

EQUALIZER

SYSTEMS

A DAYS COMPANY

(800) 846-9659

equalizersystems.com

EQ Smart-Level Trailer Version Installation/Operation/Warranty Guide Effective May 2019

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This manual is intended to be used by technicians installing Equalizer Systems Level-Lite systems. It is assumed that the reader is familiar with hydraulic, mechanical, and electrical systems; in addition to workplace safety.

Required Tools & Parts

Tools Required for Installation

- Ratchet, sockets and wrench set
- Wire cutters / crimpers
- Drill/screw gun and bits
- Welding equipment (if welding leg or bracket in place)

Additional Items Required for Installation

**The following cables, connectors and breakers can be purchased from Equalizer Systems – Part # 70103

- ½ diameter grade 5 or better fasteners (bolts, nuts, washers). A locking type nut recommended.
- #4 AWG power wire **(to connect battery + 12V positive to the pump) *
- #4 AWG ground wire **(to connect battery - 12V ground to pump) *
- #4 AWG ring terminals **
- Loom clips (to secure harness and hydraulic hoses to the coach)
- Self-drilling screws or pop rivets
- Wire ties
- 10 – 16 quarts Automatic Transmission Fluid (Dexron or multi-purpose)

*Note: These items must be #2 AWG or larger if cable run is greater than 12 ft

* Caution *

Modification of any factory supplied item may result in the denial of all warranty claims. Call Equalizer Systems Technical Support prior to any modifications

With any hydraulic application, holding position on a cylinder must be done with safety in mind. Failure in the system may cause the jacks to retract or extend suddenly. When working under or near the coach, always use jack stands of appropriate rating to support the weight of the coach.

Jacks

Determine where the jacks will be mounted. The jacks must be mounted to the chassis frame, as close as possible to the front and rear axles.

Secure the jack brackets in place according to the bracket mounting drawings. Bolt the jack to the bracket using $\frac{1}{2}$ inch diameter fasteners, minimum grade 5. The jacks must be installed with a minimum of 6 inches of ground clearance. See Installation chart below. In any case, the bottom of the footpad should be no lower than any other item mounted on the coach. Pay particular attention to the angle of departure for the chassis when mounting the rear jacks – and the angle of approach when mounting the front jacks.

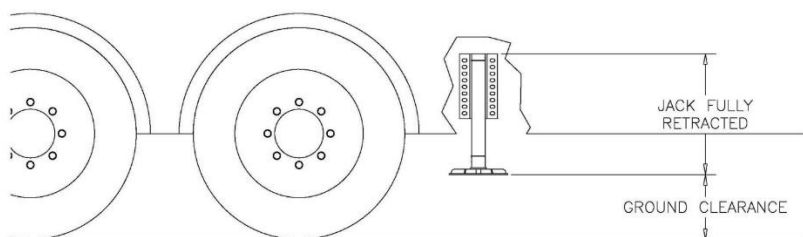
Reference Chart for Installing Jacks:

The foot/pad must be mounted with-in the range suggested (see chart below) for proper operation of the system. If jacks are mounted outside of the recommended range the program in the control may not operate correctly. Retract the jack fully (jack up). Ground clearance is determined by measuring from the bottom of the jack foot to the ground (jack retracted fully) when the vehicle is close to being level. When in doubt call Equalizer Systems 800-846-9659.

6 inches minimum of ground clearance recommended

SL/DP (round tube jacks)

SL-15	8-10 inches
SL-16	8-10 inches
SL/DP-18	10-12 inches
SL/DP-24	14-16 inches



Pump

Install the pump kit on the coach. The pump must be mounted in a location that is reasonable to route the hydraulic hoses to the manifold. It must be accessible for filling the reservoir and monitoring the fill level. The cartridge valves and the end of the motor must be accessible to manual override the system (see instructions for manual override). The pump is mounted using the 3/8-16 threaded holes in the base of the pump assembly.

Fittings

Install the hydraulic adaptor fittings in the top and bottom of each jack and install the fittings into the manifold. The straight thread O-ring side always goes to the cylinder or manifold. The tapered side will get the hose attached to it. When installing straight fittings into the leg or manifold, tighten to 15 lbs-ft. When using 90-degree fittings, turn until finger tight, position correctly, then tighten the jam nut to 15 lbs-ft.

Hose

Install the hydraulic hoses according to the chart below. Route the hoses clear of all hot exhaust components and pinch points in the suspension/chassis system. Route and attach in a manor to prevent chaffing by sharp edges or other items that could cut or damage the hose. Attach the hoses to the manifold and jack fittings (from step 4). Tighten to 15 lbs-ft. Secure the hydraulic hoses with wire ties or loom clamps to the chassis. Care should be taken to not kink or twist hoses. The minimum bend radius is 6 inches.

Installation of Hoses to the Manifold:

<u>Jack Leg</u>	<u>Manifold Connection</u>
Left Front – Top	Brown Solid (T-1)
Left Front – Bottom	Brown Stripe (B-1)
Right Front – Top	White Solid (T-2)
Right Front – Bottom	White Stripe (B-2)
Left Rear – Top	Orange Solid (T-3)
Left Rear – Bottom	Orange Stripe (B-3)
Right Rear – Top	Yellow Solid (T-4)
Right Rear – Bottom	Yellow Stripe (B-4)

Note: Some trailers have 6 jacks. When this is the rear jacks 2 left and 2 right are connected in pairs left pair and right pair. See the drawing for this.

Wire harness

Route the wire harness from the pump assembly to the area where the control panel is to be mounted. The harness needs to be routed away from moving objects, sharp edges and high heat sources. Use wire ties and or loom clamps to secure in place. The end with the 9 pin and 2 pin connector goes to the pump assembly. See the drawing for the lay out. Connect the harness connectors to the matching connectors at the pump assembly.

Note: there may be additional wires and or connectors present that are used for interface into other controls. These will be OEM specific requirements. Contact Equalizer for further info on this.

Bi-Rotational Motor Pump #'s 2542KS

Power Connections:

Pump # 2542KS: Attach a #4 gauge wire (# 2 gauge if the run is over 12ft.) from the positive + 12V terminal on the battery to the + terminal on the motor contactor (solenoid). There will be a yellow fused wire on this terminal. This supply may be fused at the source with a minimum 120-amp circuit breaker. This +12v supply must be a dedicated and isolated circuit (not shared with other devices), and must be constant, non-switched +12vdc.

Attach a # 4 gauge wire (# 4 gauge if the run is over 12ft.) between the negative -12v terminal on the battery and the ground stud on the pump. This is the preferred method of grounding. If grounding the pump to the chassis, the connection must be sound, free of paint and not susceptible to corrosion. The battery must be connected to the frame with #4 gauge or larger wire. It is not acceptable to allow the pump mounting bolts to be the sole grounding connection.

Note: All wire gauge sizes and breaker ratings noted above are the recommended minimum size. Larger gauge wiring and high breaker rating may be used. There may be variances on specific systems supplied to OEM customers due to the exact make up of the system.

Additional information on power supply connections

The below is just general information to be used as a guide.

Pump #s	Recommended min. wire gauge size	Circuit breaker size	Normal pump amperage (current draw is load dependent)
2542KS	2 or 4 gauge	120	60 - 140

Battery size considerations

Generally, the greater the size of the battery or bank the better. A group 24 RV deep Cycle marine battery should be considered the minimum. Multiple batteries connected in parallel is common. The battery or bank must have some sort of charging system in play to keep the battery or bank at peak charge for proper operation.

EQ Smart-Level Control Panel

Fasten the control panel in the desired location. The control panel can be mounted vertically or horizontally. It may be mounted as much 30 degrees from vertical or horizontal. It may not function well right at 45 degrees. The best most accurate will be right at horizontal (zero degrees) or vertical (90 degrees). It may be mounted on any surface regardless of its orientation to the front of the vehicle. Examples; on the center console, vertical wall, cabinet wall or other firm structure. The control panel is not waterproof therefore it must be in an interior location or compartment protected from the environment and spill areas. Attach the supplied wire harness between the Control Panel and the location of the pump assembly. Basically, there are two connectors one is a 12-pin double row the other is a 3 pin which is the power and ground feed for the control panel. There may be additional optional connectors that are not used for most installations. There may be additional wires breaking out of this harness that are used for "specific" customer needs.

The control panel must be firmly mounted to a surface that 'reacts' with the coach during leveling. The Auto Level function requires this as the leveling sensors are located inside of the control panel. Also, a set up process known as Orientation Program followed by setting the null (described later) must be performed. If these steps are not properly completed the Auto Level function will not operate properly. See orientation setting and null setting for these processes.

Purging Bi-Rotational Pump #'s 2542KS

This procedure must be performed with the initial installation & running of hydraulic system, and following installation of the pump assembly and jack(s). This procedure applies only to systems that are equipped with the Bi-Rotational pump. All electrical and hose connections must be completed before the purging process. You Must Follow this Procedure Strictly. Any Deviation from the Process will cause the purging process to become difficult and time consuming.

Fill the reservoir with Automatic transmission fluid. (Multi-purpose or any of the Dexron fluids)

Remove a fitting/plug that is installed on the retract side (hashed label) or attach a hose to the retract side coupler (if present). Place into a clean container. This will allow retract side air to escape to atmosphere.

Run the pump to extend the jacks(s). Maintain the fluid level in the reservoir between 1/4 and 1/2 full. Do not allow the reservoir to run empty. If jacks(s) will not fully extend, crack loose the upper hose(s) at the jack(s) and run the pump to extend until air is expelled. Use Caution - hydraulic fluid will be under high pressure. Retighten the hoses and complete the extension of the jack(s). Maintain the fluid level as described above.

Reinstall the fitting or plug into the retract side of the manifold or remove the hose attached to the coupler. (See above)

Run the pump to retract the jack(s). Maintain the fluid level as above. Do not fill the reservoir to full until after the legs are fully retracted.

If fluid in reservoir appears to be aerated (foaming), allow unit to rest until foam dissipates (approx. 10 minutes).

Fully extend and retract jack(s) a minimum of 3 times. Allow any foam in the reservoir to dissipate as needed. Maintain the fluid level in the reservoir as needed. Allowing 10 minutes between extend and retract for air to dissipate.

The above purging process are for dealers and retail installation. High volume OEM installers may have special procedures utilizing special equipment. Call Equalizer for info on this.

EQ Smart-Level Control Panel Programing

After the system is fully installed the control panel must be programed for operation. Failure to do this will result in a failed or improper Auto-Level. There are basically two program settings the orientation setting and the null setting. that must be done in the following order.

Orientation Setting:

This process cannot be completed until after the system has been connected to power and the control panel has been mounted and all electrical harness connections have been completed. This process teaches the control panel where the front of the vehicle is and how the control panel is mounted (vertical or horizontal). If this process is not performed correctly the processor will not know where the front of the vehicle is. It is possible that without doing this process it may work on a level floor/shop environment however when at sites where the system needs to operate specific legs for leveling it very likely will operate the improper legs. Once this process is properly completed the setting will be "retained" in the control panel and should not ever need to be performed again unless the control panel is replaced or moved to a different location.

With the control panel off press and hold the all retract button then while holding it press the power button, then release both buttons. The power light will start blinking and you will hear a rhythm beeping, also the 4 jacks down indicator lights will be on. Next the orientation is selected by pressing one of the manual control arrows. The exact specific one is determined by how the panel is mounted (see examples below). You will select an up arrow if the panel is mounted vertically and down arrow if it is mounted horizontal. The specific one is the one that most relates to the front of the coach.

Examples:

If the panel is mounted vertically inside the vehicle so that when you are looking at it, you are also looking at the inside of the front of the vehicle. You would push the up arrow for the front jacks.

If the panel is mounted vertically inside the vehicle so that when you are looking at it, you are also looking the inside of the rear of the vehicle then you would press the up arrow for the rear jacks.

If the panel is mounted vertically on the vehicle so that when you are looking at it, you are also looking at the side of the vehicle then you would press the up arrow for the left or right jacks depending on which is the closest to the front of the vehicle.

Note: if you are not clear on this process check our web site for video and/or call Equalizer Systems for assistance.

Setting the Null:

Null is the term used to indicate the levelness of the coach. A null setting was done at the factory so that the system will try to level, however most likely it will need to be set after the above orientation setting is performed. With the coach sitting somewhat level on the shop floor and with the control panel power off, depress and hold the Auto-Level button and then press and release the power button Do not release the Auto-Level button and listen for a series of beeps. After the keypad has beeped 5 to 6 times, release the Auto-Level button (the keypad will continue to beep as long as the Auto-Level button is held). The new null has been set and the panel will maintain this setting. This process may need to be completed later following an Auto-Level process if the coach is not level.

Operation

Auto Level

Power On: Push and release the Power Keypad button to engage power. All lights should come on then most will go out. The LED light next to the Power button should be lit RED when power is on. Other lights should go out, if they do not refer to the Keypad LED section. If the rear jacks down lights are on, they must be cleared by pressing the all retract button prior to performing Auto-Level.

For safety reasons keep people and pets away for jacks and the trailer during jack operation.

Front Jacks: On a trailer version Auto Level it is required that tow vehicle be disconnected from the trailer prior to leveling with Auto Level. Use the UP Arrow(s) on the control panel to extend the front jacks to support the trailer and lift the trailer from the tow vehicle.

Auto-Level: Press the Auto-Level button and release. The system will send out a continuous series of beeps and the "Operating" LED will flash RED to let you know Auto-Level is operating. The front may/will lower then the rear legs will be deployed and planted. Next the system will use the front and the rear legs to automatically level the coach. When completed, the Keypad will signal the successful completion with a dual-stage tone. The Keypad may be left on once level has been achieved. The Keypad will enter "sleep mode" after five minutes of inactivity. If the unit is not level after the process is complete see the section on setting the Null.

Note: During the auto level process no movement in or of the vehicle can be allowed as the system is motion sensitive.

Retracting the Jacks: Use the ALL RETRACT button to retract the jacks prior to travel

The Equalizer System does provide the ability to retract the jacks using the Down Arrows for jacks. However, these buttons **are not** intended to be used for retracting the jacks to their stowed position prior to travel. The Down arrows are to be used only for retracting the jacks to help level the coach. The All Retract button must be pressed to insure the system is ready/safe for travel. Jacks (rear only) will automatically retract and return to stowed position when the ALL RETRACT button is pressed and released. On a trailer version system, the front jacks will need to be retracted using the Down arrow to retract the jacks to the stowed position after coupling to the tow vehicle. When All retract is pressed the pump will run in retract for approximately 5 seconds after the last (rear jack on a trailer version) jack has been fully retracted or until a time limit has been reached.

It is always the responsibility of the coach operator to visually confirm that the jacks are fully retracted and safe for travel

Helpful Hints

- Do not allow motion in the coach during the Auto-Level operation (don't move around in the coach). This could cause the system to fault out or level/stabilize improperly.
- The Auto-Level is a microprocessor-controlled system. Proper and adequate battery voltage and permanent chassis ground are essential.
- Your system is equipped with override ability. Refer to the procedure for proper use of this. It is usually better to review this procedure prior to its actual use, rather than having to learn a new procedure in difficult environments and or situations. This is designed to get the jacks retracted in the event that there has been a power/control failure.
- If the system has not been used (with the jacks stowed) for over 24 hours, it is recommended that you engage the All Retract button prior to travel in order to re-pressurize the system. The jacks down status lights may come on regardless of the position of the jacks if the unit has been sitting for a while. Also, if power to the system is interrupted the status lights may be on requiring all retract performed to clear.
- A lubricant, like WD40, may be used to clean and lubricate the cylinder shafts.

Manual Operation

Push and release the Power Keypad button to engage power. All lights will come on then most will go out.

Using the Up Arrow, extend the jacks until they contact the ground (this is referred to as “planting” the jacks). As you extend the jacks, an LED light on the Keypad will indicate the jack(s) is out of the “stowed” position. Jacks may only be operated in pairs using the manual keypad Arrows.

Jacks should always be used in the following order. Fronts first to support and disconnect the unit free of the tow vehicle. Press the up arrow for the front jacks to extend and lift. Then the rears, extend by pressing the up arrow for the rear jacks until they contact the ground and lift/stabilize the rear.

Manual leveling should always be done front to rear first then side to side adjustments can be made.

The left and right-side manual control Arrows will not function until after the unit has sensed that the rear jacks have been planted. A “deny tone” will be given. In the event of this use the up Arrow for the rear jacks to further extend the rear jacks and lift the unit.

Use a bubble level on a flat surface in the center of the coach. Level the vehicle by using the Down or Up Arrows until the vehicle is level. Jacks may be operated only in pairs. The Keypad may be left on or powered off once level has been achieved. The Keypad will enter “sleep mode” after five minutes of inactivity.

Use the All Retract button to retract the jacks prior to travel. This system does provide the ability to retract the jacks using the Down Arrows for the jacks. However, these buttons are not intended to be used for retracting the jacks to their stowed position prior to travel. The Down Arrows are to be used only for retracting the jacks to help level the coach. The All Retract button must be pressed to insure the system is ready/safe for travel. The rear jacks should automatically retract and return to stowed position when the ALL RETRACT button is pressed and released. The pump will run in retract for approximately 5 seconds after the last jack has been fully retracted- or until a time limit of 90 seconds has been reached. The front jacks will need to be retracted fully using the down arrow for the front.

It is always the responsibility of the coach operator to visually confirm that the jacks are fully retracted and safe for travel

Blue Tooth Operation

The EQ Smart-Level control panel is equipped with built in Blue Tooth control ability. To use this from your smart phone down load the Blue Tooth App from our web site (direct link) or go to the Google Play store. You are looking for EQ Smart-Level. From there simply follow the provided instructions. The operation of the system from a smart phone is the same as from the control panel with the exception that you cannot perform the orientation setting or null programming from the Blue Tooth.

Panel Indicator LED's

During typical operation, the LED's on the bottom left hand corner of the keypad should NOT be illuminated. The only LED that should light is the OPERATING LED, which should flash during operation.

POWER LED	ON Red when power is ON OFF when power is OFF FLASH every 1 sec. in sleep mode
JACK LED	ON Red when jack(s) are deployed OFF when jack(s) are stowed
OPERATING LED	ON Red w/Auto-Level or All Retract OFF when keypad is idle or sleeping
LOW VOLTAGE LED	ON Red when voltage is below 10.5 VDC OFF when voltage is above 10.5VDC
ENGAGE PARK BRAKE LED (not present on trailer version)	ON Red when park brake is not set OFF when park brake is set
IGNITION ON LED (not present on trailer version)	ON Red when ignition is in the ON position OFF when ignition is off
EXCESS SLOPE LED	ON Red following an Auto-Level attempt, if system cannot overcome slope OFF when slope is not excessive

If the LOW VOLTAGE, ENGAGE PARK BRAKE, IGNITION ON or EXCESS SLOPE LED's illuminate, you have an error condition that must be corrected prior to operating the jacks. The Ignition on and engage park brake LED's may not be present on most trail version systems.

Note: After an auto level process the operation light should turn off and the Excess Slope light should be off. This indicates that the system has finished leveling and is within the .5-degree (approx. 7/16 inch over 4 feet) front to rear and side to side leveling specification.

If the Excess Slope light is on, then the system was not able to complete the process within the .5-degree specification. There are several possibilities to include but not limited to Low Voltage, jack(s) running out of travel or system/component failure.

Manual Override for Bi Rotational Pump #s 2542KS

Your hydraulic pump is equipped with a Bi Rotational motor. You will use a 2000 r.p.m. drill and a ¼ inch Allen Driver. Care must be taken to ensure neither the drill nor the Allen driver contact any wires or hydraulic hoses while in use.

To operate your jack(s) using the manual override (with bi-rotational motor)

The individual cartridge valves are clustered together on the side of the pump manifold. They are labeled 1 thru 4. Locate the screws on the appropriate cartridge valve(s). Using a 1/8-inch Allen wrench, turn the screw(s) clockwise until seated in.

The pump may or may not have a DV-2 valve on the opposite side of the manifold. If it does turn the 1/8-inch Allen screw clockwise until seated in.

There are 2 motor types.

Some motors have a black plastic plug in the end of the motor. Remove this plug by prying with a small screw driver.

Some motors have a foil sticker on the end, remove this sticker.

Place the drill with a ¼ inch Allen driver on the manual override shaft located at the end of the motor.

To retract your jack(s) run the drill in the counter-clockwise direction. To extend your jack(s), run the drill in the clockwise direction.

Following manual override operation, failure to return all valves to normal position may result in one or more jacks drifting/traveling down from their retracted (stowed) position. For cartridge valves, rotate the center screw fully counter-clockwise.

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.

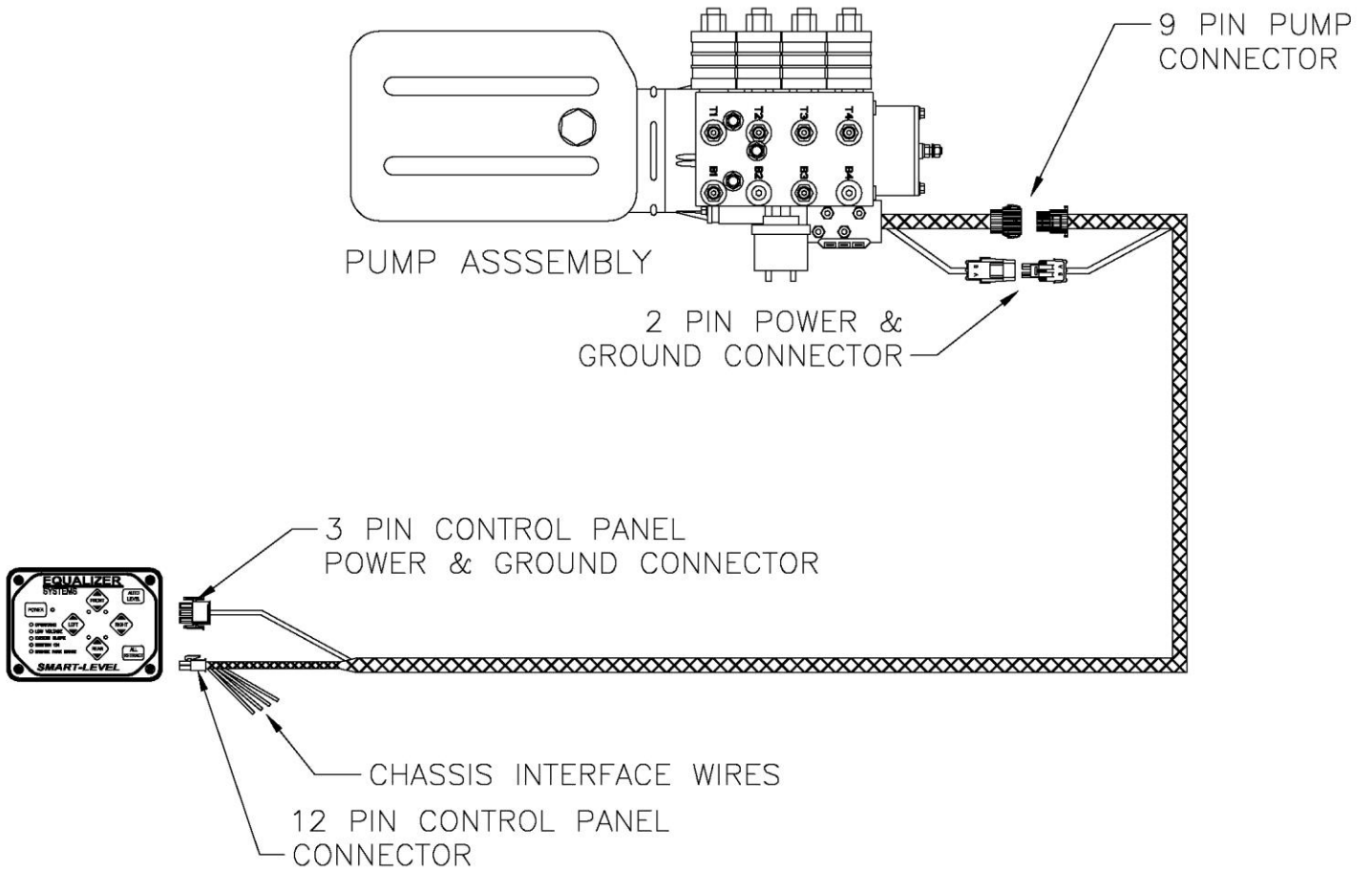
No additional warranties, expressed or implied, are authorized by Equalizer Systems

This warranty voids all previous issues.

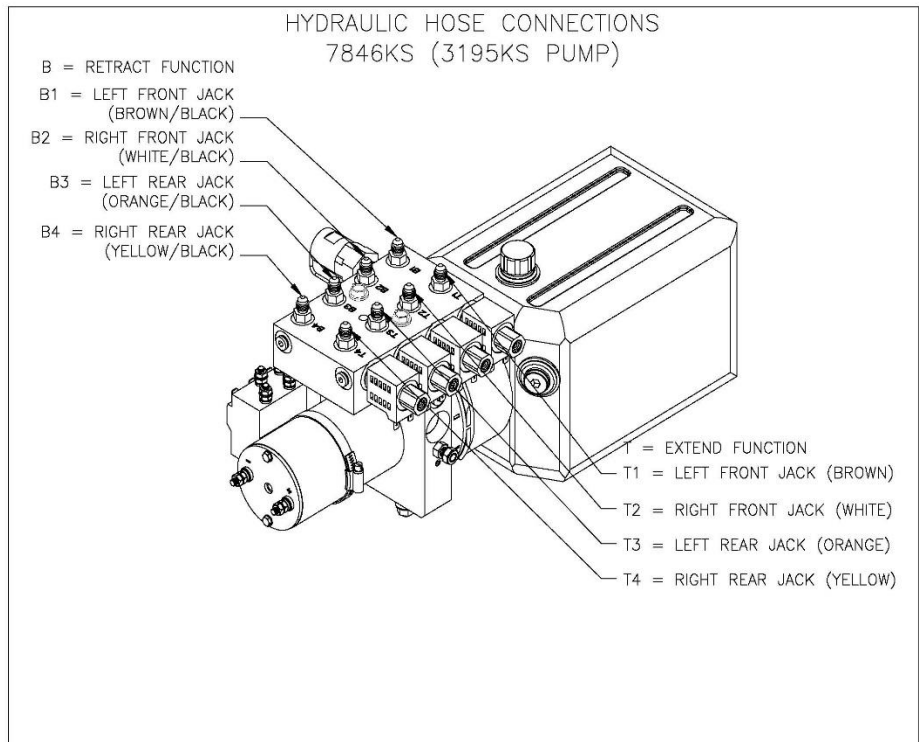
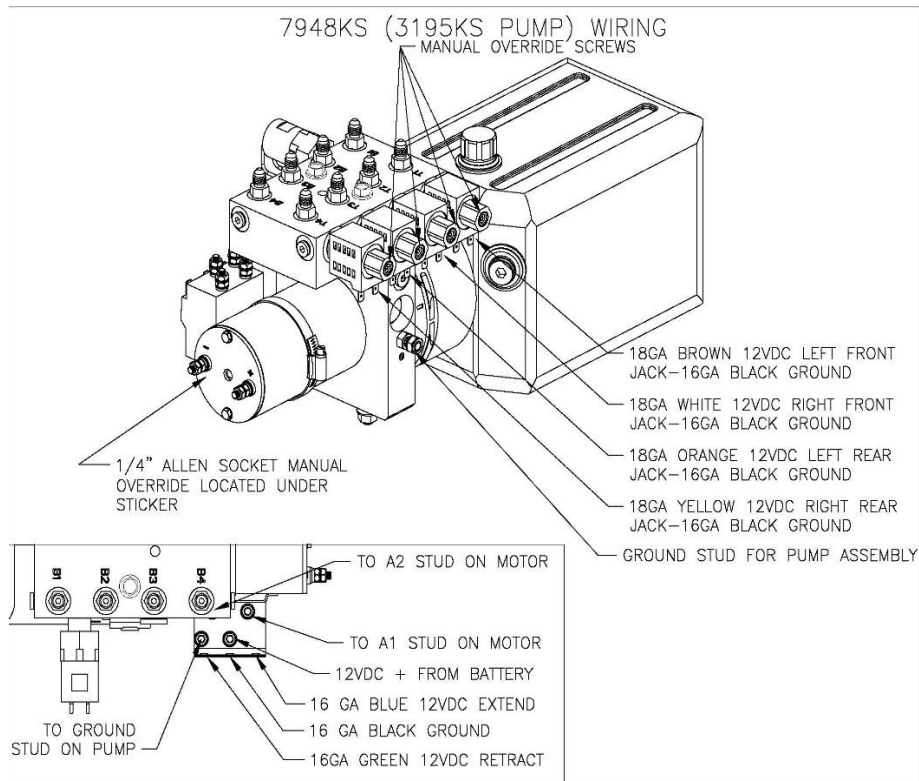
Questions concerning this warranty should be directed to:

**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>

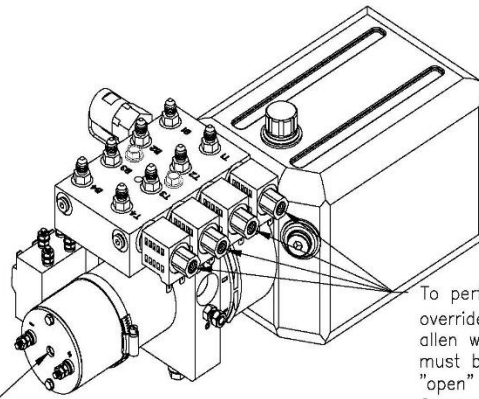


EQ Smart-Level Control Panel with harness and pump Layout



Pump #s 2542KS

Small Bi-Rotational Pump Assembly



Manual override screw, 6mm allen head, is under this sticker. Using a 2000 rpm minimum drill, retract jacks by turning counter clockwise. To extend, turn screw clockwise.

To perform the manual override procedure, using a $\frac{1}{8}$ " allen wrench, all set screws must be turned clockwise "open" until they are snug. Once all levelers are retracted, turn all valve screws counter clockwise "closed" until snug.

Pump #s 2542KS

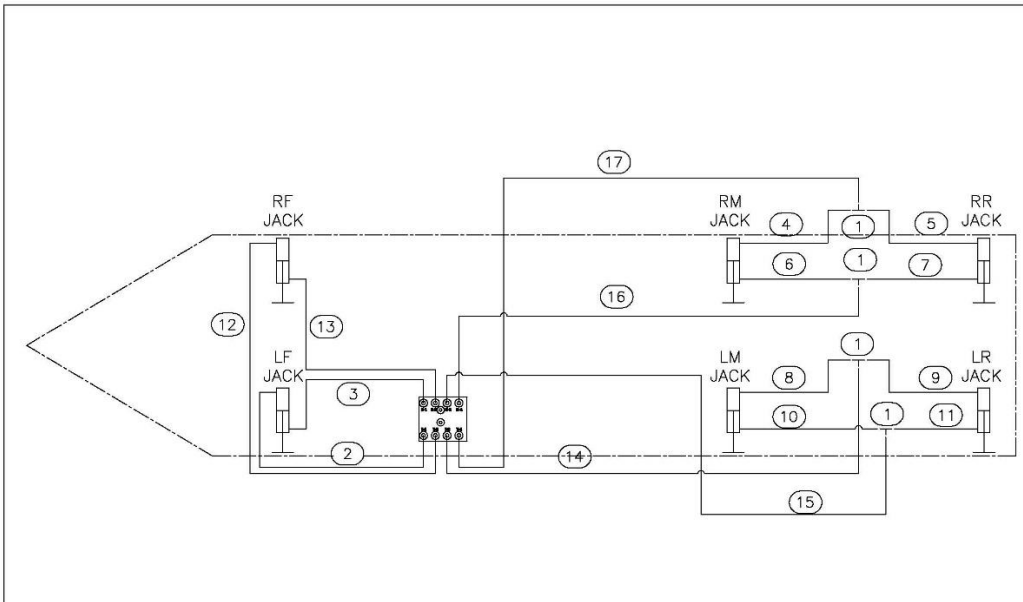
Hose and fitting connections for 6 leg trailer leveling systems

PARTS LIST				
ITEM	PART#	DESCRIPTION	QUAN	LOCATION
1	1262	FITTING-UNION TEE	4	BETWEEN REAR JACKS
2		HOSE-	1	BROWN SOLID PUMP PORT T1 TO TOP OF LF JACK
3		HOSE-	1	BROWN STRIPE PUMP PORT B1 TO BOTTOM OF LF JACK
4		HOSE-	1	YELLOW SOLID (2 STICKERS) TOP OF RM JACK TO TEE
5		HOSE-	1	YELLOW SOLID (2 STICKERS) TOP OF RR JACK TO TEE
6		HOSE-	1	YELLOW STRIPE (2 STICKERS) BOTTOM OF RM JACK TO TEE
7		HOSE-	1	YELLOW STRIPE (2 STICKERS) BOTTOM OF RR JACK TO TEE
8		HOSE-	1	ORANGE SOLID (2 STICKERS) TOP OF LM JACK TO TEE
9		HOSE-	1	ORANGE SOLID (2 STICKERS) TOP OF LR JACK TO TEE
10		HOSE-	1	ORANGE STRIPE (2 STICKERS) BOTTOM OF LM JACK TO TEE
11		HOSE-	1	ORANGE STRIPE (2 STICKERS) BOTTOM OF RM JACK TO TEE
12		HOSE-	1	WHITE SOLID PUMP PORT T2 TO TOP OF RF JACK
13		HOSE-	1	WHITE STRIPE PUMP PORT B2 TO BOTTOM OF RF JACK
14		HOSE-	1	ORANGE SOLID PUMP PORT T3 TO TEE
15		HOSE-	1	ORANGE STRIPE PUMP PORT B3 TO TEE
16		HOSE-	1	YELLOW STRIPE PUMP PORT B4 TO TEE
17		HOSE-	1	YELLOW SOLID PUMP PORT T4 TO TEE

NOTE: CUSTOMER TO LOOK AT DIAGRAM ON PAGE TWO AND FILL IN THE LENGTH OF EACH HOSE REQ'D. FOR PROPER OPERATION, THERE ARE CERTAIN HOSES THAT NEED TO BE THE SAME LENGTH. HOSE 4 & 5, HOSE 6 & 7, HOSE 8 & 9, AND HOSES 10 & 11. IF THERE ARE QUESTIONS, PLEASE CONTACT YOUR SALES REP.

Warranty authorization must come directly from Equalizer Systems. (800) 846-9659.

Equalizer 55186 COUNTY ROAD 3 ELKHART, IN 46515	#	REVISIONS	BY:	DATE:	UNLESS OTHERWISE SPECIFIED: TOLERANCES: XXX ± 0.010 .XX ± 0.010 X ± 0.030 ANG. ± 1/2° REMOVE ALL BURRS AND SHARP EDGES .015 MAX	TITLE 6 POINT LEVELING HOSE CHART SIZE SCALE MATERIAL A 1:1 AS NOTED DRAWN BY DATE SJ 8/4/16 APPRO'D BY DATE	USED ON: GENERIC RV PART NAME: HOSE KIT-6 POINT GENERIC PAGE: 1 OF 2 DWG NO.: DRO02 REV: -
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