Congratulations! You purchased a Deluxe Surrey by International Surrey Company, the widely recognized industry leader.

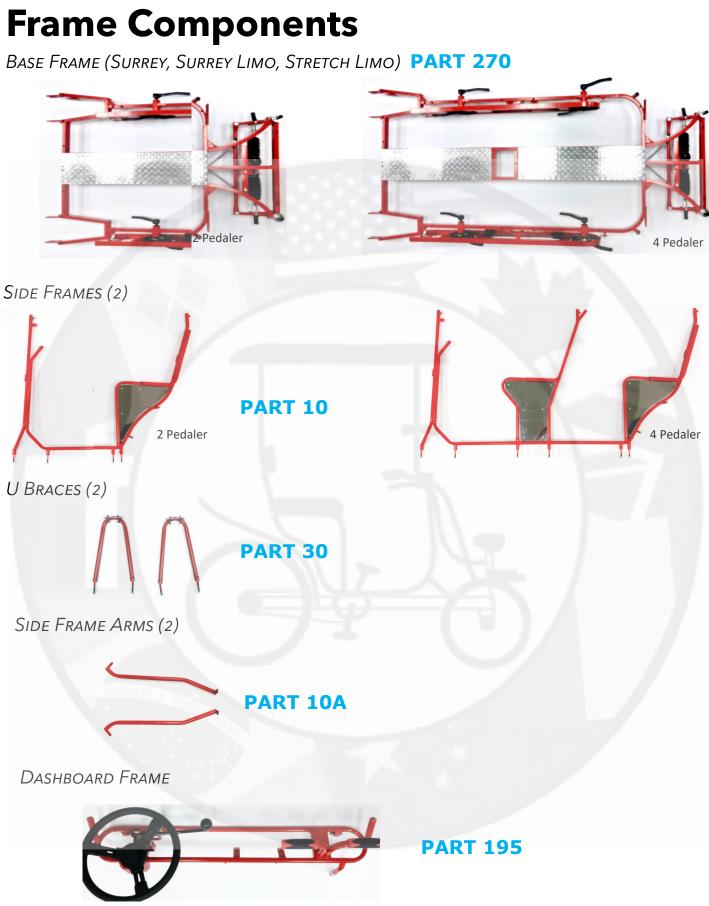
whether for your business to generate strong, long-term, profits or for your family and friends to enjoy in the neighborhood, you have made a wonderful choice!



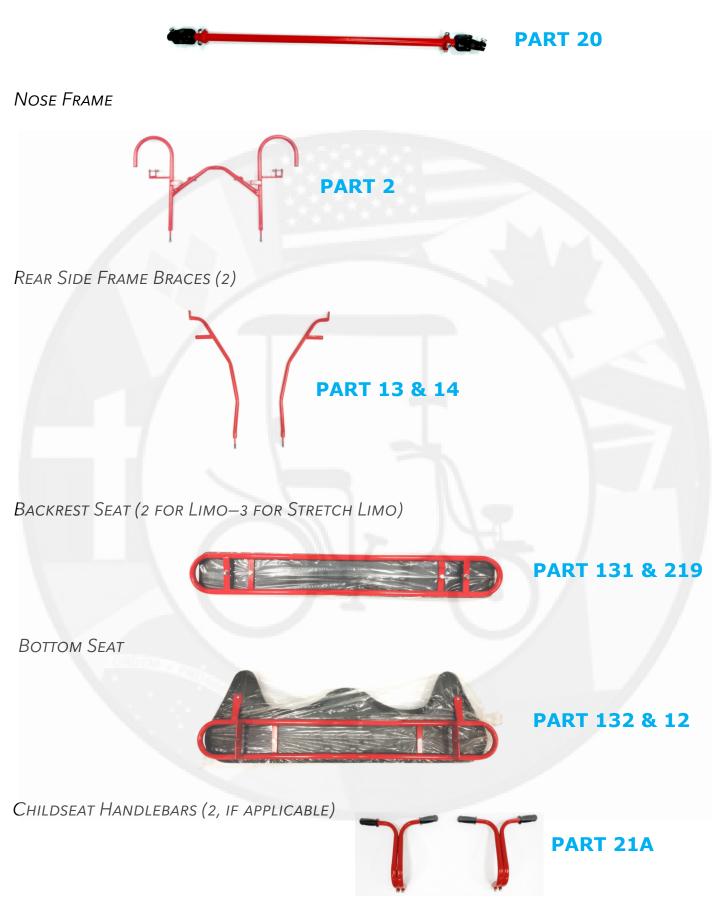
Please carefully watch the provided video at least once prior to your attempt to assemble your Surrey. Carefully following the steps of the video and these written instructions simultaneously will not only make assembly easier but will also ensure your Surrey Deluxe will perform as it was designed.



Video Access <a href="http://www.internationalsurreyco.com/technical-support/">www.internationalsurreyco.com/technical-support/</a> Password: user1970



Frame will include Shifter with installed cables and housings with hardware if the Easy 7 Speed Gearing Package was purchased. STEERING COLUMN WITH UNIVERSAL JOINTS





#### **Limo and Stretch Limo Components**

Rear Handlebar (Limo only – 2 Stretch Limo)

2 Pedaler

**PART 90** 

BOTTOM SEAT (1 FOR LIMO-2 FOR STRETCH LIMO)

Note the bracket in the center with the two bolts. That bracket is not present in the last row seating.

MIDDLE BOTTOM SEAT VERTICAL BRACE (LIMO ONLY - 2 STRETCH LIMO)

**PART 91** 

4 Pedaler

#### **Stainless Steel & Alloy Components**

#### Front Bumper



COMPLETE SET OF WHEELS (4) PART 137 & 142



Wheels will be spoked if the Easy 7 Speed Gearing Package was purchased unless optional front brakes are ordered.

FRONT FENDERS (2)PART 61



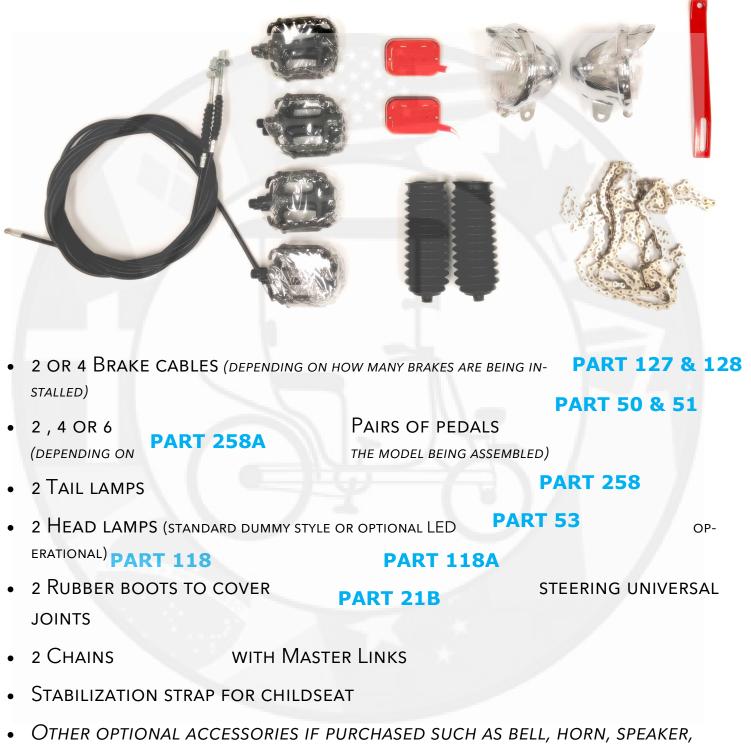
REAR FENDERS WITH SUPPORT FRAMES (2)



AWNING POSTS (4 FOR SURREY, 6 FOR LIMO, 8 FOR STRETCH LIMO)



#### **Interior Cardboard Box Contents**



MIRROR, ETC.

#### **Suggested Tools**

- 10 inch crescent wrench
- 8 or 6 inch crescent wrench
- 10mm socket
- 13 mm socket
- 14 mm socket
- Socket wrench
- 10 mm box end wrench
- 13 mm box end wrench
- 14 mm box end wrench
- 15 mm box end wrench
- 17 mm box end wrench
- 22 mm box end wrench
- Box cutter knife
- Weighted plastic or rubber mallet
- Awl or small Philips head screw driver (to line up holes)
- Needle-nose Pliers
- Channellock Pliers
- 4 mm allen wrench
- Vice grips

Please note, these are only recommended tools. For example, socket wrenches are not required, but they do make the job a little easier and faster.

#### Assembly

**1.** Completely unpack and unwrap all Surrey components. Place the large **Base Frame # 270** on a flat, level area (elevated off of the ground on two 5 gallon buckets, if possible).

Install two front wheels. If your Surrey has the front drum brakes, you will slide the brake plate over the tab on the side of the tie rod as you slide the front wheel axle into the bushing on the bottom of the tie rod. Tighten the axle with a wrench on the axle on the inside area of the wheel hub. After the axle is securely screwed into the bushing, install the flat washer and lock nut on the inside end of the front wheel axle and tighten the nut. Note: If you have spoked front wheels, there is no brake plate on the front wheel and there is no flat washer *and lock nut for the inside of the axle*.

Install two rear wheels. Loosen the nuts on each of the **Rear Wheels # 137** and slide them onto the **Rear Stays** (forked shaped frame pieces on the **Base Frame**). Leave the **Rear Wheel nuts** loose.

2. Install the **Chains #118** by running the chain over the front crank chainring and around the axle of the rear wheel. Attach the ends of the chain with the **Master Link #118A**. The **Master Link** is connected with the pin plate, through each end of the chain, then the flat plate and finally the notched lock plate. Slide the wheel all the way forward and loop the chain over the top of the freewheel cog on the rear wheel. Pedal the crank forward; the chain will work its way around the freewheel.

Pull the **Rear Wheel** back to pull the slack out of the chain. Use the chain adjusters on the rear axles of the **Rear Wheels** to pull the slack out of the chain by tightening them against the **Rear Stays**. *Please note that the Chain Adjusters are not installed on 7 Speed Wheels*. Leave a little slack in the chain. *If the chain makes a popping noise when the wheel is turned, the chain is too tight*. If the chain is too loose, it will frequently derail. To install the rear wheels, if you are installing single speed wheels, please refer to the **Single Speed Rear Wheel Addendum** (later in this manual). If you are installing 7 speed wheels, refer to Steps 1-4 only of the **Easy 7 Speed Gearing Package Instructions** (later in this manual).



Confirm that the rear wheels are installed in the center of the rear stays. If the rear wheel is fading to the left or right when installed, the rear tire will wear unevenly and more quickly. Also, the Surrey will be more difficult to pedal.

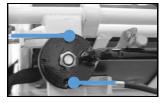
- 3. Install the Rear-Stay U Braces #30, which are painted the same color as the frame and arch over the rear wheels just under the rear fenders, on the left and right side. Leave the two 13mm nuts hand tight. It might be necessary to slight spread and narrow the Rear-Stay U Braces #30 to fit the hole pattern in the base frame.
- **4.** Install each **Surrey Side Frame #10** by sliding the welded bolts through the holes in the Surrey Base Frame. (*It might be necessary to bump the side frame into place with a plastic or rubber mallet*). Put the washers and 13 mm nuts on the bolts under the **Surrey Base Frame** hand tight. *It might be necessary to flex the side frame to line the welded bolts with the holes in the base frame. It also helps to start installing the welded bolts into the base frame at the rear working your way to the front.*
- 5. Install the Rear Fender #17 under the Surrey Side Frame #10 by loosening the 13 mm nut under the arch of the Surrey Side Frame #10. Under the Surrey Side Frame #10 arch for the rear wheel, the Rear Fender will match the hole pattern in three places, the bolt welded to the Surrey Side Frame #10 that requires a 13 mm nut and the two holes for the two 10 mm bolts and nuts that mount through the Surrey Side Frame #10, Rear Fender and Rear-Stay U Brace. Install the front mounting arm of the side frame with the 13 mm nut.

#### Repeat Steps 4 and 5 on the opposite side of the Surrey.

- 6. Install the Nose Frame Brace #2 in the center, on the front of the Surrey (The Nose Frame Brace has two large 180 degree bends which accommodate the front lights.) The Nose Frame Brace will attach in 6 places (two 13 mm nuts, one bolt and nut from each of the side frame pieces and two nuts and bolts that attach the front bumper). Attach the 13 mm nuts and both side frame bolts, leaving all nuts hand tight.
- 7. Install the Side Frame Arms #10A on the left and right of the front of the Surrey. These arms attach to tabs on the top Nose Frame Brace with a 13 mm nut, bolt and washer on each side and attach to the end of the Side Frame on each side with a 13 mm bolt and washer. Attach the 13 mm nuts and both side frame bolts, leaving all nuts hand tight.
- 8. Install the Front Bumper #278 by stabbing both tube ends of the Front Bumper into the Bumper Mounts on the Surrey Base Frame. Mount the Front Bumper to the Nose Frame Brace with the two bolts and 13 mm nuts.
- 9. Install the Dashboard Frame #195 by inserting the small tubular ends into the each of the Surrey Side Frame #10 mounts (*First remove the keeper bolts with an allen wrench*) A small amount of grease on each small tubular end will help lubricate the insertion into each Surrey Side Frame. Be careful to remove the bolt, washers and nut from each side of the Dashboard Frame before installing. Make sure that the round barrel through which the nut and bolts mounts clears the tabs on the Surrey Side Frame as the Dashboard Frame is gently bump into place. (Use a rubber or plastic mallet to bump into place).
- **10.** Examine both black universal joints (u-joints) attached to the **Steering Column #20.** Attach the u-joint with the *single bolt* to the **Rack and Pinion Steering unit** under the front of the **Surrey Base Frame.** Notice both the u-joint and the rack and pinion mount is serrated inside the hole. Tighten the bolt to secure the u-joint. Slide one of the **Rubber Boot Covers #53** over the top of the u-joint after it is securely tightened to the rack and pinion.

Next, slide the **Rubber Boot Cover** over the remaining (top) u-joint. Slide the (top) u-joint into the top of the steering column and push the steering column down on to the bottom u-joint's square steel mount. Next, after moving the two bolts from the (top) u-joint, slide the u-joint over the Steering Wheel Yoke while pushing the steering column down on to the bottom u-joint. The (top) u-joint has two bolts and attaches to the **Steering Wheel Yoke** under the Handle Bar. The larger bolt pass by the flat area of the Steering Wheel Yoke and tightens securely. The smaller bolt is tightened into the side of the Steering Wheel Yoke to eliminate any movement between the two. Finally, 8 set screws are tightened with a 4 mm allen wrench and the 8 lock nuts are tightened with a 13 mm wrench.

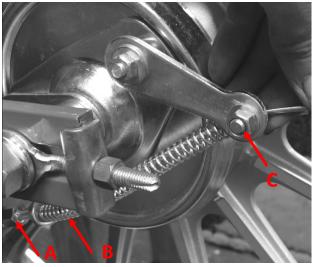
11. Elevate the rear of the Surrey by placing it on a bucket or stand. Install the Brake Cables by starting at the rear of the Surrey and guiding the Brake Cable with the black housing near the Cable Loop Guides welded on the Surrey Base Frame and Surrey Side Frame #10. At one end of the brake cable inner wire is a ball or barrel shaped end on the Cable. That end should be fed through the brake housing stop under the Steering Wheel and into the holes in the disk on the Brake Handle at the 12 and 6 o'clock positions. Push the black brake arm forward against the brake stop and tighten the brake nut to hold the arm in place.



**11.** *(cont.)* Cables directed to the passenger side of the Surrey (right) attach to the bottom of the brake disk. Cables directed to the driver side of the Surrey (left) attach to the top of the brake disk. We recommend that rear brake cables be attached at the bottom of the disk while front brake cables (if applicable) attach to the top.

On each wheel that accommodates a drum brake, slide the inner wire through the center of the jackscrew (A) that is on the brake plate. At this point, the black brake housing will be stopped and only the inner wire will continue through the brake spring (B) as it leaves the opposite side of the jackscrew. Next the inner wire will slide through a small hole in the binder bolt (C) that is attached to the brake arm on the brake plate.

Using a pair of plyers or channel locks, pull all of the slack back to the rear of the Surrey and out of the black housing. Again, confirm the black housing is securely inserted into the cable stop under the steering wheel in the front seat. While pulling on the inner wire, push the brake arm in a clockwise direction to engage the drum



brake. Using the plyers, pull the inner wire in the same direction to hold the brake arm in the engaged position. Slowly and incrementally allow the brake plate brake arm to move towards it's natural open position as you attempt to spin the wheel. At first, the wheel should be immovable as the brake arm should be fully engaged. As the arm is allowed to move to the open position, the wheel should be more and more easy to spin. When the wheel spins freely with a very slight amount of resistance, stop the brake arm from moving and securely tighten the binder bolt to fix the inner wire's position. Do not overtight the binder bolt!

Repeat the procedure on every wheel that has a brake plate.

After all wheels are adjusted, loosen the black brake arm by the steering wheel so that it freely pivots on the pivot bolt. Apply the brakes by pulling the black brake arm with a fair amount of force. While holding the brake arm in the engaged position, have another person try to spin all wheels with brakes. Brakes on each end of the Surrey should be compared with the brakes on the wheel next to it (left to right). Both wheels should have an equal amount of resistance. If one wheel is more resistant than the other, another adjustment must be performed. Equal resistance is the goal to maintain good brakes.

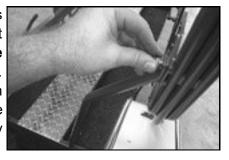
A final "fine adjustment" can be achieved by turning the jackscrew (A) counter clockwise for more brakes and clockwise for less brakes. Always tight the small jam nut against the brake plate when the fine adjustment is complete.

With the parking brake engaged, the wheels should not turn at all.

NOTE: If you have an Easy 7 Speed Package, please refer to page C of the Easy 7 Speed Gearing Package Instructions in conjunction with this step.

12. Install the Rear Fender #17 under the Surrey Side Frame #10 by loosening the 13 mm nut under the arch of the Surrey Side Frame #10. Under the Surrey Side Frame #10 arch for the rear wheel, the Rear Fender will match the hole pattern in three places, the bolt welded to the Surrey Side Frame #10 that requires a 13 mm nut and the two holes for the two 10 mm bolts and nuts that mount through the Surrey Side Frame #10, Rear Fender and Rear-Stay U Brace. Install the front mounting arm of the side frame with the 13 mm nut.

- 12. Attach the Front Fenders #61 to the bumper using the two 10 mm nuts on each Front Fender. Next attach the Front Fender to the Surrey Base Frame on top of the tabs on each side of the Surrey Base Frame.
- 13. Install the Rear Frame Braces #13 and 14. These are single tubes that are slightly bent with a tab with a hole on one end and a bolt welded to the other end. Behind the rear seat, each Surrey Side Frame #10 will have a flat area with a 14 mm bolt screwed into place. Remove the 14 mm bolt. Insert the proper Rear Frame Brace through the Surrey Base Frame by sliding the bolt through the hole. Attach the other end of the Rear Frame Brace to Surrey Side Frame #10 by screwing the 14 mm bolt through the tab of the Surrey Side Frame #10.



NOTE If you purchased the rear Trunk Surrey Basket, please see the Addendum at the end of these instructions for a photograph of the assembly.

- 14. Install the Padded Bottom Seat # 12 by loosening the 13 mm nut on the bolt welded on the inside of each side frame and sliding the Padded Bottom Seat over both bolts keeping the washer on the inside of the seat brace. See page 5 if assembling a Limousine or Stretch Limousine. See the Surrey Tram Addendum if you purchased a Surrey Tram.
- **15.** Install the **Padded Back Rest Seat #131** by sliding the bolts on the back of the seat back through the each hole on each side frame on the rear of the Surrey. See page 5 if assembling a Limousine or Stretch Limousine.
- **16.** The **Rear Stay Braces (Parts 13 and 14)** accommodate the Rear Tail Lamps (Part# 258A). Remove the lenses cover by removing the two small screws. Remove the thin plastic tab to allow the batteries to make firm contact. Make sure batteries are in place. Replace the lenses. Attach a Rear Tail Lamp on the mounting tab on each of the Rear Stay Braces already installed.

Whether you are using the "dummy" head lamps that come with the Surrey Deluxe or you upgraded to the LED lamps, both types are mounted on the universal mounting brackets on each side of the Nose Frame. Just be sure to mount both lights the same way so that they appear symmetrical.

**17.** Install the **Pedals #50 and 51**. Each pedal has an "L" or "R" on the end of each axle. The L pedal mounts to the arm without the chainring (left side of the crank). The R pedal mounts to the arm with the chainring. Also be careful to not cross thread the pedals by screwing them into the cranks arms at an angle.





18. Install the Awning Posts Assembly #25 by stabbing the stainless steel posts into the front mounts on the Surrey Side Frame #10s. Tap with a plastic or rubber mallet until enough of the stainless post appears in the thread hole (into which the allen keepers screw) so that the allen set screw can tighten. Tighten all set screws and lock nuts. Please see the Limousine Instructions on the next page. See page 5 if assembling a Limousine or Stretch Limousine.

**19.** Install both Child Seat Handlebars (#21A) on to the **Child Seat #21** by sliding the handlebars down on to the handlebar staubs after loosening the lock nuts and allen set screws. After Childseat Handle Bars are slid as far as possible, tighten the set screws (4 total) to hold the bars in place. Next, tighten the 13 mm lock nuts to hold the set screws from backing out.



Next, the Childseat is install by hooking it on the **Dashboard Frame**. Use the **Baby Seat Mount Brace** 

and by attaching it to the **Baby Seat** (on the foot loop) and the **Nose Frame Brace**, attaching in both places with the 14 mm bolts.

**20.** Install **Awning Frame #27** with 13 mm nuts. The frame should be installed with the end of the frame with the mounting holes closest to the perimeter of the frame (measuring front the back) installed in the back on the cycle. Unless the optional hard top was purchased, put on the cloth **Awning**. Secure with the Velcro ties.

#### Additional Assembly Steps: (for Limousine

- Attach the **Underseat Brace** (shaped like the first row seat side panel) under the **Padded First Row Back Rest Seat** to the **Base Frame** with the two bolts that slide into the center tube of the **Base Frame**.
- Next install the seat by sliding the bolts on the back of the seat back through the each hole on each side frame on the **Surrey Limousine Side Frames**. This step is repeated again if assembling the Stretch Limousine model.
- Install the **Padded Bottom Seat** by loosening the 13 mm nut on the bolt welded on the inside of each side frame and sliding the **Padded Bottom Seat** over both bolts keeping the washer on the inside of the seat brace.
- Next attach the Rear Handle Bar by sliding it over the tube ends behind the Middle Padded Back Rest Seat. It may be necessary to put a small amount of grease or oil on the tube ends to facilitate the Rear Handle Bar to easily slide over the tube ends. Additionally, it might be necessary to take the Rear Handle Bar over the 90 degree bends with a plastic or rubber mallet to bump it down into place. Finally, tighten the set screws and lock nuts on each side.

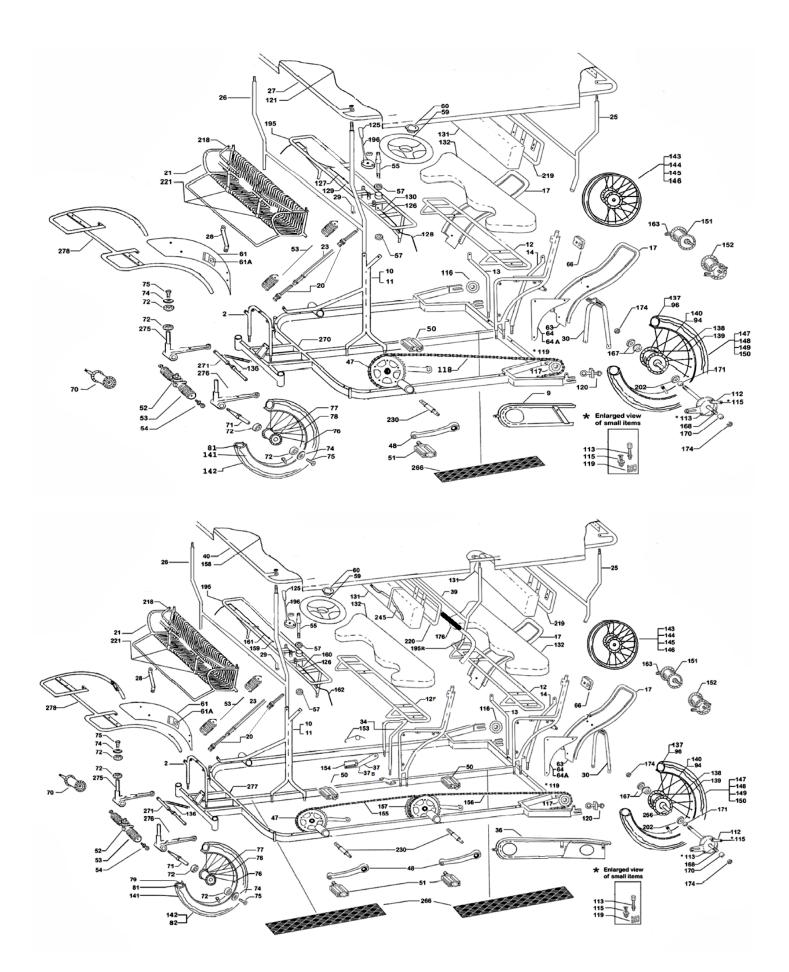
#### **Final Notes:**

Note 1—Tighten all bolts, nuts, wheels, brakes and set screws!

Note 2—Carefully read the Operating Instructions and Warnings at the end of this manual!

Note 3—Air all tires to air pressure of 35—40 lbs in each tire

Note 4—If your Surrey includes the Easy 7 Speed Gearing Option, carefully review the Easy 7 Speed Gearing Package Instructions (later in this manual) to confirm all steps have been followed.



\* Actual product may be slightly different than the drawing above as designs change over time.



# Step 1:

areas machined on top and bottom and on each end of the axle. Also note that there are "forked" with the sprocket on the right side of the wheel as far forward as possible. Note that the axle has flat Loop the chain around the axle on the sprocket side of the wheel. Slide each wheel into each rear stay washers on the axle (white washer on the sprocket side and chrome washer on the brake side)

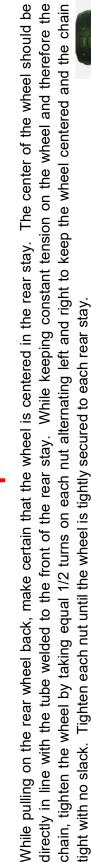
### Step 2:

Loop the chain around the rear sprocket. Pull the wheel back as far as possible.

# Step 3:

On the left side of the wheel, attach the black brake stabilizer arm to the slotted mounting tab under the left rear stay with the 10mm bolt provided on the black brake stabilizer arm. Leave the nut finger tight.

# Step 4:



# Step 5:

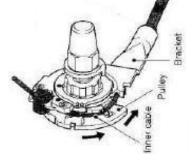
Install the Revo Shifter on the vertical staub in the middle of the 180 degree bend of the handle bar. Slide the shifter onto the staub with a minimum of 3/8ths of an inch of the staub revealed at the top. Set the shifter to 1st gear

# Step 6:

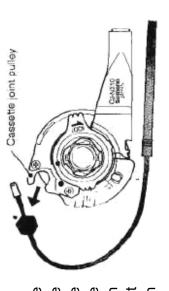
on that side of the Surrey. The fixing bolt at the end of the cable should be tightened 4 inches measuring from the end The shifting cable extends from the Revo Shifter along the base frame of the Surrey to the right side of the rear wheel ₿ |of the silver cap end on the black cable housing to the center of the fixing bolt.



# Step 7:



On the right side of the wheel hub is Shimano Cassette Joint (black plastic and metal component that circles the axle and points to the front of the Surrey). At the top of the cassette joint is a notch machined in that will accept the fixing bolt. Insert the fixing bolt and lay the shifting cable in the pulley channel. Pull the cable casing towards the front of the Surrey and insert the cable through the channel on the inside of the bracket.



# Step 8:



Turning the fine adjustment will adjust the yellow line forward and backward at the top of the cassette joint. Two yellow lines appear. One is stationary. One is adjustable. In 4th gear, both should line up exactly. If the two yellow lines are confirm the fixing bolt is fixed on the inner shifting wire 4 inches from the end of touching but not exactly in line, turn the black plastic fine adjustment knob under allowing the perfect adjustment in 4th gear. If the fine adjustment knob does not adjust the yellow line enough or the yellow line is not visible, repeat Step 6 and Set the Revo Shifter to 4th gear. On the rear wheel connected to that shifter, look he Revo Shifter (where the inner wire and casing inserts into the Revo Shifter). the black casing housing.

# Step 9:



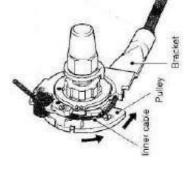


Shift the Revo Shifter to 7th gear, then back to 1st gear. Next, shift to 4th gear and check the yellow lines on the cassette. The two yellow lines should be exactly in line. If the adjustment is not perfect, repeat Step 8.

# Step 10:

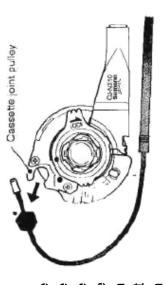
Shift the Revo Shifter to 7th gear, then back to 1st gear. Next, shift to 4th gear and check the yellow lines on the cassette. The two vellow lines should be exactly in line. If the adjustment is not perfect, repeat Step 8. WARNING When starting your ride from a complete stop or when encountering a terrain incline while riding, you **must down shift** into **1st gear!** 

Failure to use low gear in appropriate situations will result in **severe damage** to your *Easy 7* Speed Gearing System and will void all applicable warranties.



## Step 7:

On the right side of the wheel hub is Shimano Cassette Joint (black plastic and metal component that circles the axle and points to the front of the Surrey). At the top of the cassette joint is a notch machined in that will accept the ixing bolt. Insert the fixing bolt and lay the shifting cable in the pulley channel. Pull the cable casing towards the front of the Surrey and insert the cable through the channel on the inside of the bracket.







at the top of the cassette joint. Two yellow lines appear. One is stationary. One is adjustable. In 4th gear, both should line up exactly. If the two yellow lines are confirm the fixing bolt is fixed on the inner shifting wire 4 inches from the end of the Revo Shifter (where the inner wire and casing inserts into the Revo Shifter). Furning the fine adjustment will adjust the yellow line forward and backward allowing the perfect adjustment in 4th gear. If the fine adjustment knob does not adjust the yellow line enough or the yellow line is not visible, repeat Step 6 and Set the Revo Shifter to 4th gear. On the rear wheel connected to that shifter, look ouching but not exactly in line, turn the black plastic fine adjustment knob under the black casing housing.

# Step 9:





Shift the Revo Shifter to 7th gear, then back to 1st gear. Next, shift to 4th gear and check the yellow lines on the cassette. The two yellow lines should be exactly in line. If the adjustment is not perfect, repeat Step 8.

# Step 10:

Shift the Revo Shifter to 7th gear, then back to 1st gear. Next, shift to 4th gear and check the yellow lines on the cassette. The two yellow lines should be exactly in line. If the adjustment is not perfect, repeat Step 8. WARNING When starting your ride from a complete stop or when encountering a terrain incline while riding, you must down shift into 1st gear! Failure to use low gear in appropriate situations will result in severe damage to your Easy 7 Speed Gearing System and ഷ് will void all applicable warranties.

# **Brake Installation - Step 1:**

The Each inner wire cable passes through the housing stops welded to the handle bar as shown in the passenger side brake cable attaches on the disc on the opposite side at the 6 o'clock position. photo to the right. On the opposite side of the housing stop the inner wire should pass into the cable housing and travel the length of the Surrey and extend through the opposite end of the cable The driver side brake cable connects to the brake arm disk at the 12 o'clock position. housing.

# Step 2:

On the black brake stabilizer arm next to the hole for the 10mm bolt that secures the brake arm to the stabilizer tab under the base frame is a forked bracket (see photo to the right). The silver brake housing cable stop slides into the forked bracket with the larger end of the sliver bolt on the front end of the Surrey. The silver bolt has a hole through the center of the bolt. The excess inner wire passes through the center of the bolt. The black housing does not.

# Step 3:

The inner wire passes through the brake fixing bolt. The brake fixing bolt tightly fits into the brake actuator arm and slides forward to lock into place

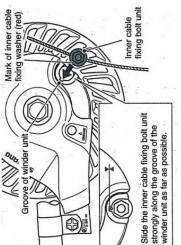
For detailed instructions about brake line installation and adjustment please see pages 16 and 17.

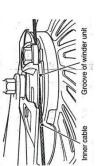
# Step 4:

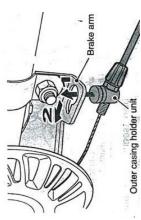
apply the brake and confirm each wheel has equal brake tension by spinning the wheel with your Elevate the rear of the Surrey and spin each rear wheel to confirm that it spins freely and does not come to an abrupt stop. If it does, the brake is adjusted too tightly. If both wheels spin freely, hand. If unequal, readjust the brake. If tension is equal, return to Step 12 of the main instructions. WARNING: Proper brake adjustment is vital for proper operation and safety. Please call our help line at 1-800-765-7370 if you require assistance.





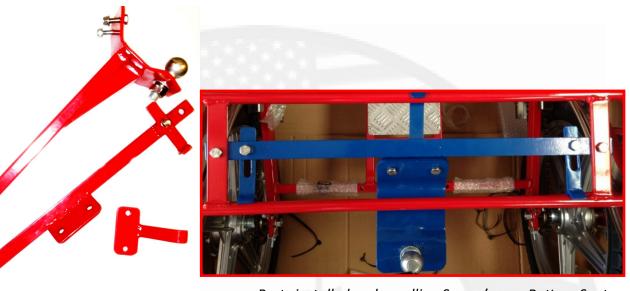






#### Unique Parts for the Surrey Tram (optional)

If you did not purchase the Tram, you may ignore this page.



Parts installed under pulling Surrey's rear Bottom Seat

- BASE FRAME
- 2 REAR WHEELS
- 1 BACKREST SEAT
- 1 Воттом seat
- 2 BRAKE CABLES
- 2 PAIRS OF PEDALS
- 2 TAIL LAMPS
- 2 CHAINS
- TRAM TRAILER HITCH
- 4 AWNING POSTS
- 1 AWNING FRAME

- 2 SIDE FRAMES
- 2 REAR STAINLESS STEEL FENDERS
- 2 SIDE FRAME ARMS
- 1 DASHBOARD FRAME
- 1 SWAN NECK TRAILER NECK
- 2 TRAILER NECK BRACES
- 2 U BRACES
- 1 AWNING



#### **Surrey Tram Assembly**

If you did not purchase the Tram, you may ignore this page.

Prior to installing the bottom seat on the last row of seating, install the Tram Hitch (obvious by the small silver trailer ball). At the bottom of the Tram Hitch there are two bolts that slide into two corresponding holes in the base frame. Slide the bolts into the two holes and put on the two 13 mm nuts (finger tight).

Please note that if you are installing the rear Surrey basket (see page 5), the basket should be put in place first in order to stab the Tram Hitch through the basket. However, you may choose to install the basket on the Tram itself, in which case ignore this notation.

The Tram Hitch also attaches with two bolts to a bracket under the seat. The attachment bracket under the seat will already be in placed. The Tram Hitch bracket should install on top of the bracket under the seat. However, it does not matter whether it is installed on the top or bottom of the under seat bracket. Install the nuts and holts finger tight.

The large trailer neck (large 1.5 inch tube with a near 180 degree bend on one end) has a plate with 4 holes at one end of the neck. Bolt that place to the corresponding plate on the Tram Base Frame with the 4 bolts provided. The trailer neck extends away from the rest of the Tram, towards the front of the Tram.

There are four trailer neck braces that secure the neck to the base frame and the side frames. Install all four of those braces in any order.

To assemble the Tram, follow the same steps that are applicable to the other Deluxe models, including rear wheel installation and adjustment, chain installation and adjustment, brake cable installation and adjustment, sideframe, seat and awning installation.



#### Rear Trunk Basket Installation (optional)

**Step 1** On the bracket, loosen the lock nut using a 13 mm wrench, and loosen the set screw with an allen wrench.



**Step 2** Install the bracket using the backrest braces, typically installing the bracket between the sideframe and the tab on the brackrest brace. Repeat on the opposite side of the cycle.







Side Rear View

**Rear View** 

Front View

- **Step 3** Expand the bracket as far as necessary. Tighten the set screw. Tight the lock nut.
- Step 4 Set the basket on bracket. Install the 4 bolts diagonally and do not tighten any nut until all 4



bolts are installed. It might be necessary to run a 3/16th drill bit through 1 or 2 of the holes in the basket to get an exact match. After all bolts are installed, tighten them securing the basket to the bracket.



#### Front Basket Installation (optional)

#### Steps

- 1. Center the wire basket in the basket frame.
- 2. Make sure the wire basket is setting flush on the back of the back of the basket frame with an overall tilt from front to back.
- 3. Use the 2 small metal brackets to secure the wire basket to the frame. Make sure the metal brackets are snug against the wire basket on both ends of the bracket.
- 4. Tighten the nut on the bolt only enough to secure the wire basket to the frame and prevent rattling.



#### **Attention!**

The assembly video demonstrates proper assembly procedure for Surrey Deluxe models. Each step is demonstrated on one side of the Surrey. After each step, you will need to follow the same steps to complete the same tasks on the other side of the Surrey. Procedures on the left (driver side) and right (passenger side) are virtually identical. Please complete each step on both sides of the Surrey before moving to the next step.

This video is demonstrated on the Surrey Limousine Deluxe. The first set of steps will be the same for all three Deluxe models. The Limousine and Stretch Limousine will take a few additional steps to complete, which will be shown near the end of the video.

Thank you for watching. Please review the Operating and Maintenance Manual before attempting to operate your Surrey. Please perform safety procedures in the manual each and every time you ride.

Thanks again. We wish you many years of Surrey enjoyment!



#### MAINTENANCE SCHEDULE

#### **Daily Maintenance**

- Check both brake cables to confirm that neither brake cable is broken or frayed at or near the brake arm and brake drum on the rear wheel.
- Confirm that both brake cables are pulling equally. Do not allow one brake cable to be adjusted with more tension than the other. Elevate the rear of the Surrey, while pulling the brake arm, attempt to spin each rear wheel forward. Both wheels should have an equal amount of resistance and complete lock the wheels from turning when the brake is fully applied.
- Confirm that the nut on the brake arm is tight but not so tight that it interferes with the
  operation of the brake arm to move freely.
- Make sure all tires are properly inflated with approximately 40 lbs of tire pressure per tire.
- Confirm that the childseat safety straps are connected and working properly.
- If your Surrey has the 7 Speed Gearing System, switch the gear shifter to 4th gear. Check the rear hub on the corresponding side of your surrey to confirm that the yellow lines are lined up insuring your gearing is properly adjusted. Please refer to the assembly and operating manual for adjustment procedures.

#### Weekly Maintenance

- After the third or fourth week of operation of new equipment, all mounting nuts and bolts should be checked to confirm they are tight. Tighten all loose nuts, but do NOT overtighten. After the equipment is operated for approximately 6 months, this will no longer be necessary. Loose frame pieces can cause welds and tubing to break and tear!
- Oil (using WD-40 or similar product) all of the pivot points in the steering mechanism, braking mechanism, chains and freewheels. Be sure to not allow oil to penetrate drum brake and brake shoes inside the drum.
- Check crank arms to confirm that they are tightened. To do this shake each crank arm to the left and right (if you are sitting on the bike). If there is any movement ("play") in the crank arms right to left, then the arm is loose. You might also hear a creaking sound when putting pressure on the pedal while pedaling. This might be due to a loose crank arm. Remove the plastic dust cap and tighten the arm with a 14 mm socket wrench. Next, replace the dust cap.

**Note:** The frequency that maintenance is required will heavily depend on how often the cycle is used and to what distances it is used.



# Please Read Carefully 000 erating



<ul> <li>Always be sure, too, that all passengers keep their feet on the pedals at all times when traveling in a forward direction. It is dangerous to remove feet from the pedals during riding. Keep feet, legs, arms and hands away from moving wheels, cranks and chains. <i>If you need to back up (travel in reverse),</i> <i>everyone on the bench seats should dismount from the Surrey and push it</i> <i>backwards.</i></li> </ul>	<ul> <li>All passengers should remain seated at all times during the ride and children in the front child seat should remain seated and snuggly fastened in behind the safety strap.</li> <li>Always use oral commands to alert other in your path of your presence and your intention.</li> </ul>	<ul> <li>Closely observe all warning signs and decals on the Surrey bike.</li> <li>Only persons tall enough to maintain balance on the seat while pedaling should pedal the Surrey.</li> </ul>	<ul> <li>Never hitch a ride from another Surrey or an automobile.</li> <li>Use approved hand signals for turning and stopping.</li> <li>Operating with improperly adjusted brakes or worn brakes may result in serious injury or death.</li> </ul>	<ul> <li>Never ride with headphones. They mask traffic sounds, sirens and may prevent you from concentrating on road hazards.</li> <li>Never ride your Surrey while under the influence of alcohol or drugs.</li> <li>Failure to follow safety procedures may result in serious harm or deathing</li> </ul>	
Always think safety first! Operate the Surrey at a safe speed with the driver being mindful of road hazards, other cyclist and approaching automobiles. Comply with all bicycle safety standards for operations in your city and state. We recommend a licensed driver always be in control of the steering wheel and brake arm.	We recommend all riders wear a helmet, especially children. Obey all traffic laws! Be visible; wear brightly colored clothing and a helmet! Be predictable and be alert!	Expect the unexpected and ride defensively! Use good, safe equipment! Always check your tire pressure, brake operation and chains before going out on your Surrey.	Use your Surrey only as recommended! Do not make quick turns, travel at unsafe speeds or collide with other objects. Adjust riding to traffic and weather conditions! Do not stunt drive! Do not ride on fewer wheels than are on the cycle.	Be especially cautious with downhill braking. With very steep downgrades, it may be impossible to stop your Surrey in a necessary distance although the braking system meets the highest standards. To avoid possible injury, dismount and walk your Surrey (use the brakes) to the bottom of the grade, if you do not feel secure enough, especially on wet, muddy or gravel roads. Use common sense. Avoid heavy motor traffic. Do not weave in and out of	

#### **RIDING SAFETY**

**General Rules** 

# STOP



Ride predictably and in a straight line. Never ride against traffic.

information, contact the Road Traffic Authority in your State.

When riding obey the same road laws as all other road vehicles, including giving way to pedestrians, and stopping at red lights and stop signs. For further

- Use correct hand signals to indicate turning or stopping.
- Ride defensively. To other road users, you may be hard to see.
- Concentrate on the path ahead. Avoid pot holes, gravel, wet road markings, oil, curbs, speed bumps, drain grates and other obstacles.
- Cross train tracks at a 90 degree angle or walk your Surrey across.
- Expect the unexpected such as opening car doors or cars backing out of concealed driveways.
- Be extra careful at intersections and when preparing to pass other vehicles.
- Familiarize yourself with all the Surrey's features. Practice gear shifts, braking, and the use of toe clips and straps, if installed.
- If you are wearing loose pants, use leg clips or elastic bands to prevent them

#### HELMETS, PROTECTIVE GEAR & CLOTHING

#### A WORD TO PARENTS REGARDING CHILDREN AND HELMETS:

Many states have passed helmet laws regarding children. Make sure you know your states helmet laws. It is your job to enforce these rules with your children. Even if your state does not have a children's helmet law, it is recommended that everyone wear a helmet when cycling. When riding with a child carrier seat or trailer, children must wear a helmet.

We strongly advise that a properly fitting ASTM or SNELL approved, Surrey safety helmet be worn at all times when riding your Surrey. In addition, if you are carrying a passenger in a child safety seat, they must also be wearing a helmet. The correct helmet should be fitted and worn in the manner described by the helmet manufacturer.

Many states require specific safety devises in addition to a helmet. It is your responsibility to familiarize yourself with the laws of the state where you are operating and riding and comply with all such laws, including properly equipping yourself and your cycle as the law and common sense requires.

Be sure to understand the following common sense safeguards for operating your

Surrey, to reduce the risk of personal injury. Parents of minor riders have an obligation to be sure their children understand these safeguards.

- Be sure you understand all the operations of your Surrey.
- Be sure all equipment is properly adjusted, especially your wheels, steering and brakes.
- Obey traffic laws. Cyclists are subject to the same rules as motorists. Know and obey all motor-vehicle, bicycle and traffic laws.
- Use common sense. Slow down for intersections. Do not erratically weave in and out of motor traffic. Watch for parked cars suddenly pulling out, or their doors opening.
- Avoid heavy motor traffic.
- Never carry more persons than your Surrey is designed to carry by the manufacturer.
- Make use of safety accessories and clothing. Wear bright or light colored clothing, or a vest with reflectors, especially at night. Wear shoes and a helmet.
- Always ride defensively. While you may be legally right, in a contest between an

auto and your Surrey, the car will come out first.

- Be especially cautious with downhill braking. With very steep downgrades, it may be impossible to stop your Surrey in a necessary distance although the braking system meets the highest standards. To avoid possible injury, dismount and walk your Surrey (use the brakes) to the bottom of the grade, if you do not feel secure enough, especially on wet, muddy or gravel roads.
- Do not stunt ride. Do not use the Surrey for stunt or acrobatic riding, ramp jumping or similar activities.

#### Warning: Bad weather requires increased breaking distance. On the road with

wet, snowy or icy weather conditions, your brakes cannot stop you as quickly as in

clement weather conditions. Special precautions must be taken to ensure safe stopping or slowing, and reduce the risk of personal injury. No matter how well your brake system functions, it is your responsibility to exercise special care in such adverse situations. Ride slowly. Be more alert. Apply your brakes sooner than you would under dry conditions.

**Warning: Special precautions for night riding.** Be sure your Surrey has reflectors or lights required by law on wheels, pedals, front and back. Be sure reflectors are properly adjusted and clean. State or local laws may require that you equip your Surrey with a light system in

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#### Initial checks on taking delivery

After assembly, carefully check all bolts related to steering, brakes and wheels, and if necessary, adjusted, by a cycle mechanic also check and, if necessary, adjust the brakes and the tire pressures.

#### Have your Surrey serviced regularly

Your vehicle must be serviced by a trained cycle mechanic every 50 to 100 miles.

#### Take care getting on board

Do not place your feet on the steering rods, the chainguards or the fenders

(mudguards). Front-seat passengers must be instructed to keep their feet clear of the

steering rods. Should their feet interfere with these rods this may throw the tracking of

the wheels out of alignment, and necessitate readjustment. Make perfectly sure, too,

that all passengers keep their feet on the pedals at all times when the vehicle is

#### in motion. It is dangerous to remove feet from the pedals during riding. If

passengers are using the Surrey who are not able to hold their feet on the pedals, like

handicapped persons, do care for fixing their shoes on the pedals before you start to

ride. The front passengers have a relatively low seating position, such that a passenger might be tempted to put his or her feet on the ground. Should such a careless action take place at speed there will be the danger of an accident with physical injuries.

#### Dealing with centrifugal force when cornering!

Passengers riding a Surrey for the first time need time to get used to cornering. Start with slow cornering with a minimal slope, so that your passengers can sense how they should position themselves in a curve. If all passengers lean correctly into the curve the vehicle maintains a high level of stability and curving at speed can be great fun. But if they fail to lean correctly, the person steering can lose confidence and control, and can in fact lose control and, in the worst case, allow the vehicle to stray onto the other side of the road, possibly colliding with oncoming traffic. It is therefore very important that you pay particular attention to the behavior of your fellow passengers while cornering and give them clear instructions in this matter.

#### Where may I ride the Surrey?

The Surrey may generally ride anywhere a bicycle is legal to ride. So avoid hitting hard against roadside curbs. Avoid riding off well-surfaced roads. Avoid potholes. Avoid off-road routes and especially downhill off-road routes. Avoid routes involving going through water and/or exposure to sea salt. Avoid routes with untoward slopes or gradients where you might reach unsafe speeds or need to push the vehicle. You may use cycle paths where they are sufficiently wide, but show respect to other path users. Where cycle paths are not wide enough, you may ride on the road. Also show respect to motorists and let them overtake where possible. Discuss with your passengers before each journey the matter of who will be responsible for giving hand signals so that other road users are not confused by conflicting messages. Good communication is at the very heart of Surrey-riding.

#### Safety is everything! Ride sensibly!

On the Surrey the person steering bears direct responsibility for him/herself and all other passengers. Ride carefully, anticipating problems, and avoid sudden maneuvers such as unexpected fast turns and unnecessary sharp braking. Bear in mind that the front passengers may well quickly feel unsafe if you cause the Surrey to travel in an erratic fashion. You can best experience this for yourself if you swap places and ride at the front. The Surrey is a pedal cycle,



To avoid accidents, teach children good riding skills with an emphasis on safety from an early age. Children should be supervised by an adult.

- Many states require that children wear a helmet while cycling. Always wear a properly fitted helmet.
- Do not play in driveways or the road.
- Do not ride on busy streets.
- Do not ride at night.
- Obey all the traffic laws, especially stop signs and red lights.
- Be aware of other road vehicles behind and nearby.
- Before entering a street: Stop, look left, right, and left again for traffic. If there's no traffic, proceed into the roadway.

# ALWAYS WEAR A HELMET!



Please read these instructions carefully! Following these instructions will prevent you from using more energy than necessary, will preserve your 7 speed gearing systems and protect the systems from damage. Failing to follow these instructions could damage your 7 speed system(s) and void your warranty.

#### **STARTING YOUR RIDE -**

1. ALWAYS set your 7 speed gearing systems to 1st gear when starting from a dead stop.

#### **RIDING AND SHIFTING -**

- 2. As you increase speed during your ride, in concert with the other pedalers, (i) cease pedaling, (ii) shift to the next highest gear and (iii) resume pedaling. If your Surrey has two 7 speed systems (two shifters), both the left and the right sides should shift in concert with each other and should always be in the same numbered gear. Team work is important!
- 3. As you ride and decrease your speed for an approaching obstacle or hazard or come to a complete stop, always down shift into a lower gear—and always shift to 1st gear if you come to a complete stop. —*NEVER* put undue stress on your transmissions by riding in higher gears than required, *if it is hard to pedal, you are in a gear that is too high*— *downshift*!
- 4. While enjoying your ride, if you encounter a hill or other incline, no mater how slight, always down shift into 1st gear and gradually work your way back up. On a decline, you may shift into higher gears.
- 5. If you encounter a headwind and pedaling becomes difficult, downshift into a lower gear. This will make pedaling more easy and will cause you to use less energy.

#### **REVIEW** -

- ALWAYS start your ride in 1st gear.
- ALWAYS downshift into 1st gear when climbing an incline, no matter how slight.
- ALWAYS be in the same gear as the other pedalers on the Surrey.
- ALWAYS pause pedaling while shifting gears up or down.
- Treat your Surrey transmissions like you would the transmission on a manual transmission automobile.
- If it is too hard, it is too high! Downshift!
- REMEMBER, the more you take care of your 7 speed system(s), the more they will take care of you!
- Failure to follow these operating instructions carefully may result in damage to your 7 speed system(s) and voiding of all warranties.

# **CERTIFICATE OF WARRANTY**

excluded from this Certificate of Warranty. This warranty does THIS CERTIFICATE OF WARRANTY offered by International Surrey Company Ltd. ("Company") is not include any labor cost in connection with repairing, replacing and maintaining the Product. All warranty claims must be made to Company in writing and all parts on which warranty is claimed must be applies. Claimant is responsible for all shipping, handling and/or freight costs associated with making a The limited, nonnents against all material and manufacturing defects. All other warranties, express or implied, statutory and otherwise, including but not limited to fitness for a particular purpose and merchantability, are P returned to Company for its determination, in its sole and absolute discretion, on whether this warranty transferable warranty is a 90 day warranty from the date of purchase on all mechanical frame compospecifically disclaimed. Damage or component failure from normal wear and tear and/or misuse, casclaim on this warranty. This warranty does not apply to products used for commercial purposes non-transferable, limited warranty on the mechanical product ("Product"). electronic components used as part of the Hitch Hiker product. ualty or other damage is specifically ർ

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