NoRamp™
PATENTED TILT TRAILERS

Operation/Maintenance Check List

To insure proper use, satisfaction, and longevity of your NO RAMP Trailer, follow these set up and maintenance procedures.

√ Your NO RAMP Trailer is hitch height sensitive. To properly set adjustable coupler, disconnect from tow vehicle and lower trailer to "Down" position. Raise or lower jack stand until the tail of the trailer is on the ground, measure coupler height and set tow vehicle and trailer coupler/hitch height to match. Always set trailer as "Horizontally Level" as possible when in towing position.

√ **Safety Lever:** Always tow with "Safety Lever" in the locked or forward position. The "Safety Lever" **must** be released to operate the lowering of the trailer.

√ Volt Meter: Your NO RAMP Trailer has a Volt Meter/Battery Level indicator inside the systems box. Press the button to turn on for voltage reading, press button again to indicate battery charge level. Press button a third time to shut off.

√ Grease Zerks: Like most trailers, your NO RAMP Trailer has **wheel bearing** zerks to be greased, located on the outside of the wheel hub. Additionally, there are **deck side** zerks directly above the axle(s) for routine greasing. The **jack stand** and pivoting ends of the **hydraulic rams** also have zerks to be greased. **Fender hinges** also need to be greased. All to be done at 1st 500 miles, and routinely thereafter.

√ Electric Brakes: Your NO RAMP Trailer comes stock with electric brakes. In and around 200 & 2000 miles take the wheels and hubs off and check for adjustments following the axle manufacturer's recommendations located in your owner's packet.

√ Lug Nuts: Check lug nut tightness at first 50, 500, & 1000 miles and periodically thereafter. Apply 100 ft.-lb. torque (150 ft.-lb. for 17.5" wheel options using $^{5}/_{8}$" wheel studs). Especially check lug nuts frequently with **aluminum wheels**!

√ Coupler Bolts: Check the adjustable coupler mounting nuts and bolts at first 50, 500, & 1000 miles and periodically thereafter. 150 ft.-lb. torque.

√ Hydraulic Fluid: Check hydraulic oil level periodically, do not overfill. See full mark for proper level...about ½ tank when in towing position.

√ Register your NO RAMP Trailer within 10 days of purchase using material provided inside of owner's packet.

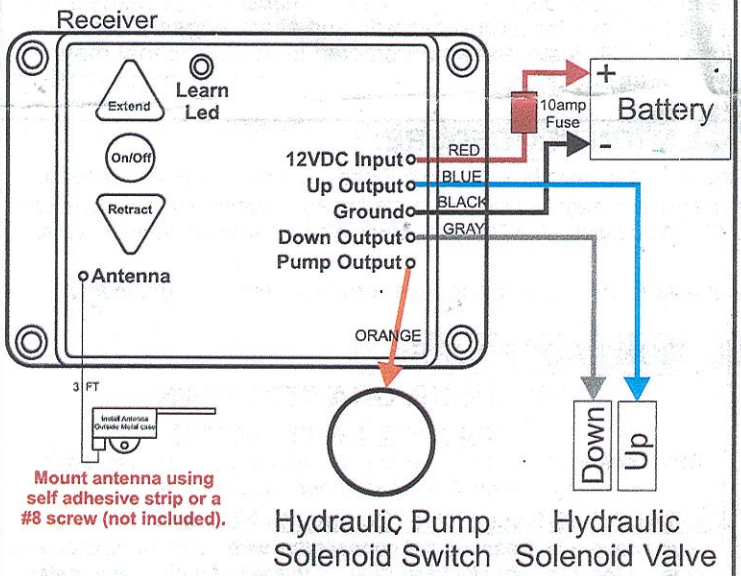
Thank you for your business.

G3-H01

Hydraulic Wireless Control System

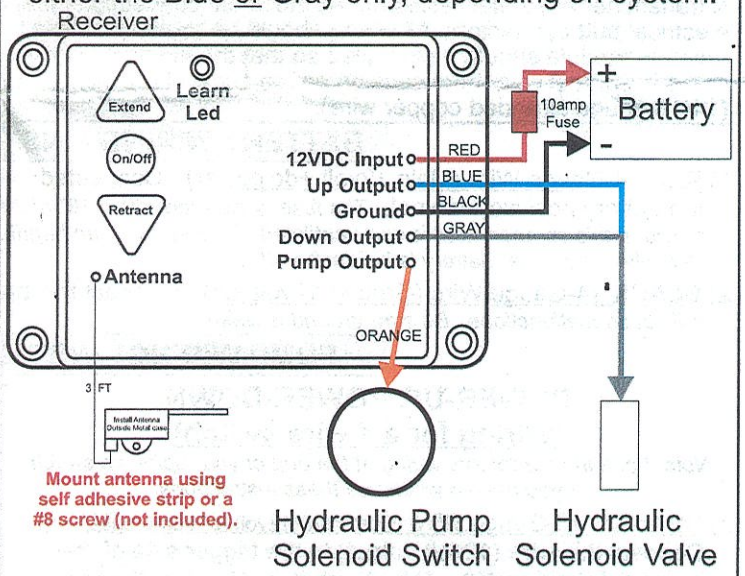
* Patents 6,900,603
6,142,501

1 Power-Up, Power-Down Double Acting Solenoid Installation



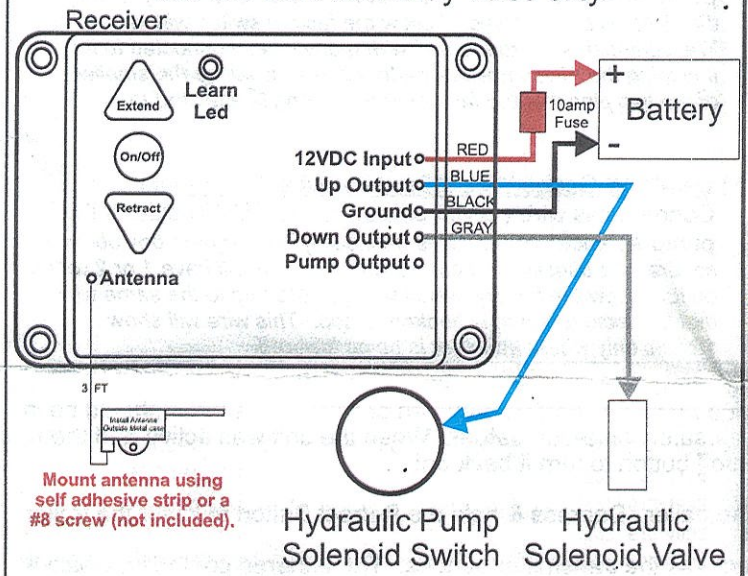
2 Power-Up, Power-Down Single Solenoid Installation

With single Hydraulic solenoid installation use either the Blue or Gray only, depending on system.



3 Power-Up, Gravity-Down Single Solenoid Installation

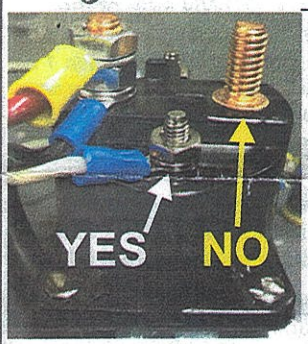
With single Hydraulic solenoid installation use the Blue and Gray wires only.



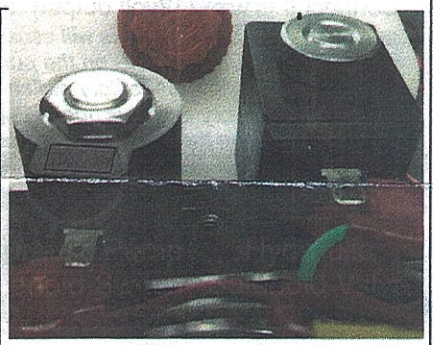
Function:

When the **Extend** button is depressed the **Orange** & **Blue** wires are powered with 12VDC.

When the **Retract** button is depressed the **Orange** & **Gray** wires are powered with 12VDC.



Solenoid Switch



Solenoid Valve

American Technology
COMPONENTS, INCORPORATED

For further assistance, please feel free to contact us.

2905 LaVanture Place • Elkhart, Indiana 46514 USA
574.262.1258 • FAX 574.264.9138

Published 07.16.15

G3-H01
Hydraulic Wireless Control System

* Patents 6,9[illegible]
6,14[illegible]

The receiver module should be located in an area where the back-up switches will be accessible without the use of the transmitter. Mounting the receiver module within cabinetry works well. ***However, if you are mounting the module within a steel compartment it is recommended that you drill a 1/2" hole in the steel, feed the antenna in (screw the end to the Receiver Module), & mount the top of the antenna to the outside of the steel box.***

- Mount antenna using self adhesive strip or a #8 screw (not included).

Typical range with the wireless key fob is 50-100ft, depending on where the receiver module is mounted. The receiver module & transmitter are water resistant. All electrical connections that are made to the control box should be made with properly sized electrical butt connectors. All wiring should be routed in areas that will protect it from road hazards and sharp edges. The receiver module should be installed so that the electrical connections are fully insulated and protected from objects that may come in contact with them causing an electrical short. All connecting wires should be the same size as the wires on the receiver (14/16-gauge stranded copper wire).

BATTERY WIRING - INSTALLATION PROCEDURE:

1) **RED** 14-Gauge Wire (Main 12volt +dc power) - Connected in-line with this wire is a **10-amp Fuse.** Connect this red wire to the battery positive terminal. *The fuse is installed within 18" of the battery and may be installed in the battery enclosure or compartment, provided this compartment is well ventilated. This system can handle 12 volt dc input. The Receiver Module's LED will turn from Green to Red when the trailer battery is **below 9-volts**.*
2) **BLACK** 14-Gauge Wire (Ground 12volt -dc) - Connect this black wire to the battery negative terminal. *Improper grounding will cause malfunctions. Be sure ground is clean.*

PUMP WIRING - INSTALLATION PROCEDURE:

POWER-UP, POWER-DOWN
(Wiring for a 4 wire switch)

Note: Look at your factory wiring at the end of your up/down switch. If you have 4 wires use these instructions.

3) **ORANGE** 16-Gauge Wire (Common)(12volt for pump up&down) Connect this wire (12volt output) to the trigger side of the pump solenoid switch. *This pin will show 12volts only when the trailer is being raised & lowered. Follow the factory switch wiring. The solenoid is the round part with many wires connected to it. Including the 12volt positive battery cable. It will be the smaller of the two pins that the factory switch wiring is attached to.*
4) **BLUE** 16-Gauge Wire (12volt output to raise trailer) Connect this wire (12volt output) to the UP side of the pump solenoid valve. *This will usually be a square box about 2" square. It's usually on the pump or near it. It will have 1 or 2 wires on it. (If the pump has only 1 square box valve, you have a single solenoid pump. Please disregard this step and skip to terminal #5). Follow the factory switch wiring. Hook up to the same wire that the factory switch is hooked up too. This wire will show 12volts only when the trailer is being raised.*
5) GRAY 16-Gauge Wire(12volt output to lower trailer) Connect this wire (12volt output) to the DOWN side of the pump solenoid valve. *This will usually be a second square box about 2" square. It's usually on the pump or near it. It will have 1 or 2 wires on it. Follow the factory switch wiring. Hook up to the same wire that the factory switch is hooked up too. This wire will show 12volts only when the trailer is being lowered.*

POWER-UP, GRAVITY-DOWN
(Wiring for a 3 wire switch)

Note: Look at your factory wiring at the end of your up/down switch. If you have 3 wires use these instructions.

3) **ORANGE** 16-Gauge Wire (Common) - Not used *If you have a harness, do not connect this wire. Clip the end off and tape up the end with electrical tape: If this wire touches any metal when unit is activated the unit will short out.*

4) **BLUE** 16-Gauge Wire (12volt output to raise trailer) Connect this wire (12volt output) to the UP side of the pump solenoid switch. *This pin will show 12volts only when the trailer is being raised. Follow the factory switch wiring. The solenoid is the round part with many wires connected to it. Including the 12volt positive battery cable. It will be the smaller of the two pins that the factory switch wiring is attached to.*

5) GRAY 16-Gauge Wire (12volt output to lower trailer) Connect this wire (12volt output) to the DOWN side of the pump solenoid valve. *This will usually be a square box about 2" square. It's usually on the pump or near it. It will have 1 or 2 wires on it. Follow the factory switch wiring. Hook up to the same wire that the factory switch is hooked up too. This wire will show 12volts only when the trailer is being lowered.*

OPERATION:

- Depress the on/off button on the transmitter, to activate. The blue light on the top should turn on. The transmitter should be in the off position when the unit is not in use. This transmitter has a safety time-out feature. When the unit was active and then not used in 1-minute it will automatically turn off. Just hit the on/off button to turn it back on!
- On the transmitter, depress & hold the Extend Button to raise the trailer. Depress & hold the Retract Button to lower the trailer.
- The switch mounted on the receiver module will function the same as the transmitter buttons. The tethered controller, which is usually supplied with the hydraulic pump, will also function to control the hydraulic system. Installation of the tethered system is not required, and can be discarded.

HOW TO LEARN A TRANSMITTER:

1) Enter learn mode: Push & hold the on/off button on the Receiver Module until the LED starts to flash, then release the button
2) Push & hold the on/off button on the Transmitter until the LED on the Receiver Module comes on constant. Release the on/off button. The Transmitter is now "learned".
3) Option: Learn another transmitter by repeating steps 1 & 2. Note: The Receiver Module exits the "learn mode" after each transmitter is learned. You can learn up to 8 transmitters.
4) To clear all transmitters out of the Receiver Module: Push & hold the on/off button on the Receiver Module for 10 Seconds.

Operation Trouble Shooting

Caution!

1) Never attempt to lift loads greater than specified load capacity located on VIN tag.
2) Never loosen any hydraulic hose lines or fittings without first releasing pressure from the pump. Perform pressure relief procedure seen below.
3) Always protect pump and motor units from high pressure spray to avoid water contamination; change oil if water contamination is present.

Hydraulic Fluid

For best results, use an SAE 10W hydraulic oil (equiv. AW 32) in general applications. High temperature use, such as in Florida and the Deep South, can use SAE 20W hydraulic oil (equiv. AW 46) instead.

Releasing Hydraulic Pressure

Before doing any type of hydraulic work on any NO RAMP trailer, the pressure needs to be released.

To do this, you need to lock the trailer in place to keep it from drifting to the ground. Do this with either the slide lock or by blocking the back end of the trailer in the up position.

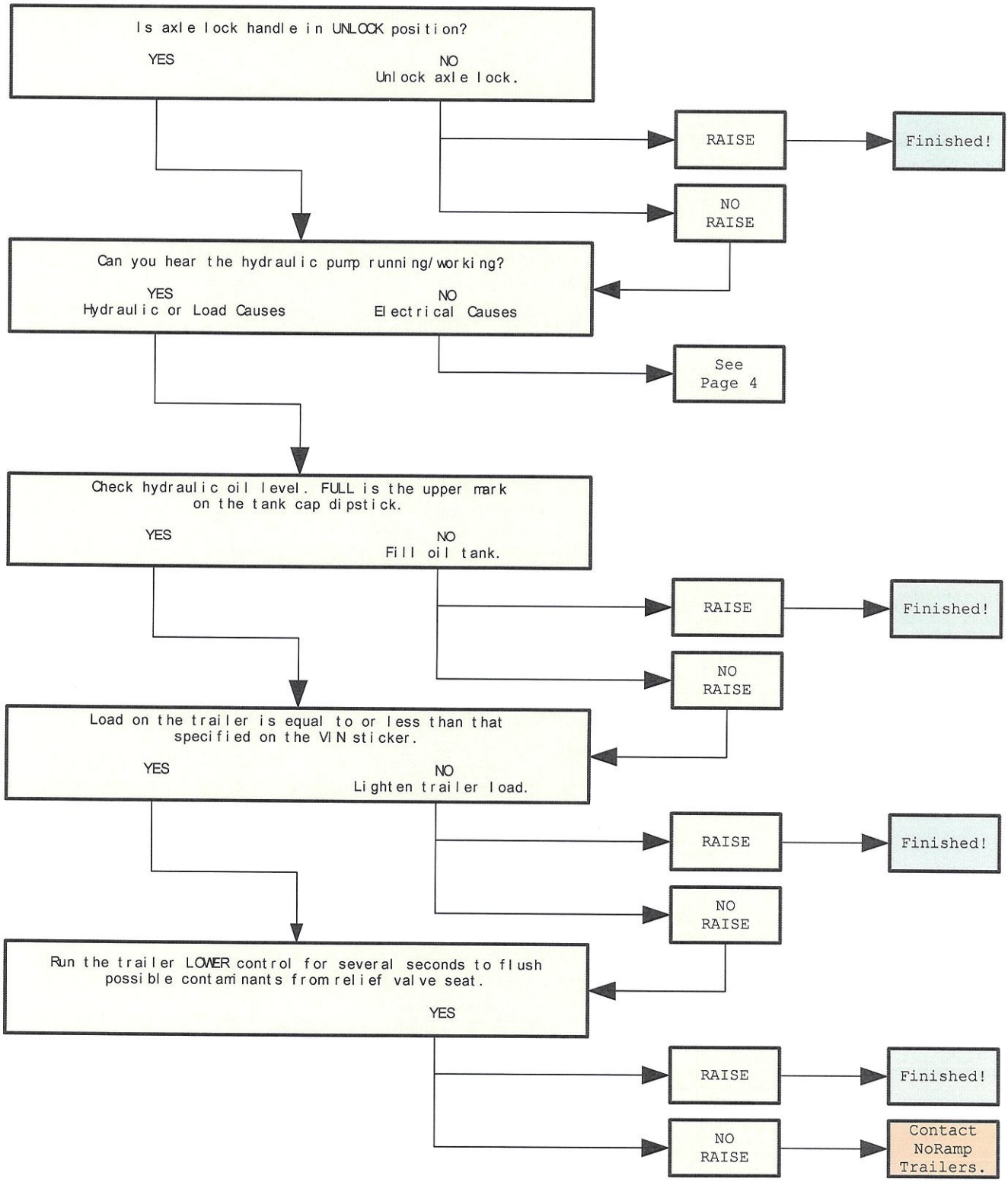
On the pump, there is a blue wire on the start solenoid. Remove the blue wire. Push the up/down button both ways. This releases the pressure from the cylinders and hoses. You can now remove any fittings or hoses.

Installation is in reverse order. Make sure all fittings are tight. Cycle axles up and down and deadhead the hydraulics to purge air from the lines. Make sure the reservoir is at least half full of hydraulic oil.

NoRamp™
PATENTED TILT TRAILERS

Trailer Raise Troubleshooting

7/2019



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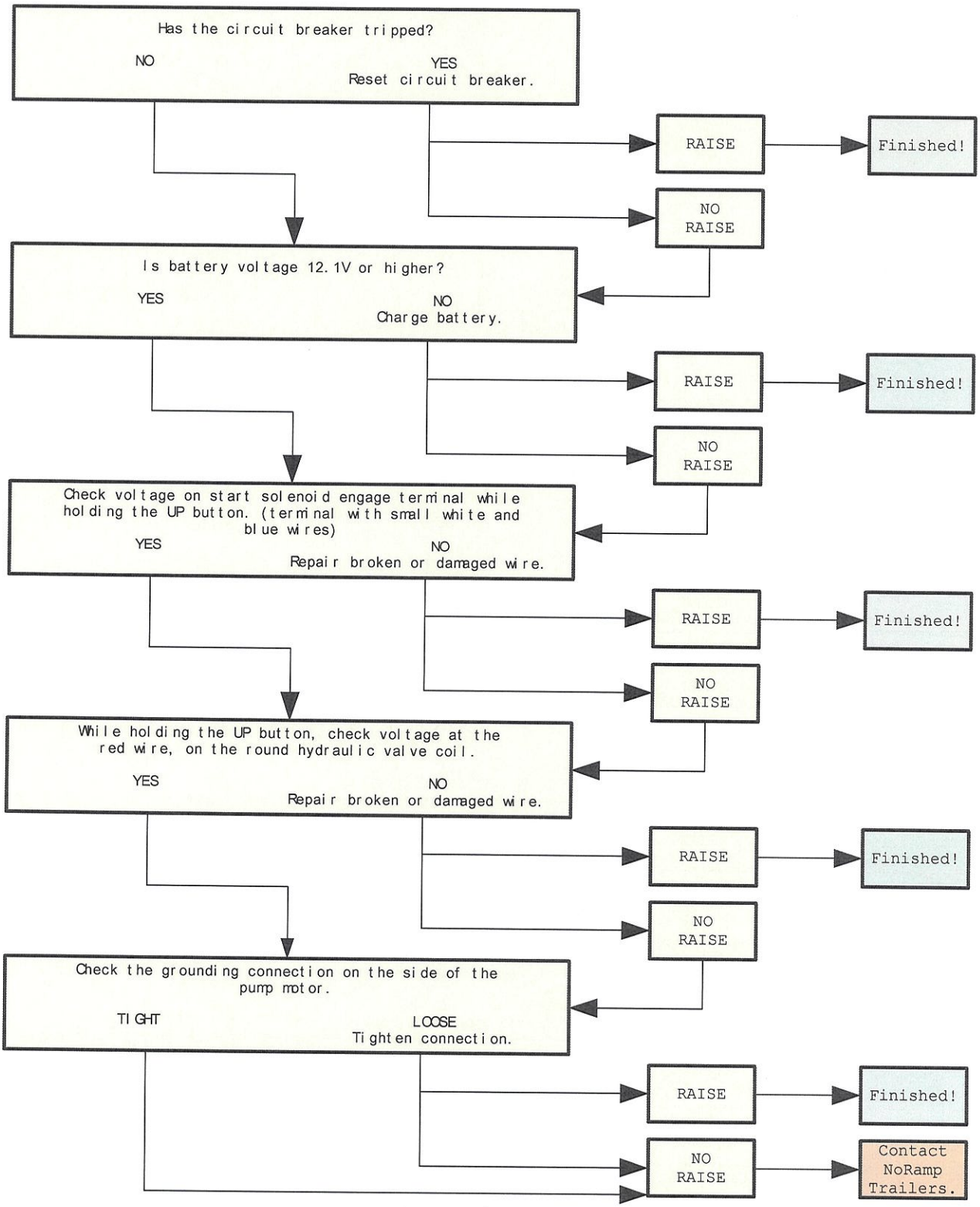
Trailer Raise Troubleshooting

7/2019



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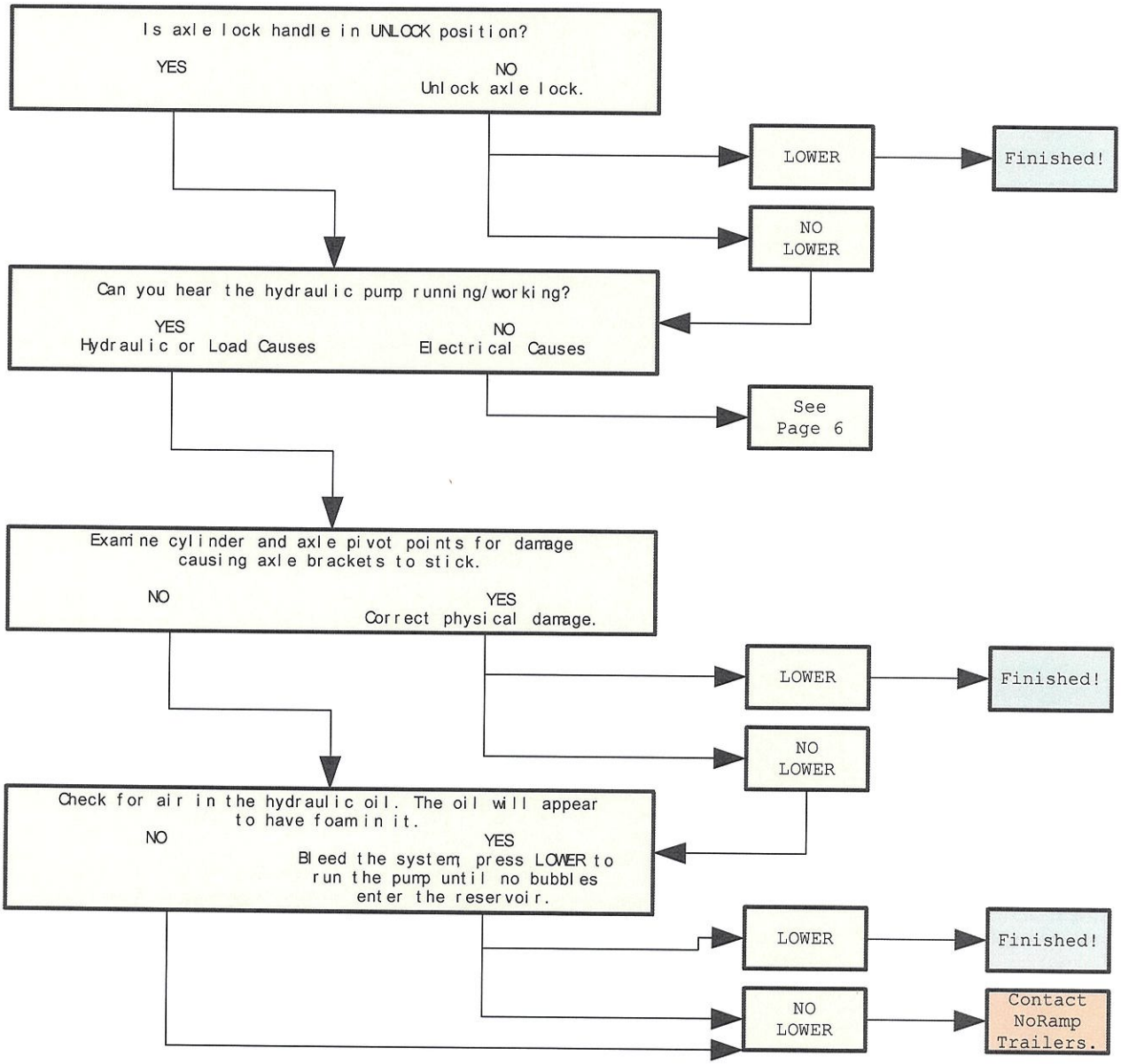
Trailer Lower Troubleshooting

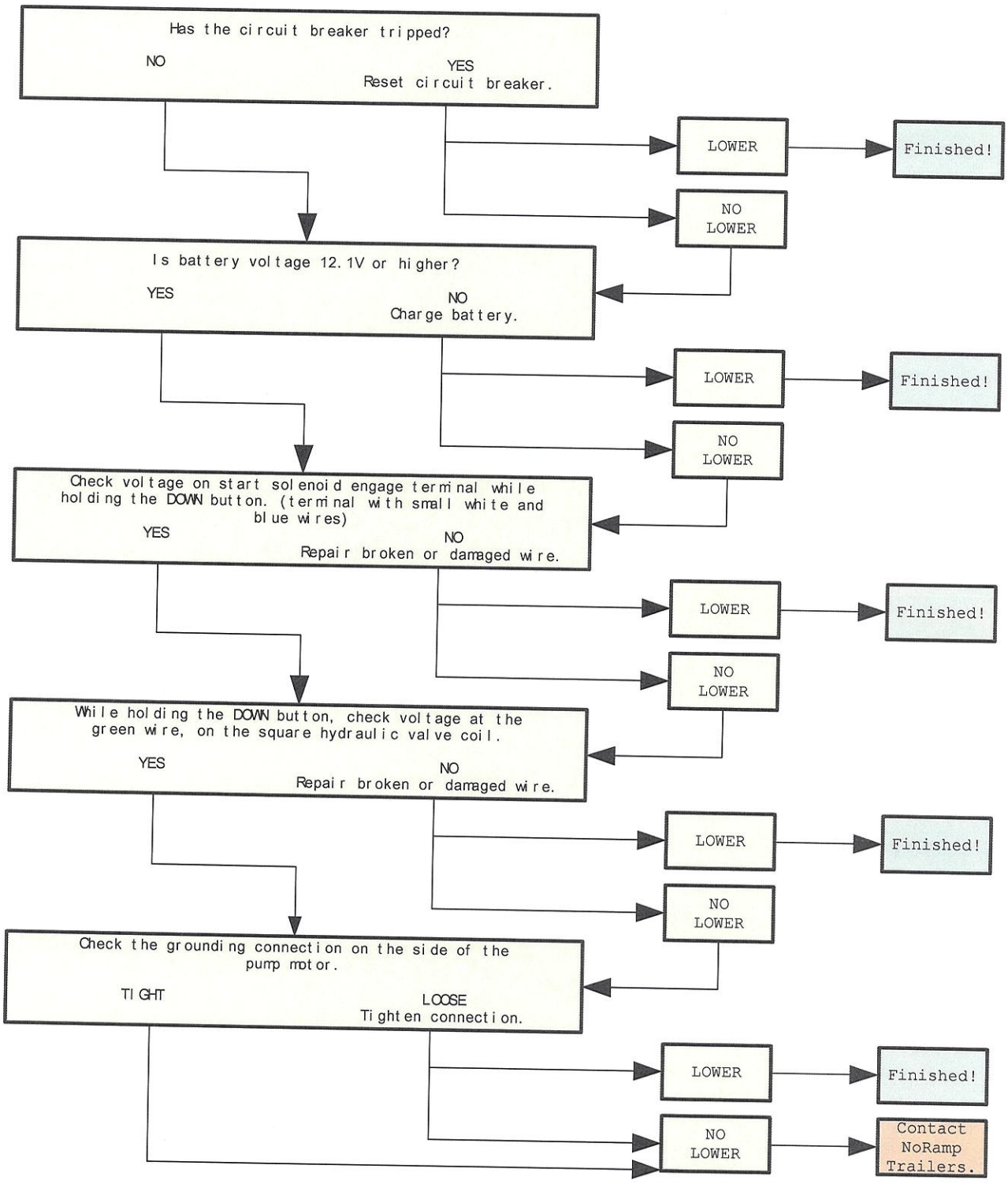
7/2019



NoRamp™
PATENTED TILT TRAILERS

Trailer Lower Troubleshooting

7/2019



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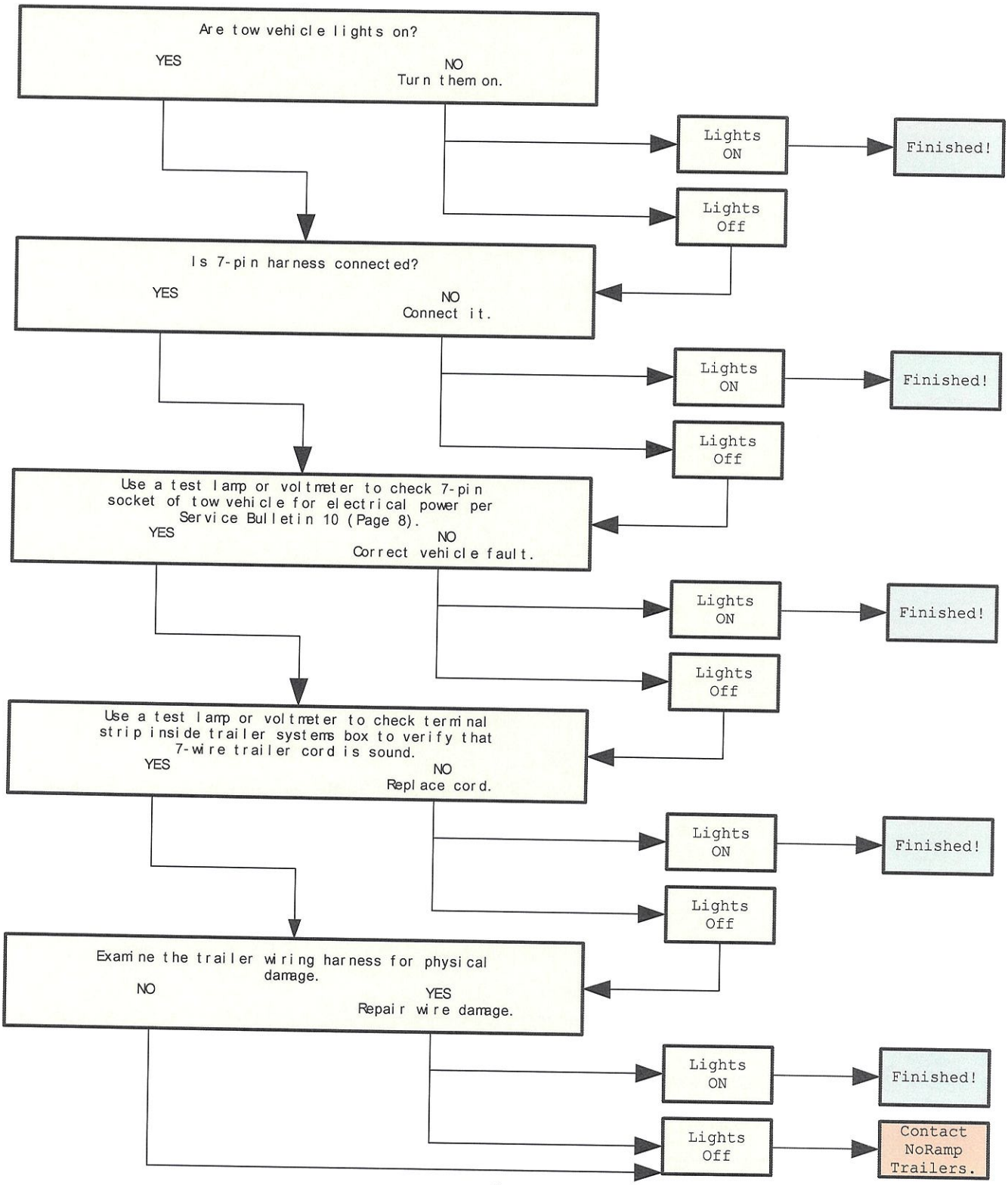
Trailer Light Troubleshooting

7/2019

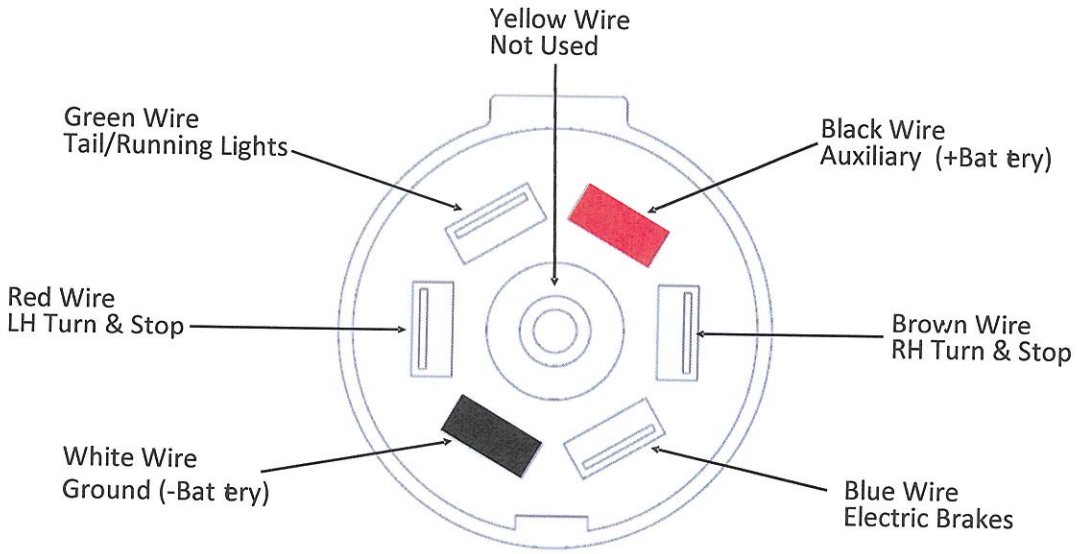


Kemco Manufacturing LLC
617 E Plymouth St
Bremen, IN 46506
(574) 546-2027

Service Bullet n 10

Dec. 18 2017

Truck 7-Way Plug-In Diagram



Looking At Face of Truck Plug.

Test 1. Start truck then connect red test lead from electrical tester to the tab in the 1 o'clock posit on, next connect black test lead to the tab in the 7 o'clock posit on. We are looking for a 12-13 volt reading with the truck running. If there is no power, the truck fuse needs to be checked or the truck needs wired/repaired for it to properly charge the trailer.

Kemco Manufacturing LLC

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617 E Plymouth St
Bremen, IN 46506
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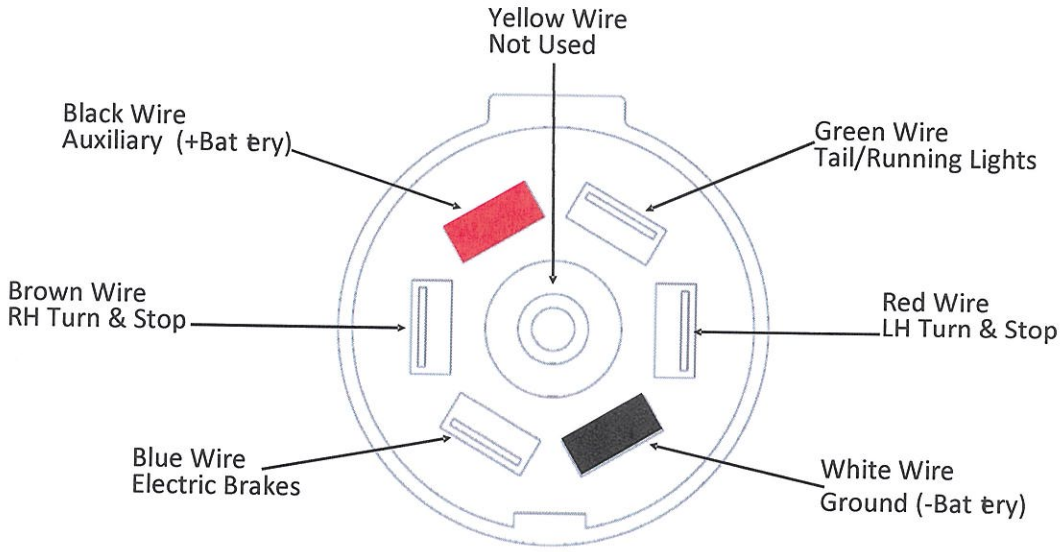
Service Bullet n 14

Mar. 1 2019

Trailer 7-Way Plug-In Diagram



Looking At Face of Trailer Plug.

To check the charging circuit on a NoRamp trailer, take a test light or electrical tester and check for power between the red & black tabs as indicated above. If power is detected then the trailer charging circuit is ok. If no power is detected then check for loose wires or a dead bat ery in the trailer.

Kemco Manufacturing LLC