

SCS UNV BU ENFORCER, ELECTRONIC SECURITY SYSTEM For All 36 & 48 Volt Carts

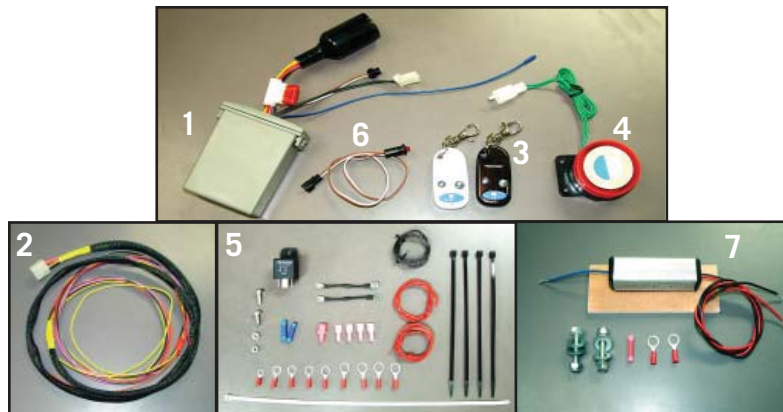


The **Buggies Unlimited ENFORCER Electronic Security System** is designed universally for use in 36 volt or 48 volt electric powered carts. If you are unsure of your golf cart type, year or model you have, please see our catalog, or **Cart Identification** page online at www.buggiesunlimited.com. Or contact our Technical Assistance Department, toll free at 1-888-444-9994 for assistance. You should allow 1 to 2 hours for installation.

PARTS INCLUDED IN THIS KIT

Item Qty. Description

- 1) 1 Alarm Base Unit
- 2) 1 Wire Harness Assembly
- 3) 2 Key Fob Transmitter
- 4) 1 Alarm Siren
- 5) 1 Hardware Kit
- 6) 1 Dash LED Indicator
- 7) 1 Voltage Regulator Kit



INSTALLATION INSTRUCTIONS

NOTE: Before beginning the installation lay out all the parts in an organized manner and remove rint terminal from black wire as shown in figure above.



CAUTION!

- Always wear appropriate eye protection when working on your cart.
- If your electric powered cart is equipped with a Tow/Run switch, turn it to the TOW position.
- Remove the key from the key switch and disconnect the main battery negative (-) cable from your set of batteries before proceeding.



WARNING!

- Use extreme care working around batteries to prevent accidental arch between battery terminals as this could ignite potentially explosive hydrogen fumes common in lead/acid batteries.
- Battery acid is poisonous and will cause severe burns. Avoid contact with eyes, skin or clothing.

1. Remove the dash or cup holders to access the alarm base unit mounting area. See figure 1, 2 & 3. For Club Car, remove the screw covers, loosen the screw on each side, then pry the dash panel outward. For EZ-GO and Yamaha, pry the cup holder upward to remove. Check to make sure alarm base unit is positioned on a horizontal mounting surface, where it will not interfere with the installation of the dash or cup holders. On Club Car models, mount base unit on top of steering column mount block.

NOTE: DO NOT permanently mount it until after the sensitivity adjustment (step #10) has been completed.

2. Drill a 5/16" hole through the dash. Disconnect the LED light at the plug connecting it to the alarm base unit, then insert the LED wires through the hole in the dash and snap the LED light into place in the dash. Reconnect the LED wires to the alarm base unit. **Be sure to place the LED light in a visible location where people can clearly see the presence of a security system on your cart.** **NOTE:** Some reaming may be required for proper fit.
3. Install the alarm siren next to the alarm base unit. Thoroughly clean the mounting surface with rubbing alcohol, to aid the adhesive tape in sticking to the chosen mounting surface. Use the two #8-32 X 1" screws & nuts to secure the alarm siren in place. Now connect the lead wires from the siren to the matching plug on the alarm base unit.
4. Connect the wire harness to the alarm base unit, then run it along the frame under the cart. Keep the yellow wire near the front if you have head & tail lights you wish to connect to this alarm system. Be sure to secure the wires every 12 inches with a cable tie. Route it into the battery area in the engine compartment for the final connections.

5. Locate the main power solenoid in your cart's electrical system. It will have four terminal connection points; two large terminal posts and two small terminal posts. See Figure 4 for samples. For this installation we are only using one of the SMALL terminal posts to make our connection with the alarm system. Use the Solenoid Wire Color Code Chart included to determine the color of the wire you will be disconnecting. See the Solenoid Wire Color Code Chart on page 4.

NOTE: With most carts, the wire you will disconnect will be blue, green, red/white, white/black, or similar color. You will **NEVER** use a black wire for this next connection. Some regenerative electric car systems use a blue wire which could be common with battery negative. See Electric Cart Solenoid Connection Color Codes on page 4.

Tech Tip - Solenoids & Diodes: *Solenoids will vary in appearance but all operate in the same manner. Some solenoids may have a diode connected between the two small terminal posts. REMEMBER that a diode is polarity sensitive! Make sure to NEVER reverse or change the positive & negative orientation of the diode or it will be shorted & destroyed. If it is removed for any reason, always check that the colored stripe or band is in the original position before continuing. See Figure 5.*

Once you have located the correct small positive terminal on the main solenoid and you have determined the correct wire to remove, disconnect ONLY that wire from the solenoid terminal and replace it with the gray colored alarm system wire. You will need to crimp the appropriate connector onto the gray wire to match the terminal connection on your solenoid. See wire diagram on page 4.

6. Connect the orange alarm system wire to the appropriate resistor (36 or 48 volt), then connect the resistor to the pink/orange wires from the alarm system wire harness. See figure 7.



CAUTION!

Verify that you are working with either a 36 or 48 volt cart, then chose the resistor marked with that voltage before continuing. Choosing the wrong resistor could cause alarm system failure which is not covered under the product warranty.

Connect the cart's positive solenoid wire (removed in step 5), to the pink/orange alarm wires. You will need to change the connector on the cart's original solenoid wire, to a 1/4 Male tab connector (included in this kit). See figure 7 and the chart on page 4.

OPTIONAL LIGHT CONNECTIONS: If you do not have lights on your cart, you may skip down to step # 8.

7. Connect the alarm system relay:
- Connect the yellow wire from the Alarm to the relay coil terminal #86.
 - Route the black wire (included in this kit) from the relay coil terminal #85, to the main black wire from the alarm harness.
 - Use one red wire (included in this kit) to connect the common terminal #30 to the power supply wire going to the headlight switch to (+12 volts).
 - Using the other supplied red wire, connect the normally open terminal #87 to the open or head light side of the head light switch.

See Figure 8.

8. Next you will need to connect the remaining two alarm wires (red & black) to the battery pack. The black single wire will connect to first negative terminal in your battery set and the red single wire will connect to the blue positive wire from the Voltage Regulator (VR) included with this kit. See the attached battery diagrams on page 9, to locate the proper battery connections for you're cart.

The Voltage Regulator has three wires, red, black and blue. Connect them as follows:

- Connect the blue wire from the VR, to the alarm System Red Wire.
- Connect the red wire from the VR, to the battery (12/16 volt) positive as shown in the wire diagram on page 4.
- Connect the black wire from the VR, to the first battery negative and shown in the wire diagram on page 4.



Fig 1 - Club Car Dash Removal



Fig 2 - EZ-GO Cup Holder Removal



Fig 3 -Yamaha Cup Holder Removal

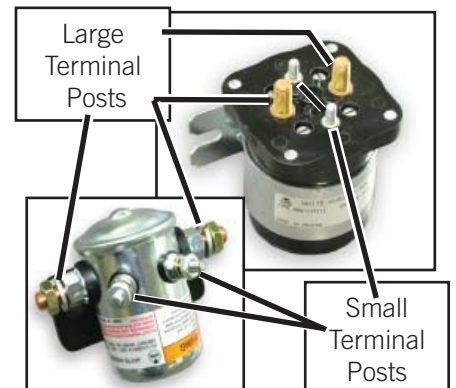


Figure 4 - Sample Solenoids

9. You will need to mount the VR to a solid part of the frame of your cart. See figures 10, 11 & 12 for some installation examples.
10. Adjust the sensitivity of the alarm by removing the black rubber plug on the side of the alarm body and turning the internal adjustment screw. Turn clockwise to increase sensitivity and turn counterclockwise to decrease. See figure 9.

NOTE: The sensitivity adjustment determines the severity of physical impact or jostle required to trigger the alarm. With each adjustment, test by jostling the car to determine the amount of force required to trigger the alarm

11. Thoroughly clean the horizontal mounting surface with rubbing alcohol before peeling the adhesive tape cover and mounting the Electronic Alarm Base Unit. Press the base unit firmly to assure adhesion. Use the long cable tie supplied to help secure the base unit in place. EZ-GO or YAMAHA carts, you will need to drill a 1/4" hole on each side of the base unit for the cable tie to run through the under side of the dash and around the base unit. DO NOT install onto a vertical surface or the adhesive may not hold.
12. Extend the blue antenna lead coming from the alarm base unit to it's full length and tie it to a stationary object for the best possible reception from the key fob transmitters. If the frame is not accessible from the alarm base unit mounting location, make sure the blue lead is extended to its full length and that it is secured to any stationary object.

NOTE: DO NOT connect the blue lead to any moving part of the steering or suspension system.

13. Install the dash components back in place and double check to assure that all the wiring for your new alarm system is secured and will not chafe against sharp edges or interfere with any moving parts.

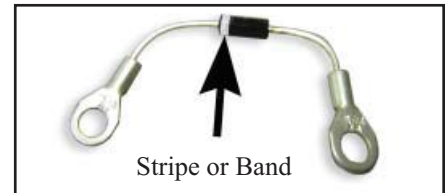


Figure 5 - Diode

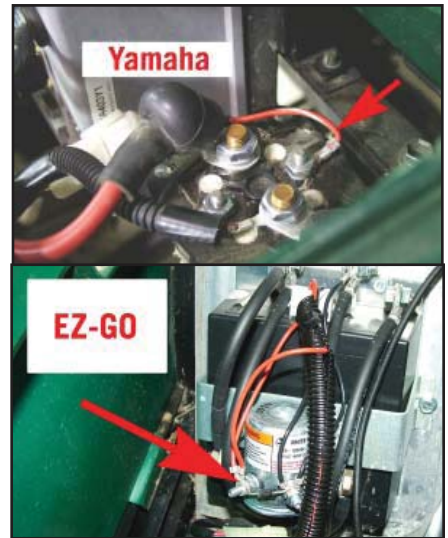


Figure 6 - Gray Alarm Wire Installation

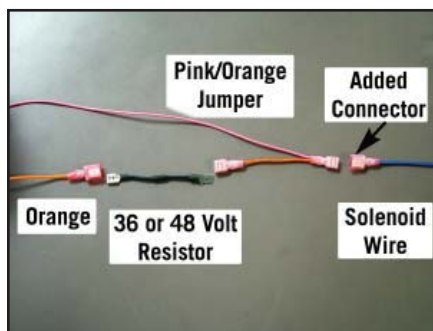


Figure 7 - Solenoid Wiring

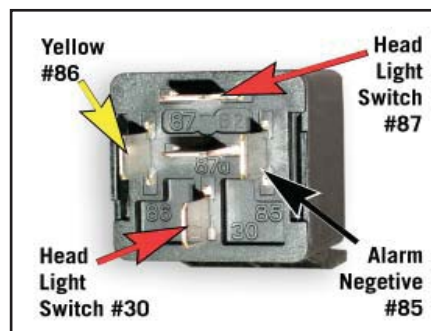


Figure 8 - Relay



Figure 9 - Sensitivity Adjustment



Figure 10 - Club Car Frame



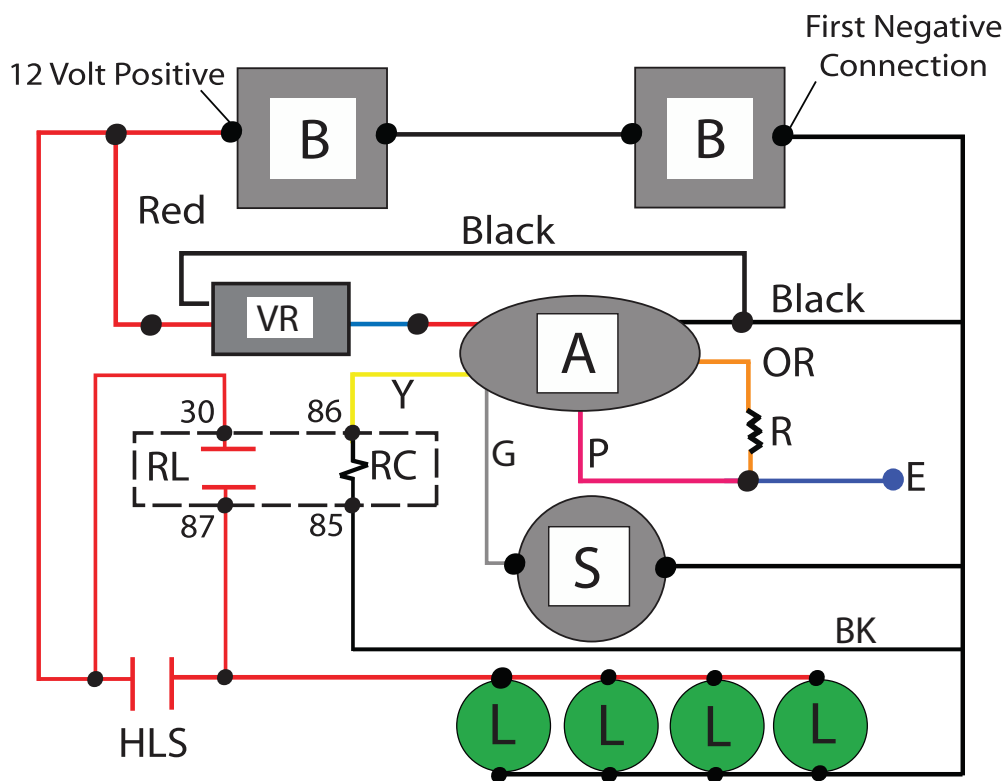
Figure 11 - Yamaha G-14/16 or G-MAX Frame



Figure 12 - EZ-GO Frame

Solenoid Wire Color Code Chart

Club Car	1981-1988 Resistor	Use the Green wire located on the solenoid Positive.
Club Car	Late 1988-1994 Resistor	Use the Green wire located on the solenoid Positive.
Club Car	1995-Present Resistor	Use the Yellow wire located on the solenoid Positive.
Club Car	1990-1994 Solid State	Use the White/Black wire located on the solenoid Positive.
Club Car	1995-Present Solid State	Use the White/Black wire located on the solenoid Positive.
Club Car IQ	2001- Present	Use the Light Blue wire located on the solenoid Positive.
Club Car Gen 1	1995-1997	Use the Blue wire located on the solenoid Positive.
Club Car Gen 2	1998-2001	Use the Blue wire located on the solenoid Positive.
EZGO Resistor	1988-Older	Use the Yellow wire located on the solenoid Positive.
EZGO Solid State	1989-1994.5	Use the Orange wire located on the solenoid Positive.
EZGO NON-DCS/PDS	1994.5- Present	Use the Red wire located on the solenoid Positive.
EZGO DCS	1994.5-Present	Use the White/Yellow wire located on the solenoid Positive.
EZGO PDS	2000-Present	Use the Yellow wire located on the solenoid Positive.
Yamaha	G2-8-9-14-16-19-22	Use the Red/White wire.



LEGEND

A = Alarm
 B = Battery
 E = Existing Solenoid Wire
 G = Gray Alarm Wire
 HLS = Head Light Switch

L = Lights
 OR = Orange Alarm Wire
 P = Pink Alarm Wire
 R = Resistor, Alarm
 RC = Relay Coil

RL = Relay Contacts
 S = Solenoid
 VR = Voltage Regulator
 Y = Yellow

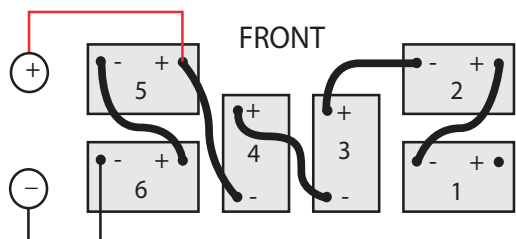
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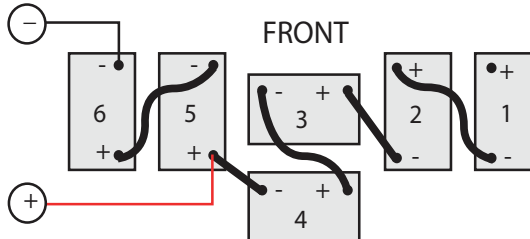


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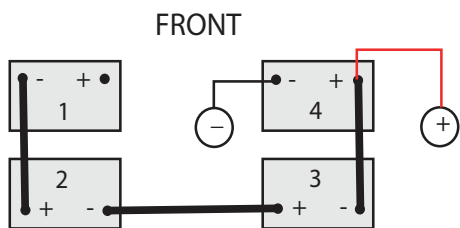
(Fig. A) Club Car DS Model 48-Volt Battery Pack



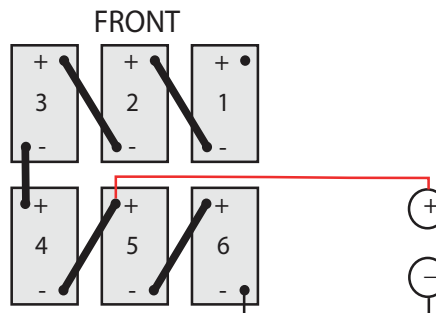
(Fig. B) Yamaha 48-Volt Battery Pack



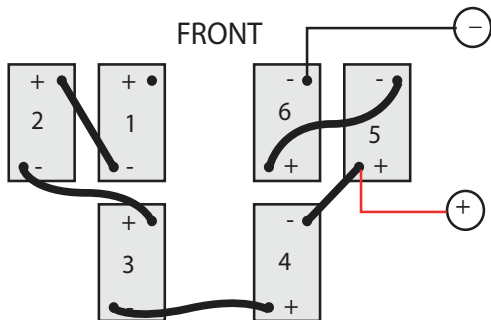
(Fig. C) Club Car Precedent
Model 48-Volt Battery Pack



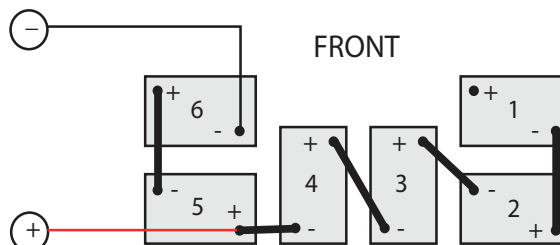
(Fig. D) EZGO TXT Model 36-Volt Battery Pack



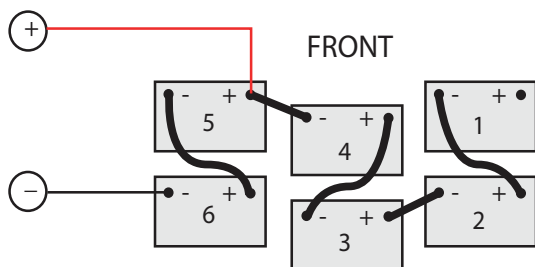
(Fig. E) EZGO Marathon
Model 36-Volt Battery Pack



(Fig. F) Club Car DS Model 36-Volt Battery Pack



(Fig. G) Yamaha 36-Volt Battery Pack



This alarm requires 12V activation. Care must be taken to connect to the first cart (-) negative connection (to battery number 6 for 6 battery pack and battery number 4 for 4 battery pack). See appropriate diagram.

It is advised to test the voltage at the positive activation small terminal at the solenoid. With the key switch "ON" you should read system positive voltage at the solenoid small activation terminal, with the key switch "OFF" you should read zero voltage. On some brands such as EZGO 1994.5 and up this does not apply, just make sure the voltage is zero on or off.



INDEMNIFICATION AND INSURANCE AGREEMENT

The ENFORCER Electronic Security Alarm System is a **theft deterrent** product and Mattison Avenue Corporation (d.b.a. Buggies Unlimited) makes no claim that theft of your cart can not or will not occur. ENFORCER Electronic Security Alarm System installation should be performed by a professional. The ENFORCER Electronic Security Alarm System purchaser assumes sole and entire responsibility for, and shall indemnify and save harmless Mattison Avenue Corporation (d.b.a. Buggies Unlimited), from any and all claim, liability, responsibility, and damage, or any costs or expenses resulting from any loss of life or injuries or claimed injuries to persons or property that may be sustained in connection with the use of any product before or after purchase, including but not limited to ENFORCER Electronic Security Alarm System. The ENFORCER Electronic Security Alarm System purchaser also shall indemnify Mattison Avenue Corporation (d.b.a. Buggies Unlimited) and save Mattison Avenue Corporation (d.b.a. Buggies Unlimited) harmless with respect to any and all liability that may be incurred.

Golf carts are recommended for use only by those aged 16 and older. Golf carts can be especially hazardous to operate. Always remember that riding and alcohol/drugs don't mix. Never ride on public roads. Never carry more than two passengers (except shuttles and trams). Never engage in stunt driving. Avoid excessive speeds and be particularly careful on difficult terrain. Buggies Unlimited reserves the right, at any time, to discontinue or change specifications, prices, designs, features, models or equipment without notice and without incurring any obligation.

Buggies Unlimited
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