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**PHENIX 1500  
FIRST DUE  
THERMAL PLASTIC  
FIRE HELMET  
CARE AND MAINTENANCE MANUAL**

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**Please read all of the information contained in this manual. Fill out the form on the last page and send it to Phenix Technology. Keep a copy for your files.**

**Failure to comply with this request will void all warranties on your helmet.**

**Each member of the agency receiving this helmet must fill out the form to completion and the form must be mailed in to be kept on file.**

# PHENIX 1500 FIRST DUE THERMAL PLASTIC HELMET

## CARE AND MAINTENANCE

**For assistance call toll-free 888-347-7838**

Congratulations, you have in your possession one of the lightest, most ergonomically correct, multi-use fire helmets on the market today. We developed this helmet in 1972. It was designed by firefighters, for firefighters. It can be worn for long periods of time without undue head or neck strain. Many fire agencies use it both as a structural and wildfire helmet. This includes the California Department of Forestry and Fire Protection and the United States Forest Service. We achieved this comfort and balance by designing the helmet with the weight properly distributed and a low center of gravity. Because of the plastics technology we utilize, we were also able to keep down the weight. We feel that was important to the firefighter wearing the product. However, don't let our light weight be associated with light duty. Since 1972 we have seen many firefighters in metro, urban, and rural fire agencies caught in situations where the helmet became the difference between injury and no injury escape unscathed. If you call us we can relate some of those stories that make our helmet exemplary in firefighter head protection. Our product has been examined by Orthopedic Surgeons and Chiropractors and has their highest recommendation as a properly designed helmet regarding weight and ergonomics relevant to possible firefighter fatigue, injuries and long-term head and neck problems.

In 1976 US OSHA developed a structural firefighter's helmet standard. The standard became the law of the land for fire helmets. It's still in effect. NFPA also designed their helmet standard based on US OSHA's document. We were compliant to both documents. Today all of our products meet and exceed one or both of these two standards depending on how the customer orders the helmet. That information is available to all FIRE AGENCIES that request it.

# WARRANTY FORM

## FOR PHENIX 1500 FIRST DUE FIREFIGHTING HELMET

NAME OF USER: \_\_\_\_\_ RANK \_\_\_\_\_

DATE OF ISSUE: \_\_\_\_\_

NAME & ADDRESS OF FIRE AGENCY/DEPARTMENT

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

CONTACT PHONE: (        ) \_\_\_\_\_

**LABEL IDENTIFICATION INFORMATION** (located under gray impact dome on right side)

LOT # \_\_\_\_\_

DATE OF MANUFACTURE: \_\_\_\_\_

MODEL # \_\_\_\_\_

COLOR OF HELMET: \_\_\_\_\_

TYPE OF EYE PROTECTION ISSUED WITH HELMET

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### POP QUESTIONS

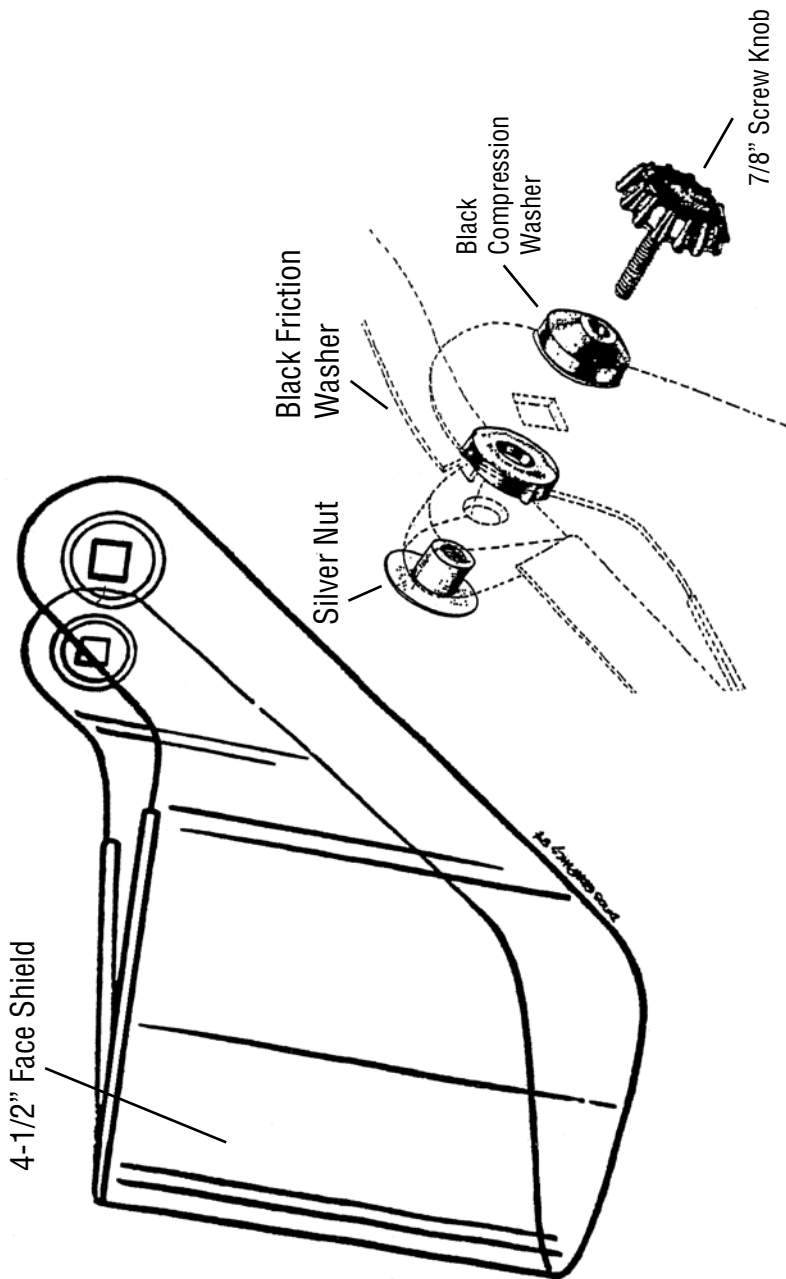
WHAT IS THIS HELMET'S OUTER SHELL MADE FROM? \_\_\_\_\_

WHAT SHOULD YOU NOT USE ON THE HELMET? \_\_\_\_\_

WHAT IS USED TO CLEAN YOUR GOGGLES? \_\_\_\_\_

**PLEASE MAIL THIS FORM TO:  
PHENIX TECHNOLOGY  
ATTN: WARRANTY CONTROL  
12391 SAMPSON AVE. # H  
RIVERSIDE, CA 92503**

\*\*\*\*Failure to return warranty form will void any warranty on your helmet.



## **FACESHIELD ATTACHMENT KIT.**

In cities all over the world our helmets have been in service for as long as 20 years and more. One large California fire department has worn our helmet since 1978. Some of those helmets worn in that department today are over 20 years old and are still providing total head protection. This shows that our helmets are very durable and if properly cared for can be used for many years. If you have one of our helmets made years ago and a part comes up missing, we can replace it in a timely manner. Replacing parts on the helmet is done with ease. We have strived to keep it simple and easy. Just call us.

Our First Due Fire Helmets may be purchased in several DIFFERENT configurations and still meet the US OSHA or NFPA standards. You can see the different models by going to our website. If you have a different requirement than what you see, we can accommodate you. As the Burger King slogan goes: “WE MAKE IT YOUR WAY.”

**As with any piece of safety equipment in the fire service, you should be aware of the proper care and maintenance procedures for each item. This is especially true of your PPE.**

## **HELMET SHELL AND IMPACT DOME**

Injection molding makes the shell. We use a high temperature, chemical-resistant material that has proven to be the best we’ve ever had. However, we are always looking for new products to improve our shell. The shells come in White, Red, Yellow, Orange, Black, and Blue.

To clean the shell use hot water and a mild liquid dish soap. (Something you wouldn’t mind putting your hands in, Joy or Ivory.) If more cleaning is needed use Isopropyl Alcohol and a soft rag. You can remove tar with an ice cube. Just chill the tar. It will shrink and you can peel it off. You can also use Meguires plastic cleaner, available at most auto supply stores. If the shell is stained with chemicals you will have to call us for directions. You may also remove the reflective

tape when cleaning the shell. Put the tape in a safe place and return it to its proper location on the shell after cleaning. Front ID shields can be removed also. Remember if you lose a part call us right away and we can get it into the mail ASAP. A coat of Meguires wax on the shell after you clean it and replace the reflective tape will make it easier to clean the next time. When cleaning the inside of the shell remove the gray rubber dome. It will come out easily. Use a damp rag to wipe down the inside of the shell and try not to disturb the labels. The labels need to be in the helmet to make it compliant to a standard. Replace the gray dome. If this isn't put back in the shell you have just voided the warranty on the helmet. Use only recommended cleaning procedures for your First Due.

NEVER USE HYDROCARBON PRODUCTS ON THIS HELMET.

**DO NOT USE YOUR HELMET SHELL AS A WINDOW BREAKER OR A FORCEABLE ENTRY TOOL. IN THE FIRE SERVICE WE HAVE LONG STICKS WITH POINTY METAL THINGS ON THE END FOR THAT PURPOSE.**

### **REFLECTIVE TAPE**

The reflective tape can be removed for cleaning of the shell or replacement with a rounded edge tool such as a butter knife. When you remove the tape store it in a dust and moisture free area. Replace the tape on the helmet in the same location from where you removed it. The placement of the reflective tape is relevant and required by the standard the helmet is compliant to. (NFPA or US-OSHA)

### **LINER**

The liner comes in several configurations. (See our website.) They are easily removed for cleaning. Brush off any large bits of foreign material. Soak the liner in a mild liquid dish soap and cold water for half an hour. Remove and rinse with clear water. Let air dry in a cool dry place out of the sun. After a while, the four liner tabs that suspend the liner in the shell will take a set and become loose. The

## **ADJUSTABLE SIZING INSTRUCTIONS**

The liner provided with this helmet must be properly sized to your head if it is to give you the proper degree of protection. Remove the liner by sliding the plastic tabs out of the pockets molded into the helmet shell. You may notice that these tabs are in very tightly. That is on purpose. The tabs should always fit snugly. Place the liner on your head and reposition the hook and latch fasteners on each side. The helmet liner should rest comfortably and be well balanced on the head. Check to see that the hook and latch fasteners are positioned equally around the liner. Look closely at the four suspension straps that go over the head. The four straps configuration should rest easily on the head, but should not have a big "bulge" at the crown of the head. The vertical position of the liner is controlled by the string in the center. Reposition this string to provide a proper setting. The string must be tied with a square knot so that it will not loosen or slack-up on usage. Helmet wearers should periodically check the tension on the string to make sure that a proper clearance is provided. To center the suspension in the shell there are positioning adjustments. The liner should be adjusted by making sure that the holes closest to the front are used for small sizes; center hole should be used for medium sizes; and the rear holes should be used for larger sizes. If the wearer is using the NomexR protector, the liner may have to be slightly loose to accommodate folding the protector up into the helmet. The protector should always be down for maximum protection against both thermal and convective heat transmission. Put the liner back into the helmet and test the fit of the liner. The helmet should rest on the head without tipping either forward or backward. The helmet should be well balanced and the wearer's ears and temple area should be protected by the outlip of the helmet shell. If the helmet sets too high on the head, or sets low on the head, readjust the liner. The nape strap is best adjusted when the helmet is actually on the head. The hook and latch fastener should be released and readjusted to fit snugly, but not too tightly.

**THE CHINSTRAP MUST BE PROPERLY SECURED AND WORN AT ALL TIMES.**



soaking will put life back into the tabs and make them tight again. When the liner gets loose and can't be fixed by soaking, use a drop of white glue (Elmer's or Weld Bond) in each of the tab cavities and replace the liner. This will hold the liner in, but you will still be able to get it out for cleaning. It will also help if you take out the liner and clean the tabs and the shell cavities with a cotton swab and Isopropyl Alcohol. The oil in smoke can get in behind the liner tabs and cause them to become loose. When the liner gets frayed or torn it should be replaced.

## CHINSTRAP

The chinstrap is made of Nomex or Nylon depending on how you ordered the helmet and to what standard you selected. There will **ALWAYS** be a Postman's slide on the right side of the helmet. You can change the postman's slide to the left side, if that's more convenient, without voiding the warranty. On the other side you may have a Quick Release device if it was in your specs. If you remove the chinstrap to clean or replace, remember how it came off and be careful of the parts. Put them in a safe place. **IF YOU LOSE A PART CALL US. WE'LL HAVE IT IN THE MAIL the SAME DAY.** To clean the chinstrap soak it in cold water and a mild dish soap for fifteen minutes. Rinse with clear water and air dry out of the sun. Replace the chinstrap in the same configuration as it originally came. If a chinstrap changes color such as white, yellow or magenta it means you have subjected the product to extreme heat. Call us. Tell us the color and we will tell you the temperature the color is indicating. When chinstraps get worn or frayed they should be replaced.

**IMPORTANT STUFF: THE CHINSTRAP IS CALLED "CHINSTRAP" BECAUSE IT IS PART OF THE HELMET RETENTION SYSTEM AND IS TO BE WORN IN PLACE UNDER THE CHIN. IT'S NOT CALLED A "ROUND THE BACK OF THE HELMET STRAP" OR AN "OVER THE TOP HELMET STRAP" OR AN "OVER THE FRONT OF THE HELMET STRAP". US-OSHA AND NFPA SAY THAT THE CHINSTRAP MUST BE PROPERLY USED FOR THE FIRE HELMET TO BE COMPLIANT.**

## FACE SHIELD

There are two models of face shield that can be placed on our helmet. They are the NFPA model and CAL-OSHA US-OSHA model. NFPA is a higher temperature and scratch resistant model and the CAL-OSHA and US-OSHA is made of polycarbonate clear plastic. If you remove the face shield for cleaning remember how it came off and put it back the same way. Clean either face shield with clean water and a soft, no-scratch rag. Cotton t-shirt works well. When replacing the face shield leave both side screws loose and place the shield in the down position. Push back on the shield and tighten the screws. ONLY HAND TIGHTEN the screws. Then place the shield in its stowed position (up) until you need it. Side Face Shield Screws should be checked every time you come on shift the same as you check your SCBA and other safety equipment.

When face shield become scratched to the point that your vision is impaired or it was melted in a training burn it should be replaced. Our face shields cover the face down to your chin in most cases, due to our helmet sitting lower on your head.

## GOGGLES

Your other choice for NFPA or US-OSHA eye protection is goggles. On the NFPA helmet they must be compliant. On the US-OSHA helmet they need only meet standard safety goggle requirements. We have two goggles that meet NFPA requirements. The ESS and the PAULSON ATAC. Both can be attached to the side of the helmet. Or you can have a strap that goes around the back of the helmet. The NFPA helmet has to have the goggles on the helmet at all times. This is a good thing for us because every time you go into a hot fire they (The Goggles) are ruined and have to be replaced. US-OSHA says you have to have safety eye protection available when you are wearing the helmet and engaged in hazardous work that could injure your eyes. Our recommendation is that you keep your goggles in your pocket in a soft cloth or place some old Nomex or PBI over your

## PLEASE NOTE:

This document was written by the president of PHENIX TECHNOLOGY.

I, Ray Russell, have been a member of the fire service since 1957. It is my sincere objective to see that the fire service personnel using our products do so in a safe and efficient manner. Fight fire using the information you have gained in training as your first line of defense or offense. Protective clothing will work only if you know your limitations. If you get injured, you can't help your fellow firefighters or those citizens you have sworn to protect. **STAY SAFE**

**RAY M. RUSSELL**  
**PRESIDENT**

**To Our Website:**  
[www.phenixfirehelmets.com](http://www.phenixfirehelmets.com)

**Toll Free Phone #**  
**888-347-7838**

E-Mail: [phenix1500@aol.com](mailto:phenix1500@aol.com)

NFPA COMPLIANT  
ISO 9001:2000 REGISTERED  
NTS NATIONAL TECHNICAL SYSTEMS  
FULLERTON, CA TESTING LAB

SYSTEM CAN PROTECT YOU FROM ALL OF THE SITUATIONS YOU MAY ENCOUNTER, INCLUDING BURNS, INJURIES, DISEASE OR HAZARDOUS CONDITIONS. IF YOU HAVEN'T BEEN TRAINED PROPERLY IN FIREFIGHTING AND RESCUE TECHNIQUES ACCORDING TO NFPA 1500, \* AND COMMON SENSE, **DON'T DO IT.**

goggles as they are stowed on your helmet. We also recommend that you keep the goggles on the back of the helmet brim as this puts the weight at the rear of the helmet and makes for a comfortable fit. Don't melt your goggles in a training burn. This is costly (good for us) and is not going to be taken lightly by the person that buys the goggles. (The fire chief comes to mind.)

**MORE IMPORTANT STUFF:** YOU HAVE JUST BEEN IN A FIRE FIGHT THAT HAS BEEN VERY SMOKY. DEBRIS HAS FALLEN ON YOU. YOU FINISH THE FIRST PART OF THE JOB AND NOW IT'S SAFE TO TAKE OFF YOUR SCBA AND START OVERHAUL. YOU PUT YOUR GOGGLES ON TO PULL A CEILING AND THEY'RE FULL OF SOME OF THAT DEBRIS THAT FELL ON YOU EARLIER, NOT TO MENTION THE SMOKE AND CARCINOGENS THAT HAVE ATTACHED THEMSELVES TO YOUR GOGGLES. YOUR EYES ARE NOW IN GREAT DANGER OF BEING INJURED DUE TO ABSORPTION OF THIS ETHYL METHOL BAD STUFF AND SMALL PARTICLES. WEAR YOUR GOGGLES WHEN SAFETY REQUIRES, BUT USE CLEAN GOGGLES!

To clean either one of our brands of goggles use cold clean water and a soft cotton cloth. (Again, a t-shirt is good). When goggles get to the point that your vision is impaired or they melt off your helmet (TRAINING BURN) replace them.

## **LEATHER IDENTIFICATION SHIELDS**

We have all types of ID shields including some pretty fancy gold leaf models. You tell us what you need and we will do it. Check out our website to see some of the models. If you don't see it, ask us. If you see Boston, New York, LA, San Francisco or anything that's offered anywhere else, we can do it. And we'll do it your way.

Our ID shields are made of Chrome Tanned leather. This gives them better water resistance. The lettering is Foil Stamped and very durable. ID Shields are attached two different ways. We have a shield bracket and we have a Hook on Hook material. (Note: It's

like Velcro™ but ours is 3M™ brand.) Both work well and stand up to high heat. If you choose the shield bracket mounted to the helmet it takes four screws to hold the shield to the bracket. If you lose any of these screws just call us and we will replace them for you. You can also find the screws at your local hardware store. Make sure the screws are the same size and rust resistant.

Use clean water and a soft cloth, you know the kind, to clean our ID shields. Do not rub hard. Just a gentle wipe-down will do. When the ID shield gets looking bad and you can't read the lettering, remove it and replace it with a new one and put the old one in your memorabilia collection. Or maybe you just want to wear it that way because it looks cool. Your call.

If you do replace the ID shield and it had attachment holes, the new holes will be in the same place so the fit will be the same. We include required screws with each new shield.

## **“D” RINGS**

The first due helmet can be fitted with a “D” ring. “D” rings have to be in your specs, as we do not put them on as a standard fitting. They are not necessary to hang up the helmet. This is best accomplished using the chinstrap. If you require a “D” ring we will put it on for you. However, we don't recommend them.

## **THINGS TO REMEMBER ABOUT YOUR PHENIX 1500 FIRST DUE HELMET**

◆ THIS IS A HIGH TEMPERATURE THERMAL PLASTIC HELMET. IT SHOULD BE CLEANED OF DIRT, DEBRIS, FIRE AND RESCUE RESIDUE AFTER BEING USED AT AN EMERGENCY. (NPFA 1851): Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles

◆ NEVER USE HYDROCARBON PRODUCTS TO CLEAN ANY PART OF YOUR FIRST DUE HELMET. (no petroleum-based cleaners)

◆ TREAT YOUR FIRE HELMET WITH CARE AND A REGULAR MAINTENANCE ROUTINE AND IT WILL GIVE YOU YEARS OF SERVICE.

◆ USE THE HELMET AS A HEAD PROTECTION DEVICE. IT IS NOT A VENTILATION OR FORCEABLE ENTRY TOOL.

◆ WHEN TRAINING IN A BURN ROOM OR AT A LIVE FIRE TRAINING SESSION, DO NOT TEST HOW MUCH YOU OR YOUR PROTECTIVE CLOTHING CAN TAKE BEFORE THEY FAIL. YOU WILL COMPROMISE YOUR GEAR AND PROVE THAT IT TAKES ONLY 167 DEGREES F TO RECEIVE A THIRD DEGREE BURN. IF THE GEAR YOU ARE ISSUED IS TESTED TO NFPA PROTECTIVE CLOTHING STANDARDS (1971) IT HAS BEEN SUBJECTED TO 500 DEGREES F FOR FIVE MINUTES. IN THAT AMOUNT OF HEAT AND TIME THE GEAR WILL SURVIVE, BUT YOU WON'T. YOU SHOULD COOL YOUR HELMET BETWEEN BURNS TO KEEP ITS INTEGRITY. THIS IS ALSO TRUE OF LEATHER AND COMPOSITE HELMETS.

◆ IF YOU HAVE A LARGE HEAD YOU NEED TO TELL US AND WE CAN MAKE ADJUSTMENTS FOR YOUR COMFORT AND SAFETY.

◆ IMPORTANT: IF YOU HAVE ANY QUESTIONS ABOUT YOUR FIRST DUE HELMET CALL US AT PHENIX, AND WE WILL TAKE CARE TO SEE YOU GET THE INFORMATION YOU NEED IN A TIMELY MANNER

\* FIREFIGHTING IS INHERENTLY DANGEROUS. YOUR HELMET MUST BE PROPERLY ADJUSTED AND SECURED TO THE HEAD WITH ALL COMPONENTS IN PLACE, CHINSTRAP SECURED AND USED AS SPECIFIED IN THE MANUFACTURER'S INSTRUCTIONS. NO AMOUNT OF PERSONAL PROTECTION APPAREL CAN PROTECT YOU FROM ALL POTENTIAL HAZARDS. NO HEAD PROTECTION