

S2R Remote Electric Golf Trolley Model: S2R v2

User Manual



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Congratulations on your purchase of the NovaCaddy S2R Remote Electric Golf Trolley. The S2R is without doubt one of the most high performance and competitive carts in the global market for motorized golf push carts and it represents what really counts in this market: A Great Balance between Functionality, Performance, Practicality and Value! To ensure operate the golf trolley properly, please read this instruction before using your S2R.

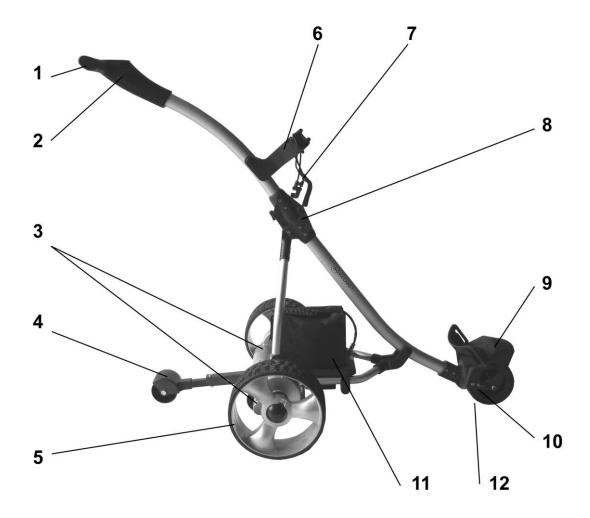
1. Packing List and Parts Glossary

Standard Parts

- 1 x Caddy
- 2 x Rear Wheels
- 1 x Anti-flip Wheel
- 1 x Battery Pack (Battery, Bag, Leads)
- 1 x Battery Charger
- 1 x Tool kit
- Remote handset
- User Guide
- Extras may be included as per the advert statement.

Optional Accessories

- Cup Holder
- Umbrella Holder
- Scorecard holder
- Carrying bag
- Seat Assembly



- 1. T-Handle with LED
- 2. Manual Rheostat Speed Ctrl.
- 3. Dual Motors/Gearbox Ass.
- 4. Anti-flip Wheel
- 5. Rear Wheels
- 6. Upper Bag Support

- 7. Bag Support Strap
- 8. Frame Lock
- 9. Lower Bag Support
- 10. Tracking Adjustment Ass.
- 11. Battery
- 12. Front Wheel

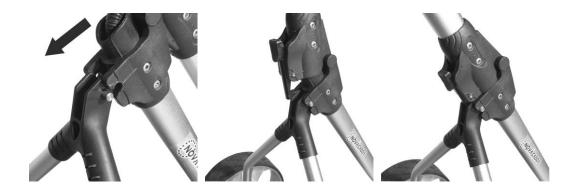
2. Assembly Instructions

- 1.Unpack all items carefully and check everything has been included. Some extras may be in small packages so do not throw anything away until all has been checked.
- 2. Place the frame structure (one piece) on soft and clean floor and ensure that you do not scratch the frame on a hard surface.
- 3. Attach the wheels to the axles by pushing the wheel locking button on the outside of the wheel and inserting the axle extension into the wheel. Make sure to keep the locking button on the outside of the wheel pushed in during this process, in order to enable the axle extensions, including the two pins, to be inserted all the way into the wheel. If not locked in, the wheel will not be connected to the clutch and will not be propelled!!! Test the lock by trying to pull the wheel out. To disassemble the wheels proceed in reverse order. If you feel the wheels are not working then take them off switch the power on and if the axle rotates you will know you have not pushed the wheels all the way in.



4. Erect the frame by unfolding and connecting the main frame tube together at the joint and locking the Y-shape lower support structure to the main frame with the frame lock mechanism. Proceed in reverse for folding the caddy.





5. Place battery pack on battery tray and fasten Velcro strap around battery tightly. Insert battery plug into caddy outlet.



6. Insert anti-flip wheel into frame and secure with pin (or built-in ball pin).



7. Install clamp style Accessories Station on frame and attach Scorecard Holder, Umbrella Holder to Accessories Station. Attach Beverage Holder to frame.



8. Unpack remote control and install batteries as indicated in the diagram in the receiver compartment of the unit. Now you are ready to learn and understand the function of the manual and remote controls.

9. Installation of seat (Optional)



9.1 Slide seat bracket bar into seat tube connector at lower frame



9.2. Tight both thumb screws to secure the bracket bar



9.3. Fit seat post into slot on the bracket bar. Hold base of post on the ground and lift the post connector to slide on to slot.



9.4. Attach seat to top of post. The seat is spring loaded and base is kept off the ground until weight is applied. When sit on the seat, the base will touch the ground for support.



3. Operating Instructions

3.1. T-Handle Function



3.1.1. Power Level.



H (High power): Green Color



MID (Mid power): Yellow Color



LOW (Low power): Red Color

3.1.2. Timer Function (Distance function)



When pressed, the trolley run 10 sec (roughly about 10 meter/yard) and stop by itself.



When pressed, the trolley run 20 sec and stop by itself.



When pressed, the trolley run 30 sec and stop by itself.

3.1.3. Cruise and Pause Function:

One press in order to Pause or Run the trolley. Select the speed to match your pace. The cart will remember its last setting when you stop, and travel at that speed automatically when you start again, except when you change the speed knob position.

Power ON/OFF button controls the caddy's power supply. Press and hold for 2-5 seconds in order to switch the caddy ON or OFF. After you have connected your battery, you need to press ON, and the battery LED will illuminate. Now your caddy is ready for operation.

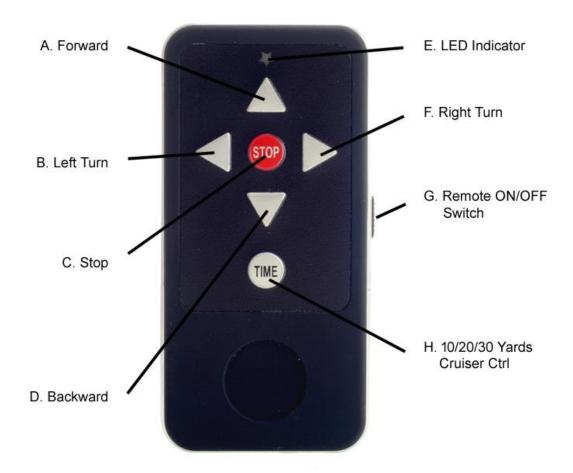
3.1.4. Digital Display

Digital display shows the speed level and Timer Function. The speed level is from 1 to 9. Timer 10M/20M/30M function shows as Program a/b/c.

3.1.5. Manual Speed controller

Scrolling of the Manual Rheostat Speed Control knob lets you choose your preferred speed to suit your space perfectly, and the digital display will show the preferred speed. The speed level is from 1 to 9.

3.2. Remote Control



A. Forward: Press the FWD button will set the caddy in forward motion. Briefly press the FWD button will increase the speed (press FWD button to decrease speed at backward motion).

B. Left Turn: Initiates left turn. When the button is released, the caddy stops turning and continues straight with original speed prior to turning.

C. Stop: Stop the caddy from any movement.

D. Backward: Press the BWD button will set the caddy in backward motion. Briefly press the BWD button will increase the speed (press BWD button to decrease speed at forward motion).

E. LED Indicator: Remote Control signal indicator.

F. Right Turn: Same as left arrow function

G. Remote ON/OFF Switch: Turn the Remote Control power ON/OFF.

H. Cruise Ctrl (Timer Function): 10, 20, 30 Seconds moving control (roughly 10, 20, 30 yard/meter) Increase 10 seconds (10 yards) each press. 30 seconds (30 yards) max.

Important Notes:

- Change remote control batteries once the indicator LED gets weak or dim
- The remote control uses 2 x 1.5V AAA batteries
- To change batteries, open up the battery compartment cover and place the batteries according to the diagram in the battery compartment
- The maximum range of the remote control varies between 80-100 yards, depending on the battery charge, obstacles, atmospheric conditions, power lines and topography of the course.
- Remote Control Connection: This is used to align the caddy frequency with an out-of-tune
 or replacement remote control or new control box.
 - Step 1 Make sure power is totally off for at least five (5) seconds
 - Step 2 Hold down the STOP button on the remote.
 - Step 3 Power up cart. Continue to hold down the stop button.
 - Step 4 Continue hold down the stop button until the lights on the LED screen blink.
 - Step 5 Cart is now in "sync" test each function to assure all are functioning.
- It is strongly recommended to operate the caddy at a maximum rang within 50 yards in order to prevent the loss of control of the caddy!

3.3. Additional Function

3.3.1. Tracking Adjustment:

The tracking can be adjusted via the adjustment mechanism mounted to the front wheel. Turning adjustment thumb wheel DOWN (left and/or right side of the front wheel) to adjust the alignment to RIGHT direction, tuning the thumb wheel UP to adjust the alignment to LEFT direction.



Adjustment Thumb Wheel

3.4. Test Caddy

Test caddy power supply by press POWER button on T-handle. All power volume lights (Red, Yellow, Green) should come on and caddy should be operable by both the manual control on the T-handle and remote control.

Note: Familiarize yourself with the T-handle control and remote control functions.

<u>Before</u> you start operating the caddy. <u>NOW</u>: Please read and follow the operating instructions <u>BEFORE</u> you operate the caddy.

3.4.1. Test Environment

First, make sure that you perform your first test of the caddy in a wide and safe area, free of obstructions or valuables, such as people, parked automobiles, flowing traffic, water body (river, swimming pool, pond, etc.), steep hills, cliffs or similar hazards.

3.4.2. Manual Control Operation

Turn the main power on by press POWER button on T-handle. The manual functions of the caddy are controlled through the rheostat control knob on the right side of the T-handle. Turn the knob forward (clockwise) will control the forward movement of the caddy. In order to slow down the caddy, turn the knob backward (counterclockwise). Push the GO/STOP button any time to pause or replay the caddy. Turn the knob dead end of backward to stop the caddy completely. Test "10M", "20M" and "30M" timer function.

3.4.3. Remote Control Operation

Make sure you are close to the caddy at all the time while testing it and familiarizing yourself with the remote control!

Now turn on the main power of caddy, and make sure the manual speed control knob is in "0" position (turn it to dead end of backward).

ONE touch of the Forward or Backward Arrow button on remote starts the caddy in either direction. Further presses increase speed. In order to STOP the caddy, press the round red STOP button in middle of the remote. To turn the caddy in either direction, push the Left or Right Arrow button. Once you release the button, the caddy will continue in the current direction at the same speed prior to the turning command. You will notice that the caddy reacts promptly to any turning command, so it will take you some practice to get just the right touch for turning maneuvers. Please be aware that the turning characteristics will change depending on the surface (grass or asphalt), the slope or the weight (loaded, unloaded) of your caddy.

The remote is designed to have a reach of approximately 80-100 yards, but we **strongly recommend** to operate the caddy in closer range of 10-30 yards (do not exceed 50 yards) to be able to react to any unforeseen events, such as other golfers crossing your path or to avoid hidden obstructions (creeks, bunkers, GUR, etc.) or a unexpected disconnection in remote operation.

Automatic stop feature. An additional safety feature of this caddy is that it will stop moving at remote control mode, if it does not receive a signal from the remote control at least every 25-30 seconds. This way, should you ever be distracted, your caddy does not get away.

Timer Function. By pressing the lower middle TIMER button on the remote to active Cruise Control (timer function).

3.5. Battery Charging and Maintenance

3.5.1. Safety Instructions for Battery Use, Store and Charging

Please OBEY These Precautions for Battery use and Charging

- 3.5.1.1. Please do not charge the battery in a sealed container. It is recommended to charge the battery in a well ventilated area.
- 3.5.1.2. Please do not charge the battery near a heater, or where heat accumulation may occur or in direct sunshine.
- 3.5.1.3. In order to prolong the service life of the battery, AVOID full discharge.
- 3.5.1.4. DO NOT overcharge the battery.
- 3.5.1.5. Do not leave the battery on the charger for extended periods of time.
- 3.5.1.6. The red color battery's pole stands for positive, and the black color for negative. In case of battery replacement please reconnect the poles of battery correctly. Otherwise your caddy could suffer severe damage.
- 3.5.1.7. Don't short circuit (careful when use metal tools)
- 3.5.1.8. Keep in a cool, dry, well ventilated area, below 120 degrees F.
- 3.5.1.9. Please do not disassemble the battery or throw it into a fire. **EXPLOSION!!!**

3.5.1.10. Never touch the electric poles of the battery!! Safety hazard!!

3.5.2. Battery Charging Instructions for Lithium Batteries

- 3.5.2.1. Do not expose the battery to excessive heat or direct sun for long periods of time.
- 3.5.2.2. Do not store in hot areas (car trunks, garages, etc.). Lithium batteries do not like high temperatures.

- 3.5.2.3. Do not leave the battery on the charger for extended periods of time. Do not overcharge the battery. Overcharging the battery will void the warranty.
- 3.5.2.4. The lithium batteries should be stored at a middle charge state during longer periods of inactivity. The ideal charge state is 40-50% of capacity.
- 3.5.2.5. To start charging Lithium battery, connect the battery cable plug to the charger and then plug the charger into an electrical outlet. It regularly take about 3-6 hours to fully charge the 14V20A lithium battery after one 18 holes game.
- 3.5.2.6. During the charging cycle the LED on the charger will show a red steady light (or blink red/green light). Once the battery is fully charged, charger's indicator will turn into a steady green light.
- 3.5.2.7. Do never drain it. Give it half charging after your last game of season. Store it in door, dry and cold none frozen area. Don't put it on concrete or metal surface. Disconnect from equipment and charger. It will be good for long term till next golf season.
- 3.5.2.8. Never expose or throw the Lithium battery into open fire. **EXTREME FIRE HAZARD**

Recommendations:

Similar to a mechanical device that wears out faster with heavy use, so also does the depth of discharge (DoD) determine the cycle count to Lithium battery. The shorter the discharge (low DoD), the longer the Lithium battery will last. **AVOID full discharges** and charge the battery more often between uses. Please always charge the battery after you play each game.

3.5.3. Battery Charging Instructions for SLA (Sealed Lead-Acid) Batteries

- 3.5.3.1. Please do not charge the battery in a sealed container or in upside down position. It is recommended to charge the battery at a well ventilated area.
- 3.5.3.2. Connect the battery cable plug to the charger and then plug the charger into an electrical outlet.
- 3.5.3.3. During the charging cycle the LED on the charger will show a red steady light (or blink red/green light). Once the charging cycle is complete, the red light will turn into a steady green light.
- 3.5.3.4. The charging cycle can last up to 12 hours depending on the level of discharge.
- 3.5.3.5. Normally the battery will hold its charge for several months, and it does not have a "memory effect", and therefore can be recharged at any discharge level. It is recommended to not fully discharge the battery, as this will shorten battery life drastically. The battery has

a normal lifespan of approximately 100-150 charges, depending on charging frequency, storage conditions, and time and discharge history, which could reduce this lifetime.

- 3.5.3.5. In order to prolong the service life of the battery, please **AVOID full discharge**, charge the battery after every use and KEEP THE BATTERY FULLY CHARGED. When the battery is not in use for an extended period of time, it is recommended to charge the battery once a month.
- 3.5.3.6. Before storing a battery for extended periods of time you must fully charge it.
- 3.5.3.7. Do not leave the battery on the charger for extended periods of time. Do not overcharge the battery.

DO NOT store a discharged battery or as it may become unusable. Replacement batteries are available from NovaCaddy or your authorized dealer.

Recommendations and Maintenance

- Fully charge the battery for approximately 5-9 hours before the first use.
- Do not leave the battery on the charger. Remove it from the charger after charge is Completed.
- The battery will take approximately 2-3 rounds and charging cycles before it reaches its full operating potential. During the first couple of rounds it might still be below its optimal power.
- Always keep your battery fully charged before another game.
- Never keep your battery connected to the grid during prolonged power outages. It might be irreversibly damaged.
- **DO NOT** fully discharge the battery by "overplaying" it. It is recommended to recharge the battery after every 18 holes.
- Do not strike lead acid battery terminals with metallic tools since this can contribute to sparks and cause subsequent explosions.
- Keep the tops of your batteries clean and check that cables are tight. Do not tighten or remove cables while charging or discharging. Any spark around batteries can cause a hydrogen explosion inside, and ruin one of the cells, and you.
- Normally the battery will hold its charge for several months, and it does not have a "memory effect" and therefore can be recharged at any discharge level. It is not recommended to fully discharge the battery, as this will shorten battery life. The battery lifespan is depending on charging frequency, storage conditions and discharge history. Before storing a battery for extended periods of time you must fully charge it. DO NOT store an empty battery or else it might become unusable. Replacement batteries are available from your authorized NovaCaddy dealer, or from NovaCaddy directly. You can also order online at:

http://www.novacaddy.com

*Life of sealed lead acid and any other batteries is dependent on a variety of factors, other than purely the number of charges, including but not limited to, frequency between charges, duration of charge, level of drainage, idle time, operating temperature, storage conditions and duration and overall shelf time.

4. Important Safety Instructions

- Be alert and act responsibly at all time while operating your caddy, just as you would when operating a riding cart, or motor vehicle. We absolutely do not recommend the consumption of alcohol or any other impairing substances while operating our caddies.
- Do not operate the caddy with the remote control in narrow or dangerous spaces, places with valuables or any people gathering areas, such as parking lots, close to flowing traffic, bag drop-off areas, stores, driving ranges, putting greens and practice areas, pro shops, restaurants, and other areas where people or items could be harmed through an error or lack of skill in operation. In such situations the caddy should be best operated with its manual controls or free-wheeling model (power off). Also, please make sure to always turn the power off and secure the caddy when you park and leave the unit for any reason, either on or off course.
- With its optimized balance and straight front wheel the caddy has extraordinarily narrow and responsive turning and maneuvering abilities. However, it sometimes tends to react to severe uneven weight distribution of its load or steep slope variations and follows the slope of the golf course. Therefore, please make sure the weight in your bag is distributed evenly (move heavy balls and items to both sides, or shift the bag on the caddy). Also, when operating your caddy by remote control anticipate the slope of the course in order to avoid frequent corrections in directions. In some extreme environments, such as very uneven terrain, steep hills, narrow and/or sloped cart paths, muddy areas, gravel paths, close to bunkers and hazard, around bushes and trees, it is recommended to operate the caddy via manual control in order to prevent any collisions, damage or the need for complicated correction adjustment maneuvers.

5. Electronic Systems

- Remote control Range: We recommend do not to exceed 50 yards distance. The greater the
 distance between you and your caddy, the greater the chance of losing contact with it.
- **Microcomputer:** The remote caddy has 3 microcomputer controls. The 1st one is in main controller box. The 2nd one is in the remote control transmitter handset, and the 3rd is in the receiver in the handle.
- Safety Protection: When the temperature of the controller box reaches its upper limit in case of an overload, it will automatically shut down to cool off. Give the caddy a short time

to cool down, then you can run it again. You can still use free-wheeling model (power off) to push the cart and keep your game run.

- Microprocessor Controlled Electronics System: When you connect the battery, the
 electronics system will automatically run through a start-up routine. Then you can press the
 main power on the T-handle turn the power ON. The battery level indicator lights will show
 you the battery level. All lights ON (Green + Yellow + Red) means highest battery level. Both
 of Yellow and Red on means middle battery level. Only Red on means low battery level.
- **Important:** The electronics controller box contains no user serviceable parts. Therefore, it is sealed to reduce the risk of moisture entering and impacting the electronic system. Breaking this seal increased the risk of damaging the electronics and decreasing the reliability of your caddy. DO NOT attempt to open the controller case.
- **Battery Operation and Care:** Follow battery charge and maintenance instructions at section 3.5.

Note: NovaCaddy reserves the right to modify/upgrade any components during a model year, so illustrations on our website, brochures and manuals may slightly vary from the actual product shipped. However, NovaCaddy guarantees that specifications and functionality will be always equal to or better from the advertised product. Promotional accessories may also vary from illustrations shown on our website and other publications.

6. General Maintenance

The steps below will ensure that you get a prolonged and reliable life out of your golf trolley.

- The Caddy has been designed so that the user can concentrate on playing golf, whilst the
 caddy does the work of carrying your bag. In order to keep your golf trolley looking at its
 best, we advise that you wipe any mud or grass from the frame, wheels and chassis after
 every round with a damp cloth or paper towel.
- Do NOT use any high-pressure jet washers to prevent moisture entering the electronic systems, motors or gearboxes of the caddy.
- Remove the rear wheels every few weeks and remove any debris that might cause the wheels to drag. You might also apply some lubricant, such WD-40 to keep moving parts smooth.
- Inspect your cart at least once a year thoroughly, please contact our customer service if there are any problem.
- Always disconnect the battery when you store the caddy, and always reassemble your caddy before reconnecting the battery. If you are not planning to play for at least a month, store the battery in a cool and dry place (not on concrete floor or metal surface) DO NEVER leave battery on charger.

All of these recommendations will help keep your trolley in top condition and ensure that it remains your reliable partner, both on and off the course.

7. Technical Specification

Control	Remote control up to 120 yards Forward, Backward, Left Turn, Right Turn, Stop in 9 speeds. Timed advance function: 10, 20 and 30 meter/yard Automatic forward cruise Manual control
Motor	2 x 200W (400W) 12V DC motor
Drive Train	Rear Wheel Drive, Dual Stainless Steel Gears & Gear boxes (17:1 ratio) Dual independent transmission
Speed	Max. 8km/hr (5 MPH), 9 speed adjustable
Distance/Range per battery charge	20km (12.5 miles)
Climbing Capability	25 degree
Max. Load	40kg (88lb)
Battery and Charger	Power: 14V20Ah Lithium or 12V36Ah SLA battery Charge AC adapter: 110~240V, 50/60Hz
Weight	12.4kg (27lb) without battery 14.9kg (33lb) with Lithium Battery 23.4 kg (51lb) with SLA battery
Dimensions	112 x 100 x 60 cm (44 x 39 x 24 inch), Full Size 86 x 60 x 36 cm (32 x 24 x 14 inch), Folded Size
Materials	High quality aluminum alloy frame, dual stainless steel gear box, durable polymer component
Wheels	Airless, rubberized thread
Color	Silver, White and Black

8. Trouble Shooting

SYMPTOM	ACTION
Caddy does not have	Make Sure battery is plugged correctly onto cart plug
power	Check battery charge level
	 Check all wiring connections and plugs
	 Depress and hold down power button for at least 5 seconds
	Check main control cable at frame hinge
Motor is running, but	 Check if wheels are secured to axle by split pin
wheels don't turn	Check the split pin on axle
	Check wheel clutches
Trolley pulls to left or	 Check and make sure the weight in your golf bag is
right	distributed evenly
	Check if wheels is fitted over the clutch and latched to axle
	 Check if clutch pin is visible at both sides of the axle
	Check if the clutch turns freely in one direction only
	 Do Tracking Adjustment if need ref. To 3.3.1.
Battery lacks power	Check cable connections
	Check charger function
	Give a new full charge
	 Ensure you have not completely discharged the battery
Problems attaching • Make sure you are holding the spring clip down	
wheels	 Sand and smooth axle with Emery cloth to remove excess
	paint or burrs
	Remove outer cap and adjust quick release catch

9. Frequently Asked Questions

Question 1: I lost my remote control handset. What shall I do?

Reply: You can purchase a new remote handset from your dealer or from http://www.novacaddy.com directly. After you receive your new remote control, ref to 3.2 to connect new remote to your trolley.

Question 2: When I connect the battery plug to caddy and turn the main switch on, the battery indicator lights do not come on.

Replay:

- a) Make sure battery is recharged.
- b) Check the battery lead cable
- c) Open the back of the T-handle with a screwdriver. Make sure the T-handle line plug is in the right position on the handle electronic board. It will happen when the line of the caddy is not connected at correct position in security.

Question 3: The caddy's main power is on, and all battery indicator lights are on, but the caddy does not run or one motor does not run.

Reply: Please check the motor connectors on the controller box and if connector pins are in the correct position.

Question 4: The manual control function works, but the remote control does not? Reply:

- a) Press any button on remote and check signal LED indicator light ON for each press. If the LED does not lite up, check the remote ON/OFF switch position.
- b) Please confirm that the rheostat speed know is in OFF or Stop position (turn it backward to dead end).
- c) Check the batteries status in your remote control handset. Replace remote control batteries with fresh brand new one.
- d) The caddy frequency may out-of-tune from remote. Rebuild connection between remote and caddy ref to section 3.2.

Question 5: The caddy does not respond well to the remote control handset.

Reply:

- a) Please check the condition of the handset batteries
- b) Make sure you don't exceed the range distance limit.

Question 6: The trolley stops by itself.

Reply: Please check the battery charge. Also the controller box has a shut down function, if the battery is too low or the controller is overheating or the caddy does not receive a signal for a while.

Question 7: The caddy tracks to one side.

Reply:

- a) Check golf bag weight balance. Make sure that the weight distribution of your golf bag is balanced on the caddy.
- b) Slope, deep or wet grass may make different friction on different wheel to cause caddy run to one side.
- c) Caddy need to do tracking adjustment, ref to section 3.3.1

Question 8: Where can I purchase spars parts or accessories for my caddy?

Reply: You can purchase spare parts and accessories from our authentic dealer or order online at: http://www.novacaddy.com

10. One-Year Limited Warranty

Your NovaCaddy product is warranted to be defects in materials and workmanship for one year after the date of purchase. In the event of a defect under this warranty, we will repair the product. This warranty does not cover damages caused by misuse, improper handling, installation, or maintenance provided by someone other that a NovaCaddy authorized service department.

Any return made under this warranty must be accompanied by the items listed below:

- 1) Contact us to get an RMA (Return Material Authorization) number, before send it back
- 2) Name and address for product return
- 3) An explain of the defect
- 4) RMA# or proof of Date Purchased
- 5) Product should be well packed in a sturdy outside shipping carton, to prevent damage in transit, to the address listed below:

IN Canada and USA Send to:

NovaCaddy Golf Products 62 Raymerville Dr. Markham, ON L3P4J5 Canada

TI: +1 905 209 9937

Emai: service.novacaddy@oneontarget.com

For service, spare parts and accessories supply, please visit our webside: http://www.novacaddy.com