

Pump Surgery

by Scott Webb

Other than the pool shell itself, there's no more critical component of a pool system than its engine of circulation, the pump. Making pump replacement efficient, then, is equally critical to a service company's health.

A pump repair job begins with the discovery of something not right with the pool's heart — a growing murmur or indications of pressure loss. This initial troubling discovery may just be water where it shouldn't be, or it may be a slowly developing metallic wail that raises the hairs on the back of a customer's neck.

No matter what stage in its demise, the first drip of a leak or the final shriek of a dying pump, prompt action is essential. A pool lives on without a heater or lights, but without the pump, it's dead.

For a service company, the real issue is to restore or replace the pump as profitably as possible. Like any problem, the earlier it's identified, the better. If the problem has been discovered by a service professional during routine pool maintenance, a diagnosis may be in hand; however, if there's an unfamiliar and untrained voice on the phone, the first challenge is to coax as much information about the symptoms as possible.

Getting those details may be the biggest challenge, notes Erik Thomson, service manager, All Pool Service and Supply, Orlando, Fla. "Most of the calls we get are from housewives," he says, "and that makes it harder because they're just making the call, they're not generally the one who takes care of the pool." Often, however, says Thomson, the customer calls in and offers the generic phrase for a pump problem: "My filter's not working."

Although this statement is technically correct — the filter does not work when the pump quits — it's of little value. Drawing as much information as possible in this situation is an art, and a test of the service manager's communication skills.

"The only time they're really accurate," Thomson says, "is when they're describing a loud motor — the bearings have gone and it's screaming bloody murder. They're good at describing that."

If the pump is not operating at all, notes Javier Payan, president of Payan Pool Service in Santee, Calif., it's worth trying to get the homeowner to fix it himself, saving everyone's time. It may be something simple.

"When we get a call from someone like that, saying their pump's not running, we tell them first to check some things, the cutoff switch, the timer, the automation . . . we want to make sure the system wasn't left in a service mode."

If it's a regular customer, he adds, the service tech tries to visualize the home and equipment layout, and give very specific instructions. "We have in our minds an image of their pool, and we'll say, 'Hey, check the breaker, it's around the side of the house.'" If all the easy fixes don't take care of the problem, then they make the appointment.

There may be those who believe that's bad business, as it may lose the company a profitable service call, but he figures it's a good long-term strategy.

"Sure, we want to charge people for our services," he says, "but the majority of our calls come from our regular customers, and we want to maintain a good relationship with them. We don't want to be in the situation where we're saying, 'Here's our service bill for flipping a switch.'" Most often it's more than just

an unflipped switch, and then it's time to schedule the repair.

At Paradise Pools, Torrance, Calif., the job can often be worked into the normal flow of service. "If it's a leaky seal, something like that," says Adam Morley, co-owner, "we'll find it on a service stop before the homeowner does, and we'll just leave them a note saying, 'By your next service date we'll have fixed your pump seal, it's leaking.'"

Everything in life should be that easy.

Making It Pay

There's an old industry adage that says, "You can be a lousy tech and a good businessman and still make it, but if you're a good tech and a lousy businessman, you're done."

With an appointment for service scheduled, being a good businessman means making it a one-stop repair, two at the most. Multiple trips to a job site make the work unprofitable, so companies strive to bring everything they need.

In order to do that, the tech needs to know the brand, model and horsepower of the pump. Information on other components of the pool system will be helpful, as well. If it's a seal replacement, the parts involved cost very little, but time spent digging in the truck or driving back to the shop is very expensive.

For current customers, getting the right parts should be easy. Most service companies either already have, or are putting in place, improved record systems so such information can be easily accessed. All Pool Service and Supply uses ESC, and Payan Pool Service uses Service CEO, both software programs that track customer history, inventory, equipment, service agreements and many other aspects of the business and deliver them onscreen with a click.

If it's a new customer, however, with no records and little information offered over the phone, says Thomson, there are other clues as to what the tech will be dealing with when he arrives. In his area, for instance, you can make an educated guess about the equipment from the location of the house.

"We know if we go to a certain subdivision," he says, "it's going to be a certain builder and a certain brand of equipment. There are just a couple of options."

Without a good idea of what's in store, however, All Pool sends a scout. "If it's looking like a 100-percent-parts call," Thomson says, "we'll usually have one of our estimators look at it first, because at that point it's a mission to get information more than anything. The estimator goes to the home and figures out where we need to go with it."

Even with advance reconnaissance, however, techs admit there are times when the dreaded third trip is necessary due to a forgotten part. They don't like it, but it happens.

"The biggest 'I can't believe I forgot that' is wire and conduit," says Morley. "The new pump may not sit in the exact same spot as the old one, and the old wire conduit may not reach the new pump. That, and forgetting the plumbing parts, especially when all the new pumps are set up for 2 inch, and I'm tapping in or retrofitting it to an inch-and-a-half pipe."

The Death Rattle

On arrival, the tech may find any number of things amiss. But if the source of the problem really is the pump, it's likely to be either a leak or the end result of a leak — that is, a pump that is disturbing the neighbors.

“Actually,” says Payan, “the sequence of events is your pump is going to run hot, and the water inside is going to turn to steam.

“The first thing that happens then is you melt your pump basket and/or melt the plastic fittings that thread onto the pump, and then you burn up the seal.

“The seal is what protects the motor from water, so once the seal is leaking for any length of time, the motor gets wet, the bearings get wet and then they dry up. When the pump shuts off, the bearings rust out, and from then on the motor starts making a racket. Left alone, it will just continue to get louder and louder and louder.”

At this point, everyone within howling distance becomes aware of the problem, and the diagnosis becomes painfully clear. It’s much too late to save the pump by this time, of course. The key is to repair leaks in the early stages — where a proactive approach can save motors from a premature death.

Repair Or Replace?

If that opportunity has been missed, there’s rarely any choice but to replace the pump. Indeed, the idea of fixing any appliance has become almost quaint.

“I’ve been doing this for 22 years,” says Payan, “and long ago we tried to repair the motors, either doing bearings or a rebuild, but now with the wholesale cost of the motor it’s better just to replace it.

“We used to do bearings in-house here, but honestly, sometimes you get an old motor with a lot of corrosion on it, and the customer is expecting to have it repaired, and then you end up spending three or four hours trying to fix this thing, and you can’t really charge accordingly because now your labor has exceeded the cost of a new motor.

“Unless it’s something simple like a shaft seal or fitting leak,” he adds, “it’s more cost-effective to replace it, put it behind you and go on to the next job. Particularly in peak season, time is a precious commodity, and the last thing you want to do is wrestle with a motor for three or four hours.” And with the tremendous advancements in pool pump technology, adds Morley, replacement will also save the customer money for years to come.

“Nine out of 10 times,” he says, “I’ll try to sell them a new pump because typically the old one’s not as efficient, especially with the new variable-speed pumps. If the pump is a Whisperflo or Max-E-Glas or something like that, and it’s just the motor, then I’ll replace the motor — and I always let the customer know their savings over a new pump.”

An exception to that rule for Morley is when the pool is plumbed with rickety old copper pipes. “Anything greater than a half-horse pump is too much for those pipes to handle,” he says. “And if it’s a half-horse or less you can still use a single-speed pump [according to California regs], but considering what I pulled out, it will still reduce their power usage at least by half.”

Variable Speeds

Exceptions notwithstanding, a dead pump is a great opportunity for a homeowner to take advantage of the high-efficiency motors and other benefits from new variable-speed pumps — from dramatic energy savings to versatile water feature performance to better filtration outcomes. And with the adoption of Title 20 legislation in California, multiple-speed pumps are mandated when the application calls for 1 or more horsepower.

This transition is going well so far for Payan. “I kind of resisted them at first because it didn’t look like a

regular pump, and I didn't know anything about them, and I thought they were highly overpriced, but after learning more about them, and seeing them in applications and seeing the demand for them and the fact that they're mandated, I'm on board.

"The thing I like about them is that instead of having a real quick start, which causes a spike in electricity, they start humming and ramp up nice and slow. And in a setting where you would need two pumps, say a jet pump and a circulation pump, you can have a one-pump system and just change the speed for the jets.

"Like in the case of a write-up I just did today, this lady's adding on a slide and a water feature. We could either add another pump to the system or we could upgrade to a variable speed. With the variable speed you've got some energy efficiency and you can up the horsepower for your slide or your water feature."

There are two schools of thought on pumps, Payan says, the service side and the builder side. In the old days, builders wanted to sell the customer a big pump because of the higher profit margin. "But on the service side," he says, "you're more concerned with flow rates and the hydraulics of the whole system — that's what we've got to deal with. "There are still some builders with that 'bigger is better' mentality," he says, "they'll say you need a 2-horsepower pump. But on the service side when we replace it, we'll say, 'You can get by with a ¾-horsepower pump and still accommodate the flow rates that you need.'"

Another aspect of variable-speed technology that service techs appreciate is its forgiving nature. We like to think that professionals don't make mistakes, but they do; and when a pool professional has incorrectly sized a pump, if it's a variable-speed model, he can simply change the speed, and then pack up the van. With a single-speed pump already hooked up and ready to go . . . well, there's a problem.

A Chance To Impress

Avoiding such problems, and making fast and smooth pump repairs and replacements, is the hallmark of a top-flight service organization. Rarely is there a better opportunity to impress a customer—one that may have only seen you vacuuming the pool and checking the water — than a timely leak repair or money-saving variable-speed pump replacement. With a disciplined and well-planned approach to all phases of a repair from first alert to final bill, pump service can be a profitable part of the business, and a competitive advantage for a professional company.

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