

SHOCKWAVE

MARINE SUSPENSION SEATING

USER MANUAL

S6



*MARINE
SUSPENSION
MODULE*

FEEL BETTER. TRAVEL FARTHER.

CUSTOMER SERVICE

At **SHOCKWAVE**, we’ve proven that innovation and attention to the highest safety standards can protect boaters from the shock of wave impact. As avid boaters ourselves, we understand what our customers value most – and we create the best marine suspension seats in the world to provide a safer, more comfortable and exciting ride.

For customer inquiries and service support contact **+1.778.426.8544** or **support@shockwaveSeats.com**

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HOURS8AM to 5PM PST

INCLUDED WITH YOUR S6 PURCHASE:

- SHOCKWAVE S6 Marine Suspension Module
- SHOCKWAVE S6 User Manual
- SHOCKWAVE S6 Drill Template
- 2 Product Cards -Warning and Care Instructions
- 2 Decals – SHOCKWAVE (all purpose), SHOCKWAVE EQUIPPED (for your boat)

ACCESSORIES SOLD SEPARATELY:

- SHOCKWAVE Shock Pump
- Commander Seat (High-Back & Mid-Back)
- Commander Heated Seat
- SHOCKWAVE S6 Swivel Slide, Swivel, and Slide.
(sold separately or as an assembled option)

JOIN THE SHOCKWAVE COMMUNITY:

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SHOCKWAVE

MARINE SUSPENSION SEATING

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IMPORTANT INSTRUCTIONS

FOOTREST AND GRAB HANDLES

WARNING

All occupants are required to have footrests available, or feet placed on deck, at all times. The footrest surface should be 0" to 5" [0mm to 150mm] below the base of the S6, 7" to 16" [175mm to 405mm] in front of the S6, and at least 16" [405mm] wide.

(A) 0" [0mm] - 5" [125mm]

(B) 7" [175mm] - 16" [405mm]

WARNING

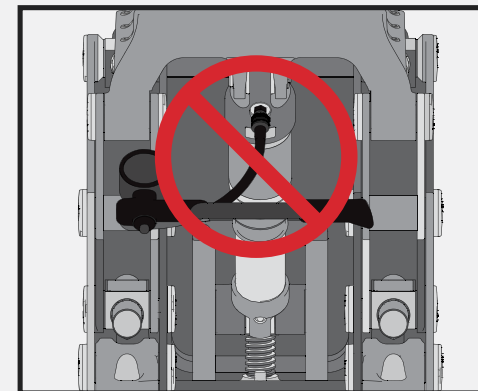
Do not install a suspended footrest onto the S6 module or seat. Footrests mounted to the module or seat will void the warranty.



SHOCK PUMP

WARNING

Do not leave the shock pump attached when operating the seat, as it will damage the pump and fill valve.



BEFORE YOU START

The maximum occupant weight for the S6 module is 300lbs [135kg] on a vessel that sees maximum deck accelerations of 5g's. When mounting a seat to the module, always use the largest fasteners possible for the bolting configuration.

Third party seats should be properly positioned on the module with the center of mass being located over the swivel pivot hole as shown.



DANGER

Any modifications done to the module that are not approved in writing by SHOCKWAVE, or installing a seat using incorrect bolting locations, can result in damage or injury, and will void the manufacturer's warranty.

GETTING STARTED

Congratulations on your purchase of a SHOCKWAVE S6 Marine Suspension Module. We hope you enjoy this new boating experience offering you access to new possibilities on the water.

MOUNTING YOUR SUSPENSION MODULE

- Through-bolt the suspension module or bolt to stainless steel inserts bonded into the deck or equivalent structure, using the largest fasteners possible
- There must be sufficient deck structure to support the weight of the seat and occupant within the vessel's operational envelope
- Thin or weak decks or mounting boxes should have large washers or reinforcement plates placed under the bolting surfaces to prevent fasteners from pulling through
- There must be no flex in the seat mounting or deck plate when the seat is loaded
- Do not attach any equipment to the suspension module
- Do not mount the suspension module in the middle of an unsupported deck plate
- Ensure that the movement of the suspension module does not interfere with the vessel structure or equipment
- Properly torque the deck mount fasteners
- Check the operation of the suspension module after installation to ensure it does not bind or stick
- All 6 mounting holes must be used



IMPORTANT

Apply a quality marine grade sealant to all mating surfaces and hardware to prevent crevice corrosion.



IMPORTANT

The suspension module must not be modified.

SETTING UP THE SUSPENSION MODULE

To achieve the best performance from the suspension module, the pressure of the shock absorber should be adjusted to attain the proper sag setting. Sag is the amount the suspension compresses under the occupant’s weight. Sag should be set at 20% of total shock travel as indicated via the red O-ring on the shock absorber.



IMPORTANT

Warranty is void on suspension modules where incorrect installation causes damage to the module.



DANGER

Incorrectly installed suspension modules can cause serious injury or death and can cause damage to the vessel and the seat.



IMPORTANT

Strength of decks and deck mountings is the responsibility of the boat builder or installer of the seats. SHOCKWAVE assumes no liability for suspension modules that are incorrectly installed.



DANGER

Prior to use be sure to pressurize the shock absorber! Do not operate the seat without sufficient pressure in the shock absorber or serious injury and damage to the suspension module will result.



STEPS TO SET UP THE SUSPENSION MODULE

- 1 Install the pump and pressurize the shock absorber to 35psi. **Then remove the pump.**
- 2 Cycle the shock absorber by bouncing on the seat 5 times. This will equalize the positive and negative air chambers.
- 3 Use the pump to pressurize the shock absorber to match the occupant’s weight according to the table below. **Then remove the pump.**

Weight [lbs]	Pressure [psi]
50	35
100	55
150	75
200	95
250	115
300	135

- 4 Cycle the shock absorber by bouncing on the seat 5 times.
- 5 Push the red o-ring against the shock body.
- 6 Gently sit on the seat.
- 7 Gently get out of the seat.
- 8 The o-ring should be sitting about ¾” [19mm] down from the dust seal. This is about the width of a finger.
- 9 If the sag value is not at the desired level, inflate or deflate the shock absorber in 5 to 10 psi increments and repeat steps 4-7 until the desired level is achieved.
- 10 Disconnect the shock pump and install the valve cap.



WARNING

Do not sit on the seat with the SHOCKWAVE S6 Pump attached! Damage will occur to the shock and pump. Note, the SHOCKWAVE S6 Pump is sold separately.



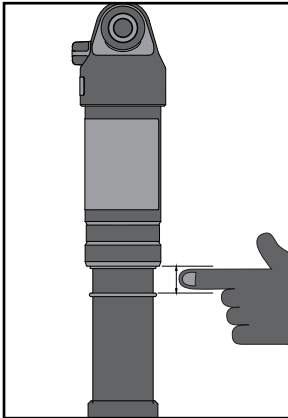
WARNING

Do not exceed 150 PSI, the maximum shock absorber pressure.



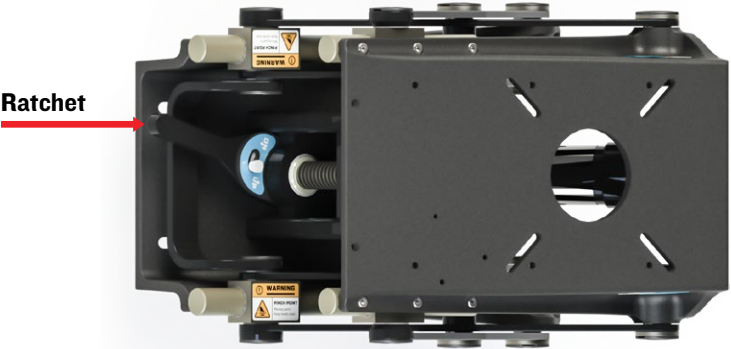
WARNING

Do not operate the S6 Module with shock pressure below 35 PSI.



CHANGING SUSPENSION MODULE HEIGHT

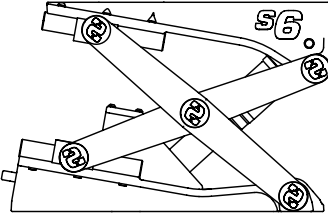
Inifintely adjustable over 3" (76mm)



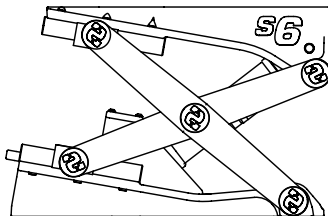
WARNING

Ratchet up / Ratchet down
Does not require much force: Excessive force can cause damage to the ratchet mechanism.

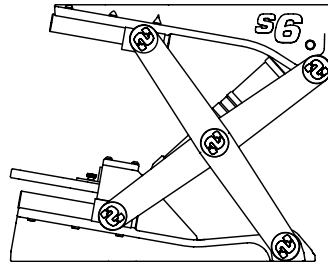
Low



Medium



High



SERVICE TIPS

CLEANING: Rinse your SHOCKWAVE S6 Suspension Module with fresh water after each use to prevent build up of salt and corrosion. Treat the suspension module with Boeshield or similar protectant every month or as often as possible to prolong the appearance and service life. To remove any dirt/salt build up on the seat, use upholstery cleaner as required.

LEAKS: The shock absorber may need to be topped up occasionally. While it is recommended to regularly check sag and shock settings, the shock absorber does not require constant pressure adjustment.

SHOCK ABSORBER LEAKS: If you experience excessive pressure loss, check the fill valve to see if debris is interfering with its operation or perform a simple soap solution test to identify the source of the problem. If a leak is found, replace the shock absorber or the stainless steel fill valve core.

BOLT TORQUE (TIGHTNESS): All fasteners are prone to becoming loose from sustained high performance use. SHOCKWAVE recommends that all bolts should be visibly inspected for signs of being loose after every 125 hours of use. Always use a thread-locker on threads to prevent loosening of fasteners.



IMPORTANT

Be sure to wash your suspension module properly. Thoroughly wash module with fresh water and boat or car wash detergent, removing all contaminants and surface corrosion.



IMPORTANT

Following CLEANING instructions is the most important way to maximize seat life.



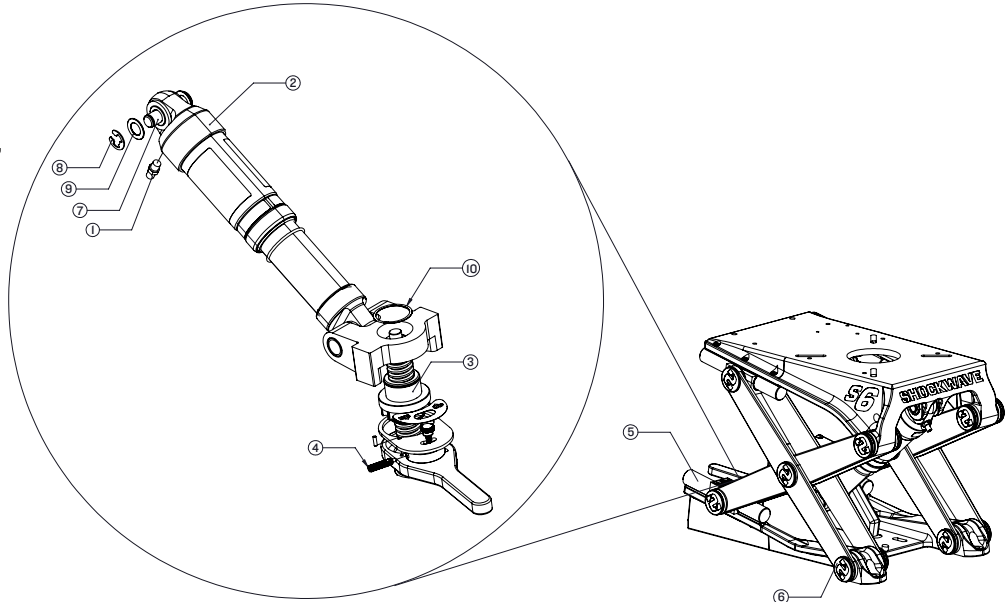
IMPORTANT

Bushings are all self lubricating.

REPLACEMENT PARTS

While your SHOCKWAVE S6 Marine Suspension Module is designed to last, you may want to refresh some of the higher wear components to keep it in peak operating condition.

If the component you require isn't shown here, please contact support@shockwaveSeats.com for a complete illustrated parts breakdown.



ITEM	QTY	PART NO.	DESCRIPTION
1	1	SW-02837	AIR VALVE ASSEMBLY
2	1	SW-07369	S6 FLOAT SHOCK
3	1	SW-07372	RATCHETING HEIGHT ADJUST NUT
4	1	SW-07377	SPRING PLUNGER
5	4	SW-07378	GUIDE RAIL

ITEM	QTY	PART NO.	DESCRIPTION
6	18	SW-07385	PIVOT LOCK CAP
7	1	SW-07387	UPPER SHOCK PIN
8	1	FA-.5-ECLIP-SS	E-CLIP FOR 1/2" SHAFT - SS
9	1	FA-1/2-FW-AN960C8I6L	WASHER, FLAT
10	2	FA-1.375-RR-EXT-SP-SS	11-3/8" SPIRAL EXTERNAL RETAINING RING

PROPRIETARY AND CONFIDENTIAL
NOTICE: THIS DRAWING MAY REVEAL DESIGNS OR INFORMATION PROPRIETARY TO PROFESSIONAL COMPONENTS LTD. BY ACCEPTANCE OF REPRODUCTIONS, RECIPIENTS AGREE TO PROTECT PROFESSIONAL COMPONENTS LTD. RIGHTS AND ARE WARNED AGAINST USE OF THE DOCUMENT FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS ISSUED.

EMERGENCY PROCEDURES/TROUBLESHOOTING

CONDITION	CAUSE	SOLUTION(S)
Suspension module is lower than normal or shock absorber will not pressurize	<ul style="list-style-type: none">Leak in systemWorn or corroded fill valveDefective shock absorber	<ul style="list-style-type: none">Check system for leaks by applying soapy water to system connections and look for bubbles. If a leak is found, either<ul style="list-style-type: none">Remove the fill valve core and replace with a new stainless steel oneReplace the shock absorber - this is required only on extremely rare occasions
Suspension module is bottoming out	<ul style="list-style-type: none">Shock pressure is too low	<ul style="list-style-type: none">Attach pump and add air as per this manual
Suspension module is topping. Ride is rough and erratic. Noise heard or shock felt when seat comes to top of travel	<ul style="list-style-type: none">Shock pressure is too high	<ul style="list-style-type: none">Reduce shock air pressure
Squeaking noise when underway	<ul style="list-style-type: none">Loose componentsShock absorber mounting bolts are dry	<ul style="list-style-type: none">Tighten loose componentsApply grease to shock mounting bolts
Moving components or accessories will not move	<ul style="list-style-type: none">Bearing or sliding mechanism is corroded, dry or binding	<ul style="list-style-type: none">Disassemble if necessary and lubricate with marine grade grease

SHOCKWAVE SEATS



COMMANDER MID-BACK SEAT

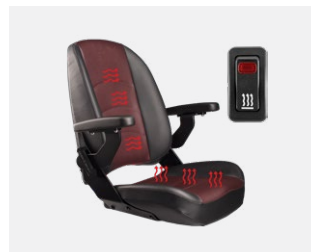
The Commander Seat is designed to add an extra element of comfort and support for your suspension module. Crafted in the U.S., these seats are the definition of quality and strength, made using only the best materials available today. Available in White (SW-04920-W) and Heavy Duty fabric (SW-04920-HD).



COMMANDER HIGH-BACK SEAT

SW-06328

This seat is perfect for long days on the water when neck and head support is preferred. Available in Heavy Duty fabric (SW-06328-HD).



COMMANDER HEATED SEAT

SW-06987

This seat offers both a heated back and a heated seat cushion, ensuring the occupant really feels the warmth. The cushions will heat up to a pleasant 98°F (38°C), ensuring a comfortable trip in the winter months and shoulder seasons in northern climates.



CUPHOLDER

SW-01688

The Commander Seat also offers an optional cupholder that can be attached to either side of the armrest. Available in black, this cupholder will hold your coffee, a can, or a generous sized cup or bottle.

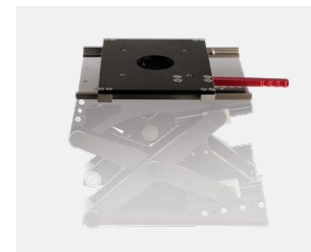
S6 ACCESSORIES



SWIVEL SLIDE

SW-07866

This Swivel Slide system has 5-inches of fore-aft travel and features premium track and cars for smooth operation. The 360-degree swivel has a positive lock that engages every 22.5° (16 positions).



SLIDE

SW-07867

Our purpose-built Slide offers a full 5-inches of fore-aft travel, allowing for comfortable seating options for a wide variety of occupants and users. Our Slide pairs perfectly with the S6 and the Commander Seat.



SWIVEL

SW-07868

This robust 360-degree Swivel is designed to pair with the S6 and the Commander Seat. A positive lock engages every 22.5° (16 positions).



SHOCK PUMP

SW-01983

The high-pressure shock pump features an integrated pressure gauge and bleed valve for simple adjustment with a maximum inflation pressure of 350 psi. A SHOCKWAVE shock pump is required to operate the S6.



SEATBELT

SW-00774

For those who need an extra level of safety and security, we offer a seatbelt for our Commander Seats.



FOOTREST

SW-07507

Our height adjustable Folding Footrest has 6" of travel and is foot operated for ease of use. It offers a stable 17" wide platform and is designed to be bulkhead mounted on a console.

GENERAL BOATING BEST PRACTICES AND SAFETY

SHOCKWAVE Marine Suspension Modules are designed to mitigate shock and vibration encountered in high-speed vessel operation in rough seas. Following the suggestions in this section will ensure that you are getting the most out of the product.

OPERATE IN THE VESSEL'S OPERATIONAL ENVELOPE Driving a boat beyond its limitations can have damaging effects on the hull, engines and equipment. SHOCKWAVE seats are designed to provide shock mitigation to the occupant. They will not protect the occupants from injury caused from operating the vessel outside of its operational envelope.

OPERATE THE VESSEL IN YOUR CREW'S PHYSICAL CONDITIONING ENVELOPE Personal fitness is a limiting factor to the amount of sustained G loads a person can endure without injury. If you have inexperienced, relatively unfit or overweight persons aboard, extra caution must be exercised to prevent injury. The helmsman must be keenly aware of the shock loads being transmitted to others not in a suspension seat or standing as serious injury can occur. Installation of SHOCKWAVE seats provides an extra level of protection but they will not protect a person from ALL shock loads.

OPERATE IN YOUR OWN ABILITY ENVELOPE SHOCKWAVE seating will increase the confidence of the helmsman. Sometimes over confidence can lead to loss of control. Generally, the seats will permit greater control of the vessel and the helmsman should focus on using the control advantages of shock mitigated seating to better look after the vessel and crew.

DO NOT SIT IN SEATS WITH HARD OR SHARP OBJECTS. DO NOT WALK ON SEATS Ensure that sharp objects and heavy gear are worn so that they will not tear upholstery.

DO NOT TIE THE BOAT UP WITH THE SUSPENSION MODULE As tempting as it may be SHOCKWAVE seats are not designed to tie up the boat. A sudden surge or wave will likely bend the seats or attachment brackets and compromise performance.

TIE EVERYTHING DOWN Pay attention to how you have stowed your gear. Elastic shock cords and ratchet tie-downs should be used to secure all gear. Plastic containers of oil and other fluids must be protected from chafing and puncture. Electronic equipment must be secured to prevent damage from shock loads.

CHECK ALL EQUIPMENT Conventional mounting brackets for heavy items such as fire extinguishers are subject to much more loading than without shock mitigation. Make sure all of your equipment brackets are tight. Recheck major equipment bolts regularly. Wiring, cables and fluid hoses should be bundled tightly and not allowed to flail. Do not allow any objects under the seats or footrests as they will limit the stroke of the seat and damage the objects or the seat.

ENSURE THAT THE SUSPENSION MODULE IS FUNCTIONING PROPERLY Refer to the Caution Notes in the next section. The following is provided as a general checklist. Providing you have done everything correctly in the Caution Notes - do not operate the seat if:

- The shock absorber setting or sag is incorrect
- Components are loose, broken or missing
- The suspension module makes a strange noise

USE SEATBELTS If supplied - seatbelts prevent occupants from being ejected from the vessel and the seat. When not in use, the seatbelt buckle ends should be fastened to prevent damage to the suspension module.

ADJUST HEIGHT AND FORE AND AFT ADJUST CORRECTLY If supplied - correct ergonomics and posture enhances the ability to operate the vessel safely and reduces the risk of shock and vibration related injury. Take the time to adjust the seat on the suspension module so that it's comfortable.

RINSE THE SUSPENSION MODULE WITH FRESH WATER AFTER EACH USE Rinse the suspension module with fresh water after each use or every week if being stored outside to prevent a buildup of salt and debris.

CAUTION NOTES

Your SHOCKWAVE S6 Marine Suspension Module will mitigate the effects of shock and vibration, reducing the potential of injury, but it will NOT prevent the possibility of injury. The increased level of comfort and control provided by your SHOCKWAVE S6 Marine Suspension Seating will allow the craft to operate at higher speeds in sea states which create high shock loads on the craft and potentially the occupants. **HIGH SHOCK LOADS COULD POTENTIALLY EXCEED THE SEAT'S CAPABILITY TO MITIGATE.**

Operating marine craft in a high shock load environment is inherently hazardous. Tolerance to the effects of shock and vibration vary from person to person and it is the responsibility of the craft operator to ensure the safety of each person on board. Pain and/or discomfort are indicators of a potential injury. Constantly monitor the physical state of the craft and the personnel on board. Hazardous operation of the craft may result in serious injury, death or damage to the craft.

DO NOT

- Operate seat without sufficient pressure in shock absorber or serious injury and damage to suspension module will result.
- **Place hands near module when in use. Serious injury can result.**
- Modify the equipment by drilling any holes, removing material, or adding extra equipment. Serious injury can result.
- Use the suspension module if it is or appears to be damaged. Serious injury can result.
- Use the suspension module if the module to deck attachments are loose. Serious injury can result.
- Use the suspension module if module resting height is lower than normal. This may be an indication of a damaged shock absorber and serious injury can result.
- Operate the suspension module with insufficient air pressure in the shock to prevent bottoming. Serious injury and damage to the seat can result.
- Use the suspension module for uses other than its intended purpose. Use of the seating for other than its intended purpose may result in damage to the equipment or bodily harm.
- Use the suspension module if fasteners are loose. Damage to the equipment or bodily harm may result.
- Attempt to open, perform maintenance or repair the suspension module while the craft is underway. Damage to the equipment or bodily harm may result.
- **Place items under or around the suspension module that may interfere with the suspension module's range of motion. Damage to the equipment or bodily harm may result.**
- Operate the seat if the occupant's weight exceeds 300lbs [135kg] for deck accelerations greater than 5g's.
- Mount footrests directly to seats.



IMPORTANT

Follow IMPORTANT instructions located throughout this User Manual to prolong the appearance and service life of your SHOCKWAVE S6 Marine Suspension Module.

WARRANTY AND WARRANTY POLICY

SHOCKWAVE Seats expressly warrants that all mechanical seat components in its MARINE AND OTHER and SUSPENSION SEATS shall be free from defects in material and workmanship for one year from the date-of-sale provided such seats are subject to normal use and receive proper maintenance. Shockwave Seats expressly warrants that the cushions and seat covers shall be free from defectively sewn seams for a period of 90 days or 750 hours of use, whichever comes first, excluding normal wear and tear. Rips, tears, abrasions and installation damages are not covered by warranty. S6 finish is not covered by warranty if corrosion is a result of abuse or lack of maintenance. Modules must be cleaned with fresh water after every use.

Your sole and exclusive remedy against SHOCKWAVE Seats arising from the purchase or use of MARINE AND OTHER and SUSPENSION SEATS is limited to repair or replacement of defective materials or defective workmanship, after verification by Shockwave Seats. Defective product or materials may be requested for return by SHOCKWAVE Seats for inspection prior to issuing any replacements. Freight charges for returns are to be covered by the user.

All warranty claims shall have prior approval from SHOCKWAVE Seats warranty department and must be accompanied by the information requested on the following Claim Form. Products will be repaired or replaced at the sole discretion of SHOCKWAVE Seats.

These warranties will become null and void if:

- The seat is abused or altered
- The seat is involved in an accident
- The seat is improperly installed
- The seat is used for other than its intended use, contrary to any of the instructions in the manual provided
- There is damage to the cushions and covers caused by cuts, burns, or abuse
- There is damage to the seat caused during installation or unpacking
- There is damage to the structural integrity as a result of the user installing unapproved accessories
- Footrests are mounted directly to seat
- Occupant weight exceed 300lbs [135kgs] for 5g deck accelerations

WARRANTY DISCLAIMERS AND LIMITATIONS OF LIABILITY

THE ABOVE EXPRESSED WARRANTIES SHALL BE THE EXCLUSIVE WARRANTIES, AND SHOCKWAVE SEATS MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED. SHOCKWAVE SEATS EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

IT IS AGREED THAT SHOCKWAVE SEATS SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, including, but not limited to, loss of income, loss of use, lost profits, damage to other property, the cost of removing and reinstalling the INDUSTRIAL SEATING or SUSPENSION SEATS, attorney's fees, and any liability you may have with respect to any other person.

TIME LIMIT ON COMMENCING LEGAL ACTION

It is agreed that you have one year from the accrual of a claim to commence any legal action arising from the purchase or use of the MARINE AND OTHER or SUSPENSION SEATS, or be barred forever. Failure to give prompt written notice within ten (10) days of the discovery of any defect in material or workmanship that occurs within the warranty period will void the warranty. Send notification to:

SHOCKWAVE SEATS Warranty Department

Unit 2-2075 Henry Avenue West, Sidney BC Canada V8L 1T2
Email: support@shockwaveseats.com ~ Phone: +1.250.656.6165

WARRANTY CLAIM FORM MUST BE SUBMITTED

Download your Warranty Claim Form at shockwaveseats.com/warranty

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