

Model 7CP6170 shown
(Pump sold separately)

Industrial Clutches

Model 34299
5CP Plunger Pumps

Model 34959
7PFR Plunger Pumps

Model 34971
7CP Plunger Pumps

FEATURES

- Special e-coating offers 3 to 6 times better corrosion resistant finish.
- Special bearings with unique grease offer more consistent viscosity at high temperatures and better water resistance for harsh environments.
- Special projection welded coil and plate offers extra durability in heavy vibration applications.
- Superior strength forged rotor, hub and armature offer superior flux and maximum torque for long life.

SELECTION: Select the clutch to match the pump shaft size and belt horsepower rating.

INSTALLATION:

1. Remove the four bearing cover screws on pump and discard.
2. Line up the clutch plate with the bearing cover screw holes with the **dish side out**. Secure with four flanged centering screws (M6-7PFR), (M8-5CP, 7CP) and torque per specifications. **Do not use pump bearing cover screws.**
3. Mount the coil assembly onto the clutch plate and secure with four flanged centering screws (1/4"-20x3/8") and torque per specifications.
4. Lubricate the pump shaft with antiseize lubricant and insert the key into the pump shaft.
5. Place taper sleeve on pump shaft with larger diameter facing pump side. **Do not put antiseize on outside diameter of taper sleeve.**
6. Slide the rotor and armature assembly over shaft. Be certain keyway of pump is aligned with armature keyway.
7. Slide shaft spacer (5CP, 7PFR) or flat washer (7CP) over shaft screw. Apply Loctite 242 to threads of shaft screw and torque per specifications.

SPECIFICATIONS

MODEL	34299	34959	34971
Pump Model	5CP	7PFR	7CP
Clutch Grooves.....	8	8	8
Shaft Size	20 mm	24 mm	24 mm

COMMON SPECIFICATIONS

	U.S. Measure	Metric Measure
Diameter.....	7.3"	(185 mm)
Belt Type	Poly-V, L-Style, 8 Ribs	(Poly-V, L-Style, 8 Ribs)
Torque.....	75 ft./lbs.	(101.7 Nm)
Watts	44	(44)
Amps	3.6	(3.6)
Power Required	12 VDC	(12 VDC)
Weight.....	13.0 lbs.	(5.89 kg)
Dimensions.....	7.3 x 2.07"	(185 x 52.6 mm)

8. Connect the lead wire to the positive side of the electric circuit. Also be certain there is an adequate grounded connection to the coil assembly plate.
9. Engage and disengage the clutch to assure proper functioning. If full load is required initially from the pump, allow clutch to engage 20-50 cycles before commencing normal operation for adequate burnishing.

NOTE: Follow standard belt mounting and center distance procedures to determine drive pulley size, speed and horsepower per belt.

OPERATION: The clutch works with a flow switch, pressure switch or a manual on/off switch installed in the system and connected to a 12VDC power supply. When the trigger gun is released or the unit is manually turned off, a signal is sent to the clutch to disengage and cease pump operation. When operation resumes by opening the trigger gun or manually turning the system on, the clutch will engage, starting the pump and resuming full operation.

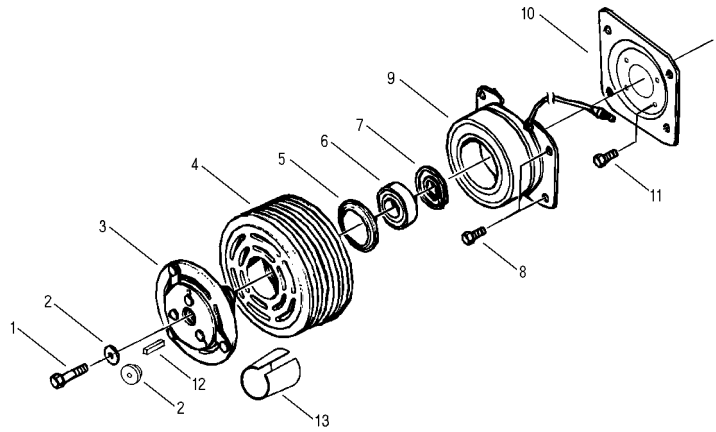
“Customer confidence is our greatest asset”

PARTS LIST

ITEM	DESCRIPTION	MATL	MODEL NUMBER	QTY
		34299 34959 34971		
1	Screw, Shaft, HH	STZP	35032 35032 92530	1
2	Spacer, Shaft	STZP	— — —	1
	Washer, Flat	STZP	— — 26118	1
3	Armature	—	— — —	1
4	Rotor	—	— — —	1
5	Seal	—	— — —	1
6	Bearing	—	— — —	1
7	Ring, Snap	—	— — —	1
8	Screw, Coil Assembly	STZP	— — —	4
9	Assembly, Coil	—	— — —	1
10	Plate, Clutch	STZP	— — —	1
11	Screw	STZP	34935 34934 34935	4
12	Key	STL	35034 30067 30067	1
13	Sleeve, Taper	STZP	— — —	1
—	Lubricant, Antiseize	—	6106 6106 6106	1

Material Codes (Not Part of Part No.): STL=Steel STZP=Steel/Zinc Plated

EXPLODED VIEW



TORQUE REQUIREMENTS

Item	Thread Size	Tool Size	in.lbs.	ft.lbs.	Nm
Plate Screws (7PFR)	M6	M8 Hex	55	4.4	6.2
Plate Screws (5CP, 7CP)	M8	M10 Hex	115	9.4	13
Coil Assembly Screws	1/4"	3/8" Hex	55	4.4	6.2
Shaft Screw	M8	M13 Hex	115	9.4	13

TROUBLESHOOTING

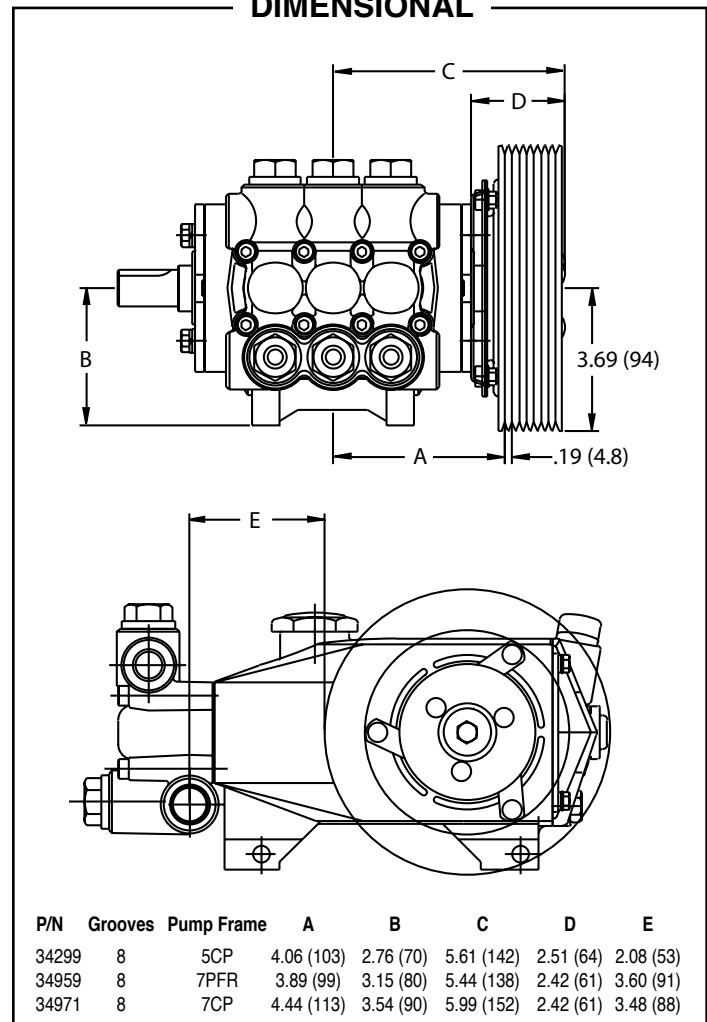
Clutch will not engage	<ul style="list-style-type: none"> Check positive and ground connections. Check for 12 VDC.
Squealing belt(s)	<ul style="list-style-type: none"> Check belt slippage or belt tension.
Short belt life	<ul style="list-style-type: none"> Check side-to-side alignment and belt tension.
Excessive noise when clutch disengaged	<ul style="list-style-type: none"> Worn bearing; replace clutch assembly.
Clutch cycling	<ul style="list-style-type: none"> Check for adequate voltage. Worn rotor or discolored rotor surface; replace clutch assembly.
Scraping noise when clutch engaged and/or disengaged.	<ul style="list-style-type: none"> Check alignment of coil and rotor assembly.

WARRANTY

90 Day Warranty

Refer to complete CAT PUMPS Warranty for further information.

DIMENSIONAL



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