



RV Stabi-Lizer Installation & Operation Manual

Effective May 2018

Contents

Installation	Pages 2 & 3
Operation	Page 4
Manual override	Page 5
Drawings	Page 6 & 7
Warranty	Page 8

Required Tools & Parts

Tools required for installation

- Drill and drill bits
- Wrenches/ratchet/sockets (for mounting leg assemblies)
- Cutters (for wiring and wire ties)
- Crimpers (for wiring terminals)
- Screw driver (for mounting screws)
- Welder (for mounting leg assemblies)

Additional items required for installation

- Wire (10 GA) and terminals (1/4-inch eyelet) for power and ground connections
- Wire ties
- Fasteners needed for mounting

Leg Assembly

The leg assemblies (4) should be mounted to the frame or structure sufficient to be able to lift the vehicle. The mounting location should be selected so there is no interference with the leg and foot as it is extended or retracted. The mounting location should be selected to minimize the amount of road spray onto the assembly. Generally, the closer to the edge (side) of the vehicle, the more stable the vehicle will be. Sufficient ground clearance should be considered to prevent damage to the jack assembly when the vehicle is moving. Too much ground clearance will create the need to “over extend” the jack assemblies resulting in an unstable vehicle. Also, the jacks could extend past vertical which could lock them up in the extended position preventing retraction. The best ground clearance is approximately 8 inches (1/2 of the max travel of 16 ½ inches of the leg assembly). The brackets are designed to be welded to the frame or supporting structure. This will provide for the most universal and variable mounting locations. There are also mounting holes located on the bracket for mounting the mechanism to the vehicle using bolts or fasteners. A minimum of 3 fasteners should be used for mounting of each leg assembly. The fasteners should be a minimum grade 5 and should be of the proper size to fill the hole in the mounting bracket. The use of flat washers and locking type nuts are recommended.

Control Panel

The control panel must be mounted in a location where it is protected from the elements as it is not a sealed or weatherproof unit. The location should be selected so the wiring harness can be routed to it. The location should allow easy access for operation. A location near the vehicle driver is best so that the status of the jacks is known prior to driving the coach. Screw holes in the corners are provided for the mounting. Screws are not provided due to the varying surfaces to which the control panel could be mounted.

Controller

The controller must be mounted in a location where it is protected from the elements, as it is not a sealed or weatherproof unit. The location should be selected so the wiring harnesses can be routed to it. Screw holes in the corners are provided for the mounting. Screws are not provided due to the varying surfaces to which the controller panel could be mounted.

Electrical Connections: (See drawings for wiring connections)

Note: This is a 12 VDC Electric System

Control Panel to Controller

There is a single harness assembly to connect the control panel to the controller. This connector is labeled '**SW PNL INPUT**'. Simply match-up and join the connectors. Be sure to press the locks so that the connectors stay mated. The harness should be routed and secured in such a manner to avoid strain on the connectors and to protect the harness from chaffing and heat sources.

Controller to Leg Assemblies

Each leg assembly (4) will have a harness that is connected from the controller to the motor pigtailed. Select the correct controller connector for the position of each leg assembly. The connectors are labeled for the jacks. The harness should be routed and secured in such a manner to avoid strain on the connectors and to protect the harness from chaffing and heat sources. The harness must be routed in a manner that keeps the harness away from the moving parts of the leg assembly. When plugging in the connectors, verify that the locking latches are in place.

Power and Ground

These two connections may be in the kit. If they are not in the kit, then they are to be provided by the installer. The two connections are made to the marked studs (1/4-inch dia. lugs) located at the corners of the controller. The wiring for these connections should be properly routed and protected to prevent chaffing and damage from heat. Proper wiring and terminals should be selected for the application.

Power: Battery +: On the corner of the controller there is a Stud (Lug) marked Battery +. This stud needs to be connected to a 12 VDC 40 Ampere positive source. This wiring feed should be protected at the source (battery positive terminal or power distribution block or center) using a 40 Ampere Circuit Breaker. The wire gauge should be a minimum 10 gauge in size. Depending on the length of the run (over 12 feet), it may need to be larger.

Ground: On the corner of the controller there is a stud (lug) marked 'Ground'. This stud needs to be connected to the chassis ground or the negative side of the battery. The wire gauge should be a minimum 10 gauge. Depending on the length of the run (over 12 feet) it may need to be larger.

Ignition on safety disable/interlock

At the upper left corner of the controller there is a ¼ inch male spade terminal labeled IGN. This terminal must be connected to a 12 VDC ignition on source. This connection when properly made will prevent the extension of the jacks when the key switch is in the engine run position. The main purpose of this is prevent the inadvertent/accidental extension of the jacks when driving the vehicle. It also provides for a jack (s) down warning/alert if the jacks are down and the key is turned on (engine started).

Operation

Extension for Leveling and Stabilizing

Push the power switch to the on position. The power light should come on. Use the individual buttons to extend the jacks to the ground to level and stabilize the vehicle. The jacks may be extended individually or in pairs by pressing one or two of the extend buttons. Care should be taken to not overextend individual jacks. The vehicle will be the most stable the lower it is to the ground once the leg assemblies are firmly planted. The leg assemblies will lose stability (be less stable) the further they are extended. The user may decide to use all 4 or just one pair of the jack assemblies depending on the user's needs. It is recommended they be used as pairs (front or rear). The use of pads or blocks to take up ground clearance or to prevent the foot from sinking into soft ground should be done with care to avoid excessive stress on the leg assembly and the possibility of "falling off" of the blocks which could damage the leg assemblies or the vehicle.

Note: The ignition key needs to be in the off position for the jacks to extend

The RV Stabi-Lizer system is a vertical stabilization system. It is not designed to lift the vehicle to the point that the tires come off the ground. It is not to be used in a manner or circumstances that results in the tires being lifted from the ground. It is not to be used to change tires or perform other service work. Tires should be blocked to prevent unwanted front to rear or side stress on the jack assemblies. The leg assemblies should not be relied upon to prevent side to side or front to rear (roll off) movement.

Retraction

Push the power switch to the on position. The power light should come on. Use the all retract switch to retract the jacks prior to travel. The switches for the retract of the front and rear are to make stabilization and leveling adjustments. They are not to be used for retraction prior to driving unless the all retract function failed or is not completed.

Caution

Visually verify that all jack assemblies are fully retracted prior to travel. Mechanical/electrical issues could cause the jacks down warning to not properly operate.

Manual Override

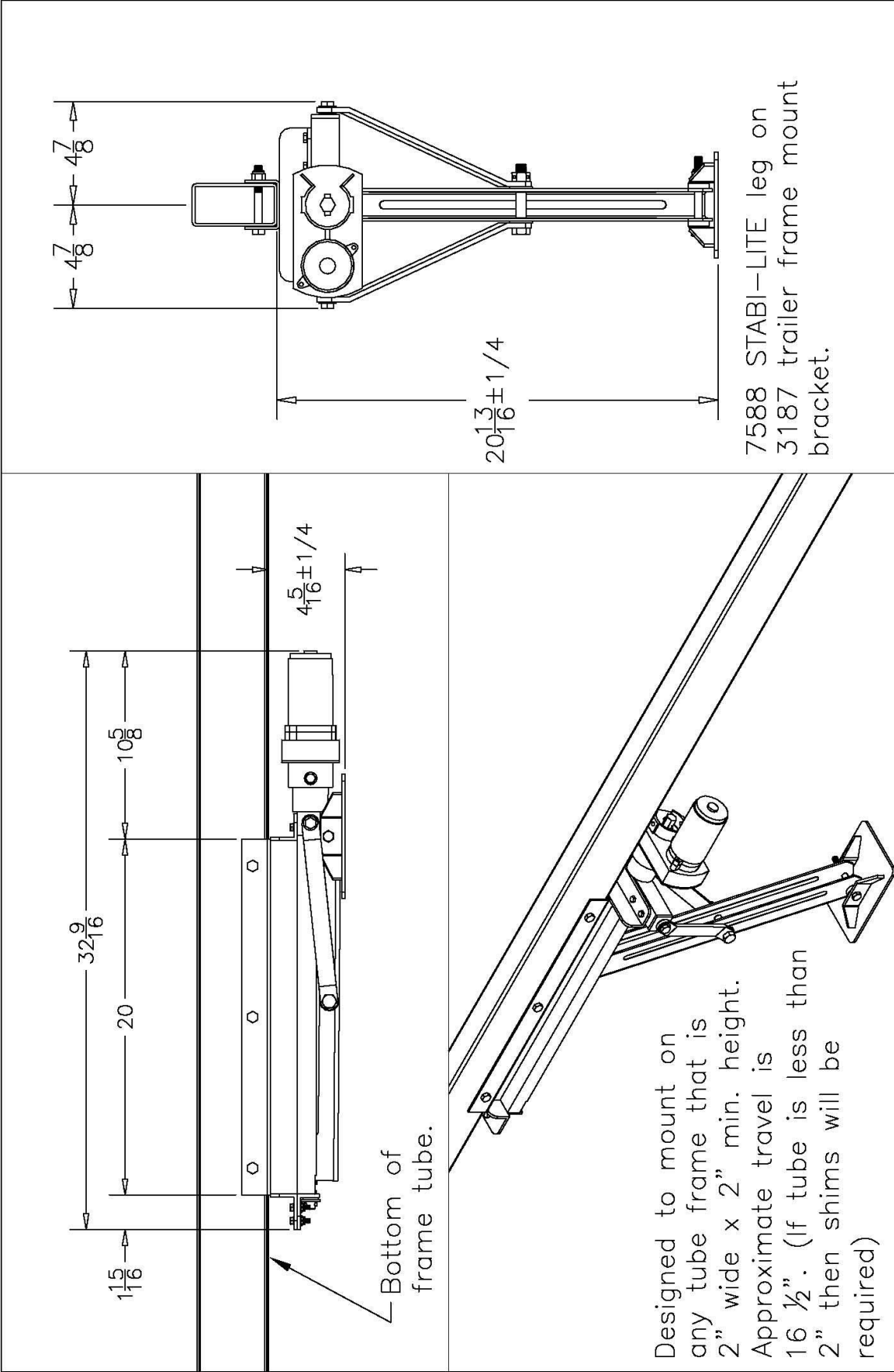
Each of the leg assemblies are equipped with an override feature that will help to get the leg assemblies retracted in the event of power or electrical failure. This feature is to be used only to retract the leg assemblies and must be done by hand (No power tools to avoid damage to the mechanism). This feature cannot overcome a damaged leg assembly.

To retract the Leg Assembly(s)

Locate the override hex (5/8 inch) on the gearbox drive. Using a 5/8-inch wrench (socket wrench preferred) rotate the hex clockwise by hand to retract the leg assembly. If more than one leg needs to be retracted it is recommended they be retracted alternately to avoid excessive stress on the leg assemblies. Excessive torque on this override hex could break it off. Do this carefully by hand, do not use an impact or power driver on it.

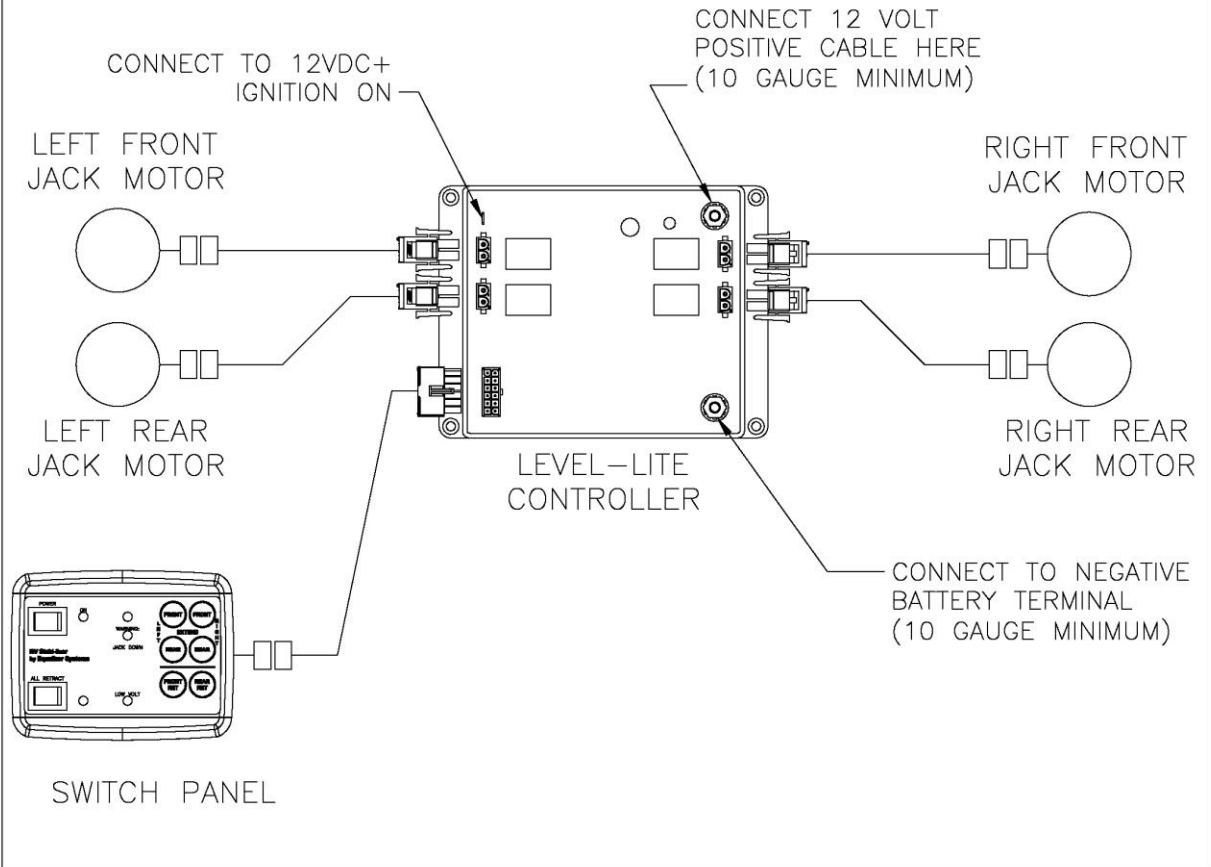
*When using the override do not use to extend leg assemblies to lift the vehicle. The controller has current overload protection built in to avoid damaging the leg assembly from exceeding the maximum capacity. The override is designed only to retract the leg assembly in the event of power or electrical failure.

*Visually verify that all jack assemblies are fully retracted prior to travel.



UNLESS OTHERWISE SPECIFIED:		TITLE		USED ON:	
TOLERANCES:		STABI-LITE GENERAL DIMENSIONS		STABI-LITE SYSTEMS	
.XXX ± 0.010	XXX ± 0.010	SIZE	SCALE	MATERIAL	
.XX ± 0.010	XX ± 0.010	A	1:1		
X ± 0.030	X ± 0.030	DRW BY:	DATE:	PART NAME:	
ANG ± 1/2°	ANG ± 1/2°	SJ	6/25/13	STABI-LITE (TRAILER) ASSEMBLY	
REMOVE ALL BURRS AND SHARP EDGES .015 MAX	REMOVE ALL BURRS AND SHARP EDGES .015 MAX	APP'D BY:	DATE:	PAGE:	DWG NO.:
				1 OF 1	7915/7588
					REV: —

RV STABI-LIZER WIRING CONNECTION DIAGRAM



Equalizer Systems Limited Warranty Policy

March 2017

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 slide out and leveling system components for a period of **one year** from the date of original sale of the vehicle. 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. 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. Warranty coverage for parts or systems sold by non-authorized resellers (such as live or internet auctions) will be at the discretion of Equalizer Systems.
10. 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.
11. Excessive warranty labor resulting from inadequate access to the Equalizer Systems product will not be reimbursed.
12. Equalizer Systems will not pay a markup on warranty parts unless required by law.
13. Travel expenses, hotel, telephone, fuel or any other expenses of the like are not covered under warranty.

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 North
Elkhart, IN 46515
1-(800) 846-9659
1-(574) 266-6083 fax

To activate your warranty, please visit our website at <http://equalizersystems.com/service/activate-warranty>
EQ022