

SMART SOLUTIONS FROM **ENVIROSPEC.COM**

# PowerWashPro

SPRING 2013

washing for  
fun, pride and profit  
**PINE STATE'S**  
Chris Case  
shares his secrets

house washing  
**EDUCATION**  
by Dan Galvin

**WHAT TO SAY**  
and what not to say  
to sell house wash jobs!

**MAN VS. DIRT**  
a history of  
cleaning chemicals

**INCLUDES**  
**NEW PRODUCTS**  
**FOR 2013**

SEE DAN GALVIN'S 2013  
HOUSE WASHING SCHOOL SCHEDULE

# THIS MONTH:

SPRING 2012

## Have I got a deal for you.

Everyone loves a bargain. And that's what you'll find when you go to **EnviroSpec.com** and click on **Sale Items**. Check out engines, pumps, sprayers and other equipment at up to half off. It's all perfectly new, top-grade stuff. And visit regularly, because you never know what you might find.



## Clean the kitchen.

Cleaning baked-on cooking residue in commercial kitchens can be one of the nastiest jobs around. Not just because of the oily grime, but because of caustic cleaning chemicals that irritate your eyes, nose, lungs and skin. Fortunately, the foaming cleaner **Hood Pro** from EnviroSpec works a whole lot better, without you inhaling fumes that humans were never meant to breathe.

## Be kind to animals.

One of the top charity causes here at EnviroSpec are abandoned, abused dogs and cats. Animal shelters around the country offer comfort and medical care for our furry friends; they also provide the spaying and neutering that reduces the population of strays. So help those who can't help themselves, by volunteering or donating—or both—at the pet shelter in your town.



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### **Dan Galvin's HOUSE WASH SCHOOL SCHEDULE**

**April 9TH - 11TH**

**June 25th -27th**

**August 20th - 22nd**

**October 15th -17th**

Contact [success@envirospec.com](mailto:success@envirospec.com)

*Location to be determined*

**PowerWashPro**  
FROM ENVIROSPEC  
SPRING 2013

## You never know what you might learn at EnviroSpec.com

We've gotten some great feedback from the first issue of PowerWashPro. Contractors apparently found out things about their own profession they didn't know. As you'll see, this new issue continues to offer smart tips and ideas for power wash professionals.

As it turns out, though, this is only the tip of the iceberg.

The real in-depth educational resources are waiting for you at our website, EnviroSpec.com.

How do you clean a gas station, a mobile home or a dairy farm? Those are just some of the many topics you'll come across on *How To Wash Stuff*, a popular and informative feature.

Here's another one: What would you use a Foam Cannon for? The answer to that question is found on yet another educational resource for mobile wash contractors, the *EnviroSpec Technical Library*. Sure, you know a lot. But come look around, and you'll be amazed at how much more you can add to your professional knowledge base.

One of the most important pieces of information in our business is the *Material Safety Data Sheet* for each chemical you use. Understanding health, environmental and disposal considerations is the mark of a true professional. Simply go to the Chemicals page of the EnviroSpec online catalog and click on *MSDS* for each detergent.

You can also click on *Product Info* for every item, and find out exactly how to use that chemical for the most effective and efficient results.

So enjoy PowerWashPro now, and we're looking forward to seeing you online later.



# Man vs. dirt: A history of cleaning chemicals

By Tom Tortorici

**Before there was much of** anything to clean, there was water. As mankind's first cleaning chemical, it was a pretty effective one; you could easily wash the mud off your hands in a waterfall, puddle or ocean. Because of its molecular structure, many substances simply dissolved, and were rinsed away, in water, which is why it's considered the 'universal solvent.'

Around 2200 BC, the ancient Babylonians found a way to improve water's cleaning power, and like so many great discoveries, it was by accident. Water had been used to clean cooking utensils that were covered in animal fat and wood ash. By combining the three substances, they inadvertently created the world's first soap.

The Egyptians used vegetable oils and alkaline salts to make their soap, and were perhaps the first people to regularly bathe their bodies and launder their clothes. Did that bit of progress improve social interaction, and therefore help create true societies? History doesn't say.

The hearty people of the Greek empire managed to wash themselves without soap or water. They'd rub down their bodies with clay, sand, pumice or ashes. Then they'd cover themselves with oil, and finally scrape the oil off with metal blades.

The Romans rediscovered the benefits of soap and water, again by accident. Atop Mount Sapo, animal sacrifices were traditionally practiced. When it rained, animal fat and volcanic ash flowed down into the Tiber River. The mixture created a lye soap solution, making the river an ideal place to wash up. And 'Sapo' became the basis for our word 'soap.'

After the fall of the Roman Empire in the 5th century, the tradition of washing ourselves and our stuff went away,

ushering in 1000 years of uncleanness and bad hygiene, not to mention several deadly plagues.

## A new awareness brings new products

Finally, in the late 1600s, cleanliness came back into fashion in Europe, as people made the connection between personal hygiene and defense against disease. Manufactured bars of soap became available, along with — of course — advertising campaigns to promote them.

In some countries, though, soap was taxed as a luxury item. Eventually that tax was removed, enabling even people of modest means to enjoy clean bodies and possessions.

In 1898, B.J. Johnson developed the first formula for liquid soap. Since it was made of palm and olive oils, he called it 'Palmolive.' It was an instant hit. The first liquid soap for household cleaning followed; it was made from pine oil, and was branded as 'Pine-Sol.'

During WWI, the animal fats that were still used to make soap were in short supply, so chemists in Germany created a cleaning chemical made from synthetic, as opposed to natural, ingredients. The result? The first detergent.

Proctor & Gamble's labs resurrected the detergent idea in 1943. The laundry 'soap flakes' they had been selling turned both white and color clothes grey-ish. They improved the 'synthetic surfactants' by adding phosphate compounds and other enzymes. The result was Tide®, which could penetrate greasy, difficult stains that soap and water alone couldn't touch. The product became so popular, especially in areas with mineralized or 'hard' water, that stores had to limit the quantity that each

housewife could purchase.

By the 1950s, detergents had replaced soaps for washing clothes in developed countries. In the '80s, detergents were developed that could clean in cold water. In the '90s, super concentrated liquid detergents came out, and in the 2000s, biodegradable, green-friendly products were released.

Today, even bar soap is not technically soap; It's a petroleum- or synthetic-based bar of detergent. Real soap is only available from natural-product companies.

## Power washing becomes an industry

The first commercial high-pressure washing of buildings and vehicles in the 1960s went back to basics — just water, the hotter the better. But specialized detergents evolved, as well as the ability to inject cleaning chemicals into the water stream.

However those chemicals were often caustic, removing paint as well as the dirt.

In the 1980s, pressure washing contractor John Allison began developing safer, more effective detergents in a home-made lab. By the next decade, he had figured out how to defy the laws of chemical compounding by developing super-concentrated SuperFlo Polymer.™

The environmentally-friendly detergents made from that formula were an immediate success among cleaning contractors throughout the country. Now, his company EnviroSpec offers a family of cleaning chemicals for every possible need, having made a huge impact on the mobile power wash industry, and leaving everything from houses and trucks to commercial kitchens and gravestones looking newer than they actually are.

# Sick kids, abandoned pets and jobless veterans want to thank you.

**Why?** Because when you buy a drum pack of **chemicals from EnviroSpec**, 100% of the profits go to charity work that benefits those in need. So you're contributing to society simply by purchasing the most powerful cleaning detergents available. That's what they call a win-win.



## A new career for a U.S. vet.



**Members of the military** sacrifice for their country in all kinds of ways. But when they return to civilian life, they often find no job or career opportunities waiting for them. However one lucky veteran recently received a free **Business Start-Up Package** worth \$8,000 from the **EnviroSpec Washin' Warriors Project**. Setting him up as a mobile wash contractor included providing him with equipment, chemicals, parts, and ongoing training. And he was just the first of many.

## All they want is to grow up normal.

Is there anything sadder than an innocent child with a serious medical condition? On December 1, EnviroSpec presented a check for **\$20,000 to the Shriners Hospital for Children**. Those funds will go toward treatment of orthopaedic deformities, and neuromuscular conditions like cerebral palsy, when families can't afford the necessary procedures. Of course, improved health leads to self-confidence and a promising future.



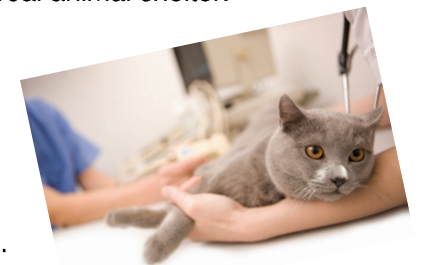
## Rescuing homeless dogs and cats.

**Suzie's Friends** is a no-kill animal sanctuary in Homerville, Georgia founded by **EnviroSpec President John Allison** and his wife Shelley. Many abandoned, hungry, and often sickly animals come through its doors, and receive the loving care and medical attention they need. Once recuperated, permanent homes are sought for these sweet canines and felines. Naturally, there are animals in need in every town, so consider volunteering at your local animal shelter.



## The spay-and-neuter mission.

In addition to their work at Suzie's Friends, John and Shelley Allison have brought in **over 3500 cats and dogs** to be spayed/neutered, thereby reducing the future population of helpless stray animals. The funds for this much-needed and humane program also come from contractors like you who purchase chemicals from EnviroSpec.



## Find out more at EnviroSpec.com.

While you're learning more about our **Soap for Hope** charity programs, be sure to also explore our huge online product catalog. Smart mobile wash professionals know to start here for everything they need.



**EnviroSpec** Your Authority for High-Performance Cleaning  
[envirospec.com](http://envirospec.com) 1-800-346-4876

# 100%

of the profits from our  
**Detergent Formulary Division**  
are donated to Charities for Children & Animals



## **PINE STATE POWER WASH**

*this month's featured*  
**HOUSE WASH  
CONTRACTOR**

My name is Chris Case and I own Southern Maine based **PINE STATE POWER WASH, LLC**.

You might be familiar with my last name. I hope you are, and I hope some of you have had the opportunity to either work with or got to know my father, Peter (aka Dr. Pete).

I started my business in September of 2011 after 12 years in the law enforcement field. I worked in central and southern Maine during those twelve years.

When I was in high school, I had the opportunity to work at EnviroSpec for John Allison. I mixed detergents, did shipping and later answered phones (back when the phones were the primary way of ordering!).

I had always kicked around the idea of starting up my own business. My dad owned and operated Hi-Tech Mobile Wash out of central Maine from 1988 until he sold the business in 1999.

My wife and I decided that I should go for it in August of 2011 and in the middle of September we dove in.

I had done some carpet cleaning as a supplemental income and decided to incorporate that into my pressure washing business. I started out on a shoestring. I bought a used Ford one ton van, a Hydro-tek pressure washing trailer (that I got a steal on because of a loggers convention in Maine) and took the trailer apart and mounted it in the van.

I had a 200 gallon water tank,

two inexpensive hose reels, and a bunch of equipment (hoses, trigger guns, lances, detergents, nozzles, etc) from EnviroSpec. I went to work for less than \$15,000.

I quickly outgrew the van and upgraded to a GMC cab over diesel with a 16' box and added two 275 gallon water tanks. This allowed me to fill up at some of my truck accounts before going to the isolated parts of their lots to wash trucks instead of running 500 ft of garden hose.

Being in Maine, we have many opportunities for the professional mobile washer. Obviously our distinct four seasons make for very different types of work from month to month. The snowy, sandy and salty roads keep me busy with trucks throughout the year.



Also, our humidity creates mold and mildew issues on vinyl and cedar surfaces of homes as well, especially on the rocky Maine coast.

The summer months were full of vinyl restoration. Of course, using the "old school process" that I grew



up learning from Dr Pete, I did things differently than most people who clean houses.

I restored vinyl, using heat and Prodigy, removing mold and mildew, as well as oxidation. When I say I use heat, I never use extremely hot water. The actual temperature of the water is determined by the weather conditions.

Unless it is extremely hot outside, using warm water is advised because it makes your house washing detergent work better. It is important to remember not to allow detergent to dry on surfaces, especially windows.

Weather conditions play a huge factor in how fast things dry. Hot weather, bright sun, dry conditions and wind all change the speed in which detergent will dry on a surface. Anyone who thinks washing a house is simple is fooling themselves. Weather is just one of the extreme variables encountered. Other variables are surface type and condition, detergent strength, and cleaning pressure applied.

This cleaning process can be water pressure or manual surface agitation, which is sometimes necessary for some types of cleaning (i.e. streaks on gutters).

Unless I have someone specifically request it, I do not "soft wash" houses. Soft washing is the process of

applying sodium hypochlorite (12% bleach) on vinyl at low pressure, letting it dwell for a period of time, then rinsing also with low pressure as well. I attempt in all ways to keep the process green by using detergents that EnviroSpec sells that are environmentally safe. I've had amazing feedback from my clients about how the restoration and environmentally safe techniques have made them my customers for life. Many of these customers will pay the extra money to have me take the time to use high pressure and green detergents when restoring their vinyl.

Keep in mind, sodium hypochlorite is very strong and if you aren't careful with it can damage vegetation and the smell can be offensive to clients.

My company's largest and most exciting job of the summer was an amazing cedar wood restoration in "down east" Maine. It was three large buildings that sit on two miles of the Maine coast. As you can see from the photos, we applied Restore by using a

15 gallon, 1.5 GPM electric pump. We then used appropriate pressure with warm water to rinse off the darker stain and begin the process of fully restoring the wood to its original color. Anyone who has done any wood restoration knows the importance of "fanning" the contact points to make the process even.

Appropriate pressure is very important, especially when restoring cedar. Appropriate pressure is determined in the field, by quickly assessing how much pressure any given surface can withstand without incurring damage. The appropriate pressure also provides for optimal restorative results. In other words, if you're too far away, you're not going to clean it, but if you're too close, you'll damage it.

The results were dramatic and the owner was thrilled with the way his buildings look. So thrilled that he has decided to leave the cedar natural and have my company return every year to restore them as his siding maintenance program.

I was able to get some pictures at the site of Dr Pete doing some wood restoration as well! These buildings were very large, two being over 3000 square feet, the other being about 2500 square feet.

We did this job in September and the weather was practically perfect. It was in the 50's and 60's and

sunny. We were very lucky. Additionally, because the job took more than one day and was a long way from home, we rented a house on the Atlantic Ocean.

We also went to a local tavern that had great pub food and live Irish music. Patrons were actually doing Irish jigs all around the bar. Dad enjoyed it thoroughly, while I thought it was strange that they were dancing too close to the door for us to exit.

As I said, Maine and the northeast offer many opportunities for our industry. Professionalism and communication are HUGE. I cannot stress this enough. Tell your clients what you're capable of.

I was outbid several times, but by explaining my process, then telling the clients what kind of detergents I use, I got the jobs over the sodium hypochlorite competition.

As John said in one of the articles in the last issue of PowerWashPro, we, as contractors know the business the best. Homeowners need that reassurance when they're trusting us with what is most likely their most expensive asset. Make sure that you look at a property well when you bid on it. Look for any issues that may cause you to spend more time or need extra equipment (i.e. a high pitched roof and a ladder hook or a lift).



If nothing else, it's your opportunity to show a client that you're looking at and/or seeing the whole picture. It also shows that you know what you're doing

Doing high quality work is the best way to get both repeat business and open the door for new opportunities. Be very aware of your clients wants and needs and know how to address them and answer their questions.

I promise you, the neighborhoods where you make the most money have houses owned by people who will refer you to others.

Christopher C Case  
**PINE STATE POWER WASH, LLC**

## My FedEx STORY

by John Allison  
EnviroSpec - [www.envirospec.com](http://www.envirospec.com)



I just have to share this story with you. It is about you, me and everyone else who stands in front of a potential customer.

We have always shipped all of our products by UPS but like everyone else we are always looking to cut cost. A few years back I was contacted by FedEx ground to see if I would be interested in giving them a try. I agreed and over a period of 3 weeks they brought in new computers, scales, printers and sent reps out to train our shipping department on their software. The next Monday came and the FedEx drivers appeared to pick up our packages. *No lie!* The male was about 50, belly hanging over his shirt that was not tucked in (no uniform) and the girl was wearing shorts and 'flip-flops' - yes - *flip-flops.* As I stood there 'gawking' in disbelief I had this bad feeling that someone looking like this was going to show up at my customers place of business and I just couldn't do that to them. I called my FedEx rep and told him what happened and for them to come pick up their equipment.

Time passed and a couple of years after that the same rep came knocking. Everything had changed and they would like for me to re-consider using their service. The price was right so I did. After another installation of equipment and training the first pick-up day came. Folks - you just had to be there! In walks the driver wearing 'sweat pants' and had a 'load' of snuff 'between his cheek & gum' that would have choked a mule. This is where the story ends but what a lesson learned. What do you look like when you show up?



# STEP #1: EDUCATE YOURSELF & YOUR CUSTOMER



Do you use any of these products to WASH HOUSES?



## SODIUM HYDROXIDE

is the ACTIVE ingredient in many products that contractors are using to wash houses!

All of these products are **EXTREMELY CORROSIVE!**



Don't forget to leave the EnviroSpec Tri-Fold that has closed more House Wash deals that there are house washers!

More details to follow.

## So now that you have learned STEP #1

you can easily explain to the homeowner why your service is safer and will produce better results. Just keep in mind that doing it the *right way* will take you longer. Where some contractors brag about 'blowing off 3 to 4 house per day' you may only be able to wash one the *right way*.

As you are speaking with your prospective client be sure to mention that when you finish you will leave behind a safe environment. This is very important to the homeowner especially if they have children, grandchildren, pets or want to plant a flowers any time soon.

## STEP: 2 NOW LOOK THE PART

### WHEN YOU SHOW UP

- Show up with a clean, well organized vehicle.
- Show up wearing a 'button-up' uniform shirt.
- Show up with pictures and testimonials. *and above all else...*
- Show up with all of your MSDS Sheets.
- And **ALWAYS** leave the Tri-Fold on pages 14 & 15.



**TECH TALK:** by John Allison  
EnviroSpec - [www.envirospec.com](http://www.envirospec.com)

### CORROSIVE PRODUCTS BEING USE AS HOUSE AND TRUCK WASH DETERGENTS

TERM: The word 'corrosion' is derived from the Latin verb *corrodere* which means 'to gnaw' indicating how these substances seem to 'gnaw' their way through the flesh. A corrosive substance is one that will destroy and damage another surface or substance with which it comes into contact. The main hazard to people include damage to the eyes, the skin, and the tissue under the skin; inhalation or ingestion of a corrosive substance can damage the respiratory and gastrointestinal tracts.



This is what sodium & potassium hydroxide will do to skin & eyes. Do we really want to leave this stuff behind after we complete the job?

# A new prospect calls you up. Then what?

Here's a guide to what you just might say for the best chance of getting the job—even if you charge more than the other guy.

## Your cell phone rings, and you answer:

"Thanks for calling Midville Housewashing."

"Hi, I'm calling to get an estimate on having my house pressure washed."

"Great, who is calling please?"

"This is Judy Jones."

"Ms. Jones, this is Jack Johnson. If you can help me out with a little information, I'll explain what we can do for you." (Always use Mr. or Ms. when addressing a customer, as a sign of respect.)

"Now what style home do you have, Mrs. Jones?"

"It's a raised ranch."

"Okay, and what type of siding is it?"

"Aluminum."

"Has it ever been cleaned before, Ms. Jones?"

"I don't think so. We've been here since 1994 and I know we haven't cleaned it."

"You must be getting a tremendous amount of oxidation or chalking on it by now."

"There is! In fact, we were planning on washing it ourselves last year but just never found the time."

"Now that I have this information Ms. Jones, let me explain our service. First, we utilize very sophisticated equipment and detergents made exclusively for the exterior house washing industry." (Don't use the word 'chemicals' due to that term's negative associations.) "Before starting the job, we run test patterns so you'll see exactly what the clean siding will look like. If for any reason it doesn't meet your expectations, the only charge will be a \$35 service fee. I'm sure you would much rather proceed like this, instead of having someone come in, wash your home, only to be dissatisfied, right?"

"Right!"

"You should know that in some situations where surfaces have been neglected and not cleaned at proper intervals, or cleaned with harsh chemicals, the surface may not be sound enough to look like new, even after it's been cleaned. But regular cleaning with the right detergents in the future will really help preserve the look and value of your home."

"I understand."

"Because believe me, your being happy with the job is more important to me than making money from a dissatisfied customer. Now, I also want you to know, assuming that you give us the go-ahead, that we never use detergents or other products that could

harm lawns, shrubs, soil, pets or children. Everything is environmentally safe, because after all, it's your home, and that's important to you." (Here of course, you're creating a 'bond' by showing that you care about the same things they care about.)

"I'm sure, if you've shopped around, you've heard other companies say that their cleaning products are biodegradable. The fact of the matter is, Ms. Jones, given enough time, everything is biodegradable, even your house!" (Often you'll hear a chuckle at this point, indicating that you've made your point.)

As you continue your sales presentation by phone, be sure to allow the homeowner to comment or ask questions; the more interaction there is, the more likely you'll make the sale. Take their considerations seriously, and acknowledge them for asking good questions.

Then continue: "Now just so you know, we start out with the exterior gutters and work our way down to the foundation. We remove all surface oxidation, acid rain, pollutants and mildew. Then when we're through with the cleaning process, we apply a Plex-Master surface sealant which is manufactured from the same chemical family as Plexi-Glass.™ This has been specifically formulated to protect your house and retard future mildew and oxidation. Then before leaving we'll insure that porches, steps, walkways and driveways are rinsed clean of any solutions."

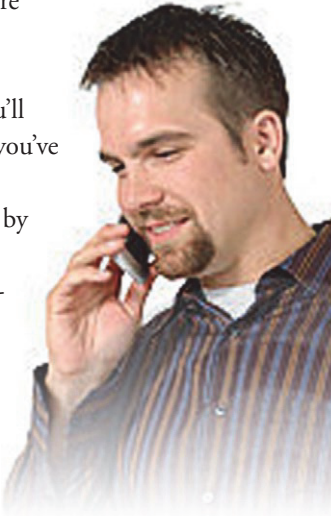
Chances are, the homeowner hasn't heard this level of caring detail from your competitors. So when you present your estimate, she'll understand how much more she's getting for her money.

Keep in mind of course that this phone sales dialog is just a guideline; you don't have to follow it word-by-word. It's intended to create ideas and give you a track to run on when talking to prospective customers.

But if you follow the main principles, adapting them to your own business, you'll learn to become persuasive enough to close on many more jobs than you lose. In fact, by 'planting the seeds' of what an informed homeowner should expect, she will be better able to resist the low-ball estimates of less-reputable contractors.

And of course an educated homeowner will benefit by using a hard-working professional with the knowledge and products that will serve them well for years to come.

Isn't that the kind of customer where future referrals come from?



# Dan Galvin's Journey: An American Success Story

A New Englander starts small, then learns how to build a solid power wash business.

By Allison Hester



Dan and his wife Heather

Dan Galvin spent a long time searching for the right career.

After high school in Plymouth, Massachusetts, he joined the U.S. Navy where he was a strike force team leader, a missile technician, and a rescue swimmer on board ships. He found the Navy a lot of fun, but knew it wasn't for him.

Next, he became a broker for the family insurance business. "I worked on my own but I had to wear a suit and tie every day. I was stuck in an office, and I absolutely hated it," he said. So in 2000, Dan went out on his own and started selling insurance software. "I was still stuck in a suit but, at least it got me outside, talking to people. But it still just wasn't me."

Lost on what to do next, Dan got a phone call from his uncle, who said, "Hey, do I have a deal for you!" The uncle had been in the pressure washing business since 1977 and was ready to retire.

Dan realized the offer might actually have some potential.

So Dan paid \$10,000 for "about \$2000 worth of equipment, including old, beat-up pressure washer." But the main thing he was buying was his uncle's knowledge, which he knew was priceless. He also got his uncle's two accounts; one was for an electric company's vehicles, and the other was for graffiti removal at Fenway Park, home of the Boston Red Sox. "That was all I had. I think the monthly income was around \$500 between the two of them."

Dan's wife Heather was less than thrilled. "She said, 'How the hell are you going to make money with a garden hose?'" Dan laughed. "Like so many people, she was clueless to what power washing was and how to make money from it."

Dan said his uncle was the best around, but he didn't know how to mar-

ket to make that six figure income. "It took me less than three months to make my \$10,000 back, so my wife was happy," he said. "And that was with me having no clue how to market. I was ecstatic."

## Growing and Changing

In the neighborhoods surrounding his home, Dan noticed a lot of vinyl houses that were moldy. So he hit them hard with a home-made postcard. "I was just spraying and praying," sending out postcards to anyone and everyone and praying he'd get some jobs.

By 2007, after buying out a couple of competitors, Dan's East Coast Power Washing had moved on to cleaning heavy equipment for large construction companies. Then the economy hit all those companies hard and he lost most of his accounts. So he had to go back to where he started...house washing.

Dan knew that house washing means



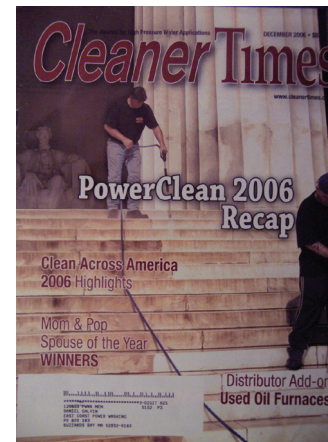
*Spraying Fenway Park with a coating to protect it from graffiti*



*Cleaning the Jefferson Memorial in Washington D.C.*



*East Coast Power Washing in Plymouth, Massachusetts*



a never-ending challenge to find and keep clients. He also knew he had to be 'different' than all the other power washers in the area. Dan had learned from an article in the EnviroSpec 2002 Catalog that the use of 'proper cleaners' was huge to house washing clients. Dan says, "I wasn't selling power washing, I was selling safety! You can't use the word 'chemical,' which scares people; you need to say something like 'cleaning products.'"

Dan knew he used the best cleaners, because they were from EnviroSpec, and he knew he did the best job around; but that alone did not get him the number of clients he wanted. Then when he was attending a marketing class he heard a phrase that changed the way he thought about selling his services.

The Quote: "If you truly believe that you have the best product or you do the best job, then you are doing your prospects a total disservice by not convincing

them to use you. If you don't have the best product or service, *change it*, so you do have the best product or service."

"That hit me like a ton of bricks" says Dan. "I knew I did the best job around, but never realized I was hurting people by letting those 'splash and dash' power washers sucker those people in on price alone."

That's when Dan figured out that he was now a consumer advocate in the power washing industry. He says "It all stems back to that 2002 EnviroSpec catalog. That catalog helped me lay the foundation of my business; I just didn't know it at the time."

### A Competitive Advantage

The one product that EnviroSpec introduced Dan to that has made him hundreds of thousands of dollars, and has put him in the top 10% of power washers in the country, is Plex-Master. It's a surface

sealant with mildew formation retardant that Dan applied after he washed the house, so he could guarantee customers that their house would be mold-free for one year. In an area where mold will typically start growing on a house in as little as one month after it's washed, Dan was guaranteeing no mold or mildew for a year! This easily set him apart from other power washers in his area.

Dan tells the story of a house he washed, where the next-door neighbor was also washing his house the same day. "I finished washing and sealing the entire house with Plex-Master in a little under two hours. The neighbor had taken two hours just to wash his garage! He yells over to me, 'hey how do you do that so fast?' I said I have the right equipment and use the best soaps. He said, 'soap?' I just shook my head and walked away. The next year, after the neighbor saw that the house I cleaned still looked good, he

called me to wash *his* house."

In 2008, when most companies were downsizing or going out of business, Dan's wife Heather joined the East Coast team, and the company's residential business boomed. In fact, Dan says that with the help of EnviroSpec's informative catalog, their soaps, and Plex-Master, he has made well over a million dollars.

As his company has grown, so has his ability to give back. In 2006, Dan participated in the "Clean Across America" project, cleaning around the Lincoln Memorial. Every year, his company donates community service projects, including the cleaning of local schools and churches. "We spend about 40 to 60 man-hours in giving back. I truly believe that giving back helps you grow."

### Power Washers of North America

On the advice of his uncle, Dan had joined the PWNA (Power Washers of North America) and attended his first convention in 2005. "I learned more from two days at the convention than I did the two years I was in business. I became absolutely hooked." It was at that first PWNA meeting that Dan realized power washing was an actual industry. "I didn't realize there were thousands of other power washers out there doing the same thing, struggling with the same struggles I was having."

At dinner one evening, Dan met Daryl Mirza. "I was in business for two years making \$250,000 and thinking I was doing really well. Then Daryl mentioned that he had 500 employees. Wow! I never even fathomed the idea that there could be a nationwide power washing company," Dan laughed. "So you go from little corner store to nationwide. The connections you make through PWNA really are incredible, and everyone is there to help everybody."

Dan was later elected to the PWNA Board, and then served as President from 2008 to 2010.

### Finding His Company's 'Sweet Spot'

During the 2010 PWNA conference,

several million-dollar producers participated in a panel discussion where they mentioned finding your company's 'sweet spot' – the place where you are making the right amount of money for you.

Dan said he is currently in such a place, and struggles with the idea of whether or not to grow the business. "I would like to grow, but my wife is really comfortable right now," he said. "She likes it where we can go away when we want to go away."



One of Dan's biggest focuses is getting systems in place so that the business will continue to run without him. In addition to the need for the right systems, Dan offers this bonus tip: "If you want to make a profit and be successful in business, let your wife keep your books."

### Marketing Makes a Difference

Dan has also written a consumer guide called *7 Costly Mistakes Even Smart Homeowners Make When Hiring a Power Washer*. He gives it to his higher-end clients for free. "The book

is a marketing tool. For one, it gives you instant credibility because you wrote the book," he explained. "Just one more tool that puts you heads above every other power washer in the area."

"I've spent well over \$50,000 to educate myself on marketing," Dan says. "How to speak properly. How to speak to customers. What to put in postcards to customers."

In late 2010, Dan began a program to give back to an industry that has been so good to him and his wife. SuccessInPowerWashing.com teaches pressure washing company owners how to get more leads, separate their company from their competition, use technology and the internet, and double their income without adding more clients.

### Teaming Up to Educate

To further help in training contractors, Dan has teamed up with John and Shelley Allison of EnviroSpec. "John and Shelley have an amazing love for this industry; they know if you educate the contractor, the contractor will become more successful, and in turn the industry becomes more successful. It's not about the money with John and Shelley; their rewards come from the success of their customers. They are the most amazing people I have ever met."

Dan will teach the step-by-step systems he used to take his power washing business from zero to \$250,000 in less than three years. He'll offer to-the-point marketing ideas that contractors can take home and implement immediately.

"There's enough business out there for everybody if you are educated," Dan says.



*Dan with James Malinchak, star of 'ABC Secret Millionaire'.*



# SEPARATE YOURSELF FROM THE PACK!

## SMART HOMEOWNERS GUIDE

Protect Your Home:

# 5

things you must ask your house washing service

## AN EDUCATED HOMEOWNER

will always choose a quality contractor like you over an unprofessional low-baller. So how do you educate them? Just give them a copy of this...

### HOMEOWNER'S SMART GUIDE, "5 things you must ask your house washing service."

When customers ask these important questions, you'll be able to give the right answers -- while your low-balling competitor will just have to shrug his shoulders...and walk away.

Protect your home: 5 things you must ask your house washing service

#### 1 Do you use bleach by itself to wash the house?

Bleach is often used as a cheap and ineffective cleaning chemical by house washers. It can degrade siding and roofing materials, and certainly isn't too good for grass, animals and other living things in the environment.

However when a bit of bleach is properly mixed with a high quality house-specific detergent like *EmulsifierPlus*, risks are greatly minimized. In addition, the gloss enhancers contained in that detergent will make your home look bright and new.

Also be sure your house washer is not using caustic chemicals on your home, such as sodium hydroxide and potassium hydroxide. These are the active ingredients in *Drano*, *Easy-Off* and paint strippers. And of course you don't want them to remove the paint along with the dirt!

SMART HOMEOWNERS GUIDE

#### 2 Are your detergents environmentally friendly?

It's your property--of course it should be left free of residual chemicals. You need to be sure up front that lawns and shrubs are not harmed by contaminants, not to mention children and pets.

However, even when you ask, some house washing companies will assure you that their cleaning materials are "biodegradable." That's not good enough! Given enough time, even your house itself is "biodegradable."

Or you might be told that their chemicals are "neutralized" after the job is done. At least, whatever hasn't already seeped into the ground. Wouldn't you rather they use detergents that are formulated to be 100% environmentally safe from the start?

A true house washing professional is as concerned about the local environment as you are. Leaving soil, greenery and underground streams exactly as they found them is their primary goal.

#### 3 Have you reviewed your detergents' MSDS?

MSDS? What's that?

MSDS stands for 'Materials Safety Data Sheet'. This industry-standard form includes information about ingredients, properties, handling, potential risks or hazards, and instructions in the case of accidental spills.

Would you hire a house washing service that hasn't reviewed the MSDS info for every detergent product they use? Neither would we! Unfortunately, most contractors in the industry have no idea what ingredients are in the products they use.

As an added precaution, also ask your house washing pro if they first test their cleaning products on a small, hidden part of the house surface, to be sure there is no unexpected reaction or other issue. You don't want to find out about a possible problem after the job is done.

#### 4 Do you *only* remove mildew?

If your house washing contractor just removes mildew, they're doing a very small part of the job.

To remove mildew most contractors use bleach! Just remember—*bleach is a corrosive!* The term 'corrosive' means 'to gnaw' indicating how these substances seem to 'gnaw' their way through other surfaces (especially flesh). Remember, they are there to wash your house and not a load of clothes.

There are much safer and more effective ways to wash a substrate. A well structured, 'alkaline detergent bed' will kill the mildew and penetrate to the roots. Although bleach will remove surface mold/mildew it does very little to remove the more prevalent pollutants such as carbon monoxide, particulate matter, nitrogen dioxide, sulfur dioxide and lead.

We often hear people talk about 'sowing seeds.' With this Tri-Fold that is exactly what you will be doing...

You will be sowing or planting seeds in the consumers mind that will force them to make good decisions when it comes to who is best equipped and the most knowledgeable and who can best wash their home - *safely*.

These are the exact seeds that I planted in my prospects mind when I was washing houses in the 70's & 80's and I closed 8 out of every 10. And I did it at 3 to 4 times the price my competitors were charging.

#### 5 Will you apply a surface sealant to protect my home?

The best house washing companies don't just clean the home's exterior—they also apply a layer of protection to retard mildew, oxidation and general 'fall-out' pollutants. The product that they use to insure that your home remains 'spotless' for many months to come is called *PlexMaster*.

Applying this invisible shield ensures a long life and a fresh appearance for your house. All surfaces, including windows, will be protected. Yes, windows too! *PlexMaster* also makes it possible for the home owner to simply take a garden hose and 'quickly' rinse the siding and windows to keep them crystal clear for up to a year! Annual *PlexMaster* protection agreements are available at a fraction of the initial house wash cost.

**EnviroSpec.com**

Published as a service for responsible home owners by EnviroSpec, a leader in providing safe, premium-quality products for the professional power wash industry.  
Info@EnviroSpec.com © 2013 EnviroSpec

We've made it so much **EASIER** for you to win out over the local...

# Low Baller!



To order these professional **'HOUSE WASH CLOSERS'**

Call 1-800-346-4876  
or visit [www.envirospec.com](http://www.envirospec.com)  
Part # HWTF - 100 per pack

As you hand them your **ESTIMATE** also hand them **THIS TRI-FOLD.**

When you do it's all over!

If you don't wash it...  
...no-one will!



by John Allison  
EnviroSpec - [www.envirospec.com](http://www.envirospec.com)

The Industry's #1 Selling House Wash Products  
**FOR OVER 30 YEARS AND COUNTING**  
 ALL WITH HIGH GLOSS ENHANCERS

**Call and Listen**



to what our customers have to say!

**Heavy Mold & Mildew**

**Lim<sup>o</sup>nene**

Contains Mold Destroying...

**d'LIMONENE  
 CITRUS PEEL EXTRACTS**™

along with  
**Gloss Enhancers**

Since it's introduction in 1994  
 Limonene has been our industry's  
**#1 SELLING HOUSE WASH**

This is a product that you have to  
**TRY and SEE** simply because  
 you could never imagine...



...THE POWER OF  
**CITRUS PEEL EXTRACTS**



**BLEACH FRIENDLY DETERGENT**

**CONTRACTORS** know that **BLEACH** only removes surface mold and mildew so when it comes to killing the roots and cleaning carbonaceous hydrocarbons, acid rain and general 'fall-out' pollutants that bleach alone will not touch they call on the power of...

**EMULSIFIER PLUS**  
 with **Gloss Enhancers**

Mix 1-Gallon of bleach with 4-gallons of Emulsifier Plus for the best of all world when bleach has to be a part of your MIX.



according to Dan Galvin

*this is the icing on the cake!*



Read the artical about Dan in this issue and see how he has turned an ordinary occassional house wash into a million dollar business using **the invisible shield sealer...**

**PLEX-MASTER**

Surface with  
**PLEX-MASTER**

**& without**

On a typical 2,000 s/f house this is about a 20 minute process. Simply apply PlexMaster through your down-stream injector and rinse off immediately before PlexMaster dries. We recommend doing the house in 4-6 sections. This product goes on over windows and rinses freely.

Most people want their house washed before they pay the Window Cleaner. When you use PlexMaster a window cleaner is not necessary because in addition to PlexMaster leaving a protective barrier that will last up to one year it *also* leaves the windows 'sparkling clean.'

When you are done put them on your calendar to call next year for the follow-up re-seal that you will charge \$149.95 of another 20 minutes work!

see these products and more at  
[www.envirospec.com/MSDS.htm](http://www.envirospec.com/MSDS.htm)

# A new prospect calls you up. Then what?

Here's a guide to what you just might say for the best chance of getting the job—even if you charge more than the other guy.

## Your cell phone rings, and you answer:

"Thanks for calling Midville Housewashing."

"Hi, I'm calling to get an estimate on having my house pressure washed."

"Great, who is calling please?"

"This is Judy Jones."

"Ms. Jones, this is Jack Johnson. If you can help me out with a little information, I'll explain what we can do for you." (Always use Mr. or Ms. when addressing a customer, as a sign of respect.)

"Now what style home do you have, Mrs. Jones?"

"It's a raised ranch."

"Okay, and what type of siding is it?"

"Aluminum."

"Has it ever been cleaned before, Ms. Jones?"

"I don't think so. We've been here since 1994 and I know we haven't cleaned it."

"You must be getting a tremendous amount of oxidation or chalking on it by now."

"There is! In fact, we were planning on washing it ourselves last year but just never found the time."

"Now that I have this information Ms. Jones, let me explain our service. First, we utilize very sophisticated equipment and detergents made exclusively for the exterior house washing industry." (Don't use the word 'chemicals' due to that term's negative associations.) "Before starting the job, we run test patterns so you'll see exactly what the clean siding will look like. If for any reason it doesn't meet your expectations, the only charge will be a \$35 service fee. I'm sure you would much rather proceed like this, instead of having someone come in, wash your home, only to be dissatisfied, right?"

"Right!"

"You should know that in some situations where surfaces have been neglected and not cleaned at proper intervals, or cleaned with harsh chemicals, the surface may not be sound enough to look like new, even after it's been cleaned. But regular cleaning with the right detergents in the future will really help preserve the look and value of your home."

"I understand."

"Because believe me, your being happy with the job is more important to me than making money from a dissatisfied customer. Now, I also want you to know, assuming that you give us the go-ahead, that we never use detergents or other products that could

harm lawns, shrubs, soil, pets or children. Everything is environmentally safe, because after all, it's your home, and that's important to you." (Here of course, you're creating a 'bond' by showing that you care about the same things they care about.)

"I'm sure, if you've shopped around, you've heard other companies say that their cleaning products are biodegradable. The fact of the matter is, Ms. Jones, given enough time, everything is biodegradable, even your house!" (Often you'll hear a chuckle at this point, indicating that you've made your point.)

As you continue your sales presentation by phone, be sure to allow the homeowner to comment or ask questions; the more interaction there is, the more likely you'll make the sale. Take their considerations seriously, and acknowledge them for asking good questions.

Then continue: "Now just so you know, we start out with the exterior gutters and work our way down to the foundation. We remove all surface oxidation, acid rain, pollutants and mildew. Then when we're through with the cleaning process, we apply a Plex-Master surface sealant which is manufactured from the same chemical family as Plexi-Glass.™ This has been specifically formulated to protect your house and retard future mildew and oxidation. Then before leaving we'll insure that porches, steps, walkways and driveways are rinsed clean of any solutions."

Chances are, the homeowner hasn't heard this level of caring detail from your competitors. So when you present your estimate, she'll understand how much more she's getting for her money.

Keep in mind of course that this phone sales dialog is just a guideline; you don't have to follow it word-by-word. It's intended to create ideas and give you a track to run on when talking to prospective customers.

But if you follow the main principles, adapting them to your own business, you'll learn to become persuasive enough to close on many more jobs than you lose. In fact, by 'planting the seeds' of what an informed homeowner should expect, she will be better able to resist the low-ball estimates of less-reputable contractors.

And of course an educated homeowner will benefit by using a hard-working professional with the knowledge and products that will serve them well for years to come.

Isn't that the kind of customer where future referrals come from?



## EnviroSpec's 'black magic' behind...

# SUPERFLO POLYMER™

We recently had a sales rep join our company who had been in the chemical and pump business since the late 1980's. One day he told us that after talking to our customers for over a 3 month span that he was shocked to hear just how much our customers liked our detergents. "No-one - absolutely no-one - has ever had anything but great things to say about our detergents."

**When EnviroSpec puts on a chemical customer they are a chemical customer for life and it's all because of SuperFlo Polymer™!**

## SO WHAT IS THIS MYSTERY PRODUCT CALLED SUPERFLO POLYMER™

...and why has it made EnviroSpec chemicals the most asked for detergents in the professional cleaning/mobile wash industry?

Years ago John Allison, the owner of EnviroSpec, was a contractor just like you. And - just like you - he tried everyone's 'claim to fame' detergents until he realized that everything that he purchased was thought up and compounded by someone who had never had to clean anything for profit. It was after many very expensive 55 gallon drums of watered down detergents when John finally realized that if he was ever going to make it in such a demanding industry he needed to learn how to make his own chemicals.

John set up a small lab at his business and over the next few years his 'chem lab for a dummy' flourished. Almost every day John would head out to a job site with yet another 'concoction' that he had dreamed up the night before. He would take his new formula out and if it showed any signs of success he would keep 'tweaking' it until it was either a great success or a horrible failure. John says the failures ran about 99 to 1 over the successes.

Over the next few years John learned what to use and what not to use to clean the delicate surfaces of stone and brick, the greasy surfaces of commercial vehicles, the impossible to clean restaurant exhaust hoods, aluminum and vinyl sided houses, pools, patios, roofs, concrete, cement mixers, etc. and he learned all this without 'blowing himself up' in the process. Although there were several close calls along the way.

Now John Allison had developed an incredible arsenal of cleaners by 1984 and yet the SuperFlo Polymer™ product that is now known throughout the industry today was not even on the horizon at that time. Here is how the SuperFlo Polymer™ product came about and how it has dramatically changed the complexion of the professional mobile wash industry.

John had an account that had several terminals scattered throughout New England, New York and New Jersey. When one of his vehicles left to service these accounts it would be 2-3 weeks before it would return so it had to leave with enough chemical to complete the schedule. Oftentimes that meant carrying up to 15 drums of soap. Most of the time the vehicle also carried 500 gallons of water and that coupled with the weight of the soap resulted in some very expensive fines as the truck would pass through the weigh stations along the way from job site to job site.

There had to be a way to be able to put enough powder in solution where 1 drum of detergent (even if it were a 'sludge') would equal 3 drums of a super concentrate that could be further diluted through a down-stream injector. In detergent chemistry the 'rule of thumb' has always been that - at best - you can only mix one pound of powder to 1 gallon of water without 'fall-out' or separation occurring. And here John is trying to defy all the laws of chemical compounding by attempting to mix 3 pounds of powder into one gallon of water and having it hold in solution.

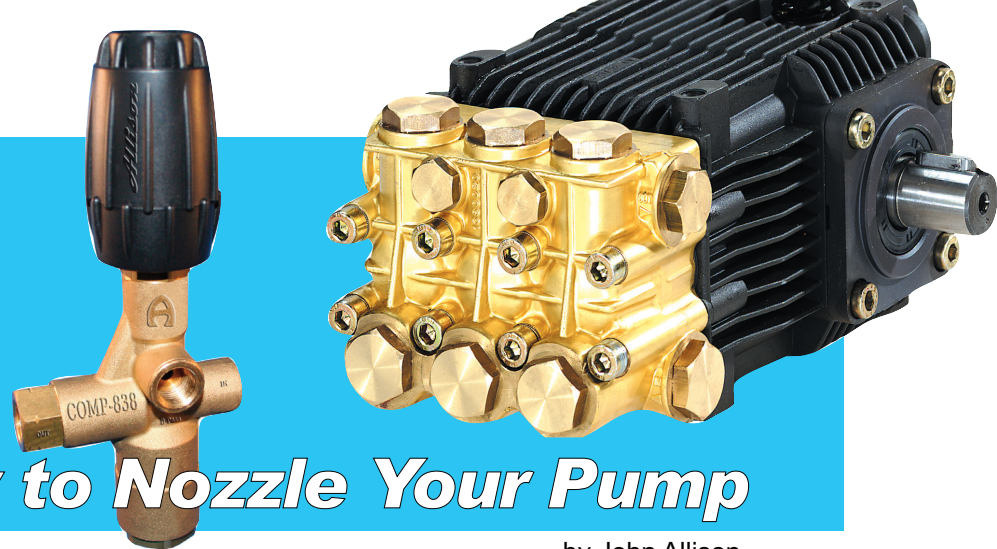
John contacted a chemist friend who had suggested that maybe he should look outside of the detergent chemistry industry and try to find something or a combination of 'somethings' that could couple or 'tie-up' the solids and keep them in a solution. His friend also told him that every once in a while all the 'stars will align' and what is known in the chemical formulary industry as 'black magic' will occur. He did and it did! And one day - out of nowhere - the blends came together and when they did John had a product that could be added to detergents that would couple as much as - not 3 pounds per gallon - but up to 4 pounds per gallon.

## ...and there is even more MAGIC!

The longer you wash a surface with any of our products that contain SuperFlo Polymer™ the shinier it gets. Even the lustre on surfaces that have been 'burned' and 'dulled' by contractors who have used harsh, low cost caustic cleaners will be rejuvenated and brought back to life.

# PUMP SET-UP

## Why & How to Nozzle Your Pump



by John Allison  
EnviroSpec - [www.envirospec.com](http://www.envirospec.com)

### What does 'NOZZLING A PUMP' mean?

Typically when a new pump is installed the same nozzles that came with the machine which could have been the wrong nozzles to begin with are the ones used on the new pump.

Knowing how to nozzle the pump is the first step in knowing how to maintain your own equipment. You should learn this because experience tells me that most pressure washer distributors seldom get it right.

Let's say you buy a 5.6 GPM 3,500 PSI pump. The first thing you want to do is determine the exact nozzle that it will take to produce these specs. When you look at the nozzle chart it tells you that a number '06.0' nozzle is the one you should use. So let's see if that is right. Most times it isn't. Manufacturer's have been known to occasionally over state the capabilities of some of their pumps.

Before you start this procedure remove your chemical injector and hook up your hose and gun and install that new '06.0' nozzle.

Before starting the engine always **turn your unloader down** to where you will be getting very low pressure once you fire off the engine and pull the trigger.

### FIRST:

With the trigger gun in the open position start to turn the unloader adjusting knob slowly to increase pressure. Watch your gauge closely. When you get to a point where the gauge needle stops moving you **STOP** turning. At this point this is the absolute most you will be able to get out of this pump with that nozzle.

### REMEMBER:

We are trying to find the perfect nozzle that will give us the manufacturers advertised specifications. So if the nozzle chart says a 06.0 is the nozzle needed to get 5.6 @ 3,500 psi and the gauge needle stopped moving at 3,100 PSI this means you have the wrong nozzle for your set-up. If the pressure is to low you will need to install a smaller nozzle. In this case try a '05.5' nozzle. If the pressure is to high you will need to install a larger nozzle.

**NOW** - the most important thing you MUST learn is this. Never - ever touch the unloader again! Once you have nozzled the pump correctly ALL pressure adjustments from here on out should be done by using a LARGER nozzle only. Why Larger ONLY? Because when you determined the correct nozzle by finding out the absolute smallest nozzle required to obtain the correct specifications - anything smaller will over pressurize or 'red-line' the pump. Once you have nozzled the pump correctly that is the smallest nozzle you should ever use. A good rule of thumb is if you are using a 05.5 nozzle and it is giving you 3,500 PSI on a 5.6 GPM pump and you install a 09.0 nozzle the pressure will drop to around 2,000 PSI and you GPM will remain the same. If you try to adjust the unloader to reduce the pressure then you are also reducing the GPM. Using the unloader to adjust the pump to 2,000 PSI will by-pass around 1.5-2.0 GPM.

### Considerations for problems:

If you can't get the pressure with the nozzle that is recommended for the advertised pump specifications here are some possible reasons why.

1. The manufacturer has over rated the pump and you are not getting 5.6 GPM. TS2021's always seem to be in the 5.3 GPM range.
2. The engine speed is not correct. (See 'Engine Speeds' article)
3. You have the wrong pulley sizes on the machine. (See Pulley/Gear article)

To maintain your equipment properly you must have a few, low cost tools. Here are the ones you will need when nozzling a pump.

1. 2 (not 1) pressure gauges just in case one is giving you a false reading.
2. A tachometer on you engine. This is so easy to install that everyone should have one.

## EVERY HOUSE HAS A DIRTY DRIVEWAY

...and when you forget to include this service in your proposal you have just missed a market and left a 'pile of money' on the table.

Equipped with the right tools like a **Mosmatic Concrete Cleaner** (below) the professional mobile wash contractor will have countless opportunities each week to increase sales. Cleaning residential driveways and walkways is by far the easiest sell and most profitable services a professional contract cleaner can perform.

Just tell your client that a clean house and a dirty driveway is like putting on a new suit and a 'dirty' out pair of shoes.'



## 2012'S MOST MISSED MARKET

by John Allison  
EnviroSpec - [www.envirospec.com](http://www.envirospec.com)



### HERE IS ANOTHER GREAT IDEA!



Banks have billions of tied up in foreclosed property. Why not find the individual at the bank who is in charge of unloading these properties and present to the idea that a 'sparkling' house with a 'like new' roof, siding, driveway and walkway will bring many thousands more than one that looks rundown and filthy. - Good luck © John

You will enjoy our video selection under **SURFACE CLEANERS** watch them at [www.envirospec.com](http://www.envirospec.com)



## TECH TALK:

by John Allison  
EnviroSpec - www.envirospec.com

### FIGURING HORSEPOWER REQUIREMENTS

The first thing you need to know is how to determine how much horsepower you will need to drive your pump.

**How to figure horsepower requirements:** Let's say you buy a pump that is rated for 4,000 PSI and 5.5 GPM and you want to know how much horsepower you will need to obtain those numbers. Here is how you determine what engine you will need.

If you have a gas engine...

**PSI X GPM ÷ 1100 = THE HP YOU WILL NEED.**

Example: 4,000 PSI X 5.5 GPM ÷ 1100 = **20 HP**

If you have a diesel engine...

**PSI X GPM ÷ 1250 = THE HP YOU WILL NEED.**

Example: 4,000 PSI X 5.5 GPM ÷ 1250 = **17.6 HP**

If you have an electric motor...

**PSI X GPM ÷ 1450 = THE HP YOU WILL NEED.**

Example: 4,000 PSI X 5.5 GPM ÷ 1450 = **15.17 HP**

#### Considerations:

If you have a belt drive system with the correct pulley set-up you could assume that if you have an engine that is rated for 20 HP @ 3,600 RPM (normal engine speed) that you have enough engine to produce the 4,000 PSI @ 5.5 GPM pump - example above.

**But what if you are gear driving the pump?** If you have bought a 1450 RPM Pump that is capable of handling 4,000 PSI @ 5.5 GPM that same engine (20 HP) is too small and here is why. Gear boxes have a ratio of 2.2 to 1 which means that 1450 X 2.2 = 3190 RPM. That means you will need to run the engine at approximately 3200 RPM so you do not 'red-line' the pump. If you run the engine at its full 3,600 RPM you will be turning the pump that is rated for 1450 RPM at 1636 RPM. (3600 ÷ 2.2 = 1636). So now how much horsepower will you need for this 1450 RPM pump when you gear drive it.

**IF 3600 = 20 HP**

20 HP ÷ 3600 = .0055555 x 3190 =

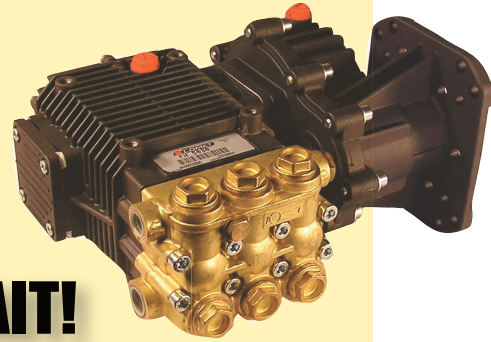
**17.72 HP at 3190 engine RPM.**

So now your 20 HP is only producing 17.72 HP because you are having to run it 'slower.' If you are ordering an engine simply order a larger engine. How much larger?

**Use this formula:**

**PSI X GPM ÷ 1100 x 1.12 =**

**'will be the required horsepower rating'**  
that you will need for a 1450 RPM Pump  
that you will be gear driving



## BUT WAIT!

You already have 20 horsepower and are not ready to buy another engine - *and* you need ALL of the 4,000 PSI @ 5.5 GPM!

Simply buy a 1750 RPM Pump that will give you the pressure and a little more VOLUME.

Why more volume and how much more?

**'Why more volume?'** We have already determined that you need ALL of the 20 HP that your engine will produce at 3600 RPM (wide open.) And we have determined that with a 1450 RPM pump we can not run the engine at 3600 RPM. So, if we do the math using a 1750 RPM Pump and the gear box ratio is 2.2 to 1 you will see that 2.2 to 1 is 3850 RPM engine speed which is too fast for the engine. We are trying to get the GPM to 5.5 when running the engine at 3600 RPM - right?

So here is what we are going to do.

Find a pump with a 24MM (std) shaft that you can run at 1750 RPM and use this formula.

Take the desired GPM - 5.5 in this case - and multiply it by 1.07.

**5.5 X 1.07 = 5.885 GPM**

You probably won't find a pump with that exact specification but you will find a 6 GPM pump. Now - use this calculation to determine the actual GPM of that 6.0 GPM pump when you are running the engine at 3600 RPM.

**6 ÷ 3850 X 3600 = 5.61 GPM**

*Close enough?*

# Not WANTED



## SHORTY'S "SPLASH N' DASH"

### WE KNOW YOU HAVE SEEN THIS GUY!

He's the guy who is roaming the neighborhoods all across America with a gallon of bleach and a toy pressure washer.

Yes, he disguises himself as a professional mobile washer and many homeowners are falling for his story.

He is the person who performs the job the first time around and then you are the one who has to go in behind him and try and 'fix' the damage he left behind.

He is gone now - out of

business for obvious reasons - but you are the ones who are left behind and you are the ones who are now looked upon by the consumer as just another 'guy with a pressure washer' and a 'silver tongue.'

So - what do you plan to do about 'THIS GUY?' Yes you do what every contractor for the past 40 years has been doing and that is - complain, bellyache, cry, make excuses and on and on but the bottom line is...

...THEY AIN'T GOING AWAY - and if you think they are you may as well...

**...THROW IN THE TOWEL!**

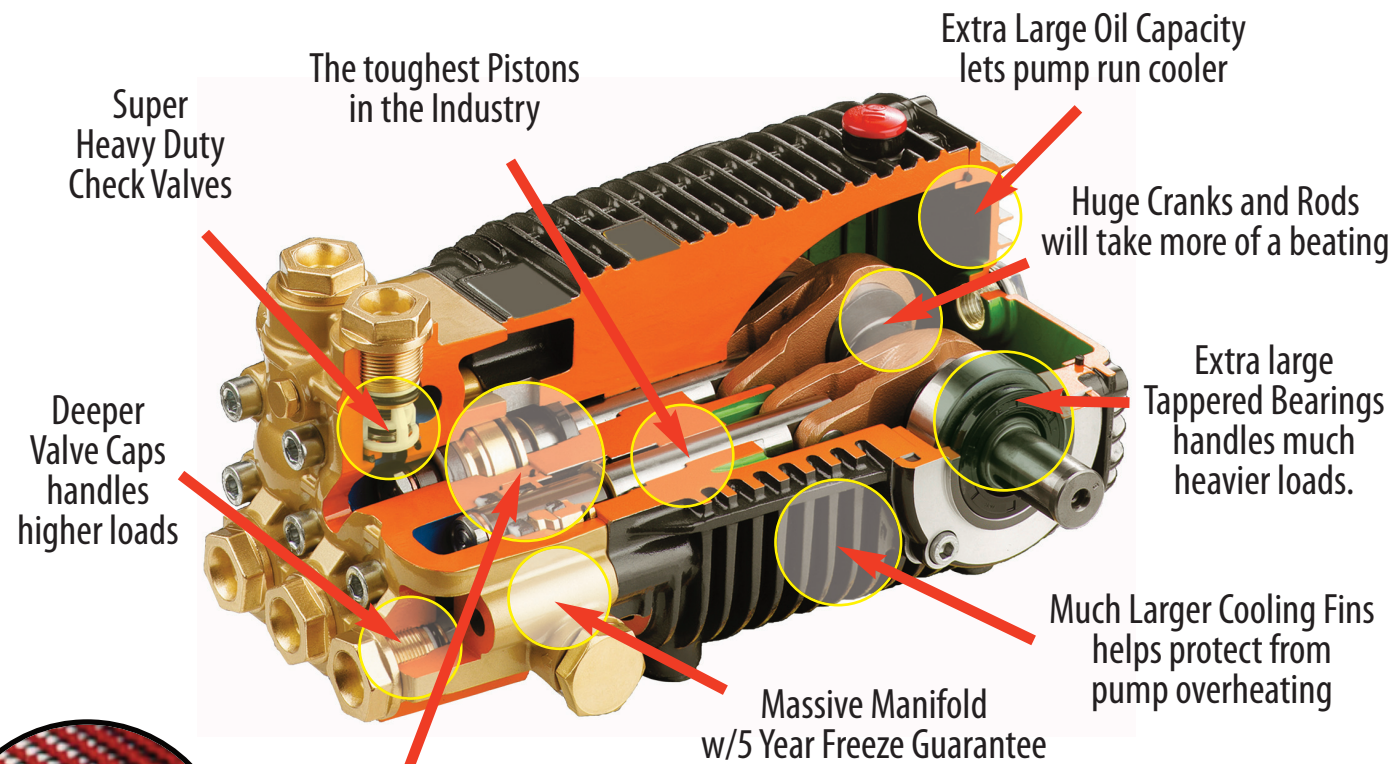
**BUT YOU CAN BEAT THEM AND WE CAN SHOW YOU HOW!**

**Use the Tri-Fold found on pages 14 & 15**

# Allison PUMPS

just how many  
**REASONS**  
can you think of  
to not buy the best?

Here are **9** reasons why you should!



**KEVLAR® 200° SUPER HIGH TEMP - BULLET PROOF PACKINGS**

Over the past 40 years, EnviroSpec owner John Allison has used most every high pressure cleaning pump in the industry. He says that 90% of all pump failures are due to excessive heat building up while the unit is in by-pass. Although we do not recommend that you push any pump to high temperatures, we have to report that Allison brand pumps with Kevlar seals have shown to withstand temperatures of over 225 degrees without failure. You could be running the best and most durable pump on the market.

*It's a fast and easy Change-Over*

**super hot seals made with 'bullet proof' material...**

## TS 200° PUMPS for Belt Drive Machines

These are 1450 RPM Pumps specifically designed to install on belt drive pressure washers.

### Allison TS8636SK

Belt Drive - 1450 RPM  
Max PSI 3,600  
Max GPM 8.6  
WEIGHS 45 lbs.

List Price: \$2250.00  
Professional discount: \$800.00



### TS & TSG PUMPS

Ours are **200° Seals**  
while theirs are 145°

### Allison TS1130SK

Belt Drive - 1450 RPM  
Max PSI 3,000  
Max GPM 11.0  
WEIGHS 45 lbs.

List Price: \$2250.00  
Professional discount: \$850.00

## TSG 200° PUMPS for Gear Reducers

are 1750 RPM Pumps specifically designed to install on gear reducers. This allows the engine to run a full RPM without losing much needed horsepower as is the case with other pumps.

### Allison TSG8636SK

Belt Drive - 1750 RPM  
Max PSI 3,600  
Max GPM 8.6  
WEIGHS 45 lbs.

List Price: \$2100.00  
Professional discount: \$800.00

If they are tough enough  
for the oil fields  
then they are  
**TOUGHER**  
than you'll ever need!



### Allison TSG1130SK

Belt Drive - 1750 RPM  
Max PSI 3,000  
Max GPM 11.0  
WEIGHS 45 lbs.

List Price: \$2250.00  
Professional discount: \$850.00

## TS-H 190° PUMPS - are Premium Hi-Temp Replacement for...

EZ4040G use **TS4040DH** / TS2021 use **TS5641SH** / Gear Driven TS2021 use **TSG5641SH**

### Allison TS4040DH

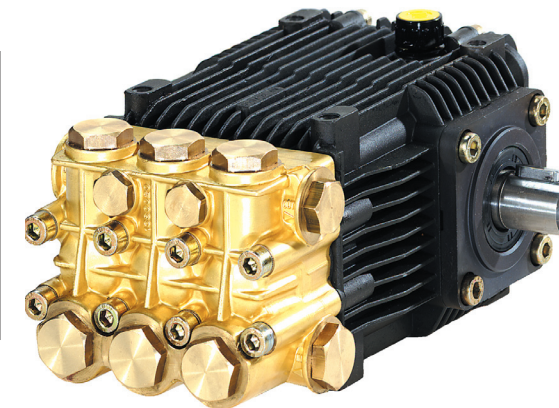
Direct Drive - 3400 RPM  
Max PSI 4,000  
Max GPM 4.0  
WEIGHS 21 lbs.

Bolts directly to engine.  
List Price: \$1245.00  
Professional discount: \$415.00

### Allison TS5540DH

Direct Drive - 3400 RPM  
Max PSI 4,100  
Max GPM 5.5  
WEIGHS 21 lbs.

Bolts directly to engine.  
List Price: \$1245.00  
Professional discount: \$415.00



### Allison TS5641SH

Belt Drive - 1450 RPM  
Max PSI 4,100  
Max GPM 5.6  
WEIGHS 34 lbs.

24mm Shaft  
List Price: \$1685.00  
Professional discount: \$595.00

### Allison TSG5641SH

Belt Drive - 1450 RPM  
Max PSI 4,100  
Max GPM 5.6  
WEIGHS 34 lbs.

24mm Shaft  
List Price: \$1685.00  
Professional discount: \$595.00



**HOW  
OFTEN  
DO YOU  
REPLACE  
PACKINGS**

## KOHLER ENGINE - 18 HP

20 AMP RECHARGING  
HOT WATER READY WHEN NEEDED  
INCLUDES MUFFLER ON OIL FILTER SIDE

#1829 WEB PRICE \$849.00



## VANGUARD ENGINE 18 HP

20 AMP RECHARGING  
HOT WATER READY WHEN NEEDED  
INCLUDES MUFFLER ON OIL FILTER SIDE

#1732 WEB PRICE \$949.00



## KOHLER ENGINE - 14 HP

INCLUDES MUFFLER  
DIRECT REPLACEMENT FOR HONDA 13  
PREMIUM CHOICE OVER HONDA 13  
KOHLER - THE PRO'S PREFERRED ENGINE

#K014 WEB PRICE \$495.00

## SERVICE SCHEDULES

Engines every 50 hours  
Pumps every 100 hours  
- Pumps with aluminum rods - 30W Non-detergent oil  
- Pumps with bronze rods - 50W Non-detergent oil  
Gears ever 250 hours - 90 low foaming gear lube

### COMPLETE KOHLER MAINTENANCE KITS

KOHLER - Complete Kit includes 2-qts of oil, oil filter, air filter, pre-cleaner, fuel filter and 2 spark plugs.  
18 HP Kit #6440 WEB PRICE \$49.95  
22-30HP Kit #6441 WEB PRICE \$49.95

### OIL FILTERS:

KOHLER #1837 WEB PRICE \$9.95  
Vanguard #1734 WEB PRICE \$9.95

### AIR FILTERS:

KOHLER (See maintenance kits)  
Vanguard #1735 WEB PRICE \$5.95

## TINY-TACH/HOUR METER

When you call us for technical help because your pump is not up to pressure the first thing we are going to ask you is 'how fast is your engine running?'

Will you be able to help us help you?

#1429 Web Price \$39.95



## TURBO 4,000 PSI OUR #1 SELLER

2-Sizes Available

4.5 Nozzle Size #16225 WEB PRICE \$30.08  
5.5 Nozzle Size #16227 WEB PRICE \$30.08



## HOSE REEL HOLDS UP TO 200' OF 3/8"

Solid steel construction, durable power coat, direct hand rewind, full flow brass swivel, rated to 4000 psi.

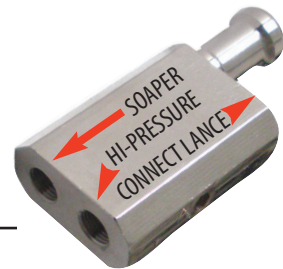
#1316 WEB PRICE \$64.95



## TROMBONE NOZZLE HOLDER

Install high pressure nozzle in one hole  
Install low pressure nozzle in the other hole  
Switch from soap to no soap simply by pulling piston

#7775 WEB PRICE \$11.95



## 10" PREMIUM BRUSH

This brush hold more water than any other brush on the market. Long lasting, super hi-pile

#1451 WEB PRICE \$9.95



## REMEMBER

Change your oil  
every 50 hours!

## QUICK DRAIN PLUG FOR PUMPS, ENGINES, GEARS

Fits 18 & above Kohler & Vanguards  
No more messy oil changes.  
Very easy installation  
Will not fit Honda

#1428 Web Price \$19.95



## DUAL NOZZLE HOLDER

We've sold them all - THESE ARE THE BEST!

Holder with Stainless Ball  
#1267 WEB PRICE \$12.95

Holder with Chlorine Bal  
#1269 WEB PRICE \$19.95



## SERPENTINE - 4000 PSI BLACK

SET UP WITH QUICK CONNECTS ON BOTH ENDS

#1708 50' Web Price \$ 9.95  
#1709 100' Web Price \$124.95

www.envirospec.com

Each section has:

1 ea. Quick Connect Plug  
1 ea. Quick Connect Coupler  
1 ea. 3/8" MPT (fixed)  
1 ea. 3/8" MPT (swivel)  
Strain reliefs on both ends

## SERPENTINE - 6000 PSI BLACK

SET UP WITH QUICK CONNECTS ON BOTH ENDS

#6001 50' Web Price \$ 79.95  
#6002 100' Web Price \$129.95

www.envirospec.com

# SERPENTINE HOSE

has been our industry's  
#1 SELLING HOSE  
for over 15 years.

## SERPENTINE - 7400 PSI BLACK

FLEXIBLE AND VERY LIGHT WEIGHT  
DOES NOT COME WITH QUICK CONNECTS



#6301 50' Web Price \$ 94.95  
#6302 100' Web Price \$169.95  
Only weighs 1 pound more than the 6000 PSI hose.

www.envirospec.com

## SERPENTINE - 4000 PSI GREY

SET UP WITH QUICK CONNECTS ON BOTH ENDS

#1804 50' Web Price \$ 69.95  
#1805 100' Web Price \$124.95

www.envirospec.com



## SERPENTINE - 6000 PSI GREY

SET UP WITH QUICK CONNECTS ON BOTH ENDS

#6101 50' Web Price \$ 84.95  
#6102 100' Web Price \$134.95

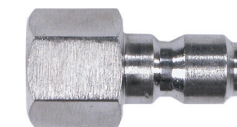
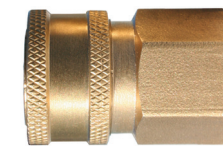
www.envirospec.com

# QUICK CONNECTS

## QUICK COUPLER BRASS

WITH VITON O'RINGS

#Q54FB 1/4" FPT WEB PRICE \$2.28  
#Q54MB 1/4" MPT WEB PRICE \$2.28  
#Q58FB 3/8" FPT WEB PRICE \$2.59  
#Q58MB 3/8" MPT WEB PRICE \$2.59



## QUICK PLUG PLATED STEEL

HARDENED FOR LONG LASTING SERVICE

#QP4FB 1/4" FPT WEB PRICE \$.89  
#QP4MB 1/4" MPT WEB PRICE \$.89  
#QP8FB 3/8" FPT WEB PRICE \$.99  
#QP8MB 3/8" MPT WEB PRICE \$.99

## QUICK CONNECT O'RINGS

EPDM  
#QOR4E BAG OF 50 WEB PRICE \$ 9.95  
#QOR8E BAG OF 50 WEB PRICE \$ 9.95  
VITON  
#QOR4V BAG OF 50 WEB PRICE \$12.95  
#QOR8V BAG OF 50 WEB PRICE \$12.95



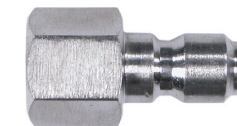
### CAUTION:

Never use a petroleum based product to lubricate couplers. If you do the o'rings will swell and self-destruct.

## QUICK COUPLER STAINLESS STEEL

WITH VITON O'RINGS

#Q54FS 1/4" FPT WEB PRICE \$2.99  
#Q54MS 1/4" MPT WEB PRICE \$2.99  
#Q58FS 3/8" FPT WEB PRICE \$3.99  
#Q58MS 3/8" MPT WEB PRICE \$3.99



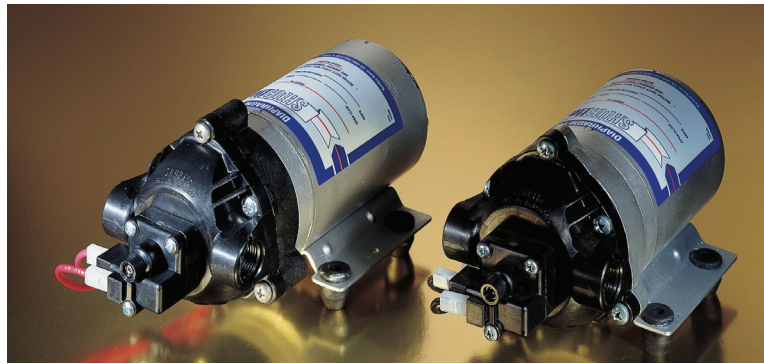
## QUICK PLUG STAINLESS STEEL

HARDENED FOR LONG LASTING SERVICE

#QP4FS 1/4" FPT WEB PRICE \$1.79  
#QP4MS 1/4" MPT WEB PRICE \$1.79  
#QP8FS 3/8" FPT WEB PRICE \$2.19  
#QP8MS 3/8" MPT WEB PRICE \$2.19

## SHURFLO PUMP - 12V 1.8 GPM @ 100 PSI

Chemical Resistant Viton Seals  
Includes a pressure demand switch so when you release the trigger the pump shuts-down.  
#1050 WEB PRICE \$95.75



## SHURFLO PUMP - 115V 1.6 GPM @ 100 PSI

Chemical Resistant Viton Seals  
Includes a pressure demand switch so when you release the trigger the pump shuts-down.  
#1056 WEB PRICE \$139.95

## SHURFLO PUMP - 12V 3.6 GPM @ 45 PSI

Chemical Resistant Viton Seals  
Includes a pressure demand switch so when you release the trigger the pump shuts-down.  
#1052 WEB PRICE \$129.95



## WATER FILTER PREMIUM

We recommend this filter for ALL pumps. This is not an area where you want to be Cheap!

3/4" for up to 9 GPM #3798 WEB PRICE \$39.95  
1.0" for up to 13 GPM #3799 WEB PRICE \$49.95



#3799 has a bottom clean-out

## WATER FILTER CLEAR

Two sizes to choose from

1/2" FPT In/Out #1012 WEB PRICE \$12.95  
3/4" FPT In/Out #1013 WEB PRICE \$12.95



## BALL VALVE - 3000 PSI

Our #1 Seller since 1986  
3/8" FPT - CARBON STEEL

#1303 WEB PRICE \$21.95



Take the 'load' off the your  
**TELESCOPING WAND**  
with this harness  
#2028 WEB PRICE \$14.95

## BALL VALVE 3-WAY

Although this popular valve can be used for a number of things its most common use is to set-up dual chem feeds for your chemical injector.

#1308 WEB PRICE \$27.95



## TELESCOPING LANCES

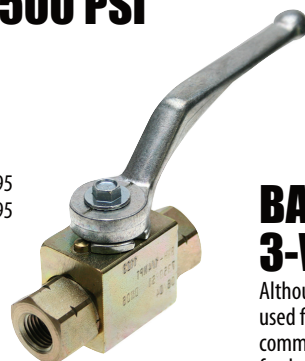


18' - 3-section wand #2018M WEB PRICE \$84.95  
24' - 3-section wand #2024M WEB PRICE \$94.95

## BALL VALVE - 7500 PSI

Rugged Carbon Steel  
Blow-out proof stem

3/8" FPT #1305 WEB PRICE \$19.95  
1/2" FPT #1306 WEB PRICE \$21.95



## GUN SWIVEL

Swivels at Max Pressure  
Rated to 4100 PSI

Lance to Gun Out  
#1144 \$34.95

Hose to Gun In  
#1146 \$34.95



# CHEMICAL INJECTORS

## ALLISON 33% SUPER SUDS SUCKER

Our Industry's #1 Selling Injector since 1986  
Draws up to 33%

#1964 WEB PRICE \$58.95



## ALLISON 2-in-1 INJECTOR - 22%

The injector with a 'built-in' spare  
When 1 side stops working you don't have to!  
Simply turn one knob off and the other on.

2-5 GPM #1736 WEB PRICE \$24.95  
5-9 GPM #1738 WEB PRICE \$24.95

## ALLISON 22% SUDS SUCKERS

With Ceramic Ball

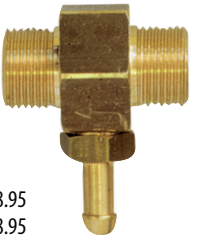
Non Adjustable:  
3-5 GPM #1441 WEB PRICE \$12.95  
5-8 GPM #1443 WEB PRICE \$12.95



## ECONOMY BLEACH INJECTORS

With Ceramic Ball

3-5 GPM #1511 WEB PRICE \$8.95  
5-8 GPM #1512 WEB PRICE \$8.95



## Allison INJECTORS

have been the  
Professional's First Choice  
for over 30 years.

## PREMIUM CHEM FILTER

Our biggest and best chemical filter.  
Constructed of Brass and Stainless Steel  
1/4" Babb

#1153 WEB PRICE \$3.49



# House Wash Products

## EMULSIFIER PLUS

Have the best of both worlds  
with this bleach friendly  
DETERGENT

This is a 55 Gallon Drum Pak  
#EMUP55 WEB PRICE \$140.00

Full-dress Detergents  
that out perform all others.  
And we have been doing it  
for over... **40**  
Years

## LIMONENE

Formulated with pure  
d'Limonene citrus extracts that  
kill mold and mildew on contact.

This is a 55 Gallon Drum Pak  
#LIM55 WEB PRICE \$150.00

Unlike any other detergent that you will find on the market EnviroSpec products were conceived and developed by a professional contractor just like you. Why? Again - just like you - he fell prey to every 'claim-to-fame' product that cost a lot and did little! You might say that it was survival that took him to this end.

## PLEX-MASTER

Leaves an invisible shield on the  
surface. that retards further mold  
and mildew formation.

This is a 5 Gallon Drum makes 55 Gallons  
#PLE55 WEB PRICE \$90.00



Dan Galvin's

## HOUSE WASH SCHOOL SCHEDULE

April 9TH - 11TH - June 25th - 27th  
August 20th - 22nd - October 15th - 17th

Contact [success@envirospec.com](mailto:success@envirospec.com)

## FOAM & SHINE

Great shine for surfaces that are  
either new or have been well  
maintained. Excellent foamer.

This is a 55 Gallon Drum Pak  
#FS55 WEB PRICE \$140.00



# UNLOADERS

## K-7 UNLOADERS

SOFT TOUCH  
 Rated to 3,500 psi  
 With 'anti-surge' kit installed

#1089	K7.0/2.1-2.9 GPM	WEB PRICE	\$89.95
#1090	K7.1/2.9-4.2 GPM	WEB PRICE	\$89.95
#1091	K7.2/4.2-6.6 GPM	WEB PRICE	\$89.95
#1092	K7.3/6.6-10.8 GPM	WEB PRICE	\$89.95
#1789	KIT FOR ALL	WEB PRICE	\$26.95



There is only **ONE WAY** to adjust an **UNLOADER!**

## VB350 UNLOADER

Pressure Type  
 TO 8 GPM - 5,700 PSI

#2032	WEB PRICE	\$89.95
#2033	KIT	\$39.95



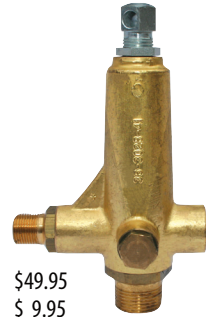
If you don't have a pressure gauge don't bother trying to install and unloader because you are just going to do it wrong!

## K-5

Flow Actuated  
 4.2 to 6.6 GPM  
 up to 3,000 PSI

#1087	WEB PRICE	\$49.95
#1785	KIT	\$ 9.95

while supply last!



See pages 32 & 33 and learn how to adjust an unloader **THE RIGHT WAY!**

## PA-10 COMPENSATING UNLOADER

SOFT TOUCH  
 8 GPM - 3600 PSI

#1108	WEB PRICE	\$89.95
#1109	KIT	\$59.95

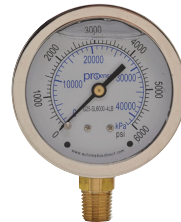


## MV-550 UNLOADER

Pressure Type  
 to 8.0 GPM - 3,600 PSI

#1120	WEB PRICE	\$24.95
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while supply last!



**STEP #1**  
 in adjusting an unloader  
**BUY A GAUGE!**  
 6,000 PSI  
 #1132  
 WEB PRICE \$12.95

# TRIGGER GUNS

## ALLISON YGA-5000 & 5000C

Max 5,000 PSI and up to 12 GPM

Stainless Ball	# YGA5000	WEB PRICE	\$19.95
Chlorine Ball	# YGA5000C	WEB PRICE	\$26.95



Relax Action TRIGGER

Relax Action TRIGGER



Relax Action TRIGGER



Relax Action TRIGGER

## ALLISON YGA5000S

Straight Thru Gun  
 Preferred by contractors who work long hours between jobs. The Straight-thru design is much more comfortable and productive than 'pistol-type' gun

Max 5,000 PSI and up to 11 GPM		
#1218	WEB PRICE	\$29.95



Relax Action TRIGGER

## ALLISON HI-TECH 501

This may be an economy gun but it is one long lasting super tough hombre. We have carried this gun for over 15 years and it remains one of our top sellers.

#1209	WEB PRICE	\$15.95
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## RL-5100 by PA

Allowable 4,500 PSI and up to 13 GPM

Stainless Ball	#1204	WEB PRICE	\$49.95
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The easiest pulling gun in the industry! Long lasting!



Relax Action TRIGGER

## ALLISON HI-TECH 5500

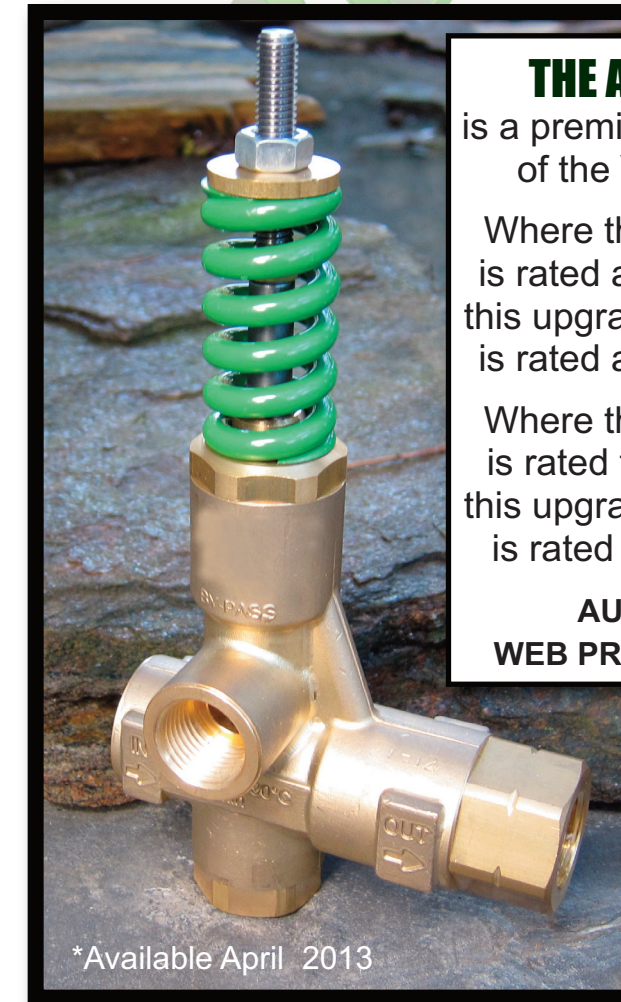
Max 5500 PSI and up to 13 GPM  
 One of the most comfortable grips in the industry

#HT5500	WEB PRICE	\$26.95
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# 2 UNLOADERS THAT ARE

# new for 2013



**THE AU2848**  
 is a premium upgrade of the YU-2140  
 Where the YU2140 is rated at 4060 PSI this upgraded version is rated at 4800 PSI  
 Where the YU2140 is rated to 21 GPM this upgraded version is rated at 28 GPM

**AU2848\***  
**WEB PRICE \$99.95**

\*Available April 2013

Visit us at [www.envirospec.com](http://www.envirospec.com) and enter part numbers **AU2848\*** or **COMP-838** and all of your unloader problems will cease to exist!



## THE COMP-838

Replaces K-7's and all other 'SOFT TOUCH' UNLOADERS

This unloader takes **THE 'LOAD'** out of un'loader' and by doing so it extends the life of every component on the pressure washer.

This the perfect unloader for any pressure washer producing up to 8.0 GPM & a 'spike' pressure not exceeding 3,800 PSI

It is a 'super easy' install and comes standard with a 6,000 PSI Gauge.

**COMP838**  
**WEB PRICE \$79.95**

# UNLOADERS FOR DUMMIES

by 'Master Dummy' - John Allison

If there is one thing I have learned in my 40 years as both a contractor and a supplier/manufacturer is that everyone who comes into this industry (including myself) wants to be a 'rocket scientist' or an engineer. Sometimes that is good - most times it isn't.

Believe me - there is NO rocket science required when it comes to a pressure washer. Water comes in and water goes out and with the exception of a few safety valves in between...

*THAT IS REALLY ALL THERE IS TO A PRESSURE WASHER  
SO PEASE DON'T COMPLICATE THINGS.*

I am not going to bore you (now) with the 'water in' and 'water out' on a pressure washer concept but I am going to give you the 'master dummies' lesson on unloaders which is one of those 'safety valves' I spoke of earlier. So sit back and don't bother taking notes. *It 'ain't' that hard folks!*

You have a machine that, with the trigger gun pulled, is running at 'whatever PSI' (doesn't matter so don't get 'bogged' down with any fancy calculations) and now you don't want water to come out the gun any more so you release the trigger. That water has to go somewhere or the pump could explode or lock up your engine. In order to keep this from happening you have an UNLOADER installed on the on the high pressure side of the pump head. When the trigger is released an internal by-pass valve goes into action and UNLOADS or 'by-passes' the water. The Unloader is now acting as a TRAFFIC COP and is redirecting the 'water traffic' to another location. It could be redirected back to the inlet side of the pump, back to a water tank or even the ground if you want.

SORRY - that is all there is to an unloader. Now, if you are like most, you will sit back and come up with at least 20 questions about unloaders. Which one should I buy, what color, what size, who makes it, etc. and the bottom line is this - **WHO CARES!** They all do the same thing. Yes, some will last longer and those are the only ones we sell.

My recommendation is to purchase a Compesating counter balanced unloader like the popular ALLISON COMP-838. This unloader has a very 'soft touch' and while most unloaders really hammer away at longevienty of your equipment the '838' is very gentle.

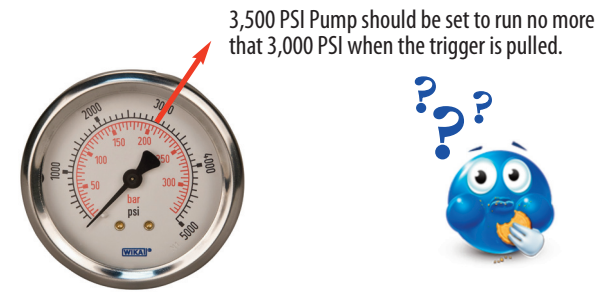
## LESSON #1 - OPERATING PRESSURE

That is the pressure that is being produced when you have the trigger pulled.

A TS-2021 Pump is rated for 3,500 PSI so your maximum operating pressure is 3,500 PSI. Right? WRONG! Your maximum operating pressure should be approximately 80-85% of 3,500 PSI or... **3,000 PSI!**

Why? Because you have to allow for - SPIKE PRESSURE.

With the trigger gun pulled - if your operating pressure on a 3,500 PSI Pump is more than 3,000 PSI you will be OVER the manufacturers rating when you 'release' the trigger and factor in 'SPIKE' pressure which is what it UNLOADS at.



3,500 PSI Pump should be set to run no more than 3,000 PSI when the trigger is pulled.

## LESSON #2 - SPIKE PRESSURE

We know that we know what operating pressure is what is **SPIKE** pressure?

Well - that is the pressure that the pressure gauge 'spikes' or 'jumps' up to when you release the trigger!

I know you have a pressure gauge - right? If you don't no need to waste OUR time. Get one and then start over with lesson #1! That's like having a car with no speedometer and complaining when you get a 'speeding ticket'.

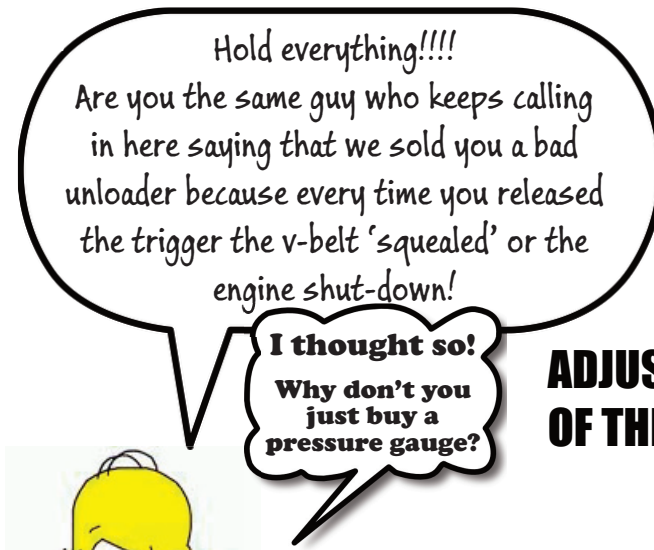
Now when you release the trigger watch your pressure gauge jump to a higher pressure. This is your **SPIKE** pressure.

**SPIKE** pressure should never be more than 15-20% of operating pressure. This means that if your operating pressure is 3,000 PSI then your spike pressure should not exceed a maximum of 15-20% or, in this case, 450 to 600 PSI making your pressure gauge read no more than 3600 PSI with the trigger gun released.



Visit [WWW.ENVIROSPEC.COM](http://WWW.ENVIROSPEC.COM)

for more great articles just like this that are written by John Allison and others who at one time had the same problems that you experience every day!



## ADJUSTING 99% OF THE UNLOADERS IN THE INDUSTRY

by John Allison  
EnviroSpec - [www.envirospec.com](http://www.envirospec.com)

First look at the body of the unloader and identify the markings. You will have an 'IN', an 'OUT', a 'By-pass' and around the adjusting knob a (+) and a (-).

Before you even think about properly adjusting an unloader you need to make sure your machine is nozzled correctly.

If you have a 5.6 GPM Pump that is rated for 3,500 PSI you have to remember the **spike** pressure factor under LESSON 2. You are going to use a nozzle that will give you 5.6 GPM @ 3,000 PSI. Go to your nozzle chart and you will see that will be a #06.5 nozzle size. Caution - do not get confused about the first 2-numbers on a nozzle. Those are the degrees or how wide or narrow the stream of water will be as it exits the nozzle. The last 3 numbers will be the nozzle size. For example: a 1506.5 nozzle is 15 degree with a nozzle size of 06.5.

**Now - install the NEW nozzle and let's get to unloader adjusting.**

1. The first thing you want to do is take off the chemical injector if you have one installed. Then place your pressure gauge between the unloader and the trigger gun. Before you crank the engine turn the knob on the unloader to it's lowest possible pressure - see (-).

2. Now crank the engine and get it to full operating RPMs. While holding the gun **OPEN** start turning the knob on the unloader toward the (+) direction and watch the gauge closely. When the gauge **STOPS** moving then you must **STOP - YES - STOP!** **DO NOT** turn that knob any more. If the pressure shows that you have **exceeded** what you have calculated to be the proper operating pressure then you need to use a larger nozzle size in order to bring the pressure back down. Using this example try a 07.0 nozzle instead of the 06.5 and see if it brings the PSI down to the proper operating pressure. On the other hand, if the pressure will not come up to that pre-determined operating PSI then you will need to install a smaller nozzle. In this case start by installing a 06.0 instead of the 06.5 nozzle size.

**WHY** am I having problems getting to the proper operating pressure. First you should know that some pumps are over rated by the manufacturer. For example; we have bench tested the TS-2021 pump many times and have yet to get one to produce more than 5.3 GPM at it's rated 1450 RPM although it is rated for 5.6 GPM. Having to reduce the nozzle size on this pump is normal.

Now if you understand how to properly adjust the unloader you will understand what happens if you keep turning the unloader adjusting knob **AFTER** you have already reached your operating pressure. You start **Red-Lining** your pump!

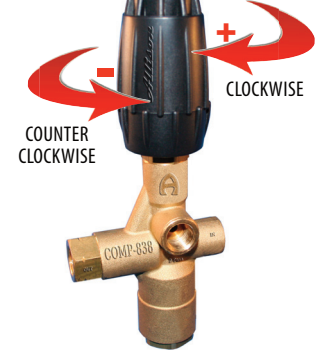
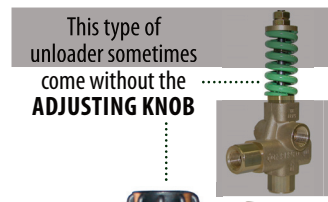
So what do you think will happen if you continue to turn the knob clockwise while the OPERATING PRESSURE stays at 3,000? All you are doing at this point is **SETTING** the **SPIKE PRESSURE** to an **UNSAFE PRESSURE**. I have seen **spike pressures** as high as **7,000 PSI** on a pump rated at only 3,500 PSI.

How does this happen? The most common reason is because the operator does not have a pressure gauge installed on their machine so they have to guess at the pressure. This probably represents 75% of all pressure washer problems. When you over-pressurizing a pump you will destroy or reduce service the life of every component on the system.

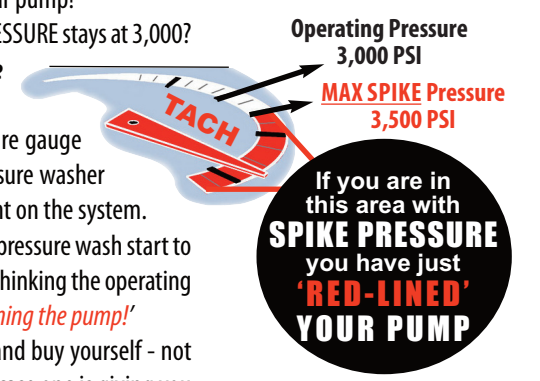
At least once a week someone calls and tells us that when they release the trigger the belts on their pressure wash start to 'scream' and/or the engine shuts down. This occurred because they kept turning the unloader adjusting knob thinking the operating pressure would increase but all they were doing was setting the 'spike pressure' to an unsafe level or - **red-lining the pump!**

Solution - use this information and buy yourself - not one - but **two** pressure gauges just in case one is giving you a false reading.

**Congratulations!**  
**Your degree is in the mail!**



NOTE:  
**K-7 & K-5 & K-9 UNLOADERS**  
adjust the opposite from most other unloaders.



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