# EZR7 Made in the USA

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And Foreign Patents



EZR7

Universal 7-Pin Heavy Duty Plug

# Installation Instructions and Product Warranty

**Professional Installation Required** 

EZ Connector, Inc., Tulare, CA USA EZConnector.com



## Thank you for purchasing our EZR7 trailer plug!

Your choice displays your recognition and value in the utmost in safety and reliability. This is a superior designed, quality crafted product that will provide years of trouble-free service if properly installed & maintained.

It is important that care and attention to detail be taken during the installation of this plug in order to realize all of its benefits. The exceptional quality of this plug will still not overcome a poor installation, or dysfunctional trailer or vehicle wiring.

We congratulate you on your purchase!

EZ Connector

# Notice!

There are certain steps in these instructions that if skipped, will require you to <u>back-up</u> & <u>cut</u> connections you have already made. Please follow these instructions carefully. Specifically, ensure that you:

- 1. Feed the Socket cable through the Mounting Bracket before connecting any of the wires.
- 2. Always slide heat shrink tubing, both large and small onto wires before making any wire connections

#### PRODUCT WARRANTY AND DISCLAIMER

#### LIMITED WARRANTY

- A. EZ CONNECTOR, INC. warrants the following:
- 1. That the Product is free from defects in material and workmanship.
- When professionally installed and used in accordance with the instructions supplied, the Product will operate substantially in the function of low voltage electrical continuity for lights and brakes between a trailer and its towing vehicle.
- B. The above Product has a limited lifetime warranty on the original installed vehicle/trailer to the original non-commercial end user purchaser of the Product and a 5 year commercial warranty, provided the product is registered along with proof of purchase, to the manufacturer within 30 days of purchase. Warranty does not apply to adapters
- C. EZ CONNECTOR, INC.'s sole liability under this warranty shall be:
- To replace the defective Product component(s) in accordance with EZ CONNECTOR, INC.'s return procedures, or
- At EZ CONNECTOR INC.'s sole option, to refund the purchase price upon return of the defective item. The warranty period for replaced Products shall be the remainder of the original warranty period for the replaced item.
- D. EZ CONNECTOR, INC. shall incur no obligation under this warranty if:
- 1. If EZ CONNECTOR, INC.'s verifiable tests disclose that the alleged defect is not due to defects in material or workmanship; or
- If, in EZ CONNECTOR, INC.'s sole judgment, the Product has been subjected to misuse or neglect, alteration, damage or improper installation or maintenance.

#### WARRANTY LIMITATIONS AND EXCLUSIONS.

A. THE WARRANTIES SET FORTH ABOVE FOR THE PRODUCTS PROVIDED HEREUNDER ARE COMPLETE AND ARE IN LIEU OF, AND CUSTOMER HEREBY WAIVES, ALL OTHER CONDITIONS, REPRESENTATIONS, AND WARRANTIES, EXPRESS OR IMPLIED BY STATUTE, USAGE, CUSTOM OF THE TRADE OR OTHERWISE, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NOTWITHSTANDING ANY OTHER OR PRIOR STATEMENT, WRITTEN OR ORAL, EZ CONNECTOR, INC. MAKES NO OTHER WARRANTIES REGARDING THE QUALITY OF ITS PRODUCT(S) OR THE MATERIALS COMTEMPLATED HEREUNDER AND EZ CONNECTOR, INC. EXPRESSLY DISCLAIMS ANY WARRANTIES OF DURABILITY, THAT THE PRODUCT WILL MEET ALL OF CUSTOMER'S NEEDS OR THAT THE OPERATION OF THE PRODUCTS WILL BEET REE.

B. Customer acknowledges and agrees that the Products supplied under this Agreement are intended for standard uses and are not specifically designed, manufactured or intended for use or resale in critical applications or hazardous environments requiring fail-safe performance and in which the failure of Products could lead directly to death, personal injury, or severe physical or environmental damage ("High Risk Activities"). EZ CONNECTOR, INC. and its suppliers explicitly disclaim any express or implied warranty of fitness for any such use and the customer hereby agrees to release and hold EZ CONNECTOR, INC. harmless from liability resulting out of or in connection with implementation of these Products in High Risk Activities.

C. LIMITATION OF LIABILITY. EZ CONNECTOR, INC.'S LIABILITY SHALL BE LIMITED TO THE PRICE PAID BY CUSTOMER FOR THE GOODS OR TO REPLACEMENT OF THE GOODS, AND CUSTOMER SHALL BE ENTITLTED TO NO OTHER REMEDY, REGARDLESS OF THE FORM OF THE CLAIM. EZ CONNECTOR, INC. SHALL NOT BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES ARISING FROM OR RELATING TO THE USE OF OR INABILITY TO USE THE PRODUCT, WHETHER OR NOT SUCH DAMAGES ARE FORESEABLE AND WHETHER OR NOT CUSTOMER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS OR REVENUE, ATTORNEYS' FEES, DAMAGE TO BUSINESS, LOSS OF USE OF EQUIPMENT, COST OF CAPITAL, DOWN-TIME COSTS OR DAMAGES FOR DELAY, OR FOR DAMAGES FOR ECONOMIC LOSSES OR PROPERTY DAMAGE ARISING FROM ANY ACTS OR OMISSIONS, WHETHER IN NEGLIGENCE, STRICT LIABILITY, OR OTHER PRODUCT LIABILITY THEORIES.

THE LIMITATIONS OF LIABILITY AND WARRANTY DISCLAIMERS STATED IN THIS AGREEMENT FORM AN ESSENTIAL BASIS OF THE BARGAIN BETWEEN THE PARTIES AND APPLY REGARDLESS OF WHETHER ANY LIMITED REMEDY HEREUNDER FAILS OF ITS ESSENTIAL PURPOSE.

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#### **Operation:**

- To insert the plug into the vehicle socket, first remove the weather tight Dummy Plug from the socket with a straight pull. Remove the plug from the mounted holder pulling straight out.
- 2. Insert the plug into the socket and rotate until the alignment index lines up for connection.
- 3. Insert the Dummy Plug into the plug holder mounted on the trailer to keep it clean as well as keeping the Dummy Plug from being lost.
- 4. Check operation of all lights and accessories before moving vehicle.

#### **Maintenance:**

- Periodically lubricate the o-ring seals with a silicone or di-electric lubricant.
- 2. Replace O-Rings if damaged or missing using a 028 Silicone O-Ring.
- 3. To keep components dirt and water free, keep sockets and plugs (trailer plug or dummy plug) mated at all times.
- 4. If the interior of the socket or plug becomes wet during coupling (particularly with salt water) wipe down before re-coupling.
- 5. In the event that metal shavings attach to the magnet, place a cloth or plastic bag over the magnet of one of the other components and move it near the contaminated magnet to attract the shavings. Then separate the magnets and remove the bag with the shavings from the second magnet.

#### Low Voltage Applications Only!

This plug is designed for use in applications requiring no more than 36 volts. Applying greater voltages may damage the plug and/or other equipment and may result in Injury.

#### Warning - Strong Magnets

The magnets used in this plug exert a strong magnetic force. Take care when handling any of the plug's components.

- Keep fingers clear as there is the possibility of being pinched as the plug engages.
- When pulling the plug or dummy plug from its socket, clear the area around the plug of sharp objects as your hand may recoil as the magnets release.
- Keep jewelry, such as earrings, and other loose metallic items away from the plug as they may attract and stick to the plug.

#### Warning - Plastic Packing Materials

Keep the packing materials used with this product away from small children to prevent suffocation or choking.

#### PRODUCT RETURN PROCEDURES

A. No Product shall be returned without prior EZ CONNECTOR, INC. Return Merchandise Authorization (RMA) obtained by contacting our customer service phone line or email listed below. Inoperative or malfunctioning Products must be returned by Customer in protective material, securely packaged to prevent damage in transit with a copy of the purchase receipt, and shipped via prepaid UPS to:

EZ CONNECTOR, INC.

Attn: RMA #### 1010 E Walnut Ave Tulare, CA 93274 Phone: (559) 685-9184

Customerservice@EZconnector.com

a UPS Return Label prepaid by EZ CONNECTOR, INC. will be sent to you by email or US mail.

B. EZ CONNECTOR, INC. will return replaced Product via surface freight to Customer's location. The cost of expedited freight, if requested, shall be at Customer's expense. Product found to be operable after testing (i.e. no trouble found), may be subject to shipping and handling charges.

<u>Vehicle Installation</u>
(PROFESSIONAL INSTALLATION REQUIRED!)

- Determine the desired length of the cable by holding it up where it will be mounted on the vehicle and marking it. Error to the long side when cutting your cable. Excess cable can always be coiled and tied whereas too short of a cable is unworkable.
- 2. Strip  $1\frac{1}{2}$ " 2" of the jacket off of the cable, then strip the individual wires 5/16" 3/8".
- 3. Determine the vehicle's wiring configuration. Since your vehicle's wire color coding may not match the plug's or the trailer's, it is imperative that you test the circuits using a test light as well as use the vehicle's owners manual to determine which color matches which circuit. Write down which color wire you will be connecting to each of the socket wires. See Figure 1 next page.
- 4. Place the piece of the larger (¾") shrink tubing over the cable and slide it up out of the way.
- 5. Stagger cut the lengths of the individual wires so that all the butt connectors will not be together which could cause a large knot preventing the large shrink tube from sliding over the connections.
- 6. Cut the long piece of ¼" shrink tubing into 7 equal pieces. Place one over each of the 7 wires prior to making any connections.
- 7. Match up each of the wires and pair-by-pair place the stripped ends into opposite sides of an electrical Butt Connector. Use the larger Butt Connectors for the larger diameter wires (white, blue and black). Crimp the connector well, and pull-test to ensure integrity.
- 8. After all wires are connected and crimped, slide each of the small heat shrink tubes back over the connections and apply heat to the tubings.
- 9. Then slide the large heat shrink tubing back over the entire connection covering all the connected wires (both vehicle and plug) and the cable water seal (if applied). Apply heat until the tubing has shrunk down around all of the wire connections forming a water tight seal.

Mount electrical cable in a location as high as possible under the vehicle. Secure with the zip-tie strap making sure that the end of the plug cable is pointing down.

## TRAILER INSTALLATION

# Always slide heat shrink tubing onto wires before making any wire connections.

## **Installing the plug holder:**

- Install the plug holder in a high location on the trailer.
- Choose a location that will be within easy reach, yet NOT susceptible to being submerged in water (as this holder has air-venting holes and is not water tight).

## **Installing the plug and wiring:**

- 1. Determine the desired length of the cable by holding it up where it will be mounted on the trailer and marking it. Error to the long side when cutting your cable. Excess cable can always be coiled and tied whereas too short of a cable is unworkable.
- 2. Strip  $1\frac{1}{2}$ " 2" of the insulation off of the cable, then strip the individual wires 5/16" 3/8".
- 3. Determine the trailer's wiring configuration. Using a 12-volt power source apply voltage to all wires individually to determine which circuits correspond to each wire color. Write down your findings.
- 4. Place the piece of large (¾") heat shrink tubing over the cable and slide it up out of the way.
- 5. Stagger cut the lengths of the individual wires so that all the butt connectors will not be together which could cause a large knot preventing the large shrink tube from sliding over the connections
- 6. Cut long piece of ¼" shrink tubing into 7 equal pieces. Place one over each of the 7 wires prior to making any connections.
- 7. Match up each of the wires and pair-by-pair place the stripped ends into opposite sides of an electrical Butt Connector. Use the larger Butt Connectors for the larger diameter wires (white, blue and black). Crimp the connector well, and pull-test to ensure integrity.

- 8. After all wires are connected and crimped, slide each of the small heat shrink tubes back over the connections and apply heat to the tubings.
- 9. Then slide the large heat shrink tubing back over the entire connection covering all the connected wires (both vehicle and plug). Apply heat until the tubing has shrunk down around all of the wire con nections forming a water tight seal.
- 10. Secure the cable to the trailer using the zip-tie strap to keep any pull-strain off of the connected wires and to adjust the cable slack to the vehicle.

# To ensure compatibility with all other EZ Connector installations, match the wiring shown in Figure 3.

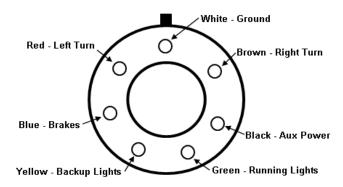


Figure 3
Looking into the Vehicle Socket

(The trailer plug is exactly the opposite so they match when plugged together)

# For a professional installation, you will need to:

- 1. Not compromise the integrity of the vehicle or trailer wiring.
- 2. Ensure that the electrical connections are strong and protected from the elements and corrosion.
- 3. Comply with all applicable codes and regulations.
- 4. Correctly wire to properly transmit the appropriate signal to the corresponding device (lights, brakes, turn signals, etc.).