Product Owner's Manual
Manual del propietario del producto
Manuel du propriétaire du produit

Oil Pump

Oil Transfer Pump
Bomba de transferencia de aceite
Pompe de transfert d'huile

Models: L 5020, L 5116, L 5132

Thank you for choosing Great Plains Industries as your preferred brand! Our team places innovation, precision, and care into every product made, providing you with the best total value. This manual contains critical product information. Save these instructions and observe all safety information to prevent personal injury or property damage. See back cover for warranty and customer support details.

DO NOT RETURN THIS PRODUCT TO THE STORE!
Please contact Great Plains Industries, Inc. before returning any product. If you are missing parts, or experience problems with your installation, contact our Customer Support Department. We will be happy to assist you.

EN

¡Gracias por elegir Great Plains Industries como su marca preferida! Nuestro equipo pone innovación, precisión y cuidado en cada producto fabricado, proporcionándole el mejor valor total. Este manual contiene información crítica del producto. Guarde estas instrucciones y observe toda la información de seguridad para evitar lesiones personales o daños materiales. Consulte la contraportada para obtener detalles sobre la garantía y el soporte al cliente.

¡NO DEVUELVA ESTE PRODUCTO A LA TIENDA!
Comuníquese con Great Plains Industries, Inc. antes de devolver cualquier producto. Si le faltan piezas o experimenta problemas con su instalación, comuníquese con nuestro Departamento de atención al cliente. Estaremos encantados de ayudarle.

ES

Merci d'avoir choisi Great Plains Industries comme votre marque préférée! Notre équipe place l'innovation, la précision et le soin dans chaque produit fabriqué, vous offrant la meilleure valeur totale. Ce manuel contient des informations critiques sur le produit. Conservez ces instructions et respectez toutes les informations de sécurité pour éviter les blessures corporelles ou les dommages matériels. Consultez la couverture arrière pour obtenir des détails sur la garantie et le support client.

NE PAS RENVOYER CE PRODUIT AU MAGASIN !
Veuillez contacter Great Plains Industries, Inc. avant de retourner un produit. S'il vous manque des pièces ou si vous rencontrez des problèmes avec votre installation, contactez notre service d'assistance à la clientèle. Nous serons heureux de vous aider.

FR

Call / Llamar / Appel: 800-835-0113 or 316-686-7361

Email: GPI-GPROtech@gplains.com

Website: gpi.net

SAVE / GUARDAR / CONSERVEZ

Model / Modelo / Modèle #: _____

Serial / Serie / Série #: _____

Date / Fecha / Date:_____

BEFORE YOU BEGIN

Compatibility Statement

- This pump was designed for use with motor oil, gear oil, and hydraulic oil. If used with antifreeze, do not exceed 50% water. Please take all due precautions when handling these liquids. Your safety is important to us.
- Do not use this pump for dispensing any fluids other than those for which it was designed. To do so may damage the pumps components and will void the warranty.

Power Source Requirements:

- This manual covers 12 volt DC electric oil pump model L 5020, and 115 volt AC electric oil pump models L 5116, and L 5132.
- Model L 5020 should be connected to a 12-volt DC power source. Models L 5116 and L 5132 should be connected to a 115-volt AC power source.
- Do not attempt connection of these pumps to an incorrect power source.

Tools Needed:

- Adjustable Wrench, Pipe Wrench, Pliers, Utility Knife, Wire Crimper/Stripper

- Diesel Exhaust Fluid (DEF). Not compatible with petroleum-based liquids. DO NOT USE WITH FLAMMABLE LIQUIDS.

- For use with Diesel Exhaust Fluid (DEF), Antifreeze, Windshield Wash Fluid, Ammonium Sulfate, Non-Potable Water, and other water-based chemicals. See wetted materials list. Not compatible with petroleum-based liquids. DO NOT USE WITH FLAMMABLE LIQUIDS.

Contents:

- (1) 12-volt DC Oil Transfer Pump (L 5020) OR (1) 115-volt AC Oil Transfer Pump (L 5116 or L 5132), and (1) Base assembly
- (1) 18 foot (5.4 m) Attached Power Cord (L 5020 Only)
- (1) Fuse Assembly, (1) Wire Connector (L 5020 Only)
- (1) 8 foot (2.4 m) x 3/4 inch Dispensing Hose
- (1) 15 inch (38 cm) to 40 inch (101 cm) Adjustable Suction Pipe
- (1) Ball Valve Spout
- (1) 3/4” Elbow Fitting

GENERAL SAFETY INSTRUCTIONS

SYMBOLS

⚠ DANGER — Description of imminent hazard and failure to avoid hazard will result in death.

⚠ WARNING — Description of hazard and possible resulting injures or death.

⚠ CAUTION — Description of hazard and possible resulting injuries.

This symbol indicates a general warning to the user. See additional specific warnings.

This symbol indicates electrical shock hazard. Follow proper installation and maintenance instructions in this manual.

This symbol indicates hot surface. Take care to avoid coming into contact with hot surface.

This symbol indicates automatic restart. Pump contains thermal protection which automatically shuts off motor before overheating. Pump will turn back on automatically after cooling. Turn switch OFF and wait 30 minutes to resume normal pumping. Disconnect power before any inspection or service.

Owner's manual must be read before using, inspecting, or servicing this product.

Disconnect power when product is unattended or in the case of a malfunction. Disconnect power before any inspection, servicing, or maintenance.

GENERAL SAFETY INSTRUCTIONS (CONTINUED)

SAFETY WARNINGS

⚠ DANGER *Observe precautions against electrical shock when operating the system. Serious or fatal shock can result from operating electrical equipment in damp or wet locations.*

⚠ DANGER *Observe precautions against electrical shock when servicing the pump. Always disconnect power before repairing or servicing. Never apply electrical power to the system when any of the cover plates are removed.*

⚠ WARNING *Inspect external pump wiring regularly to make sure it is correctly connected. To avoid electrical shock, use extra care when connecting the pump to power.*

⚠ WARNING *Avoid prolonged skin contact with petroleum fuels. Use protective goggles, gloves and aprons in case of splashing or spills. Change saturated clothing and wash skin promptly with soap and water.*

⚠ WARNING *This pump is provided with an internal auxiliary temperature-limiting device which automatically shuts off the motor before overheating. The pump will turn back on automatically after cooling if the switch is not in the off position. Turn the switch OFF and wait 30 minutes to resume normal operation.*

⚠ CAUTION *If using solvent to clean pump components or tank, observe the solvent manufacturer's recommendations for safe use and disposal.*

SPECIFICATIONS

	L 5020	L 5116	L 5132
Housing Material	Aluminum		
Pump Rate	20 QPM (19 LPM)	16 QPM (15 LPM)	32 QPM (30 LPM)
Duty Cycle	30 minute ON, 30 minute OFF		
Max Viscosity	220 CPS	1160 CPS	970 CPS
Operating Temperature	Max Temp is +140° F (+60° C). See Viscosity Chart for minimum temp.		
Max Discharge Pressure	50 PSI		
Input	12-volt DC	115-/230-volt AC	
Current Draw	40 amps	7.5/3.7 amps	13.3/6.6 amps
Motor	1620 RPM	1725 RPM	3450 RPM
Motor Approval	cULus Listed	UL Recognized Component, CSA Certified	
Motor Protection	Inline Fuse (40A)	Thermal Protection	
Cord	10/2 x 18ft installed	36 in. with Grounded NEMA Plug	
Tank Adapter	2” NPT		
Inlet	1” NPT		
Outlet	3/4” NPT		
Weight	22 lbs	33.7 lbs	43.6 lbs

GENERAL SAFETY INFORMATION

The purpose of this manual is to assist you in installing, operating and maintaining your GPI Oil Pump. This pump is a positive displacement, direct drive pump.

Models L 5116 and L 5132 are wired for 115-volts only, however these motors have the capability to run on 230-volts if properly wired by an Electrician (see the label on the motor for specifications). GPI does not supply any wiring items or hookup connectors for the 230 voltage. Rewiring for 230-volts is the risk and responsibility of the buyer/owner and user. GPI is not liable for any damage or accidents caused by rewiring.

Both the 12-volt DC and the 115-/230-volt AC pump are compatible with motor oil, gear oil, hydraulic oil, antifreeze (not to exceed 50% water), and ATF. Do not use this pump for dispensing any fluids other than those for which it was designed. To do so may damage pump components and will void the warranty.

GENERAL SAFETY INFORMATION (CONTINUED)

Do not use the GPI Oil pump with water, acids, brake fluid or windshield washer fluid.

If in doubt about compatibility of a specific fluid, contact the supplier of the fluid to check for chemical compatibility with:

•Aluminum •Stainless Steel

•Brass •Steel

•Nitrile Rubber •Zinc Plated Steel

Do not leave the system running without fluids. “Dry running” can damage the pump.

Do not pump the tank completely dry, as contaminants from the bottom of the tank may enter the pump.

It is your responsibility to:

- Know and follow applicable national, state and local safety codes pertaining to installing and operating electrical equipment for use with petroleum fluids.
- Ensure that all equipment operators have access to adequate instructions concerning safe operating and maintenance procedures.

Observe all safety precautions concerning safe handling of petroleum fluids. Do not use pump with low flash point fluids (100° F or less).

To ensure safe operation, this pump must be properly grounded. Care should be taken to ensure proper grounding during initial installation and after any service or repair procedures. For your safety, please take a moment to review the warnings below.

Observe precautions against electrical shock when operating the system. Serious or fatal shock can result from operating electrical equipment in damp or wet locations.

On 12-volt pumps, inspect external pump wiring regularly to make sure it is correctly attached to the battery. To avoid electrical shock, use extra care when connecting the pump to power.

Avoid prolonged skin contact with petroleum fluids. Use protective goggles, gloves and aprons in case of splashing or spills. Change saturated clothing and wash skin promptly with soap and water.

Observe precautions against electrical shock when servicing the pump. Always disconnect power before repairing or servicing. Never apply electrical power to the system when any of the coverplates are removed.

If using solvent to clean pump components or tank, observe the solvent manufacturer’s recommendations for safe use and disposal.

IMPORTANT: The motor of Model L5020 is provided with an internal auxiliary timer circuit that limits operation of the pump to the listed duty cycle. The timer circuit will turn th epump off whn duty cycle is exceeded. After allowing the pump to cool for 30 minutes the pump can be reset by turning the switch off and on.

Worn and damaged hoses or nozzles are potential safety hazards and should be replaced.

INSTALLATION INSTRUCTIONS

⚠ WARNING ***Coverplates protect the operator from moving parts. Never operate the pump without coverplates in place. Never apply electric power to the pump without coverplates in place. Always disconnect power before repairing or servicing***

Installation of Pump to Tank

Make sure all threaded connections are wrapped with three to four turns of oil resistant thread tape or pipe thread sealant.

Make sure drums are properly secured to prevent tip over when full or empty. All tanks must be properly vented.

GPI pumps have a 2-inch NPT connection that can be mounted directly to a 2-inch female pipe thread on the tank.

1. Clean the tank interior of all dirt and foreign material.
2. Glue sections of suction pipe together and cut it to the proper length that is required. Suction pipe should extend 2 to 3 inches above bottom of tank.
3. Screw suction pipe into inlet threads of pump base.
4. Insert the suction pipe through the tank bung. Screw pump into tank bung to secure the pump to the tank. (Figure 1)
5. To prevent pressure buildup and possible leaks through the ball valve, make sure the tank is vented.

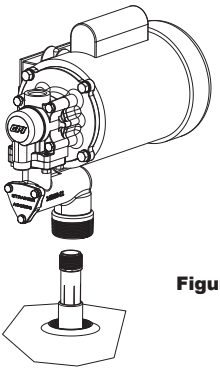


Figure 1

Installing Discharge Plumbing on Pump Outlet

1. Install a 90 degree elbow to the pump outlet using oil resistant pipe sealant.
2. Install the hose and ball valve using oil resistant pipe sealant on the threads. Tighten securely.

ELECTRICAL INSTALLATION

115-/230-volt AC Powered Pumps (Models L 5116 & L 5132):

This GPI Oil Pump is factory wired for 115-volt AC. These motors have the capability to run on 230-volts if properly wired by an electrician. Power to the unit should be supplied from a dedicated circuit breaker.

If AC extension cords are used, they must be capable of safely carrying the rated motor current. Use only heavy duty, 3-wire, grounded extension cords.

NOTE: Many building codes require Ground Fault Circuit interrupt (GFCI) protection.

Motor Ratings (FLA):

115-/230-volt AC:

.50 HP, 1725 RPM – 7.5/3.7 amps

1 HP, 3450 RPM – 13.3/6.6 amps

12-volt DC:

.40 HP, 1620 RPM – 40 amps

12-volt DC Powered Pumps (Model L 5020):

This GPI Oil Pump is factory wired for 12-volt DC. Circuit must be protected with a 40 amp automotive-type fuse.

OPERATION

IMPORTANT: Always follow safety precautions when operating this equipment. Review the safety instructions.

⚠ CAUTION ***Before each use, repair leaks around seals or connections. Make sure hoses are in good condition and connections are tight. If damaged, replace hoses before use.***

NOTE: ***Make sure the work area is dry.***

⚠ WARNING ***Make sure the pump is properly grounded. Repair any corroded or damaged wiring before use.***

NOTE: ***Ensure the tank contains enough fuel.***

Before first usage, pour oil into pump outlet port to coat pumping element.

1. Place ball valve into the receiving tank to be filled.
2. Turn on the motor.
3. Open the ball valve and fill the container to the desired level. If flow does not occur within 15 seconds, shut off motor and refer to the priming information in the Troubleshooting Section.
4. Shut off the nozzle.
5. Turn off the motor.

Motor Protector

The AC pumps contain thermal motor protection. If the pump overheats the unit will shutoff.

If the motor shuts off, follow these instructions:

Model L 5132: Turn off the switch. Allow the motor to cool before restarting.

Model L 5116: Turn off the switch. Allow the motor to cool. Push the button to manually reset the protector.

Model L 5020: The 12-volt model is protected by an inline fuse (supplied), and an internal circuit breaker switch. If the motor shuts off, check the fuse and timer circuit.

⚠ CAUTION ***An automatic bypass valve prevents pressure build up when the pump is on with the nozzle closed. To avoid pump damage, do not run the pump more than 10 minutes with the nozzle closed. Leaving the pump on with the nozzle closed for more than 10 minutes can damage the pump components and will void the warranty.***

⚠ CAUTION ***Never leave the pump running without fluid. Dry running can damage the pump components, and will void the warranty.***

IMPORTANT: ***This is an intermittent duty pump, after running the pump for a maximum of 30 minutes, allow it to cool for 30 minutes.***

IMPORTANT: ***The motor is provided with an internal temperature-limiting device. Excessive motor heat will trip the device and will only reset after the motor has cooled. If the device trips, turn the switch OFF and let the pump cool for 30 min. Turn the switch ON again when ready to operate. If the device trips again before the end of the duty cycle, see the troubleshooting guide.***

⚠ CAUTION ***Always turn the pump off if the temperature-limiting device trips. If left on, the pump will automatically reset when cool and start pumping.***

MAINTENANCE

NOTE: This pump is designed for minimum maintenance. The motor bearings are self-lubricating. Inspect the pump and components regularly for leaks and make sure the hose and power cord are in good condition. If damaged, replace before use. Keep the pump exterior clean to help identify leaks.

IMPORTANT: Do not use this pump for water, chemicals or herbicides. Dispensing any fluid other than those listed in the owner's manual may damage the pump (see BEFORE YOU BEGIN: Fueling Compatibility Statement at front of the owner's manual). Use of the pump with unauthorized fluids will void the warranty.

Disconnect power and relieve pressure in the system by opening the nozzle before servicing the pump.

This pump is designed for minimum maintenance. Motor bearings are sealed and require no lubrication. Inspect the pump and components regularly for leaks and make sure the hose, ball valve and components are in good condition.

Use of the pump with unauthorized fluids will void the warranty.

Remove and clean the strainer if low flow is noticed. To clean the strainer, remove the three screws on the strainer cover. Remove cover and pull out screen. Clean screen and reinstall. Care should be taken not to damage the O-ring.

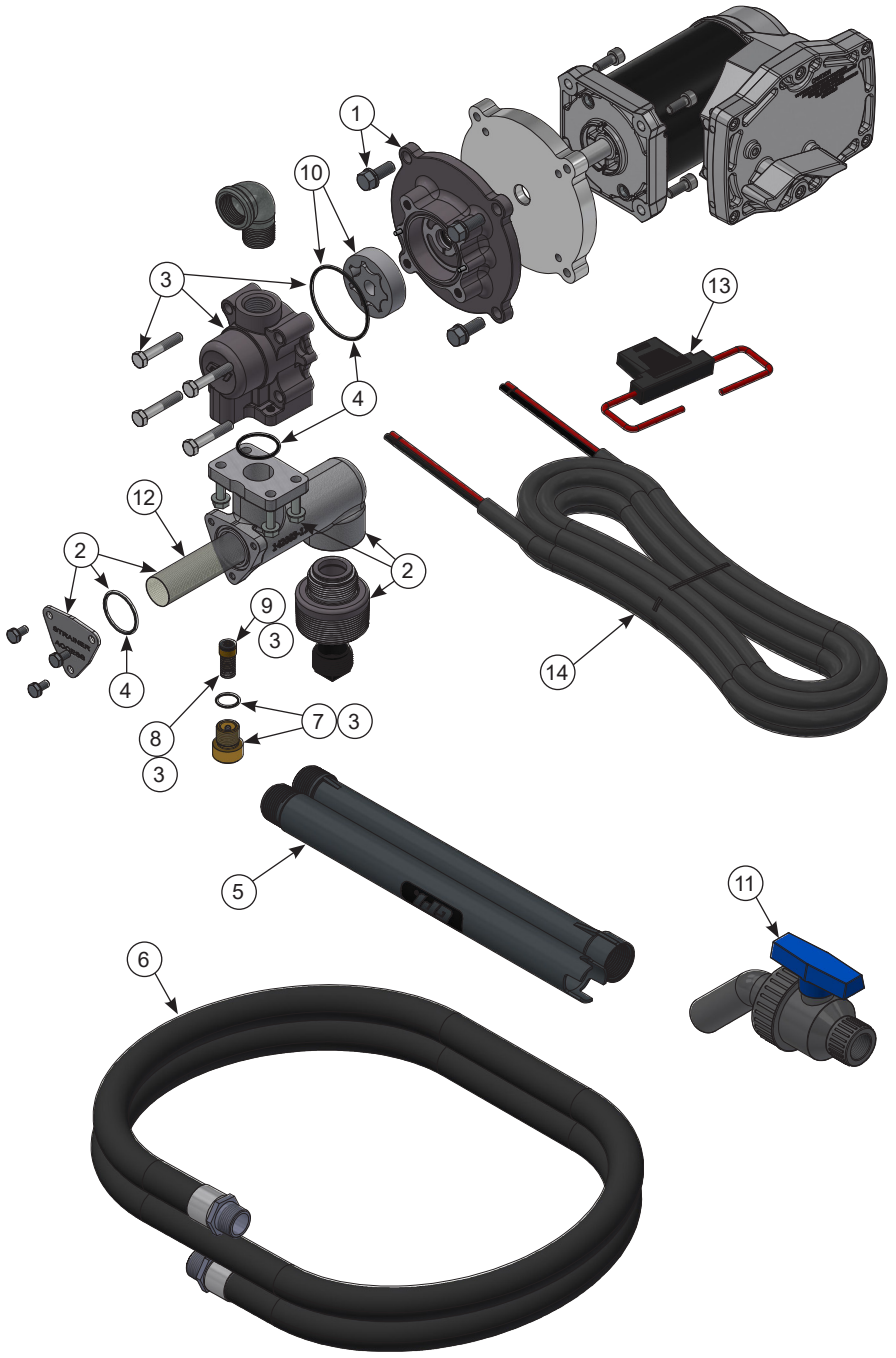
TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
A. PUMP WON'T PRIME	1. Dirty strainer screen	Remove and clean strainer.
	2. Suction line problem	Check for leaks in suction line.
	3. Pump outlet is blocked or valve is shutoff	Check pump outlet system for blockage.
	4. Fluid level below suction pipe	Refill tank or add longer suction pipe.
	5. Fluid viscosity exceeds pumps rated capability	Refer to the Viscosity Charts for viscosity limits.
	6. Gerotor is locked	Inspect gerotor for smooth rotation. Remove any debris.
	7. Excessive gerotor wear	Inspect gerotor. Replace if worn.
	8. Bypass valve not seating	Remove / inspect bypass valve. Clean if necessary.
B. LOW FLOWRATE	1. Dirty strainer screen	Remove and clean strainer.
	2. Suction line problem	Check for leaks in suction line.
	3. Fluid viscosity exceeds pumps rated capability	Refer to the Viscosity Charts for viscosity limits.
	4. Nozzle or meter pressure exceeds product specifications	Replace meter or nozzle.
	5. Bypass valve not seating	Remove / inspect bypass valve. Clean if necessary.
	6. Excessive gerotor wear	Inspect gerotor. Replace if worn.
	7. Low voltage to motor	Ensure power at motor is at proper voltage.
	8. Motor wired for incorrect voltage	Rewire for correct voltage. Instructions are on motor nameplate.
C. MOTOR STALLS WHEN VALVE/ NOZZLE IS CLOSED	1. Bypass valve is sticking	Remove / inspect bypass valve. Clean if necessary.
D. MOTOR STALLS WHEN PUMP FIRST STARTS	1. Fluid viscosity exceeds pumps rated capability	Refer to the Viscosity Charts for viscosity limits.
	2. Gerotor is locked	Inspect gerotor for smooth rotation. Remove any debris.

TROUBLESHOOTING (CONTINUED)

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
E. MOTOR OVERHEATS	1. Fluid viscosity exceeds pumps rated capability	Refer to the Viscosity Charts for viscosity limits.
	2. Gerotor is not rotating smoothly	Inspect gerotor for smooth rotation. Remove any debris.
	3. Incorrect voltage	Ensure power at motor is at proper voltage.
F. MOTOR WILL NOT TURN ON	1. No power to motor	Check circuit breakers and electrical connections.
	2. Switch failure	Replace switch.
	3. Motor has tripped internal motor protection	Turn motor off and allow motor to cool for at least 30 minutes.
G. PUMPS LEAK	1. Missing or damaged seals	Inspect affected areas for proper O-ring sealing.
	2. Shaft seal damage	Inspect and replace shaft seal if needed.
	3. Incompatible fluid pumped	Check if fluid is compatible with aluminum, brass, nitrile rubber, stainless steel, steel and zinc plated steel.

PARTS LIST



PARTS LIST (CONTINUED)

Ref. No.	Description	Part Number	Qty.
1	**Gear Kit**	**162501-01**	
	Gear Coverplate O-ring #226	▲	1
	Gears	▲	2
2	**Outlet Hardware Kit**	**162516-503**	
	5mm Hex Key (not shown)	▲	1
	M6-1.0 x 20mm SHCS	▲	4
	Outlet Port O-ring #222	▲	1
3	**Switch Assembly**	**902006-555**	1
4	**Seal Kit**	**162502-01**	
	Bypass Valve Orifice Seal	▲	1
	Bypass Poppet O-ring #920	▲	1
	Gear Coverplate O-ring #226	▲	1
	Outlet Port O-ring #222	▲	1
	Motor Shaft Seal	▲	1
	Electrical Coverplate Seal	▲	1
5	**Bung Adapter Kit**	**110909-1**	
	Bung Adapter	▲	1
	Gasket	▲	1
6	**Power Cord Kit**	**110242-01**	
	Power cord 12-2	▲	1
	Strain relief	▲	1
7	**Nozzle Cover Kit**	**162504-01**	
	Nozzle Cover	▲	1
	M6-1.0 x 14mm BHCS	▲	2
8	**Bypass Poppet Kit**	**162505-01**	
	Poppet Spring	▲	1
	Bypass Poppet	▲	1
	Bypass Poppet O-ring #920	▲	1
9	**Bypass Coverplate Kit**	**162506-01**	
	Bypass Coverplate	▲	1
	Cast Bypass Plug	▲	1
	Poppet Bypass	▲	1
	Gear Coverplate O-ring #226	▲	1

(▲) Available as part of kit only.

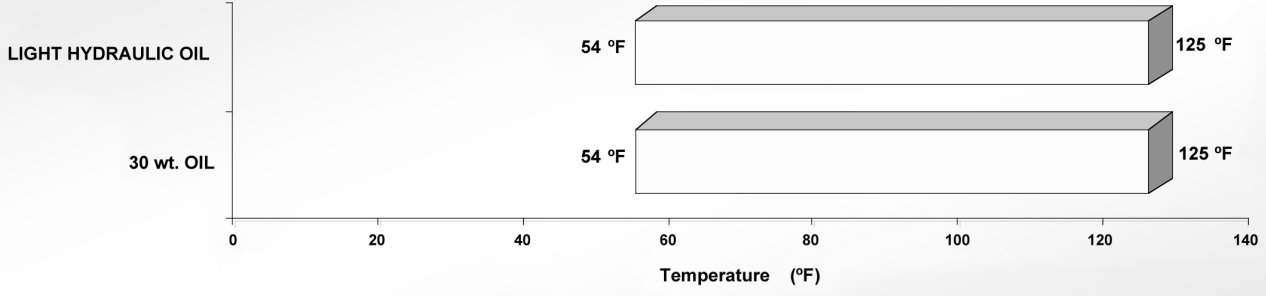
PARTS LIST (CONTINUED)

Ref. No.	Description	Part Number	Qty.
	Bypass Poppet O-ring #920	▲	1
	Bypass Valve Orifice Seal	▲	1
	M6-1.0 x 80MM SHCS	▲	4

(▲) Available as part of kit only.

VISCOSITY CHARTS

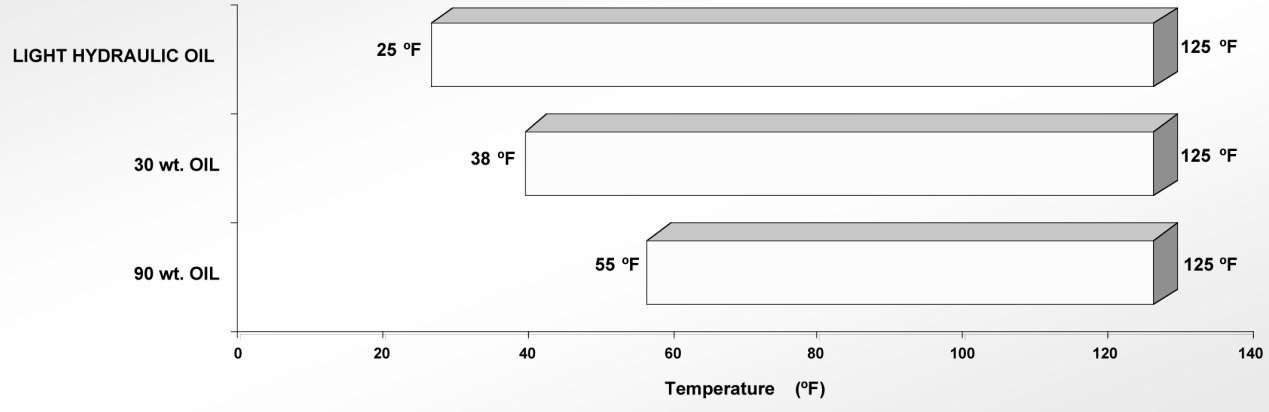
MODEL L 5020 PUMP OPERATING TEMPERATURE RANGE



VISCOSITY CHARTS (CONTINUED)

VISCOSITY CHARTS (CONTINUED)

MODEL L 5132 PUMP OPERATING TEMPERATURE RANGE



WARRANTY

Limited Warranty Policy

Great Plains Industries Inc. warrants the goods manufactured shall be free from defects of material and workmanship.

Specific warranty details for individual products can be found at www.GPI-GPRO.com or by scanning the QR code below.

GARANTÍA

Política de garantía limitada

Great Plains Industries Inc. garantiza que los productos fabricados estarán libres de defectos de materiales y mano de obra.
Los detalles específicos de la garantía para productos individuales se pueden encontrar en www.GPI-GPRO.com o escaneando el código QR que aparece a continuación

GARANTIE

Politique de garantie limitée

Great Plains Industries Inc. garantit que les produits fabriqués seront exempts de défauts de matériaux et de fabrication.
Les détails spécifiques de la garantie pour les produits individuels peuvent être consultés à l'adresse suivante www.GPI-GPRO.com ou en scannant le code QR ci-dessous

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