

# *SuperLift Pump*

## **HPS-60-D**



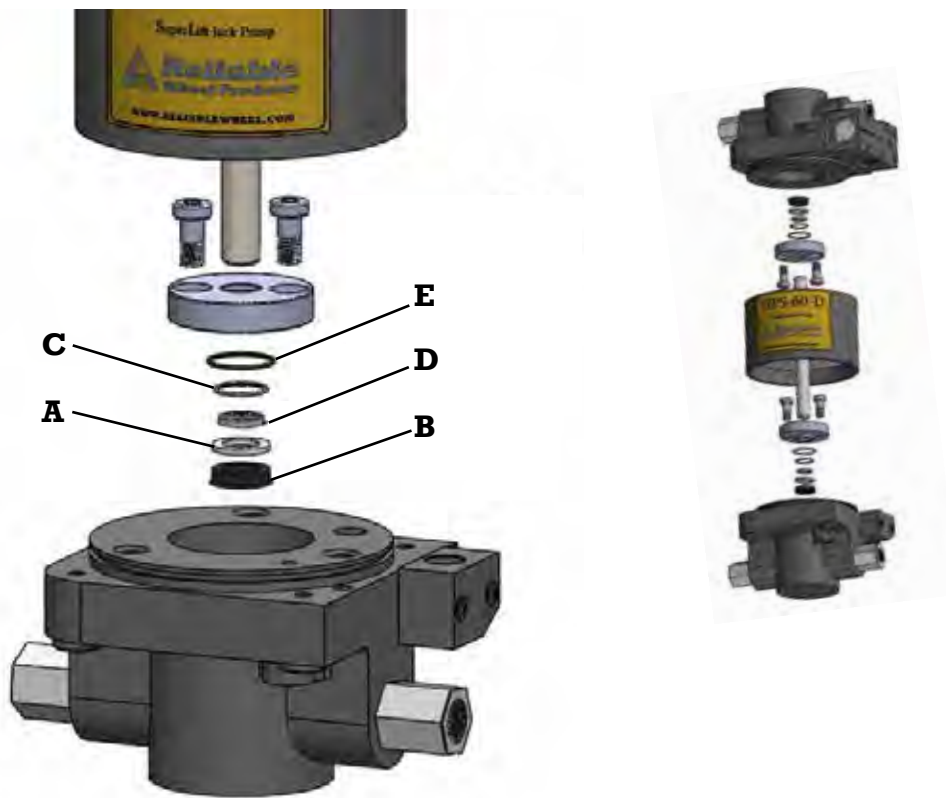
<b>PART #</b>	<b>DESCRIPTION</b>
PR-SVA-S-PUMP	SPOOL BLOCK COMPLETE
PR-RCK-HPS-60-D	MASTER REPAIR KIT ( INCLUDES 4 KITS BELOW )
PR-54040048	HYDRAULIC SECTION REPAIR KIT
PR-CHK-HPS-60-D	CHECK VALVE REPAIR KIT
PR-540233	AIR DRIVE REPAIR KIT
PR-540113	SPOOL REPAIR KIT



# SuperLift Jack HPS PUMP

**PR-54040048**

## HYDRAULIC SECTION REPAIR KIT HPS-60-D SERIES PUMPS

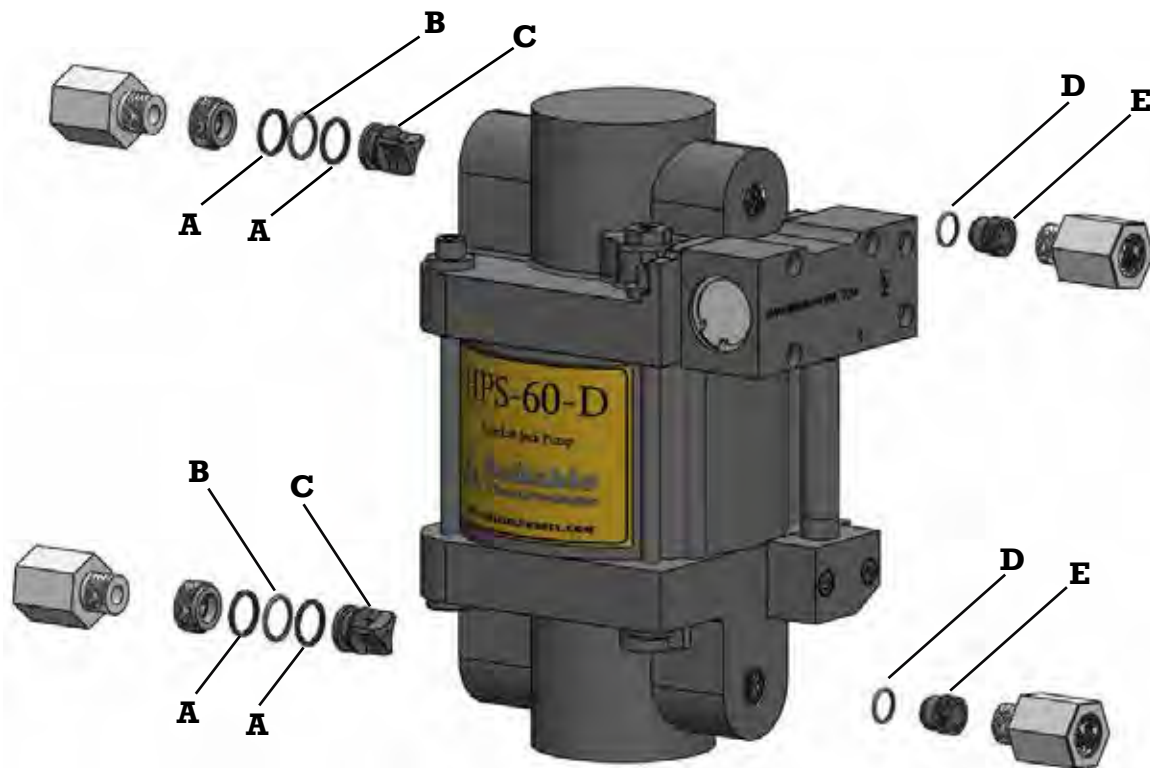


ITEM	DESCRIPTION	QUANTITY
A	BACK UP SEAL	2
B	HIGH PRESSURE SEAL	2
C	O-RING	2
D	GLIDE RING	2
E	O-RING	2

# SuperLift Jack HPS PUMP

## PR-CHK-HPS-60-D

### CHECK VALVE REPAIR KIT HPS-60-D SERIES PUMPS



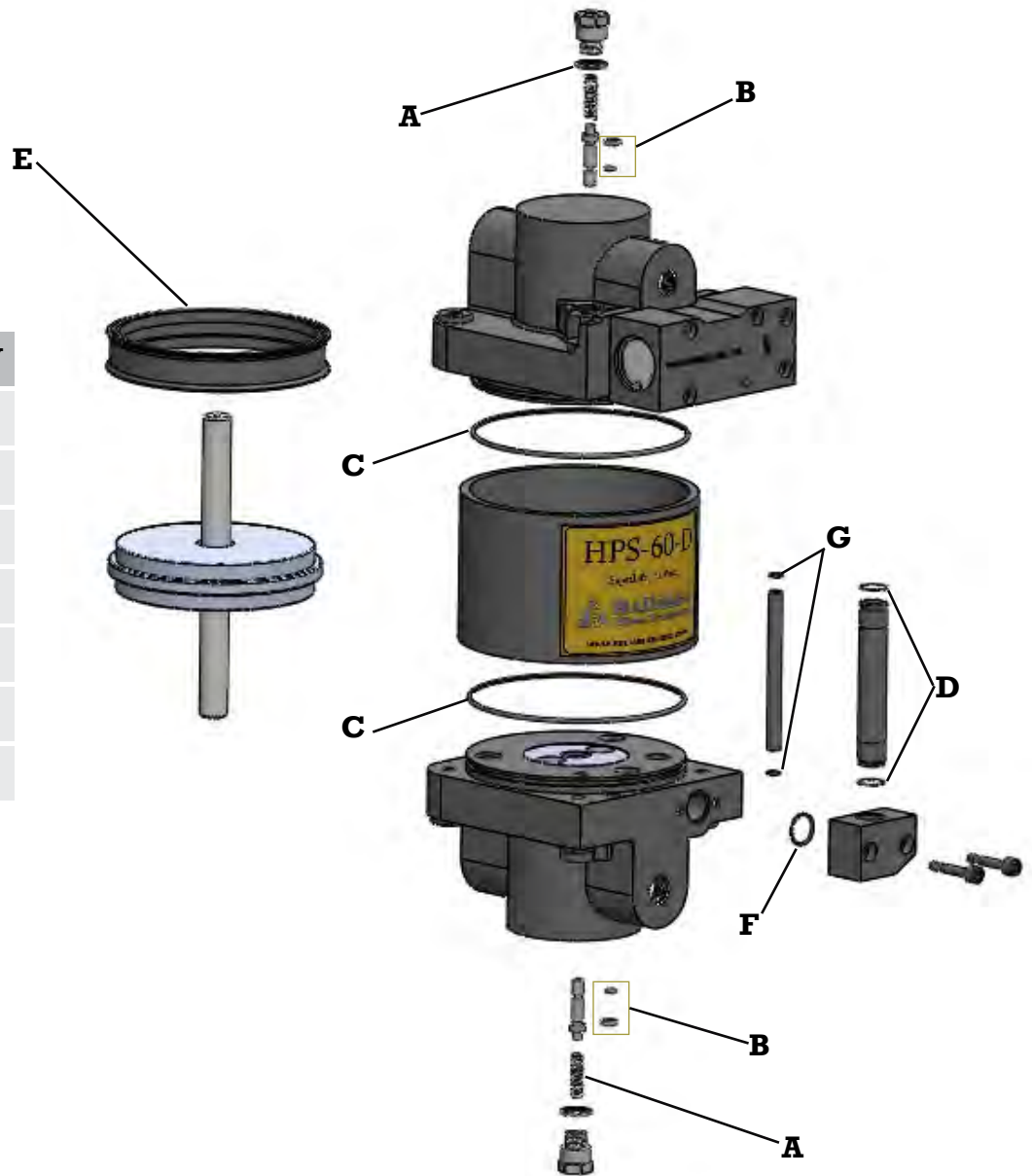
ITEM	DESCRIPTION	QUANTITY
A	BACK UP SEAL	4
B	O-RING	2
C	INLET CHECK VALVE	2
D	O-RING	2
E	OUTLET CHECK VALVE	2

# SuperLift Jack HPS PUMP

## PR-540233

### AIR DRIVE KIT HPS-60-D SERIES PUMPS

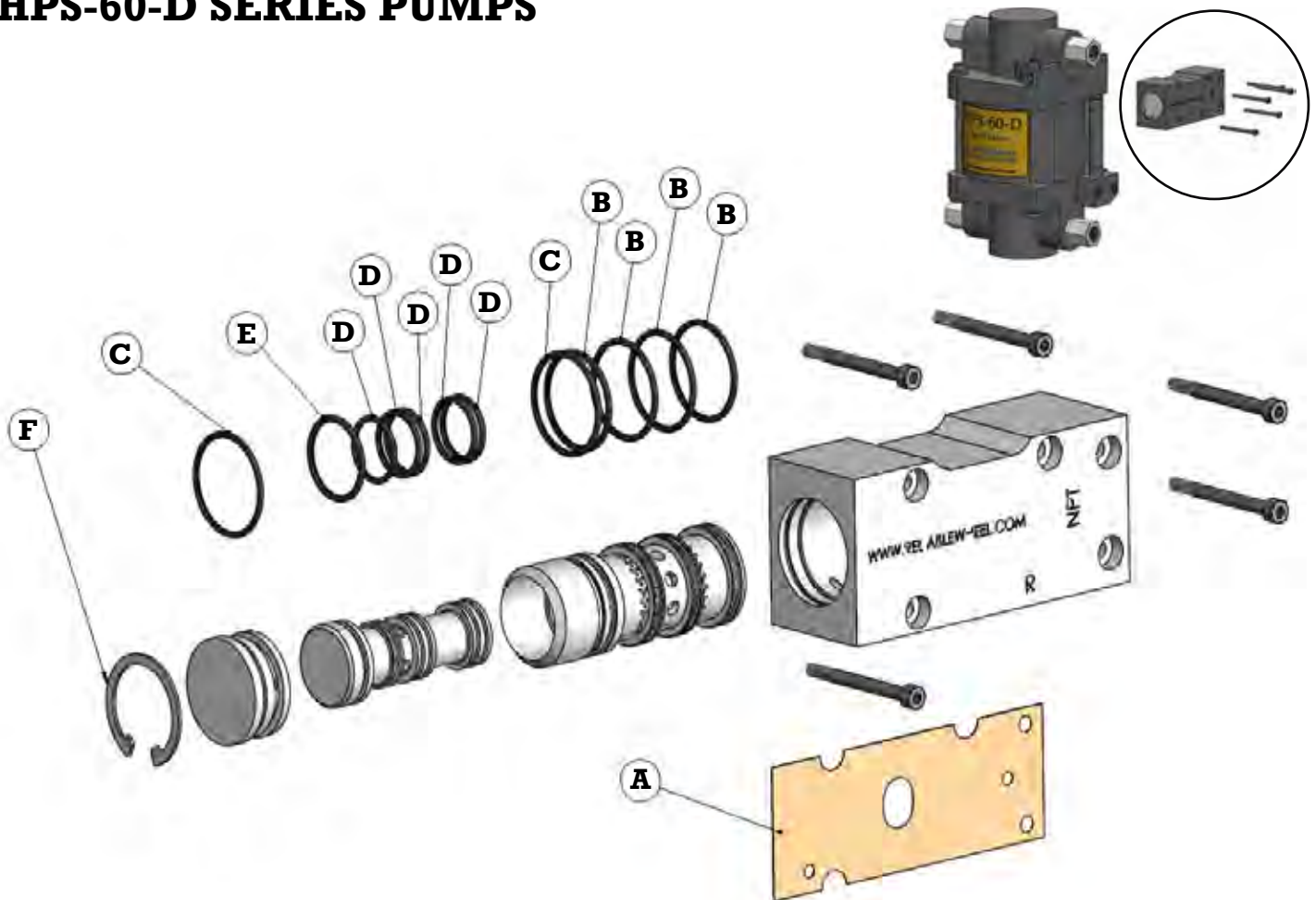
ITEM	DESCRIPTION	QTY
A	SEAL RING	2
B	TAPPET & SEALS	2
C	O-RING	2
D	O-RING	2
E	AIR PISTON SEAL	1
F	O-RING	1
G	O-RING	2



# SuperLift Jack HPS PUMP

**PR-540113**

## SPOOL REPAIR KIT HPS-60-D SERIES PUMPS



ITEM	DESCRIPTION	QUANTITY
A	GASKET	1
B	SPOOL SLEEVE O-RING	4
C	SPOOL SLEEVE & PLUG O-RING	2
D	SPOOL O-RING	5
E	SPOOL PLUG O-RING	1
F	SNAP RING	1



# *SuperLift Jack HPS PUMP*

## **HPS-60-D Pump - Installation and Maintenance Manual**

### **HYDRAULIC SECTION**

Attention! Never loosen the cap nut in the hydraulic seal area of the pump to orient the pump for installation. This nut must always be tight to assure proper operation of the high pressure seals. The discharge and suction connections are in the sides of the pump head.

### **INITIAL SET-UP**

The pump will stop and maintain pressure for an indefinite period of time, at about 100% to 110% of the ratio, assuming no air or hydraulic leaks.

### **MAINTENANCE**

#### **USE ONLY ORIGINAL SUPERLIFT SPARE PARTS**

The air drives of all liquid pumps are factory pre-treated with silicon free grease (Kluber Lube) and require no further lubrication except during routine maintenance.

Pumps can be repaired at your local authorized service center or returned directly to Reliable Wheel Products.

Pumps returned for repair should be accompanied with the pump's model, serial and order numbers as well as mfg. date and description of the problem / symptom.

### **DESCRIPTION OF OPERATION**

The automatically operated pump is controlled by a floating slide valve which alternately applies air pressure to the piston and subsequently vents the air again. The control system as such is operated with out springs and arresting fixtures as pressure is alternately supplied to and vented from the front surfaces of the pneumatically operated floating slide valve.

The main parts in the hydraulic section are the pump body, plunger, seals with thrust rings and inlet and outlet check valves. The check valves are rated for full flow with dynamic sealing.

### **COMPRESSED AIR SUPPLY**

Do not use an air lubricator because the pump was lubricated with silicon free grease (PR-540113-G) when built. The use of an air-oiler can severely damage the pump.



# *SuperLift Jack HPS PUMP*

## **TROUBLE SHOOTING - PNEUMATIC SECTION**

**Symptom:** Pump cannot be operated at low air pressure.

**Cause:** Excessive friction of O-rings on spool valve

**Remedy:** Re-lubricate or replace the O-rings

**Symptom:** Pump can only be actuated at high air pressure.

**Cause:** Air escapes through the piston guide in the top air cap.

**Remedy:** Replace O-ring on the piston extension.

**Symptom:** Pump runs slowly or not at all.

**Cause:** Exhaust or spool valve is "icy."

**Remedy:** Stop pump for a short while and, if necessary, clear air line and supply of moisture.

**Symptom:** Pump will not run and air escapes through the exhaust muffler.

**Cause:** Pilot valve tappet is not sealing in top cap.

**Remedy:** Clean and grease tappet, check for wear and replace if necessary.

**Symptom:** Pump will not run and air escapes through small holes in the spool valve housing.

**Cause:** Spool valve fails.

**Remedy:** Clean spool valve and sleeve, check O-rings and sleeve, lubricate and/or replace.

**Symptom:** Pump will not run and air escapes through the small holes in the bottom cap.

**Cause:** Pilot valve tappet is not sealing in the bottom cap.



# *SuperLift Jack HPS PUMP*

## **TROUBLE SHOOTING - HYDRAULIC SECTION**

- Symptom: Pump operates at a high frequency and short strokes.  
Cause: Pilot valve defective.  
Remedy: Clean, check and lubricate pilot valve parts or replace if necessary.
- Symptom: Pump does not have flow, operates irregularly or does not maintain pressure.  
Cause: Air in the hydraulic system.  
Failure of one of the check valves.  
Suction filter is blocked.  
High pressure seal is worn excessively.
- Remedy: - Check suction line and pipe joints for leaks.  
- Check seals between air and high pressure sections.  
- Check both valve assemblies and clean or replace if necessary.  
- Clean suction filter.
- Symptom: Fluid escapes through the air exhaust.  
Cause: Worn high pressure seal.  
Remedy: Clean fluid from air section, re-lubricate and replace seal.

## **REPAIR SERVICES AVAILABLE FOR QUICK TURNAROUND**

Reliable Wheel Products offers cost-effective, quick turnaround on our liquid pumps, air amplifiers and gas boosters. Using original manufacturer parts, we guarantee our quality workmanship.

Our typical overhaul includes a pressure and cycle test to evaluate the problem, then we completely disassemble the unity. All parts are cleaned and inspected for damage. If any unexpected damage or problems are found, the customer is advised immediately for authorization to proceed. The customer is advised of any additional costs at this time.

Qualified, trained service technicians then replace all seals and check valve kits (and other components as may be required). The unit is reassembled and given another pressure and cycle test, then repackaged and returned to the customer.

Reliable Wheel Products also sells rebuilt kits for your to repair your pump yourself. The kit consists of a spool kit, and air drive kit, a hydraulic kit and a check valve kit, plus a small tub of lubricant. Please be sure to provide a serial number and model number for the unit needing repair.