# SANDMANX

OWNERS MANUAL





# **WELCOME TO DEAD AIR SILENCERS**

Thank you for purchasing our products and supporting the Second Amendment.

Dead Air Silencers was co-founded by one of the industry's true icons, Mike Pappas, and is supported through distribution and manufacturing by our industry partners. The goal of our company is simply to make the best firearm sound suppressors on the market. Every suppressor is manufactured in the U.S.A. by American craftsmen utilizing the finest materials. As Mike says, "We wouldn't have it any other way. We want the best products, made by Americans for Americans." That said, it's our customers that make our products possible and we appreciate each and every one of you that have supported us.

We place an absolute premium on customer service. We demand that our customers receive prompt and rewarding care and support. Feel free to contact us at 801-857-4232 or info@DeadAirSilencers.com with any questions or concerns you may have. Once again, thank you for your support.

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FIREARMS ARE DANGEROUS! REVIEW THIS OPERATOR'S MANUAL IN FULL BEFORE
USING YOUR SUPPRESSOR. FAILURE TO FOLLOW THE INSTRUCTIONS LISTED
BELOW COULD RESULT IN DAMAGE TO YOUR FIREARM AND/OR SERIOUS
PERSONAL INJURY OR DEATH. DO NOT ATTEMPT TO USE YOUR FIREARM AND/OR
SUPPRESSOR UNTIL YOU HAVE THE PROPER TRAINING TO DO SO.

# 1. PRODUCT OVERVIEW

The SANDMAN X is a compact, hard-use suppressor that offers users the versatility of quickly and easily configuring their suppressor with a variety of mounting and front-end cap options to tailor the assembly to suit their specific needs.

The SANDMAN X features a body of Haynes 282 that is produced using additive manufacturing techniques. Inside the SANDMAN X are two patent pending Triskelion™ baffles and three cone baffles surrounded by the Triskelion™ Gas Management System. This design provides excellent acoustic performance, muzzle-flash mitigation, and thermal management while minimizing the increase in operating velocity (low back-pressure) of reciprocating components of the host firearm.

Although optimized for use on 7.62 x 51 NATO (.308 WIN) hosts, the SANDMAN X is also outstandingly effective on hosts in a variety of other calibers (rated caliber list).

Firearm	Caliber	Barrel Length	dB @ Muzzle	dB @ Ear
Mk18	5.56 NATO	10.3"	142dB	139dB
AR15	5.56 NATO	16"	141dB	138dB
AR10	7.62 NATO	16"	143dB	141dB
Bolt Action Rifle	7.62 NATO	24"	140dB	139dB

#### Test Equipment

Test Equipment Hottinger Brüel & Kjær Impulse Noise Evaluation Kit, https://www.bksv.com/en/instruments/daq-data-acquisition/analyzer-system/impulse-noise-evaluation-system

# A note on our sound testing...

At Dead Air Silencers, we pride ourselves with both the innovative and scientific process we use to design our products. Part of improving a product is measuring, and you can't improve what you can't accurately measure.

While we test across the sound spectrum for frequency and "perceived" sound, we also test for peak sound pressure in decibels (dB) at various locations. We're keenly interested in balancing at-ear and muzzle results for the best possible shooting experience.

Our published sound testing is performed in accordance with MIL-STD-1474E, which doesn't exactly provide the best indicator of how something sounds, but it does provide a very conservative and consistent muzzle sound level that can be reliably compared to previous results or known baselines. Our particular system provides very conservative results that you can rely on as accurate and representative of what can be experienced with our products.

Other manufacturers may move the microphone to other locations to provide more favorable readings, such as back behind the muzzle of the suppressor or only at the ear of the shooter. Some even rely on dealer/media sources to measure using systems that typically provide very favorable results. To keep all of this data in context as an end user, you should know this typically results in a bias of several decibels.

Our stated results are from our Engineering group, not our marketing group.

#### **GENERAL CONSIDERATIONS:**

**Ammunition:** Ammunition will have a huge influence on how your new suppressor functions. Use good quality factory-new ammunition in your firearm.

**Concentricity:** In order to reduce the risk of a baffle strike, it is important to ensure that your barrel threads are aligned concentrically with the bore axis of your host firearm's barrel. If you do not have the means to verify this, it is strongly recommended that you have a competent gunsmith verify if for you.



CHECK YOUR FIREARM'S CHAMBER AND MAKE CERTAIN THAT THE FIREARM IS
UNLOADED AND THE MAGAZINE REMOVED BEFORE PROCEEDING ANY FURTHER.

IF THERE IS ANY QUESTION OR DOUBT, CONSULT THE OPERATOR'S MANUAL
APPLICABLE TO YOUR FIREARM AS TO THE PROPER PROCEDURE FOR CLEARING
AND/ORUNLOADING YOUR FIREARM. DO NOT INSTALL YOUR NEW SUPPRESSOR
ON A FIREARM WITH A CLOSED ACTION!

# 2. GET TO KNOW YOUR SANDMAN X

## **SANDMAN X KM**



# 3. ADAPTER INSTALLATION

When discussing directionality during assembly, "back" will always be toward the host firearm, "front" will always be away. For example, the Direct Thread Adapter that connects to the barrel goes in the back of the suppressor, and the Front Cap threads into the front

## **STEP ONE:**

Choose your preferred mount adapter option and coat the threads with high-quality grease. Your SANDMAN X ships with either a KeyMo adapter or Xeno Adapter.

Note: If you experience loosening of the mount due to the suppressor experiencing heavy heat cycles, then it's recommended to degrease the threads and use a high temperature thread locker. Note that it requires high heat to remove many high-strength thread lockers. Dead Air recommends using a medium strength, high temperature thread locker like Vibra-Tite 123 for average operating conditions.

# **STEP TWO:**

Thread the adapter into the suppressor until it bottoms out on the rear suppressor face.

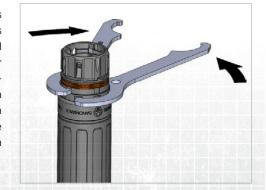
Note: Adapter options that incorporate HUB Taper architecture will bottom out on a taper inside the rear of the suppressor rather than on the rear suppressor face, resulting in a gap between the front face of the notched flange and the rear suppressor face.



Detent Ring

## **STEP THREE:**

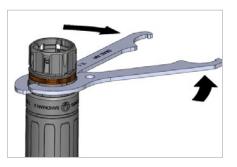
Use the Hook Spanner Wrenches to catch the notches in the parts such that the mount is being turned Clockwise and the suppressor Counter-Clockwise. It's recommended to align the hooks such that there's an inch or two between them to maximize the leverage over them as you squeeze them together.



# 4. ADAPTER REMOVAL

## **STEP ONE:**

Use the Hook Spanners to catch the notches in the parts such that the adapter is being turned Counter-Clockwise and the suppressor Clockwise. It's recommended to align the hooks such that there's an inch or two between them to maximize the leverage over them as you squeeze them together.





YOU MAY NEED TO HEAT THE SUPPRESSOR UP TO LOOSEN THE THREADS.
PAY SPECIAL ATTENTION TO THE HEATED SURFACES TO AVOID BURNS!



WHEN THE TORQUE BREAKS BETWEEN THE TWO PARTS, THE WRENCHES MAY SWING ENOUGH TO CREATE A PINCH POINT. ALWAYS BE CAREFUL AND MIND THE GAP!

## **STEP TWO:**

Continue loosening mount and remove from back of suppressor. Clean threads and follow instructions for Mount Installation for the new mount

# 5. MUZZLE DEVICE INSTALLATION

## **STEP ONE:**

Ensure your barrel has threads that match the 5/8-24 muzzle device that shipped with your SANDMAN X. Remove any existing muzzle device that may still be on the host firearm's barrel. Dispose of any crush washer or shims that were used. Do not reuse as they may have an adverse effect on suppressor alignment, causing damage to the suppressor or worse.

# **STEP TWO:**

Ensure threads are clean and thread new muzzle device onto the barrel and torque into place. For a more secure fitment, Rocksett or Vibra-TITE Hot-Lock may be use to semi permanently attach the muzzle device to barrel. Muzzle device torque: 25-35 ft-lbs. Note: Torque in excess of 35 ft-lbs. may cause precision issues.

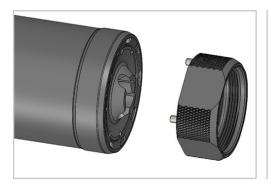
# 6. FRONT CAP INSTALLATION

## **STEP ONE:**

Align the pins in the Sandman Front Cap Tool (DA208—sold separately) into the holes cut into the front cap. Ensure tool is flat against the front cap with the pins evenly and fully engaged and apply torque Counter-Clockwise to loosen and remove.

## **STEP TWO:**

Clean threads and taper. Apply high-quality grease to the surfaces and install new cap and hand tighten.





Pro Tip: You can store your cap that's not in service on the tool itself!

# 7. INSPECTION UPON ASSEMBLY

All components should be snug with no gaps or rattling. If any component is not fully tightened, then check threads for any damage or debris. Clean both mating parts as necessary and repeat the tightening step.

NOTE: DEBRIS ON THE THREADS AND TAPER SURFACES MAY CAUSE MISALIGNMENT OF SUPPRESSOR PARTS AND ALLOW FOR PROJECTILE STRIKES ON BAFFLES OR THE FRONT CAP.

Any questions concerning the performance or care of your suppressor should be directed to our Customer Service Department (801) 857-4232.

# 8. INSTALLATION AND REMOVAL

## **STEP ONE: PREPARATION**

Your suppressor is intended to be attached to the muzzle end of your firearm. It will thread directly onto your existing barrel, which will vary based on host firearm. Because this is a modular system, there are a few options available for mounting it to your host firearm. For direct thread use, choose a thread mount appropriate to your firearm. For a fast attach system, a KeyMo or Xeno adapter will provide a bombproof attachment system paired with our various flash hiders and brakes.

We recommend checking tightness often. All direct thread suppressors will loosen with use and are very dependent on the quality of the barrel threading. A loose suppressor mount will shift the point of impact due to misalignment of the suppressor and may cause the projectile to strike the baffles or front cap, damaging the suppressor. Do not over-tighten the suppressor with any assorted tools or wrenches, as such actions may result in damage to your firearm, the suppressor, or both. Hand tightening the suppressor onto the barrel is preferred. If extra tightness is desired, the included Hook Spanner wrenches can provide a bit of additional torque during installation.

Before installation, ensure the muzzle device is clean and lubed before carefully threading the silencer onto the muzzle end of your firearm. Take care not to cross thread or force the suppressor onto the muzzle adapter. In the event that the suppressor does not smoothly connect to your firearm, stop the installation process and immediately contact our Customer Service Department for further instruction. Ensure the suppressor is tightened all the way against the shoulder of the barrel and/or muzzle adapter.



IF THE MOUNT DOES NOT SMOOTHLY THREAD ONTO YOUR FIREARM STOP THE INSTALLATION PROCESS AND CONTACT OUR CUSTOMER SERVICE DEPARTMENT. FAILURE TO PROPERLY INSTALL YOUR SUPPRESSOR COULD RESULT IN SERIOUS INJURY, DAMAGE TO THE SUPPRESSOR, THE HOST FIREARM, THE USER, AND/OR A THIRD PARTY.



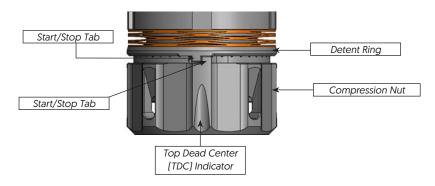
OUR PRODUCTS ARE CALIBER SPECIFIC. UNLESS STATED OTHERWISE ON THE SUPPRESSOR ITSELF OR ON THE PACKAGING, THE SANDMAN X SUPPRESSOR WILL NOT FUNCTION SAFELY WITH ANY CARTRIDGE WITH PRESSURES HIGHER THAN .300 REMINGTON ULTRA MAGNUM. USE OF YOUR SUPPRESSOR OUTSIDE OF ITS INTENDED SCOPE COULD RESULT IN DAMAGE TO YOUR FIREARM, DAMAGE TO PROPERTY, BODILY INJURY, OR DEATH.

## STEP TWO: MOUNTING THE SUPPRESSOR TO BARREL

## **KEYMO:**

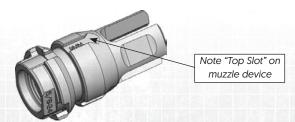
The KeyMo system is a thread-to-taper system with a detent clutch plate to resist loosening off the taper during the high vibration or high thermal shifts that occur when shooting. It is NOT a ratchet system that "locks" in place. With enough vibration, thermal shift—and obviously hand torque—you can break the taper connection, detent friction, and the suppressor may be removed. This section is designed to help you understand the functionality and how to tighten accordingly.

# KEYMO ADAPTER START/STOP POSITION



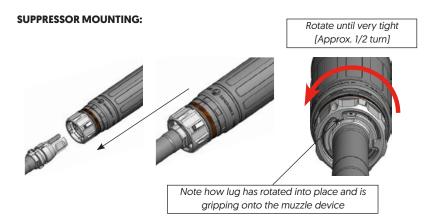
When looking down at the "top" of the suppressor in your hand, ensure the start/stop tabs of the Compression Nut and Detent Ring are touching face-to-face, with the Detent Ring on the left and the Compression Nut on the right. THIS IS THE NORMAL CONDITION THAT THE SUPPRESSOR SHOULD BE IN BEFORE INSTALLATION AND IT WILL AUTOMATICALLY BE SET BACK TO THIS CONDITION UPON REMOVAL. If moved from this condition while off the host firearm, a simple twist of the Nut in the unthreading direction (counter-clockwise looking down at it from behind) will snap it back into place so that they are touching and it'll be ready for install.

## **KEYMO MUZZLE DEVICE**



The KeyMo muzzle device has a "top slot" that ensures the suppressor will always be tightened to the same location for excellent return-to-zero. It may be marked by a max thru-caliber engraving. It's also the slot that sits between the two rear wrench flats.

Note: Unless your muzzle device is timed to have this slot at 12 o'clock, you'll need to note where it is on your barrel. For example, if it stops at 6 o'clock, then you'll need to orient the suppressors TDC mark to 6 o'clock also when mounting. Timing can be changed with shims or custom barrel cutting.



- 1. With the suppressor oriented to match its TDC marking with the top slot of the muzzle device, slide the suppressor over muzzle device, ensuring it comes to a stop and is resting fully on it.
- 2. Grab body of suppressor and turn in a normal right-handed direction. [Clockwise if looking from toward front of suppressor, counter-clockwise if looking at it from behind.] It can only turn this one direction.

TIGHTEN AS TIGHTLY AS POSSIBLE BY HAND. TWO HANDED METHOD IS PREFERRED, ESPECIALLY WITH HIGH VOLUME SHOOTING.

Note: There is no need to grab the Compression Nut on the rear of the suppressor during the installation or removal of the suppressor. Turn the suppressor body only during both installation and loosening. If needed, the tool features of the adapter can be used to loosen the suppressor when too hot to touch.

#### SUPPRESSOR REMOVAL:

1. ONCE THE SUPPRESSOR HAS REACHED AMBIENT TEMPERATURE AFTER FIRING HAS STOPPED, REMOVE THE SUPPRESSOR IN THE SAME MANNER BY TURNING THE BODY OF THE SUPPRESSOR TO LOOSEN Remove the suppressor in the same manner by turning the body of the suppressor to loosen. Note that the suppressor should require the same amount of torque (or greater) to remove than it took to mount it. Adjust your tightening accordingly.

**BEFORE SHOOTING:** FAMILIARIZE YOURSELF WITH THE KEYMO SYSTEM BY MOUNTING THE SUPPRESSOR ONTO THE NEWLY BARRELLED MUZZLE DEVICE AT LEAST 12 TIMES. THIS FAMILIARIZES YOU WITH HOW MUCH HAND TORQUE CAN BE PLACED ON THE SUPPRESSOR. THIS WILL ALSO HELP BED IN THE TAPERS AND DETENT RING INTO THEIR STEADY OPERATING CONDITION FOR RELIABLE USE.

MAINTENANCE: NOTE THAT THE DETENT RING IS A CLUTCH PLATE, AND AS SUCH, IS A WEAR ITEM. AFTER EACH SHOOTING SESSION PULL BACK THE DETENT RING AWAY FROM THE SPRING AND APPLY A DROP OF LUBE OR HIGH TEMP GREASE ON AT LEAST 2-4 POINTS TO ITS FACE TO ENSURE COVERAGE AND THEN ACTIVATE THE SUPPRESSOR A FEW TIMES TO EVENLY DISTRIBUTE IT. THIS WILL ENSURE THE DETENT RING HAS A LONG LIFE. REPLACEMENT PARTS ARE AVAILABLE ON THE DEAD AIR WEBSITE.

## XENO:

The Xeno Mounting system is a lightweight thread-to-taper suppressor mounting option with non-negotiable repeatability and solid return to zero — ideal for precision-minded shooters. The Xeno Mounting System still provides hardcore users the durability you've come to expect from Dead Air.

NOTE: The Xeno system is designed with LEFT-HAND threads to ensure that when the suppressor is removed, it will always come off the muzzle device without either unscrewing the muzzle device or leaving the adapter behind if not fully tightened into the suppressor. It will also notify you before shooting as you mount it to the muzzle device if the adapter has insufficient torque with the suppressor, helping to keep you shooting in an unsafe condition.



## SUPPRESSOR MOUNTING:

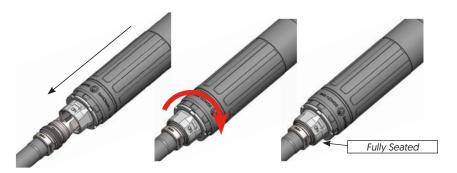
- 1. Slide the Xeno over the muzzle device until it's resting on the muzzle device.
- 2. Carefully engage the threads and turn the suppressor in a LEFT-HANDED direction [counterclockwise when looking down on it from above] as noted on the Adapter itself.
- 3. Turn until the internal tapers touch and then provide a two-handed torquing of the suppressor. Note that the torque put into it will also be the torque (and then some) that will be required to remove it.

## **SUPPRESSOR REMOVAL:**

1. Simply turn in a right hand direction (clockwise when looking down it from above) to break the torque on the tapers and continue to unscrew until free from the muzzle device.

**BEFORE SHOOTING:** FAMILIARIZE YOURSELF WITH THE XENO SYSTEM BY MOUNTING THE SUPPRESSOR ONTO THE NEWLY BARRELLED MUZZLE DEVICE AT LEAST 12 TIMES. THIS FAMILIARIZES YOU WITH HOW MUCH HAND TORQUE CAN BE PLACED ON THE SUPPRESSOR (IT CAN TAKE A LOT, SO GIVE IT TO IT!). THIS WILL ALSO HELP BED IN THE TAPERS TO BRING THEM INTO THEIR STEADY OPERATING CONDITION FOR RELIABLE USE.

MAINTENANCE: AFTER USE, APPLY A DROP OF LUBE OR HIGH TEMP GREASE TO THE INTERNAL THREADS AND TAPER OF THE XENO ADAPTER.



# **Torque Values:**

Adapter torque: 25-30 ft-lbs (Xeno adapter will accept a 1-1/8 socket)

Muzzle device torque: 25-35 ft-lbs

CHECK ALIGNMENT OF SUPPRESSOR BEFORE SHOOTING! IT IS RECOMMENDED TO USE AN ALIGNMENT ROD TO CHECK CONCENTRICITY OF THE SUPPRESSOR TO THE BULLET PATH. MISALIGNMENT CAN COME FROM MANY SOURCES. IF YOU FIND AN ALIGNMENT ISSUE, REACH OUT TO OUR CUSTOMER SERVICE BEFORE USING THE SUPPRESSOR.

AFTER MOUNTING, THE SUPPRESSOR SHOULD BE ROCK SOLID ON THE END OF THE BARREL AND HAVE NO FREE MOVEMENT. IF YOU CANNOT FULLY TIGHTEN THE SUPPRESSOR FOR ANY REASON, REACH OUT TO OUR CUSTOMER SERVICE.

## **STEP THREE: REMOVING THE SUPPRESSOR**



PRO TIP! The Hook Spanner wrench may be used to loosen a suppressor that's too hot to touch. To remove the suppressor when the Direct Thread Adapter is installed, simply rotate the body of the suppressor counter-clockwise until it begins to unthread from the muzzle of the host firearm. If the thread is left-handed, then unscrew by rotating clockwise.

To remove the suppressor when the Direct Thread Adapter is installed, simply rotate the body of the suppressor counter-clockwise until it begins to unthread from the muzzle of the host firearm. If the thread is left-handed, then unscrew by rotating clockwise.

To remove the suppressor with the Key-Mo adapter installed, simply rotate the body counter-clockwise approximately  $\frac{3}{4}$  of full turn at which point it will stop turning. The suppressor may now be slipped off the brake or flash hider. In this state, it's ready for re-installation upon its next use.

## STEP FOUR: INSPECTION UPON ASSEMBLY

All components should be snug with no gaps or rattling. If any component is not fully tightened, then check threads for any damage or debris. Clean both mating parts as necessary and repeat the tightening step.

NOTE: DEBRIS ON THE THREADS AND TAPER SURFACES MAY CAUSE MISALIGNMENT OF SUPPRESSOR PARTS AND ALLOW FOR PROJECTILE STRIKES ON BAFFLES OR THE FRONT CAP.

Any questions concerning the performance or care of your suppressor should be directed to our Customer Service Department (801) 857-4232.

# 9. CLEANING

In order to maintain optimum performance from your suppressor, it is recommended that users clean their Sandman X after every 4,000 rounds. There are a number of commercially available products designed specifically to remove built-up material from the inside of a suppressor. Failure to follow this cleaning regiment can result in a loss of acoustic performance and an increase in back pressure.

# 10. DISCLAIMER

The manufacturer is not responsible for damages or injuries due to the misuse or unintended use of it products. This product is potentially dangerous and, as such, adequate safety precautions must be taken in order to avoid damage to your firearm, damage to third parties, bodily injury or death. Please consult our website for further details at: www.deadairsilencers.com or call [801] 857-4232.

# 11. WARRANTY

We provide a lifetime warranty against all manufacturing defects and damages caused by the normal use of this product. The manufacturer will repair or replace free of charge any suppressor manufactured by, or at the direction of, Dead Air Silencers. The product is sold "as is" with no further implied contractual rights or warranties beyond those expressly stated herein.

The warranty does not apply to certain conditions or acts. It is at the sole discretion and determination of Dead Air Silencers if a particular defect or condition is covered by this warranty. Conditions not covered include, but are not limited to: modifications, abuse, neglect, use of defective ammunition, use of improperly sized ammunition, and criminal conduct. Sound Moderation Technologies assumes no liability for damages or bodily injury caused by such acts or omissions as previously described. Abuse and neglect are defined as usage outside of the reasonable scope for which the product is intended, thus contributing to the accelerated and unreasonable premature wear of the suppressor itself.

If a repair is indicated then the owner must contact our Customer Service Department at [801] 857-4232. A Dead Air Silencers representative will make arrangements for return of the suppressor at manufacturer's shipping expense. DO NOT SHIP THE SUPPRESSOR FOR REPAIR WITHOUT FIRST CONTACTING CUSTOMER SERVICE AND DO NOT SHIP IN ANY EVENT WITHOUT A COPY OF THE APPROVED BATF FORM. When you ship the suppressor back to the manufacturer, please include a detailed statement concerning the type of defect or malfunction encountered and describe the ammunition used and type of host firearm the product was used on or attached.

If for any reason your suppressor is not eligible for repair or replacement, you may purchase a replacement suppressor for 50% off the MSRP for a same or similar suppressor. Please contact our Customer Service Department for further details and requirements.

# 12. LAWFUL USE AND POSSESSION

Your new suppressor is an NFA firearm and is not legal to own or posses in certain jurisdictions. Dead Air Silencers does not offer any express or implied promises or affirmations concerning the use, possession, or ownership of your suppressor. If you have any questions concerning the ownership, possession, or use of your suppressor contact the chief local law enforcement officer in the jurisdiction in which you reside or your local BATF office for further information concerning the ownership, use, and possession of NFA controlled firearms.

## HEI PEUL OWNERSHIP INFORMATION

ALWAYS MAINTAIN A COPY OF THE APPLICABLE BATF DOCUMENTS TO YOUR SUPPRESSOR WITH THE SUPPRESSOR ITSELF WHENEVER TRANSPORTING OR USING YOUR SUPPRESSOR. FAILURE TO DO SO COULD RESULT IN CONFUSION, PROSECUTION, OR CONFISCATION OF YOUR NEACONTROLLED FIREARMS. BETTER SAFE THAN SORRY.

# 13. CONTACT INFORMATION

You can contact us directly by telephone at [801] 857-4232, or visit our website at www.deadairsilencers.com.

Thank you once again for supporting our products and feel free to contact us with any inquiries or concerns that you might have.







⚠ Warning: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For other information go to www.P65Warnings.ca.gov