

EQUALIZER

SYSTEMS

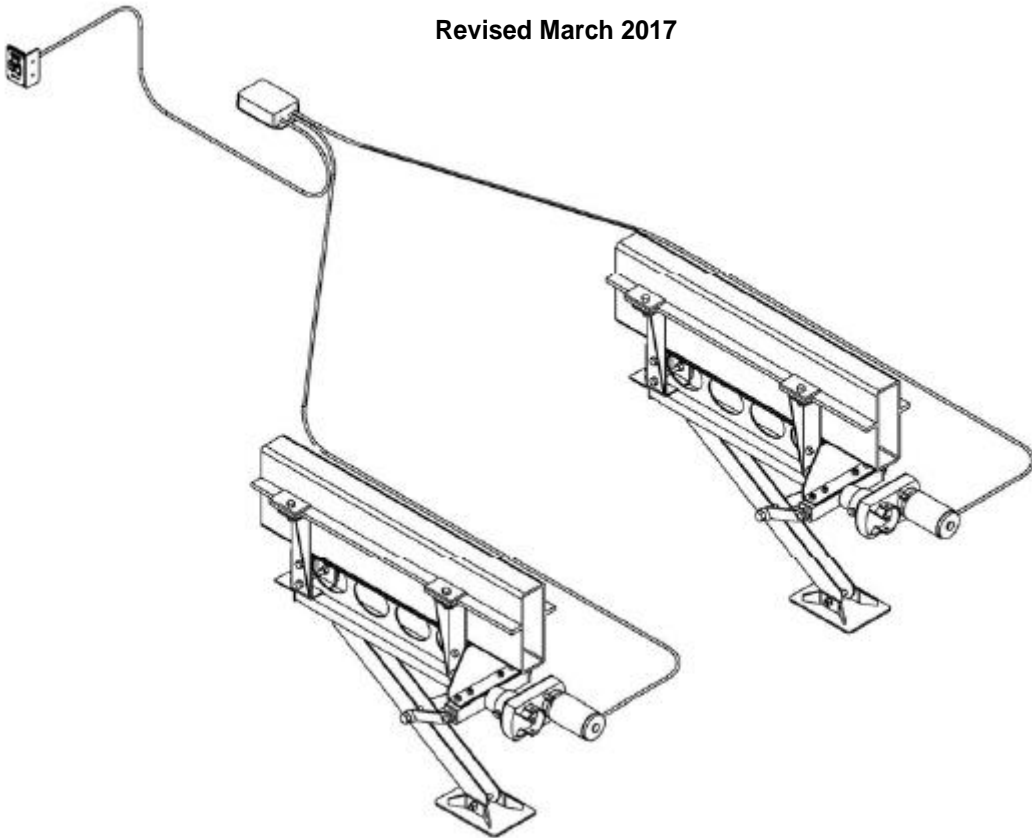
A DAYS COMPANY

800-846-9659
www.equalizersystems.com

Stabi-Lite® Installation Guide

8449, 8449AM, 8450, 8450AM
For
Sprinter Chassis,
Ford E-350, Ford E-450 and Chevrolet C5500
June 2010

Revised March 2017



Tools and Supplies Required for Installation

- 9/16" socket and ratchet and/or 9/16" wrenches
- 5/8" socket and ratchet or wrench
- Drill and drill bits
- Screwdriver or screw gun bits
- Cable ties and/or clamps

Important Warnings and Precautions

READ ENTIRE INSTRUCTIONS AND ALL PRECAUTIONS PRIOR TO INSTALLING, USING, OR TROUBLESHOOTING THIS EQUIPMENT

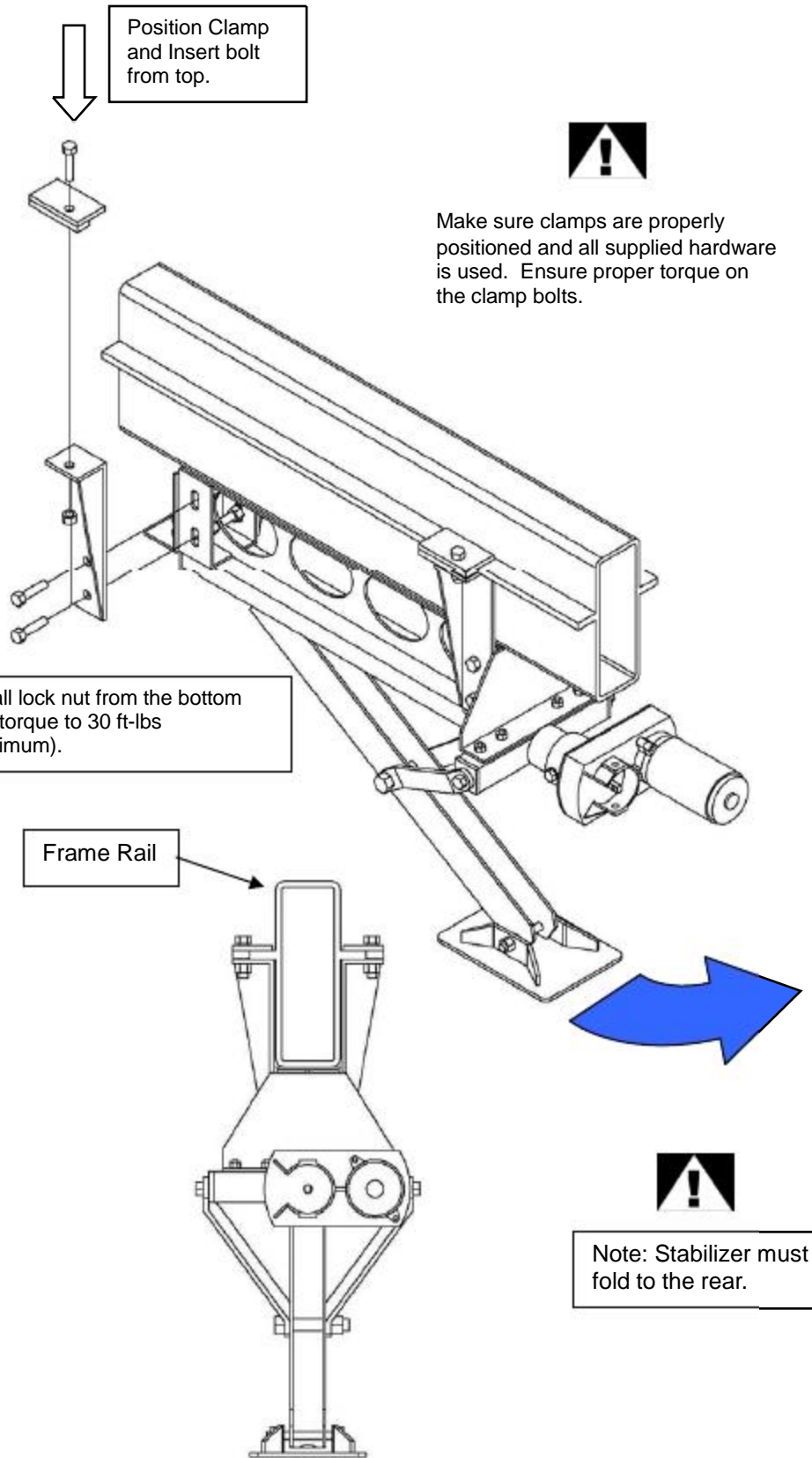
- Use the system only in the intended manner. System forces and pressures can cause severe injury or death if used improperly or modified. Service work should only be performed by trained technicians.
- Do not attempt to operate the system when the vehicle is in motion.
- Visually confirm that all stabilizer legs are retracted prior to travel.
- Make sure there are no obstructions in the extend or retract paths of the stabilizer legs.
- Do not use the stabilizer legs to lift the unit to perform any kind of service work or to change tires. The system is designed as a stabilizing system and is not meant to lift the coach off the ground.
- Do not go under vehicle when stabilizer legs are extended.
- Do not operate any system functions while anyone is under the coach.
- Do not allow excessive motion in the coach during STABI-LITE® operation. This could cause the system to stabilize improperly.
- Modification of any factory-supplied item may result in the denial of all warranty claims. Call Equalizer Systems Technical Support prior to any modifications.
- Do not attempt any technical repairs without proper training or first calling Equalizer Systems.
- Technical Support at (800) 845-9659. Failure to do so may result in denial of warranty claims.

Stabilizer Mounting- Sprinter Chassis

Stabilizer legs must be mounted to the unit's main frame rails. They are held in position by a riser and clamps.

Note: Mount the stabilizers using the supplied clamps and hardware.

- 1) Select an appropriate mounting location, based on available space. The stabilizers are to be mounted between the front and rear axles. Care must be taken when selecting the mounting locations to avoid electrical wiring, fuel lines, plumbing, and other obstructions.
- 2) Position stabilizers to each of the main chassis frame rails. The stabilizers must be positioned to fold to rear of the unit. It may be necessary to slightly shift chassis wiring harnesses to position clamps under them.
- 3) Clamp the stabilizers in place using all the clamps that are provided with the system. Insert the flange head bolt from the top and position the flange nut on the bottom. Torque to 30-35 Ft-Lbs.



Make sure clamps are properly positioned and all supplied hardware is used. Ensure proper torque on the clamp bolts.

Install lock nut from the bottom and torque to 30 ft-lbs (minimum).

Frame Rail

The stabilizers must be positioned to fold to the rear of the unit.

Torque clamp bolts to 30 ft-lbs (minimum)

Note: Stabilizer must fold to the rear.

Helpful Hint: To help position the stabilizer leg for clamping, partially extend it using the manual override coupler. Use a 5/8 inch wrench or socket. Turning counterclockwise = Extend

Stabilizer Mounting

Stabilizer legs must be mounted to the unit's main frame rails. They are held in position by a riser and clamps.

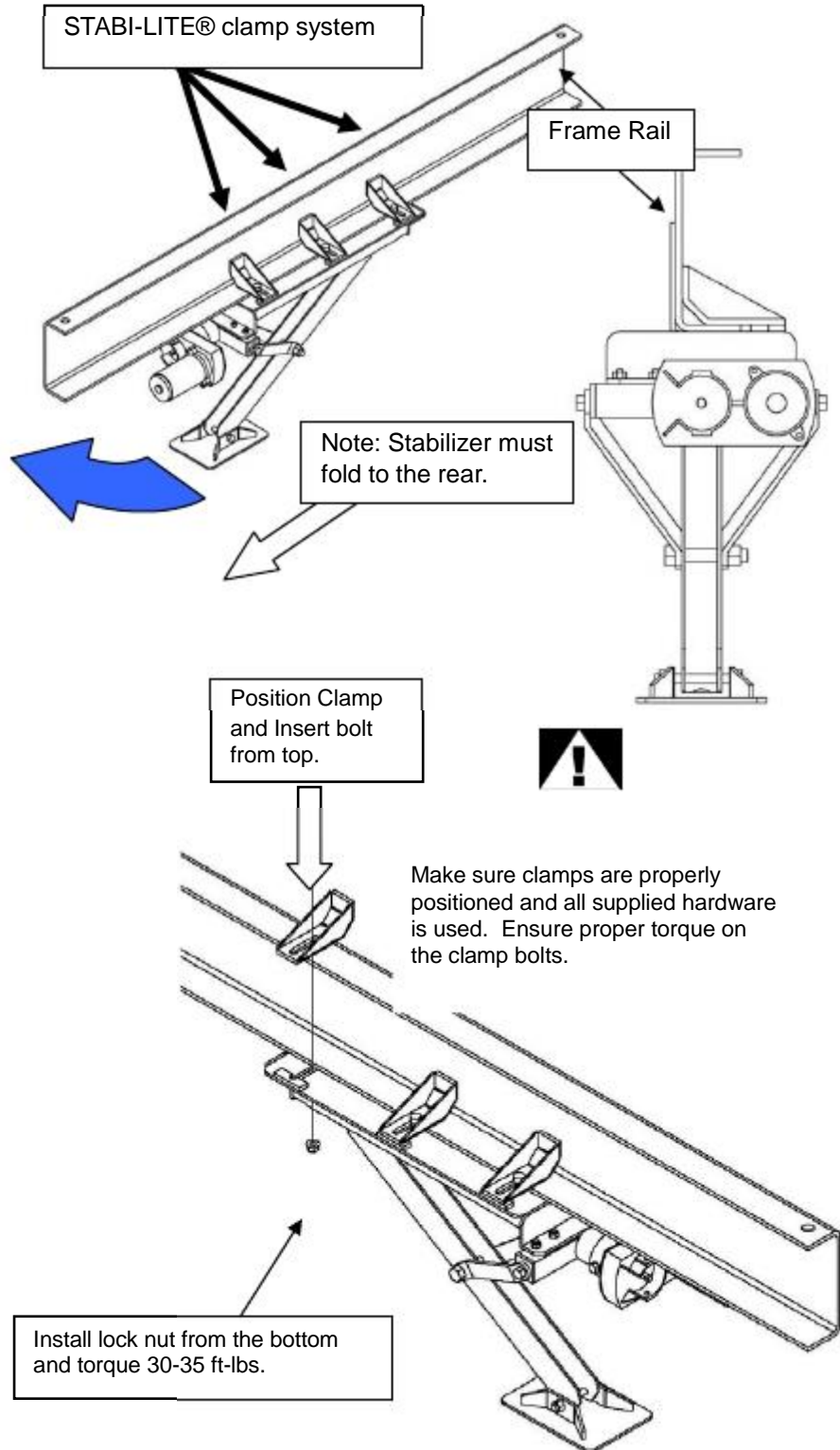
Note: Mount the stabilizers using the supplied clamps and hardware.

- 4) Select an appropriate mounting location, based on available space. The stabilizers are to be mounted between the front and rear axles. Care must be taken when selecting the mounting locations to avoid electrical wiring, fuel lines, plumbing, and other obstructions.
- 5) Position stabilizers to each of the main chassis frame rails. The stabilizers must be positioned to fold to rear of the unit. It may be necessary to slightly shift chassis wiring harnesses to position clamps under them.
- 6) Clamp the stabilizers in place using all the clamps that are provided with the system. Insert the flange head bolt from the top and position the flange nut on the bottom. Torque to 30-35 Ft-Lbs.



The stabilizers must be positioned to fold to the rear of the unit.

Torque the clamp bolts to 30-35 ft-lbs



Helpful Hint: To help position the stabilizer leg for clamping, partially extend it using the manual override coupler. Use a 5/8 inch wrench or socket. Counterclockwise = Extend

Switch Panel and System Controller Installation

Install switch panel and the system controller

Mount the switch panel and system controller in appropriate locations using the included fasteners. Attach using the mounting holes provided in the switch panel and system controller.

The provided harnesses allow maximum flexibility in mounting locations for both the switch panel and system controller.



The switch panel and system controller are not weather resistant and must be mounted in protected areas.

System Controller

The system controller is designed to be mounted in close proximity to the battery. An 8' controller to battery harness is provided.

Additionally, harnesses to connect the system controller to the stabilizer motors are 7' and 12'.

Possible system controller mounting locations:

- In a sealed baggage compartment
- In a cabinet inside the living area
- Under the dash

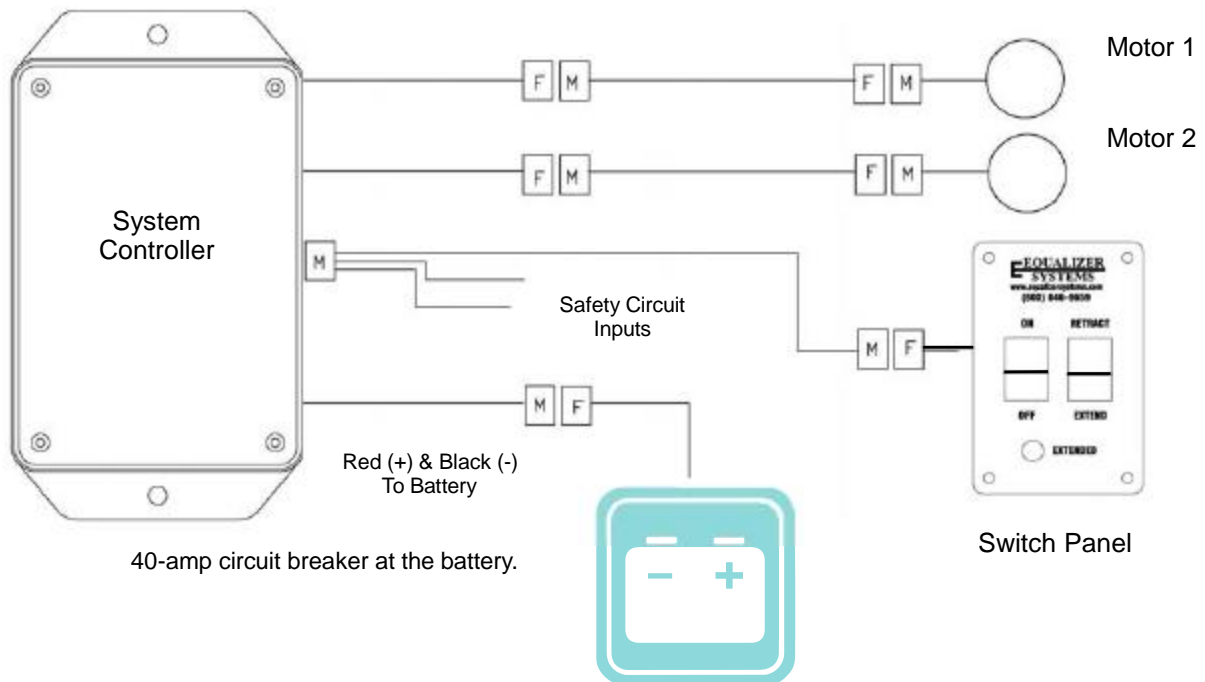
Switch Panel

A mounting bracket (P/N 2849) is provided to aid it mounting the switch panel.

When selecting the mounting location, keep in mind the provided switch panel harness is 16'.

Possible switch panel mounting locations:

- In/under the dash board
- In a cabinet or on a panel in the living area
- In a sealed baggage compartment



Connect the Harnesses

Connect the supplied harnesses as shown in the previous diagram.

A 40-amp circuit breaker is provided for use at the battery power connection.

Harnesses Included:

- (2) Controller to Motor Harnesses
- (1) Controller to Switch Panel Harness
- (1) Controller to Battery Harness

Secure harnesses using cable ties or clamps to prevent damage.

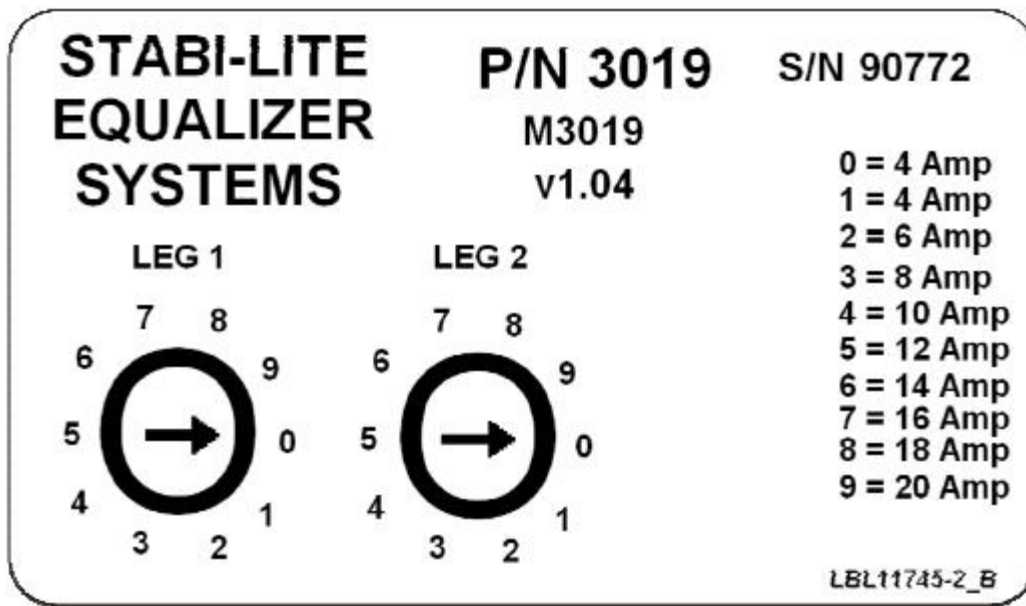
Note: Connection of the leg harness. If the unit is equipped with slide-outs, the system motor outputs can be adjusted to allow the coach to be stabilized in a more level state with the slide-outs extended. This is accomplished by adjusting the motor outputs to accommodate greater weight on one side of the unit.

The controller to motor harnesses are color coded.

Leg #1 = Grey/ Pink

Leg #2 = Purple/ Brown

The motor harnesses can be attached to either leg. Note color of wire harness routed to each stabilizer in order to properly adjust controller output to accommodate the weight of an extended slide-out.



The controller output can then be adjusted by using the dials on the controller to provide more or less force to either stabilizer leg.

Higher Number = greater lifting force applied to that stabilizer leg.

Safety Input Wiring

Two inputs are provided to ensure operational safety. These wires are pink and black w/yellow stripe. These inputs can be wired in several possible configurations:

Ignition disable: This would prevent extension of the legs when the ignition (Key) is turned to the engine run position. Retraction would be allowed.

- Connect the Pink wire to an ignition ON (12 VDC positive) source.
- Connect the Black/Yellow wire to ground (12 VDC negative).

Automatic retract: This wiring method will result in automatic retraction of the stabilizers when the ignition key is turned to the engine run position.

- Connect the pink wire to an ignition ON (12 VDC positive) source.
- Tape or protect end of the black/yellow wire so that it can not come into contact with ground or other wires.

Note: It is important that users visually verify the stabilizers are retracted after an automatic retraction has been initiated.

Other options for safety wiring exist. It is possible that a park brake switch or a transmission switch can be used to create other possible extension deny or automatic retract functions.

For example if an automatic retraction was required, but wanted the ability to run the engine without the stabilizers retracting. The black/yellow could be connected to a park brake switch so that it is grounded when the brake is applied and the ground is removed when the brake is released. This assumes the pink wire is connected to an ignition ON (12 VDC positive) source.

Manual Override Procedure

In the event of an emergency, a manual override is available. Before you begin this procedure, please read and understand these instructions.



Use caution when retracting stabilizers lowering the unit. Keep hands clear of mechanism. Use caution as the coach lowers. Do not use this procedure to over-extend the stabilizers. Do not use this procedure to extend the stabilizers to lift the unit.

Required Tool: 5/8 "Socket or wrench

To override the Stabilizer:

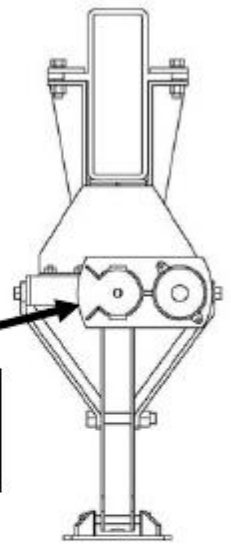
- 1) Disconnect the motor wire harness at motor connector
- 2) Place the 5/8" wrench or socket on the override coupler and turn.

To Retract:

Turn the Override Coupler in the **clockwise** direction.

To Extend:

Turn the Override Coupler in the **counterclockwise** direction.



To Retract:
Turn the override coupler **clockwise**



Unplug
Motor Lead
Connector

Parking the Coach

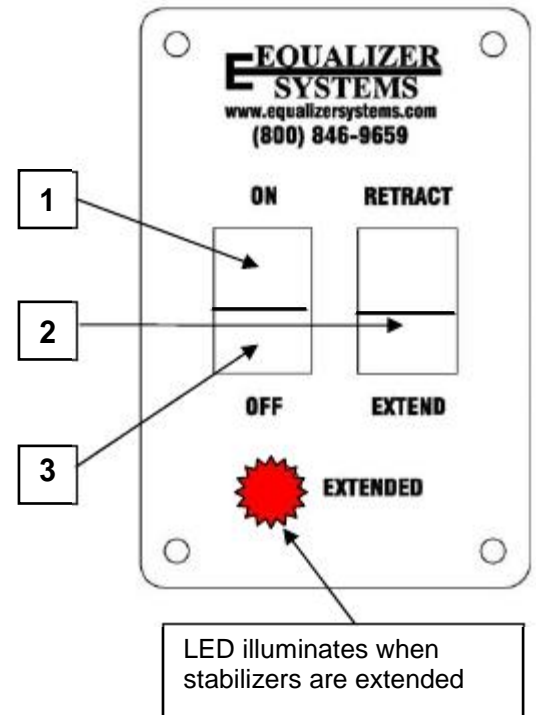
- Care must be taken when selecting a parking spot. Since the system is designed to provide stabilization, rather than leveling, park the coach on suitably level ground. The surface must be firm enough to prevent the stabilizer feet from sinking into the ground.
- Place the transmission in PARK and set the PARKING BRAKE.
- Prior to ANY system operation, visually confirm that the area above and below the stabilizers is clear of objects or obstructions.
- **Deploy the stabilizers before extending Slide-Outs. Retract Slide-Outs before retracting stabilizers.**

Extending the Stabilizers

1 Enable the System: Move the ON/OFF switch to the **ON** position. Depending on the installation, a safety interconnect circuit may be present. Certain conditions may have to be met in order to operate the system. For example, this circuit may require the ignition be OFF, the parking brake set, or the slide-outs fully retracted in order to operate the system.

2 Extending the Stabilizers: Push and release the **EXTEND** button. This starts the automatic stabilizing cycle. The stabilizers will automatically extend until they contact the ground, slightly lifting the coach. The red EXTENDED LED light will illuminate to indicate the stabilizers are out of the stowed position. To interrupt the Auto Stabilizing Cycle: Push and release the **EXTEND** button once. This will stop the stabilizer movement. Do not turn the ON/OFF switch OFF.

3 Disable the System: Once the stabilizers have firmly contacted the ground and the system has completed stabilizing, move the ON/OFF switch to the **OFF** position.



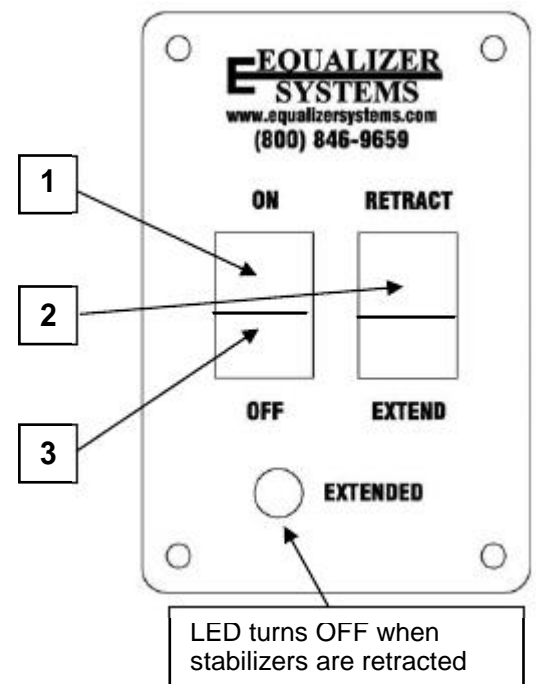
Retracting the Stabilizers

1 Enable the System: Move the ON/OFF switch to the **ON** position.

2 Retract the Stabilizers: Push and release the **RETRACT** button. This starts the automatic retraction cycle. The stabilizers will automatically retract to the stowed position. The red EXTENDED LED light will go out to indicate the stabilizers are fully retracted. To interrupt the auto retraction cycle: Push and release the RETRACT button once. This will stop the stabilizer movement. Do not turn the ON/OFF switch OFF.

3 Disable the System: Once the stabilizers have fully retracted and the system has automatically stopped running, move the ON/OFF switch to the **OFF** position.

4 Inspect: Visually confirm that the stabilizers are fully retracted into the stowed position and ready for travel.





Limited Warranty Policy

STABI-LITE®

1. Only warranty claims with prior written or verbal authorization from Equalizer Systems will be recognized, all other claims will be denied.
2. Equalizer Systems warrants system components for a period of one (1) year from the date of original sale of the vehicle or from date of aftermarket installation. This warranty covers defects in material and workmanship only. Equalizer Systems is not liable for any damage due to abuse, neglect, misuse, negligence, misapplication, error of operation, accidental or purposeful damage or damage due to an "act of God" such as, wind or rain damage, flood, lightning or other natural occurrence of the like. Equalizer Systems limited warranty is applicable to the Equalizer Systems components only and does not apply to the vehicle, apparatus or property to which it is attached. Like warranty parts will be shipped at no charge if the repair is authorized by an Equalizer Systems representative. Purchased components used in authorized warranty repairs will be reimbursed at the original purchase price.
3. Labor and freight expenses due to warrantable parts defects or workmanship will be reimbursed for a period of one year from the date of original sale of the vehicle. Freight expenses will either be prepaid by Equalizer Systems or reimbursed at the UPS Ground rate only. Any additional shipping charges or requirements are the obligation of the vehicle owner or service center performing the warranty repair. The owner or service center's obligation may include overseas shipping charges, border fees, brokerage fees and any other additional fee of the like.
4. Warranty labor will be reimbursed only for claims that have prior written or verbal authorization from an Equalizer Systems representative. Warranty labor compensation is required to correspond with the "Warranty Parts Replacement Time Guideline" published by Equalizer Systems. Any warranty repair not listed on this guideline will require prior authorization from an Equalizer Systems representative. A reasonable time allowance will be determined by the Equalizer Systems representative. Any warranty repair that is not listed on this guideline that is performed without prior authorization will be denied without exception. Time associated with learning about the repair or excessive diagnostic and installation time will not be reimbursed. Warranty labor will be reimbursed at the authorized service center's published shop rate if the rate is reasonable for that region. Overtime labor will not be reimbursed without exception.
5. Labor, parts and freight credit (if applicable) will be sent after the parts are tested and the warranty claim is validated. Returned parts that are found to be in normal operating condition are not warrantable and will be charged to the owner or service center. Equalizer Systems reserves the right to charge back the service center for labor claim payments previously submitted if the installation of the warranted part is found to be inadequate at a later date.
6. Claims will be denied if the date submitted is greater than 30 days from the repair date.
7. Prior authorization is required before parts may be sent back to Equalizer Systems. A Return Authorization Number is required for items to be accepted.
8. Complete systems are not warranted unless authorized by an Equalizer Systems representative. There are absolutely no exceptions to this clause.
9. Equalizer Systems is not liable for loss of time, manufacturing costs, labor material, loss of profits, direct or indirect damages incurred by the vehicle manufacturer.
10. Excessive warranty labor resulting from inadequate access to the Equalizer Systems product will not be reimbursed.
11. Equalizer Systems will not pay a markup on warranty parts unless required by law.
12. Travel expenses, hotel, telephone, fuel or any other expenses of the like are not covered under warranty.
13. For aftermarket installations, support of warranty claims must be provided through proper documentation of date of purchase/ installation.

Replacement Parts:

1. Replacement parts are warranted under the same guidelines listed above for the remainder of the original warranty or 90 days, whichever is longer. Proof of warranty repair date and original vehicle purchase date are required.

No additional warranties, expressed or implied, are authorized by Equalizer Systems

This warranty voids all previous issues. Questions concerning this warranty should be directed to:

Equalizer Systems
55169 CR 3
Elkhart, IN 46515
(800) 846-9659
(574) 266-6083 fax

To activate your warranty, please visit our website at <http://equalizersystems.com/service/activate-warranty>