

# 500-NP Installation Instructions for the Club Car IQ



## Before Installation:

- Place rear on jack stands (wheels off the ground)
- Use proper eye protection and tools when working with electrical equipment
- Disconnect the batteries



## Installation:

1. Prepare heatsink using supplied mounting template.
2. Mount control using original motor control mounting bolts.
3. Connect all motor wires (refer to supplied wiring diagram for proper connection).
4. Install supplied adapter harness.



## Troubleshooting:

**Perform all troubleshooting checks with rear wheels off the ground.**

### Cart does not operate

- Verify that all wire connections are correct and secure.
- Verify that the Tow switch is closed. This can be done by measuring pin 1 on the control. If switch is closed this pin should measure close to battery volts.
- Verify battery volts on pin 2 of the control.
- Verify battery volts on pin 6 of the control with the key on.
- Verify battery volts on pin 3 of the control with the accelerator start switch closed.
- Verify that control is configured for the correct application (check label).

### Contactors closes but no movement

- Verify proper armature and field connections (Refer to supplied wiring diagram).
- Verify approximately 0.5V to 3.5V (Regen I) 3.5V to 0.5V (Regen II) on pin 7 of the control as the accelerator is slowly depressed.



Detailed pictorial instructions, templates and wiring diagrams can be downloaded from the Downloads - Controller Documents section of our website.

### Disclaimer:

D&D Motor Systems, Inc. is not responsible for personal injury or equipment damage due to misuse of the product.

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**CLUB CAR IQ WIRING DIAGRAM**

This diagram illustrates the electrical system of a Club Car IQ, detailing the connections between the battery bank, motor, controller, and various control components.

### Key Components and Connections:

- Battery Bank:** Consists of six batteries labeled 1 through 6. It provides power to the system via a main positive terminal (P) and negative terminal (N).
- Motor:** Connected to the battery bank through a series of fuses (F1, F2) and a diagnostic port.
- Controller:** Receives input from the battery bank and controls the motor's operation. It features a "REMOVE" label indicating where to disconnect the black wire from the stock controller.
- Forward/Reverse Switch:** Controls the direction of travel. It has three positions: Forward (F), Reverse (R), and Neutral (N). The switch is connected to the battery bank and the controller.
- Throttle/Run Switch:** Controls the throttle position. It has two positions: Throttle (T) and Run (R). The switch is connected to the battery bank and the controller.
- Sonic Weld:** A component used for welding or joining wires. It is connected to the battery bank and the controller.
- Diagnostic Port:** Located near the motor, it allows for troubleshooting the system without using the controller.
- Wiring Colors:** Various colors are used throughout the diagram to identify different circuits, including Red, Blue, Green, Yellow, Black, White, Brown, Tan, Purple, Gray, Light Green, Pink, and Light Blue.

The diagram also shows the location of several connectors, such as the Four-Pin Connector, Three-Pin Connector, Two-Pin Connector, and Diagnostic Port. These connectors facilitate the connection of external devices and sensors to the vehicle's electrical system.

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| Connector on Cart |            | To | Connector on Control |
|-------------------|------------|----|----------------------|
| Wire Color        | Pin Number |    | Pin Number           |
| WHITE             | 1          | ®  | 8                    |
| YELLOW            | 2          | ®  | 7                    |
| PURPLE/WHITE      | 3          | ®  | 9                    |
| GREEN/WHITE       | 4          | ®  | No Connect           |
| LIGHT BLUE        | 5          | ®  | No Connect           |
| GREEN             | 6          | ®  | 3                    |
| ORANGE/WHITE      | 7          | ®  | 10                   |
| BROWN             | 8          | ®  | 4                    |
| GRAY              | 9          | ®  | 1 & 2                |
| TAN               | 10         | ®  | 6                    |
| NOT USED          | 11         | ®  |                      |
| BLUE/WHITE        | 12         | ®  | 17                   |
| BLACK/WHITE       | 13         | ®  | 16                   |
| LIGHT GREEN       | 14         | ®  | 14                   |
| RED               | 15         | ®  | 15                   |
| BLUE              | 16         | ®  | 5                    |

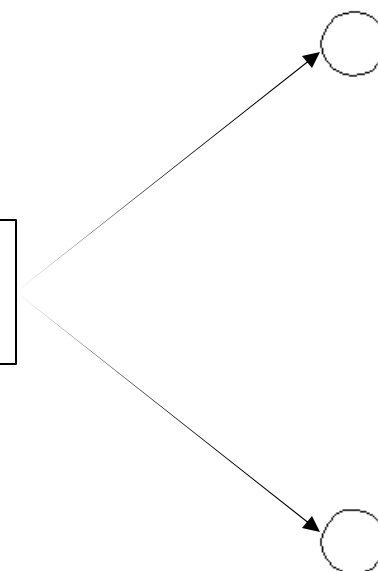


After template is mounted to heatsink, drill these holes with a No. 7 (0.201") drill bit and tap these holes to 1/4" X 20

## Mounting Template



Punch/cut these holes out of the template. Mount template to cart heatsink using original motor control bolts.



After template is mounted to heatsink, drill these holes with a No. 7 (0.201") drill bit and tap these holes to 1/4" X 20

