65
	PLUG. 1/4" NPT	<b>u</b> 1	16432	ALLOY 20	16422	ALLOY C	16432	ALLOY 20	63
	ADAPTOR, 1/4" TO 1/8" NPT	1	27217	ALLOY ZO	27216	ALLOY C	27217	ALLOY 20	64
4.7	+PACKING RING	6	96515	TFE(BRD)	96515	TFE (BRD)	96515	TFE(BRO)	42
13	PACKING END RING	1	96505	TFE	96505	TFE	96505	TFE	41
15	+PACKING RING	7	96510	GRAFOIL	96510	GRAFOIL	96510	GRAFOIL	42

	SEAT RETAINER W/ PIN	1	A91564	ALLOY 20	A91560	ALLOY C	A91564	ALLOY ZO	36
COMMON	BOLT, SEAT RETAINER	2	W770413-188	18855	92007	ALLOY C	W770413-188	18855	39A
PARTS	O-FING SEAT RETAINER	1	140,51	71-6	1500	TFE	14621	TEE	37
	PLUG 1/4" NPT	•3	16432	ALLOY 20	16422	ALLOY C	16432	ALLOY 20	63
22	+SEAL HEAD ASSEMBLY	1	A97011	020/CBN	A97023	HCO/CBN	A97011	020/CBN	60
22	+SEAL SEAT W/ SEAL RING (TFE)	1	A97044	CER 99%	A97044	ÇER 99%	A97044	CER 99%	55
24	+SEAL HEAD ASSEMBLY	1	A97011	020/CBN	A97023	HCD/CBN	A97011	020/CBN	60
24	+SEAL SEAT W/ SEAL RING (TFE)	1	A91569	ALLOY 20	A91570	ALLOY C	A91569	ALLOY 20	55

	SEAT RETAINER W/ PIN	,	A91564	ALLOY 20	A91560	ALLOY C	A91564	ALLOY 20	36
COMMON	BOLT, SEAT RETAINER	2	W770413-188	18855	92007	ALLOY C	W770413-188	18855	39A
PARTS	O-RING, SEAT RETAINER	1	19031	TFE	19031	TFE	19031	TFE	37
	PLUG. 1/4" NPT	<b>#1</b>	16432	ALLOY 20	16422	ALLOY C	16432	ALLOY 20	63
	PIN PUMP END SEAT	1	91565	ALLOY 20	91561	ALLOY C	91565	ALLOY 20	59
42	+SEAL HEAD ASSEMBLY	1	A97022	020/CBN	A97027	HCO/CBN	A97022	020/C8N	60
	+SEAL SEAT W/ SEAL RING (TFE)	2	A97044	CER 99%	A97044	CER 99%	A97044	CER 99%	55
44	+SEAL HEAD ASSEMBLY	1	A97022	020/CBN	A97027	HCO/CBN	A97022	020/CBN	60
••	+SEAL SEAT W/ SEAL RING (TFE)	Z	A91569	ALLOY 20	A91570	ALLOY C	A91569	ALLOY 20	55

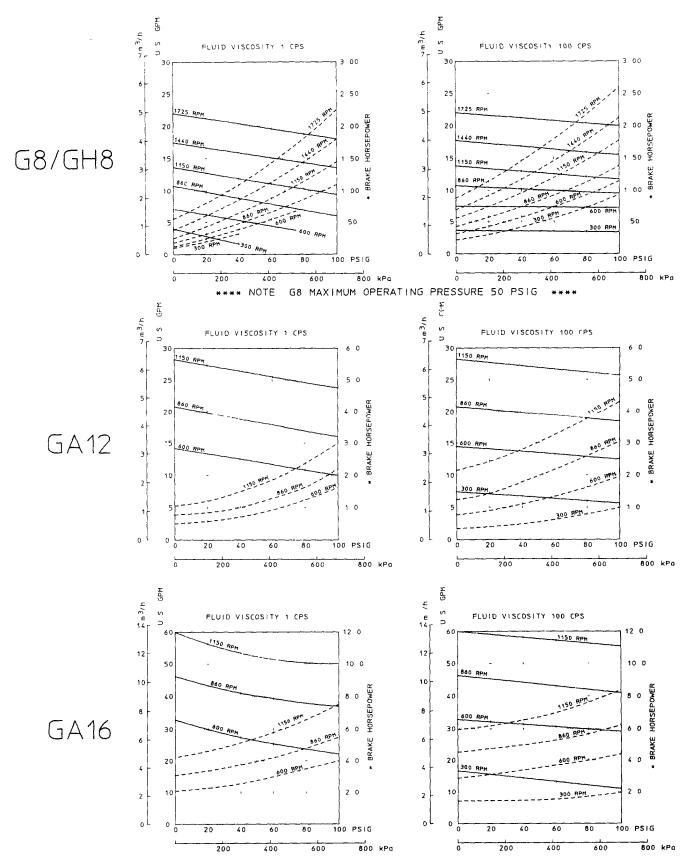
<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE 8/M \*DENOTES RECOMMENDED SPARE PART

# PERFORMANCE CHARTS



\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

# PERFORMANCE CHARTS

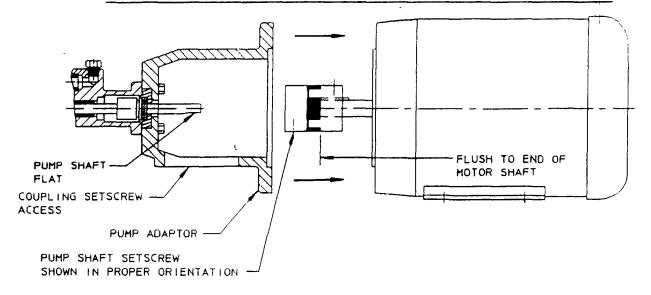


\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES





# PUMP TO MOTOR ASSEMBLY INSTRUCTIONS



## INSTRUCTION:

- 1.) POSITION PUMP SHAFT FLAT DIRECTLY OVER COUPLING SETSCREW ACCESS.
- 2.) SETSCREW COUPLING HALF, FLUSH TO END OF MOTOR SHAFT, ASSEMBLE SPIDER AND OTHER COUPLING HALF TO MOTOR HALF (OPTIONAL, WRAP COUPLING JAWS AND SPIDER WITH MASKING TAPE)
- 3.) SLIDE SHAFT OF PUMP ASSEMBLY INTO COUPLING MOUNTED ON MOTOR. FASTEN PUMP ADAPTOR TO MOTOR WITH BOLTS PROVIDED.
- 4.) BY USING COUPLING ACCESS IN THE PUMP ADAPTOR, TIGHTEN REMAINING SETSCREW ON COUPLING TO PUMP SHAFT.

NOTE: THIS PRODUCT MAY BE ASSEMBLED IN MORE THAN ONE WAY, BUT WE HAVE DETERMINED THIS PROCEDURE TO BE THE ,MOST TIME EFFICIENT

# GEARCHEM PUMPS PRESSURES TO 100 PSI

# SIGNIFICANT MODEL NUMBER SYSTEM AND AVAILABILITY TABLE

POSITION NO. 1 2	3	4 5	6	7	8	9	
POSITION 1 GEARCHEM EXTERNAL SPUR	GEAR P	UMP				,	
G = ORIGINAL VERSION, FOOT MO GA= MECHANICAL SEAL, FOOT MOU GC= MECHANICAL SEAL, C-FACE M GH= HIGHER PRESSURE MODEL, FO	INTED ON IOTOR MO	LY UNTING	ASSEMBL Y #	- 2,4	.6.8. .6.8.12 .6.8	. 16	
POSITION 2 PUMP SIZE	2	4	6	8	<b>*8</b>	12	16
Port Size Capacity (GPM MAX) Differential pressure (PSI MAX)	25° 1 5 100	50° 3 100	75° 10 100	1 00° 20 50	1 00° 20 100	1 50° 26 100	2 00' 55 100
POSITION 3 AVAILABLE PUMP METALLU	RGIES A	ND TYPE	PORT C	ONNECTI	ON		
A = 316SS FNPT C = ALLOY C FNPT D = ALLOY 20 FNPT K = 316SS FBSPT M = ALLOY C FBSPT N = ALLOY 20 FBSPT U = 316SS FLANGED V = ALLOY C FLANGED W = ALLOY 20 FLANGED	X X X X	×××××	X X X X	× × × ×	X X X X	× × × × × × × × × × × × × × × × × × ×	X X X
POSITION 4 DRIVE GEAR MATERIAL							
C = ALLOY C D = ALLOY 20 T = TFE (Glass Filled) (1) E = PEEK (1)	×××	X X X	× × ×	X X X	х	x	х
POSITION 5 IDLER GEAR MATERIAL							
C - ALLOY C (2) D - ALLOY 20 (2) K - Carbon T - TFE (Glass Filled) E - PEEK	××××	××××	× × ×	× × × <b>x</b>	× × ×	X X X	X X X
POSITION 6 WEAR PLATE MATERIAL							
K - Corbon T - TFE (Glass Filled) Z - Ceramic (3) E - Peek	×××	×××	×××	X X X	X X X	X X X	X X X
POSITION 7 SHAFT AND BEARING MATE	RIAL						
K = Standard Carbon T = TFE (Glass Filled) L = Extended Life carbon C = Extended Life Carbon - 'Cw' Shafts (14) 4 = Standard Carbon - Slotted	× × ×	×××	× × ×	X X X	X X X	X X X X	X X X X

POSITION 8 SEAL ARRANGEMENT	<u> </u>	<u>GA/GC</u> 2 - 4	<u>G</u> 6 - 8	<u>GA/GC</u> 6 - 8	<u>GH</u> +8	GA 12-16
PACKING B = TFE Rings G = Grafoil Rings J = Viton Lip Seat. (4) H-C Spring N = TFE Rings / Lantern R = Grafoil / Lantern	X X X		× × ×		X X	××

<sup>\*</sup> HIGHER PRESSURE MODEL

# GEARCHEM PUMPS PRESSURES TO 100 PSI

# SIGNIFICANT MODEL NUMBER SYSTEM AND AVAILABILITY TABLE

POSITION 8 SEAL ARRANGEMENT	<u>G</u> 2 - 4	<u>GA/GC</u> 2 - 4	<del>5</del> 6 - 8	GA/G5	<u>G</u> ⊬ •8	GA 12-16
MECHANICAL SEALS (5)			i i			1
BELLOWS A = Single Sea! (13) Carbon Rotary / Viton Ceramic Sea! / Viton		×		) }	; }	
C - Dauble Seal (6 13) Carbon Rotary / Viton Ceromic Seal / Viton		×		×	l 	!
P = Single Seal Siliconized Rotary / EPR Silicon CBD Seat / TFE		×		×	! !	
WEDGE E - Double Seal Carbon Rotary / TFE Silicon CBD Seat / TFE		×		λ	x	×
0 = Single Seal Tefton Rotary / TFE Silicon CBD Seat / TFE		x		×	x	
U = Single Sea! Corbon forally / TFE Si icon CBD Seat / TFE		λ		λ.		` .
V = External Sea! (15) Carbon Rotary / TFE Metallic Sea! / TFE	*		x			
W - External Seal Carbon Rotary / TFE Silicon CBD Seat / TFE			х			
Z = External Seal - Vacuum Carbon Rotary / TFE (15) Metallic Seal / TFE	×		х			
24 - Single Seal Carbon Rotary / 15E Metallic Seat / TFE	!	:		,		x
44 - Double Seal Carbon Rotary / TFE Metallic Seal / TFE	i					×

POSITION 9 OPTIONS PUMP SIZE		2	4	6	8	#8	12	16
A - Bearing Flush Ports	(7)	×	×	, x	×	×	STD	STD
B = PFA Coated SS Hag O-Rings Matallic Bearing Lock Pins	(7)	×	l x	X	×	×	x	×
C - Bearing Flush Parts PFA Coated SS Hsg O-Rings Metallic Bearing Lock Pins		×	×	×	X	x		
D - Bearing Flush Ports, PFA Coaled SS Hsg O-Rings Metallic Bearing Lock Pins Slotted Bearings	(8)	x	×	×	×	<b>x</b>	1 1	
E ~ Bearing Flush Ports, PFA Coated SS Mag O-Rings Metallic Bearing Lock Pins Slotted Bearings Slotted Wear Plates	(8)	×	×	* *	×			
F = GC Series Only 63 Frame Metric Motor	ļ	×	×		<u> </u>			
G - GC Series Only 71 Frame Metric Motor	Ì	×	×	×	x		Ì	
J = GA12 with ** Idier Shaft (Metallic Gear Only)	(10)		i I				' ×	! 
K = GC Series Only 80 Frame Metric Motor		×	×	×	×			
t = GC Series Only Large Coupling For 1437/1820/1840 Frame Motors		×	×	×	×			
M - GC Series Only 90 Frame Metric Motor				×	x			
N - Narrow Width Gears	(11)		×	×	ļ	l	1	
T = Température Trimmed Plastic	Gear	×	×	×	×	×	×	×
V = Center Hsg ~ Vent		×	×	×	×	×	×	STO
X = Special	(12)	×	×	×	×	×	×	×

<sup>.</sup> HIGHER PRESSURE MODEL

# GEARCHEM PUMPS PRESSURES TO 100 PSI

#### SIGNIFICANT MODEL NUMBER SYSTEM AND AVAILABILITY TABLE

#### NOTES

- (1) Maximum differential pressure allowed for plastic/plastic gears is 50 PSI
- (2) Pumps with metailic drive and idler gears require minimum viscosity of 100 cps and are limited to 1440 RPM maximum speed for G2-GH8 pumps and 1150 RPM for GA12-16 pumps
- (3) Ceramic wear plates with metallic gears require minimum viscosity of 100 cps
- (4) Viton Lip meals are limited to 25 PSIG
- (5) Not all mechanical seals available in all metallurgies
- (6) Double mechanical seals must be pressurized with seal fluid 15 to 20 PSIG above the pump discharge pressure
- (7) Standard GA12 and GA16 pumps furnished with bearing flush ports metallic bearing lack pins, and slatted wear plates
- (8) Statted bearings (GA12 and GA16) listed POSITION 7
- (9) Slotted wear plates reduce volumetric efficiency
- J OPTION available only with metal idler gear
- (11) Designation for reduced capacity pump
- (12) Consult Factory
- (13) Position 8 option A.C and P seals are only available in 316 stainless steel
- (14) 'CW' means carrosion/wear shaft material
- (15) External seals are limited to 50 PSIG

COMMENTS
Specifications and availability subject to change without notice

# GEARCHEM PUMPS EXTENDED PRESSURE PRESSURES ABOVE 100 PS I

# SIGNIFICANT MODEL NUMBER SYSTEM AND AVAILABILITY TABLE \_\_\_3 1 2 POSITION 1 GEARCHEM EXTERNAL SPUR GEAR PUMP TION 1 GEARCHEM EXTERNAL 5.5% TELL. G - ORIGINAL VERSION FOOT MOUNTED ONLY - 2 4 6 12 GE- MECHANICAL SEAL FOOT MOUNTED ONLY - 2 4 6 12 GE- MECHANICAL SEAL C-FACE MOTOR MOUNTING ASSEMBLY - 2 4 6 12 GH- HIGHER PRESSURE MODE. FOOT MOUNTED ONLY - 6 Port Size Capacity (SPM MAX) Differential pressure (PS) MAX) 25' 50' 1 5 2 1 175 140+ 1 50 26 150 POSITION 3 AVAILABLE PUMP METALLURGIES AND TYPE PORT CONNECTION A - 31655 C - ALLOY C D - ALLOY C K - 31655 M - ALLOY C N - ALLOY C U - 31655 V - ALLOY C W - ALLOY C FNPT FNPT FNSPT FBSPT FBSPT FBSPT FLANGED FLANGED FLANGED POSITION 4 DRIVE GEAR MATERIAL C - ALLOY C D - ALLOY 20 X አ × X+ | POSITION 5 IDLER GEAR MATERIAL C - ALLOY C D - ALLOY 20 E - PEEK λ POSITION 6 WEAR PLATE MATERIAL K - Carbon X T - TFE (Glass Filled) X Z - Ceramic (3) X E - Peek X POSITION 7 SHAFT AND BEARING MATERIAL ××× K = Standard Carbon L = Extended Life Carbon C = Extended Life Carbon - 'CW' Shafts (14) 4 = Standard Carbon - Slotted X X

1	POSITION & SEAL ARRANGEMENT	2 - 4	GA/GC	- <u>G</u>	GA/GC		<u>GA</u> 12
	PACKING B = TFE Rings G = Grafail Rings N = TFE Rings / Lantern R = Grafail / Lantern	×		×××	1	×	×

MODEL REQUIRES OPTION 'N' (Narrow Width Gears) IN POSITION 9
 HIGHER PRESSURE MODEL

# GEARCHEM PUMPS EXTENDED PRESSURE PRESSURES ABOVE 100 PSI

SIGNIFICANT MODEL NUMBER SYSTEM AND AVAILABILITY TABLE (CONTINUED)

POSITION 8 SEAL ARRANGEMENT	2 - 4	<u>GA/GC</u> 2 - 4	<del>- 6</del>	GA/GC	GH •6	-GA 12
MECHANICAL SEALS (5)						
BELLOWS A = Single Seal (13) Carbon Rotary / Viton Ceramic Seal / Viton		×		x		
C - Double Seal (6 13) Carbon Rolary / Viton Ceramic Seat / Viton		×		x		
P - Single Seat Siliconized Rotary / EPR Silican CBD Seat / TFE		x		x		
WEDGE E - Double Seal Carbon Rolary / TFE Silicon CBD Seat / TFE		x		x	x	×
G • Single Seal Teflon Rotary / TFE Silicon CBD Seat / TFE		x		x	x	
U - Single Seal Carbon Rotary / TFE Silicon CBD Seat / TFE		x		×	x	×
24 - Single Seal Carbon Rotary / TFE Metaltic Seal / TFE						×
44 - Double Seal Carbon Rolary / TFE Metall+c Seal / TFE						×

POSITION 9 OPTIONS PUMP SIZE	2	+4	•6	*6	12
A - Bearing Flush Ports	х	×	×	×	STD
B - PFA Coated SS Heg O-Rings Metallic Bearing Lock Pins	×	×	×	×	×
C • Bearing Flush Ports PFA Coated SS Hsp O-Rings Metallic Bearing Lock Pins	х	×	×	x	
D - Bearing Flush Ports PFA Cooted SS Hag O-Rings Metallic Bearing Lock Pins Slotted Bearings (8:	, x	×	×	×	
E - Bearing Flush Ports PFA Coated SS Hsp O-Rings Metallic Bearing Lock Pins Slotted Bearings (8 Slotted Warr Plates (9)		x	×		
F - GC Series Only 63 Frame Metric Motors	×	×			
G • GC Series Only 71 Frame Metric Hotors	×	×	×		
J = GA12 with 1' Idler Shaft (10 (Metallic Gear Only)	))				×
K • GC Series Only 80 Frame Metric Motors	×	×	×		
L - GC Series Only Large Coupling For 1431/182C/184C Frame Motors	×	×	X		
M - GC Series Only 90 Frame Metric Motors			x		
N - Narrow Width Gears	}	RED	REQ	1	
V = Center Hsg - Vent	×	×	×	×	×
X - Special (12	2) X	×	×	×	×

MODEL REQUIRES OPTION 'N' (Narrow Width Gears) IN POSITION 9
 HIGHER PRESSURE MODEL

# GEARCHEM PUMPS EXTENDED PRESSURE PRESSURES ABOVE 100 PSI

#### SIGNIFICANT MODEL NUMBER SYSTEM AND AVAILABILITY TABLE

#### NOTES

- (1) Not applicable
- (2) Pumps with metallic drive and idler gears require minimum viscosity of 100 cps and are limited to 1440 RPM maximum speed to: G2-GH6 pumps and 1150 RPM for GA12 pump
- (3) Ceramic wear plates with metallic gears require minimum viscosity of 100 cps
- (4) Not applicable
- (5) Not all mechanical seois available in all metallurgies
- (6) Double mechanical seals must be pressurized with seal fluid 15 to 20 PSIG above the pump discharge pressure
- (7) Standard GA12 pump furnished with bearing flush parts metallic bearing lock pins and slotted wear plates
- (8) Statted bearings (GA12) Listed POSITION 7
- (9) Statted wear plates reduce volumetric efficiency
- (10) J OPTION available only with metal idler gear
- (11) Not applicable
- (12) Consult factory
- (13) Pasition 8 option A C and P seals are only available in 3to stainless steel
- (14) 'CW' means corrosion/wear shaft material

Comments
Specifications and availability subject to change without natice

# GA2/GC2 SERIES PUMP CONSOLIDATED B/M

					TANDARD PUMP				1
			316S (A) DR	S (K)	ALLOY (C) OF	C	ALLO	Y 20 R (N)	}
	DESCRIPTION	QTY	PART NO	MATL	PART NO	HATL	PART NO	MATL	ITE
SITION 3	STANDARD PUMP - NON-VARIABLE COL	PONEN	its						
	HOUSING FRONT	1	70153	31655	70154	ALLOY C	70155	ALLOY 20	1
	HOUSING CENTER FNPT		70026	31655	70027	ALLOY C	70028	ALLOY 20	2
	HOUSING CENTER FBSPT	<b>'</b> '	70029	31655	70030	ALLOY C	70031	ALLOY 20	2
	HOUSING REAR	1	70214	31655	70215	ALLOY C	70216	ALLOY 20	3
	RING RETAINING	4							
	-RING RETAINING POS 8 OPT A P	5	76702	ALLDY 20	76701	ALLOY C	76702	ALLOY 20	10
	-KEY METAL DRIVE GEAR		71910	ALLOY 20	71911	ALLOY C	71910	ALLOY 20	-
	-KEY PLASTIC DRIVE GEAR	-1	71916	ALLOY 20	71917	ALLOY C	71916	ALLOY 20	
	THE THE CONTINUE CENT		7.97	1 3 1 26 1	/191	L ALINY C	71910	ALLOY 20	
	HEY PLASTIC IDLER GEAR	• 1	71916	ALLOY 20	71917	ALLOY C	71916	ALLOY 20	
	PIN BEARING LOCK	4	41801	TFE	41801	TFE	41801	TFE	1.
	+O-RING HOUSING	2	61101	TFE	61101	TFE	61101	TFE	10
	PIN HOUSING	4	40801	31655	40801	31655	40801	31655	17
	BOLT HOUSING	4	72006	18855	72006	18855	72006	18855	18/
	NUT HOUSING BOLT	4	72101	18655	72101	18855	72101	18855	11
	NAMEPLATE		41201	18855	41201	18855	61201	18855	<del>-</del>
	<del></del>			1				1	
C C	6 5 DRIVE AND IDLER GEAR	1 2	70677	ALCY (	70672	ALLOY E	70072	ALLOT L	6
	GEAR DRIVE/IDLER	1-2	70673	ALLOY 20	/08/2	A1 201 C	70673	ALLOY 20	- 6
	-GEAR IDLER	1	70674	CARBON	70674	CARBON	70674	CARBON	<del>-</del>
<del></del>	+GEAR DRIVE/IDLER	1-2	70675	TFE (GF)	70675	TEE (GF)	70675	TEE (GE)	6
	+GEAR DRIVE/IDLER	1-2	70676	PEEK	70676	PEEK	70676	PEEK	- 6
SITION 6	WEAR PLATE MATERIAL		70523	CARBON	70523	CARBON	70523	CARBON	15
Т	-WEAR PLATE		70524	TFE (GF)	70524	TFEIGFI	70524	TFE(GF)	15
Z	-WEAR PLATE	4	70525	CERAMIC	70525	CERAMIC	70525	CERAMIC	15
E	-WEAR PLATE		70534	PEEK	70534	PEEK	70534	PEEK	15
SITION 7	SHAFT AND BEARING HATERIAL								
STANDARD	CONSTRUCTION								
	+BEARING	5	70404	CARBON	70404	CARBON	70404	CARBON	12
ĸ	+SHAFT DRIVE STO	,	70372	31655	70373	ALLOY C	70374	ALLOY 20	- 4
	+SHAFT DRIVE POS 8 OPT A P					ALLOY C	70774-5	ALLOY 20	
			70372-5	31655	70373-5	<del> </del>	<del></del>		
	+SHAFT IDLER	1	70378	316\$\$	70379	ALLOY C	70360	ALLOY 20	
<del></del>	•SHAFT IDLER •BEARING	1	70378 70401	316SS TFE(GF)	70379 70401	ALLOY C TFE(GF)	70401	TFE (GF)	1:
·	- SHAFT IDLER - BEARING - BEARING	_	70378 70401 70402	J16SS TFE(GF) TFE(GF)	70379 70401 70402	ALLOY C TFE(GF) TFE(GF)	70401 70402	TFE(GF)	12
1	- SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD	3	70378 70401 70402 70372	J16SS TFE(GF) TFE(GF) 316SS	70379 70401 70402 70373	ALLOY C TFE(GF) TFE(GF) ALLOY C	70401 70402 70374	TFE(GF) TFE(GF) ALLOY 20	12
· · · · · · · · · · · · · · · · · · ·	- SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 6 OPT A P	1	70378 70401 70402 70372 70372-5	316SS TFE(GF) TFE(GF) 316SS 316SS	70379 70401 70402 70373 70373-5	ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C	70401 70402 70374 70374-5	TFE(GF)	12
1	- SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD	3	70378 70401 70402 70372	J16SS TFE(GF) TFE(GF) 316SS	70379 70401 70402 70373	ALLOY C TFE(GF) TFE(GF) ALLOY C	70401 70402 70374	TFE(GF) TFE(GF) ALLOY 20	12
	- SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 6 OPT A P - SHAFT IDLER	3	70378 70401 70402 70372 70372-5	316SS TFE(GF) TFE(GF) 316SS 316SS	70379 70401 70402 70373 70373-5	ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C	70401 70402 70374 70374-5	TFE(GF) TFE(GF) ALLOY 20 ALLOY 20	12
	- SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 6 OPT A P + SHAFT IDLER LIFE - BEARINGS	1 3	70378 70401 70402 70372 70372-5 70378	316SS TFE(GF) TFE(GF) 316SS 316SS 316SS	70379 70401 70402 70373 70373-5 70379	ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C ALLOY C	70401 70402 70374 70374-5 70380	TFE(GF) TFE(GF) ALLOY 20 ALLOY 20 ALLOY 20	12
	SHAFT IDLER  BEARING  BEARING  SHAFT DRIVE STD  SHAFT DRIVE POS 6 OPT A P  SHAFT IDLER  LIFE - BEARINGS  BEARING	3	70378 70401 70402 70372 70372-5 70378	316SS TFE(GF) TFE(GF) 316SS 316SS 316SS 316SS	70379 70401 70402 70373 70373-5 70379	ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C ALLOY C ALLOY C	70401 70402 70374 70374-5 70380	TFE(GF) TFE(GF) ALLOY 20 ALLOY 20 ALLOY 20 EWCBN	12 12 4 4 5
	- SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 6 OPT A P - SHAFT IDLER  LIFE - BEARINGS - BEARING - SHAFT DRIVE STD	1 3	70378 70401 70402 70372 70372-5 70376 70431 70372	316SS TFE (GF) TFE (GF) 316SS 316SS 316SS 316SS	70379 70401 70402 70373 70373-5 70379 70431 70373	ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C	70401 70402 70374 70374-5 70380 70431 70374	TPE(GF) TPE(GF) ALLOY 20 ALLOY 20 ALLOY 20 EWCBN ALLOY 20	12 12 4 5
EXTENDED	SHAFT IDLER  BEARING  BEARING  SHAFT DRIVE STD  SHAFT DRIVE POS 6 OPT A P  SHAFT IDLER  LIFE - BEARINGS  BEARING	1 3 1	70378 70401 70402 70372 70372-5 70378	316SS TFE(GF) TFE(GF) 316SS 316SS 316SS 316SS	70379 70401 70402 70373 70373-5 70379	ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C ALLOY C ALLOY C	70401 70402 70374 70374-5 70380	TFE(GF) TFE(GF) ALLOY 20 ALLOY 20 ALLOY 20 EWCBN	12
EXTENDED L	SHAFT IDLER  -BEARING -BEARING -SHAFT DRIVE STD -SHAFT DRIVE POS 6 OPT A P -SHAFT IDLER  LIFE - BEARINGS -BEARING -SHAFT DRIVE STD -SHAFT DRIVE STD -SHAFT DRIVE POS 8 OPT A P -SHAFT DRIVE POS 8 OPT A P -SHAFT DRIVE POS 8 OPT A P	1 3 1	70378 70401 70402 70372 70372-5 70376 70431 70372 70372-5	316SS TFE (GF) TFE (GF) 316SS 316SS 316SS 316SS 316SS 316SS 316SS	70379 70401 70402 70373 70373-5 70379 70431 70373 70373-5	ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C ALLOY C EWCRN ALLOY C ALLOY C	70401 70402 70374 70374-5 70380 70431 70374-5	TFE(GF) TFE(GF) ALLOY 20 ALLOY 20 ALLOY 20 EWCBN ALLOY 20 ALLOY 20	12
EXTENDED L	SHAFT IDLER  BEARING  BEARING  SHAFT DRIVE STD  SHAFT DRIVE POS 6 OPT A P  SHAFT IDLER  LIFE - BEARINGS  BEARING  SHAFT DRIVE STD  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P  SHAFT DRIVE POS 8 OPT A P  SHAFT IDLER	1 3 1	70378 70401 70402 70372 70372-5 70376 70431 70431 70372 70372-5 70378	316SS TFE(GF) TFE(GF) 316SS 316SS 316SS 316SS 316SS 316SS 316SS 316SS 316SS	70379 70401 70402 70373 70373-5 70379 70431 70373-5 70379	ALLOY C TFE(GF) TFE(GF) ALLOY C	70401 70402 70374 70374-5 70380 70431 70374 70374-5 70380	THE (GF.) THE (GF.) THE (GF.) ALLOY 20	12 4 4 4 5
EXTENDED L	SHAFT IDLER  BEARING  BEARING  SHAFT DRIVE STD  SHAFT DRIVE POS 6 OPT A P  SHAFT IDLER  LIFE - BEARINGS  BEARING  SHAFT DRIVE STD  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P  SHAFT IDLER  LIFE - BEARINGS AND 'CW' SHAFTS  BEARING	1 3 1	70378 70401 70402 70372 70372-5 70376 70431 70372 70372-5 70378	316SS TFE(GF) TFE(GF) 316SS 316SS 316SS 316SS 316SS 316SS 316SS 316SS 316SS	70379 70401 70402 70373 70373-5 70379 70431 70373-5 70379	ALLOY C TFE(GF) TFE(GF) ALLOY C	70401 70402 70374 70374-5 70380 70431 70374-5 70380	TFE (GF) TFE (GF) ALLOY 20	12 4 4 4 5 5
EXTENDED L EXTENDED	- SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 DPT A P - SHAFT IDLER  LIFE - BEARINGS - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 DPT A P - SHAFT DRIVE POS 8 DPT A P - SHAFT DRIVE POS 8 DPT A P - SHAFT IDLER  LIFE - BEARINGS AND 'CV' SHAFTS - BEARING - SHAFT DRIVE STD	1 1 5 1	70378 70401 70402 70372 70372-5 70378  70431 70372 70372-5 70378  70431 70372-70378	316SS TFE(GF) TFE(GF) 316SS	70379 70401 70402 70373 70373-5 70379 70431 70373-5 70379 70431 70373-2	ALLOY C TFE (GF) TFE (GF) ALLOY C EWCRN ALLOY C ALLOY C EWCRN CWALYC	70401 70402 70374 70374-5 70380 70431 70374-70374-5 70380	TFE(GF) TFE(GF) ALLOY 20	12 4 4 5 12 4 4 5 5
EXTENDED L	SHAFT IDLER  BEARING  BEARING  SHAFT DRIVE STD  SHAFT DRIVE POS 6 OPT A P  SHAFT IDLER  LIFE - BEARINGS  BEARING  SHAFT DRIVE STD  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P  SHAFT IDLER  LIFE - BEARINGS AND 'CW' SHAFTS  BEARING	1 3 1	70378 70401 70402 70372 70372-5 70376 70431 70372 70372-5 70378	316SS TFE(GF) TFE(GF) 316SS 316SS 316SS 316SS 316SS 316SS 316SS 316SS 316SS	70379 70401 70402 70373 70373-5 70379 70431 70373-5 70379	ALLOY C TFE(GF) TFE(GF) ALLOY C	70401 70402 70374 70374-5 70380 70431 70374-5 70380	TFE (GF) TFE (GF) ALLOY 20	12 4 4 4 5 5

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# GA2/GC2 SERIES PUMP CONSOLIDATED B/M

					STANDARD PUMP	MATERIAL			
			201E	S (K)	ALLD)	. C.	ALLE (3) Of	23 1 N.	
	DESCRIPTION	CTY	PART NO	MAT.	PART NO	MAT.	PART NO	MAT.	Ŧ£
SITION A	GAZ/GCZ SEAL ARRANGEMENT								
	MECHANICAL SEAL								
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	SEAL RETAINER CODE A E P Q U		21759	31655	21760	ALLOY C	21761	ALLOY 20	36
GA2	SEAL RETAINER CODE C	-, 1	21762	31655		ALLOY C	<del></del>	ALLOY 20	36
COMMON	+0-RING RETAINER	<del></del>	W213270-TFE	TFE	W213270-TFE		1 W213270-TEF	TEE	37
PARTS	BOLT SEAL RETAINER	+	W770401-188		W770401-188	18855	1 W770401-188	18855	35
	PLUG 1/8" NPT INOT REG E C		W772565-316	31655		ALLOY 5	52300	AL_0Y 20	62
	SEAL RETAINER CODE A E P.Q.U		21765	31655		ALLOY C	21767	ALLOY ZO	3,
	SEAL RETAINER CODE C	- 1	21768	31655	<del></del>	ALLOY C	21770	ALLCY 20	36
	+O-RING RETAINER		W213270-TFE	<del></del>	W213270-TFE	TFE	W213270-TFE	YFE .	37
GC2	BOLT C-FACE ADAPTOR				·		<del></del>	<del></del>	
COMMON	<del></del>	<del></del>	W770403-188	<u> </u>	W770403-188	16855	W770403-188	18855	35
PARTS	PLUG 1/8' NPT (NOT REG C E)	-	W772565-316			ALLOY C	52300	ALLOY 20	62
	MOTOR BOLT	+	W770425-186		W770425-188	10655		. 18855	25
	C-FACE MOTOR ADAPTOR	+ 1	49725	ALUMINUM		ALUMINUM		ALUMINUM	- 66
	COUPLING L-075 56C FR	<del></del>	W210369-000	STEEL	WZ10369-000	STEEL	W210369-000	STEEL	- 66
	+ASSEMBLY INSTRUCTIONS		20051-A	<u> </u>	20051-A		20051-A		
A	+SEAL HEAD ASSEMBLY	11	Y0900921-316	314/CBN/VTH					60
	+SEAL SEAT W/ O-RING (VTN)	+ 1	Y1000521-000	CER/VTN					55
,	-SEAL HEAD ASSEMBLY	2	Y0900921 316	316/CRN/VTH				****	40
	+SEAL SEAT W/ O-R PU (VTN	1 2	Y1000521-000	CER/VTN	****		****		55
E	-SEAL HEAD ASSEMBLY	1 1	77051	316/CBN					60
	+SEAL SEAT W/ O-RING (TFE)	2	171000609-000	SIC/TFE					55
P	+SEAL MEAD ASSEMBLY	1 1	170901721-316	316/F90/EPA					60
	+SEAL SEAT W/ D-RING (TRE)	<u>i 1</u>	171000609-000	SIC/TFE					55
۵	+SEAL HEAD ASSEMBLY	1	77033	020/TFE	77034	HCO/TFE	77033	020/TFE	60
	-SEAL SEAT W/ O-RING (TFE)	1	Y1000609-000	SIC/TFE	Y1000609-000	SIC/TFE	Y1000609-000	SIC/TFE	55
u	+SEAL HEAD ASSEMBLY	1 1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
	-SEAL SEAT W/ O-RING (TFE)		Y1000609-000	SIC/TFE	Y1000609-000	SIC/TFE	Y1000609-000	SIC/TEE	55
			*						
	MECHANICAL SEAL							<del></del>	
GA2	SEAL RETAINER	-1	21783	316S5	21784	ALLOY C	<del></del>	ALLOY 20	36
COMMON	BOLT SEAL RETAINER	, <u>2</u>	W770403-188		W770403-188		W770403-188	18855	
PARTS	PLUG 1/8" NPT		W772565-316	31655	52301	ALLOY C	<del></del>	ALLOY 20	62
	BOLT C-FACE ADAPTOR		W770403-188		W770403-188		W770403-188		39
GC2	PLUG 1/8' NPT	*2	W772565-316		52301	ALLOY C	<del></del>	ALLOY 20	62
COMMON	MOTOR BOLT	1.	W770425-186		W770425-188		W770425-188		25
PARTS	C-FACE MOTOR ADAPTOR	+ 1	49725	ALUMINUM	49725	ALUMINUM	69725	ALUMINUM	- 66
	COUPLING L-075 SEC PR	1 1	W210369-000	STEEL	W210369-000	STEEL	W210369-000	STEEL	61
	ASSEMBLY INSTRUCTIONS	•	20051-A		20051-A		20051-A		
	+SEAL HEAD ASSEMBLY	1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
·	+SEAT ASSY EXT SEAL	1	71571	316/TFE	71573	HCO/TFE	71572	020/TFE	55
	+SEAL HEAD ASSEMBLY	, 1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
w	+SEAT ASSY EXT SEAL	+	71574	SIC/TEE	71574	SIC/TEE	71574	SICITEE	5

COMMON	BOLT SEAL RETAINER	. 2	W770403-188	18655	W770403-188	18855	W770403-188	18855	39/
PARTS	PLUG 1/8" NPT	•2	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
	BOLT C-FACE ADAPTOR		W770403-188	18855	W770403-188	18855	W770403-188	18855	39A
GC2	PLUG 1/8' NPT	• 2	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
COMMON	MOTOR BOLT	4	W770425-186	18655	W770425-188	18855	W770425-188	10855	25
PARTS	C-FACE MOTOR ADAPTOR	1	49725	ALUMINUM	49725	ALUMINUM	69725	ALUMINUM	66
	COUPLING L-075 SEC FR	1 4	W210369-000	STEEL	W210369-000	STEEL	W210369-000	STEEL	68
	ASSEMBLY INSTRUCTIONS	, ,	20051-A		20051-A		20051-A		
	+SEAL HEAD ASSEMBLY	1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
	+SEAT ASSY EXT SEAL		71571	316/TFE	71573	HCO/TFE	71572	020/TFE	55
w	+SEAL HEAD ASSEMBLY	1	77036	020/CBN	77037	HCO/CBN	77036	020/CBN	60
-	+SEAT ASSY EXT SEAL	1	71574	SIC/TFE	71574	SIC/TFE	71574	SIC/TFE	55

1	}	HOUSING FRONT - BRG FLUSH	1	70153-1	31655	70154-1	ALLOY C	70155-1	ALLOY 20	1
		HOUSING REAR - BRG FLUSH	1	70212	31655	70234	ALLDY C	70233	ALLOY 20	3
C	1	PLUG 1/8" NPT	•3	W772565-316	31655	52301	ALLOY C	52300	ALLDY 20	62
-	Γ.	+PIN BEARING LOCK	4	41802	ALLOY 20	41806	ALLOY C	41802	ALLDY 20	14
	ľ	+0-RING HOUSING	. 2	61104	55/PFA	61104	SS/PFA	61104	55/PFA	16
		-BEARING SLOTTED	5	70419	CARBON	70419	CARBON	70419	CARBON	12 13
		+WEAR PLATE SLOTTED	. 4	70526	CARBON	70526	CARBON	70526	CARBON	15
	i	HOTOR BOLT	4	W770544-188	18855	W770544-188	18855	W770544-188	18855	25
	F	C-FACE MOTOR ADAPTOR 63 FR	1	49743	ALUMINUM	49743	ALUMINUM	49743	ALUMINUM	66
		COUPLING L-050 63 FR	1	W213579-000	STEEL	WZ13579-000	STEEL	W2 13579-000	STEEL	48
	Г	HOTOR BOLT	1 4	W770545-188	18855	W770545-188	18855	W770545-188	18855	25
	G	C-FACE HOTOR ADAPTOR 71 FR	, 1	69744	ALUMINUM	49744	ALUMINUM	49744	ALUMINUM	66
	ĺ	COUPLING L-070 21 FR	1	W213581-000	STEEL	W213581-000	STEEL	W213581-000	STEEL	68
	Γ	MOTOR BOLT	4	W770546-188	18855	W770546-188	18855	W770546-188	18855	25
	K	C-FACE HOTOR ADAPTOR BO FR	1	49745	ALUMINUM	49745	ALUMINUH	49745	ALUHINUM	66
		COUPLING L-075 80 FR	1 1	W213583-000	STEEL	W213583-000	STEEL	W213583-000	STEEL	68
	L	COUPLING L-090 1437C-184C FR	1	W213229-000	STEEL	W213229-000	STEEL	W213229-000	STEEL	68
		HOUSING CENTER - VENT PAPT		70026-Z	31655	70027-2	ALLOY C	70028-2	ALLOY 20	2
	v	HOUSING CENTER - VENT FESPT	7 1	70029-2	31655	70030-2	ALLOY C	70031-2	ALLOY 20	7
		PLUG 1/8' NPT	+1	W772565-316	31655	52301	ALLOY C	52300	ALLOY ZO	62

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# GA4/GC4 SERIES PUMP CONSOLIDATED B/M

				3163		HUP CRADINATE				•
				(A) OF	1 (K)	ALLOY (C) 06	î Îmi	ALLOY (D) 06	(N)	
		DESCRIPTION	OTY	PART NO	HATL	PART NO	MATL	PART NO	MA"L	Ţ
ITION	6	SEAL ARRANGEMENT								
NTERN	AL P	ECMANICAL SEAL		·····				***		
		SEAL RETAINER CODE A E P.Q L		21759	31655	21760	ALLOY C	21761	ALLEY 20	3
GA4		SEAL RETAINER CODE C	¬ '	21762	316\$5	21763	ALLOY C	2176+	ALLOY 20	3
СОММО	N	+0-RING RETAINER	1 1	W213270-TFE	TFE	W213270-TFE	TFE	W213270-TFE	TFE	3
PARTS		BOLT SEAL RETAINER	, 2	W770401-186	18855	W770401-166	18855	W770401-188	18855	•
		PLUG 1/8' NPT (NOT REQ ( E)	1 =2	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	6
		SEAL RETAINER CODE A E P Q U	-	21765	31655	21766	ALLOY C	21767	I ALLOY 20	-,
		SEAL RETAINER CODE C	٠,	21768	31655	21769	I ALLOY C	21770	ALLOY 20	3
cc.		+C-RING RETAINER	1	W213270-TFE	TFE	W213270-TFE	TFE	W213270-TFE	TFE	-,
GC4 COMMON		BOLT C-FACE ADAPTOR	4	W770403~188	18855	W770403-188	18855	W770403-186	18855	3
PARTS		PLUG 1/8" NPT (NOT REG C E.	. •2	W772565-316	31655	52301	ALLOY C	52300	ALLCY 20	6
		MOTOR BOLT	. 4	W770425-188	18855	W770425-188	18855	W770425-186	18855	2
		C-FACE MOTOR ADAPTOR	. 1	49725	ALUMINUM	49725	ALUMINUM	49725	ALUMINUM	. 6
		COUPLING L-075 56C FR	1	W210369-000	STEEL	W210369-000	STEEL	W210369-000	STEEL	. 6
		+ASSEMBLY INSTRUCTIONS	7 1	20051-A		20051-A		20051-A	••••	-
		+SEAL HEAD ASSEMBLY	1	Y0900921-316	316/CBH/VTN					6
^		+SEAL SEAT W/ O-RING (VTN)	, 1	Y1000521-000	CER/VTN					5
		+SEAL HEAD ASSEMBLY	2	Y0900921-316	316/08H/VTH					6
c		+SEAL SEAT W/ O-RING (VTN)	2	Y1000521-000	CER/VTN					5
		+SEAL HEAD ASSEMBLY	1	77051	316/CBN					6
E		+SEAL SEAT W/ D-RING (TFE)	2	Y1000609-000	SIC/TFE			<del></del>		S
		+SEAL HEAD ASSEMBLY	<del></del>	Y0901721-316	316/P90/EP4	<del></del>				6
P		SEAL SEAT W/ C-RING (TFE)		Y1000609-000	SIC/TFE					5
		+SEAL HEAD ASSEMBLY	1	<del></del>	020/TFE		HCO/TFE	77033	020/TFE	6
G		+SEAL SEAT W/ C-RING (TFE)	1	Y1000609-000	SIC/TFE	Y 1000609-000	SIC, TFE	N 1000609-000	SIC/TFE	5
		+SEAL HEAD ASSEMBLY	1	77036	020/CBN	77037	HC0/CBN	7703é	020/CBN	6
U		+SEAL SEAT W/ O-RING (TFE)	+	Y1000609-000	SIC/TEE	Y1000609-000	SIC/TFE	Y1000609-000	SIC/TFE	5
		<del></del>			·	1		·	i	
XTERNA	AL H	ECHANICAL SEAL								
GA4	_	SEAL RETAINER	1	21783	31655	21784	ALLOY C	21785	ALLOY 20	34
COMMON	N	BOLT SEAL RETAINER	2	W770403-188	18855	W770403-186	18855	W770403-188		31
PARTS		PLUS 1/8" NPT	• 2	W772565-316	3,355	52301	ALLEY E	5230u	ALLOY 20	6.
	_	BOLT, C-FACE ADAPTOR	<del>,</del>	W770403-188	18855	<del></del>		W770403-188	18855	3
GC 4										
		PLUG 1/8" NPT	2	W772565-316		W770403-188	188SS			
	NI.	PLUG 1/8" NPT	1 = 2	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	6
COMMON		HOTOR BOLT	4	W770425-188	31655 18855	52301 W770425-188	ALLOY C	52300 W770425-188	ALLOY 20 18855	6:
COMMON		HOTOR BOLT C-FACE MOTOR ADAPTOR	4	W770425-188	31655 18855 ALUMINUM	52301 W770425~168 49725	ALLOY C 188SS ALUHINUM	52300 W770425-188 49725	188SS ALUHINUM	6: 2: 6:
COMMON		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 S6C FR	1	49725 W210369-000	31655 18855 ALUMINUM STEEL	52301 W770425-168 49725 W210369-000	ALLOY ( 18855 ALUMINUM STEEL	52300 W770425-188 49725 W210369-000	188SS ALUMINUM STEEL	6: 2: 6:
COMMON		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS	1	W770425-188 49725 W210369-000 20051-A	31655 18855 ALUMINUM STEEL	52301 W770425-188 49725 W210369-000 20051-A	ALLOY C 188SS ALUHINUM STEEL	52300 W770425-188 49725 W210369-000 20051-A	108SS ALUMINUM STEEL	6:
COMMON		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY	1 1	W770425-188 49725 W210369-000 20051-A 77036	31655 18855 ALUMINUM STEEL	52301 W770425-188 49725 W210369-000 20051-A 77037	ALLOY C 188SS ALUMINUM STEEL 	52300 W770425-188 49725 W210369-000 20051-A 77036	ALLOY 20 18855 ALUMINUM STEEL	6: 2: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6:
COMMON PARTS		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY, EXT SEAL	1	W770425-188 49725 W210369-000 Z0051-A 77036 71571	31655 18855 ALUMINUM STEEL  020/CBN 316/TFE	52301 W770425-188 49725 W210369-000 Z0051-A 77037 71573	ALLOY C 188SS ALUMINUM STEEL HCO/CON HCO/TFE	52300 W770425-188 49725 W210369-000 20051-A 77036 71572	ALLOY 20 188SS ALUHINUM STEEL  020/CBN 020/TFE	6: 6: 6: 6: 5:
COMMON PARTS		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS  - SEAL HEAD ASSEMBLY  - SEAT ASSY, EXT SEAL  - SEAL HEAD ASSEMBLY	1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036	316SS 188SS ALUMINUM STEEL  020/CBN 316/TFE 020/CBN	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037	ALLOY C 188SS ALUMINUM STEEL HCO/CBN HCO/TFE HCO/CBN	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036	ALLOY 20 18855 ALUHINUM \$TEEL  020/CBN 020/TFE 020/CBN	6: 2: 6: 6: 6: 5: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6:
COMMON PARTS V		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY, EXT SEAL	1 1	W770425-188 49725 W210369-000 Z0051-A 77036 71571	31655 18855 ALUMINUM STEEL  020/CBN 316/TFE	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037	ALLOY C 188SS ALUMINUM STEEL HCO/CON HCO/TFE	52300 W770425-188 49725 W210369-000 20051-A 77036 71572	ALLOY 20 188SS ALUHINUM STEEL  020/CBN 020/TFE	6: 2: 6: 6: 6: 5: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6:
PARTS V		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY  -SEAL ASSY, EXT SEAL  -SEAL HEAD ASSEMBLY  -SEAL ASSY, EXT SEAL	1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574	3165S 1885S ALUMINUM STEEL 020/CBN 316/TFE 020/CBN SIC/TFE	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574	ALLOY C 188SS ALUMINUM STEEL HCO/CBN HCO/TFE HCO/CBN	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036	ALLOY 20 18855 ALUHINUM \$TEEL  020/CBN 020/TFE 020/CBN	6: 2: 6: 6: 6: 5: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6:
PARTS V		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAL MEAD ASSEMBLY  -SEAL HEAD ASSEMBLY  -SEAL ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574	31655 18855 ALUMINUM STEEL 020/CBN 316/TFE 020/CBN S1C/TFE	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574	ALLOY C 188SS ALUMINUM STEEL HCG/CBN HCG/TFE HCG/CBN SIC/TFE	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574	ALLOY 20 188SS ALUHINUM STEEL 020/CBN 020/TFE 020/CBN SIC/TFE	6: 2: 6: 6: 6: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5:
PARTS V		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY,EXT SEAL  SEAL MEAD ASSEMBLY  -SEAT ASSY,EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  HOUSING FRONT - BRG FLUSH	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-186 49725 W210369-000 20051-A 77036 71571 77036 71574  D PUMP COMPONE	31655 18855 ALUMINUM STEEL 020/CBN 316/TFE 020/CBN SIC/TFE  NT FROM B/	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574	ALLOY C 188SS ALUMINUM STEEL HCO/CBN HCO/TFE HCO/CBN SIC/TFE	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574	ALLOY 20 18855 ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE	6: 2: 6: 6: 6: 5: 6: 5:
V W		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS - SEAL HEAD ASSEMBLY - SEAT ASSY, EXT SEAL - SEAL HEAD ASSEMBLY - SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W210369-000 20051-A 77036 71571 77036 71574  D PUMP COMPONE 70153-1 70212	3165S 1885S ALUMINUM STEEL 	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574 'M	ALLOY C  188SS ALUMINUM  STEEL  HCO/CBN HCO/TFE HCO/TFE HCO/TFE ALLOY C ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574	ALLOY 20 18855 ALUHIMUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLOY 20	66.22.66.66.55.55.55.55.55.55.55.55.55.55.55.
PARTS V		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 SAC FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY -SEAT ASSY,EXT SEAL  -SEAT ASSY,EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  HOUSING FRONT - BRG FLUSH  PLUG 1/8* NPT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-186 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUHP COMPONE 70153-1 70212 W772565-316	31655 18855 ALUMINUM STEEL 	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574  M 70154-1 70234	ALLOY C 1885S ALUMINUM STEEL	52300 W770425-188 49725 W210369-000 20051-A 77034 71572 77036 71574 70155-1 70233 52300	ALLOY 20 1885S ALUHIMUM \$TEEL 020/CEN 020/TFE 020/CEN SIC/TFE ALLOY 20 ALLOY 20 ALLOY 20	6.6
V W		MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 S4C FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY, EXT SEAL  -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  HOUSING FRONT - BRG FLUSH  MOUSING REAR - BRG FLUSH  PLUG 1/8" NPT  -PIN BEARING LOCK	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUMP COMPONE L 70153-1 70212 W772565-316 41802	31655 18855 ALUHINUH STEEL 020/CBN 316/TFE 020/CBN SIC/TFE NT FROM B/ 31655 31655 ALLOY 20	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574 W1 70154-1 70234 52301 41806	ALLOY C 188SS ALUMINUM STEEL	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574 70155-1 70233 52300 41802	ALLOY 20 10855 ALUHINUM \$TEEL	6.6
V	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY -SEAT ASSY,EXT SEAL  -SEAT ASSY,EXT SEAL  -SEAT ASSY,EXT SEAL  -SEAT ASSY,EXT SEAL  -PLOUSING FRONT - BRG FLUSH	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-186 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUMP COMPONE 70153-1 70212 W772565-316 41802 61104	31655 18855 ALUHINUH STEEL 020/CBN 316/TFE 020/CBN SIC/TFE ENT FROM B/ 31655 31655 ALLOY 20 SS/PFA	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574 /M 70154-1 70214 52301 41806 61104	ALLOY C 188SS ALUMINUM STEEL	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574 70155-1 70330 52300 41802 61104	ALLOY 20 10855 ALUHINUM \$TEL 020/CBN 020/CBN SIC/TFE ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 \$5/PFA	6: 22 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6:
COMMON PARTS  V  W  ITION	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 SAC FR  ASSEMBLY INSTRUCTIONS -SEAL HEAD ASSEMBLY -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST MOUSING FRONT - BRG FLUSH  MOUSING REAR - BRG FLUSH  PLUG 1/8" NPT -PIN BEARING LOCK -O-RING MOUSING -BEARING SLOTTED	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 5	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUMP COMPONE W772565-316 41802 61104 70419	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN SIC/TFE INT FROM B. 31655 31655 31655 31655 4LLOY 20 SS/PFA CARBON	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419	ALLOY C 188SS ALUMINUM STEEL HCO/CEN HCO/TFE HCO/CEN SIC/TFE ALLOY C ALLOY C ALLOY C SS/PFA CARBON	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574 70155-1 70233 52300 41802 61104 70419	ALLOY 20 10855 ALUHINUM \$TEEL	6: 22 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6: 6:
COMMON PARTS  V  W  ITION	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS - SEAL HEAD ASSEMBLY - SEAT ASSY, EXT SEAL - SEAL HEAD ASSEMBLY - SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PUUG 1/8* NPT - PIN BEARING LOCK - O-RING HOUSING - BEARING SOUTED - WEAR PLATE SLOTTED	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W210369-000 20051-A 77036 71571 77036 71574  D PUMP COMPONE 70153-1 70212 W772565-316 41802 61104 70419	31655 18855 1ALUHINUM STEEL	52301  W770425-168  49725  W210369-000  20051-A  77037  71573  77037  71574  W1  70154-1  70234  52301  41806  61104  70419	ALLOY C 188SS ALUMINUM STEEL HCO/CEN HCO/TFE HCO/CEN SIC/TFE ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 418002 61104 70419 70509	ALLOY 20 108SS ALUHINUM STEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLO	6: 22 6: 6: 6: 5: 6: 5: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7:
COMMON PARTS  V  W  ITION	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 SAC FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY,EXT SEAL  -SEAT ASSY,EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  HOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  PLUG 1/8" MPT  -PIN BEARING LOCK  -O-RING MOUSING  -BEARING SLOTTED  -WEAR PLATE SLOTTED  MOTOR BOLT	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-186 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUHP COMPONE	31655 18855 1ALUHINUM STEEL	52301  W770425-188  49725  W210369-000  20051-A  77037  71573  77037  71574  M  70154-1  70234  52301  41806  61104  70419  70509	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/CEN HCO/TFE HCO/CON SIC/TFE  ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C ALCOY	52300 W770425-188 49775 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 55/PFA CARBON 18855	66655
COMMON PARTS  V  W  ITION	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS - SEAL HEAD ASSEMBLY - SEAT ASSY, EXT SEAL - SEAL HEAD ASSEMBLY - SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PUUG 1/8* NPT - PIN BEARING LOCK - O-RING HOUSING - BEARING SOUTED - WEAR PLATE SLOTTED	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-186 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUHP COMPONE	31655 18855 1ALUHINUM STEEL	52301  W770425-188  49725  W210369-000  20051-A  77037  71573  77037  71574  M  70154-1  70234  52301  41806  61104  70419  70509	ALLOY C 188SS ALUMINUM STEEL HCO/CEN HCO/TFE HCO/CEN SIC/TFE ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 418002 61104 70419 70509	ALLOY 20 108SS ALUHINUM STEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLO	6.55 6.66 5.55 6.61 1.11 1.22
COMMON PARTS  V  W  ITION	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY, EXT SEAL  -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  MOUSING FRONT - BRG FLUSH  MOUSING FRONT - BRG FLUSH  PLUG 1/8" NPT  -PIN BEARING LOCK  -O-RING MOUSING  -BEARING SLOTTED  -WEAR PLATE SLOTTED  MOTOR BOLT  C-FACE MOTOR ADAPTOR 63 FR  COUPLING L-050 63 FR	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUHP COHPONE 4072565-316 41802 61104 70419 70509 W770544-188 49743	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN SIC/TFE NT FROM B/ 31655 ALLOY 20 SS/PFA CARBON CARBON 18855 ALUHINUM STEEL	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 W770544-188 49743 W213579-700	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41602 61104 70419 70509 W770546-186 49743 W213579-000	ALLOY 20 10855 ALUHINUM \$TEEL	66 22 66 66 55 55 55 55 55 55 55 55 55 55 55
COMMON PARTS	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS -SEAL HEAD ASSEMBLY -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/8" NPY -PIN BEARING LOCK -O-RING MOUSING -BEARING SLOTTED	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-186 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUMP COMPONE W772565-316 41802 61104 70419 70509 W770544-186 49743	31655 18855 1ALUHINUR STEEL	52301  W770425-188  49725  W210369-000  20051-A  77037  71573  77037  71574  M  70154-1  70234  52301  41806  61104  70419  70509  W770544-188  49743	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C	52300 W770425-188 49775 W210369-000 20051-A 77034 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188	ALLOY 20 108SS ALUHINUH \$TEEL	66 22 66 66 55 55 55 55 55 55 55 55 55 55 55
COMMON PARTS	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY, EXT SEAL  -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  MOUSING FRONT - BRG FLUSH  MOUSING FRONT - BRG FLUSH  PLUG 1/8" NPT  -PIN BEARING LOCK  -O-RING MOUSING  -BEARING SLOTTED  -WEAR PLATE SLOTTED  MOTOR BOLT  C-FACE MOTOR ADAPTOR 63 FR  COUPLING L-050 63 FR	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188  49725  W210369-000 20051-A 77036 71571 77036 71574  D PUMP COMPONE  W77055-316 41802 61104 70419 70509 W770544-188  W213579-000 W770545-188	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN SIC/TFE NT FROM B/ 31655 ALLOY 20 SS/PFA CARBON CARBON 18855 ALUHINUM STEEL	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 70509 W770544-188 49743 W213579-700 W770545-188	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770545-188	ALLOY 20 10855 ALUHINUM \$TEEL	66 66 66 55 55 55 55 55 55 55 55 55 55 5
COMMON PARTS	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS -SEAL HEAD ASSEMBLY -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/8" NPY -PIN BEARING LOCK -O-RING MOUSING -BEARING SLOTTED	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188  49725  W210369-000 20051-A 77036 71571 77036 71574  D PUMP COMPONE  W77059-316 41802 61104 70419 70509 W770544-188  W213579-000 W770545-188	31655 18855 1ALUHINUM STEEL	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 70509 W770544-188 49743 W213579-700 W770545-188	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C ALLOY	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770545-188	ALLOY 20 10855 ALUHINUM STEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLO	6:00
COMMON PARTS	9	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS -SEAL MEAD ASSEMBLY -SEAT ASSY, EXT SEAL -SEAL MEAD ASSEMBLY -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PUUG 1/8" NPT -PIN BEARING LOCK -O-RING HOUSING -BEARING SLOTTED	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUMP COMPONE 70153-1 70212 W772565-316 41802 61104 70419 70509 W770544-188 49743	31655 18855 1ALUHINUM STEEL -020/CBN 316/TFE 020/CBN 516/TFE NT FROM B/ 31655 31655 31655 31655 ALLUHINUM CARBON 18855 ALUHINUM STEEL	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41800 61104 70419 70509 W770544-188 49743 W213579-300 W770545-188	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C ALLOY	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 48102 61104 70419 70509 W770544-188 49743	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLO	6:00 5:00 6:00 6:00 6:00 6:00 6:00 6:00
COMMON PARTS	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 SAC FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY, EXT SEAL  -SEAL HEAD ASSEMBLY  -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  HOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  PLUG 1/8" NPT  -PIN BEARING LOCK  -O-RING MOUSING  -BEARING SLOTTED  -WEAR PLATE SLOTTED  MOTOR BOLT  C-FACE MOTOR ADAPTOR 63 FR  COUPLING L-050 63 FR  MOTOR BOLT  C-FACE MOTOR ADAPTOR 71 FR  COUPLING L-070 71 FR	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUHP COMPONE 20153-1 70212 W772565-316 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770545-188 49744 W213581-000	31655 18855 1ALUHINUM STEEL -020/CBN 316/TFE 020/CBN 516/TFE NT FROM B/ 31655 31655 31655 31655 ALLUHINUM CARBON 18855 ALUHINUM STEEL	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574  M 70154-1 70234 52301 41806 61104 70419 7059 W770544-188 49743 W213579-700 W770545-188	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C ALLOY	52300 W770425-188 49775 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 I W770544-188 49743 W213579-000 W770545-188 49744 W213561-000	ALLOY 20 108SS ALUHINUM STEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLO	555 555 555 555 555 555 555 555 555 55
COMMON PARTS	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY -SEAT ASSY, EXT SEAL  -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  HOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  PLUG 1/8* NPT -PIN BEARING LOCK -O-RING HOUSING -BEARING SLOTTED -WEAR PLATE SLOTTED  HOTOR BOLT  C-FACE HOTOR ADAPTOR 63 FR  MOTOR BOLT  C-FACE HOTOR ADAPTOR 71 FR  COUPLING L-070 71 FR  HOTOR BOLT	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-186 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUMP COMPONE W1702565-316 41802 61104 70419 70509 W770544-188 49743 W213581-000 W770546-188	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN SIC/TFE NT FROM B/ 31655 ALLOY 20 SS/PFA CARBON CARBON STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574  M 70154-1 70234 52301 41806 61104 70419 7059 W770544-188 49743 W213579-700 W770545-188	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C ALLOY	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70155-1 7039 61104 70419 70419 1W770546-188 49744 W213561-000 W770546-188	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/CBN SIC/TFE  ALLOY 20 AL	666 667 667 667 667 667 667 667 667 667
COMMON PARTS	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS -SEAL MEAD ASSEMBLY -SEAT ASSY, EXT SEAL -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST MOUSING FRONT - BRG FLUSH MOUSING REAR - BRG FLUSH HOUSING NEAR - BRG FLUSH -PLUG 1/8" NPT -PIN BEARING LOCK -O-RING MOUSING -BEARING SLOTTED -WEAR PLATE SLOTTED MOTOR BOLT  C-FACE MOTOR ADAPTOR 71 FR MOTOR BOLT  C-FACE MOTOR ADAPTOR 80 FR	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUHP COMPONE W772565-316 41802 61104 70419 70509 W770544-188 49743 W213581-000 W770546-188 49745	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN 316/TFE 31655 31655 31655 31655 31655 31655 ALUHINUM STEEL 18855 ALUHINUM STEEL	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 W770544-188 49743 W213579-700 W770545-188 49744 W213561-000 W770546-188	ALLOY C  188SS ALUMINUM STEEL  MCO/CEN MCO/TFE MCO/CEN SIC/TFE  ALLOY C ALLOY	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770546-188 49743 W213579-000 W770546-188 49745	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 S5/PPA CARBON 1885S ALUHINUM \$TEEL 1885S ALUHINUM \$TEEL	56 66 66 66 66 66 66 66 66 66 66 66 66 6
COMMON PARTS  V  W  ITION	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL -SEAT ASSY, EXT SEAL -SEAT ASSY, EXT SEAL OPTIONS - DELETE CORRESPONDING ST -MOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH -PLUG 1/8" NPT -PLUG 1/8" NP	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUMP COMPONE 70153-1 70212 W772565-316 41802 61104 70419 70509 W770544-188 49743 W213587-000 W770546-188 49744 W213581-000 W770546-188 49745 W213583-000 W770546-188	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN 316/TFE 31655 31655 31655 31655 31655 31655 ALUHINUM STEEL 18855 ALUHINUM STEEL	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W17034-1 70234 52301 41806 61104 70419 70509 W770544-188 49743 W213581-000 W770545-188 49744 W213581-000	ALLOY C  108SS ALUMINUM STEEL  MCO/TFE MCO/CON SIC/TFE  ALLOY C ALUNINUM STEEL 108SS ALUMINUM STEEL	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770545-188 49744 W213561-000 W770546-188 49745	ALLOY 20 10855 ALUHINUM \$TEEL	55 66 66 66 66 66 66 66 66 66 66 66 66 6
COMMON PARTS	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS -SEAL MEAD ASSEMBLY -SEAT ASSY, EXT SEAL -SEAL MEAD ASSEMBLY -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PUUG 1/8" NPT -PIN BEARING LOCK -BEARING SLOTTED	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574  D PUHP COMPONE	31655 18855 1ALUHINUM STEEL 1020/CBN 316/TFE 1020/CBN 316/TFE 1020/CBN 316/TFE 1020/CBN 316/TFE 1020/CBN 31655 316	52301  W770425-188  49725  W210369-000  20051-A  77037  71573  77037  71574  W1  70154-1  70234  52301  41806  61104  70419  70509  W770544-188  49743  W213559-000  W770546-188  49744  W213581-000  W770546-188  49745  W213583-000  W213229-000	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C ALLOY	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188 49743 W2135561-000 W770546-188 49744 W213561-000 W770546-188 49745 W213563-000 W213229-000	ALLOY 20 10855 ALUHINUM \$TEEL	666 666 666 666 666 666 666 666 666 66
COMMON PARTS  V  W  ITION	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 SAC FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY, EXT SEAL  -SEAL HEAD ASSEMBLY  -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  MOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  PLUG 1/8" NPT  -PIN BEARING LOCK  -O-RING MOUSING  -BEARING SLOTTED  -WEAR PLATE SLOTTED  MOTOR BOLT  C-FACE MOTOR ADAPTOR 63 FR  COUPLING L-050 63 FR  MOTOR BOLT  C-FACE MOTOR ADAPTOR 71 FR  COUPLING L-070 71 FR  MOTOR BOLT  C-FACE MOTOR ADAPTOR 80 FR  COUPLING L-075 80 FR  COUPLING L-075 80 FR  COUPLING L-070 127C-184C FR  -GEAR, DRIVE/IDLER	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213581-000 W77045-186 49725 W2 10369-000 20051-A 77036 71571 77036 71574 D PUHP COMPONE	31655  18855  ALUHINUM STEEL	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574  M 70154-1 70214 52301 41806 61104 70419 7059 W77054-188 49743 W213579-700 W770545-188 49744 W213581-000 W770546-188 49745 W213583-000 W710543-000	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C SYPEEL  188SS ALUMINUM STEEL  STEEL ALLOY C	52300 W770425-188 49775 W210369-000 20051-A 77034 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 I W770544-188 49744 W213579-000 W770546-188 49744 W213561-000 W770546-188 49745 W213529-000 W770546-188	ALLOY 20 108SS ALUHINUM STEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLO	66 66 66 66 66 66 66 66 66 66 66 66 66
COMMON PARTS  V  W  ITION	9 B F G K L	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS -SEAL HEAD ASSEMBLY -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST MOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH HOUSING REAR - BRG FLUSH -PLUG 1/8" NPT -PIN BEARING LOCK -O-RING HOUSING -BEARING SLOTTED -WEAR PLATE SLOTTED  MOTOR BOLT  C-FACE MOTOR ADAPTOR 63 FR  COUPLING L-050 63 FR  MOTOR BOLT  C-FACE MOTOR ADAPTOR 71 FR  COUPLING L-070 71 FR  MOTOR BOLT  C-FACE MOTOR ADAPTOR 80 FR  COUPLING L-075 80 FR  COUPLING L-090 143TC-184C FR  -GEAR DRIVE/IDLER  -GEAR ORIVE/IDLER  -GEAR ORIVE/IDLER  -GEAR ORIVE/IDLER  -GEAR ORIVE/IDLER	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188	31655 ALUHINUM STEEL OZO/CBN 316/TFE DZO/CBN 316/TFE DZO/CBN SIC/TFE NT FROM B/ 316SS ALUHINUM STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM STEEL CARBON STEEL CARBON CARBON CARBON CARBON	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 W213579-700 W770546-188 49743 W213579-700 W770546-188 49745 W213583-000 W213229-000 70613 70651	ALLOY C  108SS ALUMINUM STEEL  HCO/CON HCO/TFE HCO/CON SIC/TFE  ALLOY C ARBON	52300 W770425-188 49725 W210369-000 20051-0 77036 71572 77036 71574  70155-1 70155-1 7033 52300 41802 61104 70419 70419 1W710545-188 49743 W213579-000 W770546-188 49745 W213583-000 W770546-188 49745 W213583-000 W720546-188 49745	ALLOY 20 10855 ALUHINUM \$TEEL	66666666666666666666666666666666666666
COMMON PARTS  V  W  ITION	9 B F G K L	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL -SEAT ASSY, EXT SEAL -SEAT ASSY, EXT SEAL -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST -MOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH -PLUG 1/8" NPT -PLUG	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574 D PUMP COMPONE 70153-1 70212 W772565-316 41802 61104 70419 70509 W770544-188 49744 W213581-000 W770545-188 49744 W213581-000 W770545-188 49744 W213581-000 W770545-188 70633 70651 70633	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN 316/TFE 31655 3	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 70509 W770544-188 49743 W213579-700 W770545-186 49744 W213581-000 W770546-188 49745 W213583-000 W213229-000 70613 70651 70623	ALLOY C  108SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C ALUMINUM STEEL 108SS ALUMINUM STEEL	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770546-188 49744 W213583-000 W213229-000 70613 70651 70623	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 S5/PFA CARBON 18855 ALUHINUM \$TEEL 19855 ALUHINUM \$TEEL 19855 ALUHINUM \$TEEL 48150 19855 ALUHINUM \$TEEL 48150 19855 ALUHINUM \$TEEL 48150 19855 ALUHINUM \$TEEL 48150 19856	66 66 66 66 66 66 66 66 66 66 66 66 66
COMMON PARTS  V  W  ITION	9 B F G K L	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 54C FR  ASSEMBLY INSTRUCTIONS - SEAL MEAD ASSEMBLY - SEAT ASSY, EXT SEAL - SEAL MEAD ASSEMBLY - SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PUG 1/8" NPT - PIN BEARING LOCK - O-RING HOUSING - BEARING SLOTTED HOTOR BOLT C-FACE MOTOR ADAPTOR 63 FR HOTOR BOLT C-FACE MOTOR ADAPTOR 71 FR COUPLING L-050 63 FR HOTOR BOLT C-FACE MOTOR ADAPTOR 71 FR COUPLING L-075 80 FR COUPLING L-075 80 FR COUPLING L-075 80 FR COUPLING L-090 143TC-184C FR - GEAR, DRIVE/IDLER	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188 49725 W210369-000 20051-A 77036 71571 77036 71574  D PUMP COMPONE 70153-1 70212 W772565-316 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770545-188 49744 W213581-000 W770546-188 49745 W213583-000 W770546-188 70633 70633 70651 70623	31655  18855  ALUHINUM STEEL  220/CBN 316/TFE D20/CBN 316/TFE D20/CBN 316/TFE O20/CBN 316/TFE O20/CBN 31655 31655 31655 31655 ALUHINUM STEEL 18855 ALUHINUM STEEL STEEL ALLOY C ALCARBON TFE(GF) PEEK	52301  W770425-168  49725  W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 61806 61104 70419 70509 W770544-188 49743 W213559-000 W770546-180 49745 W213581-000 W770546-180 770469 W770546-180 770469 W770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180 770546-180	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C SS/PFA ALUMINUM STEEL 188SS ALUMINUM STEEL STEEL ALLOY C CARBON TFE(GF) PEEK	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 418002 61104 70419 70509 W770544-188 49743 W213579-000 W770546-188 49744 W213561-000 W770546-188 49745 W213593-000 W270545-188 49745 W213593-000 70613 70633 70651 70623 70677	ALLOY 20 10855 ALUHINUM \$TEEL	66 66 66 66 66 66 66 66 66 66 66 66 66
COMMON PARTS	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS -SEAL MEAD ASSEMBLY -SEAT ASSY, EXT SEAL -SEAL MEAD ASSEMBLY -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  MOUSING FRONT - BRG FLUSH MOUSING FRONT - BRG FLUSH PLUG 1/8' NPT -PIN BEARING LOCK -O-RING MOUSING -BEARING SLOTTED  WEAR PLATE SLOTTED  MOTOR BOLT  C-FACE MOTOR ADAPTOR 63 FR  COUPLING L-050 63 FR  MOTOR BOLT  C-FACE MOTOR ADAPTOR 71 FR  COUPLING L-070 71 FR  MOTOR BOLT  C-FACE MOTOR ADAPTOR 80 FR  COUPLING L-075 80 FR  COUPLING L-075 80 FR  COUPLING L-070 143TC-184C FR -GEAR DRIVE/IDLER	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188	31655  18855  ALUHINUM STEEL  220/CBN 316/TFE 220/CBN 31655 31655 31655 31655 31655 ALLUH 100 20/CARBON 18855 ALUHINUM STEEL 18856 ALUHINUM STEEL 18857 ALUHINUM STEEL ALLOY C ALLOY C ALLOY 20 CARBON TFEIGF1 PEEK ALLOY 20	52301  W770425-188  49725  W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 70509 W770544-188 49743 W213579-700 W770546-188 49744 W213581-000 W770546-188 49745 W213583-000 W770546-188 70677 70651 70623 70677 71911	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C CARBON 188SS ALUMINUM STEEL 188SS ALUMINUM STEEL 188SS ALUMINUM STEEL C CARBON TFEEGF PEEK ALLOY C CARBON TPEEGF PEEK ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770546-188 49744 W213583-000 W770546-188 49745 W213583-000 W770546-188 70633 70633 70633 70651 70623 70677 71910	ALLOY 20 108SS ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE  ALLOY 20 EXPRON CARBON CARBON CARBON 188SS ALUHINUM \$TEEL 20 4LUHINUM 4TEEL 20 4LUHINUM 4T	66 66 66 66 66 66 66 66 66 66 66 66 66
COMMON PARTS  V  W  ITION	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 SAC FR  ASSEMBLY INSTRUCTIONS  -SEAL MEAD ASSEMBLY  -SEAT ASSY, EXT SEAL  -SEAL HEAD ASSEMBLY  -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST  HOUSING FRONT - BRG FLUSH  HOUSING FRONT - BRG FLUSH  PLUG 1/8" NPT  -PIN BEARING LOCK  -O-RING MOUSING  -BEARING SLOTTED  -WEAR PLATE SLOTTED  MOTOR BOLT  C-FACE MOTOR ADAPTOR 63 FR  COUPLING L-050 63 FR  MOTOR BOLT  C-FACE MOTOR ADAPTOR 71 FR  COUPLING L-075 80 FR  COUPLING L-075 80 FR  COUPLING L-076 80 FR  COUPLING L-076 80 FR  COUPLING L-090 143TC-184C FR  -GEAR DRIVE/IDLER  -KEY, METAL DRIVE GEAR	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213581-000 W770545-186 49725 W2 10369-000 20051-A 77036 71571 77036 71574  D PUHP COMPONE	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN 316/TFE 020/CBN 31655 31655 31655 31655 ALLOY 20 SS/PFA CARBON CARBON STEEL 18855 ALUHINUM STEEL 4LLOY 20 CARBON TFE (GF) PEEK ALLOY 20 ALLOY 20	52301 W770425-188 49725 W210369-000 20051-A 77037 71573 77037 71574  M70154-1 70154-1 70214 52301 41806 61104 70419 W77054-188 49743 W213579-700 W770545-188 49744 W213583-000 W770546-188 49745 W213583-000 W770546-188 49745 70651 70651 70651 70651 70651 70677 71911	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN ALLOY C ARBON TEEL 188SS ALUMINUM STEEL 188SS ALUMINUM STEEL 188SS ALUMINUM STEEL 188SS ALUMINUM STEEL 188SS ALUMINUM TEEL 188SS ALUMINUM TEEL ALLOY C ALLOY C ALLOY C	52300 W770425-188 49725 W210369-000 20051-4 77036 71572 77036 71574  70155-1 70155-1 70233 52300 41802 61104 70419 70509 I W770545-188 49744 W213579-000 W770545-188 49745 W213579-000 W770546-188 49745 W213579-000 70613 70633 70651 70623 70657 71910 71916	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/CBN SIC/TFE  ALLOY 20 CARBON \$TEEL 18855 ALUHINUM \$TEEL 18855 ALUHINUM \$TEEL 48150 ALUHINUM \$TEEL ALLOY 20 CARBON THEIGF) PEEK ALLOY 20 ALLOY 20 ALLOY 20	612 612 666 666 667 677 668 668 668 668
COMMON PARTS  V  W  ITION	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS -SEAL HEAD ASSEMBLY -SEAT ASSY, EXT SEAL -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST MOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH HOUSING REAR - BRG FLUSH -PLUG 1/8" NPT -PUG 1/8" NPT -P	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188	31655 ALUHINUM STEEL 020/CBN 316/TFE 020/CBN 316/TFE 020/CBN 316/TFE 020/CBN 316/TFE 020/CBN SIC/TFE NT FROM B/ 316SS ALUHINUM STEEL 1885S	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 W213579-700 W770546-188 49743 W213579-700 W770546-188 49745 W213583-000 W213229-000 70613 70623 70677 71911 71917	ALLOY C  188SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770546-188 49743 W213579-000 W770546-188 49744 W213583-000 W70546-188 49745 W213583-000 W70546-188 49745 70613 70633 70633 70677 71910 71916	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE  ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 \$5/PFA CARBON CARBON \$TEEL 10855 ALUHINUM \$TEEL 10855	612 25 66 66 66 66 66 66 66 66 66 66 66 66 66
COMMON PARTS  V  W  ITION	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS - SEAT ASSY, EXT SEAL - SEAL MEAD ASSEMBLY - SEAT ASSY, EXT SEAL - SEAL MEAD ASSEMBLY - SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST - HOUSING FRONT - BRG FLUSH - HOUSING REAR - BRG FLUSH - HOUSING REAR - BRG FLUSH - PLUG 1/8' NPY - PIN BEARING LOCK - O-RING MOUSING - BEARING SLOTTED - WEAR PLATE SLOTTED - MOTOR BOLT - C-FACE MOTOR ADAPTOR 63 FR - COUPLING L-050 63 FR - MOTOR BOLT - C-FACE MOTOR ADAPTOR 71 FR - COUPLING L-070 71 FR - MOTOR BOLT - C-FACE MOTOR ADAPTOR 80 FR - COUPLING L-075 80 FR - COUPLING L-075 80 FR - COUPLING L-076 113TC-184C FR - GEAR DRIVE/IDLER - KEY, METAL DRIVE GEAR - KKEY, METAL DRIVE GEAR - KKEY, PLASTIC DILER GEAR - KKEY, PLASTIC DILER GEAR	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN 316/TFE 31655 31655 31655 31655 31655 31655 31655 31655 ALUHINUM STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM STEEL 18856 ALUHINUM STEEL ALLOY 20 CARBON TFE (GF) PEE (GF) PEE (GF) PEE (GF) ALLOY 20	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 70509 W770544-188 49743 W213581-000 W770546-188 49744 W213581-000 W770545-188 49745 W213583-000 W213229-000 70613 70651 70623 70677 71911 71917	ALLOY C  108SS ALUMINUM STEEL  MCO/CEN MCO/TFE MCO/CEN SIC/TFE  ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770546-188 49744 W213579-000 W770545-188 49745 W213579-000 W770545-188 49746 W213579-000 W770545-188 49746 W213579-000 W770545-188 7744 W213583-000 W213229-000 70613 70633 70651 70623 70677 71910 71910	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 \$5/PFA CARBON 18855 ALUHINUM \$TEEL 19855 ALUHINUM \$TEEL 19856 ALUHINUM \$TEEL 20 CARBON 7FEEK ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	612 25 66 66 66 66 66 66 66 66 66 66 66 66 66
COMMON PARTS  V  W  ITION	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS - SEAL MEAD ASSEMBLY - SEAT ASSY, EXT SEAL - SEAL MEAD ASSEMBLY - SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PUG 1/8" NPT - PIN BEARING LOCK - O-RING HOUSING - BEARING SLOTTED  MOTOR BOLT  C-FACE MOTOR ADAPTOR 63 FR MOTOR BOLT  C-FACE MOTOR ADAPTOR 71 FR COUPLING L-050 63 FR MOTOR BOLT  C-FACE MOTOR ADAPTOR 71 FR COUPLING L-075 80 FR COUPLING L-075 80 FR COUPLING L-076 80 FR COUPLING L-077 80 FR COUPLING L-078 80 FR COUPLING L-078 80 FR COUPLING L-079 143TC-184C FR - GEAR DRIVE/IDLER - KEY, METAL DRIVE GEAR - KKEY, PLASTIC IDLER GEAR - KKEY PLASTIC IDLER GEAR - KEY PLASTIC IDLER GEAR - KKEY PLASTIC IDLER GEAR - KEY PLASTIC IDLER GEAR - KEY PLOT FROM THE PLATER THE PLATER THE	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188	31655 18855 1ALUHINUM STEEL 1020/CBN 316/TFE 020/CBN 316/TFE 020/CBN 316/TFE 020/CBN 31655 31655 31655 31655 31655 31655 ALUHINUM STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM STEEL 4LLOY 20 ALLOY 20	52301  W770425-188  49725  W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 61806 61104 70419 70509 W770544-188 49743 W213599-000 W770546-188 49745 W213583-000 W213229-000 70613 70623 70677 71911 71917 70016-2	ALLOY C  108SS ALUMINUM STEEL  HCO/CEN HCO/TFE HCO/CEN SIC/TFE  ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770546-188 49744 W213561-000 W770546-188 49745 W213583-000 M213229-000 70613 70633 70651 70623 70677 71910 71916 71015-2	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE  ALLOY 20 ALLOY CARBON TFEEL \$18855 ALUHINUM \$TEEL	62 25 66 66 66 55 55 55 55 55 55 55 62 62 64 65 65 65 65 65 65 65 65 65 65 65 65 65
V	9 A B	MOTOR BOLT  C-FACE MOTOR ADAPTOR  COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS - SEAT ASSY, EXT SEAL - SEAL MEAD ASSEMBLY - SEAT ASSY, EXT SEAL - SEAL MEAD ASSEMBLY - SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING ST - HOUSING FRONT - BRG FLUSH - HOUSING REAR - BRG FLUSH - HOUSING REAR - BRG FLUSH - PLUG 1/8' NPY - PIN BEARING LOCK - O-RING MOUSING - BEARING SLOTTED - WEAR PLATE SLOTTED - MOTOR BOLT - C-FACE MOTOR ADAPTOR 63 FR - COUPLING L-050 63 FR - MOTOR BOLT - C-FACE MOTOR ADAPTOR 71 FR - COUPLING L-070 71 FR - MOTOR BOLT - C-FACE MOTOR ADAPTOR 80 FR - COUPLING L-075 80 FR - COUPLING L-075 80 FR - COUPLING L-076 113TC-184C FR - GEAR DRIVE/IDLER - KEY, METAL DRIVE GEAR - KKEY, METAL DRIVE GEAR - KKEY, PLASTIC DILER GEAR - KKEY, PLASTIC DILER GEAR	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W770425-188	31655 18855 1ALUHINUM STEEL 020/CBN 316/TFE 020/CBN 316/TFE 31655 31655 31655 31655 31655 31655 31655 31655 ALUHINUM STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM STEEL 18855 ALUHINUM STEEL 18856 ALUHINUM STEEL ALLOY 20 CARBON TFE (GF) PEE (GF) PEE (GF) PEE (GF) ALLOY 20	52301 W770425-168 49725 W210369-000 20051-A 77037 71573 77037 71574  W1 70154-1 70234 52301 41806 61104 70419 70509 W770544-188 49743 W213581-000 W770546-188 49744 W213581-000 W770545-188 49745 W213583-000 W213229-000 70613 70651 70623 70677 71911 71917	ALLOY C  108SS ALUMINUM STEEL  MCO/CEN MCO/TFE MCO/CEN SIC/TFE  ALLOY C	52300 W770425-188 49725 W210369-000 20051-A 77036 71572 77036 71574  70155-1 70233 52300 41802 61104 70419 70509 W770544-188 49743 W213579-000 W770546-188 49744 W213579-000 W770545-188 49745 W213579-000 W770545-188 49746 W213579-000 W770545-188 49746 W213579-000 W770545-188 7744 W213583-000 W213229-000 70613 70633 70651 70623 70677 71910 71910	ALLOY 20 10855 ALUHINUM \$TEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 \$5/PFA CARBON 18855 ALUHINUM \$TEEL 19855 ALUHINUM \$TEEL 19856 ALUHINUM \$TEEL 20 CARBON 7FEEK ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	62 25 66 66 66 55 55 55 55 55 55 60 61 11 12 25 66 66 66 67 66 66 66 66 66 66 66 66 66

# GA4/GC4 SERIES PUMP CONSOLIDATED B/M

					NDARD PUMP HA	TERIAL			
		i	316SS (A) OR	(K)	ALLOY	( imi	ALLO (D) O	20 R IN)	
	DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	HATL	ITE
OSITION 3	STANDARD PUMP - NON-VARIABLE CO	PONEN	īts						
	HOUSING FRONT	1	70153	316\$5	70154	ALLOY C	70155	ALLOY 20	1
	HOUSING CENTER FNPT	-	70014	31655	70016	ALLOY C	70015	ALLOY 20	2
	HOUSING CENTER PESPT	1 1	70020	31655	70022	ALLOY C	70021	ALLOY 20	
	HOUSING REAR		70214	31655	70215	ALLOY C	70216	ALLOY 20	
	-RING RETAINING		702.14	1 3.033	70213	ACCO! C		72207 20	
	RING RETAINING POS 8 OPT A P	5	76702	ALLOY 20	76701	ALLOY C	76702	ALLOY 20	10
	*KEY METAL DRIVE GEAR		71906	ALLOY 20	71904	ALLOY C	71906	ALLOY 20	
	.KEY PLASTIC DRIVE GEAR	*1	71905	ALLOY 20	71903	ALLOY C	7 1905	ALLOY 20	-
	+KEY MTL/CBN IDLER GEAR	<del>   </del>	71906	ALLOY 20	7190-	ALLOY C	71901	ALLOY ZO	
	KET PLASTIC IDLES GLAN	**	7 1905	ALLOY 20	71903	ALLOY L	71905	ALLOY 20	
	+PIN BEARING LOCK	1	61801	TEF	41801	TEE	41801	TEF	14
	+0-RING HOUSING	2	61101	TFE	61101	TFE	61101	TPE	16
	PIN HOUSING	-	40801	316\$5	40801	31655	40801	316\$5	17
	BOLT HOUSING	1	72006	18855	72006	18855	72006	18855	18
	NUT HOUSING BOLT	1	72101	18855	72101	18855	72101	18855	15
	NAMEPLATE	1		<del></del>				18855	-
	NATERIALE	لنسا	41201	18855	41201	18855	41201	10033	
SITION 4	& 5 DRIVE AND IDLER GEAR								
C	-GEAR DRIVE/IDLER	1-2	70638	ALLOY E	70638	ALLOY C	70638	ALLOY C	6
0	GEAR DRIVETILLER	1 2	70642	ALLOY 20			70642	ALLOY 20	6
K	-GEAR IDLER	1	70611	CARBON	70611	CARBON	70611	CARBON	7
1	+GEAR DRIVE/IDLER	1-2	70600	TFE (GF)	70600	TFE (GF)	70600	TFE (GF)	6
E	GEAR DRIVE/IDLER	1-2	70671	PEEK	70671	PEEK	70671	PEEK	6
K	+WEAR PLATE NARROW WIDTH GEARS	4	70501 70536	CARBON	70501 70536	CARBON	70501 70536	CARBON CARBON	15
1	-WEAR PLATE	***	70504	TFE (GF)	70504	TFE(GF)	70504	TFE (GF)	15
z	+WEAR PLATE	***	70503	CERAMIC	70503	CERAMIC	70503	CERAMIC	15
E	-WEAR PLATE	4	70535	PEEK	70535	PEEK	70535	PEEK	15
SITION 7	SHAFT AND BEARING HATERIAL								
STANDARD	CONSTRUCTION			,				,,	
STANDARD	*BEARING	5	70404	CARBON	70404	CARBON	70404	CARBON	12
STANDARD	*BEARING *SHAFT DRIVE STD	5	70372	31655	70373	ALLOY E	70374	ALLOY 20	
	+BEARING +SMAFT DRIVE STD -SMAFT DRIVE POS 8 DPT A P	,	70372 70372-5	31635 31635	70373 70373-5	ALLOY C	70374 70374-5	ALLOY 20 ALLOY 20	- 4
	- SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IOLER		70372 70372-5 70378	31635 31635 31635	70373 70373-5 70379	ALLOY C ALLOY C	70374 70374-5 70380	ALLOY 20 ALLOY 20 ALLOY 20	- 4
	•BEARING •SHAFT DRIVE STD •SHAFT DRIVE POS 8 OPT A P •SHAFT IDLER •PEARING	-	70372 70372-5 70378 70401	31635 31635 31635 TFE (GF)	70373 70373-5 70379 70401	ALLOY C ALLOY C ALLOY C TFE(GF)	70374 70374-5 70360 70401	ALLOY 20 ALLOY 20 ALLOY 20 TFE(GF)	4 4 5
K	- SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT OLER - SEARING - BEARING		70372 70372-5 70378 70401 70402	31635 31635 31635 TFE(GF)	70373 70373-5 70379 70401 70402	ALLOY C ALLOY C ALLOY C TFEIGF) TFEIGF)	70374 70374-5 70360 70401 70402	ALLOY 20 ALLOY 20 ALLOY 20 TFE(GF) TFE(GF)	4 4 5
	- SEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT (OLER - SEARING - SEARING - SHAFT DRIVE STD	1 1 3	70372 70372-5 70378 70401 70402 70372	31635 31635 31635 TFE (GF)	70373 70373-5 70379 70401 70402 70373	ALLOY C ALLOY C ALLOY C TFE(GF)	70374 70374-5 70380 70401 70402 70374	ALLOY 20 ALLOY 20 ALLOY 20 TFE(GF) TFE(GF) ALLOY 20	12
K	*BEARING  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P  SHAFT (OLER  -BEARING  -BEARING  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P	-	70372 70372-5 70378 70401 70402 70372 70372-5	31635 31635 31635 TFE(GF)	70373 70373-5 70379 70401 70402 70373 70373-5	ALLOY C ALLOY C ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C	70374 70374-5 70380 70401 70402 70374 70374-5	ALLOY 20 ALLOY 20 ALLOY 20 TFE(GF) TFE(GF) ALLOY 20 ALLOY 20 ALLOY 20	4 5 12 12
K	- SEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT (OLER - SEARING - SEARING - SHAFT DRIVE STD	1 1 3	70372 70372-5 70378 70401 70402 70372	31635 31635 31635 TFE(GF) TFE(GF)	70373 70373-5 70379 70401 70402 70373	ALLOY C ALLOY C ALLOY C TFE(GF) TFE(GF) ALLOY C	70374 70374-5 70380 70401 70402 70374	ALLOY 20 ALLOY 20 ALLOY 20 TFE(GF) TFE(GF) ALLOY 20	4 4 5 12 12
r T	*BEARING  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P  SHAFT TOLER  BEARING  BEARING  SHAFT DRIVE STD  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P  SHAFT TOLER	1 1 3	70372 70372-5 70378 70401 70402 70372 70372-5	31635 31635 31635 TFE(GF) TFE(GF) 31635 31635	70373 70373-5 70379 70401 70402 70373 70373-5	ALLOY C ALLOY C ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C	70374 70374-5 70380 70401 70402 70374 70374-5	ALLOY 20 ALLOY 20 ALLOY 20 TFE(GF) TFE(GF) ALLOY 20 ALLOY 20 ALLOY 20	12 12
r T	- BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER  LIFE - BEARINGS	1 1 3 1	70372 70372-5 70378 70401 70402 70372 70372-5 70378	31655 31635 31655 TFE (GF) TFE (GF) 31655 31655 31655	70373 70373-5 70379 70401 70402 70373 70373-5 70379	ALLOY C ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C ALLOY C ALLOY C	70374 70374-5 70380 70401 70402 70374 70374-5 70380	ALLOY 2D ALLOY 20 ALLOY 20 TFE (GF) TFE (GF) ALLOY 2D ALLOY 20 ALLOY 20	4 4 5 12 12 4 4 5
r T	- BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IOLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IOLER LIFE - BEARINGS - BEARING	1 1 3	70372 70372-5 70378 70401 70402 70372 70372-5 70373-6	31655 31655 31655 TFE(GF) TFE(GF) 31655 31655 31655	70373 70373-5 70379 70401 70402 70373 70373-5 70379	ALLOY C ALLOY C TFE(GF) TFE(GF) ALLOY C ALLOY C ALLOY C ALLOY C	70374 70374-5 70360 70401 70402 70374 70374-5 70380	ALLOY 2D ALLOY 20 ALLOY 20 TFE (GF) TFE (GF) ALLOY 2D ALLOY 2D ALLOY 2D EWCBNN	4 4 5 12 12 4 4 5
r T	- BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT (OLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT (OLER  LIFE - BEARING - SHAFT DRIVE STD - SHAFT DRIVE STD - SHAFT ORIVE POS 8 OPT A P - SHAFT OLER - BEARING - SHAFT DRIVE STD	1 1 3 1	70372 70372-5 70376 70401 70402 70372-70372-5 70373-5 70431 70431	31655 31635 31655 TFE (GF) TFE (GF) 31655 31655 31655 EWCBN 31655	70373 70373-5 70379 70401 70402 70373 70373-5 70379	ALLOY C ALLOY C ALLOY C TFE (GF) TFE (GF) ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C	70374 70374-5 70360 70401 70402 70374 70374-5 70380	ALLOY 20 ALLOY 20 ALLOY 20 TFE (GF) TFE (GF) ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 EWCBNN ALLOY 20	4 4 5 12 12 4 4 5
T EXTENDED	- BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IOLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IOLER LIFE - BEARINGS - BEARING	1 1 3 1	70372 70372-5 70376 70401 70402 70372 70372-5 70378	31655 31635 31655 TFE (GF) TFE (GF) 31655 31655 31655 EWCBN 31655 31655	70373 70373-5 70379-5 70401 70402 70373 70373-5 70379	ALLOY C ALLOY C ALLOY C TFE (GF) TFE (GF) ALLOY C	70374 70374-5 70380 70401 70401 70374-5 70374-5 70380	ALLOY 20 ALLOY 20 ALLOY 20 TFE (GF) TFE (GF) ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 EWCBNN ALLOY 20 ALLOY 20 ALLOY 20	12 12 12 12 12 12 12 12 12 12 12 12 12 1
T EXTENDED	*BEARING  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P  SHAFT (OLER  -BEARING  SHAFT DRIVE STD  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P  SHAFT DRIVE POS 8 OPT A P  SHAFT IOLER  LIFE - BEARING  SHAFT DRIVE STD  SHAFT DRIVE STD  SHAFT DRIVE STD  SHAFT DRIVE POS 8 OPT A P	1 1 3 1 1 1 5 5 1	70372 70372-5 70376 70401 70402 70372-70372-5 70373-5 70431 70431	31655 31635 31655 TFE (GF) TFE (GF) 31655 31655 31655 EWCBN 31655	70373 70373-5 70379 70401 70402 70373 70373-5 70379	ALLOY C ALLOY C ALLOY C TFE (GF) TFE (GF) ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C	70374 70374-5 70360 70401 70402 70374 70374-5 70380	ALLOY 20 ALLOY 20 ALLOY 20 TFE (GF) TFE (GF) ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 EWCBNN ALLOY 20	12 12 12 12 12 12 12 12 12 12 12 12 12 1
T EXTENDED	- BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER  LIFE - BEARINGS - SHAFT DRIVE STD - SHAFT DRIVE STD - SHAFT DRIVE STD - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER  LIFE - BEARINGS AND 'CW' SHAFTS	1 1 3 1 1 1 5 5 1	70372 70372-5 70378 70401 70402 70372 70372-5 70376 70431 70372 70372-5 70376	31655 31655 31655 31655 31655 31655 31655 31655 31655 31655 31655 31655 31655 31655	70373 70373-5 70379-5 70401 70402 70373 70373-5 70379 70431 70373 70373-5 70379	ALLOY C ALLOY C ALLOY C ALLOY C TFE(GF) ALLOY C	70374 70374-5 70380 70401 70402 70374 70374-5 70380 70431 70374 70374-5 70380	ALLOY 20	12 4 4 5 5 122 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 6 7 12 12 12 12 12 12 12 12 12 12 12 12 12
T EXTENDED	- BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER  LIFE - BEARINGS - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT DRIVE POS 8 OPT A P - SHAFT DRIVE POS 8 OPT A P	1 1 3 1 1 1 5 5 1	70372 70372-5 70376 70401 70402 70372-70372-5 70373-5 70431 70372-5 70376	31655 31635 31655 TFE (GF) TFE (GF) 31655 31655 31655 EWCBN 31655 31655	70373 70373-5 70379 70401 70402 70373 70373-5 70379 70431 70373 70373-5 70379	ALLOY C ALLOY C ALLOY C ALLOY C YFE(GF) TFE(GF) ALLOY C	70374 70374-5 70380 70401 70402 70374 70374-5 70380 70431 70374-5 70380	ALLOY 20 ALLOY 20 ALLOY 20 TFE (GF) ALLOY 20	12 4 4 5 5 122 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 6 7 12 12 12 12 12 12 12 12 12 12 12 12 12
T EXTENDED	- BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER  LIFE - BEARINGS - SHAFT DRIVE STD - SHAFT DRIVE STD - SHAFT DRIVE STD - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT DRIVE POS 8 OPT A P - SHAFT IDLER  LIFE - BEARINGS AND 'CW' SHAFTS	1 1 3 1 1 1 1 5 5 1 1	70372 70372-5 70378 70401 70402 70372 70372-5 70376 70431 70372 70372-5 70376	31655 31655 31655 31655 31655 31655 31655 31655 31655 31655 31655 31655 31655 31655	70373 70373-5 70379-5 70401 70402 70373 70373-5 70379 70431 70373 70373-5 70379	ALLOY C ALLOY C ALLOY C ALLOY C TFE(GF) ALLOY C	70374 70374-5 70380 70401 70402 70374 70374-5 70380 70431 70374 70374-5 70380	ALLOY 20	4 4 4 5 5 12 12 4 4 4 5 5 5 5 5 5 5 5 5 5 6 6 7 12 12 12 12 12 12 12 12 12 12 12 12 12
T EXTENDED	- BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IOLER - BEARING - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT IOLER  LIFE - BEARINGS - BEARING - SHAFT DRIVE STD - SHAFT DRIVE POS 8 OPT A P - SHAFT DRIVE POS 8 OPT A P - SHAFT DRIVE POS 8 OPT A P - SHAFT IOLER  LIFE - BEARINGS AND 'CW' SHAFTS - BEARING	1 1 3 1 1 5 1 1	70372 70372-5 70376 70401 70402 70372-70372-5 70373-5 70431 70372-5 70376	31635 31635 31635 31635 7FE (GF) 31635 31635 31635 31635 31635 31635 31635 31635	70373 70373-5 70379 70401 70402 70373 70373-5 70379 70431 70373 70373-5 70379	ALLOY C ALLOY C ALLOY C ALLOY C YFE(GF) TFE(GF) ALLOY C	70374 70374-5 70380 70401 70402 70374 70374-5 70380 70431 70374-5 70380	ALLOY 20 ALLOY 20 ALLOY 20 TFE (GF) ALLOY 20	12 4 4 5 5 12 12 4 4 4 5 5 5 12 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# GA6/GC6 SERIES PUMP CONSOLIDATED B/M

					STANDARD PUH	P MATERIAL		1	
			316: (A) 0	\$5 B (K)	(£) 0	Y 5	ALLC (3) 0	Y 20	-
	DESCRIPTION	QTY	PART NO	MATL	PART NO	MAT.	PART NO	MAT.	TE
						<del></del>			
	SEAL ARRANGEMENT								
INTERNAL	MECHANICAL SEAL								
GA6	SEAL RETAINER CODE A E P.Q.U	<b>⊸</b> 1	21771	31655	21772	- ALLOY C	21773	ALLCY ZO	36
COMMON	+O-RING RETAINER		21774 W213270-TFE	316SS	21775 W213270-TFE	TFE	21776 W213270-TFE	TFE	36
PARTS	BOLT, SEAL RETAINER		1 W770401-188	18855	W770401-188	18855	W770401-188	18855	394
	PLUG 1/8' NPT (NOT REG C.E)	. =2	W772545-316	31655	•	I ALLOY C	52300	ALLOY ZO	62
	SEAL RETAINER CODE A E P D U	<u> </u>	21777	316SS	21778	, ALLOY C	21779	ALLOY ZO	36
	SEAL RETAINER CODE C	1 1	21760	31655	21761	ALLOY C	21782	ALLOY ZO	36
GC6	+0-RING RETAINER	1 1	WZ13270-TFE	TFE	W213270-TFE	TFE	WZ13270-TFE	TFE	37
COMMON	BOLT C-FACE ADAPTOR	. 4	W770403-186		W770403-168	18855	W770403-188	18855	394
PARTS	PLUG 1/8" NPT (NOT REG C E.	<del></del>	W772565-316	31655	<del></del>	ALLOY C	52300	ALLOY 20	62
	C-FACE MOTOR ADAPTOR	+ +	W770425-188	188SS ALUHINUM	49725	18855	W770425-188	1885S	. 25
	COUPLING L-075 56C FR	<del>+ ;</del>	W213232-000		W213232-000	STEEL	49725 W213232-000	STEEL	66
	*ASSEMBLY INSTRUCTIONS	1 1	20051-A		20051-A		20051-A		
	+SEAL HEAD ASSEMBLY	+ ,	Y0900121-316	316/CBN/VTH	+			+ :	60
^_	+SEAL SEAT W/ O-RING (VTN)	<del></del>	Y1000121-000	CER/VTN				1	55
ς	+SEAL HEAD ASSEMBLY	2	IY0900121-316	316/CBN/VTN				1	60
	-SEAL SEAT W/ O-RING (VTN)	<del></del>	Y 1000121-000	CER/VTN					55
ε	+SEAL HEAD ASSEMBLY	1	27092	316/CBN					60
	+SEAL SEAT W/ O-RING (TFE)	+	IY1000209-000	<del></del>		·			55
Р	SEAL HEAD ASSEMBLY		Y0901621-316	<del></del>	*****				60
	+SEAL SEAT W' O-RING (TFE)	<u>-</u> -	'Y 1300207-001	S'C'TEE	27099	HCO/TFE	27.097	020/TFE	55
٥	+SEAL SEAT W/ O-RING (TFE)		Y1000209-000	<del></del>	Y1000209-000			SIC/TFE	55
	+SEAL HEAD ASSEMBLY	<del>- : -</del>		020/CBN	27090	HCO/CBN	27089	020/CBN	60
U	+SEAL SEAT W/ O-RING (TFE)	<del></del> -	Y1000209-000	-	Y1000209-000		171000209-000	1 7 7 7 7 7	55
		<del></del>	1				1. 100000		
EXTERNAL	MECHANICAL SEAL								
GA6	SEAL RETAINER	1 1	21783	31655	21784	ALLOY C	21785	ALLOY 20	36
COMMON	BOLT SEAL RETAINER	2	W770403-188	18855	W770403-188	18855	W770403-168	18855	39A
PARTS	PLUG 1/8" NPT	<b>■2</b>	W772565-316	31655	52301	ALLOY C	52300	ALLOY ZO	62
	BOLT C-FACE ADAPTOR		W770403-186	18855	W770403-186	18855	W770403-188	18855	37A
GÇ6	PLUG 1/8" NPT		W772565-316	31655	52301	ALLOY C	<del></del>	ALLOY ZO	62
COMMON	MOTOR BOLT	4	W770425-188	16855	W770425-188	<del></del>	W770425-188	18855	25
PARTS	C-PACE MOTOR ADAPTOR	1	49725	ALUMINUM	49725	ALUHINUH	49725	ALUMINUM	66
	ASSEMBLY INSTRUCTIONS	1 1	W213232-000 20051-A	STEEL	W213232-000	STEEL	W213232-000	STEEL	68
	-SEAL HEAD ASSEMBLY	1	27089	020/CBN	20051-A 27090	HCO/CBN	20051-A 27089	020/CBN	60
٧	SEAT ASSY EXT SEAL	+-;-	21580	316/TFE	<del></del>	HCO/TE	21581	DZD/TFE	55
***************************************	+SEAL HEAD ASSEMBLY	1	27089	020/CBN	27090	HCO/CBN	· · · · · · · · · · · · · · · · · · ·	020/CBN	60
w	+SEAT ASSY EXT SEAL	+ ;	21583	SIC/TFE	21583	SIC/TFE	21583	SIC/TFE	55
						·····		· · · · · · · · · · · · · · · · · · ·	
OSITION 9	OPTIONS - DELETE CORRESPONDING ST	ANDARD	PUMP COMPONE	NT FROM B	'H				
	HOUSING FRONT - BRG FLUSH	1	40156-1	31655	40157-1	ALLOY C	40158-1	ALLOY 20	1
	A HOUSING REAR - BRG FLUSH	1	40224	31655	40231	ALLOY C	40234	ALLOY 20	3
1 1 4	PLUG 1/8' NPT	4.3	W772565-316	316SS		ALLOY C	52300	ALLOY 20	62
	B PIN BEARING LOCK	4	•1802	ALLOY 20		ALLOY -	41802	ALLOY 20	14
-	+0-RING HOUSING	-2	41107	SS/PFA CARRON		SS/PFA	41107	SS/PFA	16
P	+BEARING SLOTTED	- 4	40428	TFE (GF)	40428	TFE (GF)	40428	TEL (GF)	12,13
Ь	I-WEAR PLATE SLOTTED	•—	40511	CARBON		CARBON	40417	CARBON	12.13
E	-WEAR PLATE SLOTTED	4	<del></del>	TFE (GF)	40513	TFE (GF)	40513	TFE (GF)	15
Ŧ	HOTOR BOLT	4	W770545-188		W770545-188	<del></del>	W770545-188	18855	25
	G C-FACE MOTOR ADAPTOR 71 FR	1	49744	ALUMINUM	49744	ALUMINUM	49744	ALUMINUM	66
	COUPLING L-070 71 FR	1	W213582-000	STEEL	W213582-000	STEEL	W213582-000	STEEL	68
	HOTOR BOLT	4	W770546-188	18855	W770546-188	18855	W770546-188	18855	25
	C-FACE HOTOR ADAPTOR BO FR	1	<del></del>	ALUMINUM	49745	ALUMINUM	49745	ALUH INUH	66
_	COUPLING L-075 80 FR		W213584-000	STEEL	W213584-000	STEEL	W213584-000		68
]	CPLG EXT SEAL L-090 143TC-184C FR	۱ ۱	W213230-000	STEEL	W213230-000		W213230-000		68
	COUPLING L-095 143TC-184C FR	ــــا	W213231-000		WZ13231-000	STEEL	W213231-000		68
	MOTOR BOLT	+ +	W770547-188		W770547-188	18855	W770547-188	18855	25
	C-FACE HOTOR ADAPTOR 90 FR	1 1	49746 WZ 13586-000	STEEL	49746 W213586-000	STEEL	49746 W213586~000	STEEL	66
H	GEAR DRIVE/IDLER	1-2	·	ALLOY C	40604	ALLOY C	40604	ALLOY C	6.7
	+GEAR IDLER	1	40681	CARBON	40681	CARBON	40681	CARBON	7
- 1	+GEAR DRIVE/IDLER	1-2	40648	TFE (GF)	<del> </del>	TFE (GF)	40648	TPE (GF)	6 7
1.	<del></del>	1-2	40717	PEEK	40717	PEEK	40717	PEEK	6 7
	+GEAR DRIVE/IDLER		<del> </del>	ALLOY 20	41913	ALLOY C	41920	ALLOY 20	
	+KEY METAL DRIVE GEAR	1	41920	MEED! ED	41212				
	N	-1	41920	ALLOY 20	41914	ALLOY C	41921	ALLOY 20	
	•KEY METAL DRIVE GEAR	-	41921	<del></del>		<del>,</del>	<del></del>	ALLOY 20	9
	+KEY METAL DRIVE GEAR +KEY PLASTIC DRIVE GEAR	-1	41921	ALLOY 20	41914	ALLOY C	<del></del>		
	+KEY HETAL DRIVE GEAR  +KEY PLASTIC DRIVE GEAR  +KEY MTL/CBN IDLER GEAR	-1	41921 41920	ALLOY 20 ALLOY 20	41914 41913	ALLOY C	41920	ALLOY 20	9
	KEY METAL DRIVE GEAR     KEY PLASTIC DRIVE GEAR     KEY MTL/CBN IDLER GEAR     KEY PLASTIC IDLER GEAR	-	41921 41920 41921	ALLOY 20 ALLOY 20 ALLOY 20	41914 41913 41914	ALLOY C	41920 41921	ALLOY 20 ALLOY 20	9

# GA6/GC6 SERIES PUMP CONSOLIDATED B/M

					NDARD PUHP H				
			316S	S (K)	ALLO	r C P (M)	ALLO	Y 20 R (N)	
	DESCRIPTION	OTY	PART NO	MATL	PART NO	MATL	PART NO	MATL	ITEM
SITION 3	STANDARD PUMP - NON-	VARIABLE COMPONENT	<del></del>						
	HOUSING FRONT	1	40156	31655	40157	ALLOY C	40158	ALLOY ZO	1
	HOUSING CENTER	FNPT	40002	31655	40006	ALLOY C	40008	ALLOY 20	2
	HOUSING CENTER	FBSPT	40011	31655	40023	ALLOY C	40017	ALLOY 20	2
	HOUSING REAR	1	40218	31655	40219	ALLOY C	40220	ALLOY 20	3
	-RING RETAINING					1		+	
	-RING RETAINING POS	8 OPT A P 5	46702	ALLOY 20	46701	ALLOY C	46702	ALLOY 20	10 1
	KEY METAL DRIVE GEA	NR .	41905	ALLOY ZO	41903	ALLOY C	41905	ALLOY 20	8
	-KEY PLASTIC DRIVE O		41906	ALLOY 20	41904	ALL DY C	41906	ALLOY 20	8
	. WEY MYLICAN IFLER S		41905	* -DY 20	41503	AL O	41905	ALLU- 20 )	
	-KEY PLASTIC IDLER C		4 1906	ALLOY 20	41904	ALLOY C	41906	ALLOY 20	9
	PIN BEARING LOCK		41801	TFE	41801	TFE	41801	TFE	14
	+0-RING HOUSING		41101	TFE	41101	TFE	41101	TFE	16
	PIN HOUSING	<del></del>	40801	316\$\$	40801	31655	40801	31655	17
	BOLT HOUSING		62005	18855	62005	18855	62005	18855	18/
	NUT HOUSING BOLT		62101	18855	62101	18855	62101	18855	19
	NAMEPLATE	1	41201	18855	41201	18855	41201	18855	
			<del></del>			·		<del></del>	
	5 DRIVE AND IDLER GE			T				<del></del> ,	
	+GEAR DRIVE/IDLER	1-7	40668	ALLOY C	40660	ALLOY C	40068	ALLO: L	6
<u> </u>	-GEAR DRIVE/IDLER	1-2	40674	ALLOY 20			40674	ALLOY 20	6 7
K	+GEAR IDLER		40622	CARBON	40622	CARBON	40622	CARBON	
	+GEAR DRIVE/IDLER	1-2	40600	TFE (GF)	40600	TFE (GF)	40600	TFE (GF)	6 7
E	GEAR DRIVE/IDLER	1-2	40715	PEEK	40715	PEEK	40715	PEEK	6 7
51710N 6	WEAR PLATE MATERIAL -	**OTY 8 WHEN USING	NARROW WIDTH	GEARS					
к	-WEAR PLATE		40501	CARBON	40501	CARBON	40501	CARBON	15
Ţ	+WEAR PLATE		40504	TFE (GF)	40504	TFE (GF)	40504	TFE (GF)	15
Z	-WEAR PLATE		40503	CERAMIC	40503	CERAMIC	40503	CERAMIC	15
£	-WEAR PLATE		40523	PEEK	40523	PEEK	40523	PEEK	15
	SHAFT AND BEARING HATE ONSTRUCTION	ERIAL	40426	CARBON	40426	CARBON	40426	CARBON	12 1
	+SHAFT DRIVE STD	<del>-</del>	40359	316SS	40361	ALLOY C	40373	ALLOY 20	12
ĸ	+SHAFT DRIVE POS & C	WIT A P	40359-5	31655	40361-5	ALLOY C	40373-5	ALLOY 20	<del>-</del> -
	+SHAFT IDLER	<del>*************************************</del>	40360	31655	40362	ALLOY C	40374	ALLOY 20	
	+BEARING	<del>-</del>	40425	TFE(GF)	40425	TFE (GF)	40425	TFE (GF)	12
	-SHAFT DRIVE STO	<del></del>	40359	31655	40361	ALLOY C	40373	ALLOY 20	12
T	SHAFT DRIVE POS 8 C	YPT A P	40359-5	31655	40361-5	ALLOY C	40373-5	ALLOY 20	
	-SHAFT IDLER	7/7/	40360	31655	40362	ALLOY C	40374	ALLOY 20	
v Transo I	IFE - BEARINGS								
A IENOEU L	BEARING		40430	EWCRN	40430	EWCRN	40430	EWCRN	12 1
	+SHAFT DRIVE STD	<del></del>	40359	316SS	40361	ALLOY C	40373	ALLOY 20	-14
L	SHAFT DRIVE POS 8 C	YET A P	40359-5	31655	40361-5	ALLOY C	40373-5	ALLOY 20	
	SHAFT IDLER	+ +	40360	316\$\$	40362	ALLOY C	40374	ALLOY 20	
	1-2		1	<u> </u>				1.220. 201	
EXTENDED L	IFE - BEARINGS AND "CH	Y SHAFTS							
EXTENDED L	.IFE - BEARINGS AND *CH	Y' SHAFTS	40430	EWCBN	40430	EWCBN	40430	EWCBN	12 1
			40430 40312	EWCBN CW316	40430 40361-2	EWCBN CWALYC	40430	EWCBN EWALY20	12 1
EXTENDÉD L	+BEARING	4	<del></del>	<del></del>		<del></del>		<del></del>	

<sup>\*</sup>COMPONENT DUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# GA8/GC8 SERIES PUMP CONSOLIDATED B/M

					STANDARD PUNE			. 20	1
			(A) OF	SS (K)	ALLOY (C) OF	(M)	ALLO	r 20 R (N)	
	DESCRIPTION	OTY	PART NO	HATL	PART NO	MATL	PART NO	MATL	ITE
DSITION 3 5	TANDARD PUMP - NON-VARIABLE COL	-	175						
5311104 5 5	HOUSING FRONT	1	40156	31655	10452	41169.6	10.05.0	TALLON 30	
-	HOUSING CENTER FNPT	<del>  '</del> -	40052		40157	ALLOY C	40158	ALLOY 20	1
-	HOUSING CENTER PROPT	1	40064	31655	40053	ALLOY C	40054	ALLOY 20	2
į.		<del>-</del>		31655	40065	ALLOY C	40066	ALLOY 20	2
	HOUSING REAR	1	40218	3165S	40219	ALLOY C	40220	ALLOY 20	,
- ⊢	-RING RETAINING STD	<u> </u>	46702	ALLOY 20	46701	ALLOY C	46702	ALLOY 20	10
-	RING RETAINING POS 8 OPT A P	5				<u> </u>			-
ļ.	•KEY METAL DRIVE GEAR	• 2	41905	ALLOY 20	41903	ALLOY C	41905	ALLOY 20	8
<b>⊢</b>	+KEY PLASTIC DRIVE GEAR	ļ	41906	ALLOY 20	41904	ALLOY C	41906	ALLOY 20	
ļ	→KEY MTL/CBN IDLER GEAR	•2	41905	ALLOY 20	41903	ALLOY C	41905	ALLOY 20	9
ļ-	*KEY PLASTIC IDLER GEAR	<u> </u>	41906	ALLOY 20	41904	ALLOY C	41906	ALLOY 20	9
<b>-</b>	-PIN BEARING LOCK	4	41801	TFE	41801	TFE	41801	TFE	14
L.	+0-RING HOUSING	2	41101	TFE	41101	TFE	41101	TFE	16
1.	PIN HOUSING	1.4.	40801	31655	40801	31655	4650.	31055	17
F	ticf HOUSING	4	62006	18855	62006	18855	6200¢	18855	184
Ĺ	NUY HOUSING BOLT	4	62101	18855	62101	18855	62101	18855	19
Ĺ	NAMEPLATE	1	41201	18855	41201	18655	41201	18855	
SITION 4 &	5 DRIVE AND IDLER GEAR								
С .	+GEAR, DRIVE/IOLER	1-2	40689	ALLOY C	40689	ALLOY C	40689	ALLOY C	6
D .	+GEAR DRIVE/IDLER	1-2	40691	ALLOY 20			40691	ALLOY 20	6
к .	+GEAR IDLER	1	40623	CARBON	40623	CARBON	40623	CARBON	7
Τ. Τ.	-GEAR DRIVE/IDLER	1-2	40701	TFE(GF)	40701	TFE(GF)	40701	TFE (GF)	6
F .	+SEAR DRIVE/IDLFR	1-2	40716	PEE	107	PLEK	40716	PECK	6
SITION 6 WE	EAR PLATE MATERIAL								
	-WEAR PLATE		40501	CARBON	40501	CARBON	40501	CARBON	15
	*WEAR PLATE	'	40504	TFE(GF)	40504	TFE (GF)	40504	TFE (GF)	15
	-WEAR PLATE	4	40503	CERAMIC	40503	CERAMIC	40503	CERAMIC	15
	WEAR PLATE		40523	PEEK	40523	PEEK	40523	PEEK	15
	THEAT FEATE			FLLX	40323	,,,,,,		, FEE. 1	.,
SITION 7 SH	HAFT AND BEARING MATERIAL								
STANDARD CO								<del></del>	
	MSTRUCTION	4							
	A					C			
-	+BEARING		40426	CARBON	40426	CARBON	40426	CARBON	
	SHAFT DRIVE STD GAS		40351	ALLOY ZO	40347	ALLOY C	40351	ALLOY 20	•
	SHAFT DRIVE STD GA8	•	40351 40351-7	ALLOY 20 ALLOY 20	40347 40347-7	ALLOY C	40351 40351-7	ALLOY 20 ALLOY 20	
	SHAFT DRIVE STD GAS		40351	ALLOY ZO	40347 40347-7 40347-5	ALLOY C	40351	ALLOY 20	•
ĸ	SHAFT DRIVE STD GA8		40351 40351-7	ALLOY 20 ALLOY 20	40347 40347-7	ALLOY C	40351 40351-7	ALLOY 20 ALLOY 20	4
ĸ	SHAFT DRIVE STD GA8 SHAFT DRIVE STD GC8 SHAFT DRIVE POS 8 OPT A P GA8		40351 40351-7 40351-5	ALLOY 20 ALLOY 20 ALLOY 20	40347 40347-7 40347-5	ALLOY C ALLOY C	40351 40351-7 40351-5	ALLOY 20 ALLOY 20 ALLOY 20	4
K	SHAFT DRIVE STD GA8 SHAFT DRIVE STD GC8 SHAFT DRIVE POS 8 OPT A P GA8 SHAFT DRIVE POS 8 OPT A P GC8	1	40351 40351-7 40351-5 40351-9	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	40347 40347-7 40347-5 40347-9	ALLOY C ALLOY C ALLOY C	40351 40351-7 40351-5 40351-9	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	4 4 4 5
ĸ	SHAFT DRIVE STD GA8  SHAFT DRIVE STD GC8  SHAFT DRIVE POS 8 OPT A P GA8  SHAFT DRIVE POS 8 OPT A P GC8  SHAFT IDLER	1	40351-7 40351-7 40351-5 40351-9 40350	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	40347 40347-7 40347-5 40347-9 40346	ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C	40351 40351-7 40351-5 40351-9 40350	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	4 4 4 5
ĸ	SHAFT DRIVE STD GA8  SHAFT DRIVE STD GC8  SHAFT DRIVE POS 8 OPT A P GA8  SHAFT DRIVE POS 8 OPT A P GC8  SHAFT IDLER  **BEARING**	1	40351 40351-7 40351-5 40351-9 40350 40425 40351	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TFEIGT) ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347	ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C TFE(GF) ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TFE(GF) ALLOY 20	4 4 4 5
к -	- SHAFT DRIVE STD GA8 - SHAFT DRIVE STD GC6 - SHAFT DRIVE PDS 8 OPT A P GA8 - SHAFT DRIVE PDS 8 OPT A P GC8 - SHAFT IDLER - SEARING - SHAFT DRIVE STD GA8 - SHAFT DRIVE STD GA6 - SHAFT DRIVE STD GC6	1	40351 40351-7 40351-5 40351-9 40350 40425 40351-7	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TREIGE) ALLOY 20 ALLOY 20 ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347-7	ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C TFE(GF) ALLOY C ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351 40351-7	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPE(GF) ALLOY 20 ALLOY 20 ALLOY 20	4 4 4 5 12 1
ĸ	SHAFT DRIVE STD GA8  SHAFT DRIVE STD GC6  -SHAFT DRIVE PDS 8 OPT A P GA8  -SHAFT DRIVE PDS 8 OPT A P GC8  -SHAFT IDLER  -SHAFT DRIVE STD GA6  -SHAFT DRIVE STD GA6  -SHAFT DRIVE STD GC6  -SHAFT DRIVE STD GC6  -SHAFT DRIVE STD GC6	1	40351 40351-7 40351-5 40351-9 40350 40425 40351	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPE(GF) ALLOY 20 ALLOY 20 ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347 40347-7 40347-5	ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C TFE(GF) ALLOY C ALLOY C ALLOY C ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351 40351-7 40351-5	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPE(GF) ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	4 4 4 5 12 1 4 4
ĸ	SHAFT DRIVE STD GA8  SHAFT DRIVE STD GC6  SHAFT DRIVE POS 8 OPT A P GA8  SHAFT DRIVE POS 8 OPT A P GC8  SHAFT DRIVE STD GA8  SHAFT DRIVE STD GA8  SHAFT DRIVE STD GA8  SHAFT DRIVE STD GC6  SHAFT DRIVE POS 8 OPT A P GA8  SHAFT DRIVE POS 8 OPT A P GA8  SHAFT DRIVE POS 8 OPT A P GA8	1 4	40351 40351-7 40351-5 40351-9 40350 40425 40351 40351-7 40351-5 40351-9	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TFEIGF) ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347 40347-7 40347-5 40347-9	ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C TFE(GF) ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351 40351-7 40351-5 40351-9	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPE(GF) ALLOY 20	4 4 4 5 12 1 4 4
ĸ	SHAFT DRIVE STD GA8  SHAFT DRIVE STD GC6  -SHAFT DRIVE PDS 8 OPT A P GA8  -SHAFT DRIVE PDS 8 OPT A P GC8  -SHAFT IDLER  -SHAFT DRIVE STD GA6  -SHAFT DRIVE STD GA6  -SHAFT DRIVE STD GC6  -SHAFT DRIVE STD GC6  -SHAFT DRIVE STD GC6	1	40351 40351-7 40351-5 40351-9 40350 40425 40351-7 40351-7	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPE(GF) ALLOY 20 ALLOY 20 ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347 40347-7 40347-5	ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C TFE(GF) ALLOY C ALLOY C ALLOY C ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351 40351-7 40351-5	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPE(GF) ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	4 4 4 5 12 1 4 4
K .	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC6 -SHAFT IDLER  -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GG8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC6	1 4	40351 40351-7 40351-5 40351-9 40350 40425 40351 40351-7 40351-5 40351-9	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TFEIGF) ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347 40347-7 40347-5 40347-9	ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C TFE(GF) ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351 40351-7 40351-5 40351-9	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPE(GF) ALLOY 20	4 4 4 5 12 1 4 4
K TENDED LIFE	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE PDS 8 OPT A P GA8 -SHAFT DRIVE PDS 8 OPT A P GC8 -SHAFT IDLER -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC6 -SHAFT DRIVE PDS 8 OPT A P GA8 -SHAFT DRIVE PDS 8 OPT A P GC8 -SHAFT DRIVE PDS 8 OPT A P GC8 -SHAFT IDLER	1 4	40351 40351-7 40351-5 40351-9 40350 40425 40351-7 40351-7 40351-9 40350	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPE(GF) ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347 40347-7 40347-5 40347-9 40346	ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C TFE(GF: ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351-7 40351-7 40351-9 40350	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TFE(GF) ALLOY 20	4 4 5 5 4 4 4 5 5
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T EXTENDED LIFT	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA6 -SHAFT DRIVE STD GA6 -SHAFT DRIVE STD GC6 -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT ORIVE STD GA8	1 4	40351 40351-7 40351-5 40351-9 40351-9 40350-7 40351-7 40351-7 40351-9 40350-7 40351-9	ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347-7 40347-7 40347-7 40347-9 40346	ALLOY C	40351 40351-7 40351-5 40351-9 40350-9 40350-7 40351-7 40351-7 40351-9 40350-7 40350-9	ALLOY 20	4 4 4 5 12 1 4 4 4 5
EXTENDED LIFE	SHAFT DRIVE STD GA8  -SHAFT DRIVE PDS 8 DPT A P GA8  -SHAFT DRIVE PDS 8 DPT A P GC8  -SHAFT IDLER  -SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC8  -SHAFT DRIVE PDS 8 OPT A P GC8  -SHAFT DRIVE PDS 8 OPT A P GC8  -SHAFT DRIVE PDS 8 OPT A P GC8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GA8	1 4	40351 40351-7 40351-5 40351-5 40351-9 40350 40425 40351-7 40351-7 40351-9 40350 40430 40430 40351-7	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPETGF1 ALLOY 20	40347 40347-7 40347-5 40347-5 40347-9 40346 40425 40347-7 40347-7 40347-9 40346 40430 40430 40347-7	ALLOY C	40351 40351-7 40351-5 40351-5 40351-9 40350 40425 40351-7 40351-7 40350 40430 40430 40351-7	ALLOY 20	4 4 4 5 12 1 4 4 4 5
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EXTENDED LIFE	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8	1 1 1	40351 40351-7 40351-5 40351-9 40351-9 40350 40425 40351-7 40351-5 40351-9 40430 40430 40430 40351-7 40351-7 40351-7	ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347-7 40347-7 40347-9 40347-7 40347-7 40347-7 40347-7	ALLOY C	40351 40351-7 40351-5 40351-5 40350 40425 40351-7 40351-7 40350 40430 40430 40351-7 40351-7 40351-7 40351-7	ALLOY 20	4 4 4 5 12 1 4 4 4 5
K TENDED LIFE	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC6 -SHAFT DRIVE POS 8 OPT A P GC6 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC6 -SHAFT DRIVE POS 6 OPT A P GC6 -SHAFT DRIVE STD GC6 -SHAFT DRIVE STD GA8	1 1 1	40351 40351-7 40351-5 40351-9 40350 40425 40351 40351-7 40351-9 40350 40430 40430 40351-7 40351-7	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 TPE (GF) ALLOY 20	40347 40347-7 40347-5 40347-5 40347-6 40346 40425 40347-7 40347-7 40347-9 40346 40430 40430 40347-7 40347-7	ALLOY C	40351 40351-7 40351-5 40351-5 40350 40425 40351 40351-7 40351-5 40350 40430 40430 40351-7 40351-7 40351-7 40351-7	ALLOY 20	4 4 4 5 12 1 4 4 4 5 12 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
EXTENDED LIFE	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8	1 1 1	40351 40351-7 40351-5 40351-9 40351-9 40350 40425 40351-7 40351-5 40351-9 40430 40430 40430 40351-7 40351-7 40351-7	ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347-7 40347-7 40347-9 40347-7 40347-7 40347-7 40347-7	ALLOY C	40351 40351-7 40351-5 40351-5 40350 40425 40351-7 40351-7 40350 40430 40430 40351-7 40351-7 40351-7 40351-7	ALLOY 20	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
EXTENDED LIF	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8	1 1 1	40351 40351-7 40351-5 40351-9 40351-9 40350 40425 40351-7 40351-5 40351-9 40430 40430 40430 40351-7 40351-7 40351-7	ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347-7 40347-7 40347-9 40347-7 40347-7 40347-7 40347-7	ALLOY C	40351 40351-7 40351-5 40351-5 40350 40425 40351-7 40351-7 40350 40430 40430 40351-7 40351-7 40351-7 40351-7	ALLOY 20	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
EXTENDED LIF	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6  -SHAFT DRIVE POS 8 OPT A P GA8  -SHAFT DRIVE POS 8 OPT A P GC8  -SHAFT DRIVE POS 8 OPT A P GC8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC8  -SHAFT DRIVE STD GC8  -SHAFT DRIVE POS 8 OPT A P GC8  -SHAFT DRIVE STD GC8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC8  -SHAFT DRIVE STD GC8	1 1 1	40351 40351-7 40351-5 40351-5 40351-9 40350 40425 40351-7 40351-7 40351-7 40351-7 40351-7 40351-7 40351-7 40351-9	ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347-7 40347-7 40347-9 40347-7 40347-7 40347-7 40347-7	ALLOY C	40351 40351-7 40351-5 40351-5 40350 40425 40351-7 40351-7 40350 40430 40430 40351-7 40351-7 40351-7 40351-7	ALLOY 20	4 4 4 4 4 4 5 5
EXTENDED LIFT	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC6 -SHAFT IDLER  -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT IDLER  -SHAFT DRIVE STD GA8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	40351 40351-7 40351-5 40351-5 40351-9 40350 40425 40351-7 40351-7 40351-9 40351-9 40351-9 40351-9 40351-9 40350	ALLOY 20	40347 40347-7 40347-5 40347-5 40347-9 40346 40425 40347-7 40347-7 40347-9 40347-9 40347-9 40347-9 40347-9 40346	ALLOY C	40351 40351-7 40351-5 40351-5 40351-9 40350 40425 40351-7 40351-7 40351-9 40351-7 40351-9 40351-9 40351-9 40350	ALLOY 20	4 4 4 4 4 4 4 5 5 12 12 1
EXTENDED LIFT	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC6 -SHAFT DRIVE POS 8 OPT A P GC6 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC6 -SHAFT DRIVE STD GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	40351 40351-7 40351-5 40351-9 40350 40425 40351 40351-7 40351-9 40350 40430 40430 40430 40430 40430 40430 40430	ALLOY 20	40347 40347-7 40347-5 40347-5 40347-6 40346 40347-7 40347-7 40347-9 40346 40347-7 40347-7 40347-7 40347-7 40347-7 40347-7	ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351-7 40351-7 40351-9 40350 40430 40430 40351-9 40351-9 40351-9	ALLOY 20	4 4 4 4 4 5 5 12 1 1 2 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4
EXTENDED LIF	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GA8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	40351 40351-7 40351-5 40351-9 40351-9 40351-7 40351-7 40351-7 40351-5 40351-9 40351-7 40351-7 40351-9 40351-9 40351-9 40351-9 40351-9 40351-9 40351-9	ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347-7 40347-5 40347-9 40346 40347-7 40347-7 40347-7 40347-9 40347-9 40346	ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351-7 40351-7 40351-9 40350 40430 40351-9 40351-9 40351-9 40351-9 40351-9 40351-9 40351-9	ALLOY 20 ALL	4 4 4 4 4 5 5 12 1 1 2 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4
EXTENDED LIFE	SHAFT DRIVE STD GA8  -SHAFT DRIVE POS 8 OPT A P GA8  -SHAFT DRIVE POS 8 OPT A P GA8  -SHAFT DRIVE POS 8 OPT A P GA8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE POS 8 OPT A P GC8  -SHAFT DRIVE POS 8 OPT A P GC8  -SHAFT DRIVE STD GA8  -SHAFT DRIVE POS 8 OPT A P GA8  -SHAFT DRIVE POS 8 OPT A P GC8  -SHAFT DRIVE STD GA8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	40351 40351-7 40351-7 40351-9 40351-9 40351-7 40351-7 40351-7 40351-9 40351-9 40351-7 40351-7 40351-7 40351-7 40351-7 40351-9 40351-9 40351-9 40351-9	ALLOY 20	40347 40347-7 40347-5 40347-5 40347-6 40347-7 40347-7 40347-7 40347-7 40347-7 40347-7 40347-7 40347-9 40347-9 40347-9 40346	ALLOY C	40351 - 40351 - 7   40351 - 5   40351 - 5   40351 - 5   40351 - 9   40350   40425   40351 - 7   40351 - 9   40350   40430   40351 - 7   40351 - 7   40351 - 9   40350   40430   40351 - 2   40351 - 5   40351 - 2   40351 - 5    40351 - 5   40351 - 5   40351 - 5    40351 - 5   40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5    40351 - 5	ALLOY 20	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
EXTENDED LIF	SHAFT DRIVE STD GA8  -SHAFT DRIVE STD GC6 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GA8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GA8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE POS 8 OPT A P GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GC8 -SHAFT DRIVE STD GA8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	40351 40351-7 40351-5 40351-9 40351-9 40351-7 40351-7 40351-7 40351-5 40351-9 40351-7 40351-7 40351-9 40351-9 40351-9 40351-9 40351-9 40351-9 40351-9	ALLOY 20	40347 40347-7 40347-5 40347-9 40346 40425 40347-7 40347-5 40347-9 40346 40347-7 40347-7 40347-7 40347-9 40347-9 40346	ALLOY C	40351 40351-7 40351-5 40351-9 40350 40425 40351-7 40351-7 40351-9 40350 40430 40351-9 40351-9 40351-9 40351-9 40351-9 40351-9 40351-9	ALLOY 20 ALL	12 1 4 4 4 4 4 5 5 12 12 14 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# GA8/GC8 SERIES PUMP CONSOLIDATED B/M

					NDARD PUMP MA				
			31655 (A) OR	t <b>K</b> ≀	ALLEY (C) OR	โสว	AL_CY (0) 06	20 (N)	
	DESCRIPTION	DTY	PART NO	MATL	PART NC	HATL	PART NO	HAT	76
S1710N A S	SEAL ARRANGEMENT								
	HECHANICAL SEAL								
INTERNAL P	SEAL RETAINER CODE A.E P Q U		21771	31655	21772	31655	21773	31455	36
GA8	SEAL RETAINER CODE C	1	21774	31655	21775	31655	21776	31655	36
	+O-RING RETAINER	1	W213270-TFE	TFE	W213270-TFE		WZ13270-TFE	TFE	37
COMMON	<del></del>						•		
PARTS	BOLT SEAL RETAINER	2	W770401-188	18855	W770401-188	18855	W770401-188	18855	39
	PLUG 1/6" NPT (NOT REQ C.E)	*2	W772565-316	31655		ALLOY C		ALLOY ZO	67
	SEAL RETAINER CODE A E.P.Q U	1	21777	31655	21778	31655	21779	31655	36
	SEAL RETAINER CODE C	<u> </u>	21780	31655	21781	31655	21782	31655	36
GCB	O-RING RETAINER		W213270-TFE	TPE	W213270-TFE		W213270-TFE	TFE	37
COMMON	BOLT C-FACE ADAPTOR	- 4	W770403-188	18655	W770403-188		W770403-188	18855	39
PARTS	PLUG 1/8" NPT (NOT RED C E)	• 2	W772565-316	31655	52301	ALLOY C	52300	ALLOY ZO	62
	MOTOR BOLT	4	W770425-168	18855	W770425-186	18855	W770425-188	18855	25
	C-FACE MOTOR ADAPTOR	1		ALUHINUM	49725	ALUMINUM	49725	ALUMINUM	66
	COUPLING L-075 56C FR	1	W213232-000	STEEL	W213232-000	STEEL	W213232-000	STEEL	68
	+ASSEMBLY INSTRUCTIONS	1	20051-A		20051-A		20051-A		
	+SEAL HEAD ASSEMBLY	1	Y0900121-316	316/CBN/VTN					60
	+SEAL SEAT W/ O-RING (TFE)	. 1	Y 1000121-000	CER/VTN					55
,	+SEAL HEAD ASSEMBLY	2	Y0900121-316	316/CBH/VTN					60
C	+SEAL SEAT W/ C-RING (TFE)	2	Y1000121-000	CER/VTN			,		55
	-SEA HEAD ADSEMBLY	,	27092	316/C8N					60
£	+SEAL SEAT W/ O-RING (TFE)	2	Y1000209-000						55
	+SEAL HEAD ASSEMBLY		Y0901621-316	<del></del>					60
P	-SEAL SEAT W/ O-RING (TFE)		Y1000209-000						55
	+SEAL HEAD ASSEMBLY	,	27097	020/TFE	27099	HCD/TFE	27097	020/TFE	60
Q	+SEAL SEAT W/ O-RING (TFE)		Y1000209-000		Y1000209-000		Y1000209-000	SIC/TFE	55
	+SEAL HEAD ASSEMBLY	<u> </u>	27089	020/CBN	27090	HCO/CBN	27089	020/CBN	60
U	+SEAL SEAT W/ D-RING (TFE)		Y1000Z09-000		Y1000209-000		Y1000209-000		55
	TOERE GERT WIT B-ITTHE TITLE	<u></u>			. 1000207-000			3.47.7.2	
	MECHANICAL SEAL		,				<del>,</del>		
GAB	SEAL RETAINER	' 1	21783	31655		ALLOY C	21785	ALLOY 20	36
COMMON	BOLT SEAL RETAINER	2	W770403-188	18855	W770403-188	18855	W770403-188	18855	39
PARTS	PLUG 1/8" NPT	#2	W772565-316	31655	52301	ALLOY C	52300	ALLOY ZO	62
	BOLT, C-PALE ADAPTOR	-4	W770403-188	18855	W770403-188	18855	W770403-188	18855	39
GC8	PLUG 1/8' NPT	• 2	W772565-316	31655	52301	ALLOY C	52300	ALLOY 20	62
COMMON	MOTOR BOLT	4	W770425-188	18855	W770425-188	18855	W770425-188	18655	25
0.4=-	C C.CC		49725	ALUMINUM	49725	ALUMINUM	49725	ALUMINUM	66
PARTS	C-FACE MOTOR ADAPTOR	1		ALC: INC.	407.23			ALC: III	
PARTS	COUPLING 1-075 56C FR	1	W213232-000	<del></del>	W213232-000	STEEL	W21323Z-000	STEEL	68
PARTS	<del></del>		<del></del>	<del></del>		STEEL	W21323Z-000 20051-A		68
	COUPLING 1-075 56C FR	1	W213232-000	STEEL	W213232-000		·	STEEL	
V	COUPLING 1-075 56C FR ASSEMBLY INSTRUCTIONS	1	W213232-000 20051-A	STEEL	W213232-000 20051-A		20051-A	STEEL	60
V	COUPLING L-075 56C FR ASSEMBLY INSTRUCTIONS  • SEAL HEAD ASSEMBLY	1	W213232-000 20051-A 27089 21580	STEEL 020/CBN	W213232-000 20051-A 27090	HC0/CBN	20051-A 27089	STEEL	60 55
	COUPLING L-075 S6C FR ASSEMBLY INSTRUCTIONS -SEAL HEAD ASSEMBLY -SEAT ASSY EXT SEAL -SEAL HEAD ASSEMBLY	1 1	W213232-000 20051-A 27089 21580 27089	STEEL 020/CBN 316/TFE 020/CBN	W213232-000 20051-A 27090 21582 27090	HCO/CBN HCO/TFE HCO/CBN	20051-A 27089 21581	STEEL 020/CBN 020/TFE 020/CBN	55 60
v	COUPLING L-075 S&C FR ASSEMBLY INSTRUCTIONS  SEAL HEAD ASSEMBLY SEAT ASSY EXT SEAL	1 1 1	W213232-000 20051-A 27089 21580	STEEL 020/CBN 316/TFE	W213232-000 20051-A 27090 21582	HCO/CBN HCO/TFE	20051-A 27089 21581 27089	STEEL 020/CBN 020/TFE	55 60
v	COUPLING L-075 56C FR ASSEMBLY INSTRUCTIONS I-SEAL HEAD ASSEMBLY I-SEAT ASSY EXT SEAL I-SEAL HEAD ASSEMBLY I-SEAT ASSY, EXT SEAL	1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583	STEEL	W213232-000 20051-A 27090 21582 27090 21583	HCO/CBN HCO/TFE HCO/CBN	20051-A 27089 21581 27089	STEEL 020/CBN 020/TFE 020/CBN	55 60
v	COUPLING L-075 S&C FR ASSEMBLY INSTRUCTIONS I-SEAL HEAD ASSEMBLY I-SEAT ASSY EXT SEAL I-SEAT ASSY EXT SEAL I-SEAT ASSY, EXT SEAL OPTIONS - DELETE CORRESPONDING STA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583	57EEL	W213232-000 20051-A 27090 21582 27090 21583	HCO/CBN HCO/TFE HCO/CBN SIC/TFE	20051-A 27089 21581 27089 21583	STEEL	60 55 60 55
v w	COUPLING L-075 S&C FR  ASSEMBLY INSTRUCTIONS  SEAL HEAD ASSEMBLY SEAT ASSY EXT SEAL SEAT ASSY EXT SEAL PROPERTY OF THE CORRESPONDING STATEMENT OF THE CORRE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1	020/CBN 316/TFE 020/CBN S1C/TFE NT FROM B/ 316SS	W213232-000 20051-A 27090 21582 27090 21583 M 40157-1	HCO/CBN HCQ/TFE HCO/CBN SIC/TFE	20051-A 27089 21581 27089 21583	STEEL	55 60 55 60
V W SITION 9	COUPLING L-075 S&C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY -SEAT ASSY EXT SEAL -SEAT ASSY EXT SEAL -SEAT ASSY, EXT SEAL  OPTIONS - DELETE CORRESPONDING STATE HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH	1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224	020/CBN 316/TFE 020/CBN S1C/TFE NT FROM B/ 3165S 3165S	W213232-000 20051-A 27090 21582 27090 21583 H 40157-1 40231	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C	20051-A 27089 21581 27089 21583 21583 40158-1 40234	STEEL 020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLOY 20	55 60 55 60 55
v	COUPLING L-075 56C FR ASSEMBLY INSTRUCTIONS I-SEAL HEAD ASSEMBLY I-SEAT ASSY EXT SEAL SEAL HEAD ASSEMBLY I-SEAT ASSY.EXT SEAL OPTIONS - DELETE CORRESPONDING STATUSING FRONT - BRG FLUSH HOUSING FRONT - BRG FLUSH PLUG 1/6' NPT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316	57EEL 020/CBN 316/TFE 020/CBN 51C/TFE NT FROM B/ 316SS 316SS	W213232-000 20051-A 27090 21562 27090 21583 M 40157-1 40231 52301	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C ALLOY C	20051-A 27089 21581 27089 21583 21583 40158-1 40234 52300	STEEL  020/CBN 020/TFE 020/CBN SIC/TFE ALLOY 20 ALLOY 20 ALLOY 20	60 55 60 55
V W SITION 9	COUPLING L-075 56C FR ASSEMBLY INSTRUCTIONS I-SEAL HEAD ASSEMBLY I-SEAT ASSY EXT SEAL OPTIONS - DELETE CORRESPONDING STAMOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/8' NPT -PIN BEARING LOCK	1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316	316/TFE  020/CBN  316/TFE  020/CBN  S1C/TFE  NT FROM B/  316SS  316SS  ALLDY 20	W213232-000 20051-A 27090 21582 27090 21583 M 40157-1 40231 52301 41800	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C ALLOY C ALLOY C ALLOY C	20051-A 27089 21581 27089 21583 21583 40158-1 40294 52300 41802	STEEL  020/CBN 020/TFE 020/CBN SIC/TFE  ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	55 60 55 1 3 62
SITION 9	COUPLING L-075 S&C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY  -SEAT ASSY EXT SEAL  -SEAL HEAD ASSEMBLY  -SEAT ASSY.EXT SEAL  OPTIONS - DELETE CORRESPONDING STATE  HOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  PLUG 1/6' NPT  -PIN BEARING LOCK  -O-RING HOUSING	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802	316/TFE  020/CBN  316/TFE  020/CBN  S1C/TFE  NT FROM 8/  316SS  316SS  ALLOY 20  SS/PFA	W213232-000 20051-A 27090 21582 27090 21583 M 40157-1 40231 52301 41806 41107	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C ALLOY C ALLOY C ALLOY C SS/PFA	20051-A 27089 21581 27089 21583 21583 40158-1 40158-1 40234 52300 41802 41107	STEEL  020/CBN 020/TFE 020/CBN SIC/TFE  ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 SS/PFA	1 3 62 16
V W SITION 9	COUPLING L-075 S&C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY -SEAT ASSY EXT SEAL -SEAL MEAD ASSEMBLY -SEAT ASSY.EXT SEAL  OPTIONS - DELETE CORRESPONDING STATE HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH -PLUG 1/8' NPT  -PIN BEARING LOCK -O-RING MOUSING -BEARING SLOTTED	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40428	STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428	HCO/CBN HCQ/TFE HCO/CBN SIC/TFE  ALLOY C ALLOY C ALLOY C ALLOY C SS/PFA CARBON	20051-A 27089 21581 27089 21583 21583 40158-1 40158-1 40234 40234 41802 41107	STEEL 020/CBN 020/TEE 020/CBN SIC/TEE ALLOY 20 CARBON	1 3 62 16 16
SITION 9	COUPLING L-075 56C FR ASSEMBLY INSTRUCTIONS I-SEAL HEAD ASSEMBLY -SEAT ASSY EXT SEAL -SEAL HEAD ASSEMBLY -SEAT ASSY.EXT SEAL  OPTIONS - DELETE CORRESPONDING STATE HOUSING FRONT - BRG FLUSH HOUSING FRONT - BRG FLUSH -PIN BEARING LOCK -O-RING HOUSING -BEARING SLOTTED -BFARING SLOTTED	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40428	516EL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C ALLOY C ALLOY C ALLOY C SS/PFA	20051-A 27089 21581 27089 21583 21583 40158-1 40158-1 40234 52300 41802 41107	STEEL  020/CBN 020/TFE 020/CBN SIC/TFE  ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 SS/PFA	1 3 62 16 16
V W SITION 9	COUPLING L-075 S&C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY -SEAT ASSY EXT SEAL -SEAL MEAD ASSEMBLY -SEAT ASSY.EXT SEAL  OPTIONS - DELETE CORRESPONDING STATE HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH -PLUG 1/8' NPT  -PIN BEARING LOCK -O-RING MOUSING -BEARING SLOTTED	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40428	STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428	HCO/CBN HCQ/TFE HCO/CBN SIC/TFE  ALLOY C ALLOY C ALLOY C ALLOY C SS/PFA CARBON	20051-A 27089 21581 27089 21583 21583 40158-1 40158-1 40234 40234 41802 41107	STEEL 020/CBN 020/TEE 020/CBN SIC/TEE ALLOY 20 CARBON	13 62 14 16 12
V W SITION 9	COUPLING L-075 56C FR ASSEMBLY INSTRUCTIONS I-SEAL HEAD ASSEMBLY -SEAT ASSY EXT SEAL -SEAL HEAD ASSEMBLY -SEAT ASSY.EXT SEAL  OPTIONS - DELETE CORRESPONDING STATE HOUSING FRONT - BRG FLUSH HOUSING FRONT - BRG FLUSH -PIN BEARING LOCK -O-RING HOUSING -BEARING SLOTTED -BFARING SLOTTED	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 4772565-316 41802 41107 40428 40417	516EL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428 40417	HCO/CBN MCO/TFE MCO/CBN SIC/TFE ALLOY C	20051-A 27089 21581 27089 21583 40158-1 40234 52300 41802 41107 40428 40417	STEEL	55 60 60 55 55 11 3 3 62 14 16 12 12 15
V W SITION 9	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  - SEAL HEAD ASSEMBLY  - SEAL ASSY.EXT SEAL  OPTIONS - DELETE CORRESPONDING STANDUSING FRONT - BRG FLUSH  HOUSING FRONT - BRG FLUSH  PLUG 1/6' NPT  - PIN BEARING LOCK  - O-RING HOUSING  - BEARING SLOTTED  - MEAR PLATE. SLOTTED	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40417 40511	51/EL	W213232-000 20051-A 27090 21582 27090 21583 H 40157-1 40231 52301 41806 41107 40428 40417	MCO/CBN HCO/TEE HCO/CBN SIC/TEE ALLOY C ALCOY	20051-A 27089 21581 27089 21583 40158-1 40294 52300 41802 41107 40428 40417 40511	\$TEEL	60 555 60 55 55 1 1 3 62 14 16 12 12 15 15
V W SITION 9	COUPLING L-075 S&C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY  -SEAT ASSY EXT SEAL  -SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STA  HOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  PLUG 1/6' NPT  -PIN BEARING LOCK  -O-RING HOUSING  -BEARING SLOTTED  -BEARING SLOTTED  -WEAR PLATE, SLOTTED  -WEAR PLATE, SLOTTED  -WEAR PLATE SLOTTED  HOTOR BOLT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772545-316 41802 41107 40428 40417 40511 40513	STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41800 41107 40428 40417 40511 40513	MCO/CBN HCO/TEE HCO/CBN SIC/TEE ALLOY C ALCOY	20051-A 27089 21581 27089 21583 21583 40158-1 40234 52300 41802 41107 40428 40417 40511 40513	\$TEEL	555 600 555 55 11 33 622 144 166 12 12, 155 155
V W SITION 9	COUPLING L-075 S&C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY  -SEAT ASSY EXT SEAL  -SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STA  HOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  PLUG 1/6' NPT  -PIN BEARING LOCK  -O-RING HOUSING  -BEARING SLOTTED  -BEARING SLOTTED  -WEAR PLATE, SLOTTED  -WEAR PLATE, SLOTTED  -WEAR PLATE SLOTTED  HOTOR BOLT	1 1 1 1 1 1 1 1 1 1 1 1 4 2 2 1 4 1 4 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772545-316 41802 41107 40428 40417 40511 40513	516EL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41800 41107 40428 40417 40511 40513	HCO/CBN HCO/CBN HCO/CBN SIC/TFE ALLOY C ALLOY	20051-A 27089 21581 27089 21583 21583 40158-1 40234 52300 41802 41107 40428 40417 40511 40513	\$TEEL	600 555 600 555 11 33 622 144 166 12 12. 155 155 666
V W SITION 9	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  -SEAL HEAD ASSEMBLY -SEAT ASSY EXT SEAL -SEAL HEAD ASSEMBLY -SEAT ASSY.EXT SEAL  OPTIONS - DELETE CORRESPONDING STA  HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/6' NPT  -PIN BEARING LOCK -O-RING HOUSING -BEARING SLOTTED -WEAR PLATE SLOTTED -WEAR PLATE SLOTTED -WEAR PLATE SLOTTED HOTOR BOLT C-FACE HOTOR ADAPTOR 71 FR	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40428 40417 40513 W770545-188	STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428 40417 40513 W770545-188 49744	HCO/CBN HCO/CBN HCO/CBN SIC/TFE ALLOY C ALLOY	20051-A 27089 21581 27089 21583 21583 40158-1 40234 52300 41802 41107 40428 40417 40513 W770545-188 49744	STEEL  O20/CBN  O20/TFE  O20/CBN  S1C/TFE  ALLOY 20  ALLOY 20  ALLOY 20  ALLOY 20  ALLOY 20  CARBON  TFE(GF)  CARBON  TFE(GF)  1885S  ALUMINUM	600 555 600 555 11 3 622 144 166 12 12. 155 155 666 68
V W SITION 9	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  - SEAL HEAD ASSEMBLY  - SEAL ASSY EXT SEAL  - SEAL HEAD ASSEMBLY  - SEAL ASSY.EXT SEAL  OPTIONS - DELETE CORRESPONDING STANDING FRONT - BRG FLUSH  HOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  - PIN BEARING LOCK  - O-RING HOUSING  - BEARING SLOTTED  - WEAR PLATE SLOTTED  - WEAR PLATE SLOTTED  - WEAR PLATE SLOTTED  - HOTOR BOLT  COUPLING L-070 71 FR  HOTOR BOLT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40511 40513 W770545-188 49744 W213582-000 W770546-188	STEEL	W213232-000 20051-A 27090 21582 27090 21583 H 40157-1 40231 52301 41806 41107 40417 40511 40513 W770546-188	MCO/CBN MCO/CBN MCO/TFE MCO/CBN SIC/TFE  ALLOY C ALLOY	20051-A 27089 21581 27089 21583 40158-1 40234 52300 41802 41107 40428 40417 40511 40511 W770545-188 49744 W213582-000 W77054e-188	STEEL	60 55 60 55 1 1 3 3 62 16 12 12 15 15 66 68 68
V W SITION 9	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  1-SEAL HEAD ASSEMBLY  1-SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STAMOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  PLUG 1/8' NPT  -PIN BEARING LOCK  1-0-RING HOUSING  -BEARING SLOTTED  -MEAR PLATE SLOTTED  -MEAR PLATE SLOTTED  MOTOR BOLT  C-FACE HOTOR ADAPTOR 71 FR  MOTOR BOLT  C-FACE HOTOR ADAPTOR 80 FR	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40511 40513 W770545-188 49744 W213582-000 W770546-188 49745	STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40426 40417 40511 40513 W770545-186 49744 W213582-000 W770546-186	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C ALLOY	20051-A 27089 21581 27089 21583 21583 40158-1 40234 52300 41802 41107 40428 40447 40511 40513 W770545-188 47744 W213582-000 W770546-188 49745	STEEL	600 555 600 555 11 12 12 12 15 15 15 15 15 15 15 15 15 15 15 15 15
V W SITION 9	COUPLING L-075 S&C FR  ASSEMBLY INSTRUCTIONS  1-SEAL HEAD ASSEMBLY  1-SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STA HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/6' NPT  -PIN BEARING LOCK +O-RING HOUSING -BEARING SLOTTED	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W770546-188 49745	STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 4770546-188	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLDY C ALLDY	20051-A 27089 21581 27089 21583 21583 40158-1 40234 52300 41802 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W770546-188 49745	STEEL  O20/CBN O20/TFE O20/CFF S1C/TFE  ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 SS/FFA CARBON TFE(GF) 188SS ALUMINUM STEEL 38EL	11 15 15 15 66 68 68
V W SITION 9	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772545-316 41802 41107 40428 40417 40513 W770545-188 49744 W213582-000 W770546-188 49745 W213584-000 W212230-000	STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428 40417 40513 W770545-188 49744 W213582-000 W770546-188 49775 W213584-000	HCO/CBN HCO/CBN HCO/CBN SIC/TFE ALLOY C ALLOY	20051-A 27089 21581 27089 21581 27089 21583 40158-1 40234 52300 41802 41107 40428 40417 40513 W770545-188 49744 W213582-000 W770546-188 49745 W213584-000 W213230-000	STEEL  O20/CBN O20/TFE O20/CBN S1C/TFE  ALLOY 20 SS/PFA CARBON TFE(GF) 1885S ALUMINUM STEEL 1885E STEEL	555 555 555 555 557 557 557 5667 567 567
V W SITION 9 A A B B B B B B B B B B B B B B B B B	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  I-SEAL HEAD ASSEMBLY  -SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STA  HOUSING FRONT - BRG FLUSH  HOUSING FRONT - BRG FLUSH  HOUSING REAR - BRG FLUSH  PLUG 1/8' NPT  -PIN BEARING LOCK  -O-RING HOUSING  -BEARING SLOTTED  -MEAR PLATE SLOTTED  -MEAR PLATE SLOTTED  HOTOR BOLT  C-FACE HOTOR ADAPTOR 71 FR  HOTOR BOLT  C-FACE HOTOR ADAPTOR 80 FR  COUPLING L-075 80 FR  CPLG EXT SEAL L-090 143TC-184C FR  COUPLING L-095 143TC-184C FR	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 40417 40511 40513 W70545-188 49744 W213582-000 W70546-188 49745 W213584-000 W213231-000	STEEL  020/CEN 316/TFE 020/CEN SIC/TFE 020/CEN SIC/TFE NT FROM B/ 316SS ALLOY 20 SS/PFA CARBON TFE(GF) TABGS ALUMINUM STEEL 1885S ALUMINUM STEEL STEEL STEEL	W213232-000 20051-A 27090 21582 27090 21583  H 40157-1 40231 52301 41806 41107 40428 40417 40511 40513 W770546-188 49744 W213584-000 W213231-000	MCO/CBN MCO/CFN MCO/CFN MCO/CFN MCO/CFN MCO/CFN ALLDY C ALLDY C ALLDY C ALLDY C ALLOY C SS/PFA CARBON TFE (GF) 1885S ALUMINUM STEEL 1885S ALUMINUM STEEL STEEL STEEL	20051-A 27089 21581 27089 21581 27089 21583 40158-1 40234 52300 41802 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W770546-188 W7445 W213584-000 W213230-000 W213231-000	STEEL  O20/CBN O20/TFE  O20/CBN S1C/TFE  ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 SS/PFA (CARBON TFE(GF) TRESS ALUMINUM STEEL 1885S ALUMINUM STEEL STEEL	600 555 600 555 11 33 622 14 16 12 12. 15 55 66 68 68 68 68
V W SITION 9 A A B B B B B B B B B B B B B B B B B	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  I-SEAL HEAD ASSEMBLY  I-SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STA HOUSING FRONT - BRG FLUSH HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/6' NPT  I-PIN BEARING LOCK  I-O-RING HOUSING  -BEARING SLOTTED  MEAR PLATE SLOTTED  MEAR PLATE SLOTTED  MEAR PLATE SLOTTED  HOTOR BOLT  C-FACE HOTOR ADAPTOR 71 FR HOTOR BOLT  C-FACE HOTOR ADAPTOR 80 FR  COUPLING L-075 80 FR  COUPLING L-075 80 FR  CPLG EXT SEAL L-090 143TC-184C FR  COUPLING L-075 143TC-184C FR  HOTOR BOLT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40417 40511 40513 W770545-188 49744 W213582-000 W770546-188 49745 W213584-000 W712230-000 W712230-000 W770547-188	STEEL  O20/CBN 316/TFE  O20/CBN S1C/TFE  NT FROM B/ 316SS 316SS 316SS 316SS ALLDY 20 SS/PBO CARBON TFE(GF) LARBON TFE(GF) 188SS ALUMINUM STEEL STEEL STEEL 188SS	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40417 40511 40513 W770545-188 49744 W213582-000 W770546-188 49745 W213584-000 W213231-000 W770547-188	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C SS/PFA CARBON TFE (GF) 1885S ALUMINUM STEEL STEEL STEEL STEEL	20051-A 27089 21581 27089 21583 21583 40158-1 40294 52300 41802 41107 40511 40513 W770545-188 49744 W213582-000 W770546-188 49745 W213584-000 W213230-000 W213231-000	STEEL	600 555 600 555 11 13 362 14 16 12 12 12 15 15 15 66 68 68 68 68 68 68
V W SITION 9 A A B B B B B B B B B B B B B B B B B	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  1-SEAL HEAD ASSEMBLY  1-SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STANDIST FRONT - BRG FLUSH HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/8' NPT  -PIN BEARING LOCK -O-RING HOUSING -BEARING SLOTTED -MEAR PLATE SLOTTED -MOTOR BOLT C-FACE HOTOR ADAPTOR 71 FR MOTOR BOLT C-FACE HOTOR ADAPTOR 80 FR CPUE EXT SEAL L-090 143TC-184C FR COUPLING L-075 80 FR CPUE EXT SEAL L-090 143TC-184C FR MOTOR BOLT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40511 40513 W770545-188 49744 W213582-000 W770546-188 49745 W213584-000 W212230-000 W770547-188 49746	STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W770546-188 49745 W213584-000 W213230-000 W213231-000 W770547-188 49746	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C SS/PFA CARBON TFE (GF) 1885S ALUMINUM STEEL 1885S ALUMINUM STEEL 1885S ALUMINUM	20051-A 27089 21581 27089 21583 21583 40158-1 40234 52300 41802 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W773546-188 49745 W213584-000 W213230-000 W213231-000 W770547-188 49746	STEEL  O20/CBN O20/TFE O20/CBN S1C/TFE  ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 CARBON TFE (GF) 1885S ALUMINUM STEEL 1885S ALUMINUM ALUMINUM STEEL 1885S ALUMINUM ALUMINU	11 12 12 12 15 15 15 15 15 25 66 68 68 68 68 68
V W SITION 9 A A B B B B B B B B B B B B B B B B B	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  1-SEAL HEAD ASSEMBLY  1-SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STANDING FRONT - BRG FLUSH HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/6' NPT  -PIN BEARING LOCK  -O-RING HOUSING -BEARING SLOTTED	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772555-316 41802 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W213231-000 W2123231-000 W2723231-000 W270547-188 49746 W213586-000	STEEL  O20/CBN  316/TFE  O20/CBN  S16/TFE  NT FROM B/ 316SS  316SS  ALLDY 2D  S5/PFA  CARBON  TFE(GF)  188SS  ALUMINUM  STEEL  STEEL  STEEL  STEEL  STEEL  STEEL  STEEL  STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428 40417 40511 40513 W770545-186 49744 W213584-000 W213231-000 W213231-000 W213231-000 W273254-186 49746 W213586-000	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C SS/PFA CARBON TFE(GF) 1885S ALUMINUM STEEL 1885S ALUMINUM STEEL STEEL 1885S ALUMINUM STEEL STEEL STEEL STEEL STEEL STEEL	20051-A 27089 21581 27089 21581 27089 21583 40158-1 40234 52300 41802 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W213230-000 W213231-000 W213231-000 W273547-188 49746 W213586-000	STEEL  O20/CBN O20/TFE O20/CBN S1C/TFE  ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 S5/FFA CARBON TFE (GF) 188SS ALUMINUM STEEL STEEL STEEL 188SE ALUMINUM STEEL STEEL STEEL STEEL	12 12 12 15 15 15 15 15 15 15 15 15 15 15 15 15
V W SITION 9 A A A A A A A A A A A A A A A A A A	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  1-SEAL HEAD ASSEMBLY  1-SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STANDIST FRONT - BRG FLUSH HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/8' NPT  -PIN BEARING LOCK -O-RING HOUSING -BEARING SLOTTED -MEAR PLATE SLOTTED -MOTOR BOLT C-FACE HOTOR ADAPTOR 71 FR MOTOR BOLT C-FACE HOTOR ADAPTOR 80 FR CPUE EXT SEAL L-090 143TC-184C FR COUPLING L-075 80 FR CPUE EXT SEAL L-090 143TC-184C FR MOTOR BOLT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772565-316 41802 41107 40511 40513 W770545-188 49744 W213582-000 W770546-188 49745 W213584-000 W212230-000 W770547-188 49746	STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428 40417 40511 40513 W770545-186 49744 W213584-000 W213231-000 W213231-000 W213231-000 W273254-186 49746 W213586-000	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C SS/PFA CARBON TFE (GF) 1885S ALUMINUM STEEL 1885S ALUMINUM STEEL 1885S ALUMINUM	20051-A 27089 21581 27089 21583 21583 40158-1 40234 52300 41802 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W773546-188 49745 W213584-000 W213230-000 W213231-000 W770547-188 49746	STEEL  O20/CBN  O20/TEN  O20/TEN  O20/TEN  O20/TEN  O20/TEN  ALLOY 20  SS/PFA  CARBON  TFE (GF)  1885S  ALUMINUM  STEEL  STEEL  STEEL  STEEL  ALUMINUM  STEEL  STEEL  ALUMINUM  STEEL  STEEL  ALUMINUM  ALUMINUM  STEEL  ALUMINUM  STEEL  ALUMINUM  ALLOY 20	12 12 12 15 15 15 15 15 15 15 15 15 15 15 15 15
V W SITION 9 A A A A A A A A A A A A A A A A A A	COUPLING L-075 56C FR  ASSEMBLY INSTRUCTIONS  1-SEAL HEAD ASSEMBLY  1-SEAT ASSY EXT SEAL  OPTIONS - DELETE CORRESPONDING STANDING FRONT - BRG FLUSH HOUSING FRONT - BRG FLUSH HOUSING REAR - BRG FLUSH PLUG 1/6' NPT  -PIN BEARING LOCK  -O-RING HOUSING -BEARING SLOTTED	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W213232-000 20051-A 27089 21580 27089 21583 PUMP COMPONE 40156-1 40224 W772555-316 41802 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W213231-000 W2123231-000 W2723231-000 W270547-188 49746 W213586-000	STEEL  O20/CBN  316/TFE  O20/CBN  S16/TFE  NT FROM B/ 316SS  316SS  ALLDY 2D  S5/PFA  CARBON  TFE(GF)  188SS  ALUMINUM  STEEL  STEEL  STEEL  STEEL  STEEL  STEEL  STEEL  STEEL	W213232-000 20051-A 27090 21582 27090 21583  M 40157-1 40231 52301 41806 41107 40428 40417 40511 40513 W770545-186 49744 W213584-000 W213231-000 W213231-000 W213231-000 W273254-186 49746 W213586-000	HCO/CBN HCO/TFE HCO/CBN SIC/TFE ALLOY C SS/PFA CARBON TFE(GF) 1885S ALUMINUM STEEL 1885S ALUMINUM STEEL STEEL 1885S ALUMINUM STEEL STEEL STEEL STEEL STEEL STEEL	20051-A 27089 21581 27089 21581 27089 21583 40158-1 40234 52300 41802 41107 40428 40417 40511 40513 W770545-188 49744 W213582-000 W213230-000 W213231-000 W213231-000 W273547-188 49746 W213586-000	STEEL  O20/CBN O20/TFE O20/CBN S1C/TFE  ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20 S5/FFA CARBON TFE (GF) 188SS ALUMINUM STEEL STEEL STEEL 188SE ALUMINUM STEEL STEEL STEEL STEEL	11 12 12 12 15 15 15 15 15 25 66 68 68 68 68 68

# GA12 SERIES PUMP CONSOLIDATED B/M

			ļ		STANDARD PUMP			,,,	
			316S	S R U)	ALLOY (C M O	R V)	ID ALLOY	20 R W)	
	DESCRIPTION	QTY	PART NO	HATL	PART NO	MATL	PART NO	MATL	ITE
SITION 7	SHAFT AND BEARING MATERIAL (CONT	'D)							
XTENDED	LIFE - BEARINGS								
	+BEARING 1' BORE	2-4	90437	EWCBN	90437	EWEBN	90437	EWCBN	12 1
	+BEARING 3/4" BORE	0-2	90438	EWEBN	90438	EWCON	90438	EWCBN	13
L	SHAFT MTL DRIVE GR 1' DIA	1	90307	31655	90317	ALLOY C	90315	ALLOY 20	
	+SHAFT IDLER 3/4" DIA		90306	31655	90322	ALLOY C	90334	ALLOY 20	- 5
	+SHAFT CBN IDLER GR 3/4" DIA	1 1	90346	31655	90347	ALLOY C	90348	ALLOY 20	5
YYENDED	LIFE - BEARINGS AND 'CW' SHAFTS			-					
X TENDED	+BEARING 1' BORE	2-4	90437	EWCBN	90437	I EWCBN	90437	EWCBN	12 1
	+BEARING 3/4" BORE	0-2	90438	EWCBN	90438	EWCON	90438	EWCBN	13
С	+SHAFT HTL DRIVE GR 1' DIA	1	90307-2	CW316	90317-2	CWALYC	90315-2	CWALY20	
-	+SHAFT IDLER 3/4" DIA		90376	CW316	90377	CHALY"	9.374	CWALY20	
	+SHAFT CBN IDLER GR 3/4 DIA	1	90346-4	CW316	90347-7	CWALYC	90348-2	CWALY20	
				*			<del>****</del> * • • • • • • • • • • • • • • • •	<u> </u>	
	SEAL ARRANGEMENT						<del></del>		
ANIERN P	PACKING GLAND	1	A91517	ALLOY C	A91517	ALLOY C	A91517	ALLOY C	38
	LANTERN RING		97104	ALLOY 20	97105	ALLOY C	97104	ALLOY 20	46
	STUD PACKING GLAND	<u> </u>	92014	ALLOY 20 I	92012	ALLOY C	92014	ALLOY 20	30
COMMON	NUT, STUD	2	92103	ALLOY 20			92103	<del></del>	40
PARTS	GREASE FITTING	1	27201	31055	92102	ALLOY C	27201	ALLOY 20	65
			<del></del>		27201		, <del></del>	31055	
	PLUG 1/4" NPT		16415	31653	6 ·Z:	ALLOY C	16432	ALLOY 20	63
	ADAPTOR 1/4" TO 1/8" NPT	1	27217	ALLOY 20	27216	I ALLOY C		ALLOY 20	64
N	+PACKING RING	6	96515	TFE (BRD)	96515	TFE (BRD)	94515	TFE (BRD)	42
	+PACKING END RING		96505	TFE	96505	TFE	96505	TFE	41
R	+PACKING RING	7	96510	GRAFOIL	96510	GRAPOIL	96510	GRAFOIL	42
NTERNAL	MECHANICAL SEAL								
	SEAT RETAINER W/ PIN	1	A91564	ALLOY 20	A91560	ALLOY C	A91564	ALLOY 20	36
	BOLT. SEAT RETAINER	<b>#</b> 2	W770413-188	18855	92007	ALLOY C	W770413-188	18855	39A
COMMON	O-RING SEAT RETAINER	1	19031	TFE	19031	TFE	19031	TFE	37
PARTS	PLUG 1/4" NPT	•3	16415	31655	16422	ALLOY C	16432	ALLOY ZO	63
	+SEAL HEAD ASSEMBLY	1	A97001	316/CBN	A97023	HCO/CBN	A97011	020/CBN	60
U	-SEAL SEAT W/ SEAL RING (TFE)	1	A97059	SICBD	A97059	SICED	A97059	SICED	55
24	SEAL SEAT W/ SEAL RING (TFE)	1	A91569	ALLOY 20	A91570	ALLOY C	A91569	ALLOY 20	55
ONIBLE ME	CHANICAL SEAL							1	
DOUBLE INC	SEAT RETAINER W/ PIN	1	A91564	ALLOY 20	A91560	ALLOY C	A91564	ALLOY 20	36
	BOLT SEAT RETAINER	•2	W770413-188	188\$5	92007	ALLOY C	W770413-188	18855	394
COMMON	O-RING SEAT RETAINER	1	19031	TFE	19031	TFE	19031	TPE	37
	<del></del>	•1	16415	31655	16422	ALLOY C	16432	ALLOY 20	63
PARTS	PLUG 1/4" NPT				91561	ALLOY C	91565	ALLOY 20	59
PARTS		1	91565	ALLOY 20					
PARTS	PIN PUMP END SEAT	1	91565 A97022	ALLOY 20		<del>+</del>	<del></del>	020/CBN	
	PIN PUMP END SEAT	1	A97022	020/CBN	A97027	MCO/CBN	A97022	020/CBN	55
E	PIN PUMP END SEAT  SEAL MEAD ASSEMBLY  SEAL SEAT W/ SEAL RING (TFE	1 7	A97022 A97059	020/CBN SICBD	A97027 A97059	MCO/CBN SICBD	A97022 A97059	SICBO	55 55
E 44	PIN PUMP END SEAT	1 2 2	A97022 A97059 A91569	OZO/CBN SICBD ALLOY 20	A97027	MCO/CBN	A97022	4	55
E 44	PIN PUMP END SEAT  -SEAL MEAD ASSEMBLY  -SEAL SEAT W/ SEAL RING (TFE  -SEAL SEAT W/ SEAL RING (TFE)	1 2 2	A97022 A97059 A91569	OZO/CBN SICBD ALLOY 20	A97027 A97059	MCO/CBN SICBD	A97022 A97059	SICBO	55
E 44	PIN PUMP END SEAT  SEAL MEAD ASSEMBLY  SEAL SEAT W/ SEAL RING (TFE)  SEAL SEAT W/ SEAL RING (TFE)  OPTIONS - DELETE CORRESPONDING	1 2 2	A97022 A97059 A91569 D PUMP COMPONEN	OZO/CBN SICBD ALLOY 20 T FROM B/M	A97027 A97059 A91570	MCO/CBN SICBD ALLOY C	A97022 A97059 A91569	SICBD ALLOY 20	55 55
E 44	PIN PUMP END SEAT  SEAL MEAD ASSEMBLY  SEAL SEAT W/ SEAL RING (TFE)  SEAL SEAT W/ SEAL RING (TFE)  OPTIONS - DELETE CORRESPONDING  HOUSING CENTER - VENT FNPT	1 1 2 2 STANDAR	A97022 A97059 A91569 D PUMP COMPONEN 90001-2	020/CBN   SICBO   ALLOY 20   T FROM B/M   31655	A97027 A97059 A91570	HCO/CBN SICBD ALLOY C	A97022 A97059 A91569	SICBD ALLOY 20 ALLOY 20	55 55
E	PIN PUMP END SEAT  -SEAL MEAD ASSEMBLY  -SEAL SEAT W/ SEAL RING (TFE)  -SEAL SEAT W/ SEAL RING (TFE)  OPTIONS - DELETE CORRESPONDING  MOUSING CENTER - VENT FNET  HOUSING, CENTER - VENT FBSPT  HOUSING CENTER - VENT FLGO	1	A97022 A97059 A91569 D PUMP COMPONEN 90001-2 90012-2 90003-2	020/CBN SICBO ALLOY 20 T FROM B/M 316SS 316SS 316SS	A97027 A97059 A91570 90006-2 90013-2 90007-2	HCO/CBN SICBD ALLOY C ALLOY C ALLOY C ALLOY C ALLOY C	A97022 A97059 A91569 90005-2 90016-2 90010-2	ALLOY 20 ALLOY 20 ALLOY 20 ALLOY 20	55 55 2 2 2
E 44	PIN PUMP END SEAT  -SEAL MEAD ASSEMBLY  -SEAL SEAT W/ SEAL RING (TFE)  -SEAL SEAT W/ SEAL RING (TFE)  OPTIONS - DELETE CORRESPONDING  MOUSING CENTER - VENT FNET  HOUSING, CENTER - VENT FBSPT  HOUSING CENTER - VENT FLGO	1 1 2 2 STANDAR	A97022 A97059 A91569 D PUMP COMPONEN 90001-2 90012-2	020/CBN SICBD ALLOY 20 T FROM B/M 316SS 316SS	A97027 A97059 A91570 90006-2 90013-2	HCO/CBN SICBD ALLOY C ALLOY C	A97022 A97059 A91569 90005-2 90014-2	ALLOY 20 ALLOY 20 ALLOY 20	55 55 2 2

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

# GA12 SERIES PUMP CONSOLIDATED B/M

					STANDARD PUMP				
			314S	S R U)	ALLOY I	Ç V)	ALLOY 2	g <b>"</b> ,	}
	DESCRIPTION	ату	PART NO	MATE	PART NO	MATIL	PART NO	MATI	LTEN
			<del></del>	1	1	1	1	1,54.0	
OSITION 3	STANDARD PUMP - NON-VARIABLE C	DHPONENT	<del></del>	<del>,</del> -	<del>,</del>		<del>-</del>	,	,
	HOUSING FRONT - MECH SEAL	1	90129	31655	90130	ALLOY C	90131	ALLOY ZO	1
	HOUSING FRONT - LRS SEAL		90138	31655	90140	ALLDY C	90139	ALLOY 20	1
	HOUSING CENTER FNPT		90001	31655	90006	ALLOY C	90005	ALLOY 20	2
	HOUSING CENTER FRSPT	1	90012	31655	90013	ALLOY C	90014	ALLOY 20	2
	HOUSING CENTER FLGD		90003	316\$5	90007	ALLOY C	90010	ALLOY 20	2
	HOUSING REAR		90201	31655	90205	ALLOY C	90204	ALLDY 20	3
	*RING RETAINING - DR/IDLR 1"	2-4	96702	31655	96708	ALLDY C	96708	ALLOY C	10
	FING RETAINING - IDLER 3/4"	0-2	96701	31655	96709	ALLDY C	96709	ALLOY C	11
	-KEY DRIVE/IDLER GR 1' BORE	1-2	91904	31655	91910	ALLOY C	91910	ALLOY C	0 9
	-KEY, MTL 1DLER GR 3/4' BORE	0-1	91903	316\$5	91911	ALLDY C	91911	ALLOY E	9
	+KEY CBN IDLER GR 3/4" BORE	0-2	91925	31655	91926	ALLOY C	91926	ALLOY C	·
	*KEY PLSTC IDL GR 3/4" BORE	0-2	91901	11655	91412	1 M . W C	9181	VIIO, I	9
	-P'H BEARING LOCK	**	90801	31655	96803	ALLOY C	90803	ALLOY C	14
	+0-RING HOUSING	2	91101	TFE	91101	TFE	91101	TPE	16
	PIN HOUSING BOLT CTR HSG FNPT FBSPT	-10	90801 W770413-188	31455 18855	90801 W770413-188	316\$\$ 188\$\$	90801 W770413-188	316SS	17 18A
	<del></del>	1			<del></del>		<del> </del>	<del></del>	18A
	BOLT CTR HSG FNPT FBSPT NUT HSG BOLT FNPT FBSPT	11	W770422-188	18855	W770422-188	18655	W770422-188	18855	19
	LOCK WASHER FNPT FBSPT	1,	W771107-186	18855	W771214-166	18855	W771214-188	18855	20
	BOLT. CENTER HSG FLGD	12	W770412-186	18855	W770412-188	18855	W77107-186	18855	184
	LOCK WASHER FLGD	12	W771107-188	18855	W771107-188	18855	W771107-168	18855	20
	PLX 1/4' NPT	46	16-15	31655	16422	ALLOY C	19432	ALLOY 20	63
	KEY COUPLING/DRIVE SHAFT		91924	STL	91924	STL	91924	STL	21
	PLUG 1/8" NPT	1	W772565-316	316\$5	52301	ALLOY C	52300	ALLOY 20	62
	NAMEPLATE	1	41201	18855	41201	18855	41201	18855	
OSITION 4	& 5 DRIVE AND IDLER GEAR								
	+GEAR DRIVE/IDLER 1' BORE	1-2	90627	ALLOY C	90627	ALLOY C	90627	ALLOY C	6 7
Ç	GEAR IDLER 3/4" BORE	0-1	90626	ALLOY C	90626	ALLOY C	90626	ALLOY C	7
ĸ	GEAR IDLER 3/4' BORE		90664	CARBON	90664	CARBON	90664	CARBON	7
7	+GEAR IDLER 3/4' BORE	0-1	90663	TFE(GF)	90663	TFE(GF)	90663	TFE (GF)	7
E	+GEAR IDLER 3/4' BORE		90677	PEEK	90677	PEEK	90677	PEEK	7
						·		·	
051710N 6	WEAR PLATE MATERIAL								
K	+WEAR PLATE SLOTTED	ľ	90503	CARBON	90503	CARBON	90503	CARBON	15
T	+WEAR PLATE SLOTTED		90510	TFE (GF)	90510	TFE (GF)	90510	TFE(GF)	15
7	+WEAR PLATE SLOTTED	•	90512	CERAMIC	90512	CERAMIC	90512	CERAMIC	15
E	"MEAR PLATE, SLOTTED		90515	PEEK	90515	PEEK	90515	PEEK	15
OSITION 7	SHAFT AND BEARING MATERIAL								
STANDARD	CONSTRUCTION								
	+BEARING 1' BORE	2-4	90424	CARBON	90424	CARBON	90424	CARBON	12 1
	+BEARING 3/4' BORE	0-2	90429	CARBON	90429	CARBON	90429	CARBON	13
K	SHAFT HTL DRIVE GR 1' DIA	1	90307	31655	90317	ALLOY C	90315	ALLOY 20	4
	SHAFT IDIER 3/4" DIA		90306	31635	90322	ALLOY C	90334	ALLOY 20	5
	-SHAFT CON IDLER GR 3/4" DIA	1	90346	31655	90347	ALLOY C	90348	ALLOY 20	5
	+BEARING 1' BORE	2-4	90428	TFE (GF)	90428	TFE (GF)	90428	TFE (GF)	12,1
	+BEARING 3/4' BORE	0-2	90430	TFE(GF)	90430	TFE (GF)	90430	TFE (GF)	12 1
			90307	31655	90317	ALLOY C	90315	ALLOY 20	4
τ	SHAFT HTL DRIVE GR 1' DIA	. 1				ALLOY C		ALLOY 20	5
τ	<del></del>		90306	31655	90322	ALLUI C	90334	MELDI 20	
τ	-SHAFT MTL DRIVE GR 1' DIA	1		31655 31655	90322	ALLOY C	90334	ALLOY 20	5
•	+SHAFT HTL DRIVE GR 1' DIA		90306			<del></del>			13
<b>T</b>	+SMAFT MTL DRIVE GR 1' DIA +SMAFT IDLER 3/4' DIA +SMAFT CBN IDLER GR 3/4' DIA	1	90306 90346	31635	90347	ALLOY C	90348	ALLOY 20	
· · · · · · · · · · · · · · · · · · ·	SHAFT MTL DRIVE GR 1' DIA SHAFT IDLER 3/4' DIA SHAFT CBN IDLER GR 3/4' DIA BEARING SLOTTED 1' BORE BEARING, SLOTTED 3/4' BORE	1 2-4	90306 90346 90431 90432	316SS CARBON CARBON	90347 90431 90432	ALLOY C CARBON	90348 90431 90432	ALLOY 20 CARBON	13
· · · · · · · · · · · · · · · · · · ·	-SHAFT MTL DRIVE GR 1' DIA -SHAFT IDLER 3/4' DIA -SHAFT CBN IDLER GR 3/4' DIA -BEARING SLOTTED 1' BORE -BEARING, SLOTTED 3/4' BORE	1 2-4 0-2	90306 90346 90431	316SS CARBON	90347 90431	ALLOY C CARBON CARBON	90348 90431	ALLOY 20 CARBON CARBON	13

\*COMPONENT QUANTITY MAY BE EUMULATIVE OVER ENTIRE B/M

<sup>\*\*</sup>OTY (2) WHEN PUMP HAS FMPT OR FESPT CENTER HOUSING. COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE 8/M

<sup>+</sup>DENOTES RECOMMENDED SPARE PART

# GA16 SERIES PUMP CONSOLIDATED B/M

31055   ALDOY C						STANDARD PU				]
DESCRIPTION				3165	S	ALLOY	C	ALLOY	20	
MOUSTING PROFIT   MECH SEAL   1 90129   31855   90130   ALLOY C 90131   ALLO		DESCRIPTION	OTY			<del></del>		<del></del>		IT
MOUSTING PROFIT   MECH SEAL   1 90129   31855   90130   ALLOY C 90131   ALLO									· ·	
MOUSING FRONT   LTS SEAL   1   90138   31655   90101   ALLOY C   90139   ALLOY C   90139   ALLOY C   90139   ALLOY C   90139   ALLOY C   90130   ALLOY C	311104 3				31655	90130	ALLOY C	90131	ALLOY 20	1
MOUSTING CENTER			<del>~</del> 1			<del></del>			<del></del>	┰
MOUSTING PEAR   1			30 1		<del></del>	+				┿
#RING RETAINING - DRIFTQUER 1: 2-4 96702 31635 96708 ALLOY C 96708 ALLOY C 19007 ALLOY				<del></del>	<del></del>	+	<del></del>	<del></del>	<del></del>	+-
## HING RETAINING - IQLES 3/4 0-2 99701 31655 99700 ALLOY C 99701 ALLOY C 99702 ALLOY				<del></del>	<del>+</del>	<del></del>	<del></del>		+	+-
**************************************										1
#EFF CRAMPSTG GRAW 3/4* BORE   0-2   91229   ALLOY C   91929   ALLOY C   91920   ALL				<del></del>			<del></del>			1
### BEARING LOCK					<del></del>	91910	ALLOY C	91910	ALLOY C	$\perp$
			RE 0-2		ALLOY C	91929	ALLOY C	91929	ALLOY C	
### HOUSING ### 90001 31055 90801 31655 90801 31655  BOLT CTR HSG PLD0 12 1772417-188 18555 1770412-18		PIN BEARING LOCK	-4	90801	31655	90803	ALLOY C	90603	ALLOY C	
BOLT CTR HSG		+O-RING HOUSING	2	91101	TPE	91101	TFE	91101	TFE	
LDCK MASSEP		PIN HOUSING	-4	90801	31655	90801	31655	90801	31655	1
PLUG. 17. MPT		BOLT CTR HSG FL	3D 12	W770417-188	18855	W770412-188	18655	W770412-188	18855	1
PLUG. 17. MPT		LOCK HASHER	12	1771107 188	19855		487,5		1008.	-
WEAR PLATE SLOTTED   1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		The same of the sa		,	***	÷	ALLOY C		·	
NAMEPLATE				THE RESERVE AND DESCRIPTIONS ASSESSMENT		<del></del>				
STITION 4 & 5 DRIVE AND IDLER GEAR  C					<del></del>					1
C - GERAP DRIVE/IDLER 1' BORE 1-2 99067 ALLOY C 90667 ALLOY C 90667 ALLOY C K - GEAR IDLER 3/4' BORE 90670 (ARBON 90370 (A			<del></del>			-1201		7.20	.,,,,,,,	
C - GERAP DRIVE/IDLER 1' BORE 1-2 99067 ALLOY C 90667 ALLOY C 90667 ALLOY C K - GEAR IDLER 3/4' BORE 90670 (ARBON 90370 (A	CITION !	P E DRIVE AND IDIED OF TH								
K -GEAR IDLER 3/4' BORE 0-1 90676 CARBON 90676 CARBON 7 -GEAR IDLER 3/4' BORE 0-1 90670 TPE(GF) 90670 TFE(GF) 90670 TPE(GF) 9067										_
T -GEAR IDLER 3/4' BORE E +GEAR IDLER 3/4' BORE DOG78 PEEK 90678 PEEK 90510 TREIGF)										<u> </u>
E + GEAR IDLER 3/4* BORE 90678 PEEK 90678 PEEK 90678 PEEK  SITION 6 WEAR PLATE HATERIAL  K - MEAR PLATE SLOTTED 4 90503 CARBON 90503 CARBON 90503 CARBON 7 NEAR PLATE SLOTTED 4 90510 TPE (GF) 90515 PEEK			_	<del></del>						_
STITION 6   WEAR PLATE   SLOTTED		+GEAR IDLER 3/4" BOR	0-1	90670	TFE (GF)	90670	TFE(GF)	90670	TFE (GF)	
MEAR PLATE SLOTTED	E	+GEAR IDLER 3/4" BOR		90678	PEEK	90678	PEEK	90678	PEEK	Ī
STANDARD CONSTRUCTION  -BEARING 1' BORE 2-4 90424 CARBON 90424 CARBON 90424 CARBON -BEARING 3/4' BORE 0-2 90429 CARBON 90429 CARBON 90429 CARBON -BEARING 3/4' BORE 0-2 90429 CARBON 90429 CARBON 90429 CARBON -SHAFT DRIVE 1' 1 90355 31655 90357 ALLOY C 90356 ALLOY 20 -SHAFT HTL IDLER 1' 1 90362 ALLOY 20 90361 ALLOY C 90360 ALLOY 20 -SHAFT HTL IDLER 1' 1 90349 31655 90351 ALLOY C 90350 ALLOY 20 -BEARING 1' BORE 2-4 90428 TFE(GF) 90428 TFE(GF) 90428 TFE(GF) -BEARING 3/4' BORE 0-2 90430 TFF(GF) 90430 TFE(GF) 90430 TFE(GF) -SHAFT DRIVE 1' 1 90355 31655 90357 ALLOY C 90356 ALLOY 20 -SHAFT HTL IDLER 1' 1 90355 31655 90351 ALLOY C 90360 ALLOY 20 -SHAFT HTL IDLER 1' 1 90349 31655 90351 ALLOY C 90360 ALLOY 20 -BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90431 CARBON 90431 CARBON -BEARING SLOTTED 3/4' BORE 0-2 90432 CARBON 90431 CARBON 90431 -SHAFT DRIVE 1 1 90355 31655 90357 ALLOY C 90356 ALLOY 20 -SHAFT HTL IDLER 1' 90349 31655 90351 ALLOY C 90350 ALLOY 20 -SHAFT HTL IDLER 1 1 90349 31655 90351 ALLOY C 90350 ALLOY 20 -SHAFT HTL IDLER 1 1 90355 31655 90357 ALLOY C 90350 ALLOY 20 -SHAFT BRIVE 1 1 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT HTL IDLER 1 1 90355 31655 90357 ALLOY C 90350 ALLOY 20 -SHAFT HTL IDLER 1 1 90355 31655 90351 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTL IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTL IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTL IDLER 1 90355 31655 90351 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTL IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTC IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTC IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTC IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTC IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTC IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT CRIVPLSTC IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT DRIVE 1' 1 90365 BLOY 20 90361 ALLOY C 90350 ALLOY 20	Z	-WEAR PLATE SLOTTED		90512	CERAM! C	90512	CERAMIC	90512	CERAMIC	-
### ABEAR ING	E	-WEAR PLATE SLOTTED		90515	PEEK	90515	PEEK	90515	PEEK	,
**SHAFT DRIVE 1' 1 90355 3165S 90357 ALLOY C 90356 ALLOY 20  **SHAFT CBN/PLSTC IDLER 3/4' 1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20  **SHAFT MTL IDLER 1' 90349 3165S 90351 ALLOY C 90350 ALLOY 20  **BEARING 1' BORE 2-4 90428 TFE(GF) 90428 TFE(GF) 90428 TFE(GF)  **BEARING 3/4' BORE 0-2 90430 TFE(GF) 90430 TFE(GF) 90430 TFE(GF)  **SHAFT DRIVE 1' 1 90355 3165S 90357 ALLOY C 90356 ALLOY 20  **SHAFT CBN/PLSTC IDLER 3/4 1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20  **SHAFT NTL IDLER 1' 90349 3165S 90351 ALLOY C 90362 ALLOY 20  **BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90432 CARBON 904	STANDARD	CONSTRUCTION	2-4	90424	CARBON	90424	CARBON	90424	CARBON	12
-SHAFT CBN/PLSTC IDLER 3/4 1 90362 ALLDY 20 90361 ALLDY C 90362 ALLDY 20 -SHAFT HTL IDLER 1' 90349 3165S 90351 ALLDY C 90350 ALLDY 20 +BEARING 1' BORE 2-4 90428 TFE(GF) 90428 TRE(GF) 90430 TRE(GF) 90356 ALLDY 20 +SHAFT CBN/PLSTC IDLER 3/4 1 90362 ALLDY 20 90361 ALLDY C 90362 ALLDY 20 +BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90431 CARBON 90431 CARBON 90431 CARBON 90431 CARBON 90431 CARBON 90432 CARBON 90432 CARBON 90432 CARBON 90432 CARBON 90432 CARBON 90432 TRE(GF) 90356 ALLDY 20 +SHAFT CBN/PLSTL IDLER 3/4 90362 ALLDY 20 90361 ALLDY C 90356 ALLDY 20 +SHAFT LBN/PLSTL IDLER 1 90349 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 90349 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90349 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90349 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90355 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90355 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90355 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90355 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90355 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90355 316SS 90351 ALLDY C 90362 ALLDY 20 +SHAFT DRIVE 1 1 90355 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90355 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90355 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90355 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90349 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90349 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 90349 316SS 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 1 90355 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 1 90355 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 1 90355 90351 ALLDY C 90350 ALLDY 20 +SHAFT DRIVE 1 1 1 90355		+BEARING 3/4" BORE	0-2	90429	CARBON	90429	CARBON	90429	CARBON	_
-SHAFT MTL IDLER 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 -BEARING 1' BORE 2-4 90426 TFE(GF) 90426 TFE(GF) 90426 TFE(GF) -BEARING 374' BORE 0-2 90430 TFE(GF) 90430 TFE(GF) 90430 TFE(GF) -SHAFT DRIVE 1' 1 90355 316SS 90351 ALLOY C 90356 ALLOY 20 -SHAFT COM/PLSTC IDLER 3/4 90362 ALLOY 20 90361 ALLOY C 90356 ALLOY 20 -SHAFT MTL IDLER 1' 1 90349 316SS 90351 ALLOY C 90350 ALLOY 20 -BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90432 CARB	ĸ	+SHAFT DRIVE	. 1	90355	31655	90357	ALLOY C	90356	ALLOY 20	<del>                                     </del>
-SHAFT MTL IDLER 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 -BEARING 1' BORE 2-4 90426 TFE(GF) 90426 TFE(GF) 90426 TFE(GF) -BEARING 374' BORE 0-2 90430 TFE(GF) 90430 TFE(GF) 90430 TFE(GF) -SHAFT DRIVE 1' 1 90355 316SS 90351 ALLOY C 90356 ALLOY 20 -SHAFT COM/PLSTC IDLER 3/4 90362 ALLOY 20 90361 ALLOY C 90356 ALLOY 20 -SHAFT MTL IDLER 1' 1 90349 316SS 90351 ALLOY C 90350 ALLOY 20 -BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90432 CARB		+SHAFT CBN/PLSTC IDLER 3/		90362	ALLOY 20	90361	ALLOY C	90362	ALLOY 20	$\vdash$
**BEARING 1' BORE 2-4 90428 TFE(GF) 90426 TFE(GF) 90428 TFE(GF)  **BEARING 3/4' BORE 0-2 90430 TFE(GF) 90430 TFE(GF) 90430 TFE(GF)  **SHAFT DRIVE 1' 1 90355 31655 90357 ALLDY C 90356 ALLDY 20  **SHAFT CBN/PLSTC IDLER 3/4 90362 ALLDY 20 90361 ALLDY C 90362 ALLDY 20  **SHAFT NTL IDLER 1' 1 90349 31655 90351 ALLDY C 90350 ALLDY 20  **BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90432 CA			<del></del> 1		<del></del>					_
**BEARING 374' BORE 0-2 90430 TFF(GF) 90430 TFE(GF) 90430 TTE(GF)  **SHAFT DRIVE 1' 1 90355 316SS 90357 ALLOY C 90356 ALLOY 20  **SHAFT CBN/PLSTC IDLER 3/4 1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20  **SHAFT TCBN/PLSTC IDLER 3/4 1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20  **BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90431 CARBON 90431 CARBON 90431 CARBON 90431 CARBON 90432 CA			7-4							17
T - SHAFT DRIVE 1' 1 90355 3165S 90357 ALLOY C 90356 ALLOY 20 - SHAFT CBN/PLSTC IDLER 3/4 1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 - SHAFT MTL IDLER 1' 1 90349 3165S 90351 ALLOY C 90350 ALLOY 20 - BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90432 CARBON 90431 CARBON 90432 CAR										<u> </u>
- SHAFT CBN/PLSTC IDLER 3/4   1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 + SHAFT HTL IDLER 1' 90349 316SS 90351 ALLOY C 90362 ALLOY 20 + BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90432 CARBON 90362 ALLOY 20 90349 316SS 90351 ALLOY C 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 SHAFT DRIVE 1' 1' 90355 316SS 90351 ALLOY C 90362 ALLOY 20 SHAFT DRIVE 1' 1' 90349 316SS 90351 ALLOY C 90362 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 SHAFT NTL IDLER 1' 1' 1' 90349 3	7					<del></del>				
-SHAFT NTL IDLER 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 -BEARING SLOTTED 1' BORE 2-4 90431 CARBON 90431 CARBON 90431 CARBON -BEARING SLOTTED 3/4' BORE 0-2 90432 CARBON 90432 CARBON 90432 CARBON 90432 -SHAFT DELTE 1 1 90355 316SS 90357 ALLOY C 90356 ALLOY 20 -SHAFT NTL IDLER 3/1 90362 ALLOY 20 90361 ALLOY C 90350 ALLOY 20 -SHAFT NTL IDLER 1 90349 316SS 90351 ALLOY C 90350 ALLOY 20  EXTENDED LIFE - BEARINGS -BEARING 1' BORE 2-4 90437 EWCBN 90437 EWCBN 90437 EWCBN 90436 EWCBN -BEARING 3/4' BORE 0-2 90438 EWCBN 90438 EWCBN 90436 EWCBN 90436 EWCBN -SHAFT DELYE 1' 1 90355 316SS 90351 ALLOY C 90350 ALLOY 20 -SHAFT CBN/PLSTC IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90360 ALLOY 20 -SHAFT CBN/PLSTC IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90360 ALLOY 20 -SHAFT NTL IDLER 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20 -SHAFT NTL IDLER 1' 90349 316SS 90351 ALLOY C 90350 ALLOY 20	•									-
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+BEARING SLOTTED 3/4' BORE 0-2 90.32 CARBON 90.32 CARBON 90.432 CARBON 90.432 CARBON 4 - SHAFT DRIVE 1 1 1 90.355 316SS 90.357 ALLOY C 90.356 ALLOY 20 + SHAFT CBN/PLSTL IDLER 3/4 90.362 ALLOY 20 90.361 ALLOY C 90.356 ALLOY 20 + SHAFT HTL IDLER 1 90.349 316SS 90.351 ALLOY C 90.350 ALLOY 20 + SHAFT HTL IDLER 1 90.349 316SS 90.351 ALLOY C 90.350 ALLOY 20 + SHAFT DRIVE 1 1 BORE 2-4 90.437 EWCBN 90.437 EWCBN 90.437 EWCBN 90.437 EWCBN 90.437 EWCBN 90.437 EWCBN 90.436 EWCBN 9		<del></del>			<del></del>					١.
- SHAFT DRIVE 1 1 90355 316SS 90357 ALLOY C 90356 ALLOY 20 - SHAFT (BH/PLSTL IDLER 3/1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 - SHAFT MTL IDLER 1 90349 316SS 90351 ALLOY C 90350 ALLOY 20 - STENDED LIFE - BEARINGS  - BEARING 1' BORE 2-4 90437 EWCBN 90437 EWCBN 90437 EWCBN - BEARING 3/4' BORE 0-2 90438 EWCBN 90438 EWCBN 90430 EWCBN - SHAFT DRIVE 1' 1 90355 316SS 90357 ALLOY C 90356 ALLOY 20 - SHAFT CBN/PLSTC IDLER 3/4' 1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 - SHAFT NTL IDLER 1' 1 90349 316SS 90351 ALLOY C 90350 ALLOY 20 - SHAFT NTL IDLER 1' 1 90349 316SS 90351 ALLOY C 90350 ALLOY 20										17
-SHAFT LBH/PLSTL IDLER 3/1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 -SHAFT HTL IDLER 1 90349 31655 90351 ALLOY C 90350 ALLOY 20  EXTENDED LIFE - BEARINGS  -BEARING 1' BORE 2-4 90437 EWCBN 90437 EWCBN 90437 EWCBN 90437 EWCBN -BEARING 3/4' BORE 0-2 90438 EWCBN 90438 EW					<del></del>					_
**SHAFT HTL IDLER 1 90349 31655 90351 ALLOY C 90350 ALLOY 20  EXTENDED LIFE - BEARINGS  **BEARING 1' BORE 2-4 90437 EWCBN 90437 EWCBN 90437 EWCBN  **BEARING 3/4' BORE 0-2 90438 EWCBN 90438 EWCBN 90436 EWCBN  **SHAFT DRIVE 1' 1 90355 31655 90357 ALLOY C 90356 ALLOY 20  **SHAFT CRIVE 1' 1 90349 31655 90351 ALLOY C 90356 ALLOY 20  **SHAFT MTL IDLER 1' 1 90349 31655 90351 ALLOY C 90350 ALLOY 20	4				<del></del>					<u> </u>
+SHAFT NTL IDLER 1 90349 31655 90351 ALLOY C 90350 ALLOY 20  EXTENDED LIFE - BEARINGS  -BEARING 1' BORE 2-4 90437 EWCBN 90437 EWCBN 90437 EWCBN -BEARING 3/4' BORE 0-2 90438 EWCBN 90438 EWCBN 90438 EWCBN 90430 EWCBN  - SHAFT DRIVE 1' 1 90355 31655 90357 ALLOY C 90350 ALLOY 20 -SHAFT CBN/PLSTC IDLER 3/4' 1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 -SHAFT NTL IDLER 1' 1 90349 31655 90351 ALLOY C 90350 ALLOY 20  EXTENDED LIFE - BEARINGS AND 'CW' SHAFTS			<del></del> 4 l							L_
-BEARING 1' BORE 2-4 90437 EWCBN 90437 EWCBN 90437 EWCBN 90437 EWCBN		+SHAFT MTL IDLER	<u> </u>	90349	31655	90351	ALLOY C	90350	ALLOY 20	L
-BEARING 1' BORE 2-4 90437 EWCBN 90437 EWCBN 90437 EWCBN 90437 EWCBN									-	
-BEARING 3/4' BORE 0-2 90438 EMCBN 90438 EMCBN 90438 EMCBN L -SHAFT DRIVE 1' 1 90355 31655 90357 ALLDY C 90356 ALLDY 20 -SHAFT CBN/PLSTC IDLER 3/4' 90362 ALLDY 20 90361 ALLDY C 90362 ALLDY 20 -SHAFT HTL IDLER 1' 90349 31655 90351 ALLDY C 90350 ALLDY 20 EXTENDED LIFE - BEARINGS AND 'CW' SHAFTS	EXTENDED								1	
L -SHAFT DRIVE 1' 1 90355 3165S 90357 ALLOY C 90356 ALLOY 20 -SHAFT CBN/PLSTC IDLER 3/4' 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 -SHAFT NTL IDLER 1' 90349 3165S 90351 ALLOY C 90350 ALLOY 20  EXTENDED LIFE - BEARINGS AND 'CN' SHAFTS		+BEARING 1" BOR	2-4	90437	EWCON	90437	EWCBN	90437	EWEBN	12
+SMAFT CBN/PLSTC IDLER 3/4' 1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 +SMAFT NTL IDLER 1' 1 90349 31655 90351 ALLOY C 90350 ALLOY 20 EXTENDED LIFE - BEARINGS AND 'CM' SMAFTS		+BEARING 3/4" BORE	0-2	90438	EWCBN	90438	EWCON	90438	EMCBN	1
+SMAFT CBN/PLSTC IDLER 3/4' 1 90362 ALLOY 20 90361 ALLOY C 90362 ALLOY 20 +SMAFT NTL IDLER 1' 1 90349 31655 90351 ALLOY C 90350 ALLOY 20 EXTENDED LIFE - BEARINGS AND 'CM' SMAFTS	L								ALLOY 20	┪
+SHAFT MTL IDLER 1' 90349 31655 90351 ALLOY C 90350 ALLOY 20  EXTENDED LIFE - BEARINGS AND 'CW' SHAFTS					<del></del>					Η-
EXTENDED LIFE - BEARINGS AND 'CW' SMAFTS			_ 1							-
· · · · · · · · · · · · · · · · · · ·		TOTAL TOTAL TOTAL				1 ,433,	70001 0	. 7330		_
· · · · · · · · · · · · · · · · · · ·										
-BEARING 1: BORE 2-4 90437 EWCBN 90437 EWCBN 90437 EWCBN		····							т.	
AREARING 3/4' ROPE 0.2 90436 FM 90436 FM 90436 FM 90436	XTENDED					,				12

EWLON

CW3 16

CW3 16

CW3 16

90436

90365

90355-2

EWCBN

CWALYC

CWALYC CWALYC

90438

90389

90357-2

EWCBN

CWALY20

CWALY20

CWALY20

90436

90356-2

13

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART

+SHAFT CBN/PLSTC IDLER 3/4"

3/4" BORE

0-2

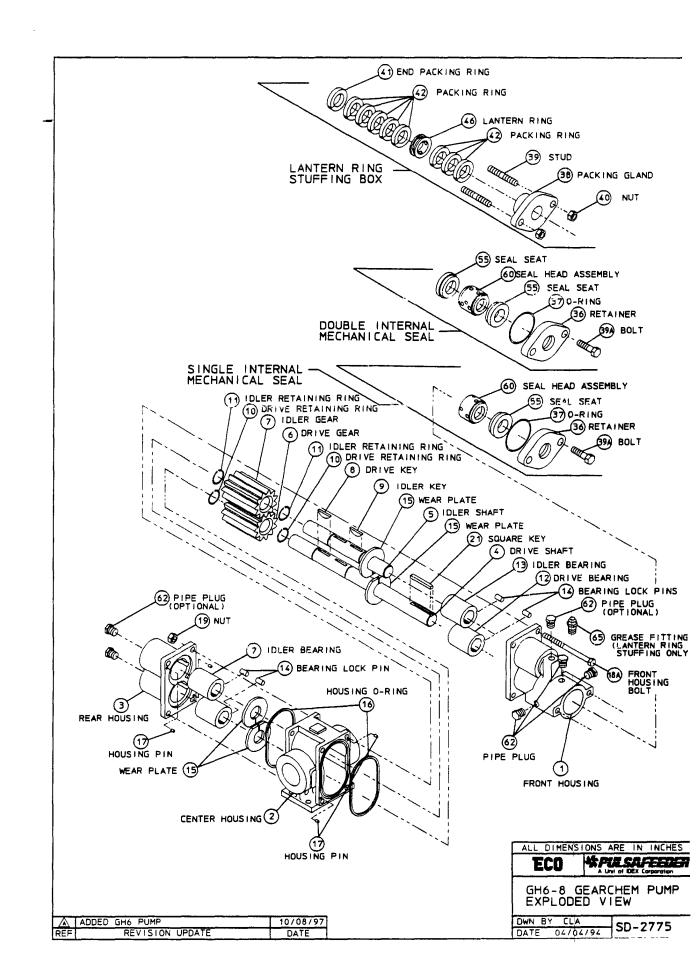
+BEARING

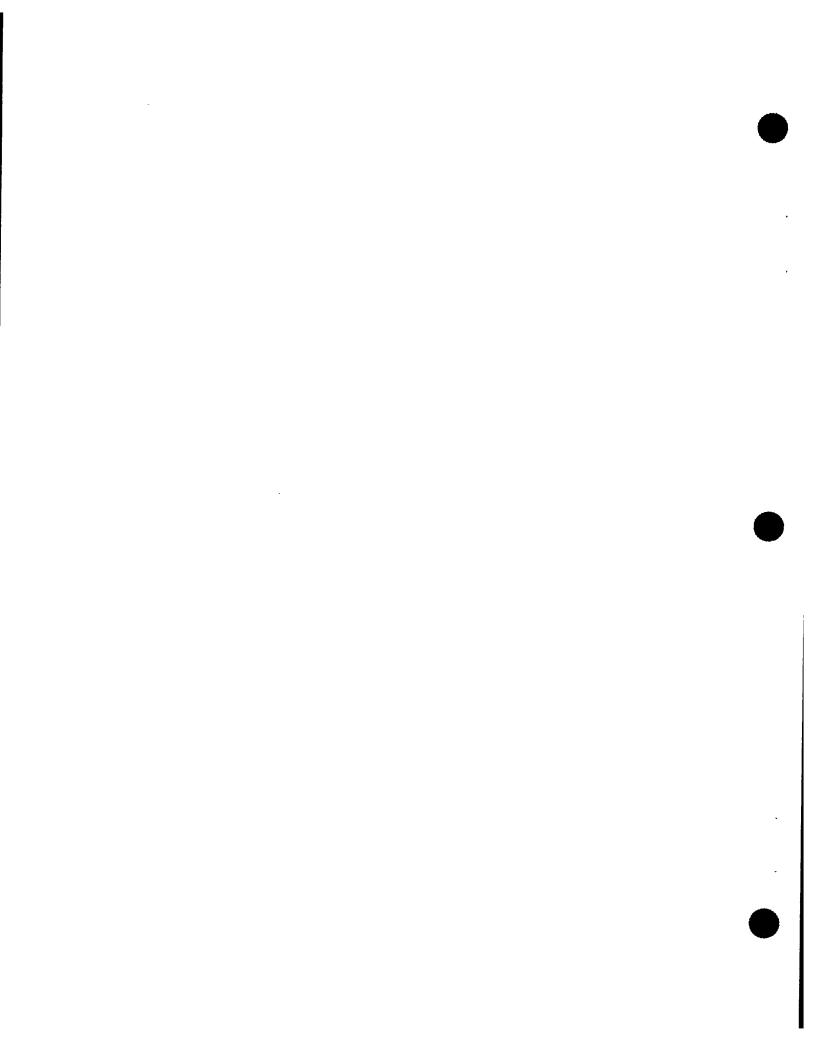
+SHAFT HTL IDLER

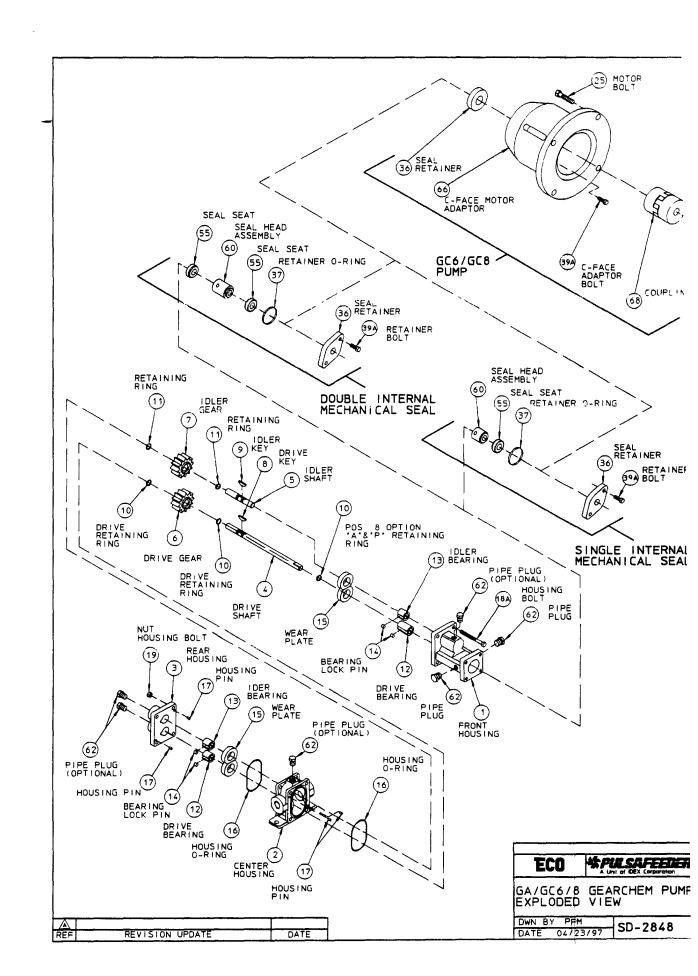
# GA16 SERIES PUMP CONSOLIDATED B/M

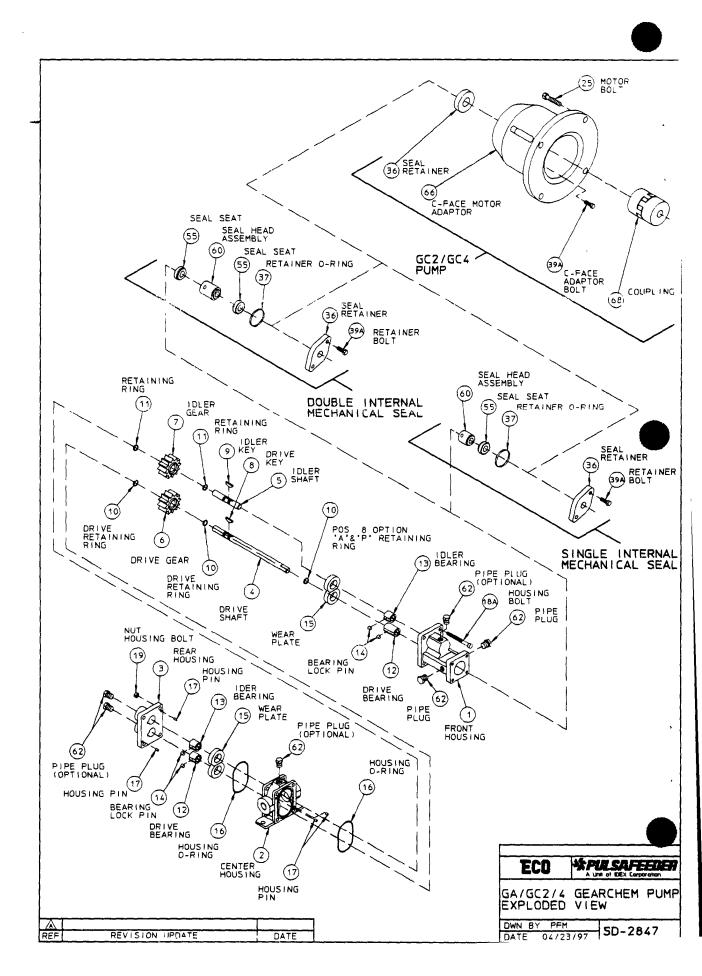
		]			STANDARD PUH	P MATERIAL			
		ļ	3165 (U)	S	ALLOY	c	ALLOY	20	
	DESCRIPTION	QTY	PART NO	MATL	PART NO	MATL	PART NO	HATL	ITE
	SEAL ARRANGEMENT								
PATIENT N	PACKING GLAND	, ,	A91517	ALLOY C	A91517	ALLOY -	A91517	~1CY (	
	LANTERN RING	• <del></del>	97104	ALLOY 2J	97105	ALLOY C	97104	ALLOY 20	46
	STUD PACKING GLAND	2	92014	ALLOY 20	92012	ALLOY C	92014	ALLOY 20	99
COMMON	NUT STUC	+		ALLOY 20	92102	ALLOY C	92103	ALLOY 20	40
PARTS	GREASE FITTING	<del>,                                    </del>	27201	31055	27201	31055	27201	31055	65
	PLUG 1/6" NPT	1 -1	16415	31655	16622	ALLOY C	16432	ALLOY 20	63
	ADAPTOR 1/4" TO 1/8" NPT	+	27217	ALLOY 20	27216	ALLOY C	27217	ALLOY 20	64
	PACKING RING	-	96515	TFE (BRO)	96515	TFE (BRO)	96515	TFE (BRD)	42
N	*PACKING END RING	, ,	96505	TFE	96505	TFE	96505	TPE	41
R	PACKING RING	, ,	96510	GRAFOIL	96510	GRAFOIL	96510	GRAFO!L	4.2
PARTS	BOLT SEAT RETAINER  O-RING SEAT RETAINER  PLUG 1/4" NPT	1 *3	W770413-188 19031 16415	1885S TFE 316SS	92007 19031 16422	TFE ALLOY C	W770413-188 19031 16432	TFE ALLOY 20	9:
	+SEAL HEAD ASSEMBLY	1	A97001	316/CBN	A97023	HCO/CBN	A97011	020/CBN	60
U	- SEAL SEAT W/ SEAL RING (TFE)	1	A97059	SICBD	A97059	SICBO	A97059	SICBO	55
24	: SEAL SEAT W/ SEAL RING (TFE)		37.1307	ALLOY 20	A91570	ALLOY C	~~~~~	ALLOY 20	
	SEAT RETAINER W/ PIN	1	A91564	ALLOY 20	A91560	ALLOY C	A91564	ALLOY 20	36
COMMON	BOLT SEAT RETAINER	2	W770413-188	18855	92007	ALLOY C	W770413-188	18855	35
PARTS	O-RING SEAT RETAINER	1 1	19031	TFE	19031	TFE	19031	TFE	37
	PLUG 1/4" NPT	-1	16415	31655	16472	ALLOY C	16432	ALLOY 20	63
	PIN PUMP END SEAT	1	91565	ALLOY 20	91561	ALLOY C	91565	ALLOY 20	59
	+SEAL HEAD ASSEMBLY	1	A97022	020/CBN	A97027	HCO/CBN	A97022	020/CBN	60
E	+SEAL SEAT W/ SEAL RING (TFE)	2	A97059	SICBD	A97059	SICBD	A97059	SICBD	55
44	+SEAL SEAT W/ SEAL RING (TFE)	2	A91569	ALLOY 20	A91570	ALLOY C	A91570	ALLOY 20	55

<sup>\*</sup>COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M \*DENOTES RECOMMENDED SPARE PART











# **KOPkits**<sup>®</sup>

# Keep-On-Pumping Kits That Can Save You Time and Money.

ECO products have a reputation for superior reliability by supplying carefully designed high-quality equipment. Even the best equipment requires a minimal amount of maintenance. **KOPkits** are designed to guard against unnecessary downtime and assure you the highest level of efficient and uninterrupted service from your ECO pumps.

**KOPkits** contain recommended spare parts generally required for normal maintenance. A typical kit includes shaft mounted drive and idler gears

(with keys and retaining rings), wear plates, bearings and lock pins, housing o-rings, packing rings or seal assembly (with seat) and an exploded view assembly drawing.

KOPkits will save you money. When you need a part, you've got it! You can cut downtime and production loss from days to minutes. You also save by buying parts in KOPkit form compared with buying individual parts

Each **KOPkit** part is securely packed in a customized kit to protect parts when stored for long periods of time.

A **KOPkit** is a troubleshooter's best friend. In the event of a breakdown, it will put you back in business fast! Preventive maintenance will insure continuous high performance of your ECO pumps.

Keep on pumping! Get all the money saving and security benefits of ECO **KOPkits** immediately.

## Standard KOPkits

The **KOPkit** part number as shown below covers current models All ECO pumps have the model number stamped on the name plate.

This model number, prefixed by a "K", becomes the kit number.

The table on the next page can be used to identify most kit numbers.

# Special KOPkits

ECO Gearchem pumps have kits available for non-standard pumps.

Consult your representative or distributor for kit number and pricing.

Typical	KOPkit	Number
---------	--------	--------

KGA8ACTTTU



Model GA8 Pump - 316 SS Basic Pump Allov C Drive Gear

A Unit of IDEX Corporation

TFE (Glass Filled) Idler Gear TFE (Glass Filled) Wear Plates TFE (Glass Filled) Bearings —

Single Mechanical Seal Head & Seat



# KOPKit Nomenclature

MGA on No. 1 2 3 4 5 6 7 8 9

Evtornal											
External	Spur	Gear I	Pump								
G = Original version, foot					2,	4, 6, B					
	= Mechanical Seal, foot mounted only 2, 4, 6, 8, 12, 16										
GC = Mechanical Seal, C-face motor mounting assembly 2, 4, 6, 8											
GH = Higher pressure model, foot mounted only 6, 8											
Position 2 Pump Size	. 2	4	6	8	H6	H8	12	16			
Port Size	25"	50"	75"	10"	75"	10"	1 5"	2 0"			
Capacity (GPM Max)	15	3	10	20	10	20	26	55			
Differential pressure	100	100	100	50	200	100	100	100			
(PSIG Max)		L	<u> </u>	ــــــــــــــــــــــــــــــــــــــ	1	l	<u> </u>	l			
Position 3 Available Pump Metallurgy's / Type Port Connections											
A = 316SS FNPT	Χ.	X	<u>X</u>	X	X	X	_ x				
C = Alloy C FNPT	X	X	X	Х	X	X	] X	Į			
D = Alloy 20 FNPT	X	X	_ X	X	_ x	X	X	1			
K=316SS FBSPT	X	X	] X	X	Х	X	] X	1			
M = Alloy C FBSPT	X	X	X	Х	X	X	X	1			
N = Alloy 20 FBSPT	Х ]	X	X	X	X	X	[ X	ļ			
U≃316SS Flanged						1	X	X			
V = Alloy C Flanged		l	1				] X	X			
W = Alloy 20 Flanged		<u> </u>	<u></u>	L	<u> </u>	l	X	X			
Position 4 Drive Gear N	Vlateri	al									
C = Alloy C	Х	Х	X	X	Х	X	X	X			
D = Alloy 20	Х	X	] X	X		1	I	l			
T = TFE (Glass filled)	X	X	_ X	X		l	l				
E = Peek	X	X	X	X	<u> </u>		<u> </u>				
Position 5 Idler Gear M	ateria	1									
C = Alloy C	X	X	X	X	X	_ X	X	Х			
D = Alloy 20	Х,	X	] x	X	i	Į	ļ				
K = Carbon	X	X	] X	X	1	X	X	X			
T = TFE (Glass filled)	X	X	X	X		X	X	X			
E = Peek	X	X	<u> </u>	X	<u> </u>	X	_ x	X			
Position 6 Wear Plate I	Materi	ial									
K = Carbon	X	X	X	X	X	X	X	X			
T = TFE (Glass filled)		X	] x	[ X	X	X	X	X			
2 = Ceramic	X	X	] x	[ X	X	X	X	X			
E = Peek	Х	X	<u> </u>		<u> </u>	x	L				
Position 7 Shaft & Bea	ring Ñ	/lateria	al								
K = Standard Carbon	X	X	X	X	X	X	X	X			
T = TFE (Glass filled)	x	×	<b>x</b>	X	i	x	X	l x			
L = Extended Life Carbon	X	x	×	X	x	X	X	×			
C = Extended Life Carbon -	X	X	<b>†</b> x	×	×	X	X	X			
"CW" Shafts		Į.	1		l	l	l	Į.			
4 = Standard Carbon Slotted		Ī	1	1	1	1	ľχ	X			



Engineered Pump Operations 2883 Brighton-Henrietta Townline Road Rochester, New York 14623
Telephone (716) 292-8000 Fax (716) 424-5619
http://www.pulsa.com/E-mail/pulsa@pulsa.com



	•	•			•	•				
Pos	sition 8 Seal Arran	G	<u>G</u> A	/GC	G	GA/G			GН	GA
0	los a	2-4		!-4	6-8	6-8	6	; 	8	12-16
	king FE Rings	X	_		X					
	irafoil (*) Rings	x	+	- 1	x ·		+	ł	ł	
i - V	ton Lip Seal H-C Spring	Î	+		x 1	-	ł	t	ŧ	
	FE Rings / Lantern	î	ŀ	i	â		- t >	, †	x	х
	irafoil (*) / Lantern	î	ł	- 1	x		15		x i	X
	hanical Seals	/						<u> </u>		
	llows									
A =	Single Seal Carbon		T	X		X		$\neg \top$		
	Rotary / Viton			- 1			-	-	- 1	
_	Ceramic Seat / Viton	ł	ŀ	U I			ł	1	ļ	
C =	Double Seal Carbon Rotary / Viton			×		Х				
	Ceramic Seat / Viton	}		1			1	Ì	- 1	
₽=	Single Seal	1	1	x l	i	×	İ	- 1	t	
	Siliconized CBN	(	1				ļ	-	- 1	
	Rotary /EPR Silicon		1	ł			İ		- 1	
	CBD Seat / TFE									
We	edge									
E =	Double Seal Carbon		T -	X		X	)		X	Х
	Rotary / TFE Silicon	1	1	ļ			- [	-	- 1	
	CBD Seat / TFE		1				1	1	- 1	
K =	Single Seal Teflon	X		Ī	х			- 1		
	Rotary / TFE Metallic	ì		ľ			1	İ	1	
Q =	Seat / TFE Single Seal Teffon	ł	+	x ĺ	-	х	,	,	x	
¥ =	Single Seal Teflon Rotary / TFE Silicon	ļ	-	^		^	'	`	^	
	CBD Seat / TFE	1					-		- 1	
T =	Single Seal Carbon	x	1		x		1	1	- 1	
	Rotary / TFE Metallic		1	1			i i	i i	i	
	Seat / TFE		1							
U =	Single Seal Carbon	Į	[	x (		Х	[ →		ΧŢ	X
	Rotary / TFE Silicon						- 1		1	
	CBD Seat / TFE			1			1	- 1	1	
V =	External Seal Carbon	1	}	X		Х	- 1	- 1	i i	
	Rotary / TFE Metallic		1				1		- 1	
147	Seat / TFE	ł		.	,	v	+	- 1	- 1	
W =	External Seal Carbon Rotary / TFE Silicon	ŀ		X		×			- 1	
	CBD Seat / TFE						- 1			
Y =	Double Seal Carbon	×	1	1	×		1 "	1	- 1	
. –	Rotary / TFE Metallic	l ~			^,					
	Seat / TFE		1	- 1			- 1			
Z =	External Seal	1 ×			X		İ	- 1	ı	-
	Vacuum Carbon	1		!			- 1		- 1	
	Rotary / TFE Metallic	1	-	1			- 1	- 1	- }	
	Seat / TFE	1	1	i			1	ĺ	- 1	
24 =	Single Seal Carbon	l							Į	Х
	Rotary / TFE Metallic	1	1	Ì			ì	1	1	
11 -	Seat / TFE	ł	ł		-		-	ł	1	v
44 =	Double Seal Carbon Rotary / TFE Metallic	ļ	1	ļ				-	-	Х
	Seat / TFE	Í				l			- 1	
Pos	sition 9 Options -	Pumr	Size							
			2	4	6	8	6	8	12	16
B =	PFA coated SS Hsg O-	T	X	Х	X	X	X	Х	T X	X
	Rings, Metallic Bearing I	Lock		1	1	1 1				1
_	Pins	.		١	1	1			1	
	Bearing Flush Ports, PF		х	X	X	×	X	Х	1	1
	Coated SS Hsg O-Rings				1				-	1
D =	Metallic Bearing Lock Pi		x	×		+ !	v	J	+	- [
<u>=</u> ب	Bearing Flush Ports, PF, Coated SS Hsg O-Rings		^	^	X	X	X	X	1	1
	Metallic Bearing Lock Pi				1				1	-
	Slotted Bearings	,		Į	1	1 1		l		
E =	Bearing Flush Ports, PF	a l	X	x	×	×		Ì	1	†
_	Coated SS Hsg O-Rings	i,			1	''				
	Metallic Bearing Lock Pi	ns,		}	1	1 1			1	1
	Slotted Bearings, Slotted	i			1					ĺ
	Wear plates			1		1 1		l	1	
J =	GA12 with 1" Idler Shaft	1		1	1	] ]		Ì	X	Í
	(Metallic Gear Only)			١	1	1 1		ļ		1
				X	_ X	1 1		ļ	ļ	1
N =	Narrow Width Gears	,								
N = T =	Temperature Trimmed Plastic Gear	)	X	X	X	[ x ]	Х	X	X	[ X