



SAFETY MANUAL

(12-GA. & 25 mm Launchers, Aerial Flares & Handhelds)

This Safety Manual contains warnings, use, storage and inspection instructions for Orion signal launchers (12-Gauge and 25 mm), and flares (aerial and handheld).

Please read this Safety Manual carefully before using or storing signals and retain for future reference.

Remember, Flares Expire 42 Months After Manufacture Date.

Check Your Flare Dates Every Season!

WARNING: THESE ARE NOT TOYS AND MISUSE CAN CAUSE DEATH/SERIOUS INJURY. KEEP OUT OF REACH OF CHILDREN. BURNING AERIAL FLARES LAUNCHED AT HIGH VELOCITY. HANDHELD FLARES PRODUCE HOT FLAME AND/OR DENSE SMOKE.

Please read the following safety manual thoroughly before storing or using your signaling products.

Aerial and Hand-Held Flare Instructions

Principles of Signaling

The purpose of distress signaling is simple: (i) to attract attention, and (ii), to pinpoint your location to guide the responding party to your craft. Remember, nothing can happen until someone's attention is attracted. The most effective distress signals for attracting someone's attention are aerial flares because they are moving, spectacular and cover a large sighting area. Once help is on the way, hand-held red signal flares, orange smoke signals and orange distress flags serve as beacons for rescuers to pinpoint your position and keep them on course.

If You are in a Signaling Situation

1. Conserve your signals until you are reasonably sure of being detected. Wait until you see or hear a vessel or aircraft before using "one-time" signals.
2. Stay with the boat if it is safe to do so. A boat is easier to spot than a swimmer.
3. Above all, familiarize yourself with your signals before you leave shore. Time is important in any emergency and shouldn't be spent reading instructions!

Replacement & Disposal Instructions

Marine distress signals are date coded and must be replaced every 42 months to meet Coast Guard requirements. If your flares or smoke signals have expired (or will expire) during the boating season, you must replace them. It's the law!

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To dispose of expired marine pyrotechnic distress signals, Orion recommends the following methods:

- Donate expired flares to Coast Guard Auxiliary or Power Squadron for use in their training classes.
- Ignite hand-held signal flares on land in a safe area, much the same as highway flares would be ignited.
- Contact a local law enforcement or fire protection agency for their advice on proper visual distress signal (VDS) disposal.
- Retain flares for back-up use to expand signaling time in the event of an emergency.
- Never jettison flares overboard.
- Never activate marine flares in non-emergency situations over regulated waters.
- Never dispose of flares in household trash.

IMPORTANT SAFETY INFORMATION

FLARES present unique hazards because they burn at a very high temperature and are manufactured with energetic chemicals (see SDS at www.orionsignals.com/sds-sheets.html).

Annual Signal Inspection

Before each boating season, check the dates and the condition of your signaling equipment as instructed below. If signals are expired or will expire during the season, replace them immediately!

Test Your Launcher

We recommend that prior to each boating season, every signal launcher be inspected to be sure it is fully functional. To do so:

1. BE SURE THE FIRING PIN ON LAUNCHER IS NOT BENT.
2. Open the barrel and insert a 12-Gauge or 25 mm Orion, as applicable, signal into the barrel.
3. Be sure that the signal is fully inserted into the barrel.
4. Close the launcher barrel.

If the barrel snaps fully shut, it is in good operating order. Open the barrel, REMOVE THE SIGNAL AND SAFELY STORE IT WITH YOUR OTHER SIGNALS.

If the barrel does not fully close, DO NOT FORCE IT. Check that the signal is pushed all the way into the barrel. If this does not help, REMOVE THE SIGNAL AND SAFELY STORE IT WITH YOUR OTHER SIGNALS. Contact Orion for replacement instructions. DO NOT STORE LAUNCHER LOADED.

Check Your Handheld Flares

Check that moisture, mishandling, or improper storage has not corrupted the flare body. These flares are waterproof but extreme conditions can have a negative impact on their performance and shelf life.

Acquaint Yourself With Operation Of Signaling Equipment

Prior to each season and before an emergency occurs, read the warnings and instructions on all your signals. Family and visiting boaters, not including children, should also be made aware of location, warnings and use instructions of all safety gear.

First Aid

Skin: wash with soap and water if flare powder contacts skin

Eyes: flush with plenty of water if flare powder contacts eyes

Inhalation: seek fresh air if smoke or fumes from burning flares has been inhaled (avoid breathing fumes)

IF ANY IRRITATION EXISTS AFTER INITIAL FIRST AID (RESPIRATORY, SKIN, OR EYES), CONSULT A PHYSICIAN.

SDS CAN BE REVIEWED AT WWW.ORIONSIGNALS.COM/SDS-SHEETS.HTML

Instructions For Loading, Launching & Handling

ORION LAUNCHERS ARE DESIGNED TO BE USED WITH ORION SIGNALS ONLY. USE OF ANY OTHER SIGNAL OR SHELL IS DANGEROUS AND VOIDS ALL CLAIMS AND WARRANTIES. ORION SIGNALS MAY ONLY BE FIRED FROM ORION LAUNCHERS.

The Orion 12-Gauge launcher is designed to fire all Orion 12-Gauge signals (red or white), including single and twin aerial signals. The Orion 25 mm launcher is designed to fire Orion 25 mm aerial signals, and with the use of a 12-Gauge converter, can also fire all versions of Orion 12-Gauge aerial signals.

INSTRUCTIONS FOR SAFE AND EFFECTIVE USE OF ORION 12-GAUGE & 25mm LAUNCHERS

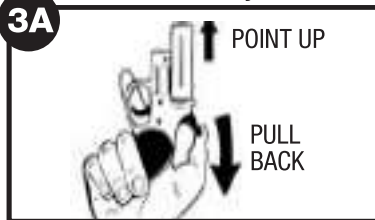


1 **STEP 1**
For most effective use, fire only after sighting potential rescue vessel.



2 **STEP 2**
AFTER SIGHTING POTENTIAL RESCUE VESSEL:
12-GAUGE LAUNCHER: Break launcher barrel open, insert Orion 12-Gauge aerial flare and close launcher.¹
25mm LAUNCHER: Depress blue plastic button on side of launcher to open barrel. Insert 25mm signal or converter and 12-Gauge signal. Close launcher.¹ Hold launcher above eye level, point straight up, cock.

Launcher No Safety Button



3A **STEP 3A** **PREPARING TO FIRE - HOW TO COCK HAMMER**

With fingers off trigger, hold launcher above head with barrel pointed up, pull hammer back until it cocks (locks in place).

Launcher With Safety Button



3B **STEP 3B** **PREPARING TO FIRE - HOW TO COCK HAMMER**

With fingers off trigger, hold launcher above head with barrel pointed up. Using left hand push in white button on launcher. At same time, use right thumb to pull hammer back until it cocks (locks in place).



4 **STEP 4** **LAUNCHING/FIRING FLARE**

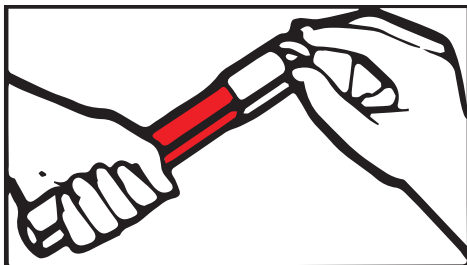
Verify launcher barrel is pointed up (as in picture above). Place finger on trigger and squeeze to fire flare.² Repeat with second signal.

¹ If barrel does not close, DO NOT FORCE. Check that signal is pushed all the way in. If barrel will not close fully, carefully remove signal and try another. Repeat Step #2

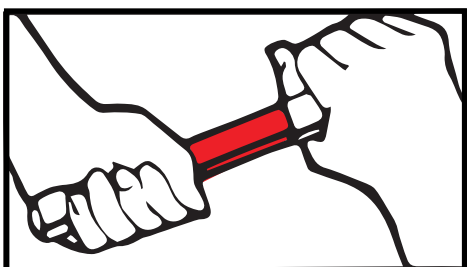
² If a signal does not fire after following these instructions and the trigger has been squeezed, DO NOT IMMEDIATELY OPEN THE LAUNCHER. While rare, a hang-fire (delayed launch after squeezing the trigger) can be very dangerous. Point the launcher overboard towards the water, wait at least 5 seconds, then open the launcher and replace signal. Repeat Step #2.

Hand-Held Red Signal Flares and Orange Smoke Signals

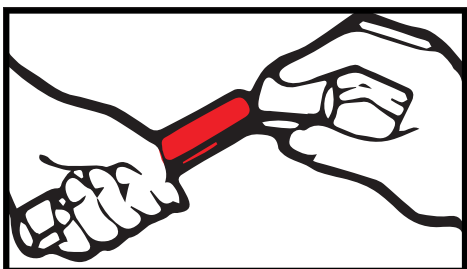
Use Instructions



1. Grasp bottom of flare below holding line on label. Remove black lid on cap.



2. Twist cap, remove and save to ignite flare. Point away from face and body. Aim downwind.



3. In a downward motion, strike button on top of flare with abrasive surface on cap. Hold burning flare over side of boat. Do not wave overhead. Avoid breathing smoke.

WARNINGS:

AERIAL AND HANDHELD FLARES ARE FOR OUTDOOR EMERGENCY SIGNALING ONLY. THESE ARE NOT TOYS. MISUSE CAN RESULT IN DEATH/SERIOUS INJURY. SIGNAL LAUNCHERS LAUNCH BURNING FLARES AT HIGH VELOCITY. HANDHELD FLARES PRODUCE HOT FLAME AND/OR DENSE SMOKE. KEEP OUT OF REACH OF CHILDREN. KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. NEVER POINT LAUNCHER AT A PERSON, ANIMAL OR ANYTHING FLAMMABLE. NEVER STORE OR CARRY LAUNCHER LOADED. DO NOT LOAD LAUNCHER UNTIL IMMEDIATELY PRIOR TO USE. DO NOT USE WHERE PROHIBITED BY LAW. IT IS ILLEGAL TO IGNITE/FIRE DISTRESS SIGNALS IN A NON-DISTRESS SITUATION. THESE PRODUCTS ARE NOT INTENDED TO BE USED AS WEAPONS AND, IF USED FOR ANY PURPOSE OTHER THAN EMERGENCY MARINE SIGNALING, MAY SUBJECT USER TO CIVIL OR CRIMINAL ACTION INCLUDING UNDER LOCAL FIREARMS LAWS. STORE AERIAL AND HANDHELD FLARES ONBOARD UNDER COVER IN A SECURE, SAFE, DRY PLACE. READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY.

IMPORTANT NOTICE

Orion USCG Approved signals are produced and independently tested to the specifications provided by the Code of Federal Regulations (CFR) 46, Part 160. Signal performance, however, can be negatively impacted if such signals are not stored properly. They must be stored under cover in a secure, safe, dry location on your boat and should be removed during long periods of boat storage. All signals and launchers should be inspected at least once annually for damage caused by exposure to moisture or mishandling.