



PSX2™

(Power Stabilizing System)

OEM INSTALLATION MANUAL

L I P P E R T
C O M P O N E N T S®

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Safety Information

The PSX2™ is intended for the purpose of stabilizing the trailer. The use of this system for any reason other than which it is intended is prohibited by Lippert's Limited Warranty and may result in serious personal injury or death. The PSX2™ is designed as a stabilizing component system and should not be used to provide service for any reason under the trailer such as changing tires or repairing or replacing any components beneath the trailer.

WARNING

The “WARNING” symbol above is a sign that an installation procedure has a safety risk involved and may cause death or serious injury if not performed safely and within the parameters set forth in this manual.

Always wear eye protection when performing this installation procedure. Other safety equipment to consider would be hearing protection, gloves, and possibly a full face shield, depending on the nature of the installation procedure.

WARNING

The PSX2™ is designed as a stabilizing component system. Do NOT use this stabilizing system to attempt to level the trailer. Failure to follow instructions in this manual could result in death, serious injury and/or damage to the trailer.

WARNING

Lippert Components Inc. recommends that a trained professional be employed to change the tires on the trailer. Any attempts to change tires or perform other service while trailer is supported by the PSX2™ could result in death, serious injury and/or damage to the trailer.

CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

System Description

Please read and study the operating section of the manual before operating the PSX2™. The PSX2™ is a 12V DC electric motor-driven system. The electric motors drive Acme-threaded screws to extend and retract the stabilizer legs to stabilize the trailer.

The stabilizing system can be installed on travel trailers and 5th Wheels. Travel trailer options include both front and rear stabilizers or a rear stabilizer only, while 5th Wheels typically utilize only a rear stabilizer.

There are no serviceable parts within the electric motors. If either motor fails, it must be replaced. Disassembly of the motor voids the warranty.

Mechanical portions of the PSX2™ are replaceable. Contact Lippert Components, Inc. to obtain replacement parts.

Installation

Resources Required

- Cordless or electric drill or screw gun
- Appropriate drill and drive bits
- Ratchet
- $\frac{9}{16}$ " wrench
- $\frac{9}{16}$ " socket
- $\frac{5}{16}$ " socket or $\frac{5}{16}$ " manual override tool (Optional, sold separately)
- $\frac{5}{16}$ " nut driver bit

Determine Stabilizer Locations

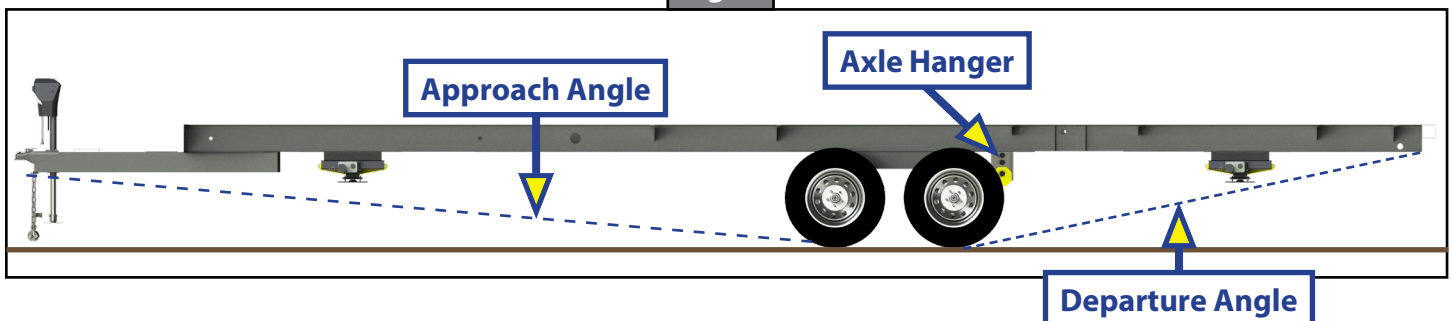
1. Measure approach and departure angles by running a string line from the meeting point of the tire and ground up at an angle to the lowest point on the front and rear of the trailer. These string lines are shown as dotted lines (Fig. 1).
2. The rear stabilizer can be mounted at any point between the rear axle hanger and the bumper while making sure the system stays within the departure angle (Fig. 1).
3. The front stabilizer can be mounted anywhere as long as the system remains within the approach angle (Fig. 1).

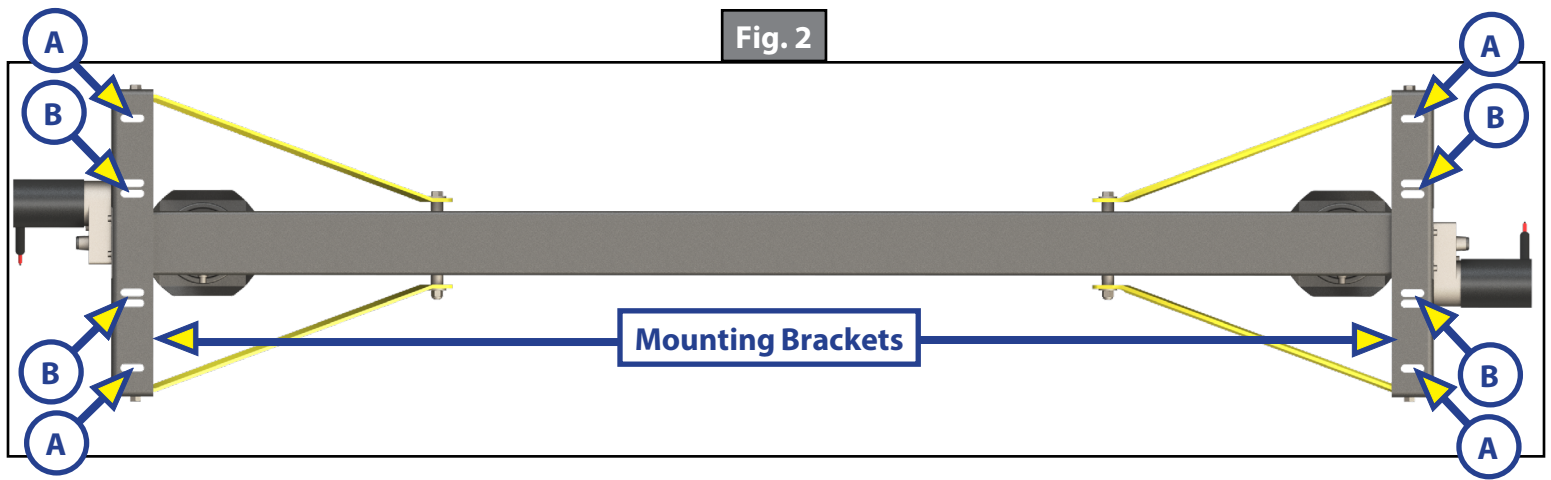
NOTE: The stabilizing systems are shown for reference only to help mark proper locations. Any location outside these guidelines will need LCI engineering approval.

⚠ WARNING

Before working underneath the trailer, make sure it is supported with jack stands at both the front and rear as per manufacturer's recommendations. Failure to do so may result in death or serious injury.

Fig. 1





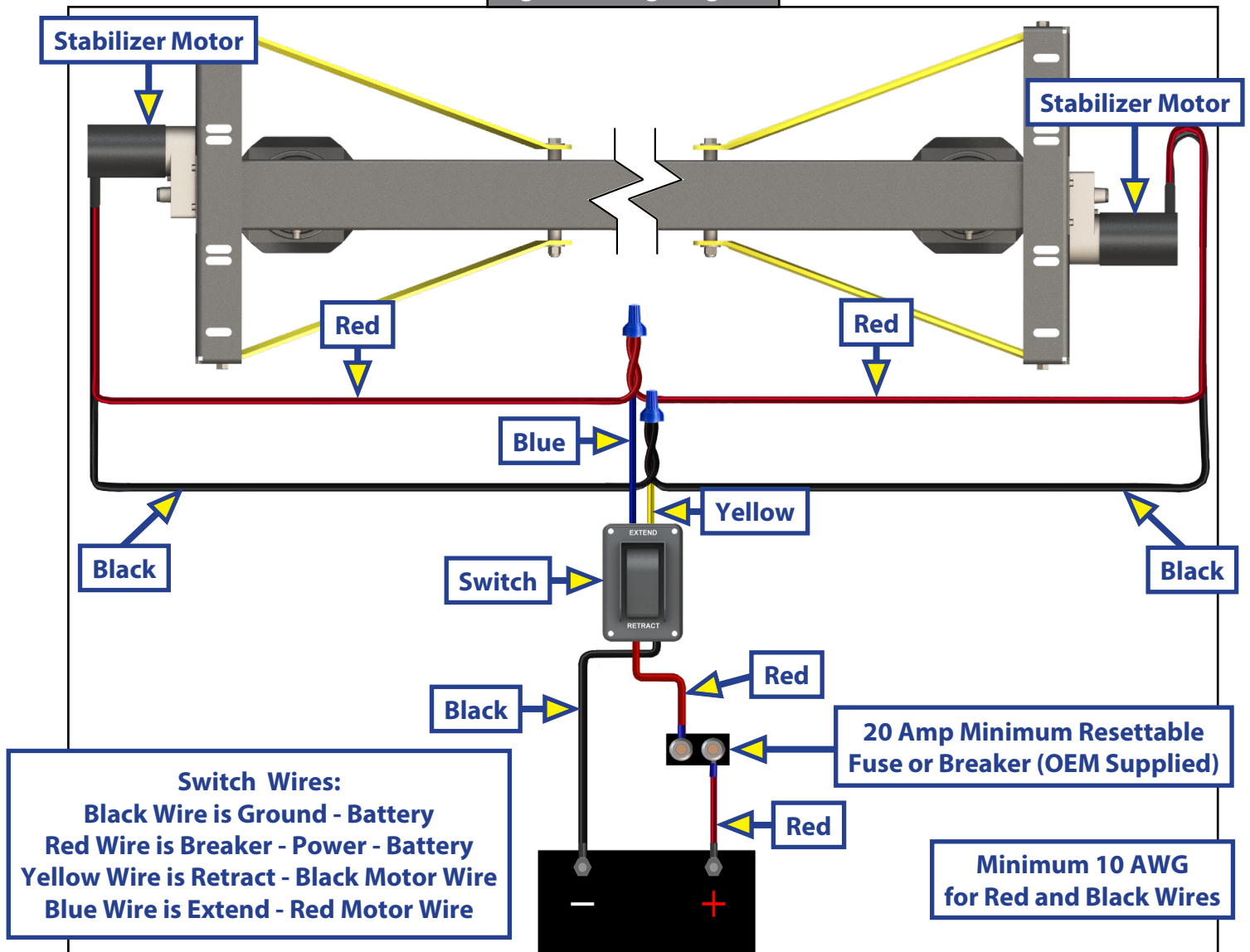
Attaching Stabilizers

NOTE: Do not weld the system to the trailer. Welding the system to the trailer voids all warranty claims.

NOTE: Support framework in accordance with the manufacturer's recommendations.

1. Place the stabilizer under the main frame rails.
2. Manually crank the system upward so the mounting brackets match up to the main frame rails. See Manual Override in the Troubleshooting section.

Fig. 3 - Wiring Diagram



3. Install four 1/4" self-drilling screws, two per end, in the Fig. 2B positions.
4. Drill four 3/8" diameter mounting holes in the main frame rails in the Fig. 2A positions.
5. Using four 3/8" flange bolts and flange nuts, securely fasten the stabilizer to the main frame rails with two bolts and nuts per end in the Fig. 2A locations.
6. Install each switch (front and rear) inside a compartment or on the exterior of the trailer within view of the related stabilizer legs.
7. Power feed for the stabilizer must be on a minimum 20A circuit. The power feed should not experience more than a 10% voltage drop between the power source and the motor connections while the circuit is under load.
8. Circuit protection of power feed wires must be per RVIA code standards.

NOTE: A minimum 10 AWG is required for wiring the stabilizers.

NOTE: Auto-reset circuit protection is contained internally in the motors. If tripped, it will reset after a delay.

Operation

WARNING

Failure to act in accordance with the following may result in death, serious personal injury or severe product or property damage. Always make sure that the stabilizer area is clear of people, pets and objects before and during operation of the system. Always keep away from the stabilizer legs when operated.

CAUTION

The PSX2™ is to be used for stabilizing the trailer, not leveling the trailer. The stabilizer legs should never be extended longer than two seconds beyond initial contact with the ground.

CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

Preparation

The PSX2™ is intended for the purpose of stabilizing the trailer after the trailer is leveled.

CAUTION

Never lift the trailer completely off the ground. Lifting the trailer completely off the ground creates an unstable condition that could result in property damage and personal injury.

1. Be sure to park the trailer on solid, level ground.
2. Clear all stabilizer leg landing locations of debris and obstructions. Locations should also be free of depressions.
3. When parking the trailer on extremely soft surfaces, utilize load distribution pads under each stabilizer leg.
4. People and pets should be clear of trailer while operating the stabilizers.

Extending Stabilizers

1. Make sure the trailer is level.
2. Verify the battery is fully charged and hooked up to the electrical system.

NOTE: If the ground beneath the stabilizer is not level, it is possible that one of the stabilizer legs will reach the ground first. If this happens, continue pressing EXTEND until the second stabilizer leg reaches the ground and stabilizes the trailer.

3. Press and hold EXTEND on the switch (Fig. 4A) for the rear stabilizer until the footpads of the stabilizer legs contact the ground and the rear of the trailer is stabilized. Then release the switch.
4. If a front stabilizer is installed, press and hold EXTEND on the switch (Fig. 4A) for the front stabilizer until the footpads of the stabilizer legs contact the ground and the front of the trailer is stabilized. Then release the switch.

⚠ CAUTION

Once the stabilizer legs have been extended, do not use the tongue jack on a travel trailer or the landing gear on a 5th Wheel. Damage to the stabilizer legs can occur when lifting or leveling the trailer after the stabilizer legs have been extended. Doing so will void the warranty of the stabilizers.

Retracting Stabilizers

1. Verify the battery is fully charged and hooked up to the electrical system.
2. If a front stabilizer is installed, press and hold RETRACT on the switch (Fig. 4B) for the front stabilizer until the stabilizer legs are fully retracted. Then release the switch.
3. Press and hold RETRACT on the switch (Fig. 4B) for the rear stabilizer until the stabilizer legs are fully retracted. Then release the switch.

Stabilizing System

By keeping the EXTEND switch (Fig. 4A) engaged for one to two seconds after the legs' footpads make contact with the ground, the trailer will be stabilized and ready for use.

In the event the system shuts off while trying to stabilize the trailer, the auto-reset circuit protection contained within the motors has tripped and will reset within 10 seconds. The internal circuit protection is included to prevent the stabilizer from lifting. If the circuit protection trips, then the stabilizer legs should not be extended farther.

If the stabilizer legs are not synchronized and are extending unevenly, press and hold RETRACT (Fig. 4B) on the switch until both legs are fully retracted. The circuit protection will trip. After the circuit protection resets, the stabilization sequence can be restarted.

NOTE: Make sure the stabilizer legs are fully retracted before moving the trailer.

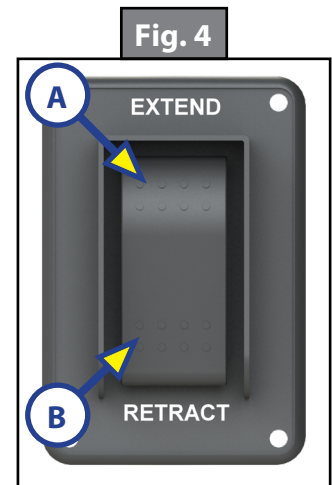
System Maintenance

⚠ WARNING

Do not work on the stabilizer unless the battery is disconnected. Failure to act in accordance with the following may result in death, serious personal injury or severe product or property damage.

Mechanical Maintenance

It is recommended that when operating in harsh environments, e.g. road salt or ice buildup, the moving parts be kept clean. They can be washed with mild soap and water. No grease or lubrication is necessary and in some situations may be detrimental to the environment and long-term dependability of the system.



Electrical Maintenance

For optimum performance, the system requires full battery current and voltage. The battery must be maintained at full capacity. Other than good battery maintenance, check the terminals and other connections at the battery, the control switch and the electric motors for corrosion and loose or damaged terminals. Check motor leads under the trailer chassis. Since these connections are subject to damage from road debris, make sure they are in good condition.

Troubleshooting

Manual Override

The PSX2™ comes with a manual override system located on the side of each motor.

NOTE: Use of a ratchet with a $\frac{5}{16}$ " socket or a $\frac{5}{16}$ " manual override tool (optional tool sold separately) is recommended to manually override the system. Do not use an impact tool to perform any of the override procedures because this may damage the motor.

To manually operate the stabilizers:

1. Disconnect one of the wire leads from each motor to prevent backfeeding the motors.

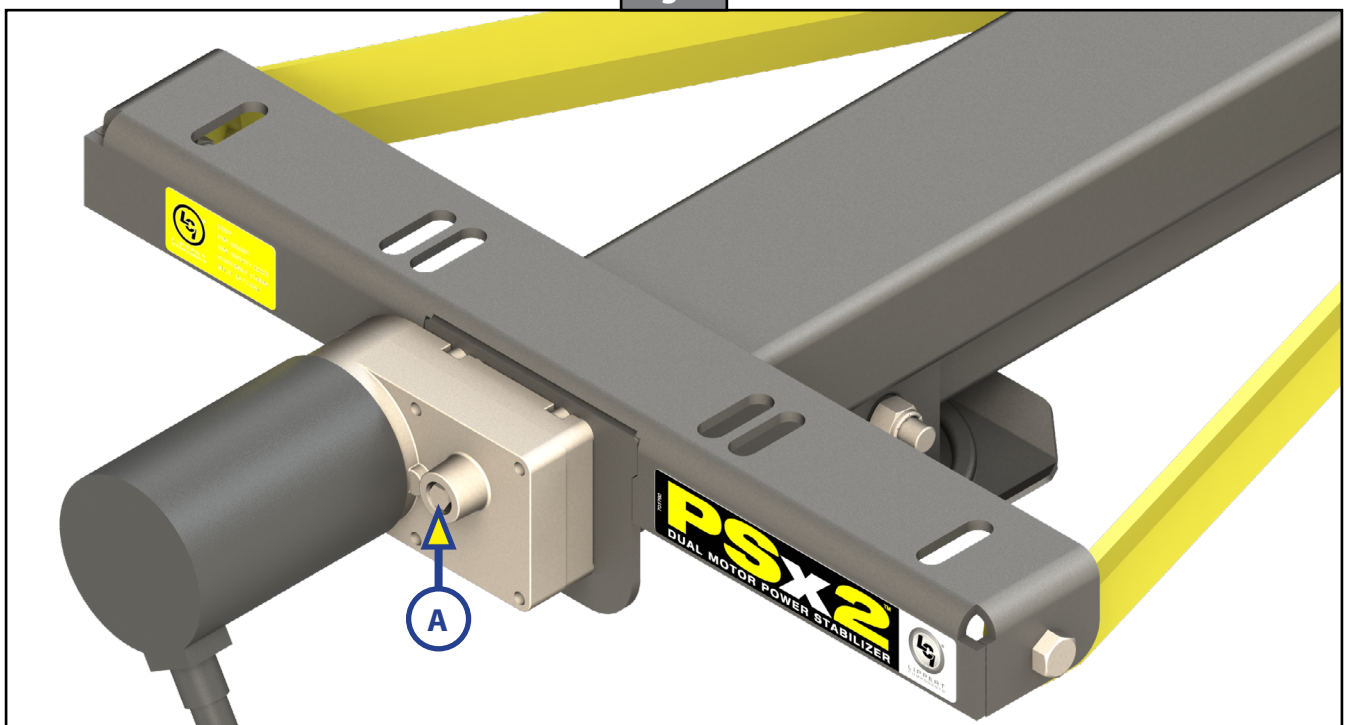
NOTE: The manual override procedure must be performed individually on each motor of PSX2 in order to manually extend or retract the legs.

2. Find the access port on the side of the leg motor (Fig. 2A).
3. Remove the rubber plug.
4. Place the $\frac{5}{16}$ " socket or $\frac{5}{16}$ " manual override tool (optional) over the manual override nut (Fig. 2A).
5. Turn the override nut until the leg extends or retracts to the desired position. A clockwise rotation will extend the leg and counterclockwise will retract the leg.

⚠ CAUTION

The gears can be stripped if the stabilizer legs are manually retracted/extended to the fullest extent and the operator continues to rotate the manual override. Use of a power tool could cause harm to the user or damage the stabilizer motor.

Fig. 5





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Revised editions are available for free download from lci1.com.

Please recycle all obsolete materials.

For all concerns or questions, please contact

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