#### 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 prepaid to:

EZ CONNECTOR, INC. Attn: RMA #### 1010 E Walnut Ave Tulare, CA 93274 Phone: (559) 685-9184 Customerservice@EZconnector.com

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.

## EZS7 Made in the USA

E7 Connector Inc. Tulovo CA USA

Protected by US Patents #5,172,751; #5,174,362; #6,478,619 Pending and Foreign Patents





# EZS7

Self Closing7-Pin Heavy Duty Plug n Play & T-Connector Versions

Installation Instructions and Product Warranty



### Thank you for purchasing our EZS7 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!

(PROFESSIONAL INSTALLATION REQUIRED!)

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. When used, always slide heat shrink tubing, both large and small onto wires before making any wire connections.
- 2. For in-bed truck installations for 5th Wheel and Gooseneck trailers, make sure that you choose a socket location within reach of the vehicle splice providing at least 2.5 inches of depth to accommodate the socket before drilling the minimum 2 1/8" hole.

#### 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:
- 1. 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:
- 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 BE ERROR FREE.

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 FORESEEABLE 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.

#### **Operation:**

- 1. Remove the trailer plug from the holder pulling straight out.
- 2. Lift the cover and insert the plug into the socket and rotate until the alignment index lines up with the tab and pulls in for connection.
- 3. Check operation of all lights and accessories before moving vehicle.
- 4. Do not remove the plug from the socket at an angle across the index tab which can potentially break the index tab.
- 5. Avoid dropping the plug or in the dirt which may necessitate removal of metallic particles from them.

#### Maintenance:

- Periodically lubricate the o-ring seals with a di-electric lubricant or petroleum jelly. DO NOT APPLY DI-ELECTRIC GREASE TO THE CONTACT SURFACES, DI-ELECTRIC GREASE IS NON-CONDUCTIVE.and can impede the flow of electricity between the contacts.
- 2. Replace O-Rings if damaged or missing using ASTM 028 Buna 50 durometer O-Rings available at better automotive outlets or from EZ Connector.
- 3. To keep components dirt and water free, keep socket or holder and trailer plug mated at all times.
- 4. Underside of cover should be wiped free of salt, grime, mud or other contaminants before disconnecting plug to prevent contamination of the inside of the socket
- 5. If the interior of the socket or plug becomes wet during coupling (particularly with salt water) wipe down before re-coupling.
- 6. 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. Compressed air may also be used to remove metal.
- 7. Do not apply di-electric grease to the contact surfaces, di-electric grease is non-conductive
- 8. Minor oxidation of the contact surfaces may occur and can be removed with ultra fine sandpaper (1200 grit) or finer ,mild abrasives or brass oxidation remover( Brasso, Never-Dull) etc.

#### 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 create an electrical shock hazard with potential injury or death.

#### 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 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.
- Individuals with pace-makers should avoid using the EZ Connector.

#### Warning – Plastic Packing Materials

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

## Vehicle Bumper Installation

3. Remove the OEM connector from the factory bracket or hole by releasing the tab and twisting on GM models, depressing the spring clips on Ford and new Dodge vehicles or removing the screws on older Ford or Dodge vehicles.

4. Remove the harness connector by depressing the tab on the round connector models and pulling apart with a rocking motion. On Dodge vehicles with the rectangular connectors, release the slide lock and then release the tab and pull apart.

5. If the optional no-drill installation clips are used, follow those instructions, otherwise insert into factory hole. Open lid and insert the small wood block above index tab to hold the lid open while installing.

6. For 2000-2007 Ford, holes will line up, just use appropriate screws. For newer Dodge trucks with the OEM connector in the bumper, use included template to trim the back of the EZ Connector to allow fit into the small molded area in the bumper..

7. For those that require drilling, insert connector in hole and mark one hole, drill with a #21 drill and use a 10-32 tap, and install 1 screw and tighten. Using a 13/64 drill, mark the remaining 3 holes, remove screw and connector. Drill and tap the remaining holes 8. Plug the back of the EZ Connector into the wiring harness connector ensuring that the seals are not twisted and that the connector is fully inserted and locked together. Replace connector, insert and start all screws, then tighten screws. Remove block.

## Vehicle in Bed Installation

9. If using the existing hole, and the existing T-harness in the bed is good, follow steps 4,7 & 8 above.

10. For a new T-connector, follow step 2.

11. Next open lid and insert a small wood block above index tab to hold lid open. Then follow step 7. Insert T-connector thru hole and run cable to the bumper connector, safely securing the cable underneath.

12. Behind the bumper connector follow step 4, insert the T between the bumper connector and harness and then follow step 8.

## TRAILER INSTALLATION

### <u>Always slide heat shrink tubing onto wires before</u> making any wire connections.

## Installing the plug holder:

- 1. Install the plug holder in a location on the trailer that when the plug is stored will prevent the cable from dragging on the ground if the trailer is moved without the plug being hooked up.
- 2. Choose a location that will be within easy reach, yet **NOT** susceptible to being submerged in water as the holder is not waterproof with the plug removed.

## Installing the plug and splicing wire if necessary:

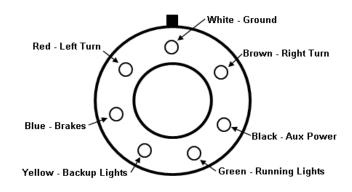
- 1. Before cutting cable remember, error to the long side when cutting your cable if necessary. Excess cable can always be coiled and tied whereas too short of a cable is unworkable.
- Strip 3 3/4" of the insulation off of the cable. Stagger cut the lengths of the individual wires so that all the butt connectors will not be together which could cause a large knot preventing the large shrink tube from sliding over the connections. Next 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 (34") heat shrink tubing over the cable and slide it way up out of the way.
- 5. 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.
- 6. 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.
- 7. 7. 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.

8. 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 connections forming a water tight seal.

9 . Secure the cable to the trailer near the hitch on top or inside of the tongue to prevent cable pinch if jack-knifed using the zip-tie strap to keep any pull-strain off of the spliced 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. The color code is the RV standard, not US Car.



### Figure 3 Looking into the <u>Vehicle</u> 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.).