



Master Owner's Manual

LEVELING & STABILIZATION

PART III

Master Owner's Manual

The Master Owner's Manual is intended to provide information on Lippert's most widely used products. Products described in the Master Owner's Manual may not be on every trailer. The trailer may also have products not included in this manual. All manual information is subject to change without notice. Revised editions will be available for free download at lippert.com/support. Manual information is considered factual until made obsolete by a revised version. Manual information may be distributed as a complete document only, unless Lippert provides explicit consent to distribute individual parts.

User's Note

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PATRIOT JACK SYSTEMS™

OWNER'S MANUAL

L I P P E R T
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Introduction

The Patriot Jack Systems™ are three designs for hydraulic landing gear for gooseneck trailers, including dual jack options with either one valve or two valves and a single jack option. The system features a hydraulic power unit mounted vertically on the roadside jack. Refer to jack rating for system lifting capacity and stroke length.

WARNING

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

WARNING

Make sure the trailer is properly supported before performing any maintenance or repair work. Follow the trailer manufacturer's recommendations for lifting and supporting the trailer. Failure to do so may result in death, serious personal injury or severe product or property damage.

CAUTION

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

Operation

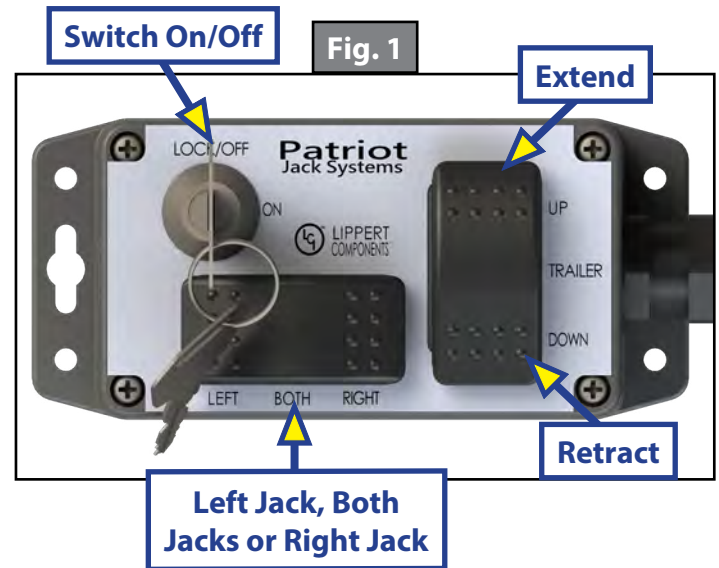
Before operating the jacks, unlock the pendant switch to activate it (Figs. 1 and 2).

NOTE: The switch key should always be returned to the LOCK/OFF position after operating the jacks and while towing the trailer.

Dual Jack Two-Valve System

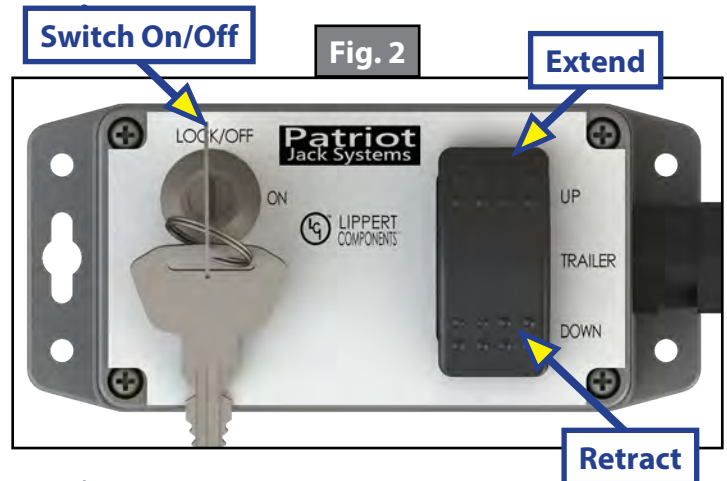
NOTE: The jacks can be operated independently or simultaneously.

1. Using the center portion of the switch, select the left jack (roadside) by moving the switch to the left; select both jacks by moving the switch to the center; or select the right jack (curbside) by moving the switch to the right (Fig. 1).
2. Press the rocker switch to extend the jack(s) (TRAILER UP) or retract the jack(s) (TRAILER DOWN) (Fig. 1).
3. Release the switch when either the trailer is level or stabilized or the jacks have been completely retracted.
4. Turn the key to the LOCK/OFF position.



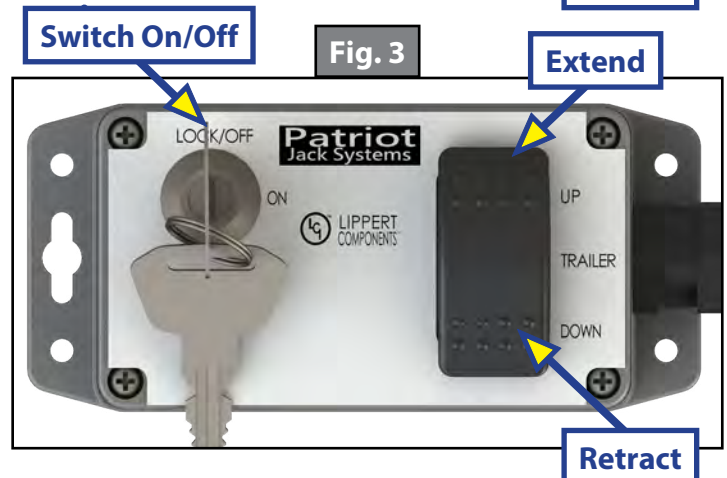
Dual Jack One-Valve System

1. Press the rocker switch to extend the jack(s) (TRAILER UP) or retract the jack(s) (TRAILER DOWN) (Fig. 2).
2. Release the switch when either the trailer is level or stabilized or the jack(s) has been completely retracted.
3. Turn the key to the LOCK/OFF position.



Single Jack One-Valve System

1. Press the rocker switch to extend the jack(s) (TRAILER UP) or retract the jack(s) (TRAILER DOWN) (Fig. 3).
2. Release the switch when either the trailer is level or stabilized or the jack(s) has been completely retracted.
3. Turn the key to the LOCK/OFF position.



Preventive Maintenance

1. Check hydraulic fluid in reservoir every 12 months. If fluid is a clear red color, do not change. If fluid is milky, pink and murky and not clear red in color, drain reservoir and add new fluid. See Adding Fluid, Purging Air From Hydraulic System section.

NOTE: Check and fill the hydraulic fluid only when the jacks are fully retracted. Filling the reservoir when jacks are extended will cause the reservoir to overflow when jacks are then retracted.

NOTE: When adding hydraulic fluid, fill reservoir to the fill line.

2. Inspect and clean all power unit electrical connections every 12 months. If corrosion is evident, spray power unit electrical connectors with lubricant.
3. Remove dirt and road debris from jacks as needed.
4. If jacks are down for extended periods, it is recommended to spray exposed inner tubes with a silicone lubricant every three months for protection. If the trailer is located in a salty environment, it is recommended to spray the exposed inner tubes every four to six weeks.

Adding Fluid, Purging Air From Hydraulic System

1. Start with all hydraulic components in the fully retracted position, i.e. the trailer is ready for travel.
2. Remove motor cover to gain access to the hydraulic reservoir. See Manual Override section.
3. Remove fill cap and check fluid level.

NOTE: When checking the fluid level after the hydraulic components are retracted, note if there are any bubbles, froth or foam on top of the fluid. This is an indication that air has been pushed back to the reservoir when the hydraulic components were retracted. Wait 15-20 minutes for the foam to dissipate before beginning the purge process.

4. If there is no froth or foam in the reservoir and the fluid is not to the fill line, fill the reservoir to the fill line at the top of the reservoir.
5. With the fluid level full and no foam in the reservoir, begin cycling the hydraulic system. Extend the jacks until the footpads touch the ground, and then immediately fully retract the jacks.
6. Check the reservoir for foam. If foam is present, see **NOTE** after step 3 and repeat steps 4 and 5.
7. Repeat these steps until no foam is present in the reservoir. If no foam is present, the system is purged of air.
8. Replace fill cap and reinstall motor cover.

Fluid Recommendation

Type "A" automatic transmission Fluid (ATF) is to be utilized. Lippert Components, Inc. recommends ATF with Dexron III® or Mercon V® or a blend of both.

For a list of approved fluid specifications, see [TI-188](#). Or go to <https://www.lci1.com/stabilization/support-patriot-jack-systems>, click on the Technical Information Sheets tab and then select *TI - 188: Hydraulic Operation Fluid Recommendation* from the listed documents.

NOTE: In colder temperatures less than 10° F, the landing gear may extend and retract slowly due to the fluid's molecular nature. For cold weather operation, fluid specifically formulated for low temperatures may be desirable.

Troubleshooting

Troubleshooting Guide

What Is Happening?	Why?	What Should Be Done?
Switch does not activate system.	Low voltage.	Test battery voltage under load. Charge or replace.
		Use Manual Override.
	Damaged or disconnected wiring.	Check wiring. Repair or replace.
		Use Manual Override.
	Tripped or blown circuit protection.	Reset or replace circuit protection.
Jacks will not extend to ground while pump is running.	Little or no fluid in reservoir.	Add fluid as recommended.
	Cartridge valve is inoperative.	Clean, repair or replace cartridge valve.
	Hose damaged or unconnected.	Replace with new hose or reconnect hose.
Jacks will not retract while pump is running.	Little or no fluid in reservoir.	Add fluid as recommended.
	Cartridge valve is inoperative.	Replace inoperative cartridge valve.
	Hose damaged or unconnected.	Replace with new hose or reconnect hose.
Trailer bleeds down after jacks extended.	Possible fluid leak.	Check for fluid leaks and repair or replace components as necessary.
	Cartridge valve manual override open.	Close override. See Manual Override of the system.
Jack bleeds down after being retracted.	Possible fluid leak.	Check for fluid leaks and repair or replace components as necessary.
	Cartridge valve manual override open.	Close override. See Manual Override of the system.

Manual Override

In the event of electrical or system failure, the jacks can be operated manually. Unhook the hydraulic power unit motor from the power source prior to attempting the manual override procedure.

Two-Valve System

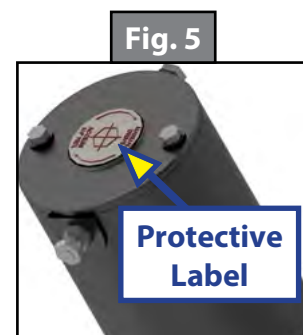
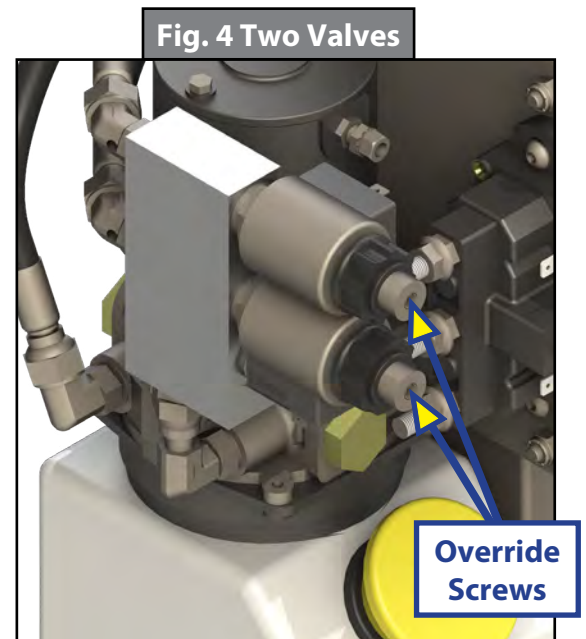
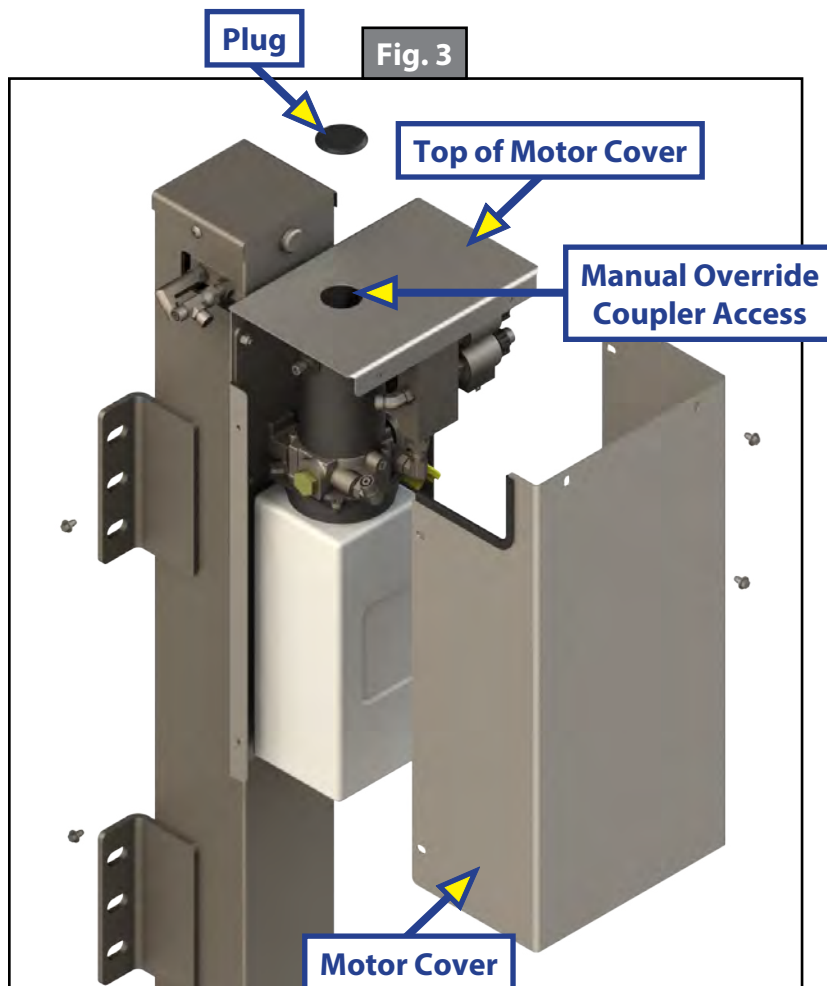
1. Remove six screws around the perimeter of the motor cover and remove cover (Fig. 3).
2. Using a $\frac{5}{32}$ " hex wrench, open the valve(s) by turning the manual override screw(s) clockwise until it stops (Fig. 4).

NOTE: With the two-valve system, the jacks can be independently extended or retracted. To manually extend or retract the curbside (right) jack, open the top valve. To manually extend or retract the roadside (left) jack, open the bottom valve. To manually operate both jacks simultaneously, open both top and bottom valves.

3. Remove plug from top of motor cover (Fig. 3).
4. Remove protective label from power unit to reveal the manual override coupler (Fig. 5).

NOTE: Top of motor cover and wiring removed for clarity in Figs. 4, 5 and 6.

5. Using a drill with a $\frac{1}{4}$ " hex bit, insert the hex bit into the manual override coupler (Fig. 6).
6. Run the drill clockwise to retract the jacks.
7. Run the drill counterclockwise to extend the jacks.
8. After extending or retracting the jacks, make sure to turn the override screw(s) counterclockwise until it stops.
9. Reinstall motor cover and plug.

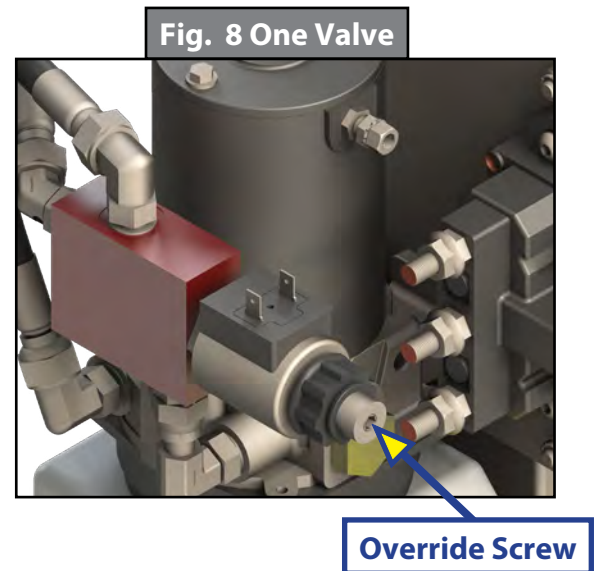
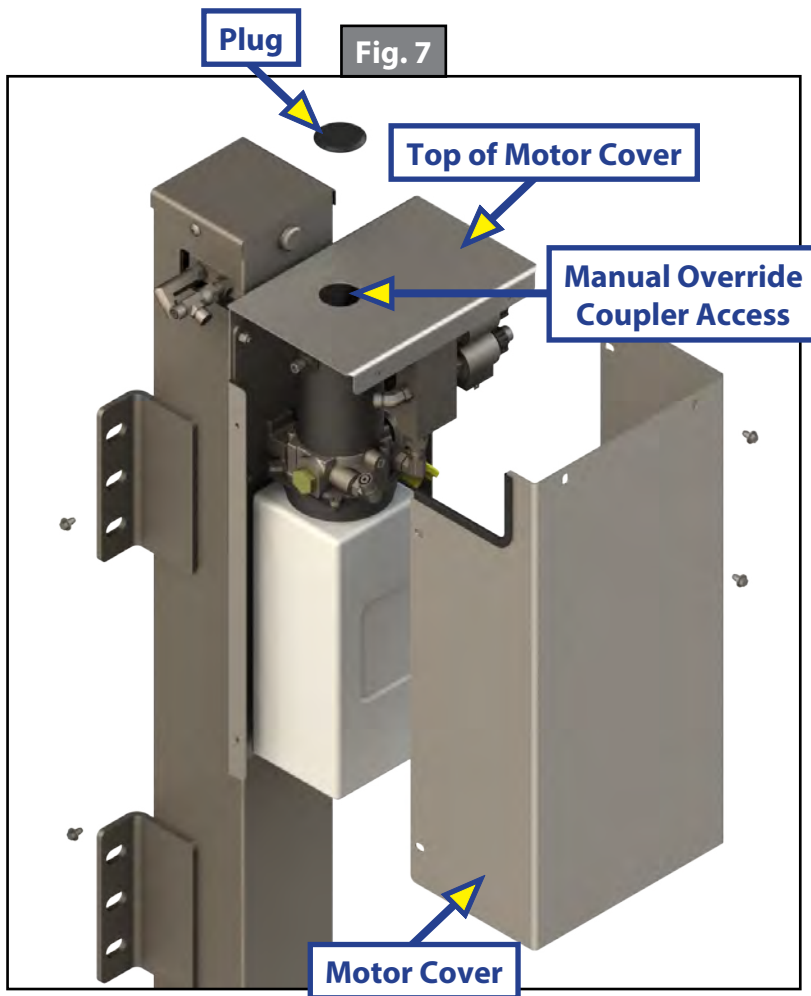


One-Valve Systems

1. Remove six screws around the perimeter of the motor cover and remove cover (Fig. 7).
2. Using a $\frac{5}{32}$ " hex wrench, open the valve by turning the manual override screw clockwise until it stops (Fig. 8).
3. Remove plug from top of motor cover (Fig. 7).
4. Remove protective label from power unit to reveal the manual override coupler (Fig. 9).

NOTE: Top of motor cover and wiring removed for clarity in Figs. 8, 9 and 10.

5. Using a drill with a $\frac{1}{4}$ " hex bit, insert the hex bit into the manual override coupler (Fig. 10).
 - A. Run the drill clockwise to retract the jack(s).
 - B. Run the drill counterclockwise to extend the jack(s).
6. After extending or retracting the jack(s), make sure to turn the override screw counterclockwise until it stops.
7. Reinstall motor cover and plug.





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Lippert Components, Inc.

Ph: (574) 537-8900 | Web: lci1.com | Email: customerservice@lci1.com



TM

HYDRAULIC LANDING GEAR OWNER'S MANUAL

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WARNING

Failure to act in accordance with the following may result in death or serious injury.

The use of the Lippert Hydraulic Landing Gear to support the coach for any reason other than which it is intended is prohibited by Lippert's limited warranty. The Lippert Hydraulic Landing Gear system is designed as a system to drop the unit off of a truck, level the unit from front to back and stabilize the front of the unit only and should not be used to provide service for any reason under the coach such as changing tires or servicing the landing gear.

Lippert Components, Inc. recommends that a trained professional be employed to change the tire of the coach. Any attempts to change tires or perform other service while coach is supported by the hydraulic landing gear could result in death, serious personal injury and/or damage to the coach.

- Be sure to park the coach on solid, level ground.
- Clear all jack landing locations of debris and obstructions. Location should also be free of depressions.
- When parking the coach on extremely soft surfaces, utilize load distribution pads under each jack.
- People and pets should be clear of coach while operating Lippert hydraulic landing gear system.
- Be sure to keep hands and other body parts clear of fluid leaks. Oil leaks in the Lippert hydraulic landing gear may be under high pressure and can cause serious skin penetrating issues.
- Never lift the coach completely off the ground. Lifting the coach so the wheels are not touching ground will create an unstable and unsafe condition.

Prior to Operation

The Lippert Hydraulic Landing Gear shall only be operated under the following conditions:

1. The unit is parked on a reasonably level surface.
2. The towing vehicle is disengaged from the unit.
3. Be sure all persons, pets and property are clear of the coach while Lippert Hydraulic Landing Gear is in operation.

System Description

Please read and study the operating manual before you operate the Lippert Hydraulic Landing Gear.

- The Lippert Hydraulic Landing Gear is an electric/hydraulic system. A 12V DC electric motor drives a hydraulic pump that moves fluid through a system of hoses, fittings and jacks to level and stabilize the coach.
- There are no serviceable parts within the electric motor. If the motor fails, it must be replaced.
- Disassembly of the motor voids the warranty.
- Mechanical portions of the Lippert Hydraulic Landing Gear are replaceable. Contact Lippert Components, Inc. to obtain replacement parts.

Component Description

The Lippert Hydraulic Landing Gear consists of the following major components:

- Lippert Hydraulic Landing Gear are rated at a lifting capacity appropriate for your coach.
- Lippert Hydraulic Landing Gear is powered from a central 12V DC motor/pump assembly, which also includes the hydraulic oil reservoir tank, control valve manifold, and solenoid valves.
- The Lippert Hydraulic Landing Gear is controlled electronically from the switch near the pump.

Preventative Maintenance Procedures

The Lippert Hydraulic Landing Gear has been designed to require very little maintenance. To ensure the long life of your slide-out system, read and follow these few simple procedures.

1. Check the fluid level every month.
 - A. Check fluid only when jacks are fully retracted.
 - B. Always fill the reservoir with the jacks in the fully retracted position. Filling reservoir when jacks are extended will cause reservoir to overflow into its compartment when jacks are retracted.
 - C. When checking fluid level, fluid should be within ¼" of fill spout lip.
2. Inspect and clean all Pump Unit electrical connections every 12 months.
3. Remove dirt and road debris from Landing Gear as needed.

WARNING

The coach should be supported at both front and rear axles with jack stands before working underneath. Failure to do so may result in death or serious injury.

The Lippert Hydraulic Landing Gear has been static tested to over 6,000 continuous cycles without any noticeable wear to rotating or sliding parts. It is recommended that when operating in harsh environments and conditions (road salt, ice build-up, etc.) 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.

Mechanical Components

Although the system is designed to be almost maintenance-free, actuate the landing gear once or twice a week to keep the seals and internal moving parts lubricated.

Check for any visible signs of "leaking" before and after movement of the system and the coach.

When the landing gear is down, visually inspect the inner and outer assemblies. Refer to components list for location of inner assemblies. Check for excess build-up of dirt or other foreign material; remove any debris that may be present.

If the system squeaks or makes any noises it is permissible to apply a coat of lightweight oil or silicone lubricant spray to the hydraulic rod but remove any excess oil so dirt and debris do not build-up. DO NOT use grease.

Electrical Components

For optimum performance, the landing gear 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 pump motor for corrosion and loose or damaged terminals. Check motor leads under the coach chassis. Since these connections may be subject to damage from road debris, be sure they are in good condition.

NOTE: The Lippert Hydraulic Landing Gear is designed to operate as a negative ground system. A negative ground system utilizes the chassis frame as the ground source. An independent ground wire back to the battery is not needed. It is important the electrical components have good wire to chassis contact. Over 90% of unit electrical problems can be attributed to bad ground connections.

NOTE: For long-term storage: It is recommended that the room be closed (retracted) and if your unit is equipped with the IRC room control, it is recommended all of the control knobs be kept in the closed position.

Auxiliary Operation

The Lippert Hydraulic Landing Gear can be run with power devices like electric drills or cordless screwdrivers. In the event of electrical or system failure, this manual method of extending and retracting the jacks can be used. A standard hand-held cordless or power drill is all that is required.

1. Locate the blocking valve (Fig. 1) on the top cap of either of the landing gear jacks.
2. Using a $\frac{5}{32}$ " Allen wrench, manually open the valve by turning the manual override set screw in the end of the valve clockwise (Fig. 1).
3. Remove protective label from the motor (Fig. 2).
4. Using a standard $\frac{1}{4}$ " hex bit, insert into auxiliary drive device, i.e. cordless drill or power drill. Insert hex bit into coupler found under protective label (Fig. 2).
5. Run drill forward or clockwise to retract jacks and in reverse or counterclockwise to extend jacks.
6. Be sure to turn manual override set screw back to the counterclockwise position after extending or retracting landing gear (Fig. 3).

Fig. 1

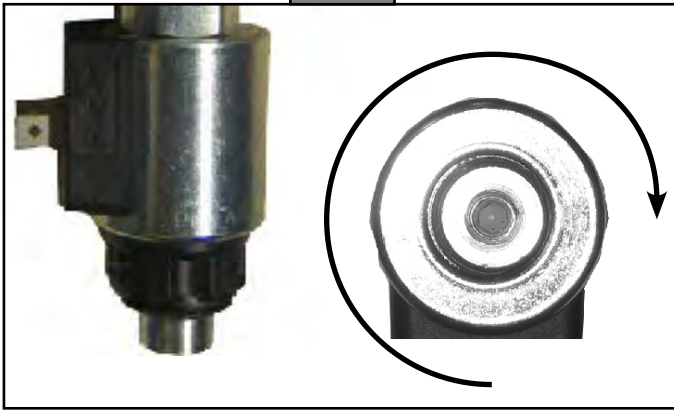


Fig. 2

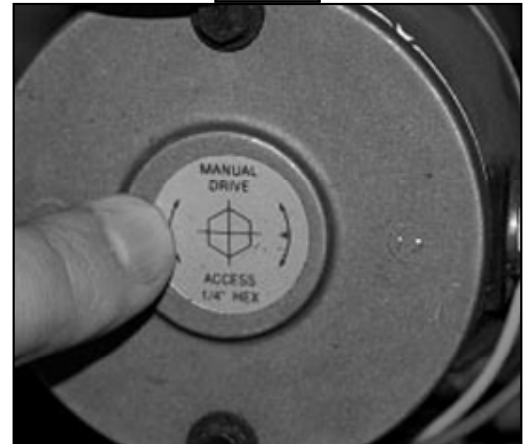
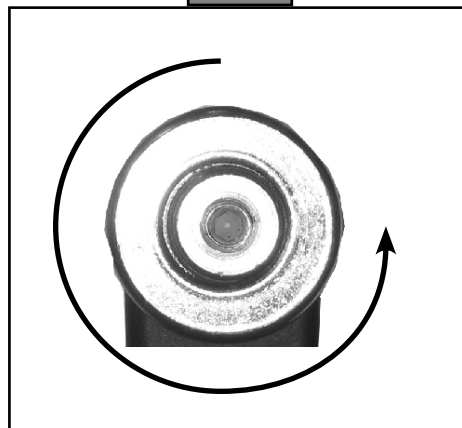


Fig. 3



Fluid Recommendation

The Lippert Electronic Leveling System is pre-filled, primed and ready to operate direct from the manufacturer. Type "A" Automatic Transmission Fluid (ATF) is utilized and will work. ATF with Dexron III® or Mercon 5® or a blend of both is recommended by Lippert Components, Inc.

In colder temperatures (less than 10° F) the jacks may extend and retract slowly due to the fluid's molecular nature. For cold weather operation, fluid specially formulated for low temperatures may be desirable. For a list of approved fluid specifications, see [TI-188](#).

Filling Directions

NOTE: Be sure landing gear are fully retracted prior to filling reservoir to prevent over-filling.

1. Remove Breather/Fill Cap.
2. Pour ATF into Breather/Fill opening.

NOTE: Do not allow any contamination into reservoir during fill process.

NOTE: Standard reservoir holds approximately 2 quarts (1.89 liters) of ATF.

3. Fill to within ½" of top.
4. Replace Breather/Fill cap when finished.

System is self-purging. By simply cycling the system 2-3 times, any air in the system will be forced back to the reservoir and out of the Breather/Fill cap.

Troubleshooting

Power Unit

Before attempting to troubleshoot the Power Unit, make sure an adequate power source is available. The unit batteries should be fully charged or the unit should be plugged into to A/C service with batteries installed. Do not attempt to troubleshoot the Power Unit without assuring a full 12V DC charge.

The following tests require only a DC voltmeter (or DC test light) and a jumper lead.

1. Attach voltmeter (or test light) leads to the negative and positive terminals on motor solenoid. Does the meter indicate 12V DC? If YES, see Step 2; if NO see Step 3.
2. If YES, at the motor, check the incoming leads to 12V DC (if necessary, disconnect leads at wire splices). Does meter indicate 12V DC? If YES, Power Unit needs to be replaced. The motor is not field serviceable. Do not attempt to repair. If NO, Inspect all wires and connections between the wall switch and the motor. Repair connections as necessary. Recheck as in Step 1.
3. If NO, Inspect all connections between battery and solenoid. Inspect 30A Auto-reset Circuit Breaker. Recheck as above in Step 1.

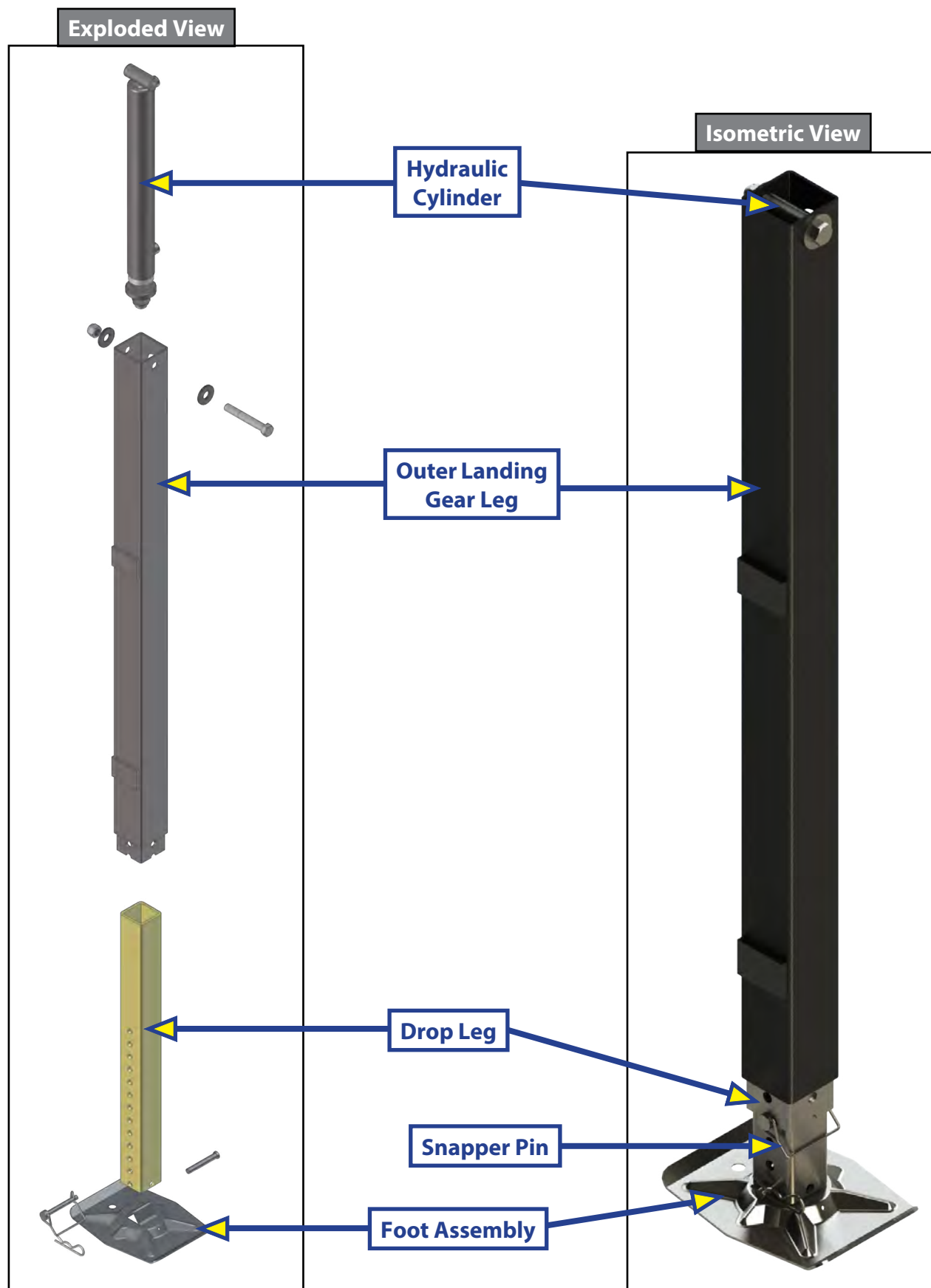
NOTE: Since there are no field serviceable parts in the motor of the Power Unit, electrical troubleshooting and service is limited to replacing only those components as previously outlined.

NOTE: Thorough inspection of wiring and connections is the only other electrical service that can be performed.

Problem	Probable Cause	Corrective Action
Jacks will not extend to ground, pump is running.	Little or no fluid in reservoir.	Fill reservoir with Dexron III ATF.
	Leg valve is inoperative.	Clean, repair or replace.
	Electronic signal is lost between switch and leg valves.	Trace wires for voltage drop or loss of signal. Repair or replace necessary wires or replace switch.
Any one or two jacks will not retract.	Hose damaged or not connected.	Replace with new hose or reconnect.
	Return valve is inoperative.	Replace inoperative return valve.
	Electronic signal is lost between switch and solenoid.	Attempt to retract jacks in manual mode, if successful replace control pad; if not, test voltage drop.
	Electronic signal is lost between switch and leg valve.	Repair bad wiring or replace defective board or valve.

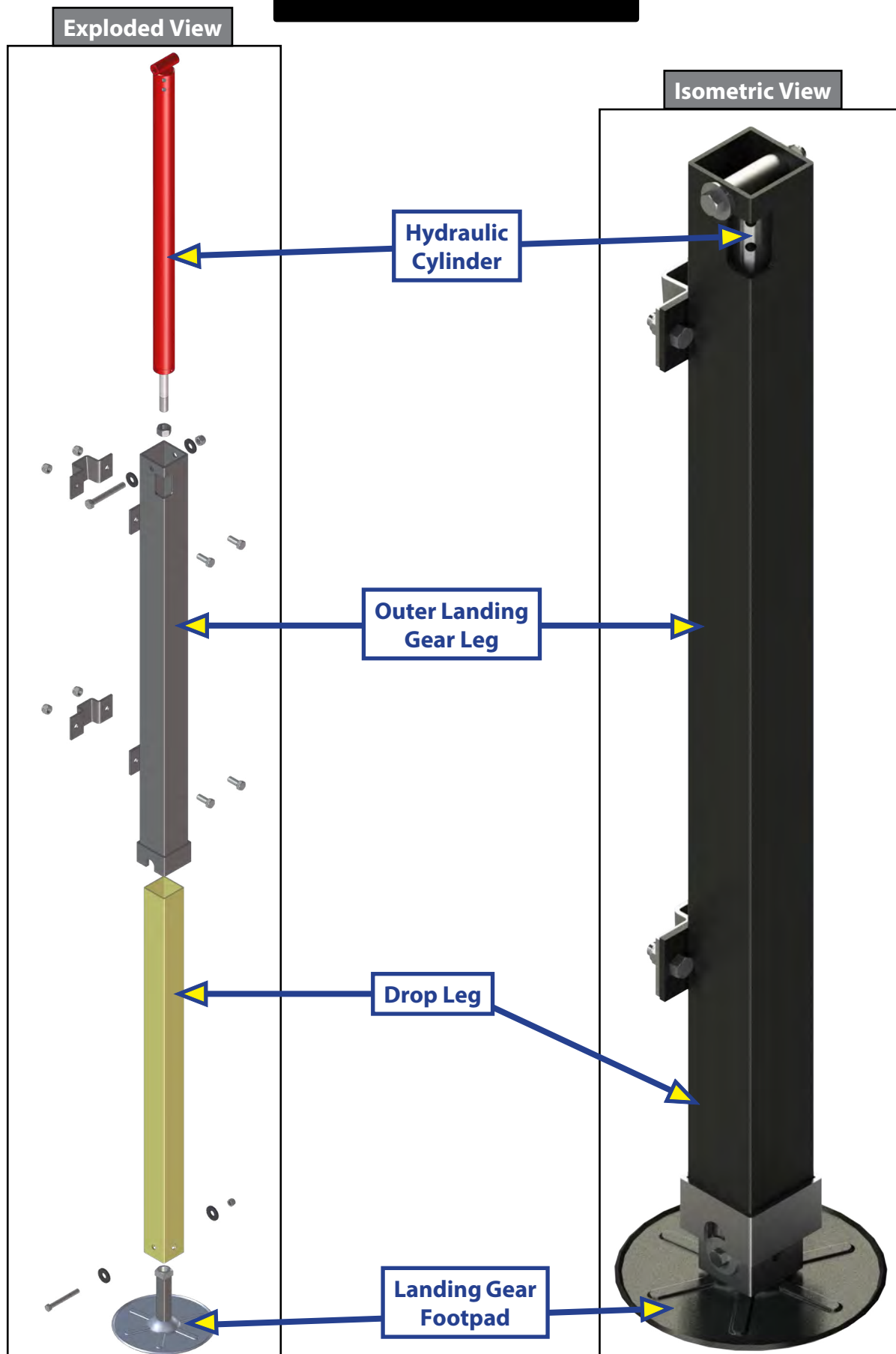
PINNED HYDRAULIC LANDING GEAR ASSEMBLY

LEVELING AND STABILIZATION



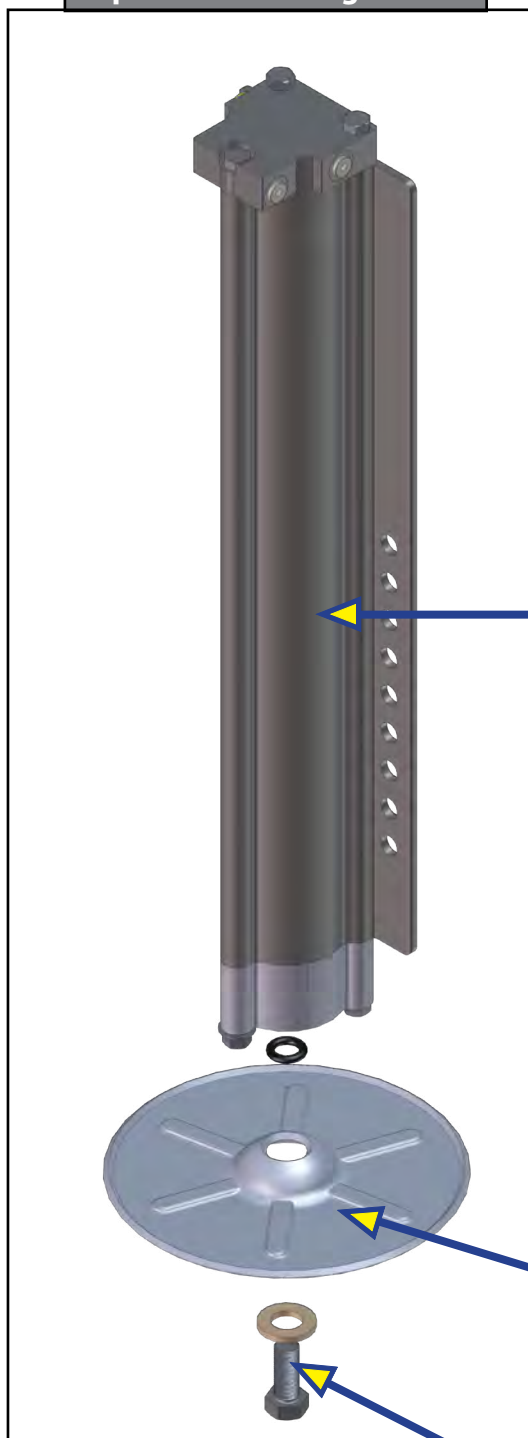
PINLESS HYDRAULIC LANDING GEAR ASSEMBLY

LEVELING AND STABILIZATION



LEVELING AND STABILIZATION

Exploded View - Right Hand



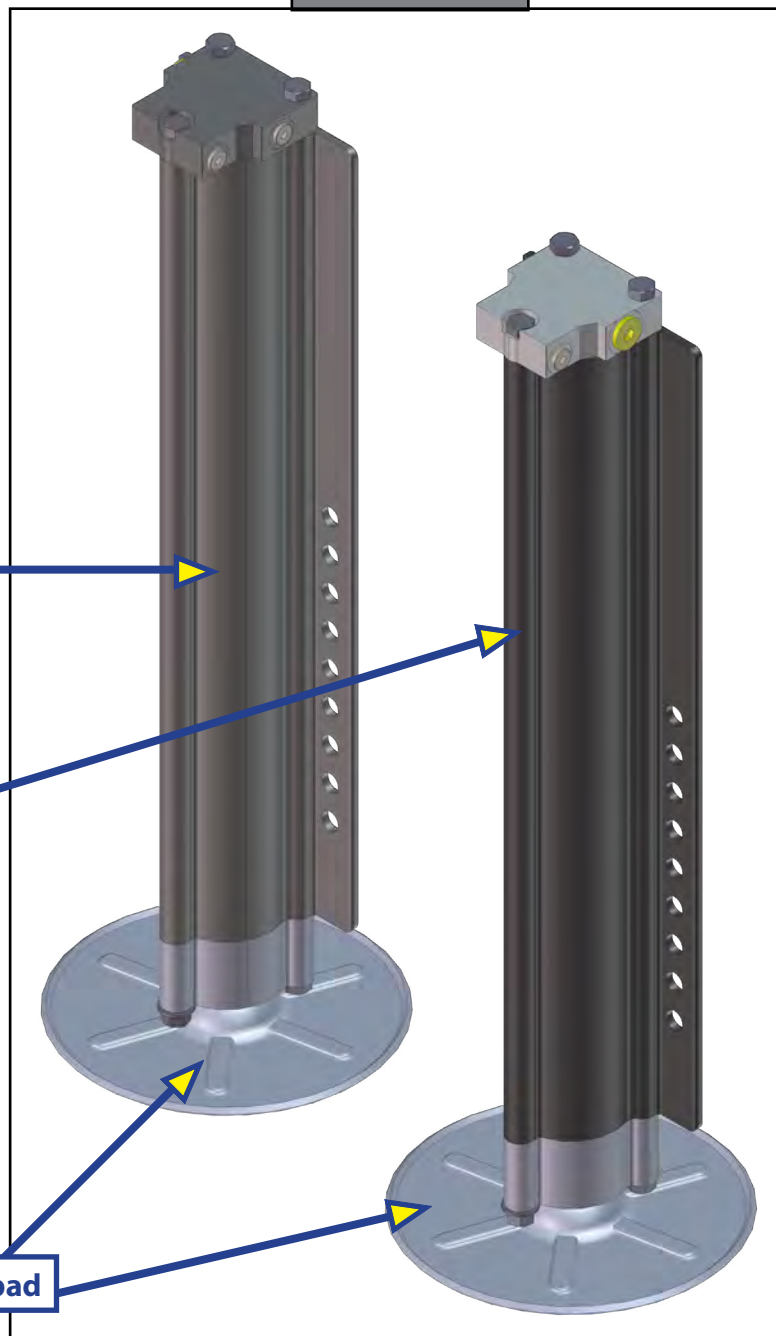
Right Hand
Cylinder

Left Hand
Cylinder

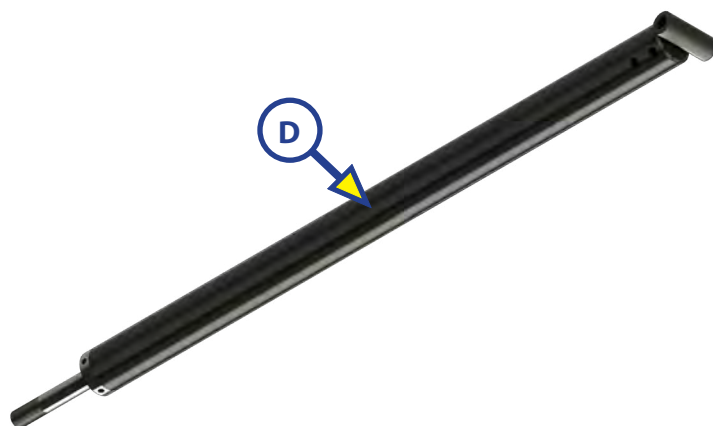
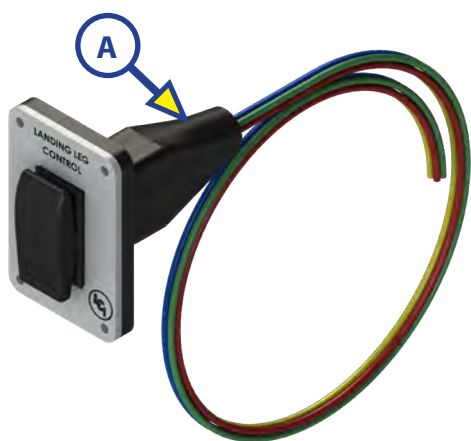
Footpad

Footpad Bolt

Isometric View



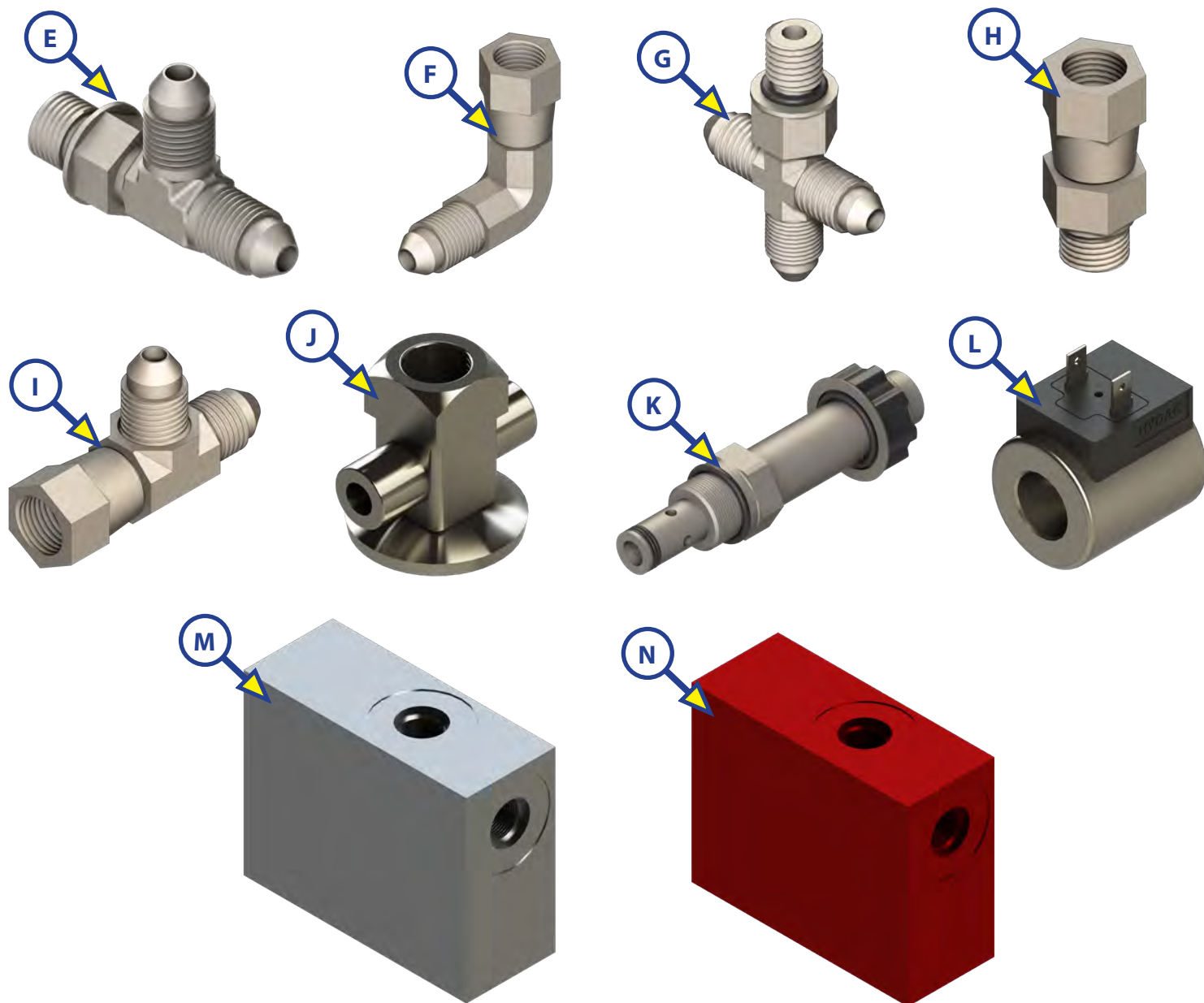
LEVELING AND STABILIZATION



Callout	Part #	Description
A	248026	Hydraulic Exterior Landing Gear Switch with Plate
B	115903	Stabilizer Jack Adapter
C	*137612	12" Stroke Bore Hydraulic Cylinder
D	118830	26" Stroke Bore Hydraulic Cylinder
NOTE: Parts shown with an asterisk (*) are for reference only. The part is not available for individual replacement.		

HYDRAULIC LANDING GEAR COMPONENTS LIST

LEVELING AND STABILIZATION



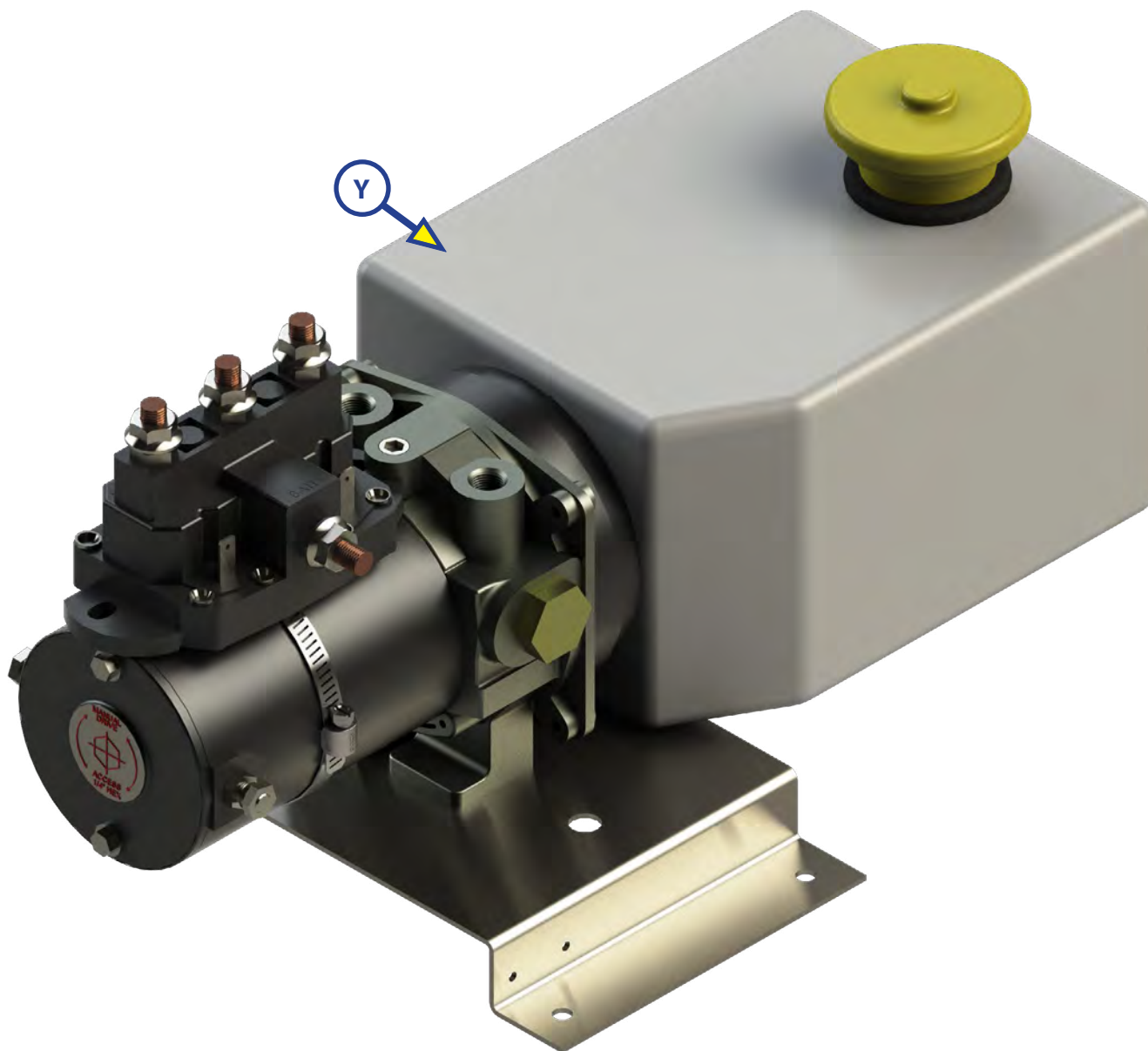
Callout	Part #	Description
E	113130	T-Fitting without Ring
F	113134	Swivel Elbow Fitting
G	136225	Cross Fitting
H	113133	Swivel Straight Fitting
I	113135	Swivel Tee Fitting
J	162893	Hydraulic Leg Gear Foot Adapter
K	177094	Cartridge Valve with Set Screw Turn and Lock Manual Override
L	176954	Hydac Spade Coil
M	138420	Valve Body Non-Restricted
N	138421	Red Block Restricted Valve Body

HYDRAULIC LANDING GEAR COMPONENTS LIST

LEVELING AND STABILIZATION



Callout	Part #	Description
O	118130	Washer; 5/8 x 1.78 x .160 Flat Zinc
P	119075	Washer; 3/8 USS Flat Washer
Q	140998	Ring Hollow Hex Plug
R	118606	Nut; 3/4 - 10 HEX GR5 Zinc
S	118044	Nut; 3/8 - 16 Nylon Insert Lock Nut Zinc
T	113309	Foot Plate
U	117919	Bolt; 3/8 - 16 x 1 Serrated Flange GR5 Zinc
V	216288	#4 JIC Cap
W	118128	Bolt; 3/8 - 16 x 3 GR5 Zinc
X	118609	Bolt; 1/2 - 13 x 3 1/2 HHCS GR5 ZN PTHD ST



Callout	Part #	Description
Y	141111	Hydraulic Power Unit
NOTE: This is the most common power unit for hydraulic landing gear; however please call our parts department to correctly identify the power unit required.		

Notes

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L I P P E R T C O M P O N E N T STM

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Ph: (574) 537-8900 Web: www.lci1.com Email: warranty@lci1.com



GROUND CONTROL[®] 3.0 LANDING GEAR OWNER'S MANUAL

LIPPERT
COMPONENTS[®]

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System Information

The Ground Control® 3.0 Landing Gear operate independently on uneven terrain. The landing gear feature minimal wiring and each will have an in-line fused link to allow the landing gear to amp out when coming into contact with the ground. The mini breakers on each landing gear also work as amp limiters. When an out-of-sync landing gear is fully retracted, the breaker will trip and allow the other landing gear to fully retract to again synchronize both landing gear. The landing gear system is for 5th wheel applications only.

Operation



Never attempt to operate the system without the footpad properly installed. Electric landing gear is designed for vertical operation. Excessive side loads may cause damage to the landing gear. The bolt-on pull pin MUST be inserted fully through both sides of the tube prior to use. Do not use landing gear to service the trailer or change tires. Retract landing gear completely prior to moving the trailer.

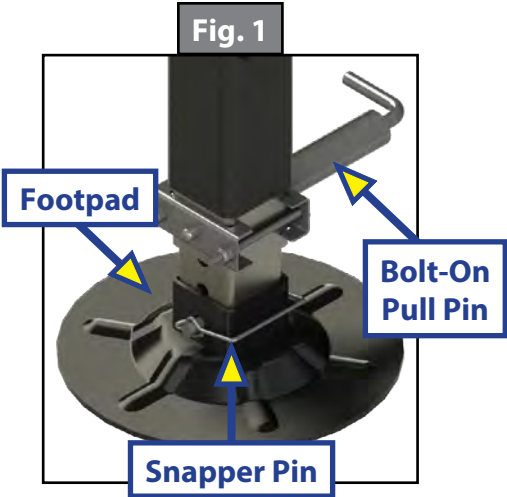
Prior to Operation

The landing gear system should only be operated under the following conditions:

1. The trailer is parked on a reasonably level surface and the tires are chocked.
2. Be sure all persons, pets and property are clear of the trailer while the landing gear system is in operation.
3. Make sure battery is fully charged.

Extending Landing Gear

- 1. Extend both landing gear to the ground by pulling the quick release bolt-on pull pins (Fig. 1).
- NOTE:** If the front of the trailer is above level, do not extend the inner legs to the ground. The trailer cannot be leveled if the front is already above level when released from the tow vehicle.
- 2. Make sure the bolt-on pull pins are re-engaged with the landing gear leg.
 - 3. Push EXT (extend) side of the LANDING LEGS CONTROL switch (Fig. 2).
 - 4. Unhook trailer from tow vehicle.
 - 5. Push and hold the EXT button to raise the landing gear to desired height.



Retracting Landing Gear

- 1. Push RET (retract) side of LANDING LEGS CONTROL switch (Fig. 2).
 - 2. Lower trailer onto tow vehicle.
 - 3. Once trailer is secured, make sure the trailer is latched.
 - 4. Press and hold the RET button to fully retract both landing gear.
- NOTE:** Be sure to hold down the switch until both landing gear are fully retracted before pulling the bolt-on pull pins.
- 5. Pull the bolt-on pull pins and slide the inner legs into the outer landing gear legs.
 - 6. Make sure the bolt-on pull pins are re-engaged upon completion.



NOTE: In the event the landing gear becomes out of sync, fully retract them to resynchronize the landing gear.

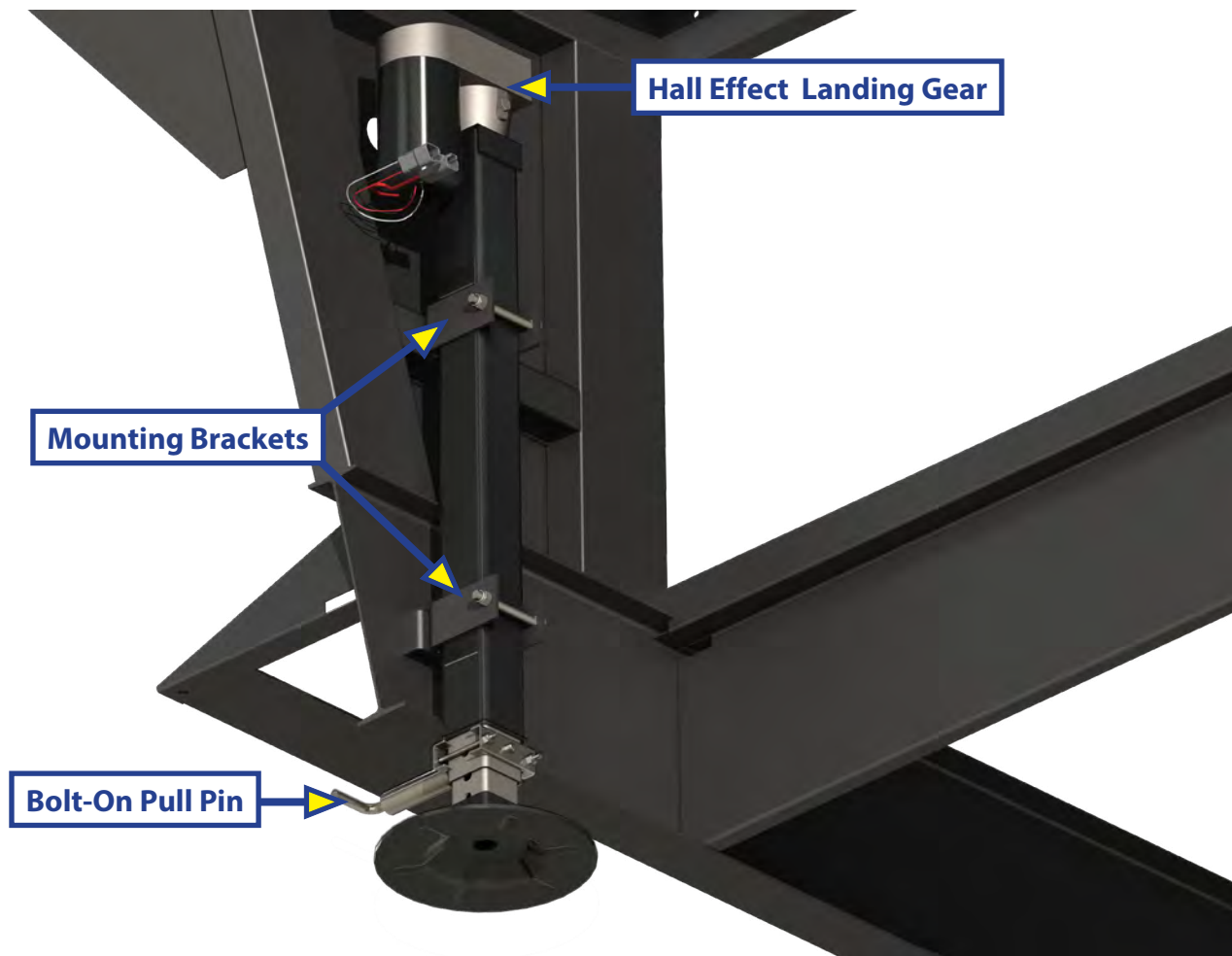
Troubleshooting

What Is Happening?	What Should Be Done?
Landing gear out of sync	Fully retract landing gear to synchronize.
Difficulty leveling trailer	If front of trailer is above level, do not extend inner legs to the ground.
Switch does not activate landing gear	Test battery voltage under load. Charge or replace.
	Check wiring. Repair or replace.

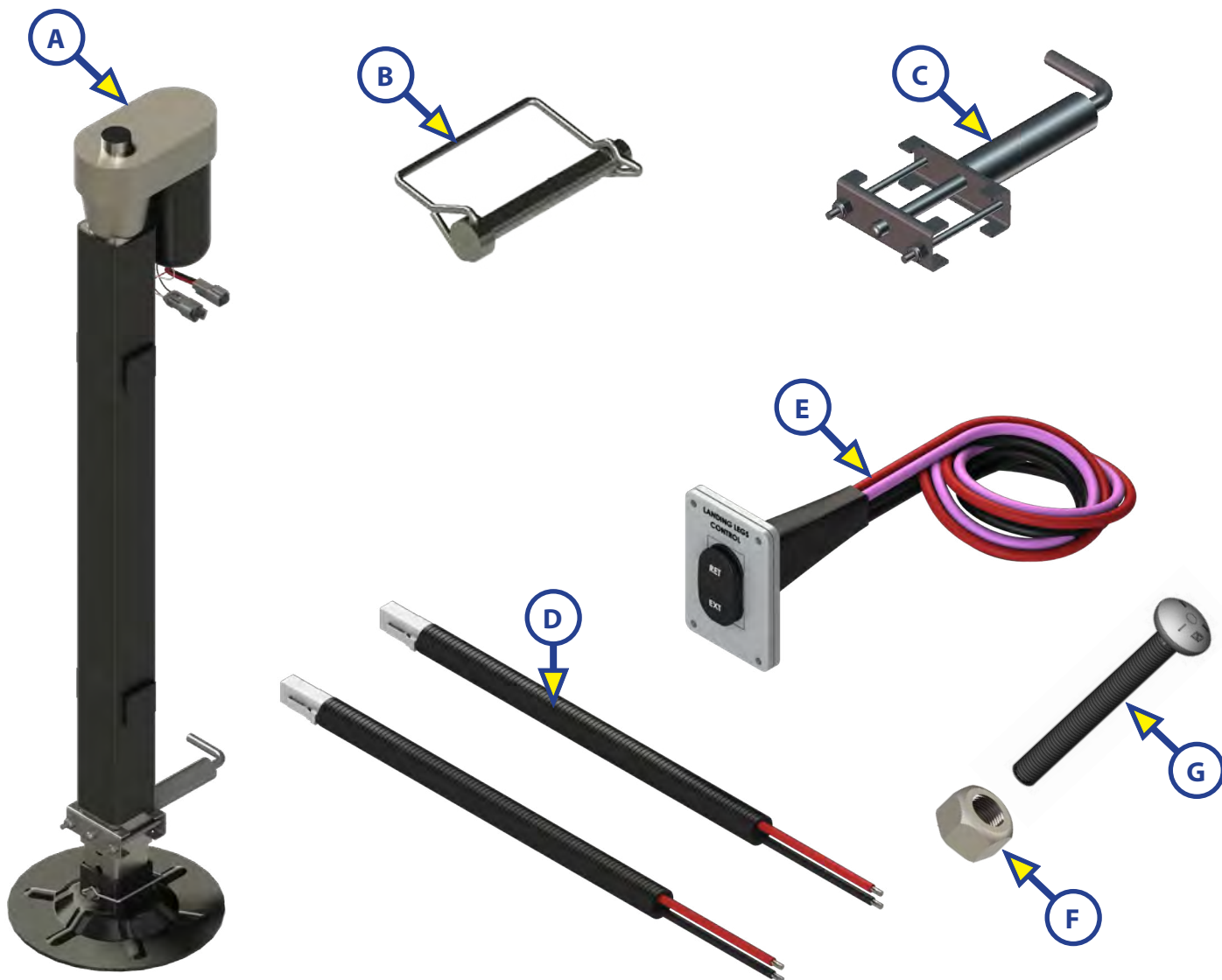


GROUND CONTROL 3.0 LANDING GEAR ASSEMBLY

LEVELING AND STABILIZATION



LEVELING AND STABILIZATION



Callout	Part #	Description
A	305340	Hall Effect Landing Gear
B	225598	Snapper Pin
C	119113	Bolt-On Pull Pin
D	407277	Pigtail with Mating Plug
E	145236	Landing Gear Switch with Harness
F	119073	3/8" Lock Nut
G	125878	3/8" Carriage Bolt



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GROUND CONTROL®
5TH WHEEL LANDING GEAR
w/UNIT PREPPED FOR
FULL AUTOMATIC LEVELING
OWNER'S MANUAL



Scan for product support

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Introduction

The Ground Control® 5th Wheel Landing Gear operates independently on uneven terrain. Raise and lower the front of your RV quicker and easier than ever, with the push of a button. Power operation eliminates the need for manual cranking. The 5th wheel landing gear system can be upgraded to a fully automatic 6 -point leveling system.

The system is prepped for the Ground Control Leveling System and can be easily upgraded. Look for the QR code located on the unit located near the compartment where the switch panel is or use the link, <https://store.lci1.com/ground-control-30-leveling-kit-for-prepped-units-2021106810.html> for more information on upgrading to a complete 6 point leveling system.

Additional information about this product can be obtained from lci1.com/support or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

Apple App Store®, iPhone®, and iPad® are registered trademarks of Apple Inc.
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For information on the assembly or individual components of this product, please visit:
<https://support.lci1.com/ground-control-leveling-lcd-touch-pad>

NOTE: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.



The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual. Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

⚠ CAUTION

The “CAUTION” symbol above is a sign that a safety risk is involved and may cause personal injury and/or product or property damage if not safely adhered to and within the parameters set forth in this manual. Always wear eye protection when performing service, maintenance or installation procedures. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the task.

Operation

⚠ WARNING

Never attempt to operate the system without the footpad properly secured or severe product damage, serious personal injury or death may occur. Electric landing gear is designed for vertical operation. Excessive side loads may cause damage to the landing gear. The bolt-on pull pin **MUST** be inserted fully through both sides of the tube prior to use. Do not use landing gear to service the trailer or change tires. Retract landing gear completely prior to moving the trailer, including retraction of the bolt-on pull pin inner leg.

Prior to Operation

The landing gear system should only be operated under the following conditions:

1. The trailer is parked on a reasonably level surface and the tires are chocked.
2. Make sure all persons, pets and property are clear of the trailer while the landing gear system is in operation.
3. Make sure battery is fully charged.

Operating Landing Gear

1. Extend both landing gear to the ground by pulling the quick release bolt-on pull pins (Fig. 1A).

NOTE: If the front of the trailer is above level, do not extend the inner legs to the ground. The trailer cannot be leveled if the front is above level when released from the tow vehicle.

2. Make sure the bolt-on pull pins are inserted fully through both sides of the tube.
3. Press and hold the arrow up or arrow down on one or both sides of the landing gear switch panel (Fig. 2) as desired.

NOTE: For retracting, be sure to hold down the switches until both landing gear are fully retracted before pulling the bolt-on pull pins.

4. When the landing gear has fully retracted, pull the bolt-on pull pins and slide the inner legs into the outer landing gear legs.
5. Make sure the bolt-on pull pins are inserted fully through both sides of the tube upon completion.

Fig. 1

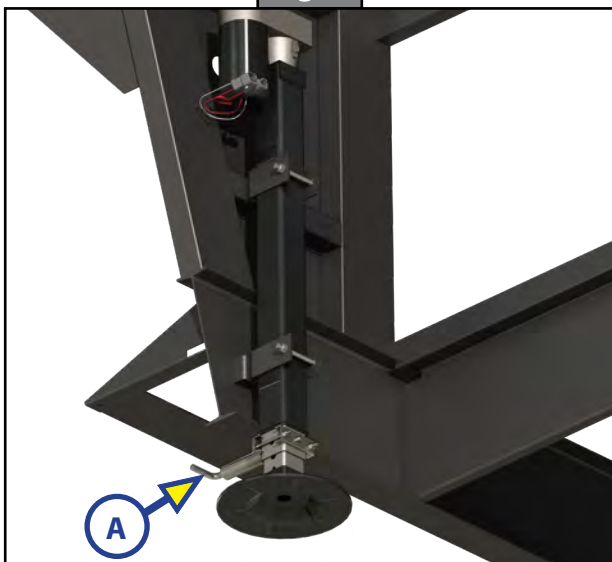
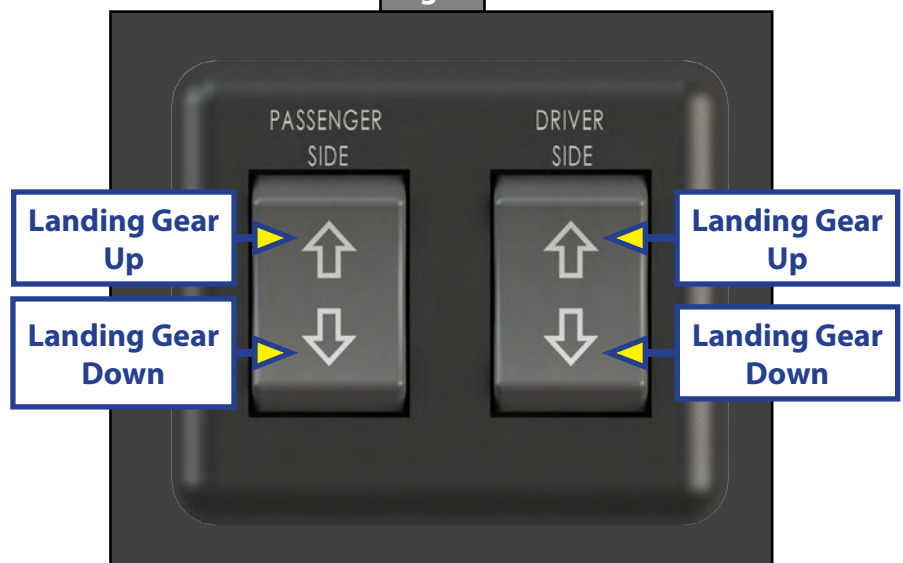


Fig. 2



Troubleshooting

What is happening?	Why?	What should be done?
Unable to level trailer.	Inner legs were extended while trailer was above level.	Connect to tow vehicle, retract jacks, extend inner leg making sure to allow room to level trailer once tow vehicle is removed
Switch does not activate landing gear.	No power.	Test battery voltage under load. Charge or replace.
	Wiring damaged.	Check wiring. Repair or replace.

Manual Override

⚠ WARNING

Make sure the trailer is supported at both the front and rear with jack stands before performing any troubleshooting or service to the trailer. Failure to do so may result in death or personal injury.

NOTE: For ease of manual override it is recommended to unplug the power harness to the motor prior to performing the manual override procedure.

NOTE: Use of a 12-18 volt cordless screw gun or pneumatic screw gun is acceptable to manually override the jacks. Do not use an impact screw gun to perform any of the override procedures, as this may damage the motor.

Top of Landing Gear Motor Override:

Tools needed: $\frac{3}{8}$ " drive ratchet and extension (no socket)

1. Find the port on the top of the jack motor (Fig.3A).
2. Remove the rubber plug (Fig. 4A).
3. Insert the $\frac{3}{8}$ " drive into the port (Fig. 5).
4. Turn override until the jack extends or retracts to desired position.
5. Insert the rubber plug back into the port after extension/retraction is complete.

Fig. 3

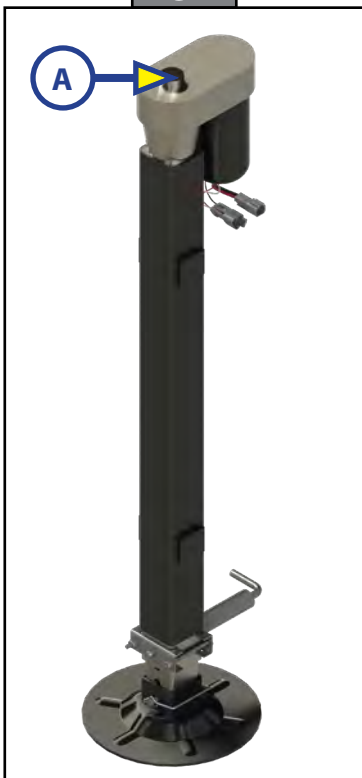


Fig. 4

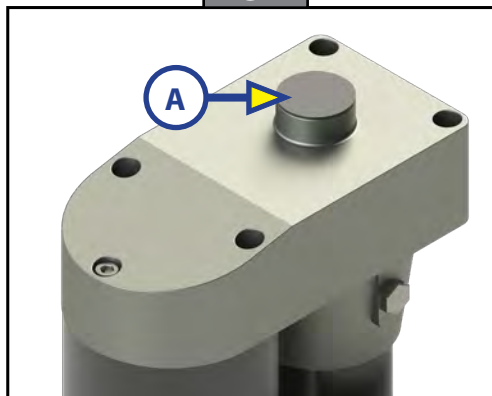
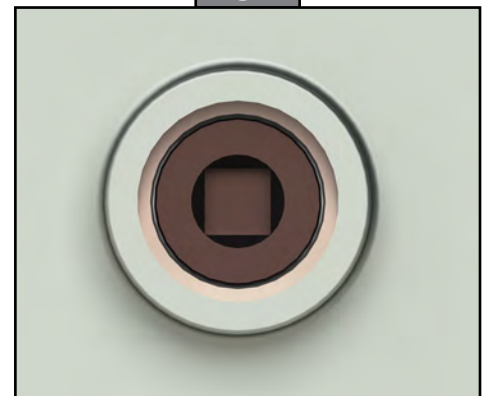


Fig. 5



Bottom of Jack Motor Override:

Tools needed: $\frac{3}{8}$ " drive ratchet and extension, $\frac{5}{16}$ " socket

1. Find the port on the bottom of the jack motor (Fig. 6A).
2. Remove the rubber plug (Fig. 7A).
3. Insert the $\frac{5}{16}$ " socket into the port (Fig. 8).
4. Turn override until the jack extends or retracts to desired position.
5. Insert the rubber plug back into the port after extension/retraction is complete.

Fig. 6

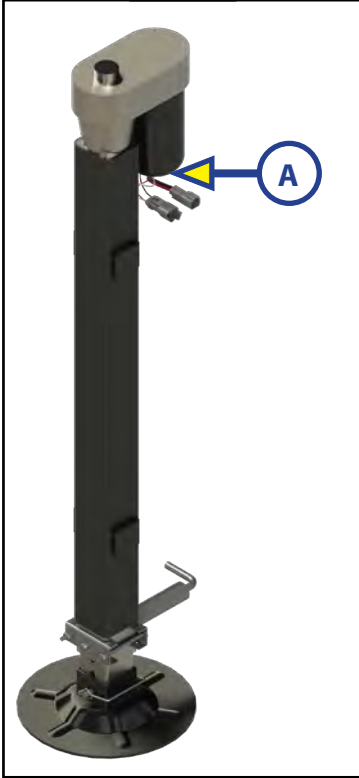


Fig. 7

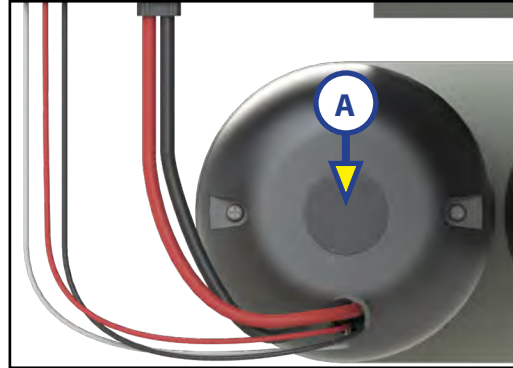


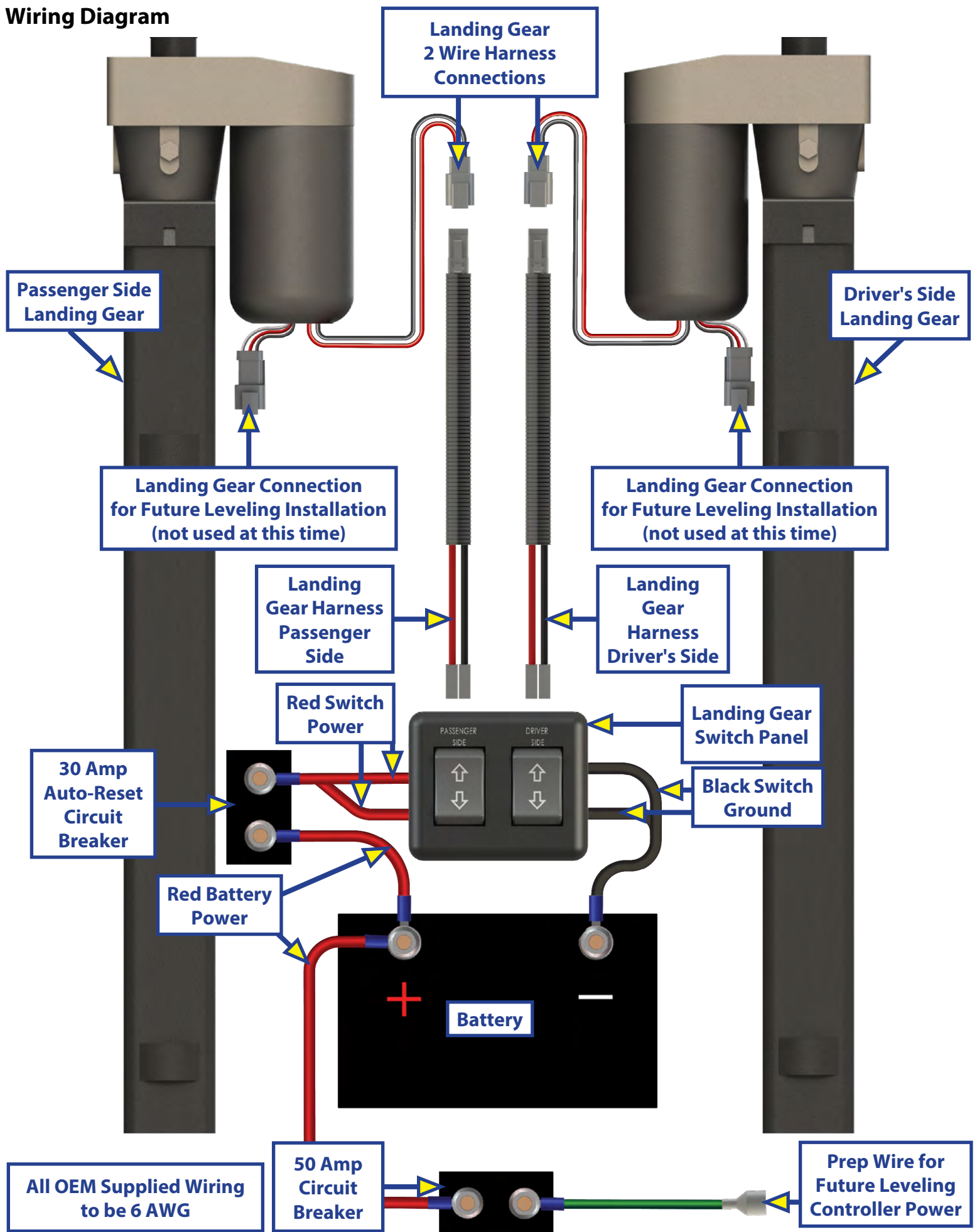
Fig. 8



Preventive Maintenance

1. For optimum performance, the system requires full battery current and voltage. The battery must be maintained at full capacity.
2. Check the terminals and other connections at the battery, the controller, and the jacks for corrosion, and loose or damaged connections.
3. Remove dirt and road debris from jacks as needed.
4. If jacks are down for extended periods, it is recommended to spray exposed leveling jack rods with a silicone lubricant every three months for protection. If the trailer is located in a salty environment, it is recommended to spray the rods every 4-6 weeks.

Wiring Diagram



Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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LONESTAR JACK SYSTEMS

OWNER'S MANUAL

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Introduction

The Lonestar Jack System™ kits are designed as single- or dual-jack systems in two weight-rated classes; 14K and 20K.

The systems are designed for the hydraulic landing gear of gooseneck trailers. The system features a hydraulic power unit mounted vertically on the roadside jack in a dual-jack system and mounted vertically on the middle-front jack in a single-jack system. Refer to jack rating for system lifting capacity and stroke length.

Hoses and pendant switches are provided with the landing gear kit.

The 14K and 20K single-jack systems are installed in the same manner with only the jack ratings being different.

The 14K and 20K dual-jack systems are installed in the same manner with only the jack ratings being different.

Because installation instructions for the 14K single- and dual-jack systems are identical to the 20K systems, only the 20K single- and dual-jack systems are provided.

For information on the assembly or individual components of this product, please visit:

<https://support.lci1.com/lonestar-jack-systems>.

NOTE: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels. This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.

WARNING

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WARNING

Make sure the trailer is properly supported before performing any maintenance or repair work. Follow the trailer manufacturer's recommendations for lifting and supporting the trailer. Failure to do so may result in death or serious injury.

CAUTION

The "CAUTION" symbol above is a sign that a safety risk is involved and may cause personal injury and/or product or property damage if not safely adhered to and within the parameters set forth in this manual.

CAUTION

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

CAUTION

The hydraulic power unit must be filled with automatic transmission fluid prior to operation.

CAUTION

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

NOTICE

All electrical wiring harnesses shall be loomed and secured to prevent possible damage and installed in accordance with RVIA electrical standards.

Operating the Switch Pendant

⚠ WARNING

Do NOT use the switch pendant to operate the jacks while positioned underneath the trailer. Operating the switch pendant to operate the jacks while positioned underneath the trailer may result in death or serious personal injury. Remove the switch pendant from its mounting and be positioned outside of the trailer and leveling jack area before turning on the switch pendant and operating the jacks.

⚠ CAUTION

The hydraulic power unit must be filled with automatic transmission fluid prior to operation.
See *Adding Fluid* section.

To use either a single- or dual-switch pendant, Lippert recommends leaving the pendant in its LOCKED/OFF position (Figs.1A), remove it from its stored position (Fig. 2) and only activate (turn on) and operate the pendant and system while positioned outside of the trailer and jack area.

Fig. 1



Fig. 2



⚠ CAUTION

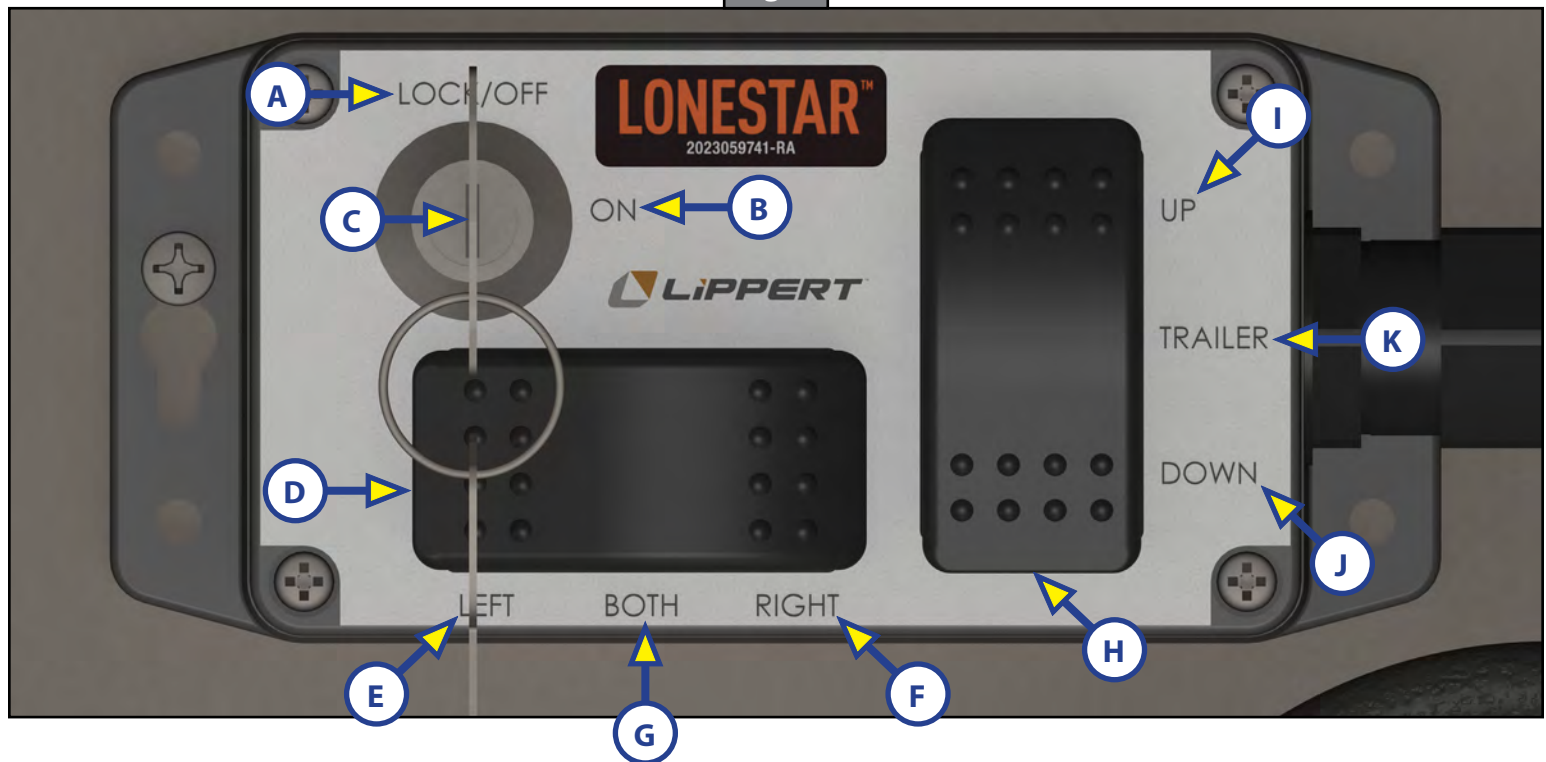
Moving parts can pinch, crush or cut. Keep clear and use caution.

Before operating the jacks, unlock the pendant switch to activate it. Turn the key to the ON position (Fig. 3B). The switch key should always be returned to the LOCK/OFF position (Fig. 3A) after operating the system and while towing the trailer.

NOTE: The jacks can be operated independently or simultaneously.

1. The horizontal momentary rocker switch (Fig. 3D) can independently operate the LEFT (roadside) (Fig. 3E) or RIGHT (curbside) (Fig. 3F) jack when the switch is pressed and held for that specific jack or operate the jacks simultaneously when the switch is released to its BOTH (neutral) (Fig. 3G) position.
2. The vertical momentary rocker switch (Fig. 3H) can raise (UP) (Fig. 3I) or lower (DOWN) (Fig. 3J) the trailer when the switch is pressed and held for that specific direction.
3. The TRAILER switch works together with the jack switch.
 - A. If the jack switch is in its BOTH (neutral) position and the TRAILER switch is pressed and held UP, both jacks will simultaneously extend to lift the trailer up. Similarly, if the TRAILER switch is pressed and held DOWN, both jacks will simultaneously retract to lower the trailer down.
 - B. If the jack switch is pressed and held in its LEFT (roadside) position and the TRAILER switch is pressed and held UP, only the left jack will extend to lift the trailer up. Similarly, if the jack switch is pressed and held DOWN, only the left jack will retract to lower the trailer down.
 - C. If the trailer switch is in its TRAILER (neutral) position (Fig. 3K), pressing either LEFT or RIGHT on the jack switch will have no effect on raising or lowering the trailer.
4. Release both switches when the trailer is either leveled, stabilized or the jacks have been completely retracted.
5. Turn the key to the LOCK/OFF position (Fig. 3A).
6. Return the locked switch pendant to its stored position.

Fig. 3



Single-Jack Switch Pendant

Before operating the jack, unlock the pendant switch (Fig. 4) to activate it. Turn the key to the ON position (Fig. 4B).

The switch key (Fig. 4C) should always be returned to the LOCK/OFF position (Fig. 4A) after operating the system and while towing the trailer.

1. The momentary rocker switch (Fig. 4D) operates the single jack to raise or lower the trailer.
2. Press and hold the UP end of the switch (Fig. 4E) to raise the trailer up by extending the jack.
3. Press and hold the DOWN end of the switch (Fig. 4F) to lower the trailer down by retracting the jack.
4. Release the switch when either the trailer is leveled, stabilized or the jack has been completely retracted.
5. Turn the key to the LOCK/OFF position (Fig. 4A).
6. Return the locked switch pendant to its stored position.

Fig. 4



Troubleshooting

What is Happening	Why?	What Should Be Done?
Jacks not properly leveling trailer.	Loose, damaged or missing hardware.	Check all fasteners for loose, damaged or missing hardware. Tighten, replace or install hardware as necessary.
Jacks not operating smoothly.	Bubble, froth or foam on top of the fluid.	Check fluid reservoir for bubble, froth or foam on top of the fluid. Refer to Purging Procedure section if necessary. Cycle leveling system for proper operation.
	Air in hydraulic system.	
Switch pendant not operating.	Bad electrical connection.	Check electrical connections and harnesses for loose, damaged or unconnected contacts or pinched, cut or missing electrical harness and/or wire coverings. Tighten, repair or replace electrical components as necessary.
	Bad switch.	Check pendant switch keys for damaged or missing keys. Replace as necessary.
Switch pendant does not stay in stored position.	Loose or missing mounting screws.	Make sure pendant fits snug in its stored position. Adjust screws as necessary to achieve a good, snug fit.

Maintenance

WARNING

Do NOT use the switch pendant to operate the jacks while positioned underneath the trailer. Operating the switch pendant to operate the jacks while positioned underneath the trailer may result in death or serious personal injury. Remove the switch pendant from its mounting and be positioned outside of the trailer and leveling jack area before turning on the switch pendant and operating the jacks.

CAUTION

Use appropriate personal protective equipment (PPE) for the procedure being performed.

CAUTION

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

Unless otherwise specified, do the following:

1. Remove dirt and road debris from leveling jacks as needed.
2. If jacks are down for extended periods, it is recommended to spray exposed jack tubes with a spray lubricant every three months for protection. If the trailer is located in a salty air environment, it is recommended to spray the jack tubes every four to six weeks.
3. Inspect and clean all of the power and electrical connections prior to the first use of the trailer at the start of the traveling season and prior to storing the trailer. If corrosion is evident, clean all corrosion with a wire brush, then apply dielectric grease to the connections.
4. Make sure to turn the manual override set screw on the valve back to the counterclockwise position after extending or retracting the leveling jacks.

Hydraulic Fluid

1. Each month, check that the fluid level is within 1/4" of the reservoir MAX fill line while leveling jacks are fully retracted.

NOTE: Always fill the reservoir with the leveling jacks fully retracted. Filling the reservoir when leveling jacks are extended will cause the reservoir to overflow when the leveling jacks are retracted.

2. Check the color of the hydraulic fluid in the reservoir every 12 months. If fluid is a clear, red color, do not change. If fluid is milky, pink and murky and not clear red in color, drain reservoir and add new fluid. Hydraulic fluid in reservoir should be changed a minimum of every five years.

Fluid Recommendation

CAUTION

The hydraulic power unit must be filled with automatic transmission fluid prior to operation. See *Adding Fluid* section.

Lippert recommends automatic transmission fluid (ATF) with Dexron®III or Mercon®V or a blend of both. For a list of approved fluid specifications, see [TI-188](#). To obtain this Technical Information sheet online:

1. Go to <https://support.lci1.com/towable-br-level-up-support-towable-level-upbr-touch-pad>.
2. Click on the Technical Information Sheets tab.
3. Look for *TI-188: Hydraulic Operation Fluid Recommendation* within the listing.

NOTE: In colder temperatures (less than 10° F) the jacks may extend and retract slowly due to the fluid's molecular nature. For cold weather operation, fluid specially formulated for low temperatures may be desirable.

Adding Fluid

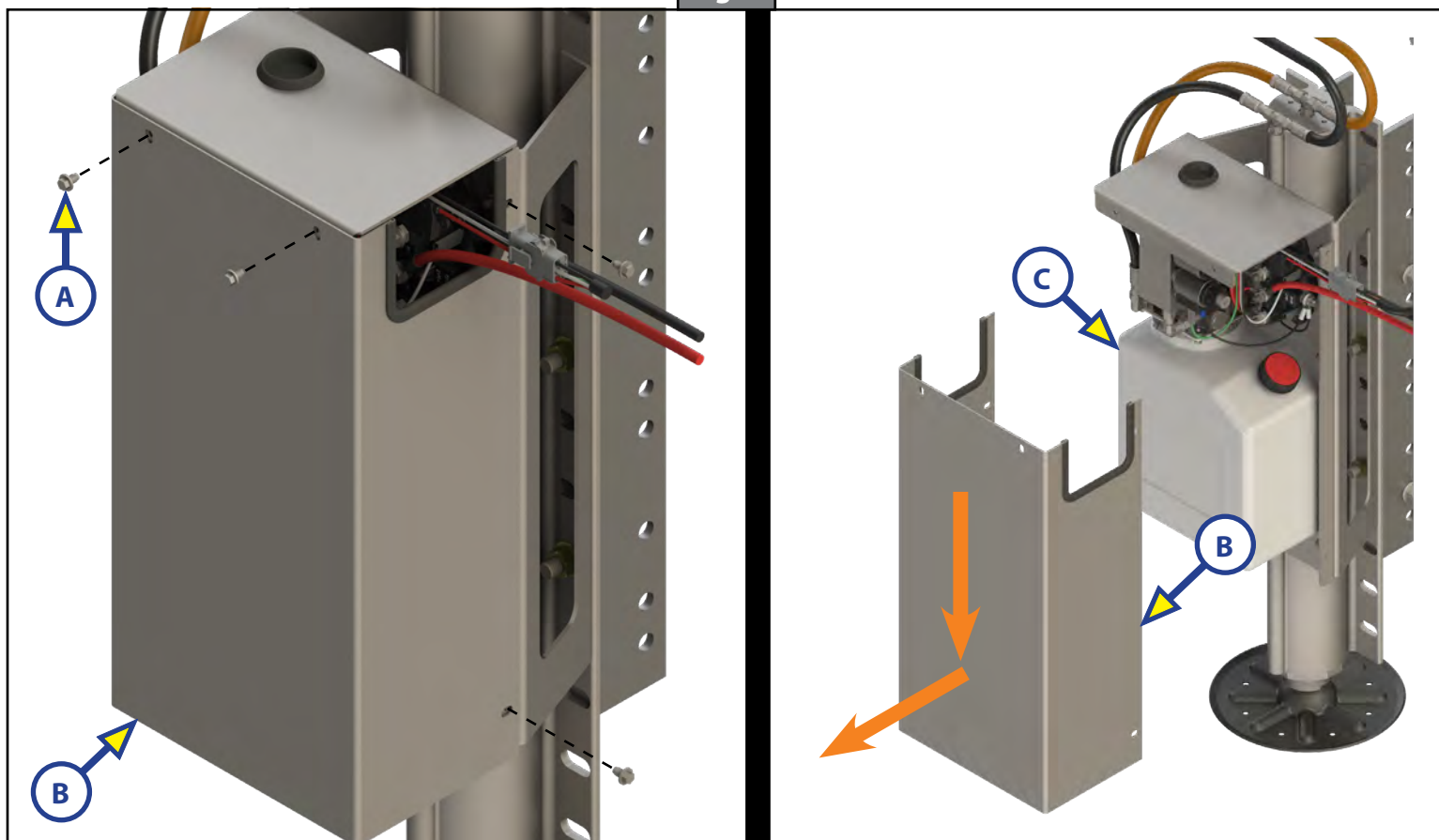
Resources Required

- Cordless or electric drill or screw gun
- 7/16" drive socket or wrench
- Automatic transmission fluid Dexron III®

NOTE: Make sure all hydraulic components are in the fully retracted position, i.e. the trailer is ready for travel. This prevents overfilling the reservoir.

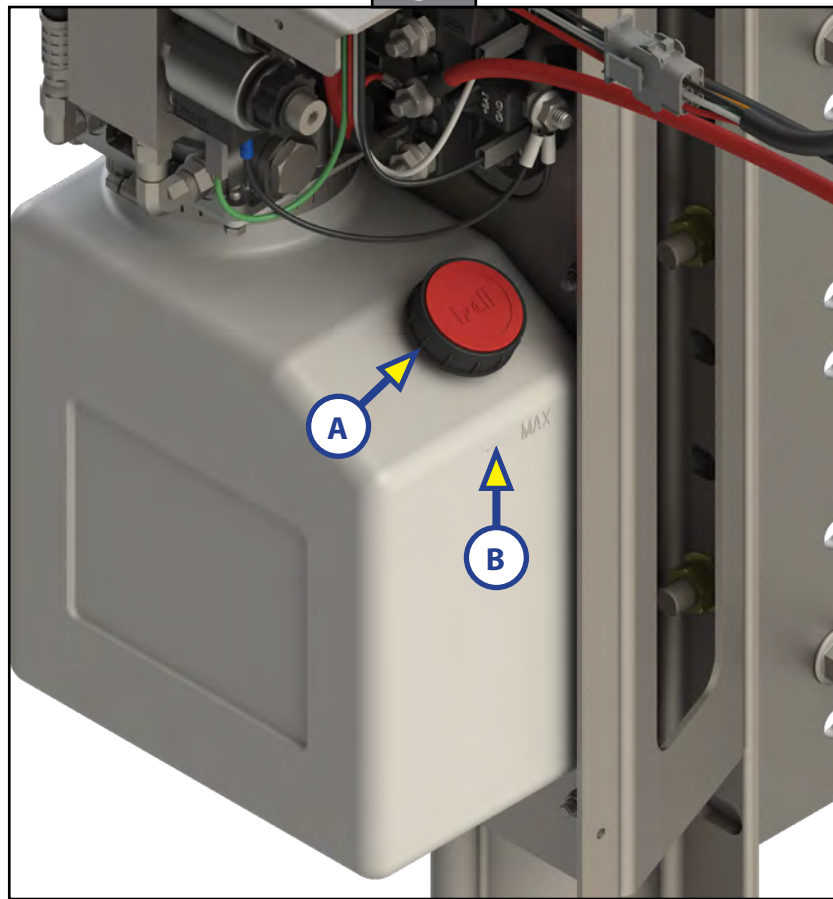
1. Use a 7/16" socket or wrench to remove six 1/4"-20 hex screws (Fig. 5A) from the motor shroud (Fig. 5B). Set screws aside for later re-use.
2. Remove the motor shroud to gain access to the hydraulic reservoir (Fig. 5C). Set shroud aside.

Fig. 5



3. Remove the reservoir fill cap (Fig. 18A).
4. Fill the reservoir to the (MAX) fill line (Fig. 18B) at the top of the reservoir.
5. Reinstall fill cap.
6. Go to Purging Procedure.

Fig. 6



Purging Procedure

⚠ WARNING

Do not attempt to purge this system without the front end of the trailer safely supported. Purging the system without properly supporting the trailer could result in death or serious personal injury.

Refer to [TI-118](#), Basic Purge Procedure for Hydraulic Pumps. To obtain this Technical Information sheet online:

1. Go to <https://support.lci1.com/towable-br-level-up-support-towable-level-up-br-touch-pad>.
2. Click on the Technical Information Sheets tab.
3. Look for *TI-118: Basic Purge Procedure for Hydraulic Pumps* within the listing.

Purging of the hydraulic system should be performed with the trailer coupled to the tow vehicle, a kingpin stand under the pin box or jack stands under the front portion of the frame.

1. Start with all jacks in the fully retracted position, as if the trailer were ready to travel.
2. Find the hydraulic pump location and note the amount of fluid currently in the reservoir. The fluid level should be about 1/4" from the reservoir MAX fill line and no more than 1/2" from the top.

NOTE: When checking the fluid level after ensuring all hydraulic jacks are retracted, note if there are any bubbles, froth or foam on top of the fluid. This is an indication that air has been pushed back to the reservoir when the hydraulic components were retracted in the last cycle. Wait 15-20 minutes for the foam to dissipate before beginning the purge process.

3. If there is no froth or foam in the reservoir and the fluid is **NOT** about 1/4" from the reservoir MAX fill line and no more than 1/2" from the top, fill the reservoir to within the level described in step 2.
4. With the fluid level full and no foam in the reservoir, begin cycling the hydraulic system:
 - A. Extend hydraulic leveling jacks to touch the ground.
 - B. Retract hydraulic leveling jacks.
5. Check the reservoir for foam. If foam is present, wait 15-20 minutes for the foam to dissipate then repeat steps 3 and 4.
6. Repeat the purging process until no foam is present in the reservoir. When no foam is present, the system is purged of air.
7. Reinstall the previously removed shroud cover (Adding Fluid section, steps 1 and 2).

Manual Override

WARNING

Do NOT perform a manual override of the jack while the system is connected to source power. Performing a manual override of the jack while the system is connected to an electrical power source could trigger an unexpected activation of the system, resulting in serious product, property and/or personal injury, including voiding of the product's limited warranty. Make sure the system is disconnected from any electrical power source prior to attempting the manual override procedure.

In the event of electrical or system failure, the jacks can be operated manually. Unhook the hydraulic power unit motor from the power source prior to attempting the manual override procedure.

Resources Required

- Cordless or electric drill or screw gun
- 1/4" drive bit
- 5/32" hex wrench
- 7/16" drive socket or wrench

Two-Valve (Dual-Jack) System

1. Remove the motor access cap (Fig. 7A) from the top of the motor mount housing (Fig. 7B) to expose the motor's manual drive access (Fig. 7C).
2. Use a 7/16" socket or wrench to remove six 1/4"-20 hex screws (Fig. 5A) from the motor shroud (Fig. 5B). Set screws aside for later re-use.
3. Remove the motor shroud to gain access to the motor and valves. Set shroud aside.
4. Using a 5/32" hex wrench (Fig. 8A), open the valve(s) by turning the manual override set screw(s) (Fig. 8B) clockwise until the set screw stops.

NOTE: With the two-valve system, the jacks can be independently extended or retracted.

- A. To manually extend or retract the curbside (right) jack only, open the top valve (Fig. 8).
- B. To manually extend or retract the roadside (left) jack only, open the bottom valve (Fig. 8).
- C. To manually operate both jacks simultaneously, open both top and bottom valves.

Fig. 7

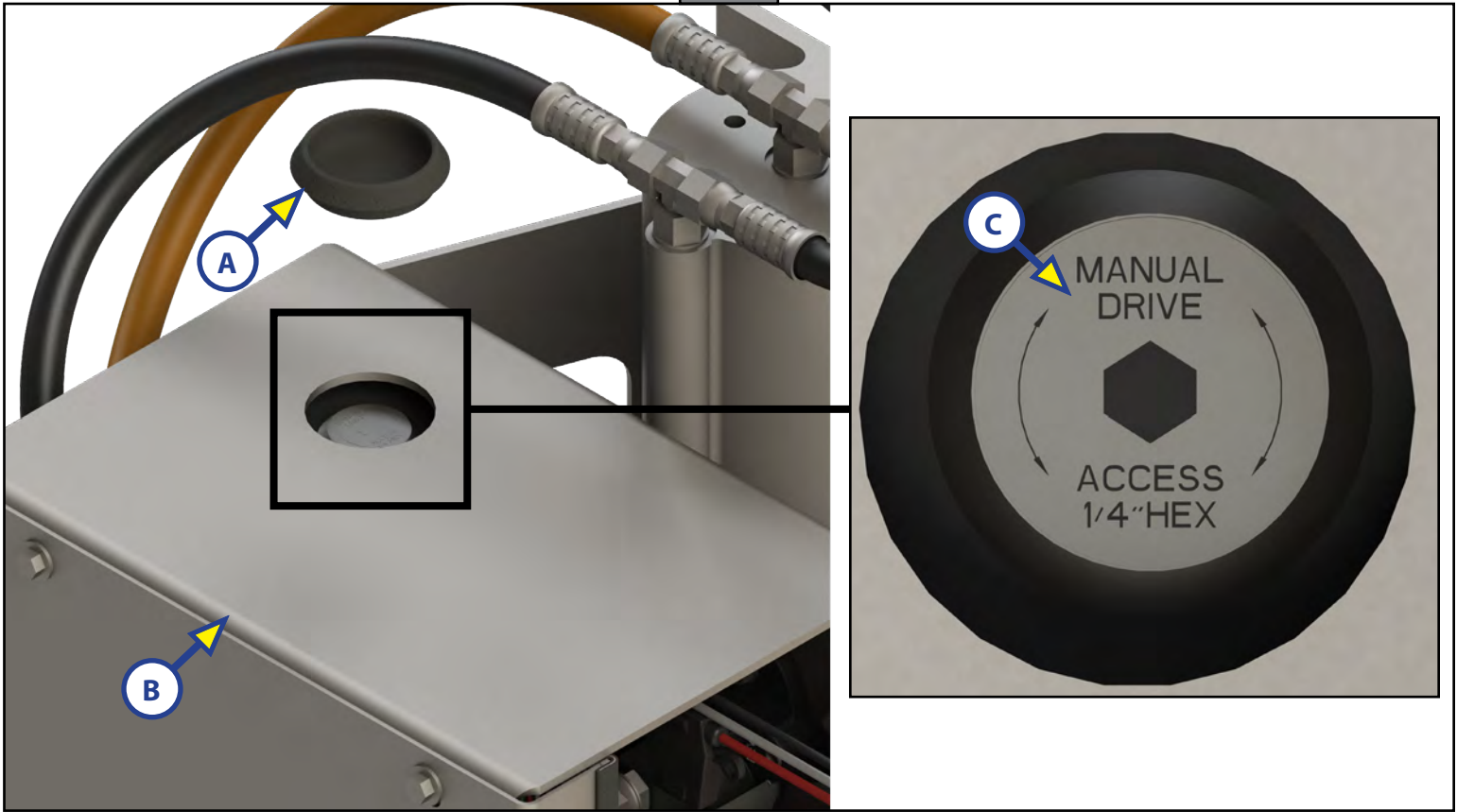
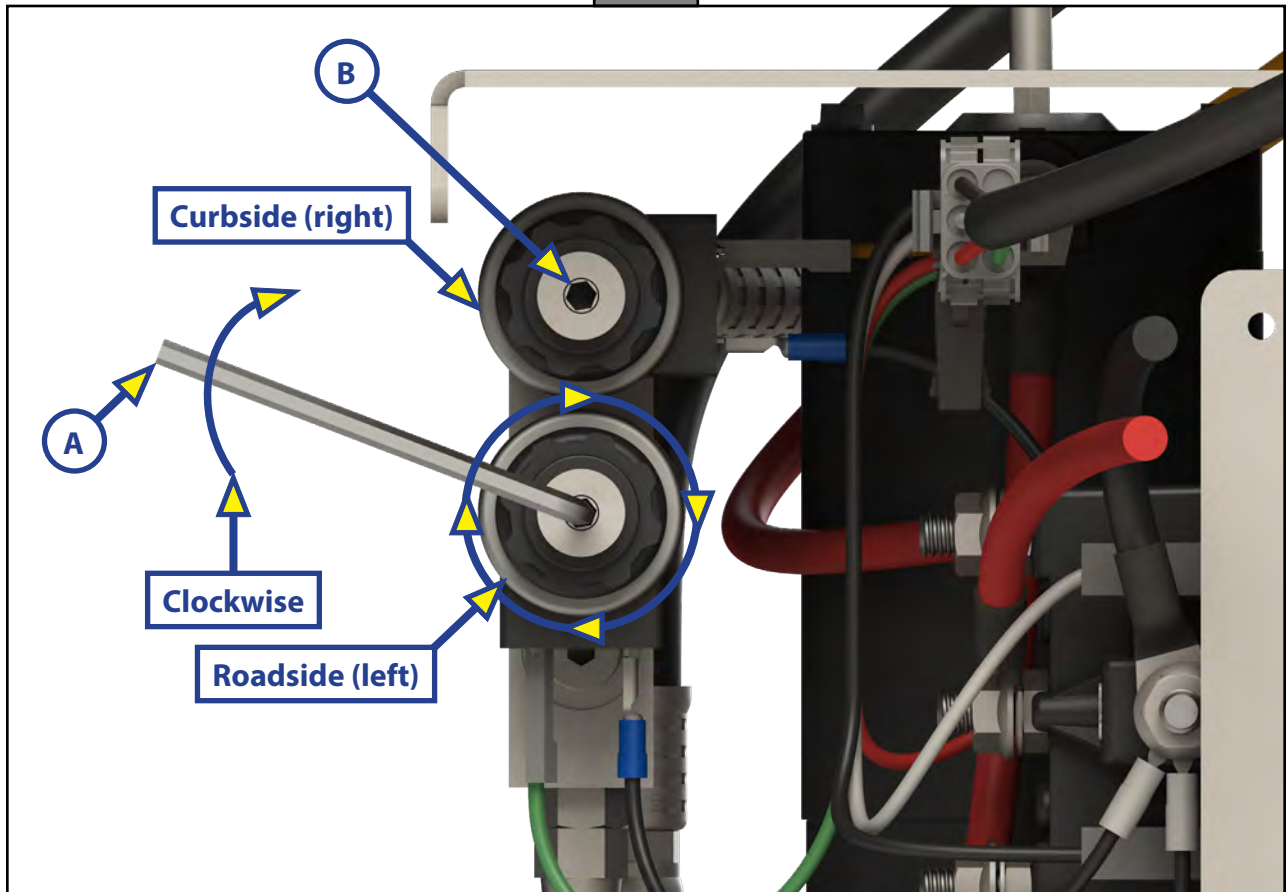
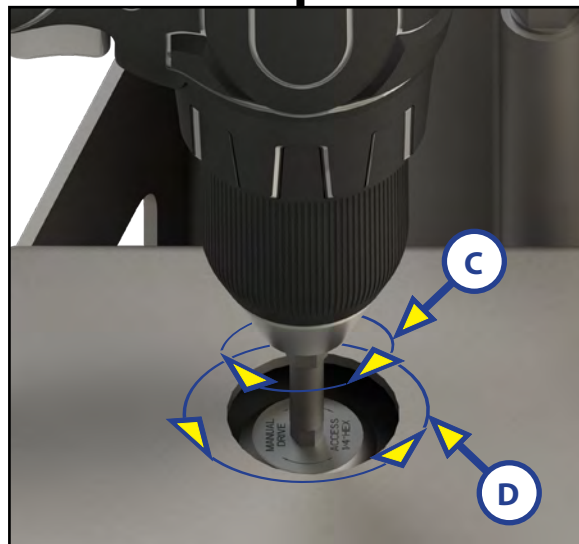
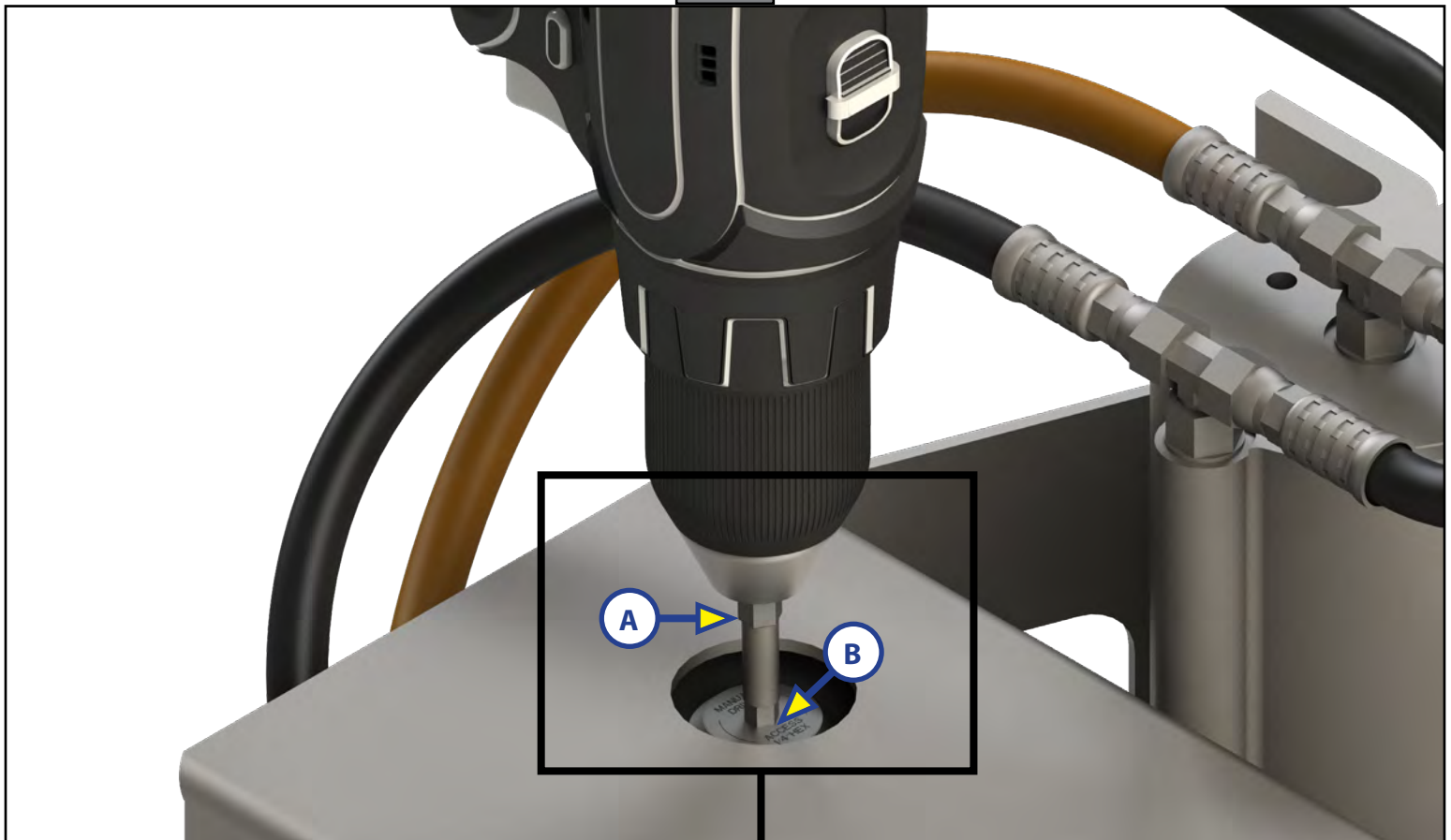


Fig. 8



5. Using a drill with a 1/4" hex bit (Fig.9A), punch the hex bit through the motor's manual override coupler label (Fig. 9B).
6. With the 1/4" hex bit inserted into the manual override coupler (Fig. 9):
 - A. Run the drill forward (clockwise) (Fig. 9C) to retract the jack(s).
 - B. Run the drill in reverse (counterclockwise) (Fig. 9D) to extend the jack(s).

Fig. 9



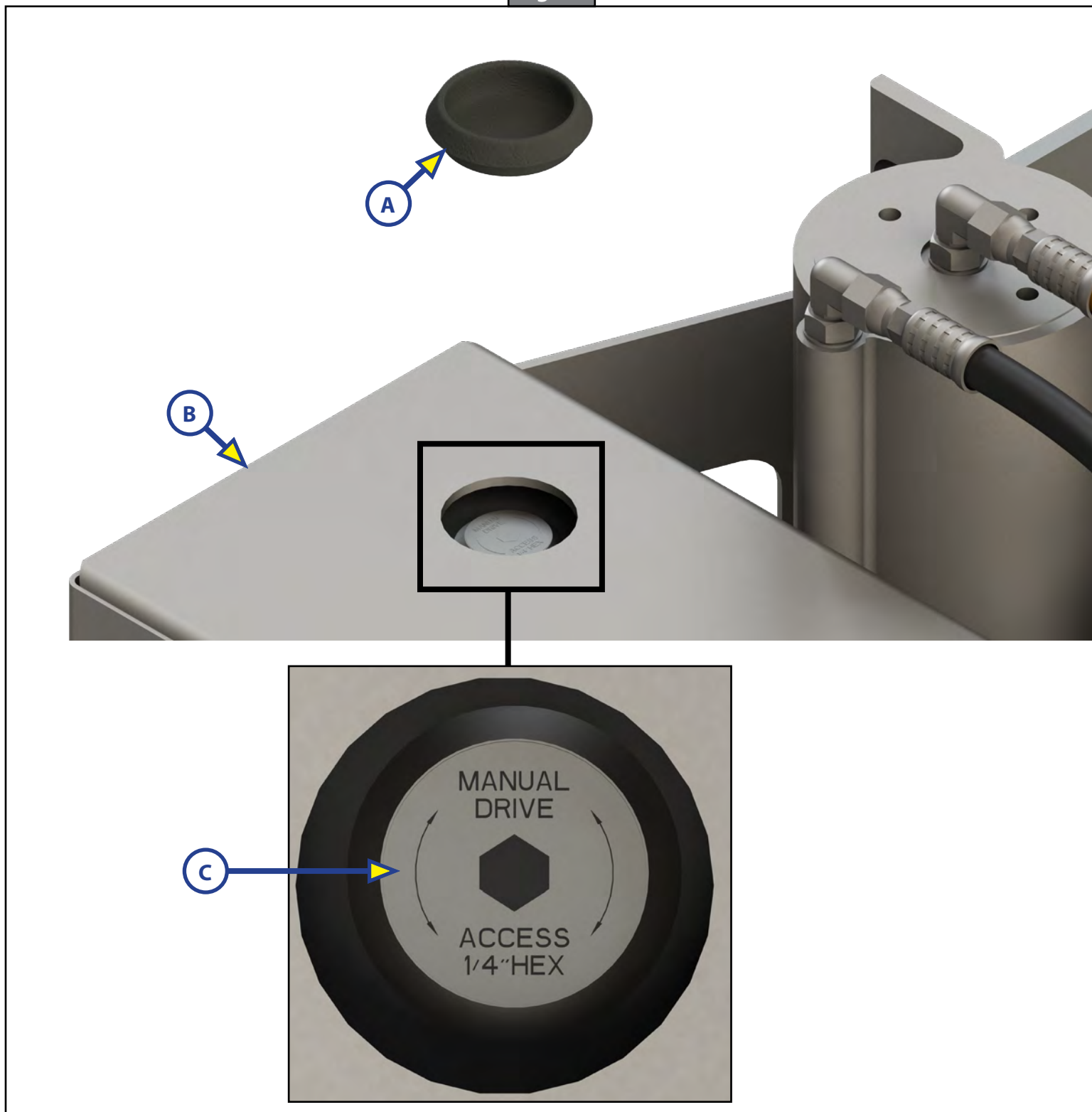
7. After extending or retracting the jack(s), make sure to turn the valve override set screw counterclockwise until the set screw stops.
8. Reinstall motor shroud (Fig. 5B) and motor access cap (Fig. 7A).

One-Valve (Single-Jack) Systems

In the event of electrical or system failure, the jacks can be operated manually. Unhook the hydraulic power unit motor from the power source prior to attempting the manual override procedure.

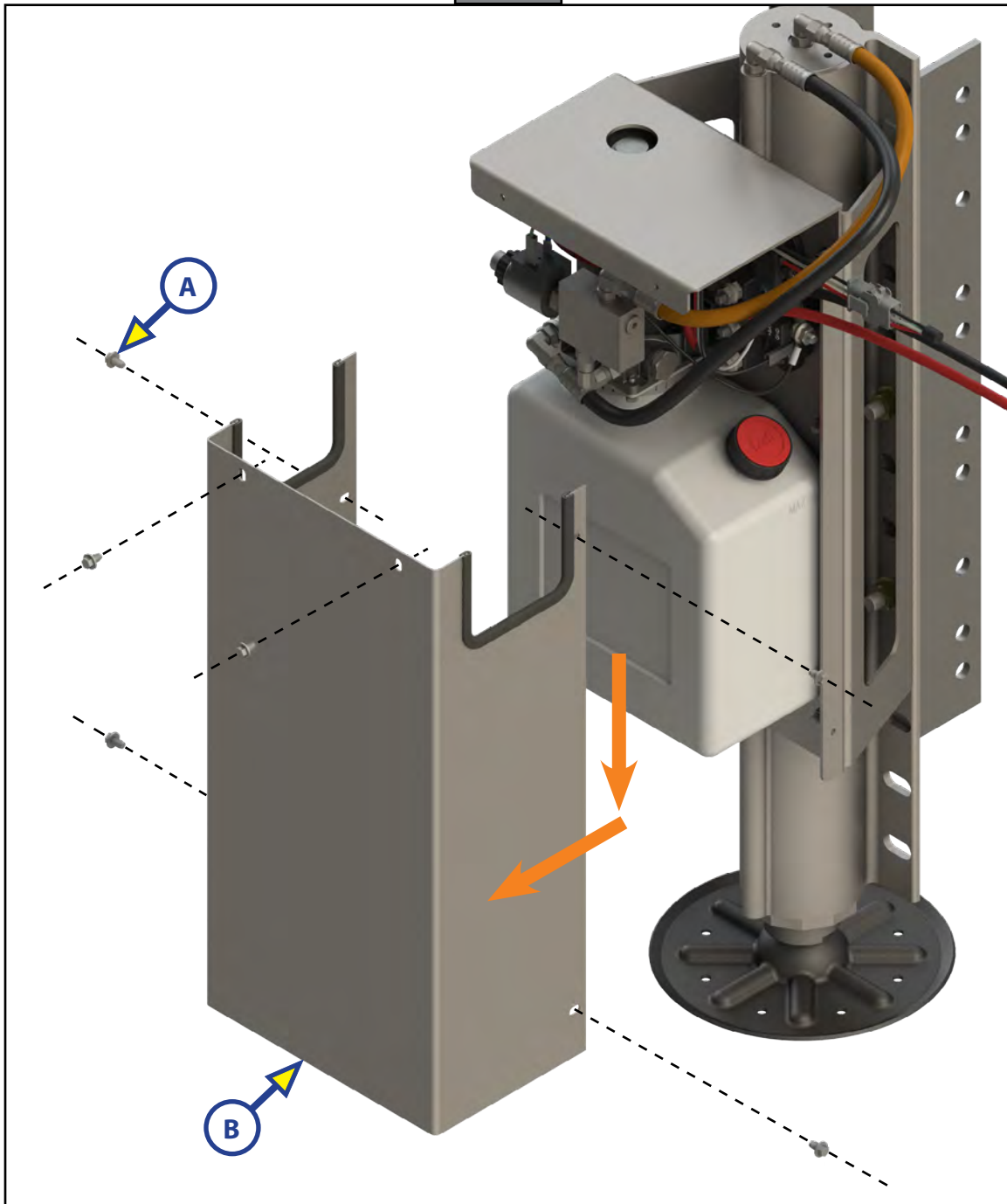
1. Remove the motor access cap (Fig. 10A) from the top of the motor mount housing (Fig. 10B) to expose the motor's manual drive access (Fig. 10C).

Fig. 10



2. Use a 7/16" socket or wrench to remove six 1/4"-20 hex screws (Fig. 11A) from the motor shroud (Fig. 11B). Set screws aside for later re-use.
3. Remove the motor shroud to gain access to the motor and valve. Set shroud aside.

Fig. 11



4. Using a 5/32" hex wrench (Fig. 12A), open the valve (Fig. 12B) by turning the manual override screw clockwise until it stops.
5. Using a drill with a 1/4" hex bit (Fig. 13A), punch the hex bit through the motor's manual override coupler label (Fig. 13B).
6. With the 1/4" hex bit inserted into the manual override coupler (Fig. 13):
 - A. Run the drill forward (clockwise) (Fig. 13C) to retract the jack.
 - B. Run the drill in reverse (counterclockwise) (Fig. 13D) to extend the jack.
7. After extending or retracting the jack, make sure to turn the valve override set screw counterclockwise until the set screw stops.
8. Reinstall motor shroud (Fig. 11B) and motor access cap (Fig. 10A).

Fig. 12

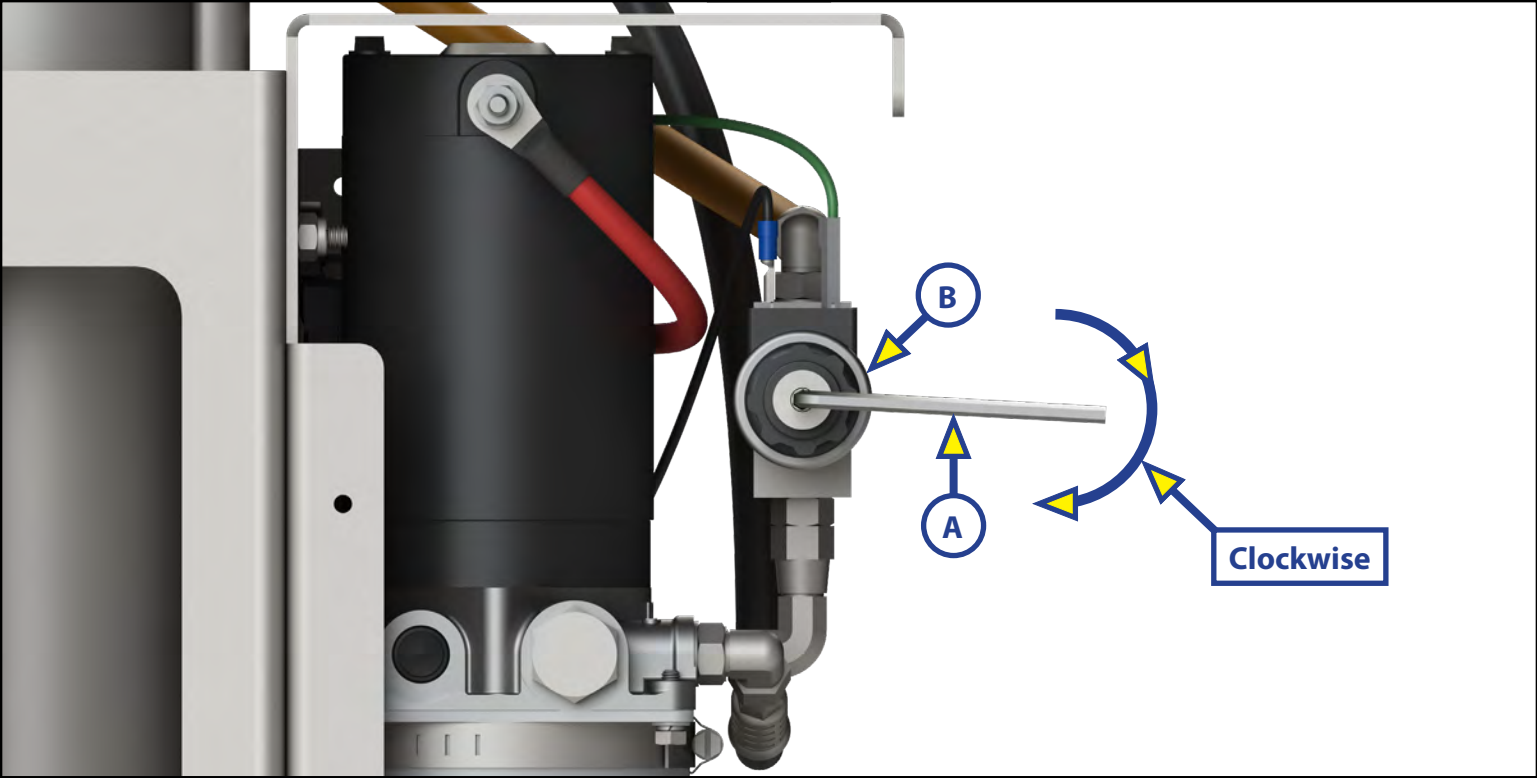
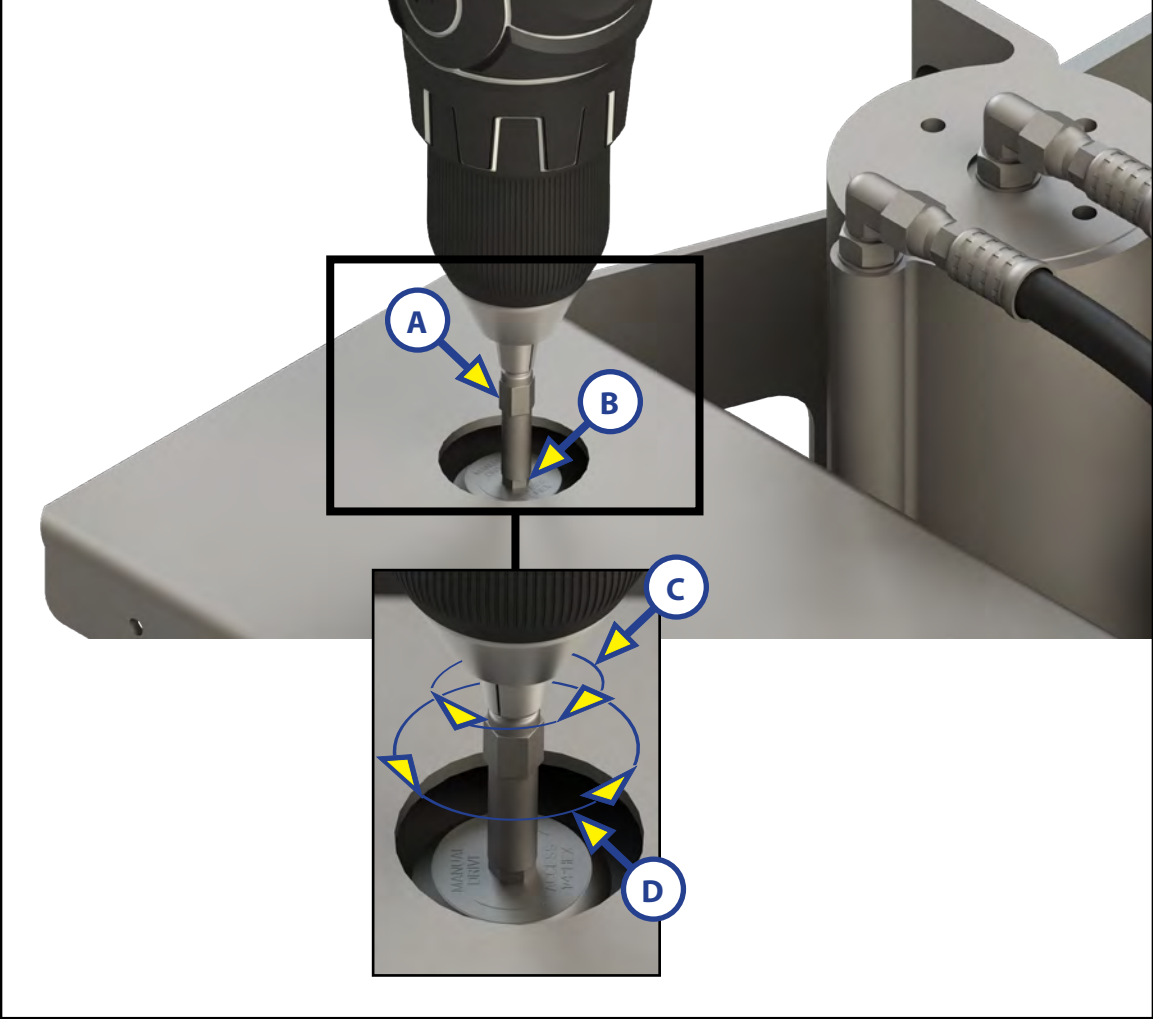
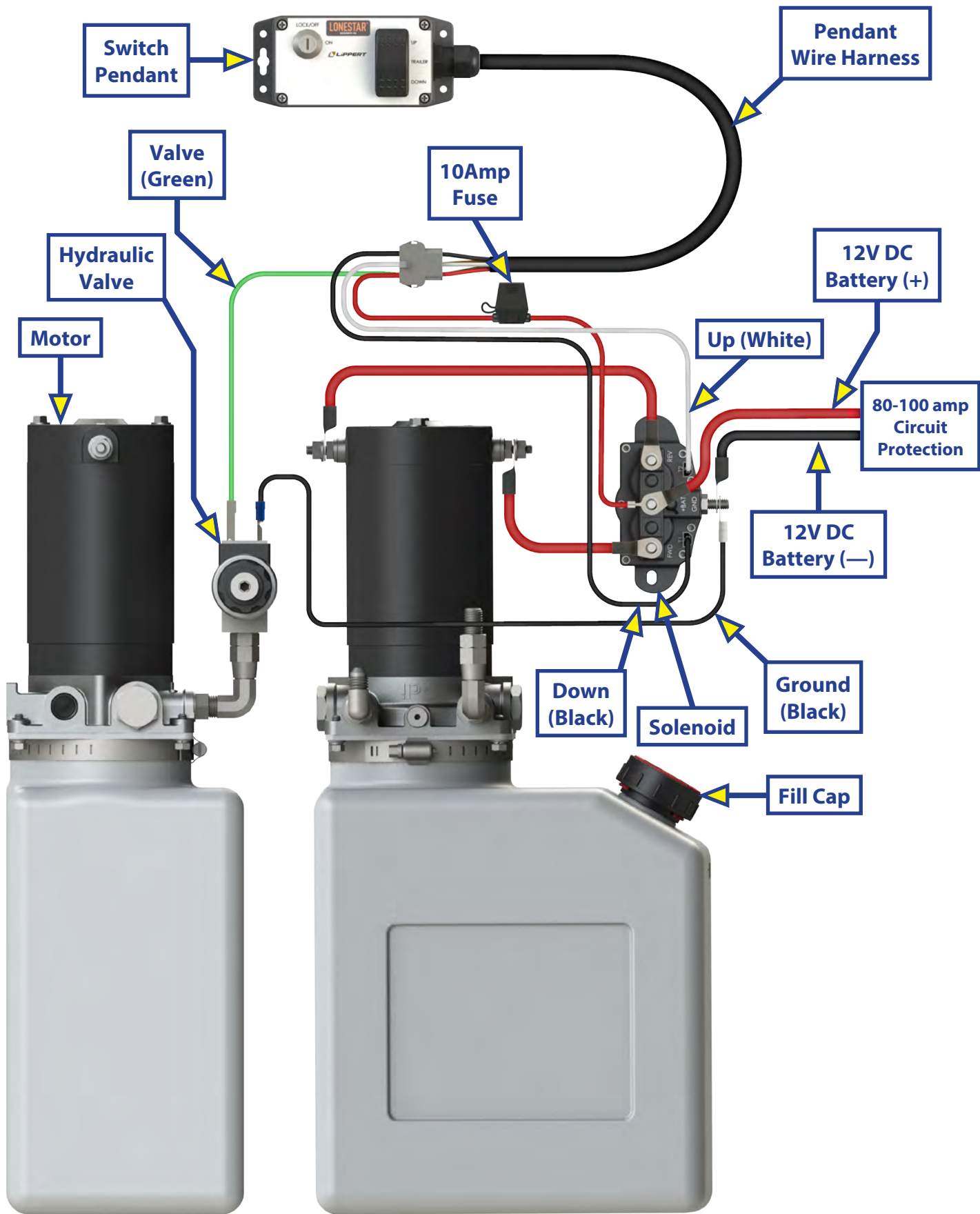


Fig. 13



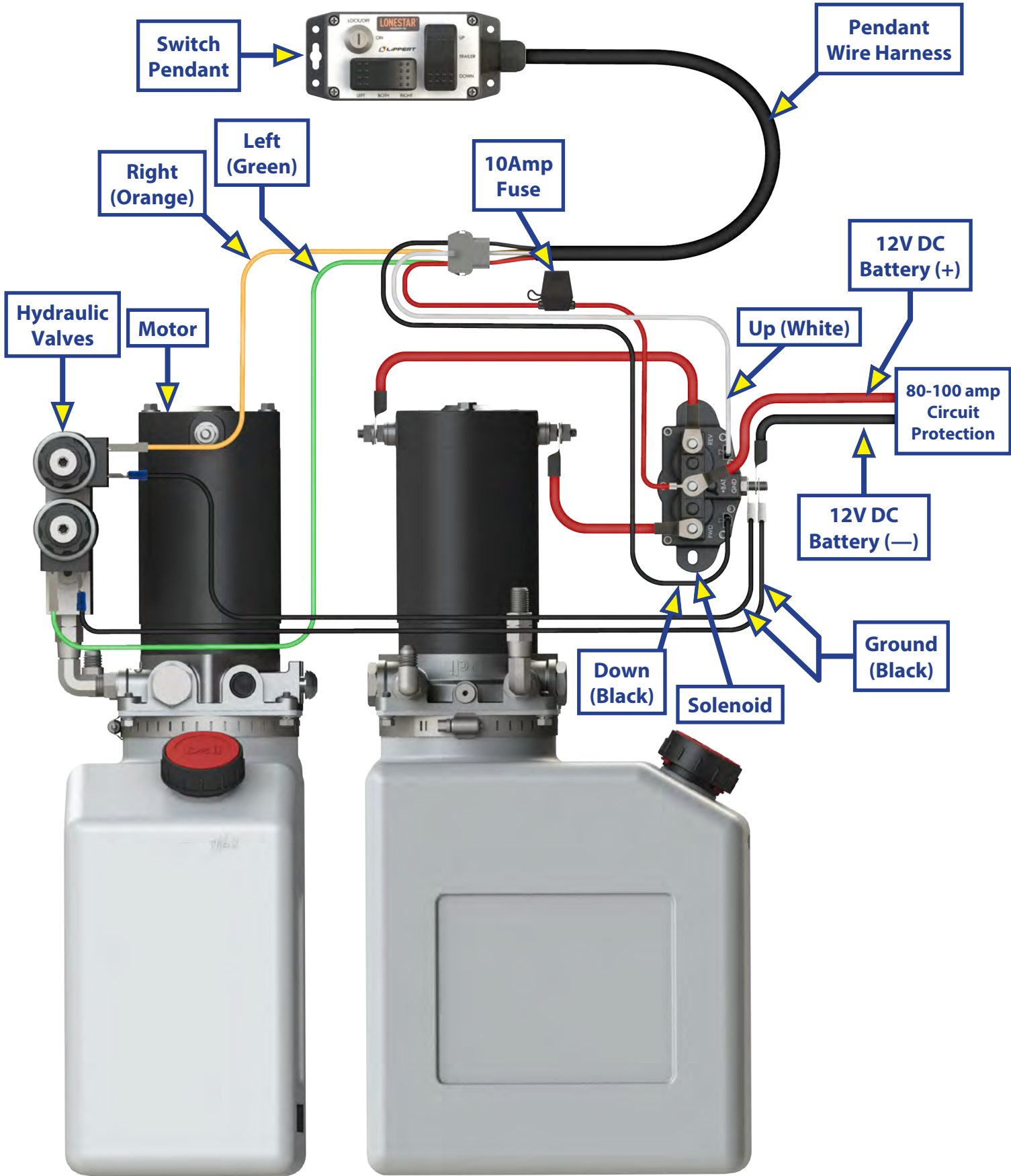
Wiring Diagram

Dual-Jack/1-Valve System



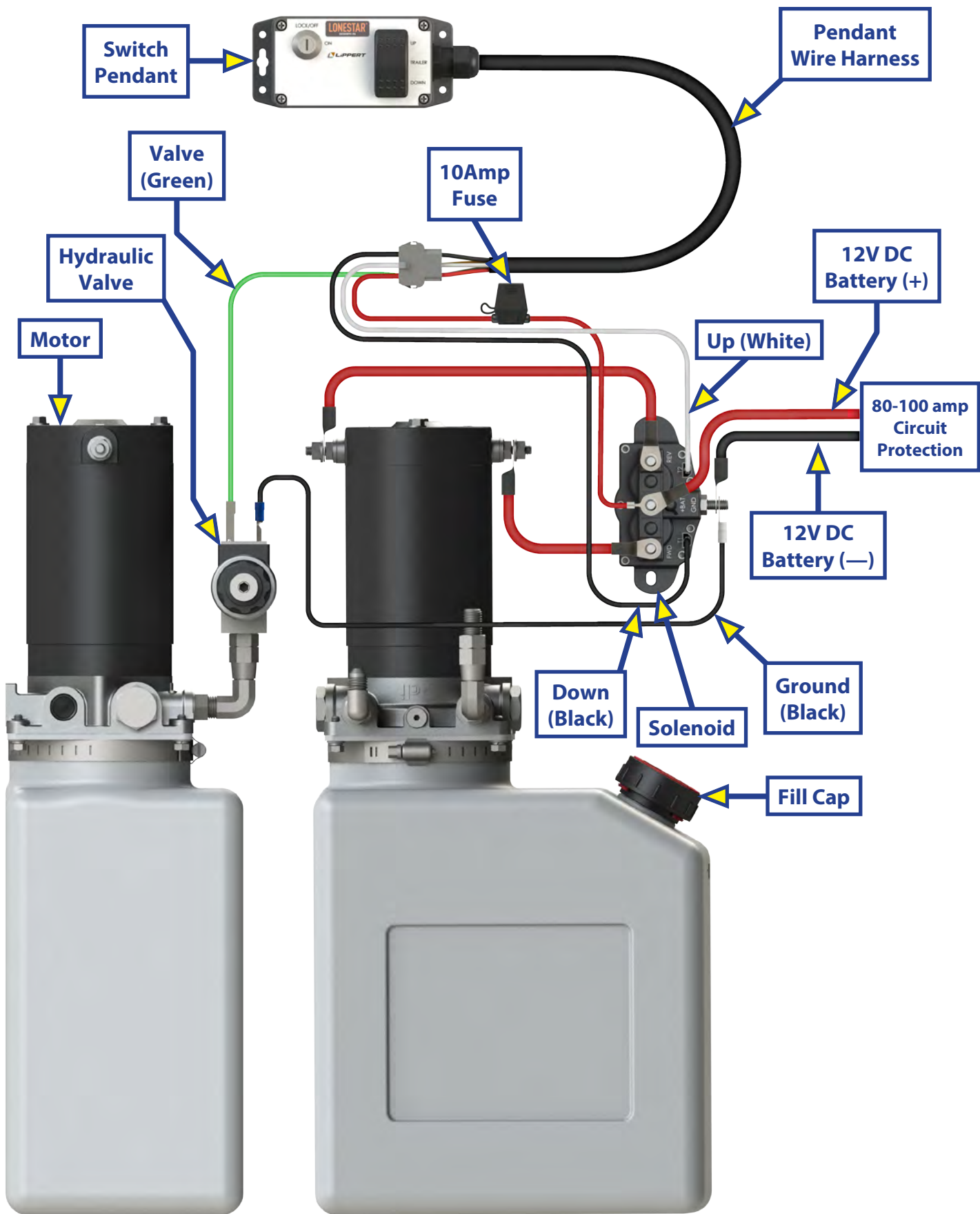
Wiring Diagram

Dual-Jack/2-Valve System



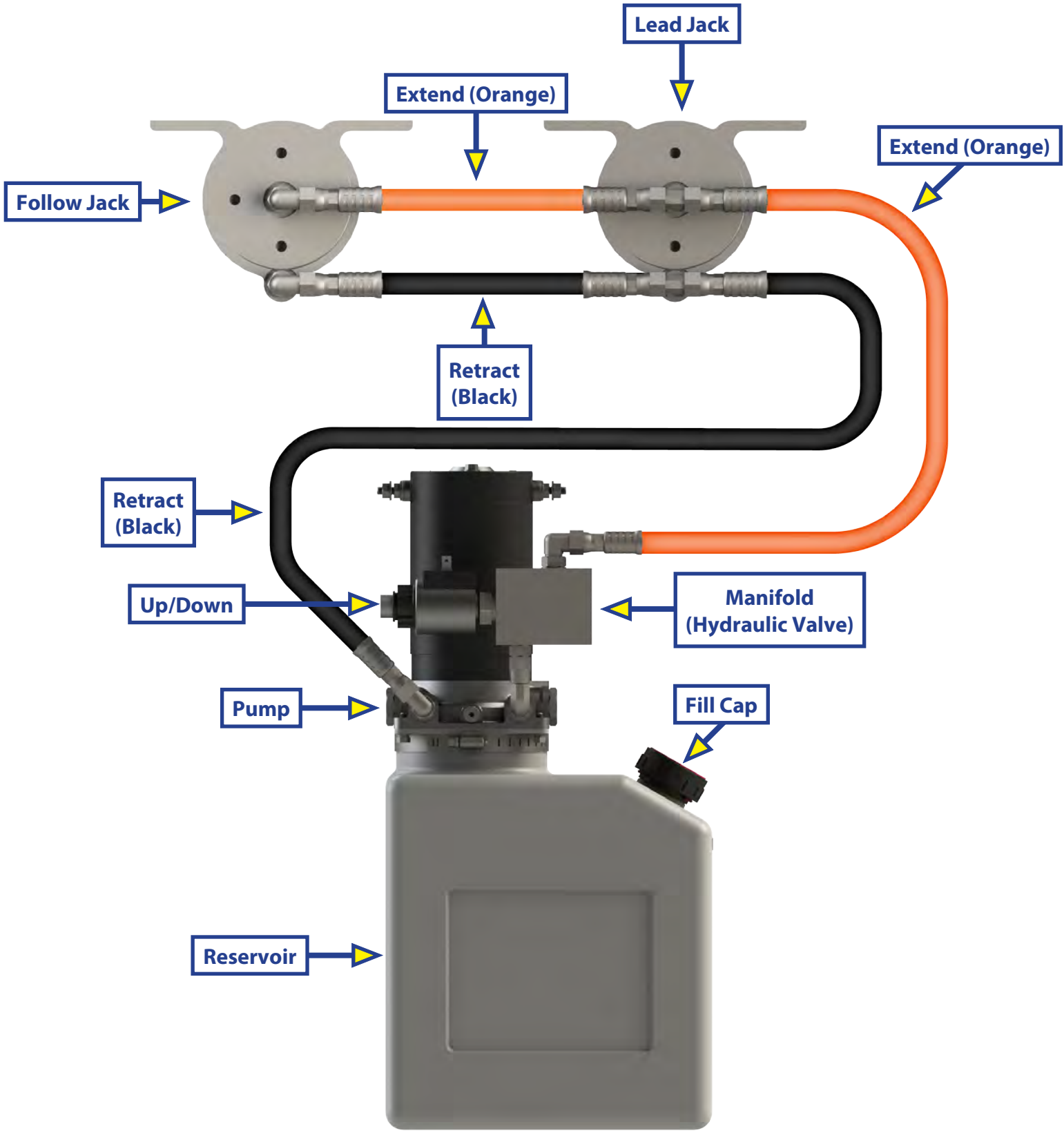
Wiring Diagram

Single-Jack/1-Valve System



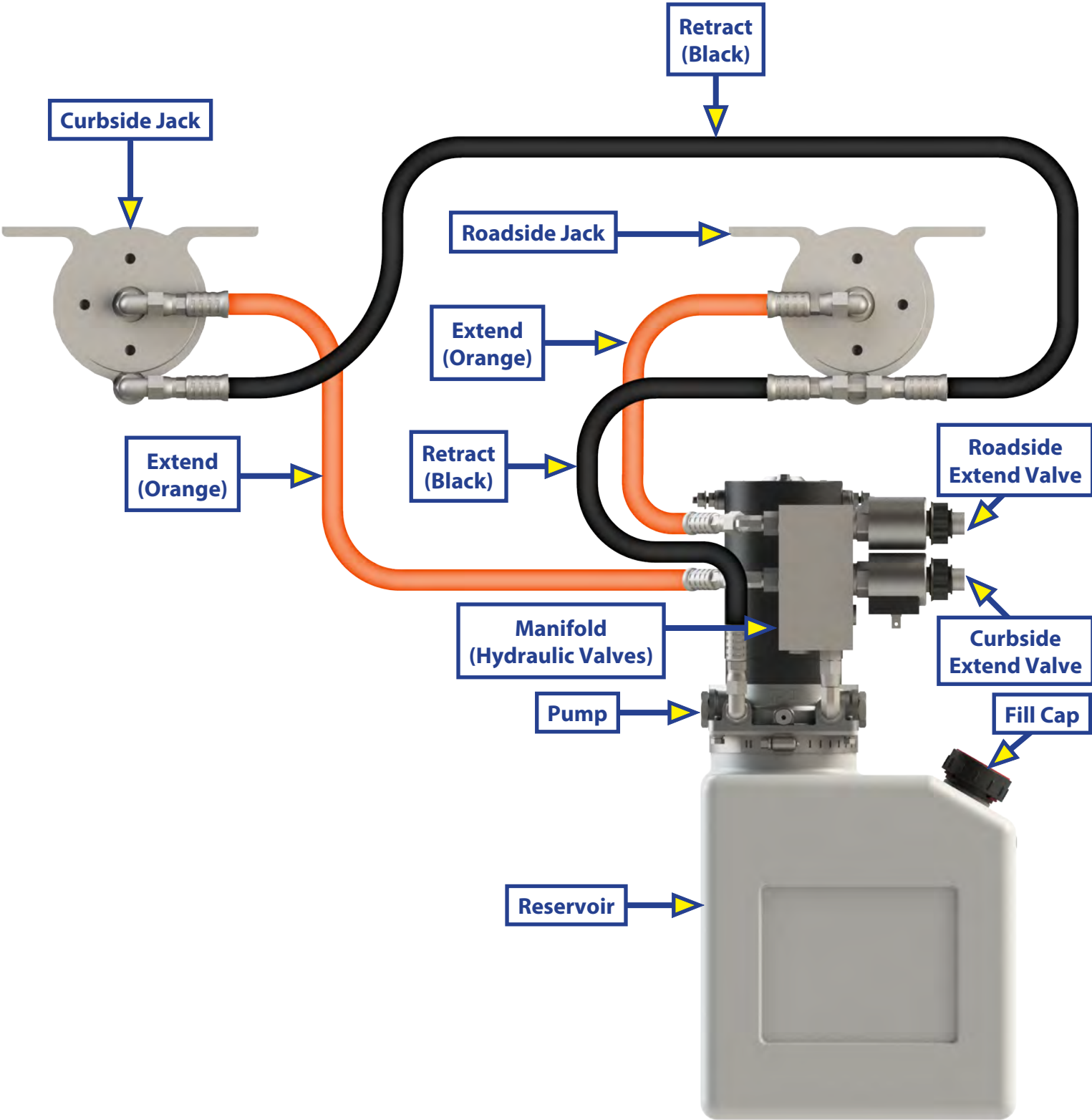
Hydraulic Diagram

Dual-Jack/1-Valve System



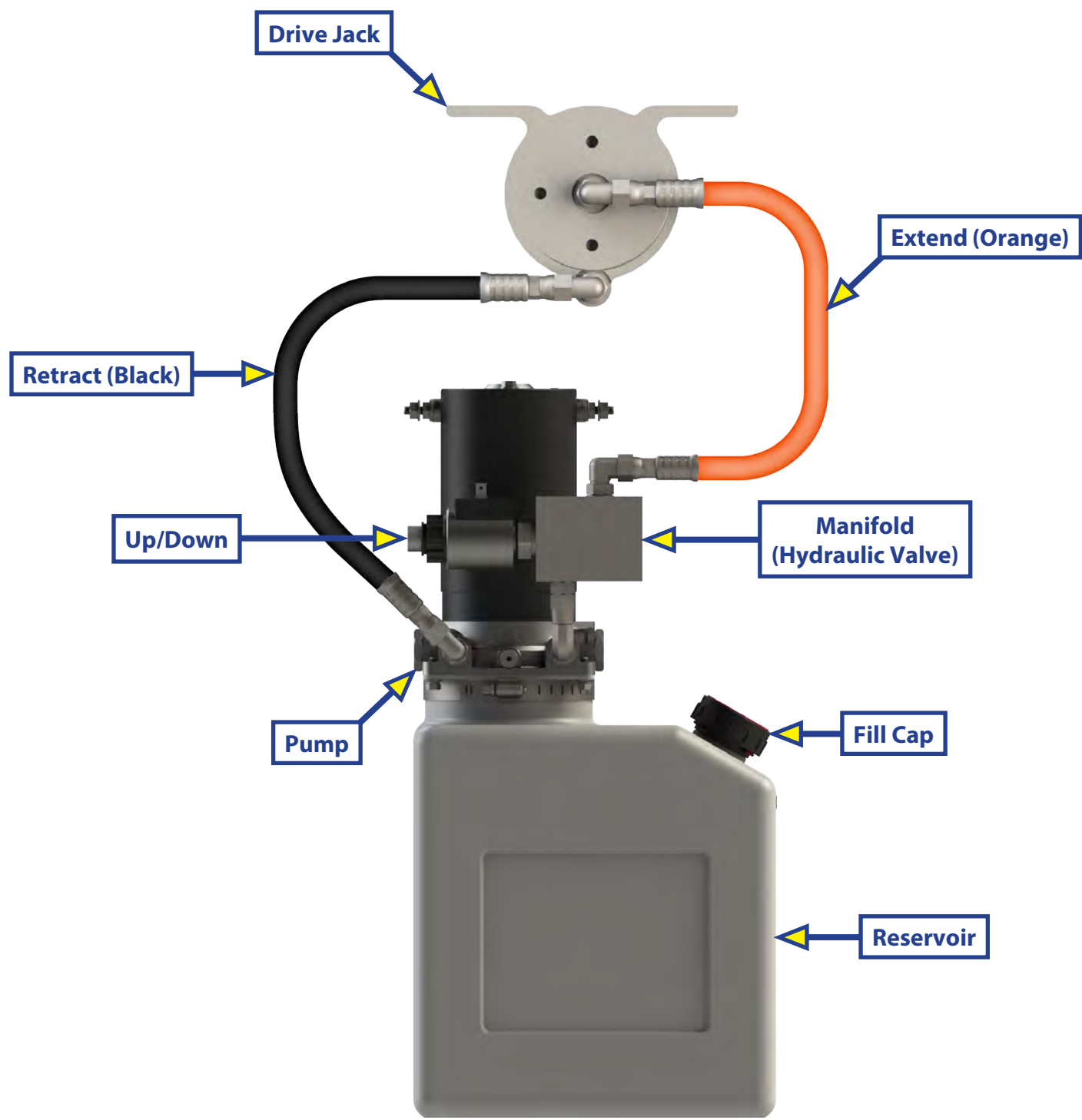
Hydraulic Diagram

Dual-Jack/2-Valve System



Hydraulic Diagram

Single-Jack System



Notes

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**MANUAL
OVERRIDE WRENCH
OWNER'S MANUAL**

**L I P P E R T
C O M P O N E N T S®**

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Manual Operation For Tongue Jacks	3

Introduction

This product is a 3 in 1 manual override handle for your tongue jack or stabilizer system. The three options are $\frac{3}{4}$ " hex override, $\frac{5}{16}$ " hex override, and pin override (as seen on the PSX1). The $\frac{3}{4}$ " socket can be used on tongue jacks and scissor jacks. The $\frac{5}{16}$ " socket is intended for PSX2, and the pin override is intended for PSX1.

Safety

Read and understand all instructions before starting any procedures stated in this manual. Adhere to all safety labels to prevent personal injury and/or product damage. Failure to follow instructions and safety labels may void product warranty.

WARNING

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

WARNING

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

WARNING

Trailer **MUST** be supported per manufacturer's recommendations before working underneath. Failure to do so may result in death or serious personal injury.

CAUTION

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

Preparation

1. Applicable tongue jack or stabilizer owner's manual with operation, override and troubleshooting instructions.
2. Frame supports as per manufacturers recommendations.

Manual Override

Most stabilizers and tongue jacks come equipped with a manual override system.

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

Manual Operation For Stabilizers

⚠ CAUTION

The gears can be stripped if the stabilizer legs are retracted/extended to the fullest extent and the operator continues to rotate the manual override. Do NOT use a power tool to extend or retract stabilizers.

⚠ CAUTION

Operating the stabilizer without grease on the screw could lead to product failure.

1. If equipped, disconnect one of the wire leads from the motor to prevent backfeeding the motor.
2. Insert the ½" pin over the nut or coupler and pin in the end of the stabilizer (Fig. 1A). The slot in the end of the Manual Override Wrench (Fig. 2) accommodates the pin on the coupler (Fig. 1A) to allow the manual extension/retraction of the stabilizer legs. Rotate the Manual Override Wrench clockwise to extend or counterclockwise to retract the stabilizer legs.

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

Fig. 1

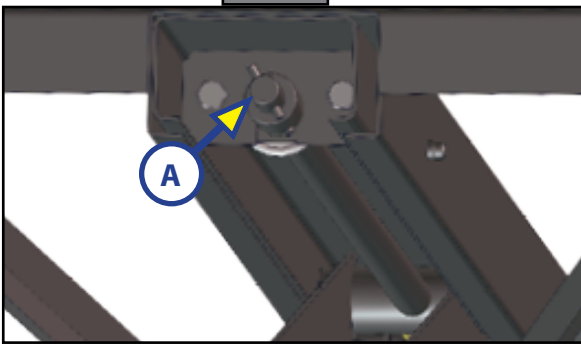
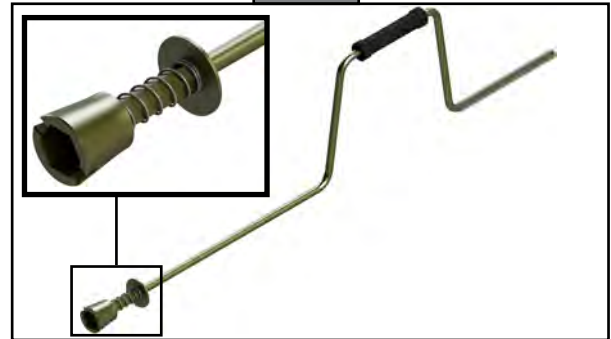


Fig. 2



Manual Operation For Tongue Jacks

⚠ CAUTION

Chock the tires of the trailer. Be sure the footpad of the tongue jack is pinned securely in place with the clevis pin and hairpin cotter pin. Make sure the ground surface under the tongue jack is firm and level.

1. Open the rubber plug on top of the tongue jack's gearbox (Fig. 3A) to expose the manual drive shaft.
2. Insert the Manual Override Wrench (Fig. 4).
3. Turn the crank handle counterclockwise to retract the jack leg or clockwise to extend the jack leg.
4. Remove the crank handle.
5. Replace the rubber plug.

NOTE: Be sure the leg of the tongue jack is fully retracted prior to moving the tow vehicle.

Fig. 3



Fig. 4





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**X-TREK
STABILIZATION SYSTEM
OWNER'S MANUAL**

**L I P P E R T
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System Information

The X-Trek is a stabilizing system for trailers utilizing hydraulic stabilizers and a manual bi-direction pump to simultaneously extend or retract all of the stabilizers.

Safety

This manual provides general instructions. Many variables can change the circumstances of the intended instructions, i.e. the degree of difficulty involved in the service operation and the ability of the individual performing the operation. This manual cannot begin to plot out instructions for every possibility, but will provide the general instructions, as necessary, for effectively installing, operating and servicing the device, product or system. In the event the skill level required is too advanced or the procedure too difficult, a certified technician should be consulted before performing the necessary service. Failure to correctly perform a troubleshooting procedure may result in voiding the warranty, inflicting personal injury or death.

WARNING

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

WARNING

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

WARNING

Failure to act in accordance with the following may result in death or serious personal injury. The use of X-Trek to support the trailer for any reason other than which it is intended is prohibited by Lippert's limited warranty. The Lippert stabilizing system is designed as a "stabilizing" system only and should not be used to provide service for any reason under the trailer such as changing tires or servicing the stabilizing system. Any attempts to change tires or perform other service while trailer is supported by X-Trek could result in damage to the trailer and/or cause death or serious injury.

WARNING

Trailer **MUST** be supported per manufacturer's recommendations before working underneath.
Failure to do so may result in death or serious personal injury.

⚠ CAUTION

The "CAUTION" symbol above is a sign that a procedure has a safety risk involved that may cause personal injury and/or product damage, including voiding of warranty, if not performed safely and in accordance with the safety procedures stated herein.

⚠ CAUTION

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

⚠ CAUTION

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

Instructions

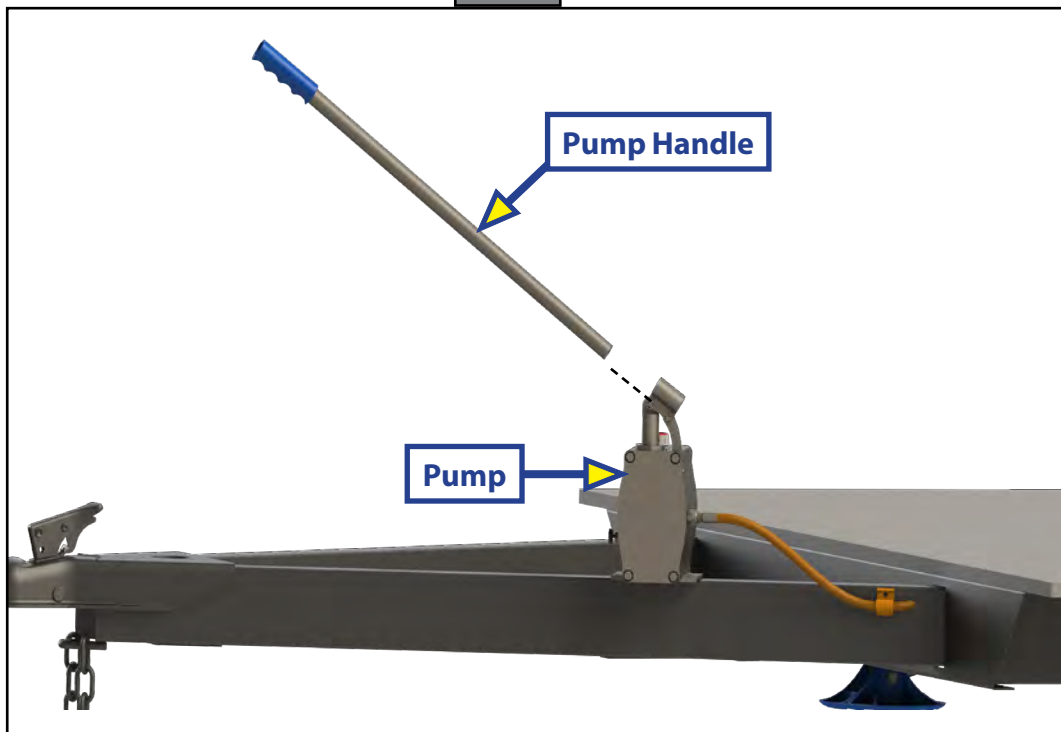
⚠ WARNING

The X-Trek Stabilizing System is to be used only for stabilization. Using the system for any other purpose could cause damage the trailer and/or cause death or serious personal injury.

Extending Stabilizers

1. Insert the pump handle into the bracket on the top of the pump (Fig. 1).

Fig. 1



2. Make sure the pressure relief valve on the pump (Fig. 2) is closed by turning it to the right (clockwise).
3. Pump the handle up and down to start extending the stabilizers.

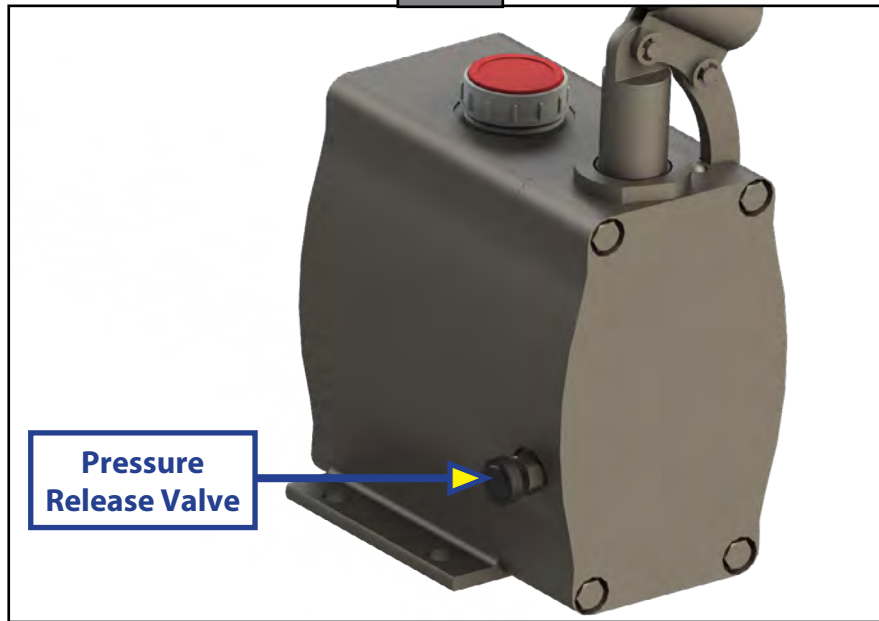
NOTE: The stabilizers will extend incrementally with each up and down stroke and will equalize force when all the stabilizers have made contact with the ground.

4. When stabilizers have been extended to the desired level, remove the handle from the pump and secure in the designated storage area.

Retracting Stabilizers

To retract the stabilizers, make sure the pressure release valve on the pump (Fig. 2) is open by turning it to the left (counterclockwise). This will release the extend pressure in all of the stabilizers simultaneously. No pumping is required because the gas spring will retract the stabilizers.

Fig. 2



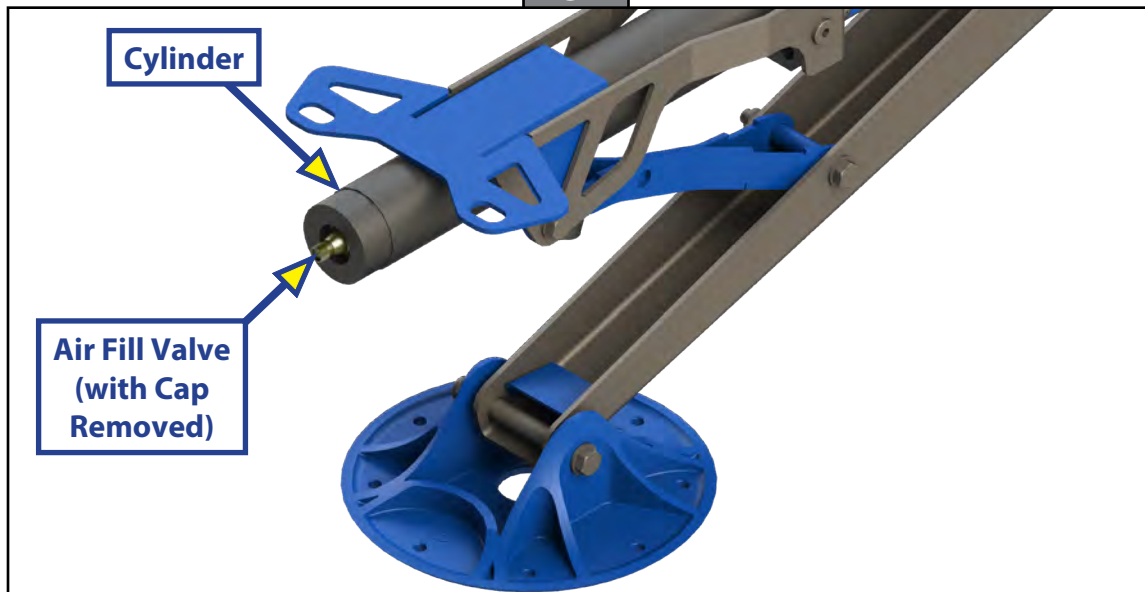
Troubleshooting

Loss of Air Pressure

A loss of air pressure to a level below 60 psi in one or more of the hydraulic cylinders can cause the stabilizer to not retract fully. In the unlikely event that one or more of the cylinders loses air pressure, air can be added by removing the cap from the air fill valve at end of the cylinder (Fig. 3), then filling the cylinder with air using a standard air pump. Pressurize to 60-70 psi

NOTE: A stabilizer that is fully retracted will be held in place magnetically, even if there is air pressure loss.

Fig. 3

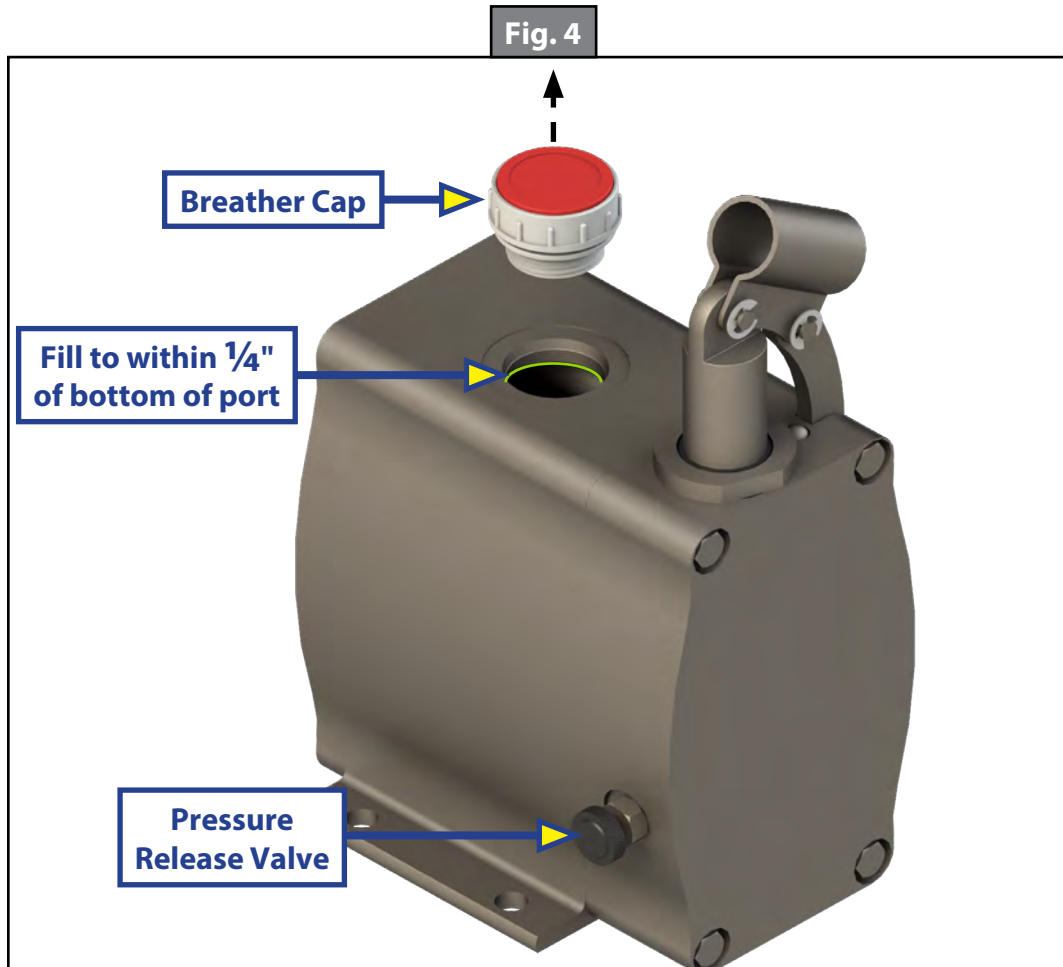


Line Break

High pressure lines are not serviceable. Contact LCI support.

System Purge Procedure

1. With all four stabilizers compressed (in the retracted position), make sure the cylinder retract air pressure in all four stabilizers is 60-70 psi.
2. Remove breather cap and fill fluid reservoir to $\frac{1}{4}$ " from bottom of port (Fig. 4). Replace breather cap.

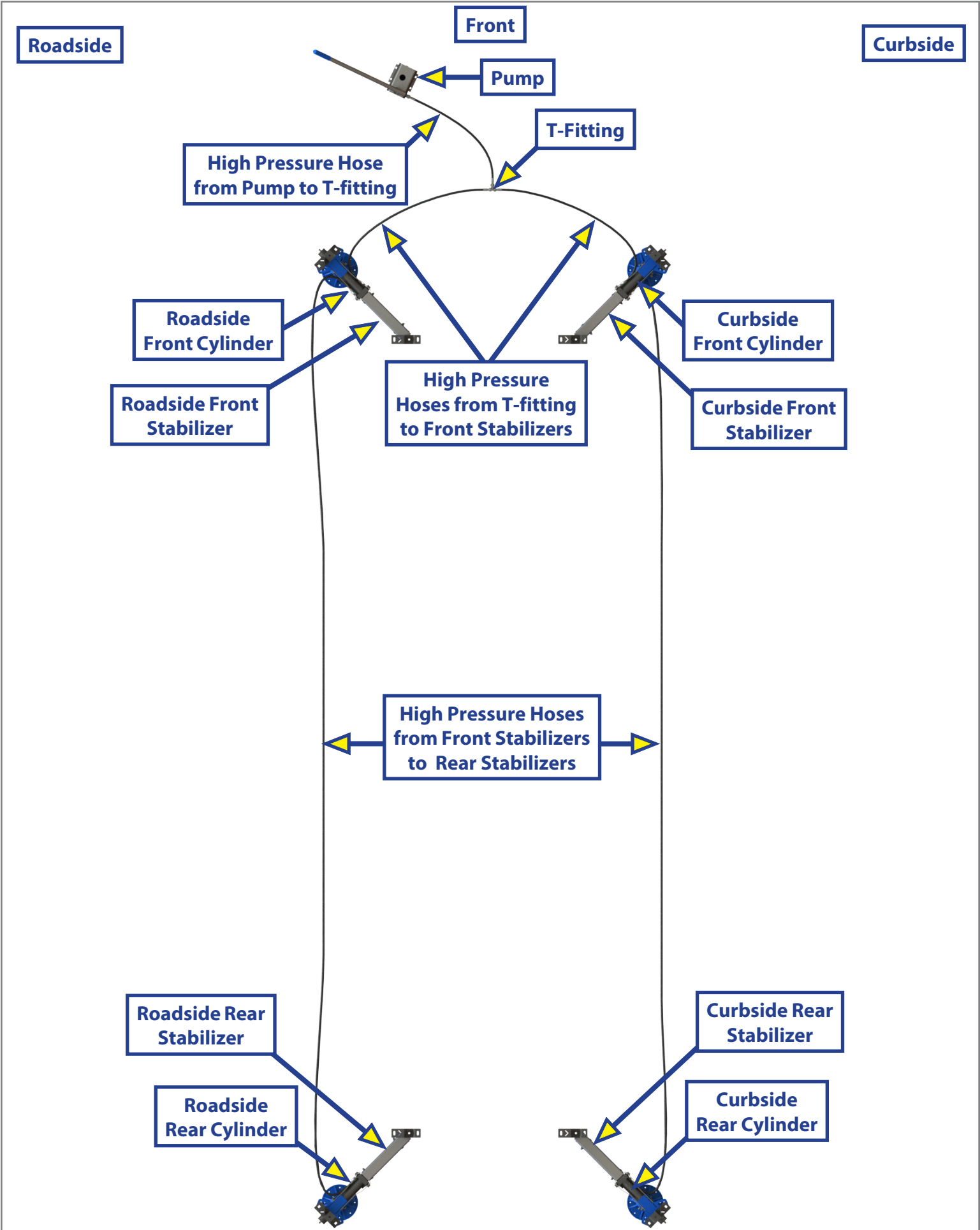


3. Insert the handle into the pump.
4. Close the pressure release valve (Fig. 4) by hand on the pump by turning it to the right (clockwise) until it is firmly hand tight.

NOTE: Do not force with pliers or other tools.

5. Actuate the pump until all stabilizers have contact with the ground. Actuate 1-2 full cycles (pump handle fully down and back to fully up is one cycle) after ground contact to build some force.
6. Open the bypass valve by turning it to the left (counterclockwise) and allow all four stabilizers to return to the fully retracted position. Stabilizers should be held in retracted position magnetically at this point.
7. Repeat steps 4-6 one more time.
8. Leave the bypass valve open so any trapped air will vent.
9. Check reservoir level again and fill as needed.
10. System is now purged and functional.
11. Remove and stow the pump handle.

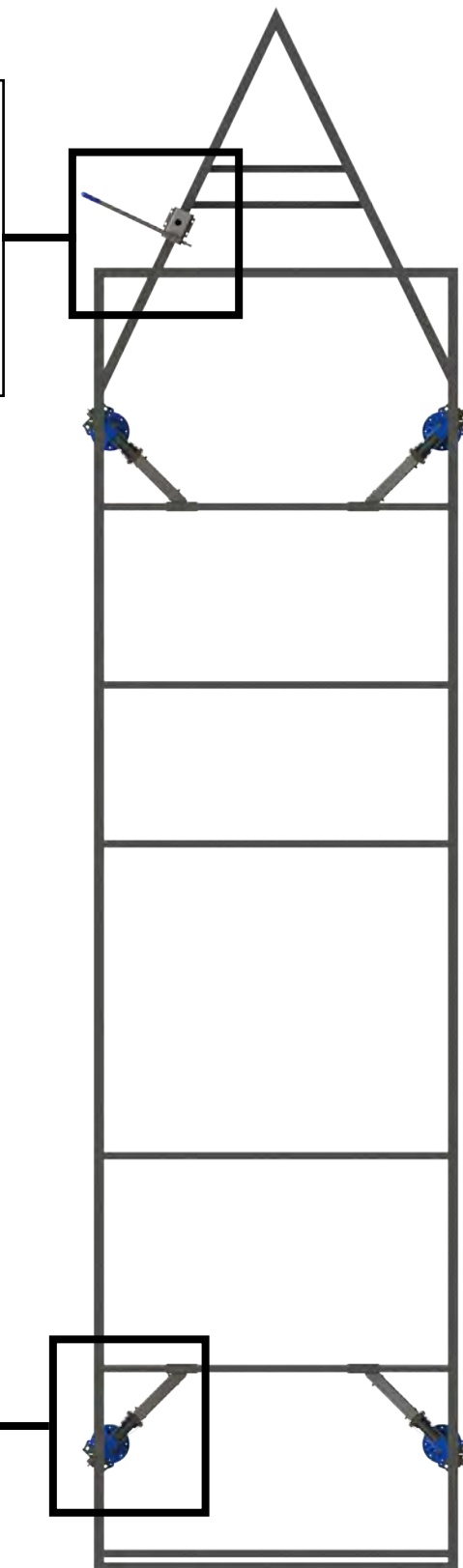
Hose Routing Diagram



X-TREK STABILIZING SYSTEM ASSEMBLY

LEVELING AND STABILIZATION

Hydraulic Pump



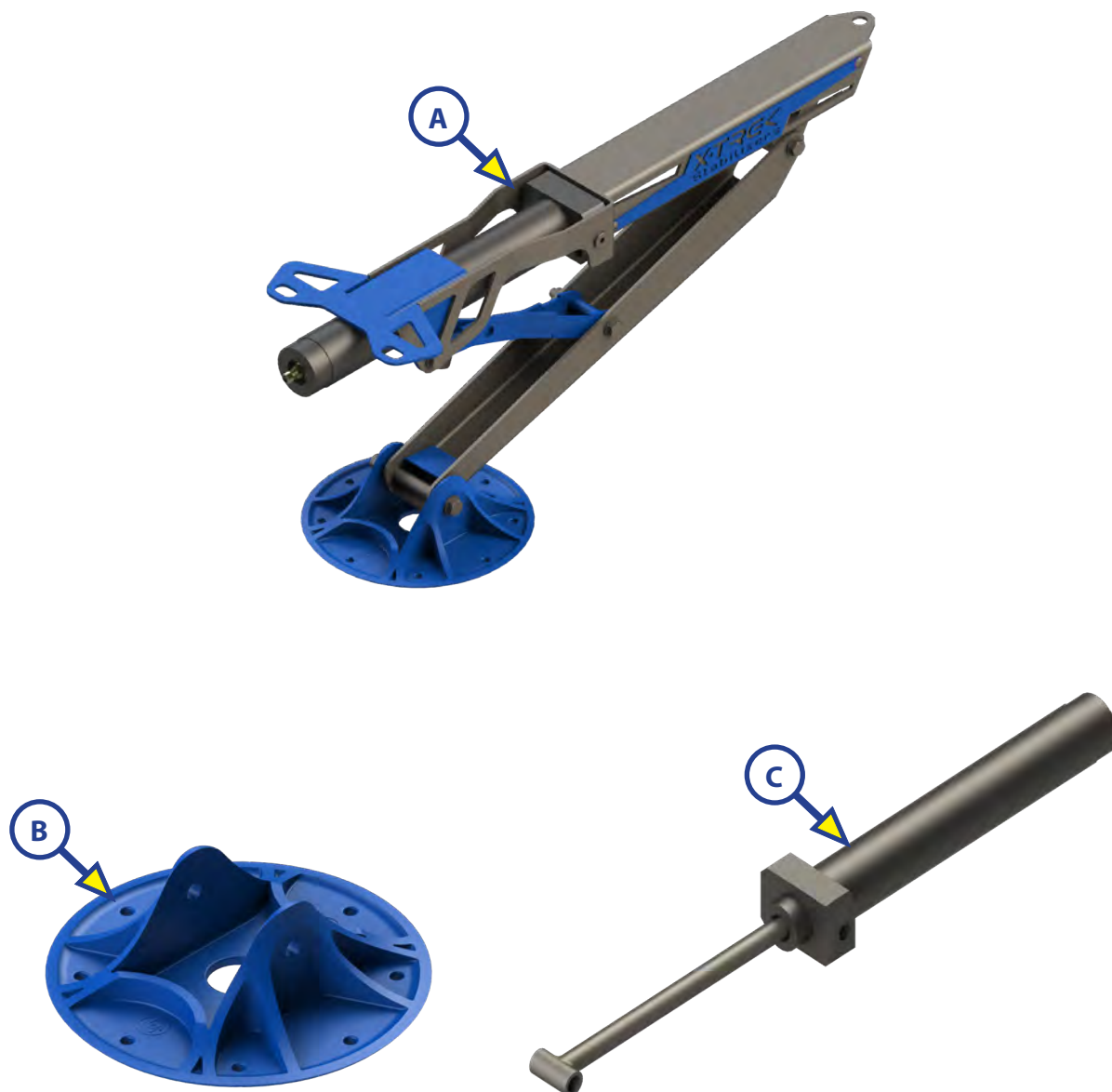
Stabilizer (x4)



X-TREK STABILIZING SYSTEM COMPONENTS

LEVELING AND STABILIZATION

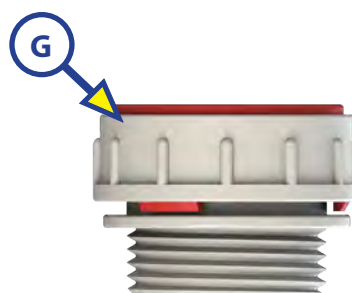
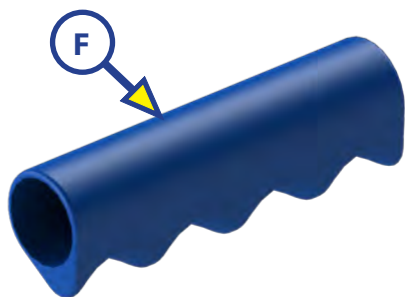
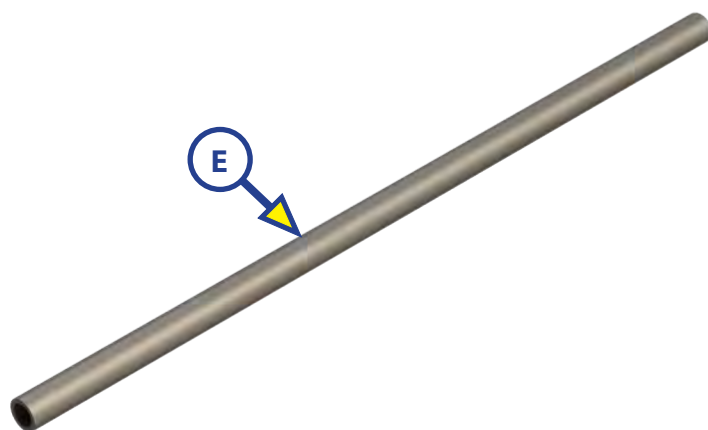
NOTE: Part numbers are shown for identification purposes only. Not all parts are available for individual sale. All parts with a link to the Lippert Store can be purchased.



Callout	Part #	Description
A	760321	Stabilizer
B	727227	Footpad
C	760316	Cylinder

X-TREK STABILIZING SYSTEM COMPONENTS

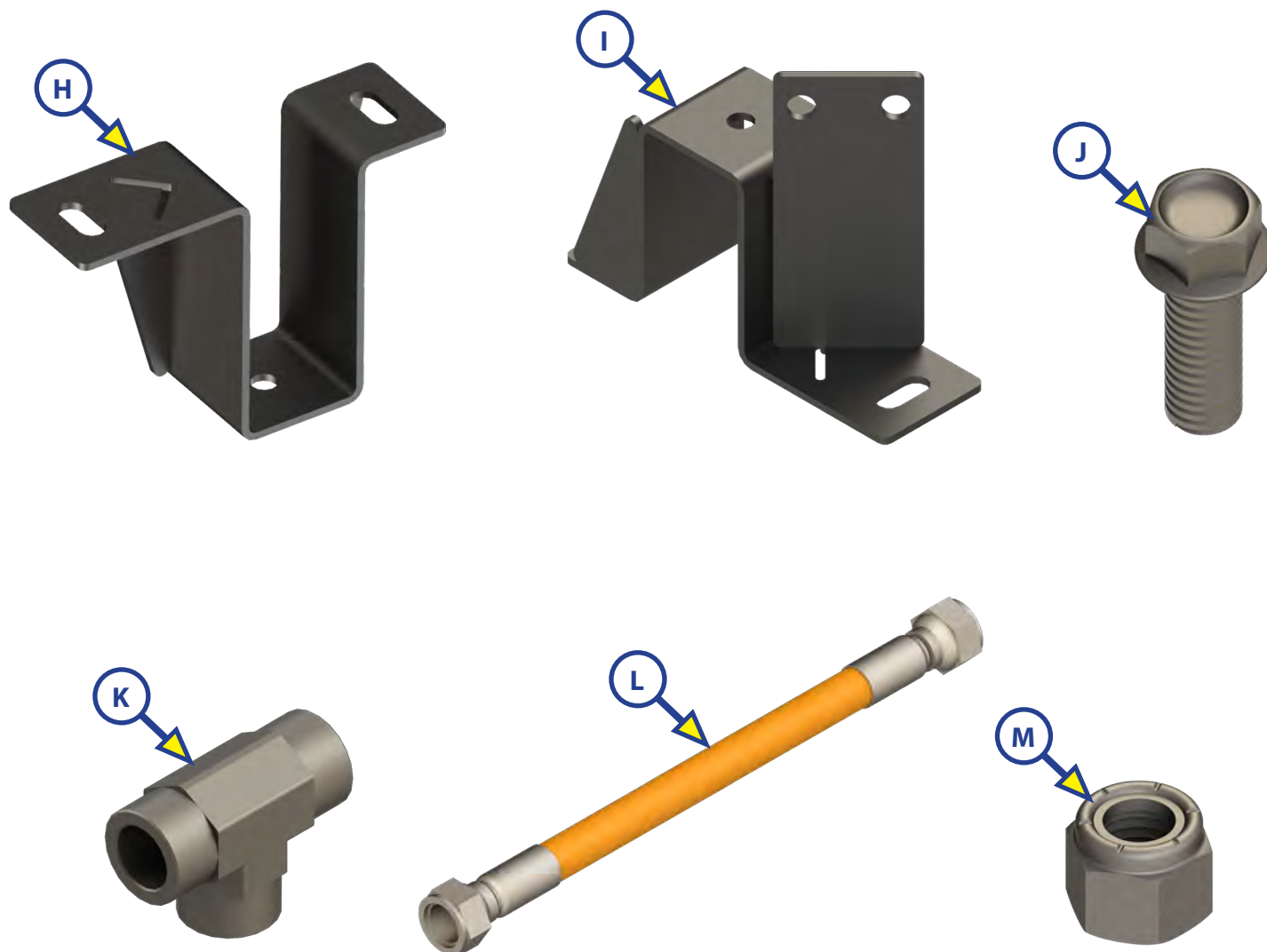
LEVELING AND STABILIZATION



Callout	Part #	Description
D	773250	Pump
E	774278	Handle
F	774287	Handle Grip
G	779059	Cap

X-TREK STABILIZING SYSTEM COMPONENTS

LEVELING AND STABILIZATION



Callout	Part #	Description
H	786720	Stabilizer Bracket (Crossmember)
I	786726	Stabilizer Bracket (Frame Exterior)
J	117919	Bolt, 3/8" - 16 x 1" GR5
K	760319	T-fitting
L	248654	Orange Hydraulic Hose
M	118044	Nylon Locking Nut, 3/8" - 16

Notes

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SWING DOWN STABILIZER OWNER'S MANUAL

LIPPERT
COMPONENTS®

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Retract Swing Down Stabilizer	3
Swing Down Stabilizer Assembly	4
Swing Down Stabilizer Components	5

Introduction

The Swing Down Stabilizer was designed to be an easy-to-install, easy-to-operate stabilizer for lightweight travel trailers. The leg extends a full 6". The Swing Down Stabilizer is infinitely adjustable from its retracted and extended length, which minimizes time and effort to support the trailer. Rectangular, steel tubing gives a support leg with high strength and minimal weight. A 4-inch square steel foot pad completes the sturdy assembly.

Safety

Read and fully understand all instructions before installing or operating this product. Adhere to all safety labels.

WARNING

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

WARNING

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

WARNING

Trailer **MUST** be supported per manufacturer's recommendations before working underneath.
Failure to do so may result in death or serious personal injury.

CAUTION

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

CAUTION

Never exceed the rated trailer capacity, trailer can collapse or tip over.
Soft or spongy areas may allow stabilizer to sink, causing trailer to tip over. Additional support may be necessary.
Do not place blocks under the stabilizer foot for additional ground clearance.
Put the Swing Down Stabilizer in a stored position before moving trailer.

Operation

Extend Swing Down Stabilizer

1. Make sure the trailer is properly supported or raised for clearance while performing the extend operation.
2. Pull the leg of the stabilizer out (Fig. 1F) from the stowed locking slots (Fig. 1A).
3. Swing the leg downward (Fig. 1E) until the tabs engage in the operational locking slots (Fig. 1B).
4. Press on the release lever (Fig. 1C or Fig. 2A). This will allow the drop leg of the telescoping stabilizer to slide down to the ground (Fig. 1D or Fig. 2B).
5. Insert the stabilizer rod (Fig. 2C) end through the hole in the rear of the stabilizer leg.
6. Crank the stabilizer rod downward for the desired leveling position.
7. Store the stabilizer rod in a secure location.

Fig. 1

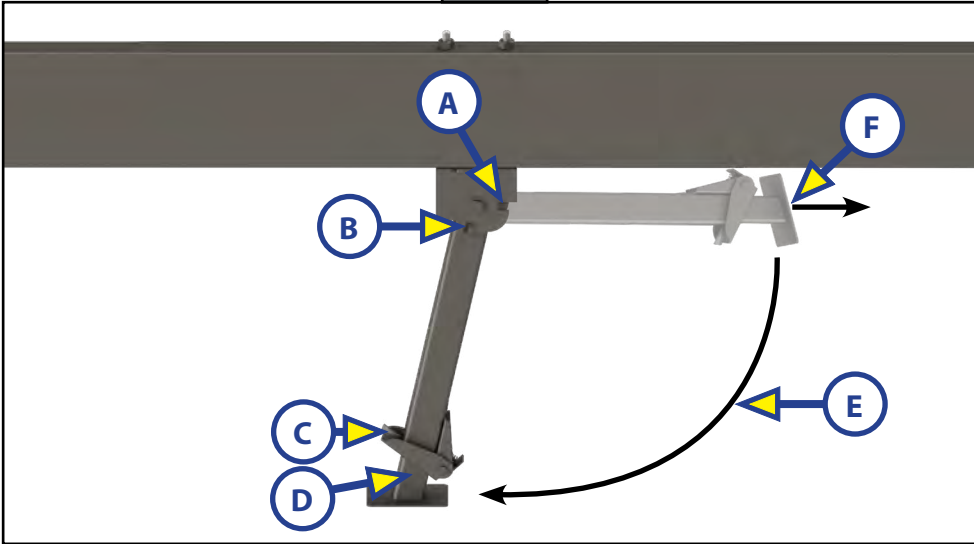
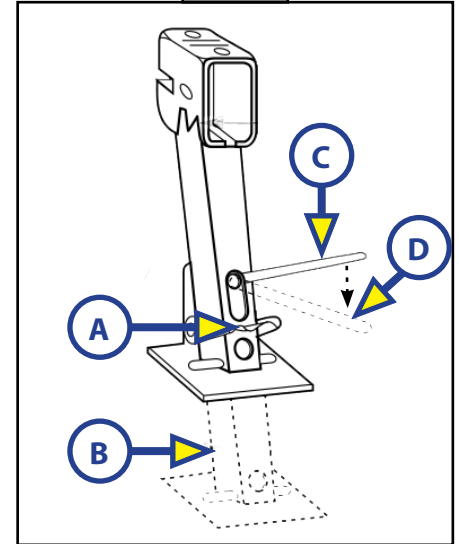


Fig. 2

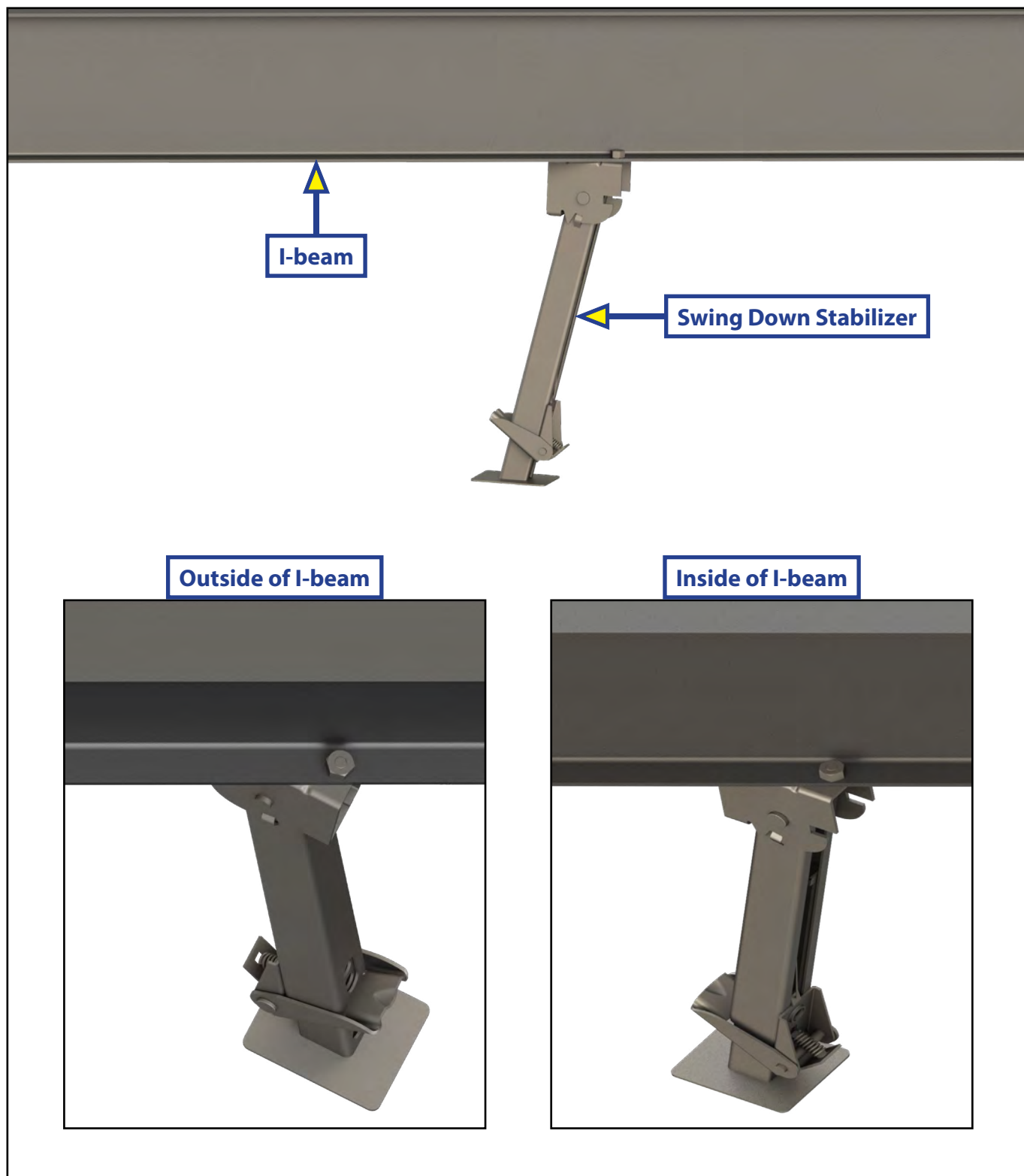


Retract Swing Down Stabilizer

1. Make sure the trailer is properly supported or raised for clearance while performing the retract operation.
2. Press down on the release lever (Fig. 1C) for a quick release, or insert one end of the stabilizer rod (Fig. 2C) in the hole just above the release lever. Press the rod down (Fig. 2D) for a slower release.
3. Slide the drop leg (Fig. 1D or Fig. 2B) up into the main body of the leg.
4. Pull stabilizer towards the ground to disengage the tabs from the operational locking slots (Fig. 1B).
5. Swing the stabilizer leg upward toward the trailer frame rail until the tabs catch inside the stowed locking slots (Fig. 1A).
6. Store the stabilizer rod in a secure location.

SWING DOWN STABILIZER ASSEMBLY

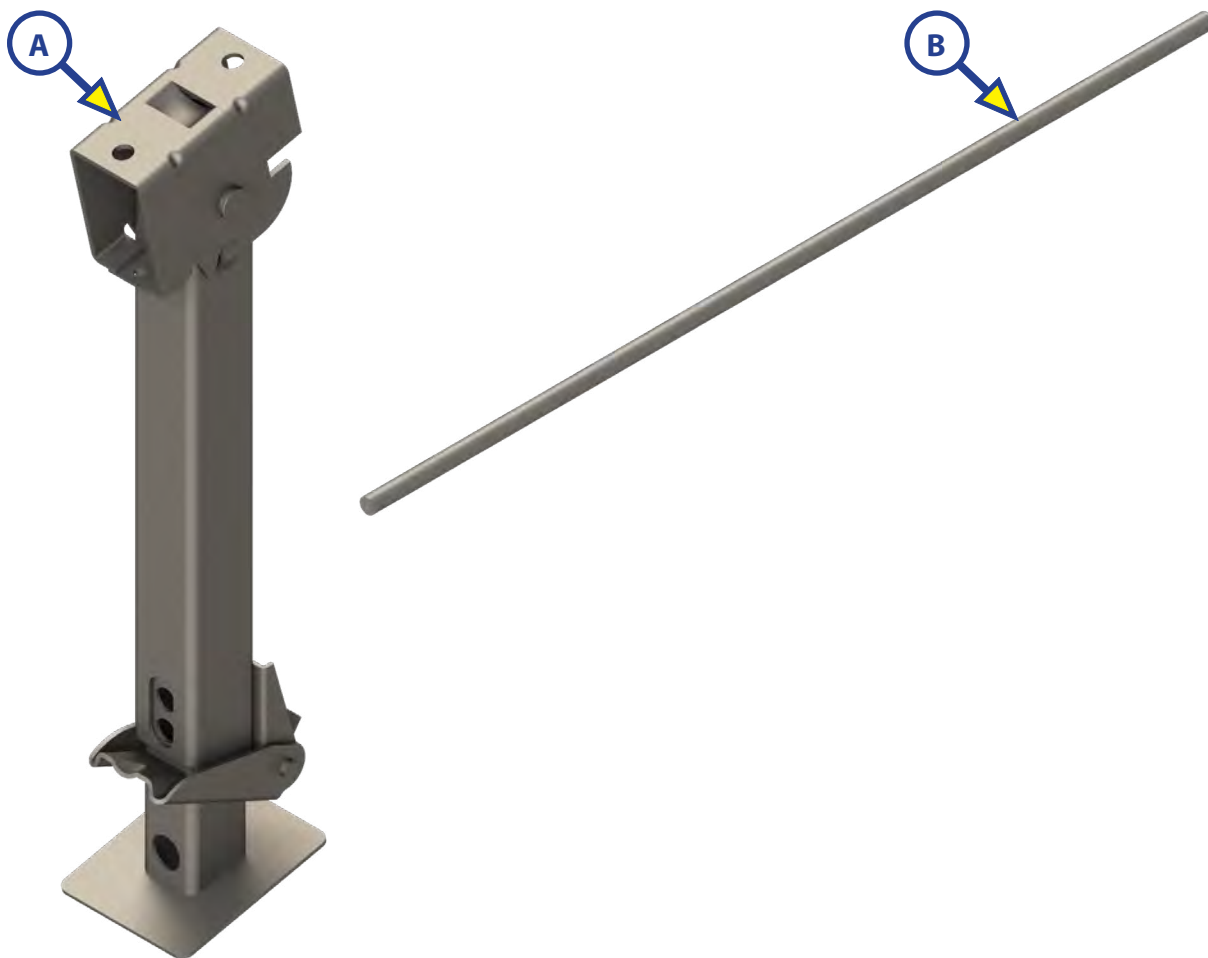
LEVELING AND STABILIZATION



SWING DOWN STABILIZER COMPONENTS

LEVELING AND STABILIZATION

NOTE: Part numbers are shown for identification purposes only. Not all parts are available for individual sale. All parts with a link to the Lippert Store can be purchased.



Callout	Part#	Description
A	770497	Swing Down Stabilizer
B	N/A	Stabilizer Rod



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PSX1TM
(POWER STABILIZING SYSTEM)
OWNER'S MANUAL

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System Description

The PSX1™ is a 12V DC electric motor-driven system. The electric motor drives 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. The standard duty stabilizer is suitable for all trailers.

There are no serviceable parts within the electric motor. If a motor fails, it must be replaced. Disassembly of the motor voids the warranty. Mechanical portions of the PSX1™ are replaceable. Contact Lippert to obtain replacement parts.

For information on the assembly or individual components of this product, please visit:

<https://support.lci1.com/stabilization-support-electric-stabilizer>.

NOTE: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

Safety Information

The PSX1™ is intended for the purpose of stabilizing the trailer after the trailer has been leveled. 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 PSX1™ is designed as a stabilizing component system and should not be used to provide service under the trailer for any reason 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, serious personal injury or severe product or property damage 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

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 PSX1 could result in death, serious personal injury or severe product or property damage.

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 the stabilizer area is clear of pets, people and objects before and during operation of the system. Always keep away from the stabilizer legs when in operation.

⚠ CAUTION

The PSX1 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.

⚠ 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.

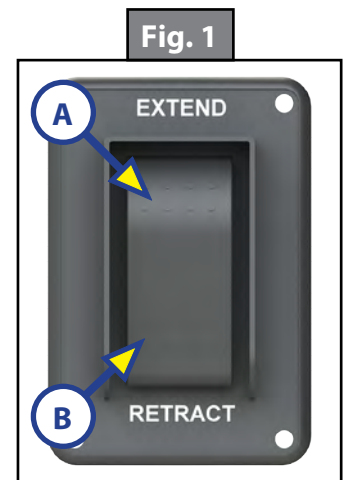
Preparation

The PSX1 is intended for the purpose of stabilizing the trailer after the trailer has been leveled.

1. Make sure the trailer is 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.
3. Press and hold "EXTEND" on the switch (Fig. 1A) 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. 1A) 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. 1B) for the front stabilizer until the stabilizer legs are fully retracted. Then release the switch.
3. Press and hold "RETRACT" on the switch (Fig. 1B) for the rear stabilizer until the stabilizer legs are fully retracted. Then release the switch.

Stabilizing System

By keeping the "EXTEND" switch (Fig. 1A) 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, an in-line auto-reset circuit protection has tripped and will reset within 10 seconds. This is an indication the PSX1™ is not being used as intended and is trying to lift too much weight.

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

Manual Override

The PSX1 comes with a manual override system located on the stabilizer end opposite the electric motor (Fig. 2A).

To manually operate the stabilizer:

1. Disconnect one of the wire leads from the motor to prevent backfeeding the motor.
2. Next, insert the 1/2" diameter manual crank handle (Fig. 3) over the coupler and pin at the end of the stabilizer (Fig. 2A). The slot in the end of the crank handle (Fig. 3) accommodates the pin on the coupler (Fig. 2A) to allow the manual extension/retraction of the stabilizer legs.

⚠ CAUTION

The gears can be stripped if the stabilizer legs are retracted/extended to the fullest extent and the operator continues to rotate the manual override. Do NOT use a power tool to extend or retract stabilizers.

3. Rotate the crank handle counterclockwise to extend or clockwise to retract the stabilizer legs.

Fig. 2

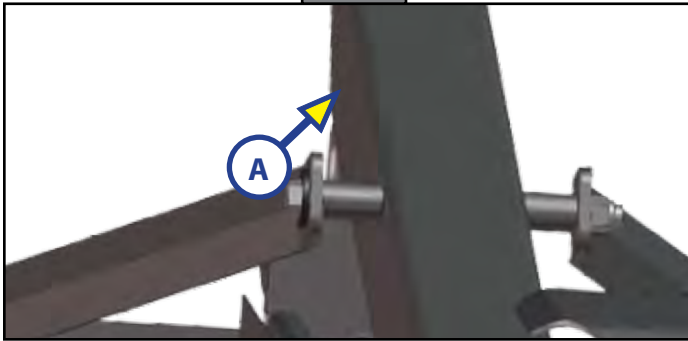
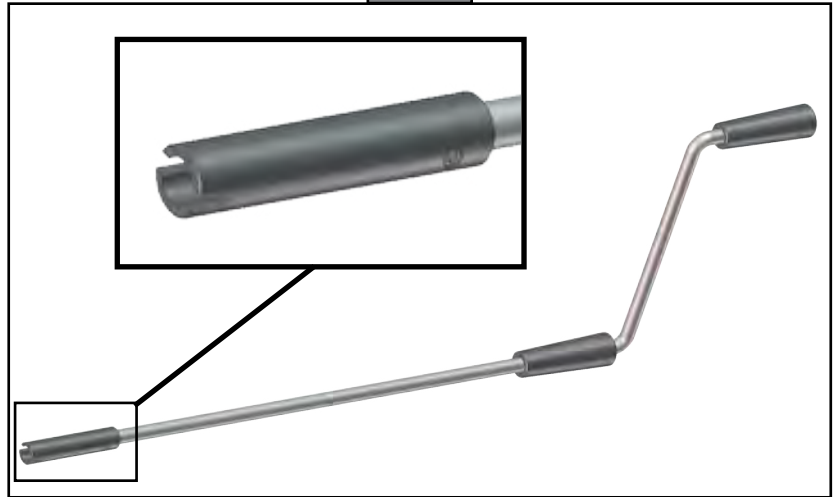


Fig. 3



System Maintenance



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. The ACME screw is precoated with grease. If the screw is cleaned, it may be necessary to add grease to the screw to ensure smooth stabilizer operation.



Operating the stabilizer without grease on the screw could lead to product failure.

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

What Is Happening?	Why?	What Should Be Done?
System shuts off	Too much weight.	Circuit protection will reset in 10 seconds.
Switch does not activate system	Low voltage.	Test battery voltage under load. Charge or replace.
		Use Manual Override.
	Damaged or disconnected wiring.	Check wiring. Repair or replace.
		Use Manual Override.



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PSX2TM
(POWER STABILIZING SYSTEM)
OWNER'S MANUAL



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Safety Information

The PSX2™ (Power Stabilizing System) 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 under the trailer for any reason, including 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 personal injury or severe product or property damage.

WARNING

Lippert 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 Operation 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. The PSX2 has two motors per 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 to obtain replacement parts.

Operation

WARNING

Failure to act in accordance with the following may result in death or serious injury. 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 has been leveled.

WARNING

Never lift the trailer completely off the ground. Lifting the trailer completely off the ground creates an unstable condition that could result in death, serious personal injury or severe product or property damage.

1. Make sure the trailer is parked on solid, level ground.
2. Clear all stabilizer leg landing locations of debris and obstructions. Locations should be free of depressions.
3. When parking the trailer on extremely soft surfaces, utilize load distribution pads under each stabilizer leg.
4. Make sure people and pets are clear of the 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. 1A) 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. 1A) 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. 1B) for the front stabilizer until the stabilizer legs are fully retracted. Then release the switch.
3. Press and hold RETRACT on the switch (Fig. 1B) for the rear stabilizer until the stabilizer legs are fully retracted. Then release the switch.

Stabilizing System

By pressing and holding the EXTEND switch (Fig. 1A) for one to two seconds after the stabilizer 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.

Manual Override

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

⚠ 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.

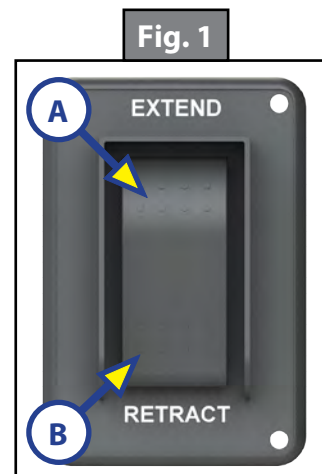
NOTE: Use a ratchet with a $\frac{5}{16}$ " socket to manually override the system. Do not use a power tool to perform any of the override procedures since this may damage the motor.

To manually operate the stabilizers:

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

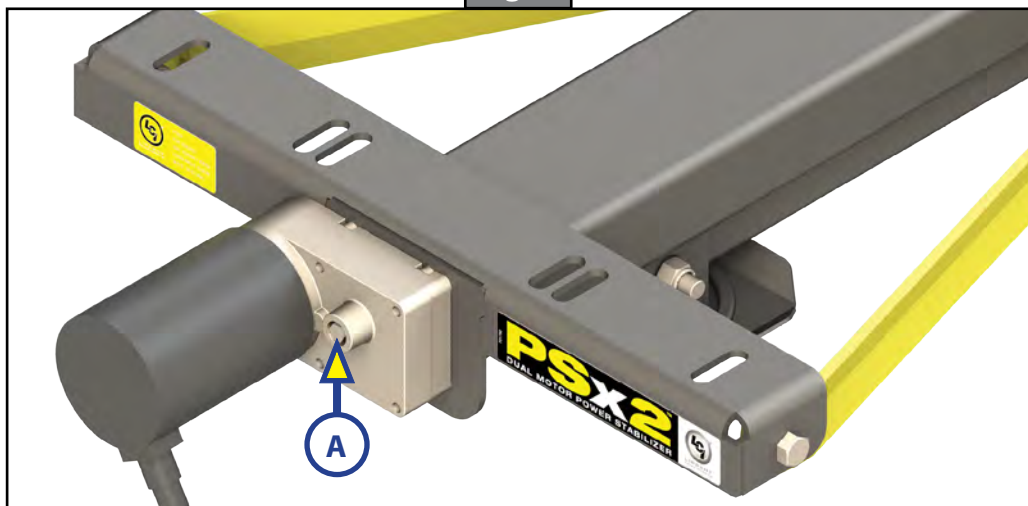
NOTE: The manual override procedure must be performed individually on each motor of PSX2 in order to manually extend or retract the legs.

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 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.

Fig. 2



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. The ACME screw is pre-coated with grease. If the screw is cleaned, it may be necessary to add grease to the screw to ensure smooth stabilizer operation.

Electrical Maintenance

For optimum performance, the system requires full battery current and voltage. Maintain battery at full capacity. Also, 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

What Is Happening?	Why?	What Should Be Done?
Legs out of sync	Uneven ground.	Fully retract both stabilizer legs to synchronize.
	Stabilizer legs extended unevenly.	
System shuts off	Too much weight.	Internal circuit protection will reset in 10 seconds.
Switch does not activate system	Low voltage.	Test battery voltage under load. Charge or replace.
	Damaged or disconnected wiring.	Check wiring. Repair or replace.



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QUICK DROP STABILIZER OWNER'S MANUAL



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System Description

The Quick Drop Stabilizer 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.

Contact Lippert to obtain replacement parts.

Additional information about this product can be obtained from [lci1.com/support](https://support.lci1.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

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For information on the assembly or individual components of this product, please visit:

<https://support.lci1.com/stabilization>

Note: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

Safety Information

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.

Quick Drop Stabilizers are intended for the purpose of stabilizing the trailer after the trailer has been leveled. 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. Quick Drop Stabilizers are 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, serious personal injury or severe product or property damage 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

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

WARNING

Lippert 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 Quick Drop Stabilizers could result in death, serious personal injury or severe product or property damage.

Preparation

Quick Drop Stabilizers are intended for the purpose of stabilizing the trailer after the trailer has been leveled.

CAUTION

Quick Drop Stabilizers are to be used for stabilizing the trailer, not leveling the trailer. The stabilizer legs should never be extended beyond initial contact with the ground.

CAUTION

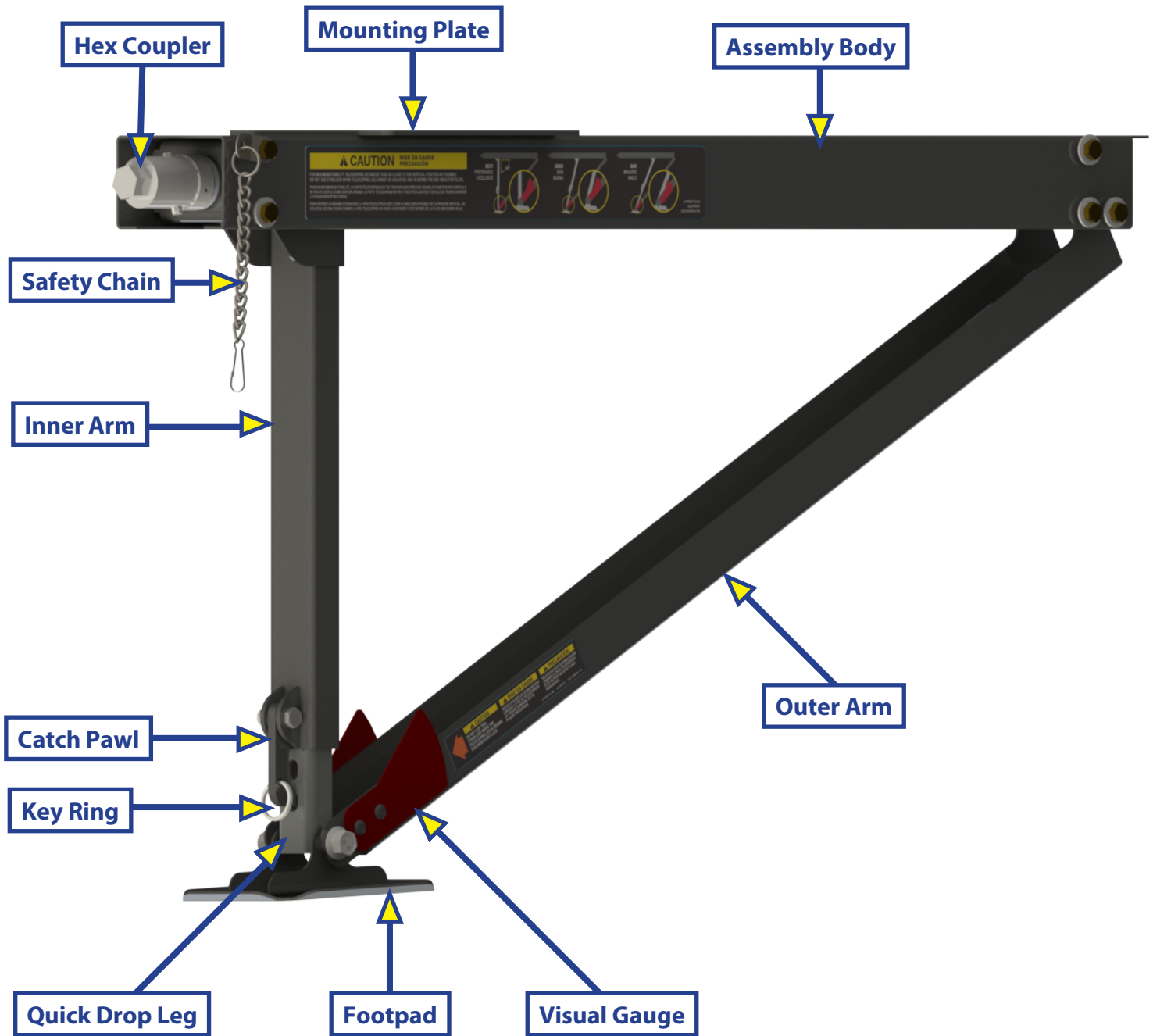
Moving parts can pinch, crush or cut. Keep clear and use caution.

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. Make sure the trailer is 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. The Quick Drop Stabilizers require a minimum of 16" ground clearance from ground to mounting plate to operate properly and provide optimal stabilization.
5. People and pets should be clear of trailer while operating the stabilizers.

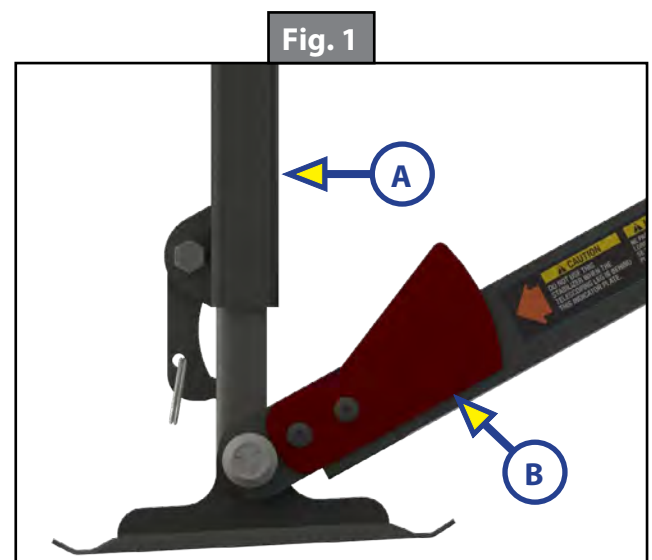
Component Identification



Proper Stabilizer Position

Using the Visual Gauge

It is important that the Quick Drop leg be positioned so that the trailer weight is evenly distributed by the stabilizer. The visual gauge (Fig. 1B) is referenced in the following instructions to determine that the Quick Drop leg has sufficient angle to adequately stabilize the trailer.



⚠ 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 the stabilizer area is clear of pets, people and objects before and during operation of the system. Always keep hands and fingers away from the stabilizer legs moving parts when in operation.

As the Quick Drop Stabilizer is extending, monitor the visual gauge as the outer arm drops and the inner arm moves across the assembly body toward the hex coupler. The arms will need to be open enough for the inner arm and quick drop leg (Fig. 1A) to move past the visual gauge (Fig. 1B).

The following table shows examples of best practices for optimal use of the Quick Drop Stabilizer.

Note: The black line represents the ground in relation to the Quick Drop Stabilizer.

BEST	Optimal Stabilization is achieved when: • The inner arm and Quick Drop leg clear the visual gauge, • AND the inner arm and assembly body are almost at a 90 degree angle.	
GOOD	Adequate Stabilization is achieved when: • The angle of the inner arm and assembly body are greater than 90 degrees, • BUT the inner arm and Quick Drop leg still clear the visual gauge. • The Good position can stabilize 500 lbs. per Quick Drop stabilizer leg.	
BAD	Stabilization is inadequate when: • The inner arm and Quick Drop leg ARE NOT clear of the visual gauge. • The angle of the inner arm and assembly body is too great to ensure that the trailer weight can be evenly distributed.	

⚠ CAUTION

Damage to components is possible if the stabilizer legs are extended/retracted to the fullest extent and the operator continues to rotate the crank handle. Do NOT use an impact driver to extend or retract stabilizers.

Operation

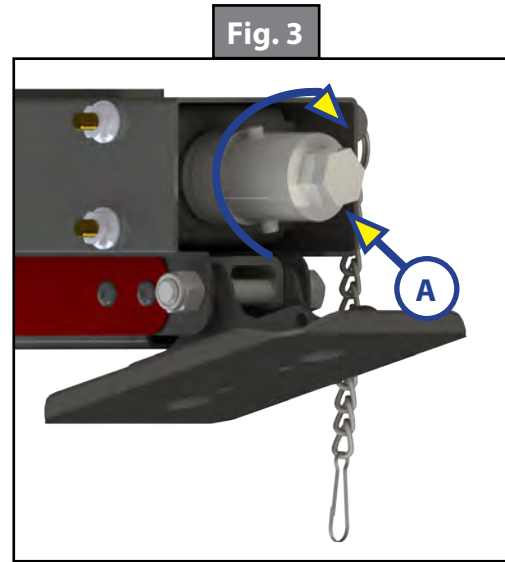
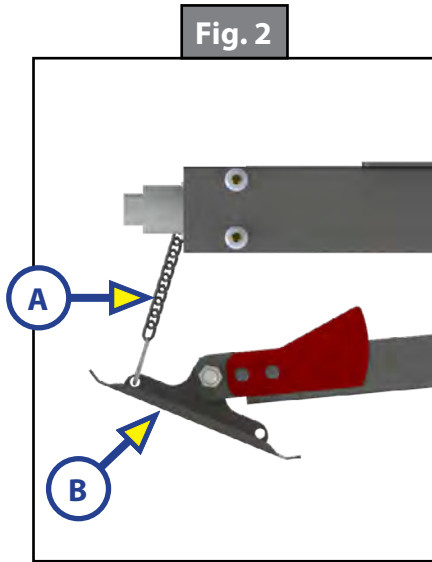
Resources Required

- 3/4" socket
- Ratchet (optional)
- Cordless drill (optional)
- Appropriate drive bits (optional)

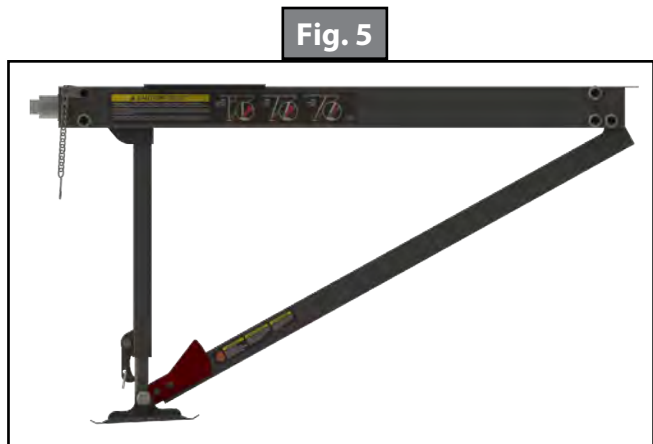
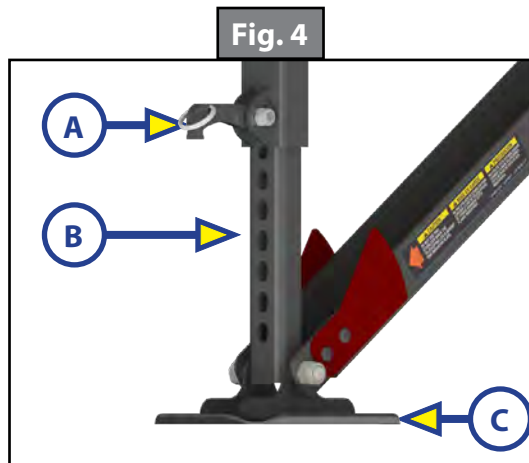
Extending Stabilizers

1. Disconnect the safety chain (Fig. 2A) from the footpad (Fig. 2B).
2. Using a 3/4" socket on a ratchet or cordless drill, turn the hex coupler (Fig. 3A) clockwise to begin lowering the foot pad towards the ground.

Note: Use of an impact drill is not recommended and will cause damage to the mechanism.



3. After the footpad has extended to a point, it will be necessary to pull the catch pawl (Fig. 4A) and lower the Quick Drop Leg (Fig. 4B) so that the foot pad (Fig. 4C) is positioned as close to the ground as possible.



4. Continue to turn the hex coupler clockwise until the footpad touches the ground and resistance is felt.

Note: It may take a few attempts of adjusting the Quick Drop Leg and turning the hex coupler to achieve the optimal stabilization (Fig. 5).

5. Repeat process for other stabilizer legs.

Note: Upon completion, the inner arm should not have moved beyond a 90 degree angle perpendicular to the assembly body. Doing so may cause the mechanism to bind and cause damage.

⚠ 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. Using a 3/4" socket on a ratchet or cordless drill, turn the hex coupler (Fig. 6A) counterclockwise to begin raising the foot pad off the ground.

Note: Use of an impact drill is not recommended and will cause damage to the mechanism.

Fig. 6



⚠ WARNING

Quick retracting stabilizers can pinch, crush and cut causing severe personal injury. Keep clear and use caution when operating stabilizers to avoid personal injury.

Note: It is recommended to stop and pull the catch pawl (Fig. 7A) and completely retract the Quick Drop leg (Fig. 7B) into the inner arm for the next use. Finish turning the hex coupler counterclockwise to completely retract. The Quick Drop Stabilizer, however, can be completely retracted using 3/4" socket on a ratchet or cordless drill and no additional user guidance.

Fig. 7

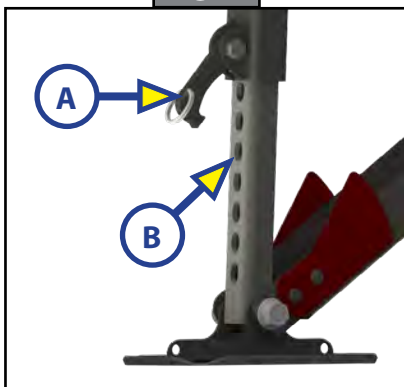
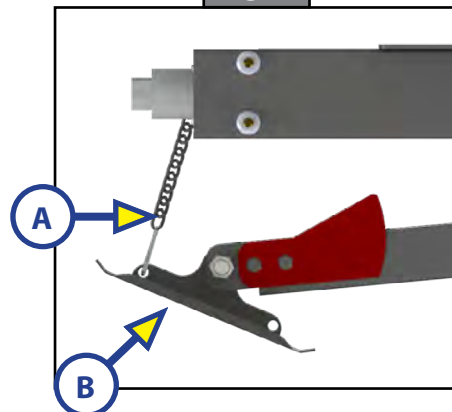


Fig. 8



2. Loop the spring hook (Fig. 8A) into one of the four holes on the footpad (Fig. 8B).
3. Repeat process for other stabilizer legs.

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

⚠ CAUTION

Do not over tighten the hex coupler while retracting the Quick Drop Stabilizer.

System Maintenance



Failure to act in accordance with the following may result in death, serious personal injury or severe product or property damage.

Maintenance

It is recommended that the moving parts be kept clean and may be washed with mild soap and water. The ACME screw is pre-coated with lubricant. If the screw is cleaned, it may be necessary to add any type of lithium-based lubricant to the screw to ensure smooth stabilizer operation.



Operating the stabilizer without grease on the screw could lead to product failure.

Troubleshooting

What Is Happening?	Why?	What Should Be Done?
Hex coupler is difficult to turn.	Debris in mechanism.	Remove debris and clean mechanism with mild soap and water. Apply a light coating of lithium-based lubricant to the acme screw and pivot points.

Notes

[illegible]



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