

CORNELL PUMP COMPANY

# GENUINE PARTS



Preferred Australian Mining Supplier &  
Cornell Pump Partner

**SOURCE**  
Bespoke Pumping Solutions

# CORNELL PARTS



## Genuine Cornell Replacement Parts

Since our establishment in 1946, Cornell Pump has been dedicated to providing high-quality replacement parts for our pumps. Our parts are designed with the same robustness and quality as every Cornell product, and we back them with a six-month warranty.

Our experienced team receives thousands of inquiries each year about pumps and hydro turbines, priming systems, IoT monitoring, and more. If you have purchased any product from Cornell, we should have the spare part you need. We still supply parts for pumps that were manufactured back in the 1950s!

We often receive requests for extremely old parts, prompting us to consult our hand ledgers to retrieve the build information. This is a testament to the enduring quality of Cornell pumps and our spare parts.

## eCommerce

Cornell's eCommerce system is the exact opposite of hand ledgers for old parts. It is a lightning-fast system that provides you with a faster, more efficient, and timelier experience when finding and ordering genuine Cornell Pump parts. With greater certainty and easier reordering, our eCommerce system streamlines the process and ensures our customers a seamless and convenient experience.



**Faster:** We can key off your serial number to give you your exact build and an exploded view of your product.



**Efficiency:** Seeing the exact part and knowing the name and part number with the look-up feature reduces mistakes in ordering and helps you see other related parts you may want to order.



**Timelier:** You can log in to order parts when convenient—the system is up 24 hours a day, seven days a week.



**Certainty:** You can confirm what you want to order and see the schematics of your purchase. It takes the guesswork off of similar parts.



**Reordering:** The system tracks your orders so you can re-order. It also lets you pick up certain kits/parts at maintenance intervals. It's there, nothing is missed, and re-ordering is fast and easy.

## PLEASE NOTE

*You must sign up to use the eCommerce site. Please contact [parts@cornellpump.com](mailto:parts@cornellpump.com) to set up an account.*

## Reasons to Buy Genuine Cornell Parts

Buying non-Cornell parts might save some money upfront but can be costly in the long run. Buy original parts because:

**Designed For Equipment**—tolerances can be less than 1/100,000th of an inch; buying the original part means it works.

**Automatically Revised**—if there is any change, Cornell knows and will make it.

**Double-Checked Compatibility**—if you have an old part, like the example from the 1950s, Cornell can check it for usability. If parts are available, we have the solution for what will work.

**Warranty**—the parts come with a Cornell warranty, and more importantly using non-Cornell parts may void your pump's/turbine's warranty.

**Safety**—our robust designs may not be emulated by others. Fewer parts may be weak and break, leading to catastrophic results.

**Quality**—you bought a Cornell for its renowned quality. Replace the parts with the same standard.

**Expertise**—Cornell's professional staff can answer advanced questions about parts and can suggest other parts you may want to replace at the same time.

## Repair Kits

Cornell offers customized repair kits for some of our solids handling pumps. Includes materials you'll need in standard maintenance, such as:

WEAR RING	IMPELLER KEY
SHAFT SLEEVE	IMPELLER SHIMS
VOL. GASKET	MECHANICAL SEAL
IMPELLER WASHER	LIPSEALS
LOCKSCREW KIT	V-RING

Designed to Cornell's exacting standards, these parts help ensure your warranty and maintain your pump investment in a top-running shape.

*Kits currently offered for models:*

3HC-RP	8NHTA-RP
4NNT-RP	8NHTH-RP
6NHTA-RP	



# ADDITIONAL FEATURES

## CORNELL PRE-ASSEMBLED FRAME KITS

Cornell Pump offers several versions of assembled frame kits for pump rebuilds. The kits are available in frame-mounted and engine-mounted styles in F-18, F-16, and F-5 configurations for many popular pumps such as the 8NHTA, 8NHTH, 6NNT, 4NNT, 6612T, 6822MX, and many others.

The Cornell parts team can help with finding the exact configuration for you. More than 60 models/ configurations are available via this program.

## FEATURES AND BENEFITS OF KITS



**Time Savings.** The kit comes complete and mates with wet ends easily.



**Cost savings.** Kits are less expensive than individual parts—and pre-assembled!



**Cornell Quality.** Be assured the replacement parts are up to Cornell's genuine standards, and the frame is built right, ready to go.



**Extended Warranty.** The fully built kit comes with a one-year warranty, as opposed to six months on individual parts.



**IIOT ready.** New frames have built-in mountings for Cornell Co-Pilot and come standard with new short-range wireless Cornell Pulse.



**Innovations.** Allows Cycloseal® and can be made with RunDry™ and RediPrime™ options.

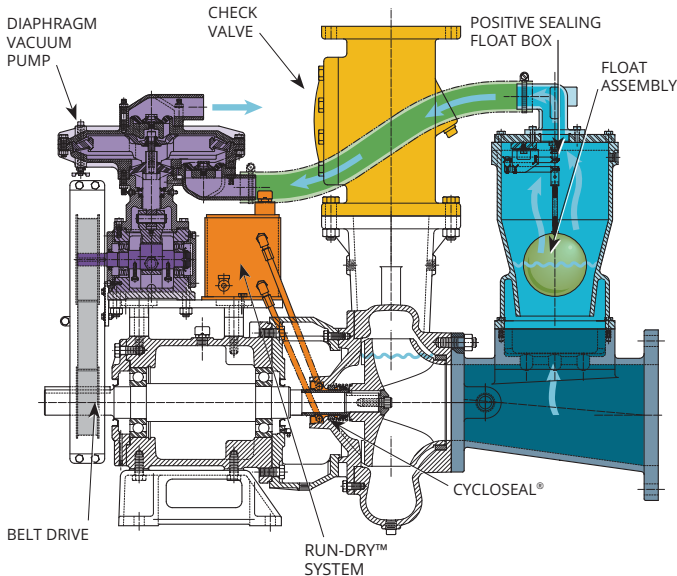
## OEM MECHANICAL SEAL KITS

All parts needed to do a proper seal swap out with OEM parts. Kits are on the shelf, ready to ship out the same day.

More than three dozen common combinations are available—save time and money. And relax because they are genuine Cornell parts.

# ADDITIONAL FEATURES

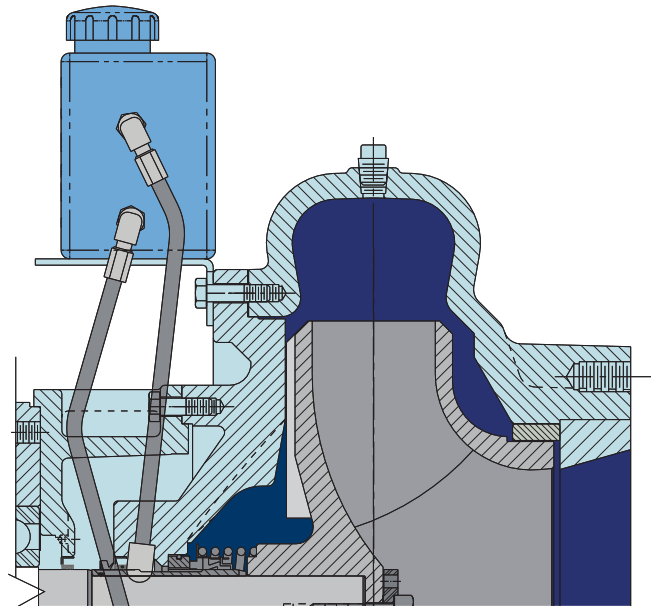
## REDI-PRIME®



**CORNELL REDI-PRIME PUMPS** feature a patented, fully automated system for rapid priming or re-priming without constant monitoring. With oversized suctions, they deliver high flow, reduced friction losses, and enhanced suction lift, making them easily handle large solids and air/liquid mixtures. Redi-Prime also maintains premium hydraulic efficiency to reduce energy consumption. The priming system was designed with the environment in mind, utilizing a positive sealing float box and a diaphragm vacuum pump to prevent water carry-over and contamination. Most Cornell pumps can be easily fitted with the Redi-Prime system..

- Fully automatic priming and repriming
- Handles air/liquid mixtures with ease
- Rapidly primes and re-primers completely unattended
- Environmentally safe priming system designed to prevent product leakage
- Premium hydraulic efficiency for reduced energy consumption

## RUN-DRY™



**CORNELL'S RUN-DRY SYSTEM** is a solution for applications where the pump might run dry. It includes an auxiliary gland and oil reservoir that lubricate the seal faces and prevent dry running during priming, re-priming, or standby operation. The system features continuous circulation and cooling of the lubricant and seal faces, and allows the pump to run dry for hours without damaging the mechanical seal.

- Run dry for hours without damaging the seal
- Cools and lubricates seal faces
- Ideal for applications that could operate in a dry condition
- Usable in conjunction with Cycloseal® and Redi-Prime®

61017MP with Run-Dry™



# ADDITIONAL FEATURES

## CYCLOSEAL® SAVES YOUR FROM FLUSHING AWAY MONEY!

Each pump requiring flush water can incur costs of \$6,000 or more. For instance, a typical 6" pump uses 3 gallons per minute, which may not seem like much. Still, it adds up to over 1.57 million gallons (5,950 m<sup>3</sup>) annually. Larger pumps, such as 8" and 16" to 24" pumps, consume even more water, with some using 8 million gallons (30,300 m<sup>3</sup>) or more per year. When you factor in multiple pumps per location and several locations per organization, the amount of water utilized just for seals is HUGE.

Cycloseal® provides an answer:

- REQUIRES NO FLUSH WATER.
- Uses inexpensive and easy-to-change type 1 or 2 mechanical seals.
- Saves \$6,000 or more in flush costs.
- More environmentally friendly alternative.
- Plus Cornell Pumps are high-efficiency and can save your operation even more money.

COST OF A GALLON OF WATER	GALLONS PER MIN	GALLONS PER DAY	GALLONS PER YEAR	EXPENSE
\$0.004	1	1,440	525,600	\$2,102
\$0.004	3	4,320	1,576,800	\$6,307
\$0.004	5	7,200	2,628,000	\$10,512
\$0.004	8	11,520	4,204,800	\$16,819

The table illustrates the costs involved, with prices per gallon typically paid by a wastewater treatment plant for their water. In some locations, costs can be as high as \$0.22 per gallon, resulting in nearly \$35,000 in flush water for the same 6" pump.

## CORNELL PULSE™



- CONNECTS VIA SHORT-RANGE WIRELESS
- PROVIDES A SNAPSHOT OF OPERATION
- INCLUDED ON ALL NEW CORNELL PUMPS\*
- RETROFITTABLE TO OLDER PUMPS OR OTHER EQUIPMENT

### LEADING-EDGE REAL TIME SNAPSHOT

Cornell Pulse is a new real-time method to measure pump temperature and vibration. The device is a small wireless unit, less than 2" in circumference, mounted on the pump and takes readings when prompted by the user via a mobile app. The app can be used on phones and tablets and detect common pump issues if the user keeps track of the readings. Pulse is designed

to withstand tough wash-down conditions and can last up to five years with daily measurements (more frequent measurements use battery power and reduce service life.)



DOWNLOAD THE PULSE APP



Connect via Cell



5 Sensor Inputs



Remote Start Up



## CORNELL Co-Pilot™

### THE POWER OF IIOT

Cornell Co-Pilot is a monitoring system that connects to your pump to track temperature, vibration, and location using battery power. Co-Pilot can also be powered with a wired connection for continuous monitoring and control system integration. Co-Pilot is part of our Pumps Industrial Internet of Things (IIoT) and reflects our dedication to cutting-edge design and meeting customer needs.

### USE THE CO-PILOT TO:

- Plan maintenance
- Check operation
- Reduce manual inspections
- Track pump location
- Demonstrate run conditions to customers on warranty claims
- Improve run time through the maintenance program
- Monitoring at your fingertips

### MONITORING AT YOUR FINGER TIPS

Easily monitor your pump's performance with desktop and mobile apps available for iOS and Android. Receive alarms for out-of-condition operations and view the last GPS location of the pump, all in one convenient platform.

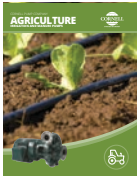
### CORNELL CO-PILOT ALLOWS YOU TO:

- Cloud monitor single and multiple pumps via IIoT
- With battery power, monitor temperature, vibration, and GPS location
- Through external power, additionally monitor pressure, flow, start/stop operations, and more\*
- Track data over time via web-based and mobile apps
- Real-time pump data for maintenance, monitoring performance degradation, and critical conditions
- Receive alerts for preset running conditions

\*Requires external sensors; contact Cornell for details.

CORNELL PUMP COMPANY

# MARKET & PRODUCT LINE



AGRICULTURE



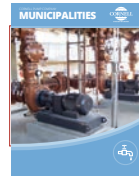
FOOD PROCESS



INDUSTRIAL



MINING



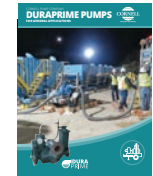
MUNICIPAL



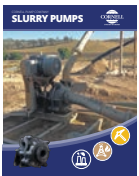
WATER  
TRANSFER



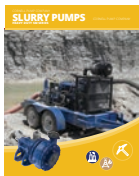
REFRIGERATION



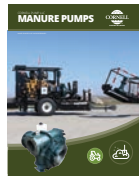
CONSTRUCTION



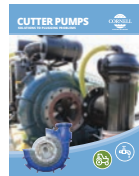
SLURRY



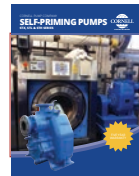
SLURRY SM



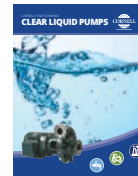
MANURE



CUTTERS



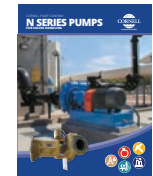
SELF PRIMING



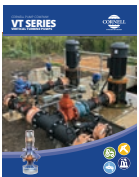
CLEAR LIQUIDS



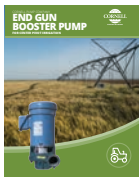
MX SERIES



N SERIES



CYCLONE™



EDGE™



HYDRAULIC  
SUBS



IMMERSIBLE



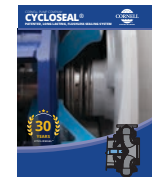
CD4MCU



RUN-DRY™



PRIMING  
SYSTEMS



CYCLOSEAL®

Cycloseal® and Redi-Prime® are Registered Trademarks of Cornell Pump Company.

Cornell pumps and products are the subject of one or more of the following U.S. and foreign patents:

6,074,554; 6,036,434; 6,079,958; 6,309,169; 6,104,949.

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