



**LEVEL-UP[®] 5TH WHEEL
OWNER'S MANUAL**

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

TABLE OF CONTENTS

Introduction	2
Product Features	3
Component Description	3
Safety	3
Preparation	4
Operation	5
Zero Point Calibration	5
Basic Landing Gear Operation	5
Unhitching Instructions	6
Auto Level Sequence	6
Hitch Recognition	6
Zero Point Calibration	7
Manual Override	8
4-Point Leveling	8
6-Point Leveling	8
Troubleshooting	10
Error Display In LCD Screen	10
Maintenance	11
Fluid Recommendation	11
4-Point Wiring Diagram	12
4-Point Hydraulic Diagram	13
6-Point Wiring Diagram	14
6-Point Hydraulic Diagram	15
Level-Up® Towable 5th Wheel 4-Point Assembly	16
Level-Up® Towable 5th Wheel 6-Point Assembly	17
Level-Up® Towable Components	18-23

Introduction

This manual is for 5th Wheel applications only.

Level-Up® is an Automatic Leveling system that comes installed in either a 4-point or 6-point configuration. See Plumbing Diagrams for additional information.

The Level-Up hydraulic system is equipped with 14K aluminum landing gear and 8K aluminum leveling jacks. The leveling jacks in the Level-Up® system work in pairs. 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 5th Wheel. Mechanical portions of the system are replaceable. Contact Lippert Components, Inc. to obtain replacement parts.

See Wiring Diagram for information pertaining to the electrical connections of this leveling system.

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

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Google Play™ and Android™ are trademarks of Google Inc.

Product Features

- One-touch automatic leveling
- Lightning-fast hydraulics
- Lightweight aluminum jacks
- Wireless remote options available

Component Description

1. Jacks
 - A. Rated at a lifting capacity for the trailer.
 - B. Standard 9-inch diameter (63.5 square inch) foot pad on a ball swivel for maximum surface contact on all surfaces.
 - C. Optional 12-inch diameter - (113 square inch) foot pad also available.
 - D. Operational Powered from a 12V DC Motor/Pump assembly.
2. Motor/Pump Assembly
 - A. 12V DC motor
 - B. Hydraulic fluid reservoir tank
 - C. Control valve manifold
 - D. Solenoid valve
3. System Controls
 - A. Touch pad can be operated in manual mode or fully automatic mode.
 - B. Manual override method exists in the event of electrical or system failure.

Safety

WARNING

The “WARNING” symbol above is a sign that a safety risk is involved and may cause death, serious personal injury and/or severe product or property damage if not safely adhered to and within the parameters set forth in this manual.

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

The Level-Up LCD 5th Wheel Leveling System is designed as a leveling system only and should not be used for any reason to provide service under the trailer, e.g. changing tires or servicing the leveling system. Lippert Components Inc. recommends trained professionals be employed to change the tires or perform other services on the 5th Wheel.

WARNING

The 5th Wheel MUST be supported per manufacturer's recommendations before working underneath. Any attempts to change the tires, or perform other service, while 5th Wheel is supported solely by the LCI Level-Up® with Automatic Leveling system could result in death or serious personal injury, severe product and/or property damage.

Make sure the 5th Wheel is properly supported with jack stands, or other adequate devices, under the frame of the 5th Wheel prior to performing any service or repair procedure. Never support the 5th Wheel by the axles or suspension. Never allow the tires to leave the ground when lifting the 5th Wheel—this creates an unstable and unsafe condition.

Make sure to keep hands and other body parts clear of fluid leaks. Oil leaks in the Lippert Leveling System may be under high pressure and can cause serious skin-penetrating injuries.

⚠ WARNING

A fluid leak within a highly pressurized hydraulic system can cause serious skin-penetrating injuries. Wear appropriate Personal Protective Equipment (PPE), such as long sleeves, gloves, protective eyewear or a full face shield, when performing service or maintenance to the 5th Wheel.

⚠ 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

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

Make sure all persons, pets and property are clear of the 5th Wheel while LCI Level-Up Automatic Leveling system is in operation.

Preparation

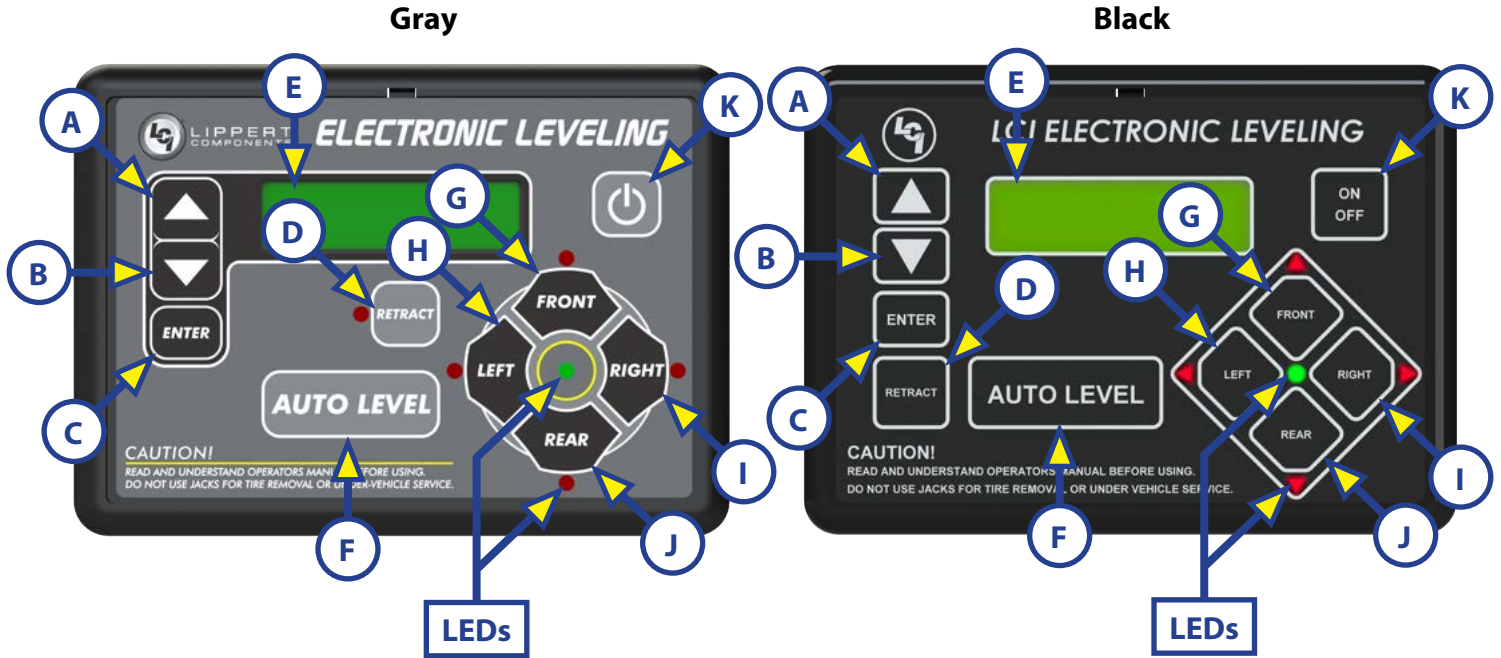
- 1.** Make sure the 5th Wheel is parked on a reasonably level surface.
- 2.** Clear all jack landing locations of debris and obstructions. Locations should also be free of depressions.
- 3.** When parking the 5th Wheel on extremely soft surfaces, utilize load distribution pads under each jack.
- 4.** Make sure the battery of the 5th Wheel is fully charged or that the 5th Wheel is plugged into shore power prior to attempting to operate the system.

NOTE: Level-Up requires a minimum of 12V DC from the battery for proper operation.

Operation

Use the LCD touchpad (Fig. 1) to operate the Level-Up hydraulic system.

Fig. 1



LCD Touchpad Features	
Callout	Description
A	Up Arrow - Scrolls up through the menu on LCD.
B	Down Arrow - Scrolls down through the menu on LCD.
C	ENTER - Activates modes and procedures indicated on LCD.
D	RETRACT - Places leveling system into retract mode while in manual mode only.
E	LCD Display - Displays procedures and results.
F	AUTO LEVEL - Places leveling system into auto level mode.
G	FRONT Button - Activates both front jacks.
H	LEFT Button - Activates left leveling jack(s) in manual mode.
I	RIGHT Button - Activates right leveling jack(s) in manual mode.
J	REAR Button - Activates leveling jacks in manual mode.
K	Power Button (ON/OFF) - Turns leveling system on and off.

Zero Point Calibration

The “Zero Point” is the programmed point in which the 5th Wheel will return to whenever the auto-level feature is used. The Zero Point is preset at the factory.

Basic Landing Gear Operation

1. Landing Gear Jacks
 - A. Landing gear jacks can be operated any time the system is on, but **NOT** in AUTO MODE. Press the FRONT Button (Fig. 1G), so that both the front, or landing gear, jacks can be extended.
 - B. If the touchpad is put in the RETRACT mode, indicated by the illuminated LED next to its button (Fig. 1D), the front jacks can be retracted together by pressing the FRONT Button.

2. Level-Up Jacks

- C. The Level-Up jacks operate when "AUTO MODE" is activated or the touchpad is in "MANUAL MODE." Once the system is in "MANUAL MODE," press the REAR Button (Fig. 1J) to extend all Level-Up jacks at the same time.

NOTE: Manual and Auto modes can be selected through the LCD menu by using the Up and Down Arrow buttons (Figs. 1A and 1B), then press ENTER (Fig. 1C) to select the desired mode

- D. Press the LEFT or RIGHT buttons (Fig. 1H or 1I) to operate Level-Up jacks on the left (roadside) or right (curbside) side of the 5th Wheel, respectively.

Unhitching Instructions

1. Press Power Button (Fig. 1K) (ON) to turn system on. LCD screen (Fig. 1E) lights up.
2. LCD screen will read "NOT LEVEL Jacks: UP."

NOTE: Indicator (LED) lights (Fig. 1) may come on, indicating the current disposition of the 5th Wheel.

3. Press FRONT Button (Fig. 1G) to extend landing gear jacks and lift front of 5th Wheel to take the weight of the 5th Wheel off of the hitch.
4. Uncouple the 5th Wheel connection from the tow vehicle.
5. Pull tow vehicle away and park it at a safe distance.

Auto Level Sequence

Prior to unhitching from the tow vehicle, make sure the 5th Wheel is parked on a level surface and the tires are chocked.

1. After unhitching from tow vehicle, press AUTO LEVEL (Fig. 1F).

NOTE: Pressing any button during an auto level sequence will abort the auto leveling cycle.

NOTE: In order for the hitch recognition feature to function, the auto level sequence **MUST** be started with the front of the 5th Wheel above level.

2. Front landing gear will retract, lowering the front of the 5th Wheel below level, stopping, then lifting the front end to level the 5th Wheel front-to-back.
3. The left side leveling jack extends and raises the roadside of the 5th Wheel.
4. The right side leveling jack extends and raises the curbside of the 5th Wheel, beginning side-to-side leveling.
5. The front landing gear extends to complete the leveling cycle.
6. Additional left-to-right or front-to-back leveling may occur, if the controller deems it necessary.

NOTE: If the Auto Level sequence does not happen as stated above, check to ensure proper manual function in all zones.

Hitch Recognition

1. Turn on touchpad.
2. Press the LEFT and RIGHT buttons (Fig. 1H and 1I) simultaneously.
3. The front of the 5th Wheel will raise to the height where the auto level sequence was started.

NOTE: If the auto level sequence was started with the front of the 5th Wheel in a below level condition, the Hitch Recognition will not function and the LCD screen will read "Feature Disabled." For the hitch recognition feature to function, the auto level sequence **MUST** be started with the front of the 5th Wheel above level.

4. Connect the tow vehicle to the 5th Wheel. Make sure hitch is connected and locked.
5. Press Up Arrow button (Fig. 1A) until LCD screen reads "AUTO RETRACT."
6. Press ENTER button (Fig. 1C). System will immediately retract all jacks and landing gear.

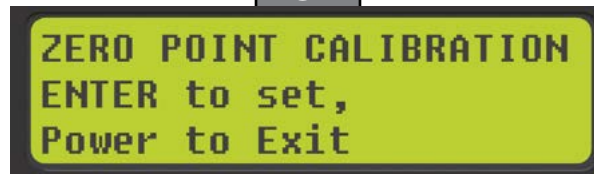
Zero Point Calibration

The "Zero Point" is the programmed point in which the 5th Wheel will return to whenever the auto-level feature is used. The Zero Point is preset at the factory and should never have to be reset. However, if necessary, Zero Point can be reset.

NOTE: The Zero Point must be programmed prior to using the auto-level feature to ensure the proper operation of the system. Prior to starting the Zero Point Calibration procedure, check all connections on the controller, valve coils, landing gear, leveling jacks and touchpad.

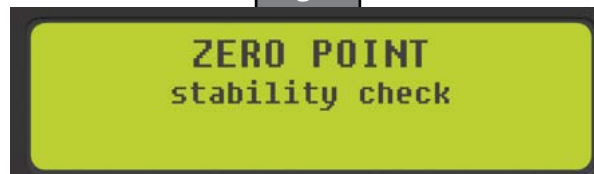
1. Manually run all leveling jacks and landing gear to level the 5th Wheel.
 - A. Manual leveling is best achieved by placing a level in the center of the 5th Wheel and leveling it both front-to-back, then side-to-side.
 - B. See Basic Landing Gear Operation section for instructions on how to manually operate the system.
2. After the 5th Wheel has been leveled, turn off the touchpad.
3. With the touchpad off, press and release the FRONT Button (Fig. 1G) ten times, then press and release the REAR Button (Fig. 1J) ten times.
4. The touchpad will flash and beep, then the LCD screen will read "ZERO POINT CALIBRATION ENTER to set, Power to Exit" (Fig. 2).

Fig. 2



5. To set the current position as the zero point, press the ENTER button (Fig. 1C).
 - A. The LCD screen will read "Zero Point stability check" (Fig. 3).

Fig. 3



- B. LCD screen will read "ZERO POINT set successfully" after the process has been completed (Fig. 4).

Fig. 4



- C. The system will set this point as its level state and the touchpad will turn off.

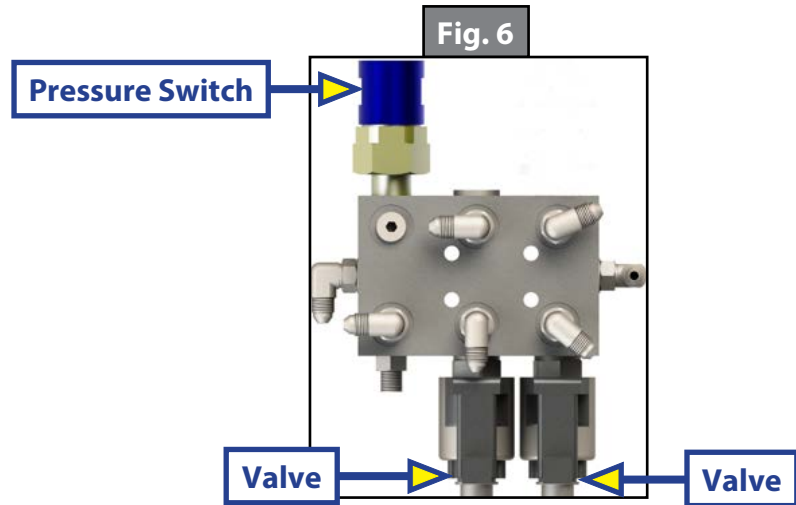
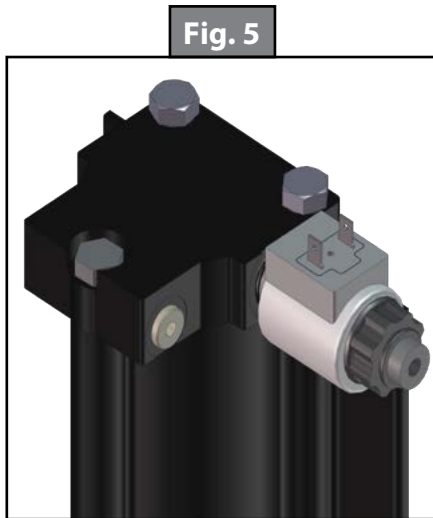
Manual Override

The LCI Level-Up® LCD 5th Wheel Leveling system can be manually operated with an electric drill. In the event of electrical or system failure, this manual override method of extending and retracting the jacks can be used.

NOTE: Unhook the hydraulic power unit motor from the main power source (battery or shore power) prior to attempting the manual override procedure.

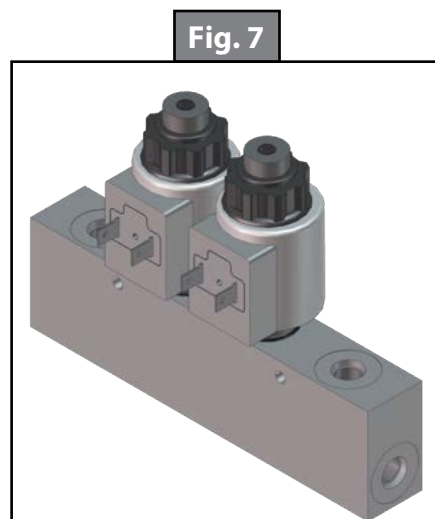
4-Point Leveling

1. Locate the valves that are paired with the landing gear or leveling jack that needs to be manually overridden.
 - A. Landing Gear - Valve located on the lead landing gear (Fig. 5).
 - B. Leveling Jacks - Valves located on the 4 Bank Remote Manifold (Fig. 6).



6-Point Leveling

1. Locate the valves that are paired with the landing gear or leveling jack to be manually overridden.
 - A. Landing Gear - Valve located on the lead landing gear (Fig. 5).
 - B. Leveling Jacks - Valve located on valve block (Fig. 7).



NOTE: Steps 2-5 are identical for both 4-Point and 6-Point Leveling Systems.

2. Using a 5/32" hex wrench, open the valve by turning the manual override set screw clockwise (Fig. 8).
3. Remove protective label (Fig. 9A) from power unit motor to reveal the manual override coupler.
4. Using an electric drill with a 1/4" hex bit, insert the hex bit into the manual override coupler (Fig. 10) to manually operate the system.
 - A. Run the drill forward (clockwise) (Fig. 10A) to retract the landing gear or leveling jacks.
 - B. Run the drill in reverse (counterclockwise) (Fig. 10B) to extend the landing gear or leveling jacks.

Fig. 8

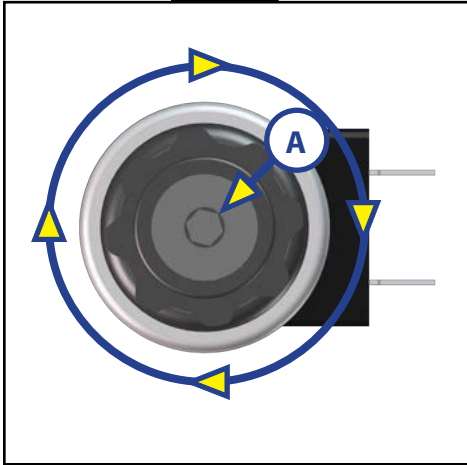


Fig. 9

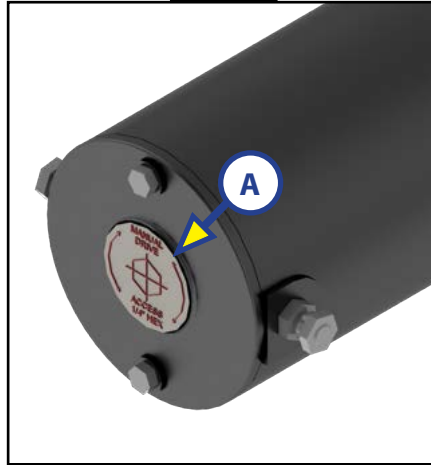
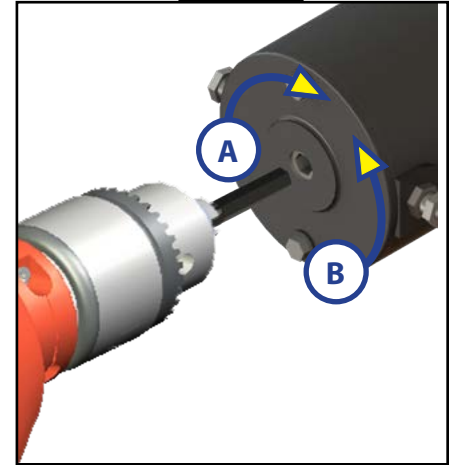
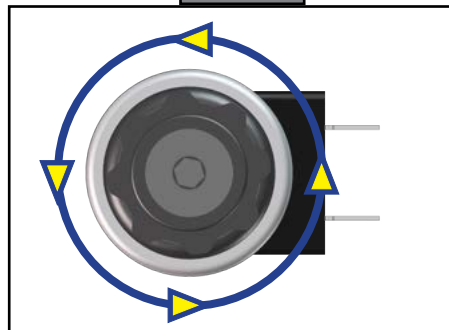


Fig. 10



5. Make sure to turn the manual override set screw on the valve back to the counterclockwise position (Fig. 11) after extending or retracting the landing gear or leveling jacks.

Fig. 11



Troubleshooting

Error Display In LCD Screen

To clear an Error Code, repair, correct the issue or press ENTER button (Fig. 1C). If the error remains, the error message will reappear.

Error Codes		
LCD Message	What's Happening?	What Should Be Done?
"EXCESS ANGLE"	Controller not properly secured.	Check and secure controller placement.
	Excessive angle reached during auto operation.	Relocate the 5th Wheel.
"EXCESSIVE ANGLE"	Controller not properly secured.	Check and secure controller placement.
	Excessive angle reached during manual operation.	Relocate the 5th Wheel.
"FEATURE DISABLED"	Front of 5th Wheel below level when starting auto-level process (only when trying to initiate Hitch Recognition).	Push the FRONT Button to raise the 5th Wheel up to hitch height and connect to tow vehicle.
	Touchpad power not cycled between consecutive leveling operations.	Turn touchpad off and then back on to reset the system.
	Zero Point not set.	Set Zero Point.
"LOW VOLTAGE"	Battery voltage dropped below 9.5V.	Check wiring - repair or replace.
		Test battery voltage under load - charge or replace.
"OUT OF STROKE"	Jack has reached maximum stroke length and is unable to lift.	Check disposition of jacks and/or relocate the 5th Wheel.
"EXTERNAL SENSOR"	Bad connection or wiring from the controller to the sensor.	Replace or repair connection to rear remote sensor.
"JACK TIME OUT"	Time limit exceeded for the requested auto operation.	Check disposition of jacks.
"AUTO LEVEL FAIL"	Unable to auto-level due uneven ground.	Check disposition of jacks and/or relocate the 5th Wheel.
	Unable to auto-level due to Zero Point being set incorrectly.	Reset zero point.
"BAD CALIBRATION"	Sensor calibration values are out of range.	Replace controller.
"INTERNAL SENSOR"	Internal sensor problem.	Replace controller.
PANIC STOP "FUNCTION ABORTED"	The User pressed a button on the touchpad during an automatic operation.	Restart automatic operation and then refrain from pressing any buttons on the touchpad.

Maintenance

1. Remove dirt and road debris from leveling jacks and landing gear and stabilizer struts (if equipped) 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 5th Wheel is located in a salty air environment, it is recommended to spray the jack tubes every 4 - 6 weeks.
3. Each month, check that the fluid level is within 1/4" of the fill spout lip while leveling jacks and slide-outs are fully retracted.

NOTE: Always fill the reservoir with the leveling jacks and slide-outs fully retracted. Filling the reservoir when leveling jacks and slide-outs are extended will cause the reservoir to overflow into its compartment when the leveling jacks and slide-outs are retracted.

4. Inspect and clean all of the 5th Wheel's power and electrical connections prior to the first use of the 5th Wheel at the start of the traveling season and prior to storing the 5th Wheel. If corrosion is evident, clean all corrosion with a wire brush, then apply dielectric grease to the connections.
5. Make sure to turn the manual override set screw on the valve back to the counterclockwise position after extending or retracting the landing gear or leveling jacks.

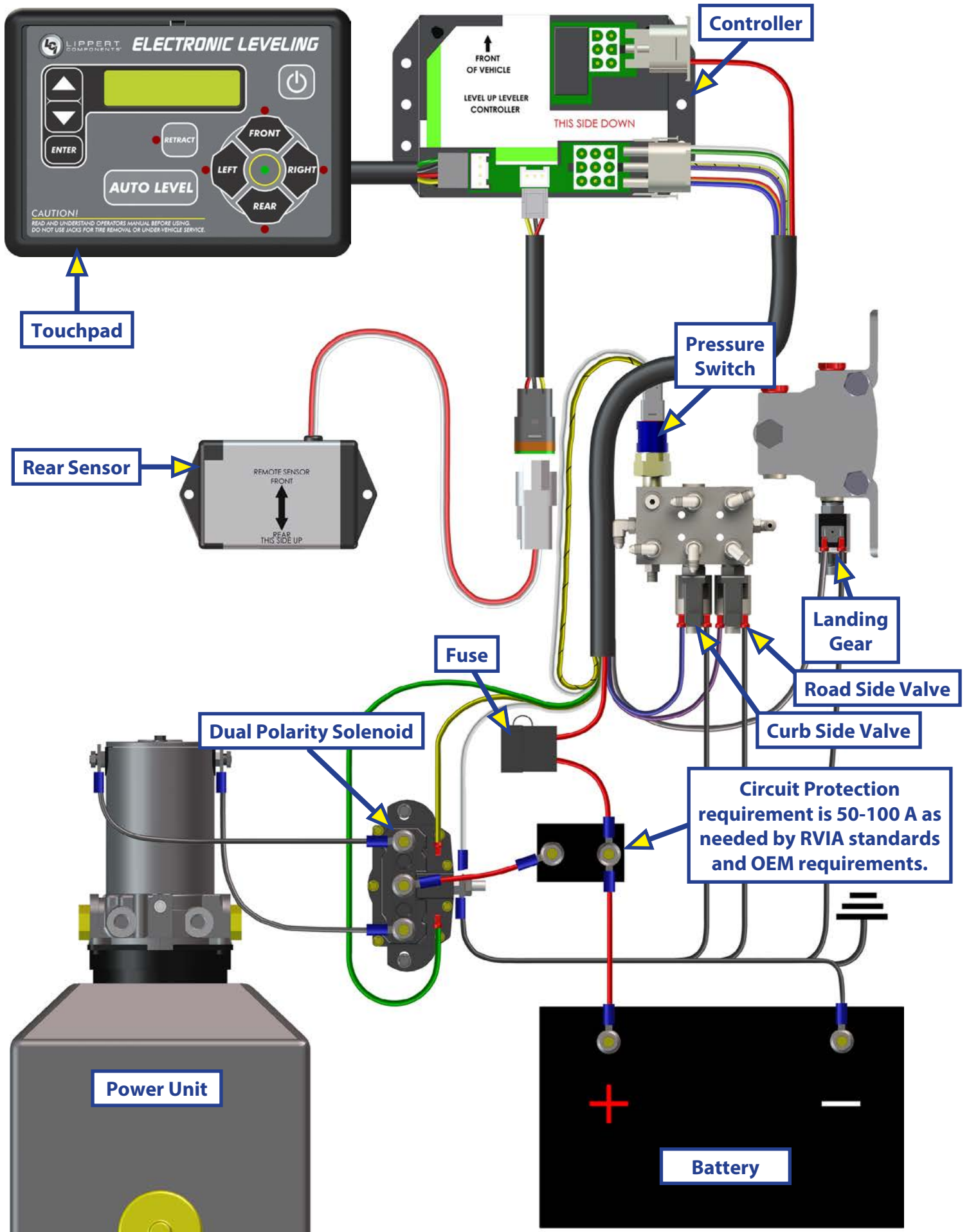
Fluid Recommendation

The LCI Level-Up Automatic Leveling system is pre-filled, primed and ready to operate direct from the manufacturer. Type "A" Automatic Transmission Fluid (ATF) is utilized. Lippert Components, Inc. recommends ATF with Dexron III® or Mercon 5® or a blend of both.

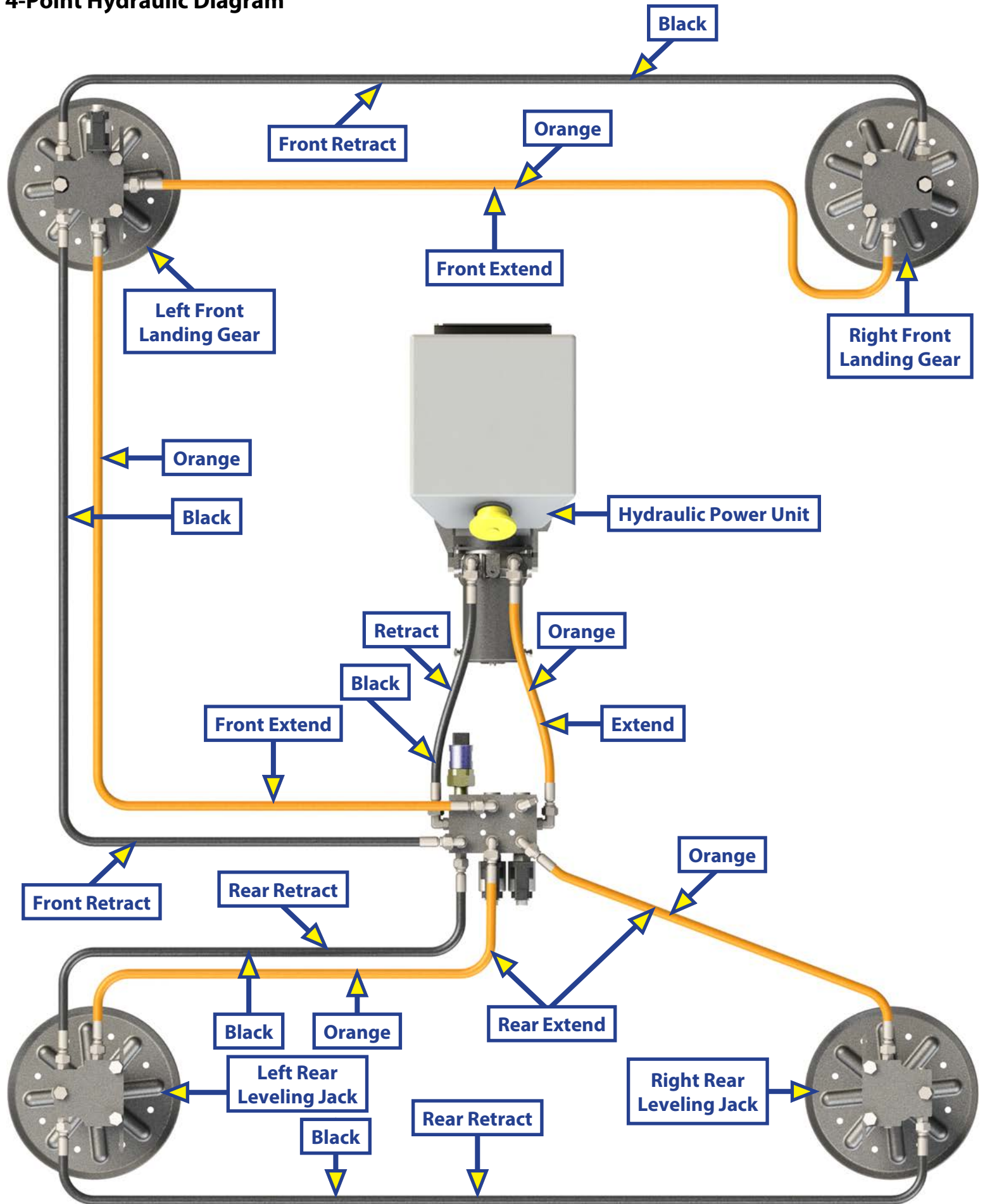
In colder temperatures, less than 10 °F, the leveling jacks and landing gear may extend and retract slowly due to the fluid's molecular nature. For cold weather operation, fluid specifically formulated for low temperatures may be desirable. For a list of approved fluid specifications, see [TI-188](#).

Or go to <https://www.lci1.com/towable-br-level-up/support-towable-level-up-br-touch-pad/>, click on the Technical Information Sheets tab, then select TI - 188: Hydraulic Operation Fluid Recommendation from the listed documents.

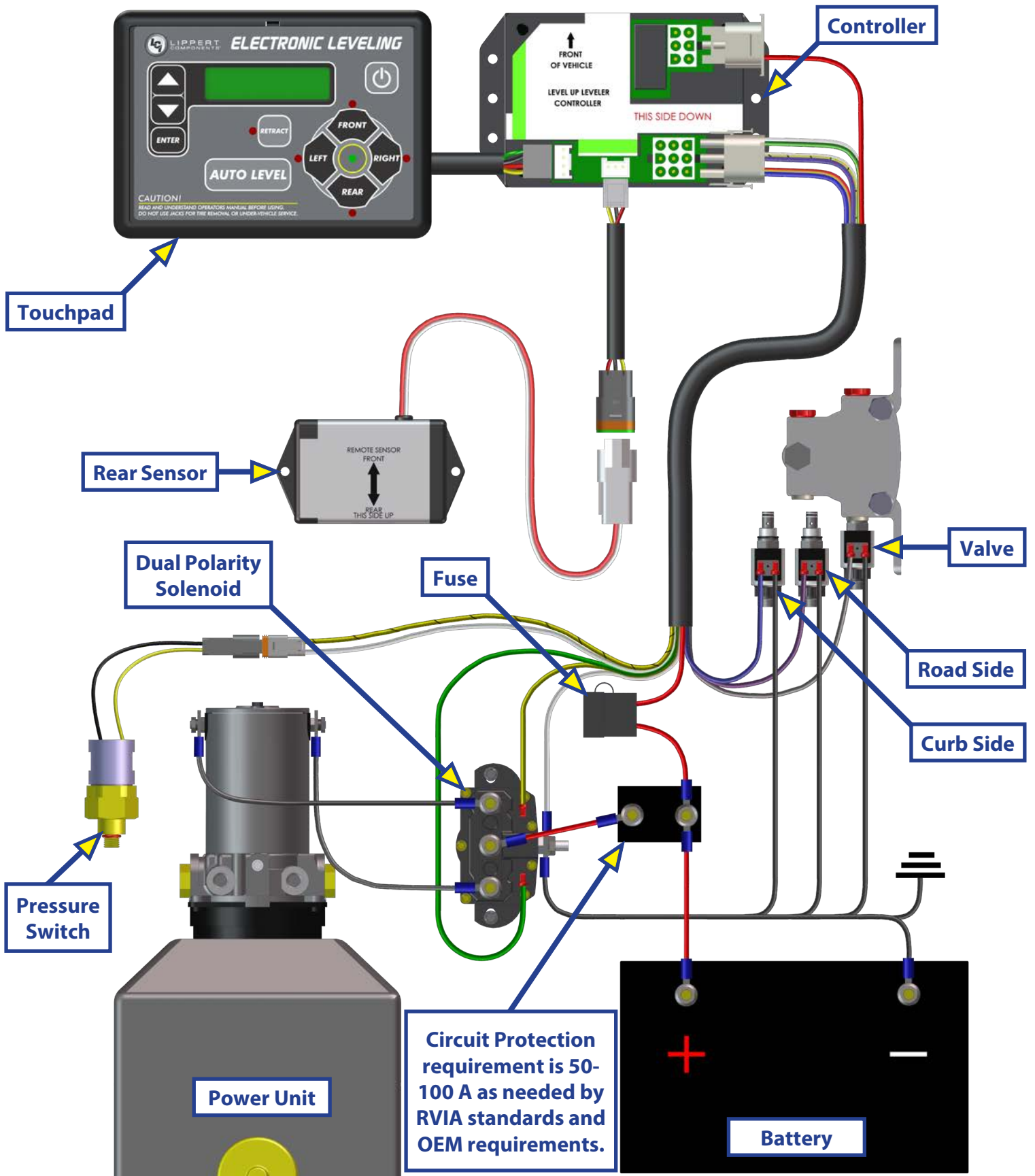
4-Point Wiring Diagram



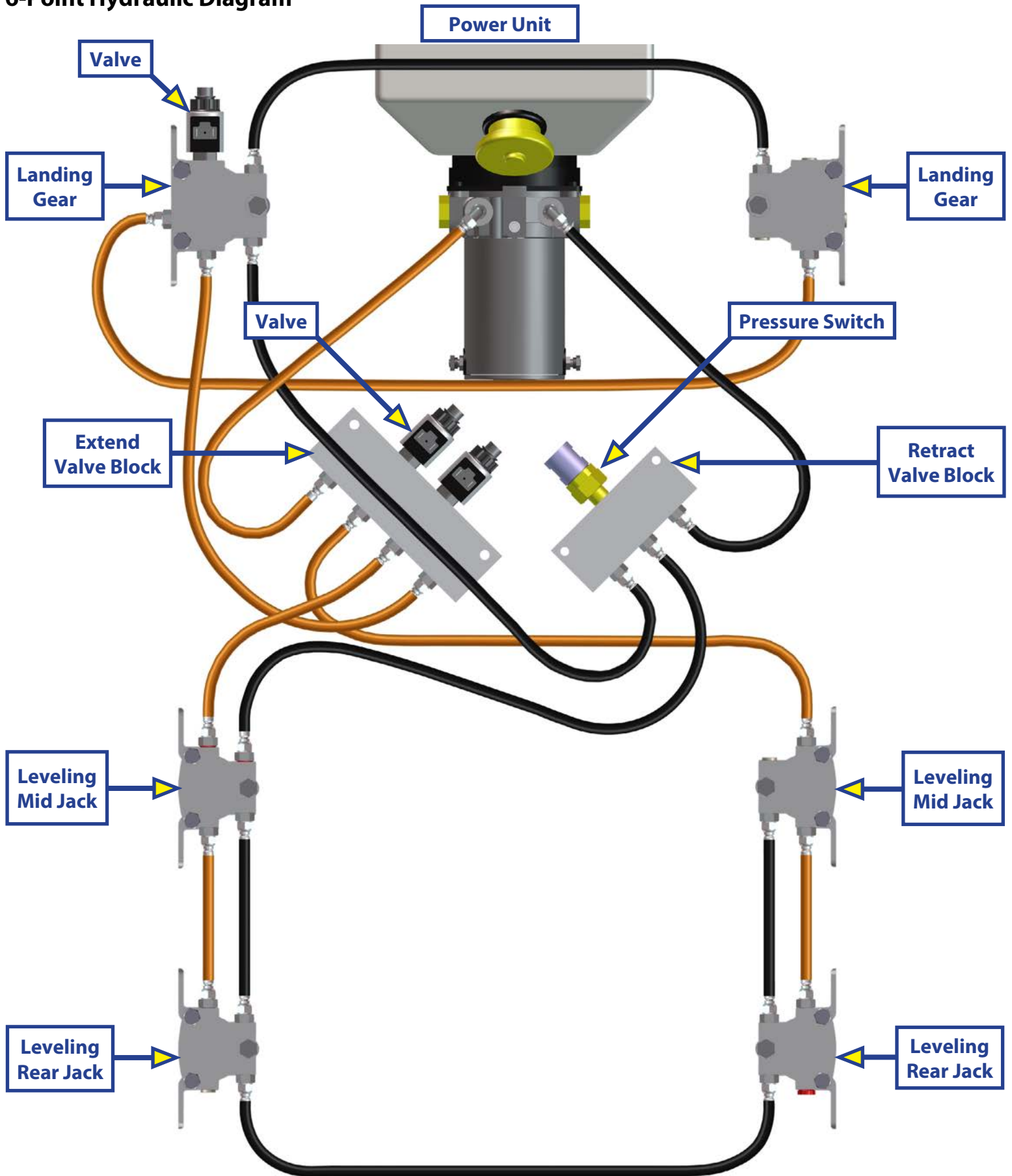
4-Point Hydraulic Diagram



6-Point Wiring Diagram



6-Point Hydraulic Diagram

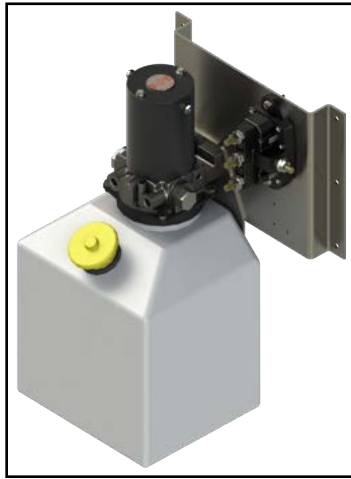




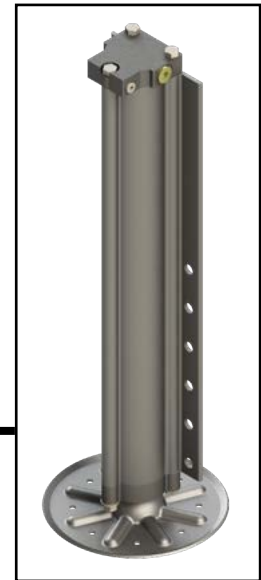
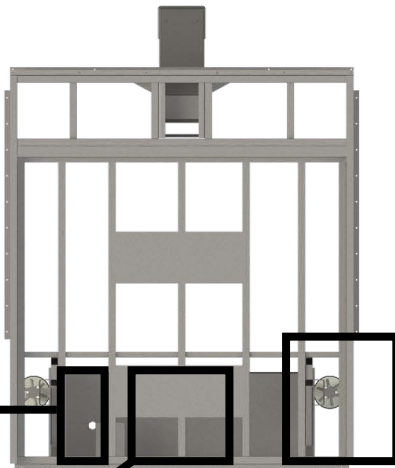
LIPPERT
COMPONENTS

LEVEL-UP® TOWABLE 5TH WHEEL 4-POINT ASSEMBLY

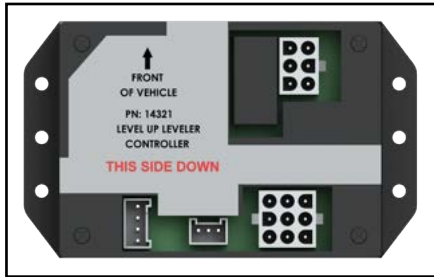
LEVELING & STABILIZATION



Power Unit Assembly



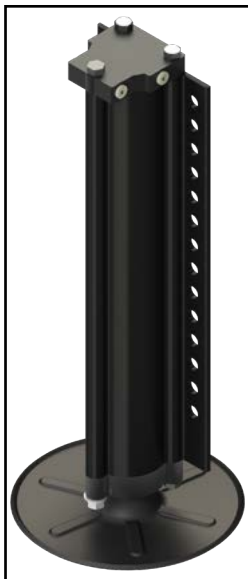
14K Landing Gear



Controller



LCD Control Touchpad



8K Leveling Jacks

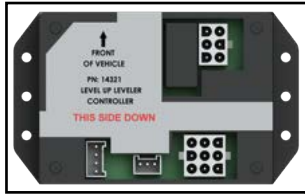


Rear Leveling Sensor

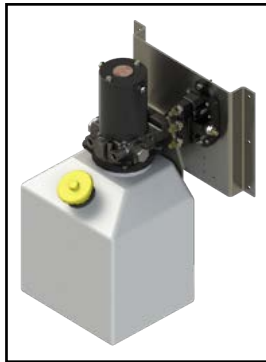


LEVEL-UP® TOWABLE 5TH WHEEL 6-POINT ASSEMBLY

LEVELING & STABILIZATION



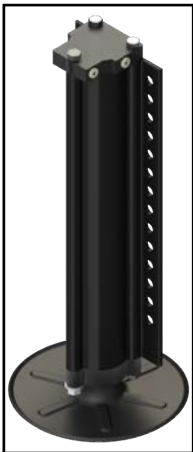
Controller



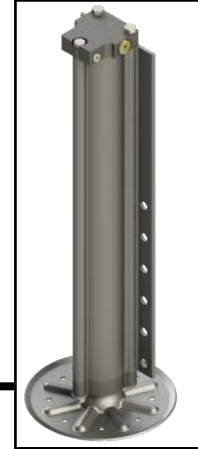
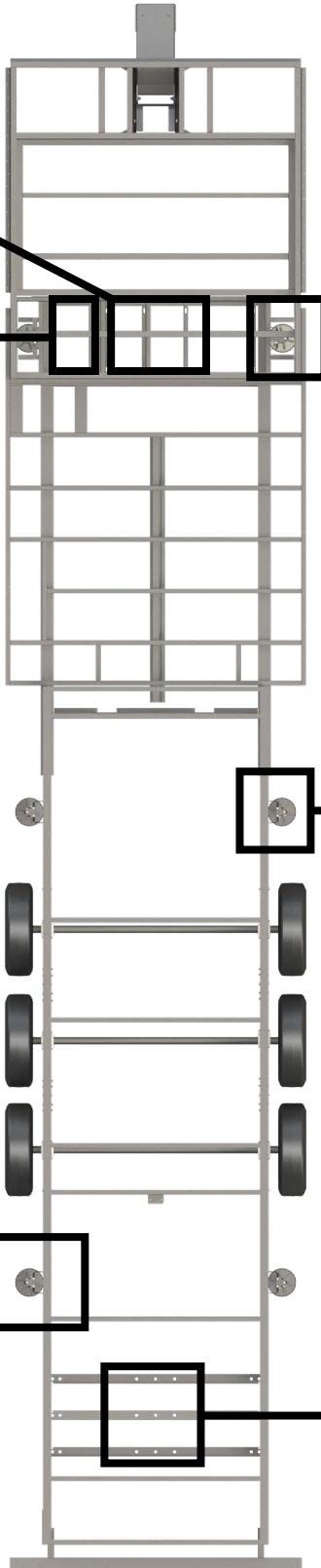
Power Unit Assembly



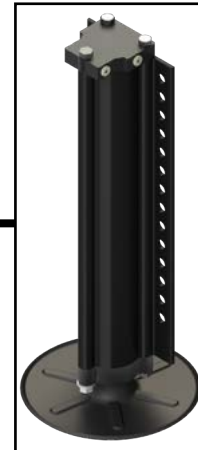
LCD Control Touchpad



8K Rear Leveling Jacks



14K Landing Gear



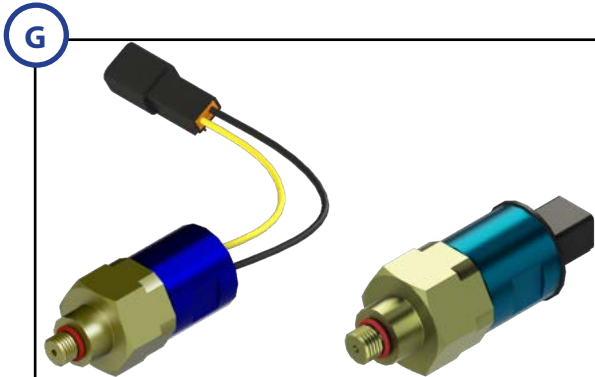
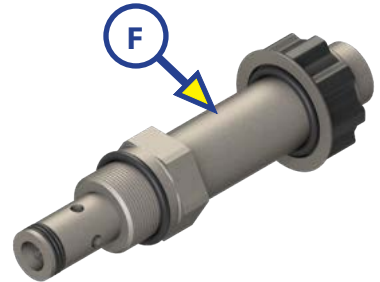
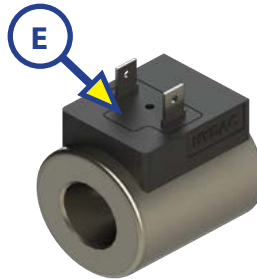
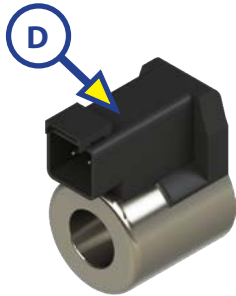
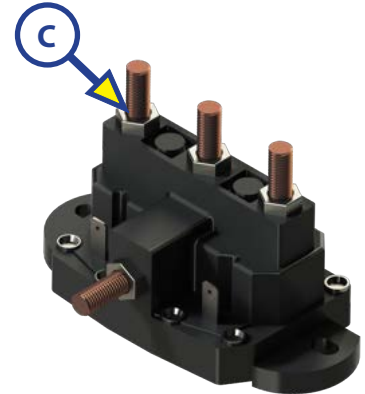
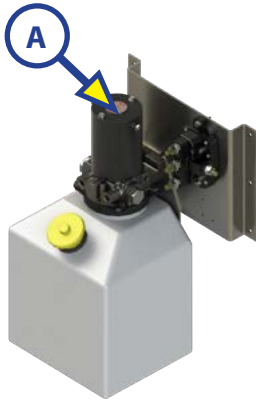
8K Mid Leveling Jacks



Rear Leveling Sensor

LEVELING & 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.



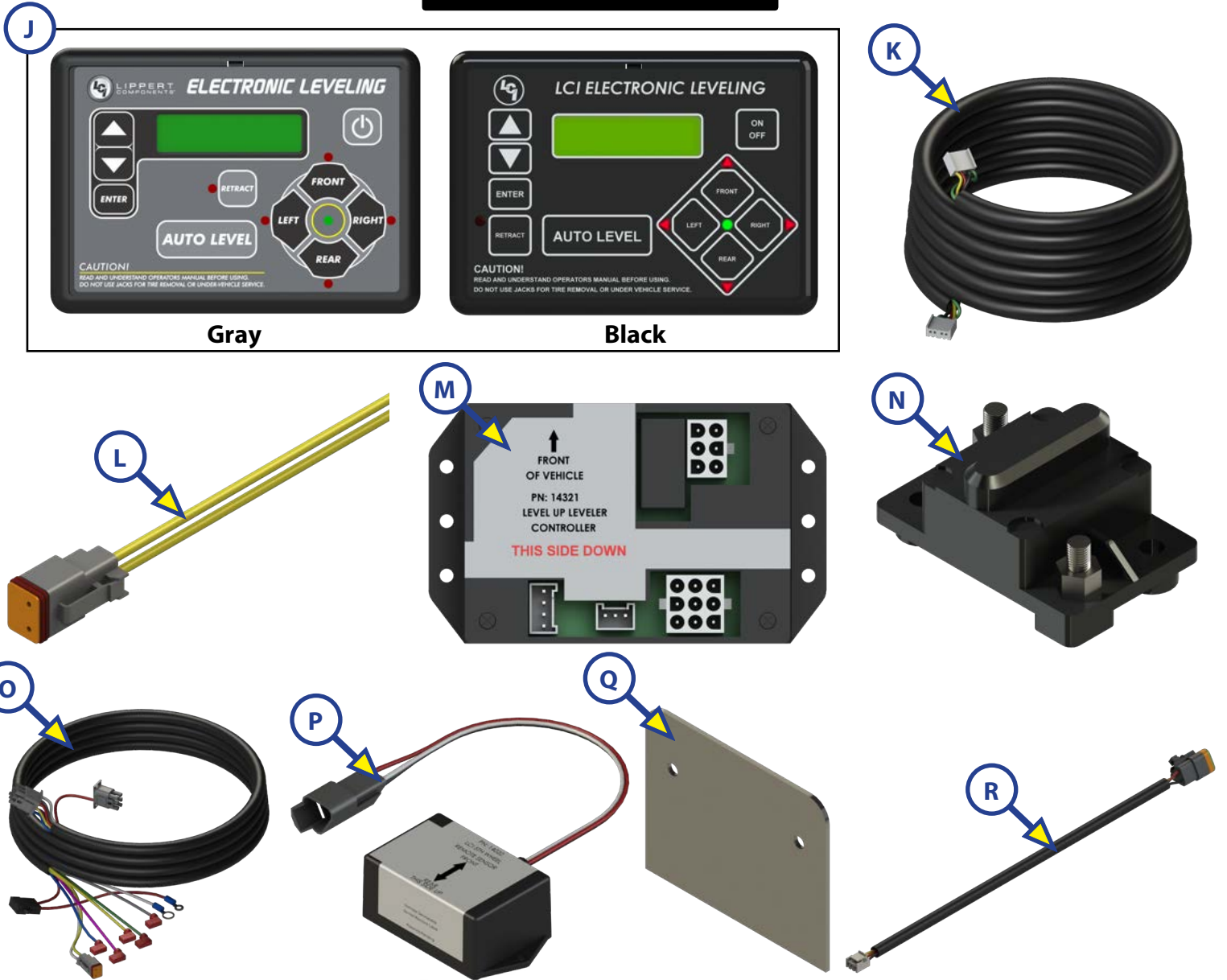
Original

Current



Callout	Part #	Description
A	251910	Vertical Power Unit
B	251909	Horizontal Power Unit
C	118246	Dual Polarity Solenoid
D	174184	Deutsch Coil
E	176954	Spade Coil
F	177094	Cartridge Valve
G	142927	Pressure Switch
H	167576	Power Unit Motor
I	157505	Fill Cap

LEVELING & STABILIZATION



Callout	Part #	Description
J	421484	LCD Touch Pad (Gray)
	234802	LCD Touch Pad (Black)
K	241316	Touch Pad Harness
L	237855	Deutsch 2 Wire Pigtail Harness
M	241129	Controller
N	*135461	80 AMP 12V Breaker
O	241318	Controller Harness
P	232201	Rear Sensor
Q	231775	Rear Sensor Mounting Plate
R	241314	Rear Sensor Harness

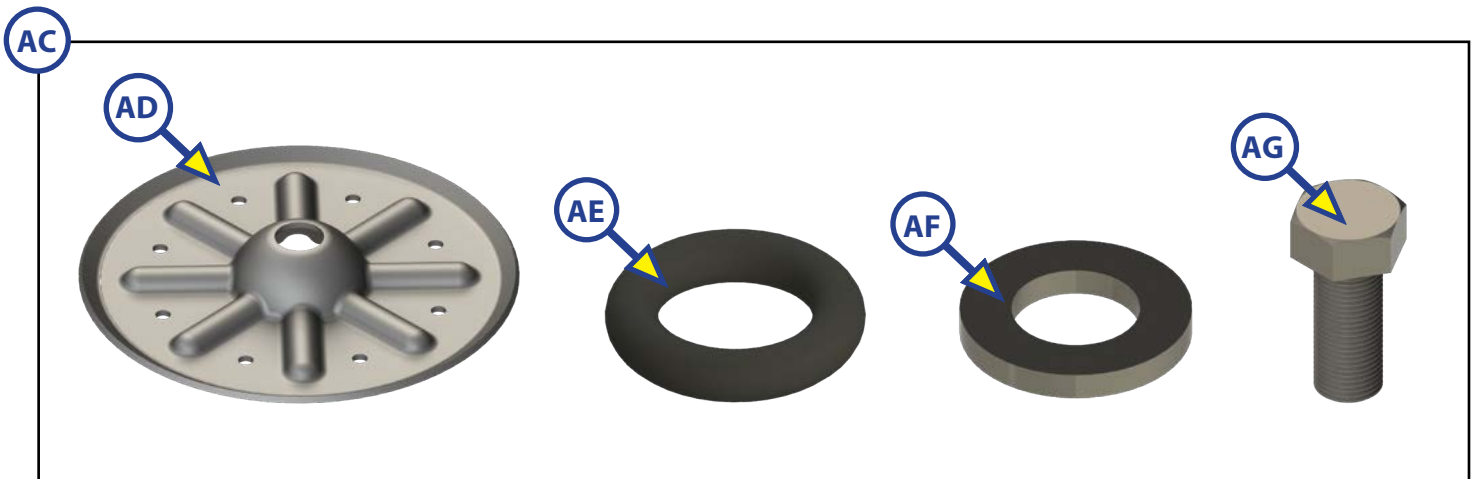
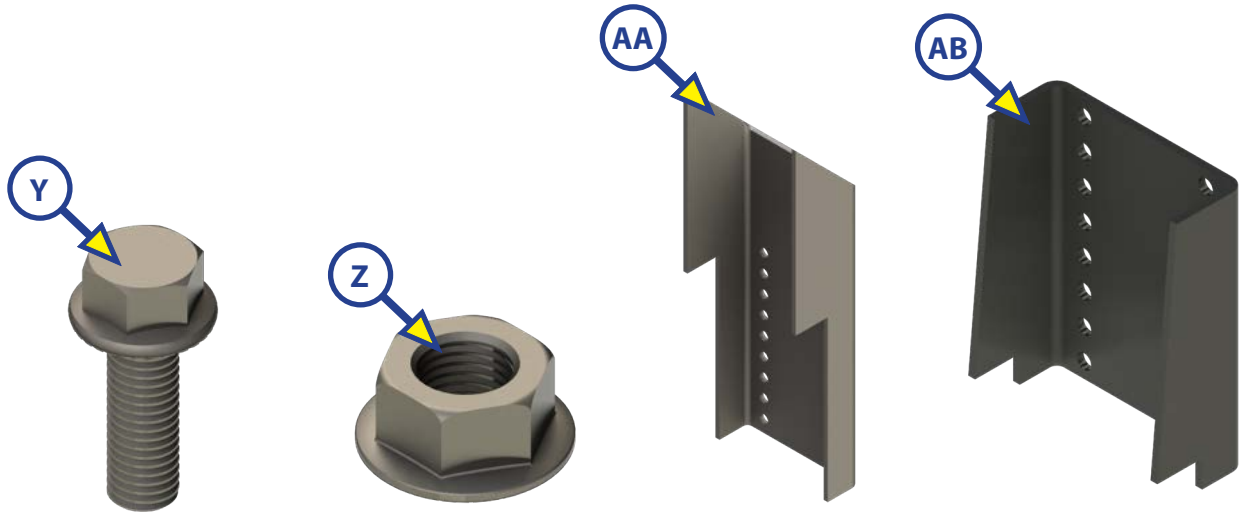
NOTE: Circuit Protection requirement is 50 amps to 100 amps as needed by RVIA standards and OEM requirements.

LEVELING & STABILIZATION



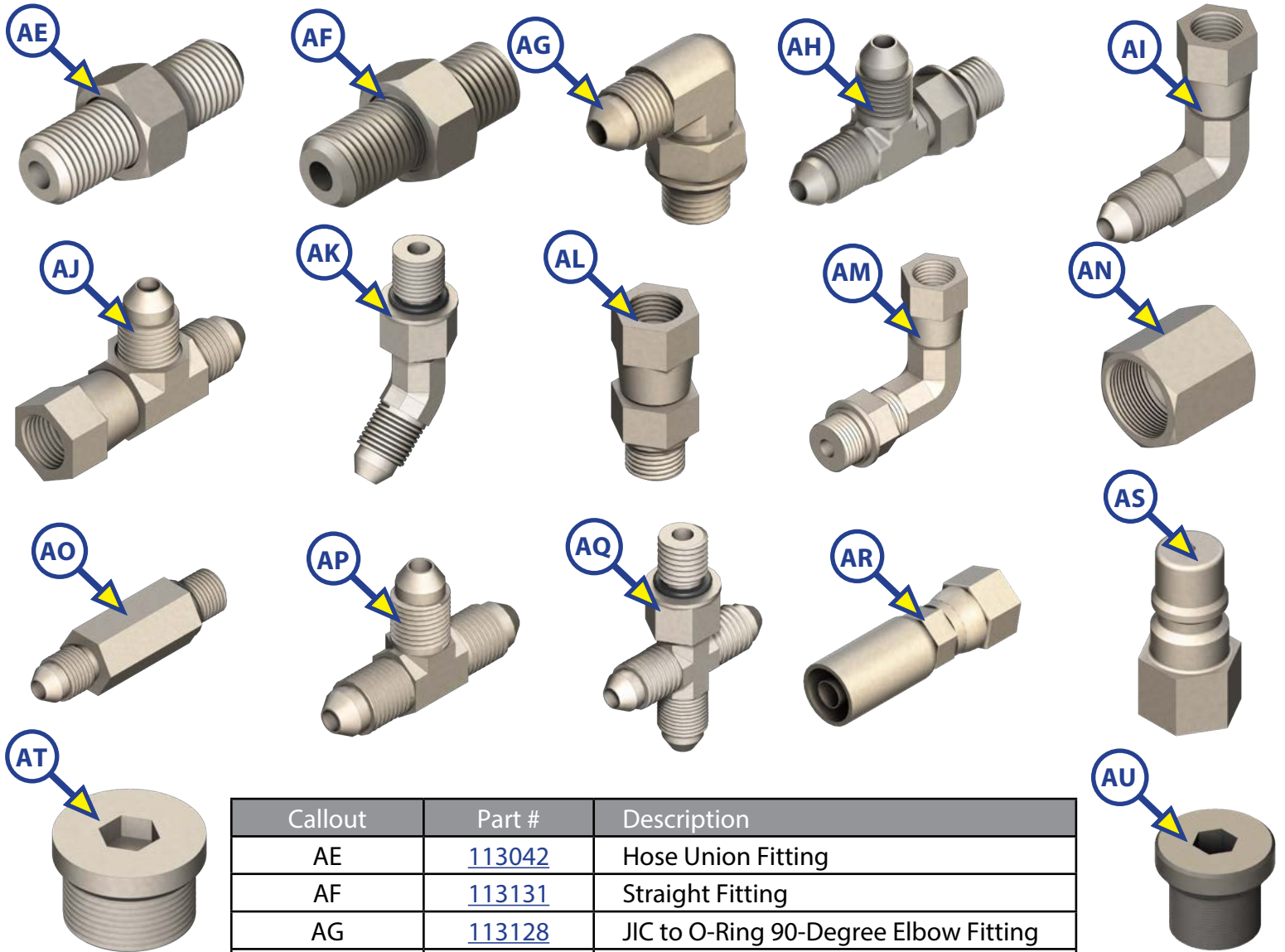
Callout	Part #	Description
S	195860	8K Jack, 8 Hole Black
	1958604	8K Jack, 8 Hole Silver
T	433458	8K Jack, 13 Hole Black
	43345810	8K Jack, 13 Hole Silver
U	275125	14K Landing Gear, 6 Hole Black (RH)
	2751254	14K Landing Gear, 6 Hole Silver (RH)
V	433469	14K Landing Gear, 9 Hole Black (RH)
	43346910	14K Landing Gear, 9 Hole Silver (RH)
W	257126	14K Landing Gear, 6 Hole Black (LH)
	2571264	14K Landing Gear, 6 Hole Silver (LH)
X	433467	14K Landing Gear, 9 Hole Black (LH)
	43346710	14K Landing Gear, 9 Hole Silver (LH)

LEVELING & STABILIZATION



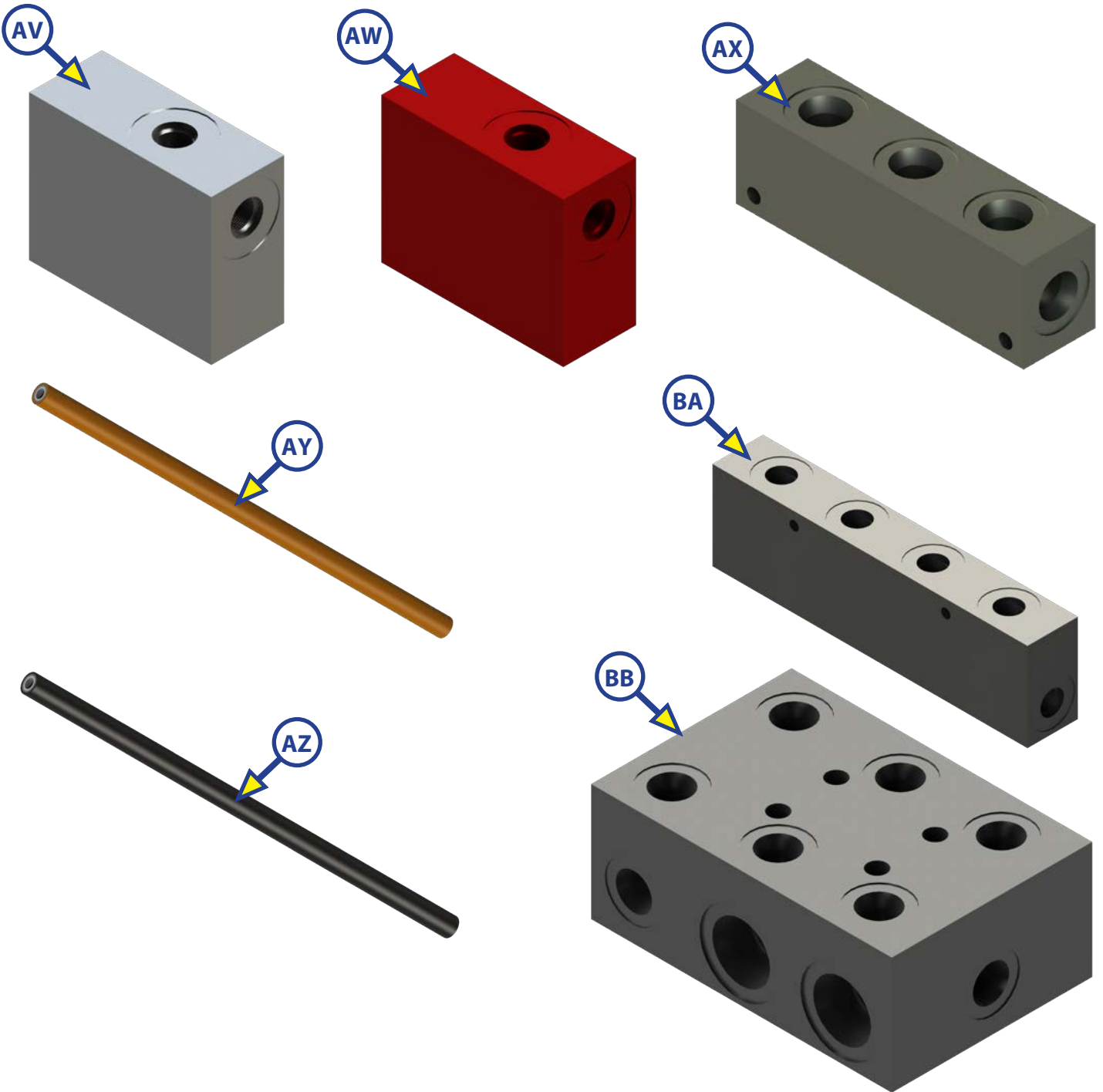
Callout	Part #	Description
Y	118076	Bolt, 1/2" - 20 x 1 1/2"
Z	178210	Nut, 1/2" - 20
AA	134989	Mount Bracket (Weld-On)
AB	218210	Front Mount Bracket (Weld-On)
AC	324269	Footpad Kit
AD	364372	Footpad
AE	123932	O-Ring Seal (2x)
AF	178208	Washer, 3/4"
AG	139446	Hex Bolt, 5/8" - 18 x 1 1/2"
<p>NOTE: A second O-Ring seal needs to be used above the footpad to secure kit.</p>		

LEVELING & STABILIZATION



Callout	Part #	Description
AE	113042	Hose Union Fitting
AF	113131	Straight Fitting
AG	113128	JIC to O-Ring 90-Degree Elbow Fitting
AH	113130	T-Fitting with O-Ring on Run
AI	113134	Swivel Elbow Fitting
AJ	113135	Swivel T-Fitting
AK	113129	45-Degree Elbow Fitting
AL	113133	Swivel Straight Fitting
AM	141020	Swivel Elbow Fitting
AN	216288	Steel Cap Fitting
AO	139417	Long Straight Fitting
AP	138423	Union T-Fitting
AQ	136225	Cross Fitting
AR	138416	Hose Coupling
AS	140457	Quick Disconnect
AT	141323	Hex Plug
AU	140998	Hollow Hex Plug

LEVELING & STABILIZATION



Callout	Part #	Description
AV	138420	Manifold
AW	138421	Restricted Manifold
AX	166078	Retract Valve Block
AY	248654	Orange Hose
AZ	248653	Black Hose
BA	194712	Extend Valve Block
BB	255130	4-Bank Manifold



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