



CVP700

Operation & Maintenance Manual



COWBOY PUMPS

877-221-9786

KINGSVILLE, TEXAS

WWW.COWBOYPUMPS.COM



OWNER'S INFORMATION

PURCHASED FROM: _____

DATE OF PURCHASE: _____

SERIAL NUMBER: _____

Cowboy Pumps ID Plate



Cowboy Pumps
700 Proco Trail
Kingsville, Texas 78363
361-221-9786
1-877-221-9786

Model CVP-700 Weight 477 Rotation _____

Serial Number _____ Date _____

452 cfm @ 1400 rpm Max 1400 rpm

Recommended Oil 50 wt Recommended oil Turbine Oil

Read owners manual before operating, not recommended for combustible vapors
Owners manuals available online at www.cowboypumps.com

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Warranty

Cowboy Pumps warrants products of its own manufacture for a period of Two (2) Years from the date of shipment to the purchaser against defective workmanship and materials. Normal wear and tear on bearings, inserts, or vanes is not included in the warranty. This warranty is void should the product be repaired or modified in any way not specifically authorized by Cowboy Pumps. nor does the warranty cover any merchandise or component which, in the opinion of Cowboy Pumps, has been subjected to negligent handling, misuse or accident. Purchaser must follow and comply with all "safety regulations and inspections" published by the Federal, State or local governments pertaining to the equipment in order for any claim to be considered, i.e. OSHA. All warranty or damage claims must be submitted in writing to Cowboy Pumps and written approval must be obtained before any product or part is returned to the factory. Cowboy Pumps shall, at its sole option, repair, replace or refund an equitable portion of the purchase price of any product which it determines to have been defective.

Claims on any component not manufactured by Cowboy Pumps will not be approved, and credit will not be issued until such item has been returned, freight prepaid to our factory, and our respective supplier(s) approved the warranty claim(s).

Neither this warranty nor any oral, written or printed statement made by Cowboy Pumps is a service contract or a service guarantee; nor is it any assurance that the product is perfectly designed or perfectly built, or an expression of any belief that the product cannot be improved. this warranty is not a guarantee that the performance of the product will meet the expectations of the purchaser against hazards such as corrosion, wear, tear, misuse, misfortune of problems, arising from incorrect set-up, use, servicing,. Should Cowboy Pumps accept a warranty claim and decide to replace a part of product, the part or product required should be sent to the purchaser or the local distributor, who will be charged for the item at the time. when the defective part or product has been returned freight prepaid to our factory, the purchaser's account will be credited an amount equal to the amount shown on the invoice relating to the defective part of product returned.

The foregoing is Cowboy Pumps be liable for consequential damages suffered by reason of any claimed defect in its product. The foregoing is expressly in lieu of all limitation, the implied warranties of merchantability and fitness for a particular purpose. It is specifically understood that Cowboy Pumps' price is based upon the foregoing limitation of liability and purchaser's waiver for any and all claims for damage. All sales by Cowboy Pumps are made subject to the terms and condition set forth above, and no others. No verbal arrangements, advertising materials, terms and conditions of any purchase order(s) submitted by purchaser, or any other term or statement not contained here in shall be of any force or effect.

Warranty Steps

Follow these warranty steps to solve your potential warranty situation:

1. Contact the company you purchased the product from (dealer).
2. Give model, serial number and date purchased to the dealer.
3. Do not try to repair the pump yourself as this may void the warranty claim.
4. Dealer will give you and RGA number along with the shipping address of the closest Cowboy Pumps Authorized Warranty Center (AWC).
5. Pump must be returned to Cowboy AWC before warranty will be honored.
6. Send pump freight prepaid in the most economical means to Cowboy AWC.
7. Cowboy's AWC will advise you of the extent of warranty.

Lubrication

Cowboy Pumps recommends using high heat turbine oil. Turbine oil is more resistant to heat breakdown. Normal motor oils will lacquer causing excessive wear.

Acceptable oils:

Chevron AIO150

Citgo Pacemaker 150

Exxon Mobil Teresstic 150

Texaco Regal R&O 150

Shell Madrela 150

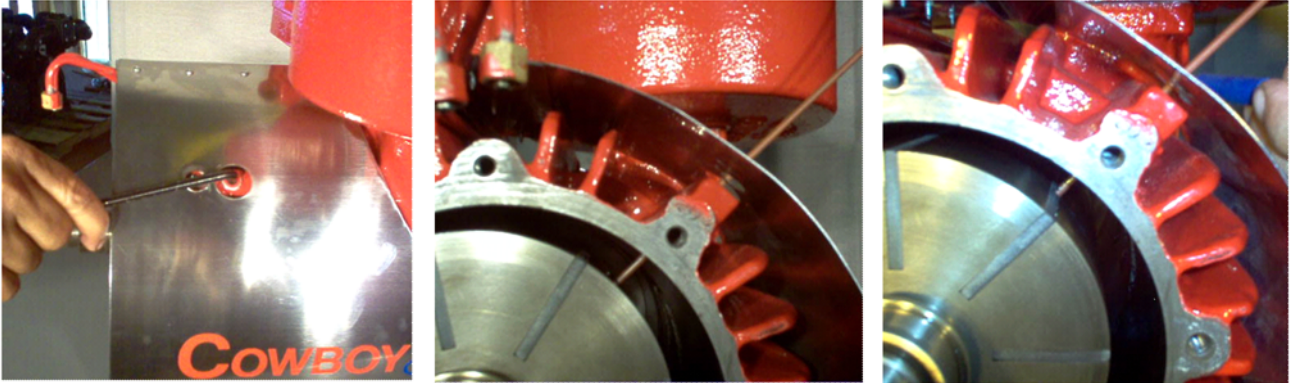
Green Oil

Routine Maintenance

Vane Maintenance:

Cowboy recommends checking vane wear every six months.

Remove plug from vane check port on housing. Insert rod through hole and mark location with a pencil on rod. Rotate rotor until rod drops in vane slot and mark location. Remove rod and inspect marks. If you have 1/4" or more between marks, it is time to replace the vanes. Vanes should be replaced in full sets. Replace plug on housing.



Pump Drive System Inspection

Inspect drive system weekly to insure belts and drive couplers are in good working condition, safety guards are in place and tight and pump is in proper working condition.

Grease u-joints and pillow block bearings monthly.

Inspect filter at least once a month.

Drain used oil from oil catch muffler daily into proper container daily.

Check pump oil level before each operation.

Routinely power wash dirt and mud from pump. Be sure and clean between shroud and pump housing. The housing fins are used to dissipate heat allowing the fan to blow cooling air efficiently.

Tank System Inspection

Test tank relief valves monthly or per tank manufacturer's recommendations.

Drain moisture traps before each load (service if more than one quart of liquid is present in moisture traps/scrubbers).

Pump Flushing

Cowboy Pumps recommends flushint the vacuum pump every 3 months. In severe or corrosive applications daily or weekly would extend the life of the pump.

Flushing Fluids Mixture:

- ½ Diesel fuel
- ½ Pump Oil

- 1.) With the pump turned off, remove filter box lid.
 - 2.) Start pump in vacuum position and slowly pour flushing mixture down intake port inside filter box allowing mixture to reach housing.
 - 3.) Cowboy Pumps recommends 2 to 3 quarts of mixture to complete vacuum pump flush.
- Reinstall filter box lid and run pump fo an additional 3 to 5 minutes to remove the remainder of the mixture.
- 5.) Drain the oil catch muffler and j-tube if equipped with one.
 - 6.) Resume standard pumping preparations.

For further assistance call 877.221.9786

CVP Flush Kit



Vacuum Principles

There are two ways to load with a vacuum pump.

Air loading involves loading a smaller amount of product along with large quantities of air. This is commonly used with a duckbill skimmer to load oil or other light fluids off the top of water, or a thin layer of water off of a hard surface. The CVP700 works well in a skimming environment if reduced to a 2 inch opening. The higher the CFM of the pump, the more effective it will be at skimming.

Vacuum loading uses the vacuum in the tank to load the product. The higher the vacuum in the tank, the heavier the product it will be able to load; or, it can lift the same product a greater distance than a pump with a lower vacuum.

Vane Pumps

Vane pumps are high volume pumps capable of vacuum in the 25" hg to 28" hg range and 30 to 35psig pressure. Industrial vane pumps are usually higher in CFM, lighter, and more compact in size. The higher airflow does result in a louder pump, but does reduce load time.

Installation

Factory Settings

All Cowboy Pumps are factory tested 2 hours to insure the most reliable product built. Cowboys' automatic oil pumps are preset at the factory and do not need adjusting. This new CVP700 will consume approximately 1 quart every 4 hours of pump operation time.

Rotation

Be sure to rotate the pump in the correct direction. The rotation is marked on the nameplate of each pump. Rotation is given facing the output shaft on the pump. Check the rotation of your drive system prior to ordering the pump as we build pumps to turn in both directions. Note: Pump rotation cannot be changed in the field.

Drive System

Cowboy Pumps offers free drive system engineering. Just call one of our engineers for assistance. 1-877-221-9786

Having a properly engineered drive system will insure correct pump performance and longevity. Factors for a proper drive system are horsepower requirements, sheave ratios, belt guards, PTO ratios, hydraulic pressure and hydraulic flow. These are just a few of the questions our trained staff will answer to insure a proper drive system.

Vacuum System

The vacuum pump is only one part of your vacuum system. Before putting your new Cowboy pump in service, check the following vacuum system components to insure they are working properly:

Cowboy Pumps recommends the use of both a primary shutoff and an exterior scrubber (secondary shut-off).

we also recommend you use 3" hot air or blower hose from the pump to the exterior scrubber systems as typical suction hose is not rated above 150F.

There should be a pressure relief valve and vacuum relief valve installed in the system.

Tank manufacture recommends the pressure relief valve to be set at 25psig. The vacuum relief valve can be set between 20" hg and 25" hg. the vacuum relief valve is used to vent a small amount of cool air into the vacuum pump to help in cooling on long vacuum jobs.

Since the CVP700 is an oil-consuming pump we recommend using an oil catch muffler (CP-F1001). This oil catch muffler will catch oil vapors coming from the pump and also reduce the pump noise levels.

Extreme care must be exercised regarding product handling. All vacuum / pressure units must be equipped with a pressure relief valve capable of venting the tank and should always be kept in good operating condition.

Operation

Place 3" four-way valve on vacuum pump in proper position for vacuum or pressure **(NOTE: WARNING ON FLAMMABLE / COMBUSTIBLE MATERIALS)**.

Make sure both scrubber blow-down valves are closed, and seal outlets and manways.

Check Oil level in vacuum pump reservoir. Inspect pump for any physical damage.

See Lubrication Specification page for recommended oil (page5)

Start vacuum pump by slowly engaging PTO on truck and set at proper RPM. Pump will start either pulling a vacuum or pressuring the tank. Upon reaching the desired pressure or vacuum, open one of the rear 4" valves thus allowing fluid to flow. Continue until operation is complete. NOTE: Rotary vane pumps have a minimum and maximum RPM. Too slow results in wash boarding the pump, too fast will cause overheating.

Scrubber/Moisture Trap Operation

Vacuum units should be equipped with an inside shutoff and an outside scrubber to prevent liquid from entering the vacuum pump. The scrubber and shutoff typically will have a 6" stainless steel float ball and a 3" rubber seat. Both must be in good condition to protect the vacuum pump. Any liquid entering the scrubber will be caught in the liquid sump, and drained out the blow down valve. A sizeable amount drained (quart or more) indicates a problem with the float ball or seat and should be corrected. The liquid drained from the scrubber is tank product and must be handled accordingly. Remember the vacuum pump is an air compressor, not a liquid pump. Liquid can do major damage, which would not be covered under warranty.

Don'ts

Your unit should be equipped with a relief valve set at the working pressure of the tank. This valve is never to be removed, plugged or reset unless performed by a qualified shop.

DO NOT release tank suction or discharge pressure until all personnel are in a safe position i.e. not directly behind outlets or near hoses.

DO NOT exceed maximum rpm, or go lower than the minimum rpm on the vacuum pump.

DO NOT load unit in excess of maximum carrying capacity of truck or trailer.

Tank Suction/discharge valve(s) should remain closed at all times except while loading or unloading.

Whenever entering tank be aware of most recent commodity hauled, check for toxic fumes and always have adequate ventilation. Never enter a tank without proper protective clothing and breathing air. If vapors inside tank are combustible, do not enter tank for ignition source will cause an explosion. Any personnel entering tank must be trained in accordance with OSHA Confined Space Entry.

Never place body parts in proximity of suction or discharge line on pump or vacuum tank.

Do not release hatch bolts until pressure has been removed, i.e. open blow down lines. Loosen all four or six bolts without moving bolts to clear lid. Should lid stick to gasket and tank be pressurized, this should prevent lid from blowing open. With all bolts loose, slightly move lid to ensure it is free and there is no pressure in the tank. Move bolts and raise lid. Always keep you body (face and limbs) free from lid while opening lid to prevent injury in case of lid blowing open.

Your vacuum pump should exhaust be equipped with a cam fitting allowing you to pipe the exhaust gases into a low-pressure recovery system or down wind & away from the equipment and personnel. ***Remember the gases could be combustible or harmful if breathed.*** Vapors should be monitored and if determined hazardous, handled in such a way as to eliminate any dangers to drivers or other workers.

Operation Sequence of Vacuum Tank

Close and secure all manways.

Connect hose(s) to rear tank connections, make sure that valve(s) in rear of vacuum tank is in closed position.

Check blow-down valves to insure they are in closed position.

Start compressor/vacuum pump. NOTE: If vapors inside the tank are hazardous or combustible, the exhaust from the vacuum pump should be hoses to a safe location.

Build desired pressure or vacuum.

Open desire valve, product should start flowing. Make sure hose is secure: hose may start whipping if air under pressure enters hose.

Watch pressure gauge when off loading. Pressure should not exceed the tank rated pressure. Relief valve should open at the set pressure and close once the pressure has dropped down. Should pressure build too high, disengage compressor.

Upon completion of operation, close rear valve.

Disengage vacuum pump.

Disconnect hose and connect dust cover to outlet. Load hose before moving truck to insure it is disconnected and driver does not run over, thus ruining hose.

Bleed pressure or vacuum from tank by opening bleed-off or drain valve on scrubber line. Open valve slowly. Stop should valve blow liquid, dust or particles from road into air. Any liquid should be handled properly based upon its hazardous content.

Vacuum tank should be inspected and retested as specified by current DOT regulations.

Vacuum pump oil level should be checked after each vacuum operation. Should the scrubber fail or the product loading foam, product may enter the vacuum pump. A pump flush is recommended to clean out vacuum pump (**see page 3 for Pump Flushing**)

Note: Vane type pumps consume oil from their reservoir. The reservoir level should be checked before each operation and filled with proper oil (**see lubrication specification page (page 5)**)



DOT 407 Tanks

DOT 407 designed and fabricated vacuum transports allow you to haul combustible liquids with special precautions. You must always remember if the material you are handling is combustible that with the right mixture of air (oxygen) and any ignition source (static electricity, spark caused by two metal objects striking or rubbing each other) or heat and an explosion or fire will occur.

DON'TS

DO NOT load or unload until properly grounded, (one ohm) has been properly attached to tank. (NOTE paint is an insulator: make sure proper connection has been made).

DO NOT use compressor to build up pressure inside of tank. You are supplying the necessary oxygen for an explosion.

DO NOT pull vacuum on the tank with flammable vapors inside the tank. They will be exhausted through the 3" hose to the outside and could cause a fire outside the tank.

DO NOT remove relief valve.

DO NOT move trailer if product is leaking.

DO'S

Blanket the inside of the tank with an inert gas (nitrogen) when loading, hauling and unloading flammable liquids. If you must pressure off, use an inert gas.

Unload tank with an approved pump, not the vacuum pump.

Ground tank before unloading.

Inspect relief valve regularly for cleanliness and proper operation. Relief valve should be pressure tested regularly (minimum of monthly).

In case of emergency, push the emergency kill button on the front of the vacuum tank.

Cowboy's Pump Accessories

CA-8016	J-Tube - 3" Pre drilled for pump mount
CA-89300	4-way valve - 3" for CRP-750
CA-9152K	Auxiliary Oil reservoir kit - 7 gal for CVP-700
CA-9279	Relief valve nipple - 3"X8" w/1 1/2" coup. for CVP-700
CP-F1001	Oil catch muffler - 3" for CVP-700

Drive System Accessories

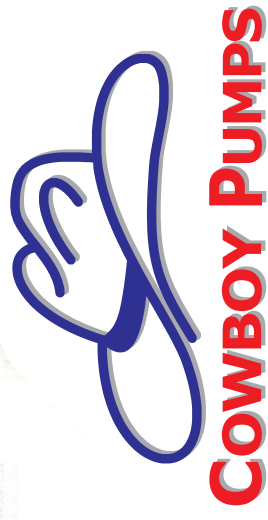
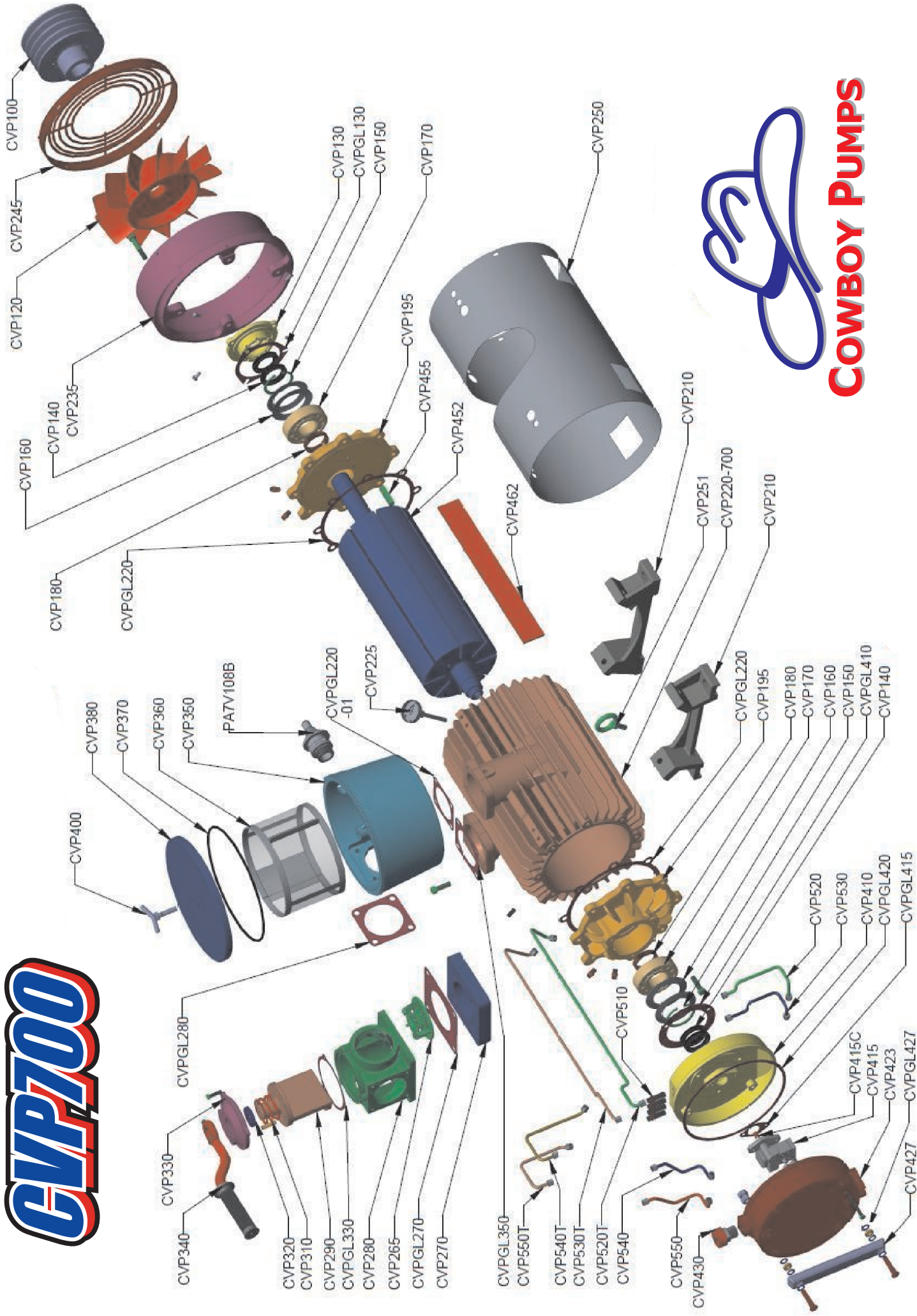
Order per transmission	Muncie PTO's
CD-HP5000 & CD-HM2500	hydraulic Pumps and Motors
HY-570 AU2X	Hydraulic fluid reservoirs
CD-PB1.5STD	Pillow block bearings
VB-B75	V-belts
CVP100	Sheaves
CVP750C9	Couplers - Hydraulic/Angle Drive
CD-GB4001:1	Angle drive gear box 1:1 ratio
CD-Hyd-1-12	hydraulic fluid cooler - 12 volt
CD-PF8182	Adapter shaft - 1 1/2" for CVP-700
CD-9192	Jack shaft - 1 1/2"
CVP700H	CVP-700 Hydraulic Drive Assm.
CVP750-ASM	CVP-700 Angle Drive Assm.

Pump Mounts

CVPM-SB	CVP-700 Side frame, belt drive, mount
CVPM-SH	CVP-700 Side frame, hydraulic drive, mount
CVPM-TB	CVP-700 Top frame, hydraulic drive, mount
CVPM-TH	CVP-700 Top frame, hydraulic drive, mount
CVPM-SA-M	CVP-700 Side frame, angle drive mount

Note: Cowboy Pumps mount are made of black powder coated 3/8" steel. Assembly bolt holes are pre-punched. All you need to do is drill frame bolt holes and assemble. We also offer a completely engineered pump mount/drive system mounting kit. Kits come complete with PTO, sheaves and v-belts, cam fittings, hoses and pump mount. Call Cowboys engineers for more details at 1.877.221.9786.





CVP-620BKIT	CVP620-Rebuild Kit W/Brgs.
CVP-620KIT	CVP620-Rebuild Kit
CVP100	Sheave-4BX6.0
CVP100-1.5-KIT	Sheave/Hub Kit-1 1/2"
CVP100-42-KIT	Sheave/Hub Kit-42MM
CVP110-1.5	Bushing, Sheave-1 1/2"
CVP110-42	Bushing, Sheave-42MM
CVP111	Bolt-Sheave to Hub
CVP112	Bolt--Remove Sheave From Hub
CVP120-R	Fan-CCW Rotation
CVP120CW	Fan-CW Rotation
CVP126	Bolt-Fan Guard To Shroud
CVP130	Seal-Housing Front Shaft
CVP131	Lock Washer
CVP140	Seal-Rotor
CVP150	Snap Ring-Rotor
CVP160	Spring-Bevel
CVP170	Bearing-Rotor
CVP185	Spacer-Rotor
CVP195	Cap, Housing
CVP191-H	Plug Countersunk Hex
CVP192	Bolt-Cap to Housing
CVP200	Connector
CVP201	Plug for End Plate
CVP210	Base
CVP220-700	Housing
CVP222	Bolt-Base to Housing
CVP223	Lock Washer
CVP225	Thermometer
CVP230	Name Plate
CVP235	Shroud-Fan
CVP241	Bolt-Oil Pump to Seal Housing
CVP242	Bolt-Fan Shroud to Housing
CVP243	Lock Washer
CVP245	Name Plate
CVP250	Shroud-Housing
CVP251	Eye Bolt
CVP251-10	Washer, Spacer
CVP252	Rivet
CVP253	Sheet Metal Screws

CVP254	Nipple
CVP255	Elbow, Thrd
CVP265	Back up Valve-HO
CVP270	Spacer Plate
CVP271	Bolt-Spacer Plate to Housing
CVP275-R	4 Way Valve Assembly
CVP280	Housing 4-Way Valve
CVP290	4-Way valve Diverter Vane
CVP300	Pin
CVP310	Spring-4-Way Valve
CVP320	Seal-4-Way Valve
CVP330	Valve Cap
CVP331	Bolt-Seal Housing
CVP333	Bolt-Valve Cap to Valve Body
CVP341	Bolt-Valve Without Filter
CVP342	Bolt-Lever 4-Way Valve
CVP345	Lever-4-Way Valve
CVP350	Filter Box
CVP351	Bolt
CVP353	Bolt-Filter Box to Housing
CVP360	Filter Element-S/S
CVP370	O'Ring-Filter Box
CVP380	Filter Box Lid
CVP390	Washer-T-Bolt
CVP400	T-Bolt-Filter Box
CVP410	Seal Housing-Rear
CVP410S	Seal Housing-Side Mount
CVP410S-CW	Rear Seal Housing Side MNT CW Rot
CVP412	Bolt-Fan Shroud to Pump Shroud
CVP413	Banko Fitting Female Soldier
CVP414	Banko Bolt
CVP415	Oil Pump-CCW
CVP415C	Oil Pump-CW
CVP417	Lock Washer
CVP418	Oil Pump Coupling
CVP419	Nipple-Oil Pump Intake
CVP421	Bolt-Oil Tank Cover
CVP422	Washer, Aluminum
CVP423	Oil Tank Cover
CVP427	Oil Sight Window

CVP430	Breather Cap-OIL
CVP451	Roll Pin
CVP452	Rotor
CVP455	Keyway-Rotor Shaft
CVP462	Vanes-Premium
CVP510	Bulk Head Fitting
CVP513	Sealing Washer for Bulk Head Fitting
CVP520	Oil Line - #1 Internal
CVP520S	Oil Line - #1 Ext. Side Filter
CVP520S-CW	Oil Line - #1 Ext. Side Filter-CW
CVP520T	Oil Line - #1 External
CVP530	Oil Line - #2 Internal
CVP530S	Oil Line - #2 External Side Filter
CVP530S-CW	Oil Line - #2 External CW
CVP530T	Oil Line - #2 External
CVP540	Oil Line - #3 Internal
CVP540S	Oil Line - #3 External Side Filter
CVP540S-CW	Oil Line - #3 External CW
CVP540T	Oil Line - #3 External
CVP550	Oil Line - #4 Internal
CVP550S	Oil Line - #4 External Side Filter
CVP550S-CW	Oil Line - #4 External CW
CVP550T	Oil Line - #4 External
CVP700	Hydraulic Motor Mounting Plate
CVP700HC	Hyd. Coupler - 42MM x 1 1/4" x 1/4" KW
CVP715	Hydraulic Bell Housing Mount
CVP715-A-ASM	Angle Drive Assembly
CVP715H	Hydraulic Drive Assembly
CVP720	Guard Rings - Hyd Drive
CVP750	Angle Drive Mount Adapter
CVPG700-KIT	Gasket Kit - CVP700
CVPGL130	Gasket - Seal Housing
CVPGL190	Gasket - Housing Cap
CVPGL220	Gasket - End Cap
CVPGL220-01	Gasket - Housing Inlet
CVPGL220-02	Gasket - Housing Outlet
CVPGL270	Gasket - Spacer Plate
CVPGL280	Gasket - 4-Way Valve
CVPGL330	Gasket - Valve Cap
CVPGL350	Gasket - Filter/Housing
CVPGL410	Gasket (Seal Housing)
CVPGL415	Gasket - Oil Pump
CVPGL420	Gasket - Oil Tank
CVPG-427	O-Ring, Oil Sight Window
PAYV108B	Vacuum Relief Valve

COWBOY  **PUMPS**

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Trouble Shooting

Excessive Heat

<i>Over speeding Pump</i>	Change speed either by sheave, or engine speed.
<i>Pump fan restriction</i>	Wash outside of pump Remove obstacle blocking fans
<i>Poor lubrication</i>	Improper viscosity oil Oil pump malfunction Broken oil line
<i>No pump air circulation</i>	Adjust vacuum relief valve

Lack of Vacuum

<i>Vacuum tank leaking</i>	Place pump in pressure mode, inspect for leaks at flanges, hoses, gaskets and manways.
<i>Collapsed hose liner</i>	Locate and replace
<i>Stuck float ball</i>	Place pump on pressure to dislodge
<i>DOT units</i>	Closed isolation valve

Pump Locked Up

<i>Foreign body in pump</i>	Remove end cap and clean pump
<i>Vane or housing broken</i>	Tear down and rebuild
<i>Overheated</i>	Allow to cool, and check excessive heat section above
<i>Pump frozen</i>	Add diesel oil mixture to melt ice and lubricate



Step 1

Starting from oil pump end drain oil from bottom, and remove 4 bolts holding oil cover.



Step 2

Remove cover exposing oil pump and lines.



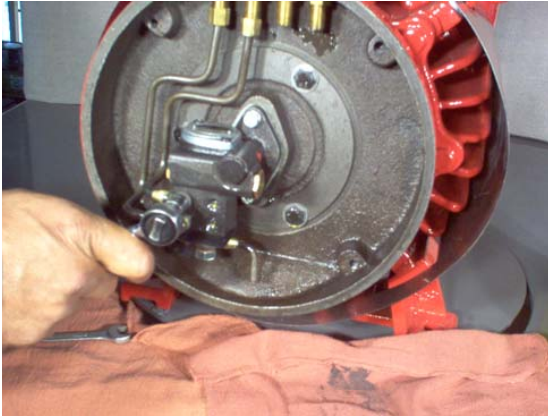
Step 3

Remove nuts from bulkhead fittings on interior oil lines.



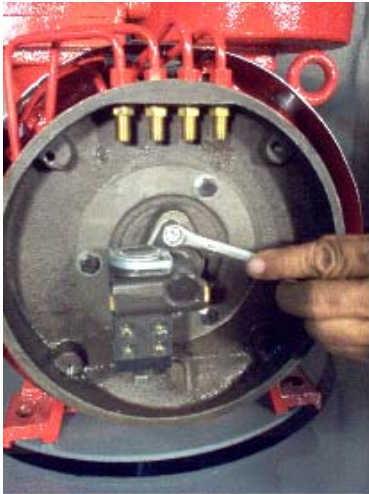
Step 4

Remove lines from bulkhead fittings.



Step 5

Remove banjo bolt from oil pump, and remove oil lines.



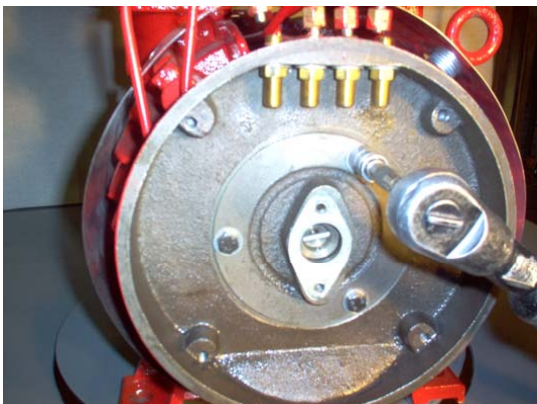
Step 6

Remove two bolts holding oil pump in place.



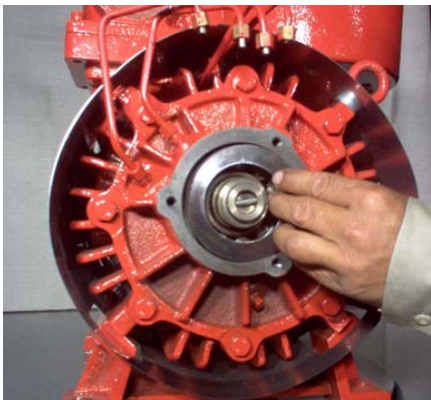
Step 7

Remove oil pump, being careful not to lose oil pump coupling



Step 8

Remove 3 bolts holding seal housing to end cap.



Step 9

Remove bevel washers from end cap.



Step 10

Remove 8 bolts holding end caps in place.



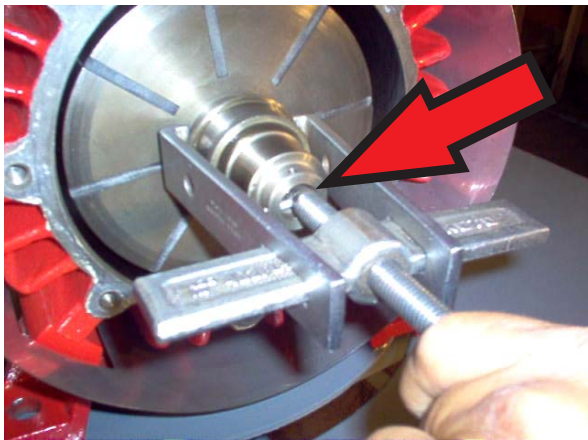
Step 11

Tap on end cap with rubber hammer to break gasket seal.



Step 12

Remove end cap from housing.



Step 13

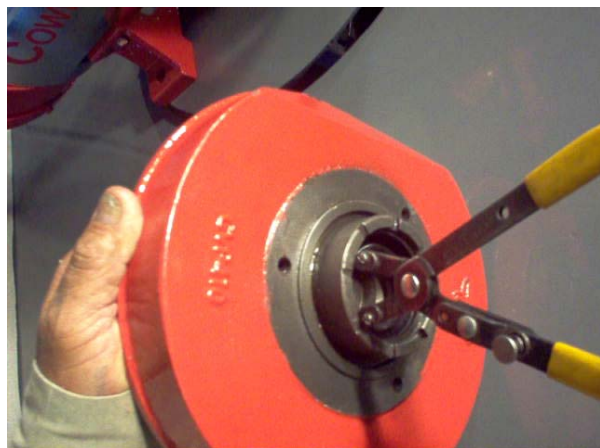
Place washer between puller and rotor to protect roll pin.

If replacing bearings use puller to remove race from rotor



Step 14

Remove old vanes, and install new vanes
Be sure to apply oil to vanes with a brush prior to installing.



Step 15

Using snap ring pliers remove snap ring, and seals.



Step 16

Lubricate seals, and install in seal housing making sure seals are back to back with lips facing out.



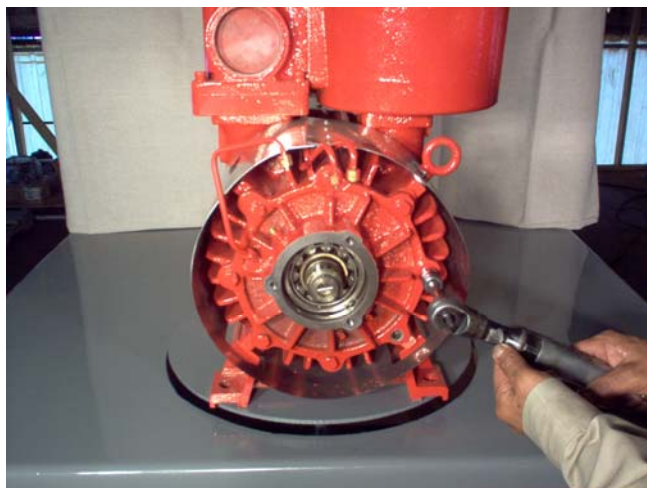
Step 17

Inspect diverter in four way valve making sure there are no obstructions, and that diverter does no over travel. Diverter is a metal to metal seal. If you detect a gap between components replace diverter valve.



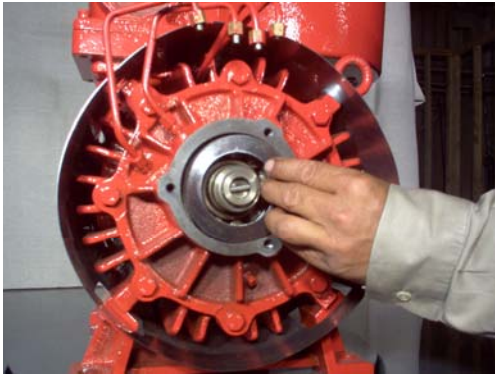
Step 18

Open filter box lid remove and clean filter, and filter box of any debris.



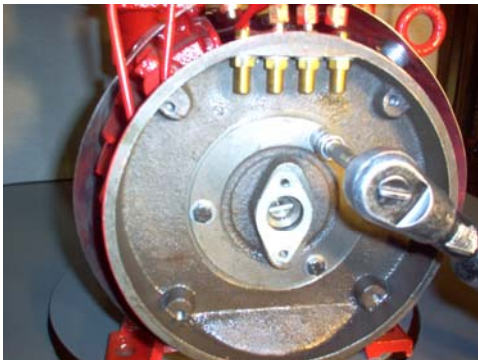
Step 19

Install new gasket and replace end cap making sure to place long ear next to corresponding mark for cap alignment.



Step 20

Install bevel springs with cone face tapering outward.



Step 21

Replace gasket between seal housing and end cap and install seal housing on end cap.



Step 22

Install oil pump making sure to align coupling



Step 22

Install oil lines and oil cover.
Fill reservoir with recommended oil (***see lubrication specification page 5***).
Fill oil lines at bulkhead fitting with oil to prime pump.

Warning & Caution Decals

Decals have been placed in the proper location on your new pump and should be explicitly followed. Naturally, we cannot foresee all of the possible hazards which you may encounter while operating the tank, so good common sense should always be exercised. If for any reason, the decals become lost or illegible, contact Cowboy Pumps or one of their dealers and new ones will be sent at no charge.

CAUTION

Read owner manual before operating this pump.

www.cowboypumps.com

Do not operate pump without proper lubrication.

Observe all appropriate company and OSHA safety
CP-1 COPYRIGHT 2004

DANGER

Do not operate unit without proper safety devices: A belt guard must be properly installed, a pressure relief valve must be properly installed not to exceed pressure on nameplate. Overpressure can cause personal injury and damage to vessel and equipment. Consult owners manual for more safety items
CP-2 COPYRIGHT 2004

DANGER

Possible combustible or noxious vapors

Combustible vapors may cause engine to run away possibly resulting in serious injury an equipment damage. to avoid a fire or health hazard, discharge vapors as far away from operator as possible or dispose of them in a waste containment system.

Always obey all safety rules and OSHA regulations when handling flammable, poisonous or combustible vapors.
CP-3 COPYRIGHT 2004

CAUTION

Verify pump operating speed at vacuum pump drive end.

**OPERATING SPEED
PUMP MUST RUN BETWEEN**

1000 - 1400 RPM

CP-4 COPYRIGHT 2011





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