# GROUND CONTROL® 3.0 Landing Gear Oem installation manual

### LIPPERT Components°

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#### Safety and System Information

The Ground Control<sup>®</sup> 3.0 Landing Gear operates independently on uneven terrain. The landing gear features minimal wiring with each landing gear having an in-line fused link to allow the landing gear to amp-out when coming into contact with the ground. The 20 amp auto-reset circuit 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 synchronize both landing gear again.

**NOTE:** Qualified personnel are required to install the Ground Control 3.0 Landing Gear system.

**NOTE:** The landing gear system is for 5th wheel applications only.

#### **A**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.

#### **A**WARNING

The trailer MUST be supported per manufacturer's specifications before working underneath. Failure to do so may result in death or serious injury.

#### **A**CAUTION

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

#### Installation

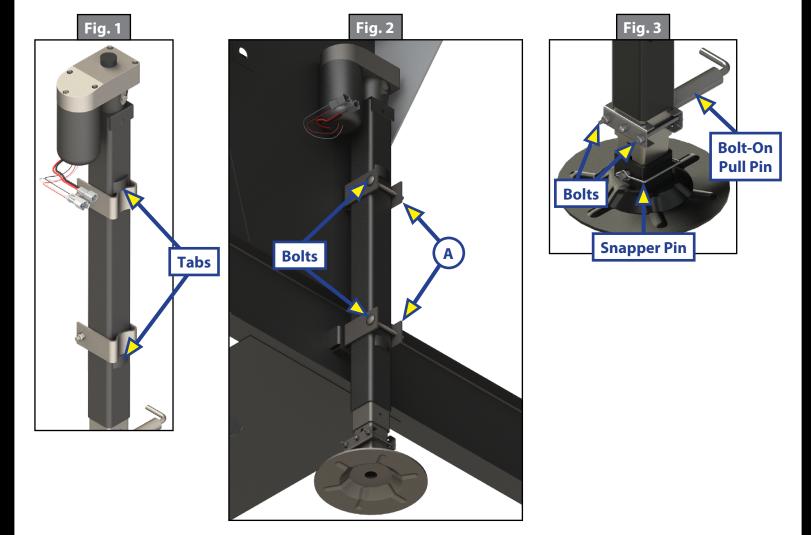
#### Landing Gear

**NOTE:** The landing gear mounting brackets are mounted on the trailer frames by LCI.

Attach landing gear (Fig. 1) to the mounting brackets welded to the trailer (Fig. 2A). Use the tabs (Fig. 1) on both sides of the landing gear leg to position it properly. The tabs should be in against the frame rails and out by the bolts of the brackets (Fig. 2).

**NOTE:** Depending on chassis manufacturer bracket location tabs may be located above and below the brackets (Fig. 2) or both tabs may be located between the brackets.

- 2. When the landing gear leg is flush with the back of the bracket, insert the  $\frac{3}{8}$ " carriage bolt into the mounting bracket.
- **3.** Thread and secure the  $\frac{3}{8}$ " lock nut onto the carriage bolt (Fig. 2).
- **4.** Use carriage bolt and lock nut to secure leg to second bracket (Fig. 2).
- 5. Attach bolt-on pull pin to the landing gear leg (Fig. 3) by pulling the spring-loaded pin to open it, and then aligning the pin with a hole at the end of the outer jack leg.
- 6. Release the pin to lock it into place with a corresponding set of holes in the outer and inner legs.
- 7. Secure bolt-on pull pin (Fig. 3) to exterior jack leg by tightening the attached two bolts and nuts.
- 8. Use the  $\frac{3}{8}$ " snapper pin to fasten the footpad to the inner leg (Fig. 3).
- 9. Repeat steps 1 8 with the landing gear on the other side of the trailer.



#### Wiring Landing Gear

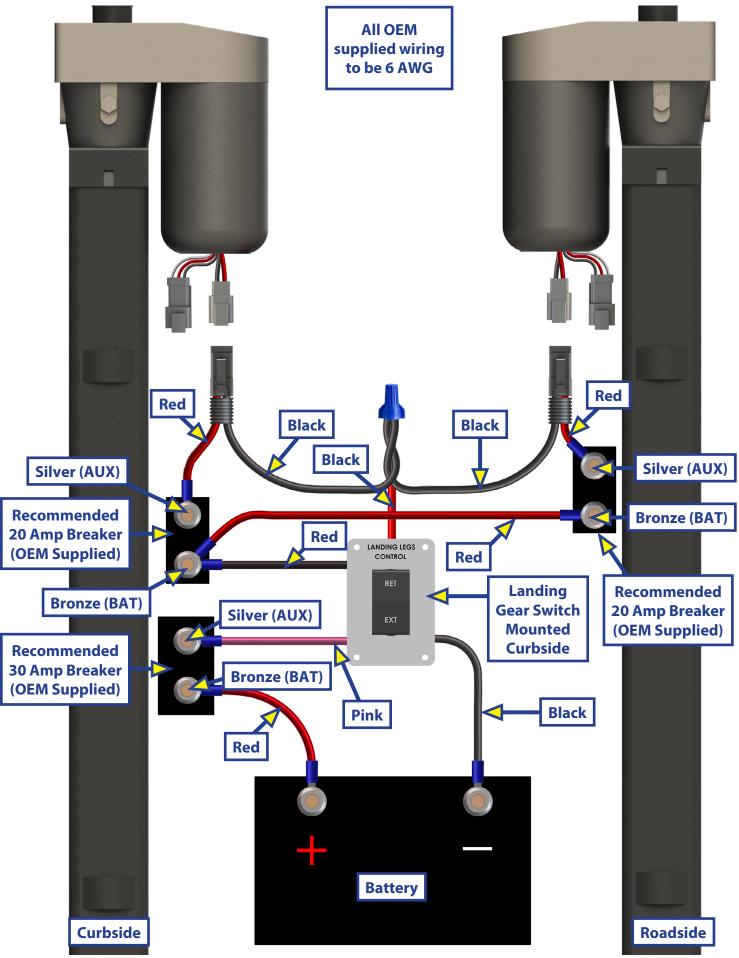
- **NOTE:** Circuit protection is not supplied. LCI recommends two 20 amp auto-reset circuit breakers be used for the landing gear motors in addition to a 30 amp auto-reset circuit breaker placed in line with the power source.
- **NOTE:** See Wiring Diagram to complete these steps. OEM will need to supply miscellaneous wiring and wiring connectors.

**NOTE:** A minimum of 6 AWG wire is needed on all power and ground wiring.

**NOTE:** The Wiring Diagram illustrates a curbside view.

- 1. Mount the two 20 amp circuit breakers above the landing gear motors.
- 2. Mount the 30 amp circuit breaker to be in line with the power source.
- **3.** Mount the landing gear switch on the curbside front area of the trailer under the bulkhead.
- **4.** On the curbside landing gear motor, connect the red wire from the wiring harness pigtail to the silver post (AUX) of the 20 amp circuit breaker.
- 5. On the roadside landing gear motor, connect the red wire from the wiring harness pigtail to the silver post (AUX) of the 20 amp circuit breaker.
- **6.** Extend the black ground wire from the harness pigtail of the roadside motor to the black ground wire coming from the harness pigtail of the curbside motor. Connect both wires to the switch's black ground wire.
- 7. Connect the switch's red wire to the bronze post (BAT) on the curbside 20 amp circuit breaker.
- 8. Connect red wire from the bronze post (BAT) of the curbside 20 amp circuit breaker to the bronze post (BAT) of the roadside 20 amp circuit breaker.
- 9. Connect the switch's pink wire to the silver post (AUX) of the 30 amp circuit breaker.
- **10.** Connect the black wire from the switch to the negative terminal of the battery.
- **11.** Connect the positive terminal of the battery to the bronze post (BAT) of the 30 amp circuit breaker.
- **12.** Plug both curbside and roadside pigtail harnesses into their respective jack harnesses.

#### Wiring Diagram



#### Operation

#### **A**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.

#### 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.

#### Extending Landing Gear

- 1. Extend both landing gear to the ground by pulling the quick release bolt-on pull pins.
- **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 engaged.
- 3. Push EXT side of the landing gear switch.
- 4. Unhook trailer from tow vehicle.
- 5. Raise landing gear to desired height.

#### Retracting Landing Gear

- **1.** Push RET side of landing gear switch.
- **2.** Lower trailer onto tow vehicle.
- **3.** Once trailer is secured, make sure the trailer is latched.
- **4.** Fully retract both landing gear.

**NOTE:** Be sure to hold down the switch until both landing gear are fully retracted before pulling the bolton 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 engaged upon completion.

### **NOTE:** In the event the landing gear become out-of-sync, fully retract them to synchronize the landing gear again.




## LIPPERT Components

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