

# ***SHOCKWAVE S5*** ***SENTINEL***



***FEEL BETTER.***

***USER MANUAL***

***MARINE SUSPENSION BASE***



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**

Serial Number:

ADDRESS                    **2074 Henry Ave. Sidney, BC  
Canada V8L 5Y1**

WEBSITE                    **shockwaveSeats.com**

SALES                        **+1.778.426.8545**

RECEPTION                **+1.250.656.6165**

HOURS                      **8AM to 5PM PST**

INCLUDED WITH YOUR S5 SENTINEL PURCHASE:

- **SHOCKWAVE S5 Sentinel Marine Suspension Base**
- **SHOCKWAVE S5 Sentinel User Manual**
- **SHOCKWAVE S5 Sentinel Drill Template**
- **2 Product Cards – Warning and Care Instructions**
- **2 Decals – SHOCKWAVE (all purpose), SHOCKWAVE EQUIPPED (for your boat)**

ACCESSORIES SOLD SEPARATELY:

- **SHOCKWAVE S5 Sentinel Shock Pump**
- **Commander Seat (High-Back & Mid-Back)**
- **Commander Seat with Heated Cushions**
- **SHOCKWAVE Swivel Slide, Swivel, and Slide**
- **Shock Extender Kit with Removal Tool**
- **Seat Adapter Kit**

JOIN THE SHOCKWAVE COMMUNITY:

-  **@SHOCKWAVESEATS**
-  **@SHOCKWAVESEATS**
-  **YOUTUBE.COM/SHOCKWAVESEATS**

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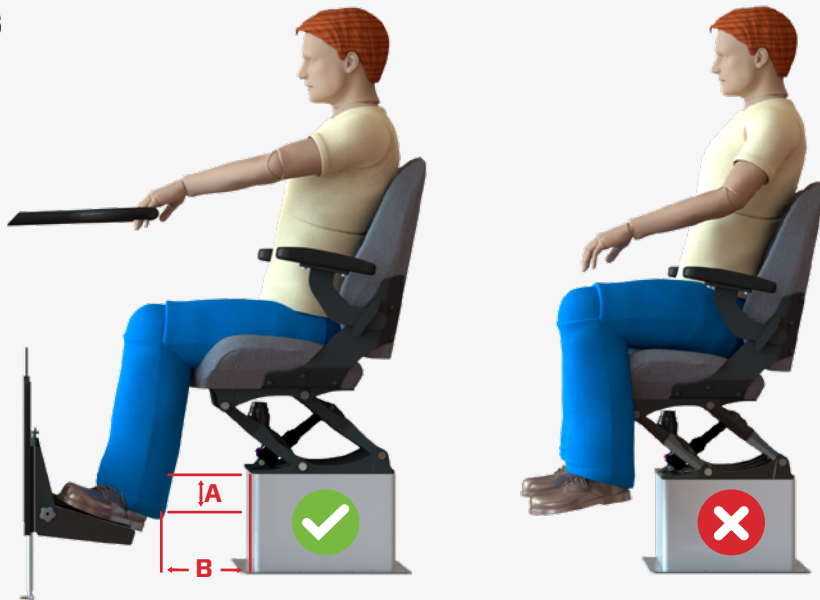
## IMPORTANT INSTRUCTIONS

### 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 1" [25.4mm] - 6.0" [152.4mm] below the base of the S5 Sentinel and 7" [177.8mm] - 16" [406.4mm] in front of S5 Sentinel, and it should be a minimum of 16" [406.4mm] wide.

- (A) 1" [25.4mm] - 6" [152.4mm]  
(B) 7" [177.8mm] - 16" [406.4mm]



### SUSPENDED FOOTREST

#### WARNING

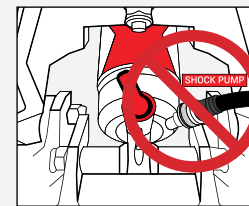
Do not install any suspended footrest onto the S5 Sentinel Suspension Base or seat mounted to the S5 Sentinel. Footrests mounted to the base or seat will void the warranty.



### FILL PUMP

#### WARNING

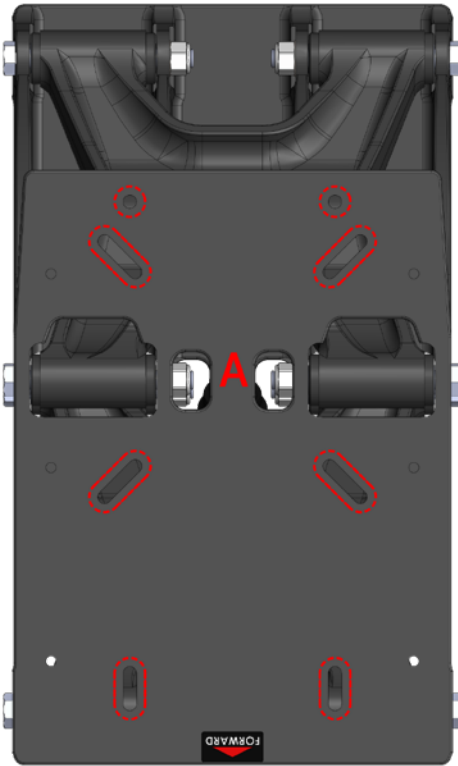
Do not leave pump attached when operating the seat, as it will damage the pump and fill valve.



BEFORE YOU START

The maximum occupant weight for the **S5 Sentinel** Suspension Base is 250lbs [113kgs] on a vessel that sees maximum deck accelerations of 3g's. For calm waters and deck of accelerations less then 2g's, a 300lb [136kg] occupant is acceptable. When mounting a seat to the Suspension Base, always use the largest fasteners possible for the bolting configuration. The **S5 Sentinel** bolt pattern can accommodate up to a 5/16" fastener.

Third party seats should be properly positioned on the Suspension Base with the center of mass being located across the main pivots shown by position **(A)**.



DANGER

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

GETTING STARTED

Congratulations on your purchase of a **SHOCKWAVE S5 Sentinel** Marine Suspension Base. We hope you enjoy this new boating experience offering you access to new possibilities on the water.

MOUNTING YOUR SUSPENSION BASE

- There must be sufficient deck structure to support the weight of the seat and occupant within the vessels 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
- Through-bolt the suspension base or bolt to stainless steel inserts bonded into the deck or equivalent structure, using the largest fasteners possible
- 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 base



IMPORTANT

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



IMPORTANT

The suspension base must not be modified.



We have created a series of 'how to' videos on our website to help you install your **SHOCKWAVE** Suspension Base. Visit

[www.shockwaveSeats.com/howto](http://www.shockwaveSeats.com/howto) for more information.

Do not mount the suspension base in the middle of an unsupported deck plate  
Ensure that the movement of the suspension base does not interfere with the vessel structure or equipment  
Properly torque the deck mount fasteners  
Check the operation of the suspension base after installation to ensure it does not bind or stick

SETTING UP THE SUSPENSION BASE

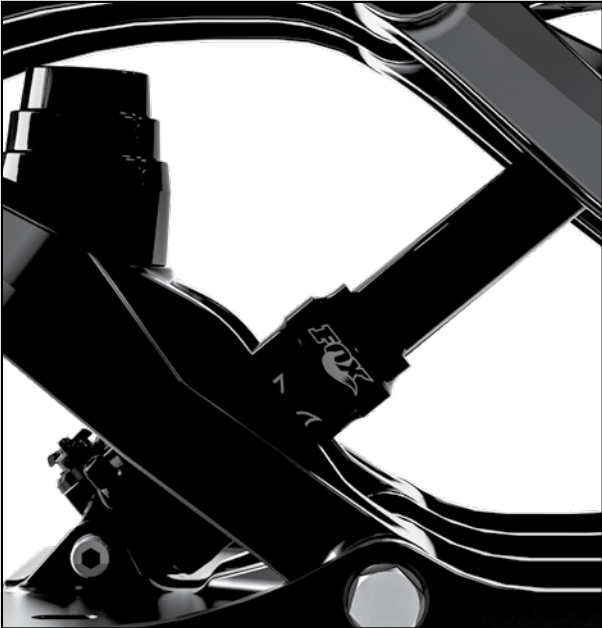
To achieve the best performance from the suspension base’s shock absorber, the pressure should be adjusted to attain the proper sag setting. Sag is the amount the suspension compresses under the occupant’s weight. Sag should be set at 20% of total shock travel. Proper sag level can be obtained by ensuring that the O-ring is at a distance of 0.5” from the shock cylinder body.

**IMPORTANT** Warranty is void on suspension bases where incorrect installation causes damage to the base.

**DANGER** Incorrectly installed suspension bases 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 bases that are incorrectly installed.

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



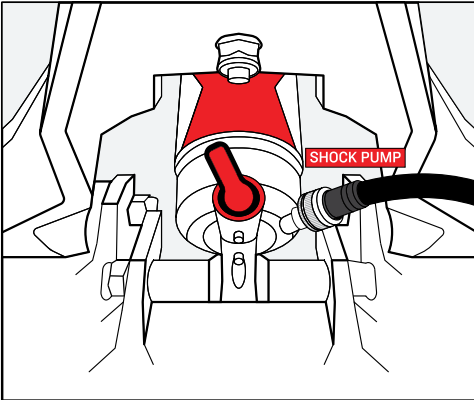
SETTING UP THE SUSPENSION BASE

- 1 Turn the 3-position lever at the base of the shock absorber to the SOFT mode. See page 10.
- 2 Install the pump and pressurize the shock absorber to 100 PSI. **Then remove the pump.**
- 3 Cycle the shock absorber by bouncing on the seat 5 times. This will equalize the positive and negative air chambers.
- 4 Use the pump to pressurize the shock absorber (in PSI) to match the weight in pounds (lbs) of the occupant. **Remove the pump before step 5.**
- 5 Cycle the shock absorber by bouncing on the seat 5 times.
- 6 Push the O-ring against the shock body.
- 7 Gently sit on the seat.
- 8 Gently get out of the seat.
- 9 Check the sag percentage marking on the shock absorber shaft. Sag is correct if the O-ring sits at the 20% mark.
- 10 If the sag value is not at the desired level, inflate or deflate the shock absorber in 10 PSI increments and repeat steps 5-8 until the desired sag level is achieved.

**WARNING** Do not sit on the seat with the SHOCKWAVE S5 Sentinel Shock Pump attached! Damage will occur to the shock and pump. Note, SHOCKWAVE Pump sold separately.

**WARNING** Do not exceed 325 PSI – the maximum shock absorber pressure.

**WARNING** Do not operate the S5 Sentinel Suspension Base with shock pressure below 100 PSI.



# SHOCK COMPRESSION ADJUSTMENT SETTINGS

Setting the sag height is designed to be a starting point. To get the most out of the suspension base the shock absorber can be fine-tuned. This is done using a combination of compression and rebound tuning to optimize ride quality as well as for varying sea conditions.

The suspension base comes with a 2 or 3 position blue lever that is designed to make quick adjustments to optimize the performance of the shock absorber in varying sea conditions. You can select three settings:

## 1 SOFT MODE

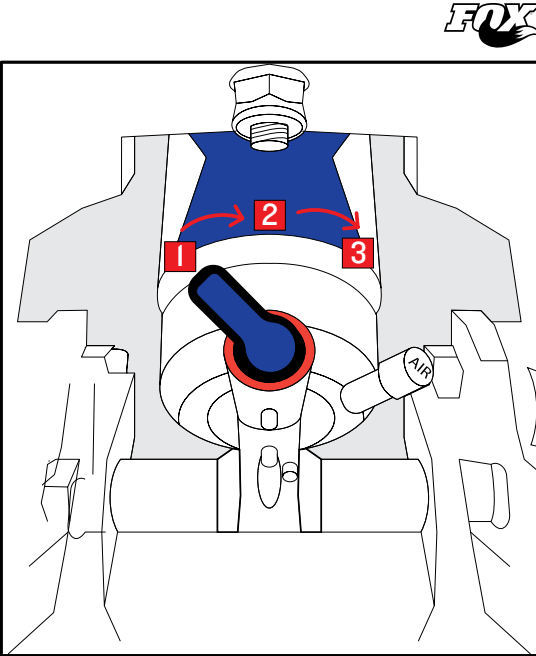
For operating in flat water and light chop where the likelihood of experiencing a slam is low. Mostly inshore use. Gives a soft ride.

## 2 MEDIUM MODE

For operating in moderate to rough conditions where some slamming could occur. Gives a medium ride.

## 3 FIRM MODE

For operating in big seas and at higher speeds where regular slamming will occur. Gives a firm ride.



# REBOUND ADJUSTMENT

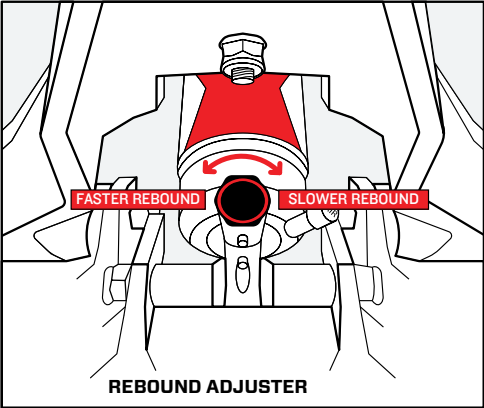
Rebound controls the rate of speed at which the shock returns to the sag position after compressing. The rebound adjustment is dependent on the air pressure setting. Higher pressure requires slower rebound settings. Use the procedure below to find the correct rebound setting.

## FASTER REBOUND

- In high frequency and small wave activity, a faster rebound can improve your suspension performance.
- Turning the red rebound adjuster counter-clockwise will make the seat rebound faster.

## SLOWER REBOUND

- In low frequency and large wave activity, a slower rebound can improve your suspension performance.
- Turning the red rebound adjuster clockwise will make the seat rebound slower.



## WARNING

Do not sit on the seat with the SHOCKWAVE S5 Sentinel Shock Pump attached! Damage will occur to the shock and pump. Note, SHOCKWAVE Pump sold separately.

SERVICE TIPS

**Cleaning:** Rinse your **SHOCKWAVE S5 Sentinel** Suspension Base with fresh water after each use to prevent build up of salt and corrosion. Treat the suspension base with Boeshield or similar protectant every month or as often as possible to prolong appearance and service life. To remove any dirt/salt build up on seat, use upholstery cleaner as required.

**Leaks:** The shock absorber should hold pressure and only 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 leaks:** 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 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 parts.

HOW TO CLEAN YOUR SUSPENSION BASE

- 1 Using a soft cloth, wipe all surfaces of the S5 or Sentinel Suspension Base with fresh water. Open deck boats can hose off suspension bases if needed.
- 2 Allow to dry
- 3 Spray LPSI, Boeshield (or equivalent) corrosion inhibitor on terry or microfiber cloth and wipe all metallic and painted surfaces and hardware.
- 4 Ensure all areas surrounding bolt heads and nuts are thoroughly cleaned and lubricated to decrease chance of corrosion
- 5 Gently wipe shock shaft with a thin layer of LPSI, Boeshield (or equivalent) corrosion inhibitor. Clean off excess to avoid particulate from sticking to the shock shaft during operations.
- 6 All accessories (slide, swivel slide) can have LPSI, Boeshield or equivalent applied.
- 7 Application of LPSI or Boeshield should occur after every trip or once every 30 days.
- 8 Wipe Corbin2 or Commander seats with Marine grade upholstery cleaner.
- 9 \*Optional: All bolt heads and nuts can be coated with LPS3 if desired for added corrosion resistance.



IMPORTANT

Be sure to wash your suspension base properly. Thoroughly wash base 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.

DRAWINGS AND EQUIPMENT LIST

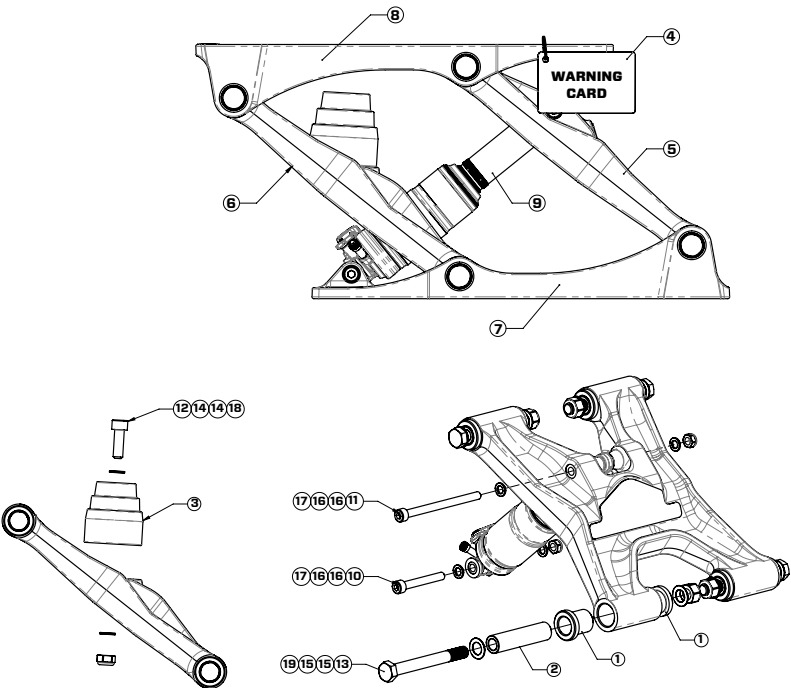
The illustrated parts breakdown is designed to provide a functional overview of the SHOCKWAVE S5 Sentinel Marine Suspension Base and provide a reference to points covered in the user manual. These drawings show:

- The name and location of major components
- A breakdown of the major components in your Suspension Base order

These drawings can be used to order spare parts and replacements.

SUSPENSION BASE DRAWING (SW-07823)

	QTY	PART NO.	DESCRIPTION
1	16	SW-04747	S5 PIVOT BUSHING
2	8	SW-04748	S5 BUSHING SPACER
3	1	SW-04754	S5 BUMP STOP
4	1	SW-04893	S5 PRODUCT CARD ASSEMBLY
5	1	SW-07825	S5 SENTINEL CAST H-ARM AFT
6	1	SW-07826	S5 SENTINEL CAST H-ARM FORWARD
7	1	SW-07828	S5 SENTINEL CAST PLATE BASE
8	1	SW-7829	S5 SENTINEL CAST PLATE TOP
9	1	SW-7830	S5 SENTINEL SHOCK ABSORBER
10	1	FA-M8X60-AS-CS-SS	SCREW, SOCKET HEAD CAP
11	1	FA-M8X110-AS-CS-SS	SCREW, SOCKET HEAD CAP
12	1	FA-M10X30-AS-CS-SS	SCREW, SOCKET HEAD CAP
13	8	FA-M12X110-HH-CS-SS	BOLT, HEX HEAD
14	2	FA-3/8-FW-AN960C6I6	WASHER, FLAT
15	16	FA-1/2-FW-AN960C8I6L	WASHER, FLAT
16	4	FA-5/16-FW-AN960C5I6	WASHER, FLAT
17	2	FA-M8-LN-SS	NUT, NYLOCK
18	1	FA-M10-LN-SS	NUT, NYLOCK
19	8	FA-M12-LN-SS	NUT, NYLOCK

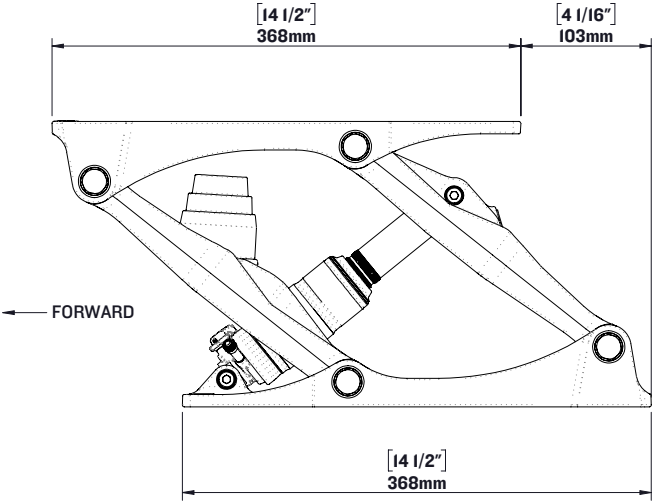


PROPRIETARY AND CONFIDENTIAL  
NOTICE: THIS DRAWING MAY REVEAL DESIGNS OR INFORMATION PROPRIETARY TO PROFESSIONAL COMPONENTS LTD. BY ACCEPTANCE OF REPRODUCTIONS, RECIPIENTS AGREE TO PROTECT PROFESSIONAL COMPONENTS LTD. RIGHTS AND ARE WARNED AGAINST USE OF THE DOCUMENT FOR ANY PURPOSE OTHER THAN THAT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

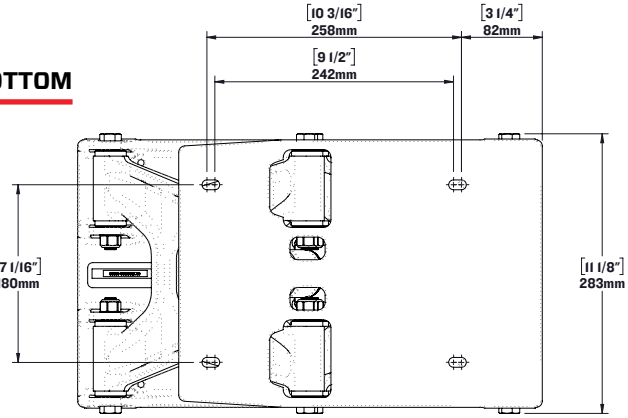
EMERGENCY PROCEDURES/TROUBLESHOOTING

CONDITION	CAUSE	SOLUTION(S)
Suspension base is lower than normal or shock absorber will not pressurize	Leak in system Worn or corroded fill valve Defective shock absorber Faulty pump	Check system for leaks by applying soapy water to system connections and look for bubbles. If a leak is found, replace the shock absorber  Remove the fill valve core and replace with a new one from an auto supply store  Replace the shock absorber – this is required only on extremely rare occasions
Suspension base is bottoming out	Shock pressure is too low	Attach pump and add air as per instructions on page 6 of this manual
Suspension base is topping. Ride is rough and erratic. Noise heard or shock felt when seat comes to top of travel	Shock pressure is too high	Reduce shock air pressure
Seat is “bucking off” or bouncing occupant	Rebound speed is too fast	Adjust red rebound adjuster as per instructions on page 11 of this manual
Squeaking noise when underway	Loose components Shock absorber mounting bolts are dry	Tighten loose components Apply marine-grade grease to shock mounting bolts
Moving components or accessories will not move	Bearing or sliding mechanism is corroded, dry or binding	Disassemble if necessary and lubricate with marine grade grease

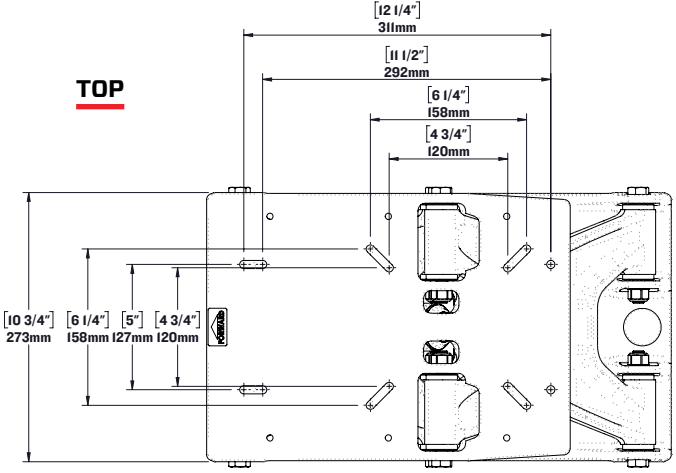
S5 SENTINEL MOUNTING PATTERN



**BOTTOM**



**TOP**



CAUTIONS & WARNINGS

Your SHOCKWAVE S5 Sentinel Marine Suspension Base 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 SHOCKWAVE S5 Sentinel 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 Base will result.
- Place hands near base 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 Base if it is or appears to be damaged. Serious injury can result.
- Use the Suspension Base if the base to deck attachments are loose. Serious injury can result.
- Use the Suspension Base if base resting height is lower than normal. This may be an indication of a damaged shock and serious injury can result.
- Operate the suspension base with insufficient air pressure in the shock to prevent bottoming. Serious injury and damage to the seat can result.
- Use the suspension base 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 base if fasteners are loose. Damage to the equipment or bodily harm may result.
- Attempt to open, perform maintenance or repair the suspension base while craft is underway. Damage to the equipment or bodily harm may result.
- Place items under or around the suspension base that may interfere with the suspension base's range of motion. Damage to the equipment or bodily harm may result.
- Operate the seat if the occupants weight exceeds 250lbs [113kgs] for deck accelerations greater than 3g'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 S5 Sentinel Marine Suspension Base.

WARRANTY & 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. Sentinel powder coat finish is not covered by warranty if corrosion is a result of abuse or lack of maintenance. Bases 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 250lbs [113kgs] for 3g 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@shockwavesSeats.com - Phone: +1.250.656.6165

WARRANTY CLAIM FORM MUST BE SUBMITTED

Download your Warranty Claim Form at [shockwavesSeats.com/warranty](http://shockwavesSeats.com/warranty)

## S5 SENTINEL ACCESSORIES



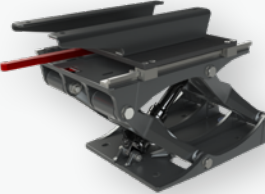
### SHOCK PUMP SW-01983

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 S5 Sentinel.



### SHOCK EXTENDER KIT WITH REMOVAL TOOL SW-08397-PKG

The SHOCKWAVE S5 Sentinel Shock Extender Kit will allow you to raise your Suspension Base 1.5", which means that you can lift the height of the base from 8.5" to 10".



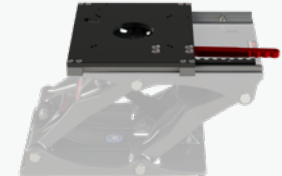
### SEAT ADAPTER KIT SW-08290

The Adapter Kit allows users with non-SHOCKWAVE brand seats that have a 5' x 12" bolt pattern to fit to SHOCKWAVE Swivels and Slides. The Adapter Kit accommodates both upward and downward bolt patterns.



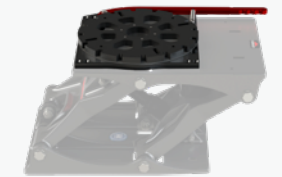
### SWIVEL SLIDE SW-05488

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-05489

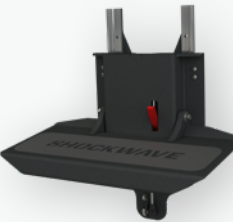
Our purpose-built Slide offers a full 5-inches of fore-aft travel, allowing for comfortable seating options for a wide variety of occupants and users. Our Slide pairs perfectly with the S5 Sentinel and the Commander Seat.



### SWIVEL SW-05592

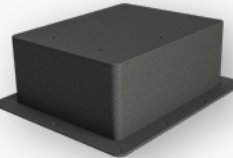
This robust 360-degree Swivel is designed to pair with the S5 Sentinel and the Commander Seat. A positive lock engages every 22.5° (16 positions).

## S5 SENTINEL ACCESSORIES & 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 platform 17" wide and is designed to be bulkhead mounted on a console.



### RISER BOXES 6" SW-07251 | 9" SW-07920

SHOCKWAVE offers Riser Boxes for customers needing additional height below their seat.



### CUP HOLDER WITH ALUMINUM BRACKET SW-01688

SHOCKWAVE offers an optional Cup Holder that can be attached to either side of the armrest of the Commander Seat.



### COMMANDER SEAT - MID-BACK BLACK SW-04920-B | WHITE SW-04920-W HEAVY DUTY SW-04920-HD

Designed to pair perfectly with the S5 Sentinel Suspension Base, the Commander is a light-weight, robust boat seat that comes equipped with folding armrests, a storage pocket, machined aluminum seat frames, fiberglass seat backs, and Corbin cushions.



### COMMANDER SEAT - HIGH-BACK SW-06328-B

This seat is perfect for long days on the water when neck and head support is preferred.



### COMMANDER HEATED SEAT SW-06987

The Heated Seat offers two heated cushions – both back and seat cushion, ensuring the occupant really feels the warmth. Seat is supplied with a 10' wiring harness and illuminating rocker switch to simplify installation.

## GENERAL BOATING BEST PRACTICES AND SAFETY

SHOCKWAVE Marine Suspension Bases 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 BASE** 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 BASE 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 base makes a strange noise

**USE SEAT BELTS** If supplied - seat belts prevent occupants from being ejected from the vessel and the seat. When not in use, the seat belt buckle ends should be fastened to prevent damage to the suspension base.


**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 base so that it's comfortable.

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

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# ***SHOCKWAVE***

***MARINE SUSPENSION SEATING***