

X3-AX Supplemental Owner's Manual



CONGRATULATIONS!

Congratulations and welcome to the Sun Seeker family! You have selected one of the most comfortable and advanced recumbents on the market. Please read this manual before riding your Sun Seeker Recumbent. In this manual you will find that we cover the basics for setting up and understanding your new recumbent.

IMPORTANT:

This manual is only a supplement to the main Recumbent Bicycle/Tricycle Owner's Manual. Read it before you take the first ride on your new recumbent bicycle/tricycle and keep it for reference.

NOTE:

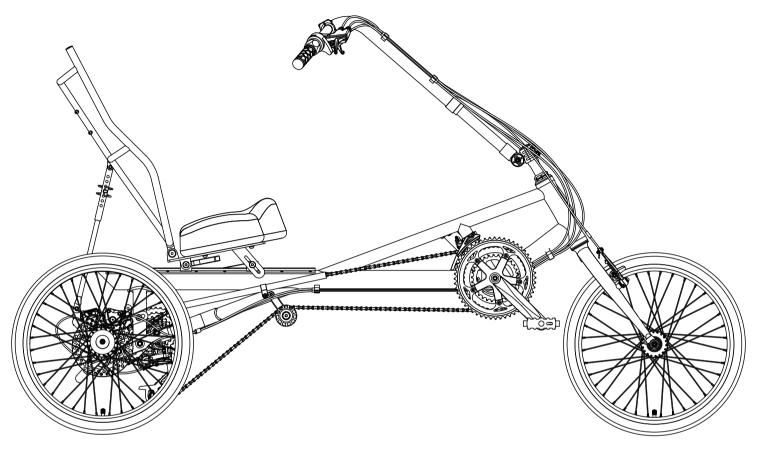
This manual is not intended as a comprehensive use, service, repair, or maintenance manual. Please see your dealer for all service, repairs, or maintenance. Your dealer may also be able to refer you to classes, clinics, or books on bicycle use, service, repair, or maintenance.

X3-AX Specifications

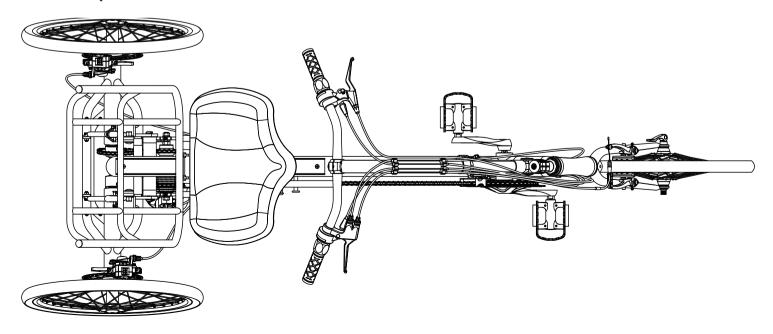
Model:	X3-AX			
Style:	Delta Trike			
Frame Material:	7005 Series Aluminum, TIG-Welded			
Fork Material:	High Tensile Blades, Chromoly Steerer			
Handlebar / Stem:	Aluminum Alloy with Telescoping Handlebar System			
Steering System:	Over Seat			
Seat Type:	Two-Piece with Cool Back Seat Mesh			
Wheelbase: Overall Length:	56" (142cm)			
Overall Length:	75" (191cm)			
Width:	30" (76cm)			
Seat Height:	20" (51cm)			
Weight:	49 lbs.			
X-Seam :	31-45" (79-114cm)			
Weight Limit:	300 lbs.			
Headset:	Semi-Integrated Steel			
Drive Type:	24-Speed Derailleur			
Pedal Type:	Platform, 9/16"			
Crankset:	Alloy 170mm 52-42-30t			
Bottom Bracket:	Sealed Cartridge Square Taper			
Chain Type:	KMC Z-51 1/2" x 3/32"			
Front Derailleur:	Microshift Dual Pull for 31.8mm Seat Tube			
Rear Derailleur:	SRAM X4			
FW / Cassette Range:	SRAM 8-Speed 11-32			
Shifter Set:	SRAM 3x8 Grip Shift			
Brake Levers:	Promax Locking Linear Pull			
Brake Caliper Front / Rear:	Promax Linear Pull / Dual Promax Mechanical Disc w/160mm Rotors			
Rims / Spokes:	Alloy Double Wall / 14g Stainless Steel Spokes / 36 Hole			
Tires / Size:	Kenda Kwest 20 x 1.25" / 100psi			
Water Bottle Cage Mounts:	Dual Seat-Back Mounts			
NOTE: Specifications subject to change without notice.				

X3-AX Reference Views

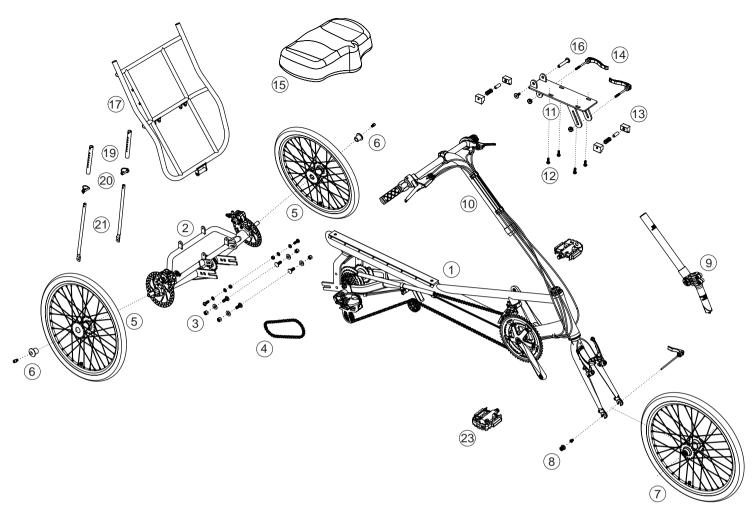
Side View



Top View



X3-AX Assembly Reference

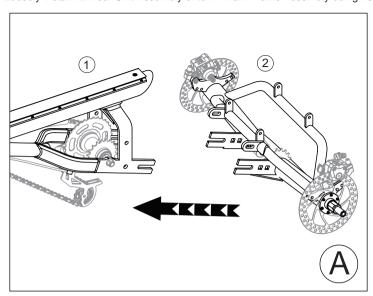


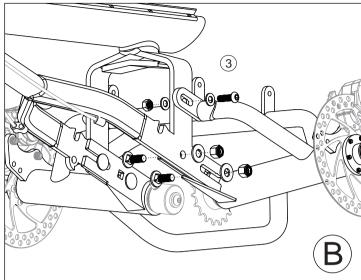
	X3-AX Parts List				
ITEM	DESCRIPTION	QTY			
1	Main Frame Assembly	1			
2	Rear Unit Assembly	1			
3	Rear Unit Hardware (4x carriage bolts/nuts/washers, 2x Allen head bolts/nuts & 4x washers)	1 set			
4	Transfer Chain	1			
5	Rear Wheel Assembly	2			
6	Rear Wheel Retaining Cap (M8 x 20mm bolt, washer)	2			
7	Front Wheel Assembly	1			
8	Front Wheel Quick Release (M5 x 125mm)	1			
9	Handlebar Stem	1			
10	Handlebar Assembly	1			
11	Seat Mount	1			
12	Seat Mount Hardware (4x bolts/washers)	1 set			
13	Seat Slider Assembly (2x wedges, 1x tubes/springs)	2 sets			
14	Seat Slider Assembly Quick Release Levers (M6x92mm)	2			
15	Saddle	1			
16	Seat Back Pivot Bolt	1			
17	Seat Back Frame	1			
18	Seat Back Mesh (not pictured above)	1			
19	Upper Seat Strut (16x150mm)	2			
20	Seat Strut Pin	2			
21	Lower Seat Strut (12x315mm)	2			
22	Seat Strut Hardware (2x upper bolts/nuts/washers, 4x half-moon nylon washers, 2x lower bolts/nuts/washers; not pictured above)	1 set			
23	Pedals (9/16")	1 pair			

Assembly Guide

Rear Unit Installation

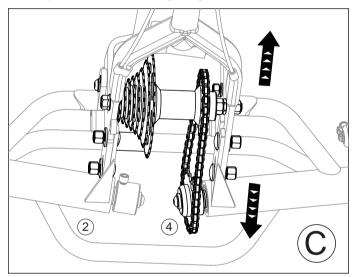
Loosely install #2 Rear Unit Assembly onto #1 Main Frame Assembly using #3 Rear Unit Hardware. See Figure A and B.





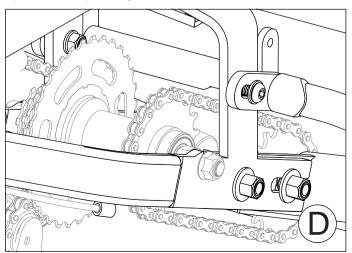
Chain Installation

Install #4 Transfer Chain onto rear axle drive sprocket and mid drive fixed sprocket. When installed, pull back #2 Rear Unit Assembly to remove slack in the #4 Transfer Chain. Excessive chain tension may create noise and binding. A slight chain twist is normal due to cambered rear axles. See Figure C.



Final Tightening of Rear Unit

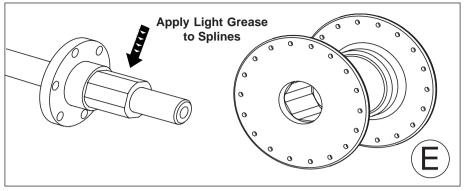
Tighten #3 Rear Unit Hardware to 18-20Nm (160-175 in. lbs) See Figure D.



Hub Spline Interface

Lightly grease axle splines and inner hub spline interface. Position wheel with hub spline inward for mounting to axle. See Figure E.

NOTE: Hub is shown removed from wheel for reference purposes only.

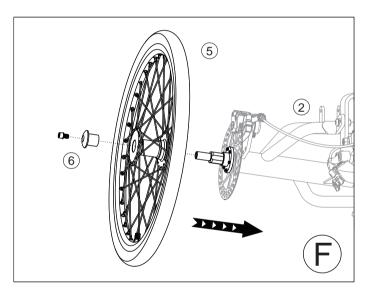


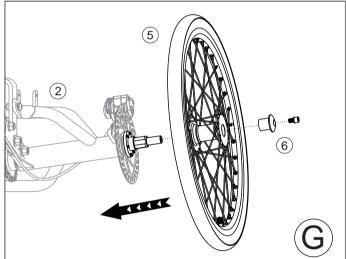
Rear Wheel Installation

Install #5 Rear Wheel Assemblies onto #2 Rear Unit Assembly axle shafts with hub splines facing inward to match axle shaft splines.

Install #6 Rear Wheel Retaining Caps into #5 Rear Wheel Assemblies. Tighten #6 Rear Wheel Retaining Caps to 12-14Nm(105-122 in/lbs) See Figure F and G.

NOTE: Rear wheel assemblies will fit either side, however the tires are directional. Use the tires as your reference for L and R sides.

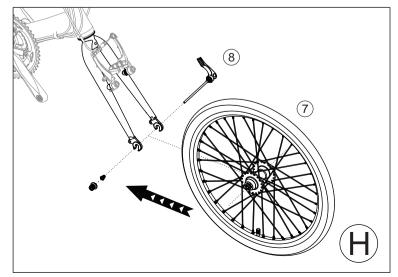




Front Wheel Installation

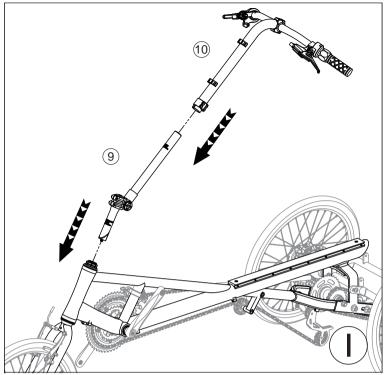
Install #7 Front Wheel Assembly into front fork dropouts. Install #8 Front Wheel Quick Release and tighten securely. See Figure H.

NOTE: Refer to Sun Seeker Recumbent Bicycle / Tricycle Owner's Manual for proper quick release operation.



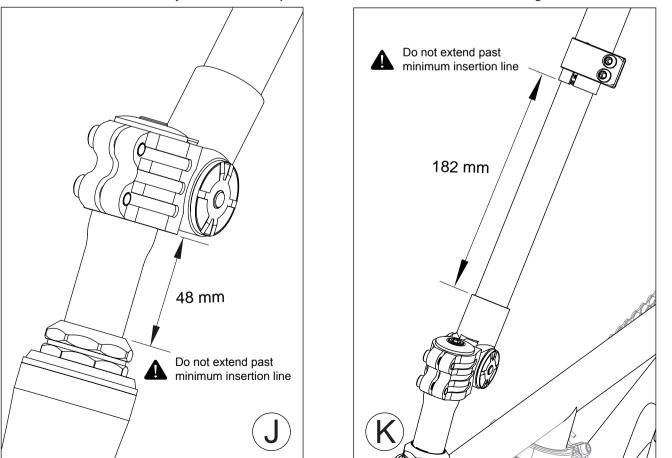
Handlebar Assembly Installation

Lightly grease base and expanding wedge of #9 Handlebar Stem. Install base of #9 Handlebar Stem into steer tube of #1 Main Frame Assembly. Position stem pivot bolt to the rear of steer tube and tighten stem wedge bolt securely. Install #10 Handlebar Assembly onto top of #9 Handlebar Stem past the minimum insertion marking, tighten securely. See Figure I.



Once handlebar assembly position is set you can now adjust the brake and shift controls for comfort. Secure shift and brake cables along handlebar assembly using provided zip ties.

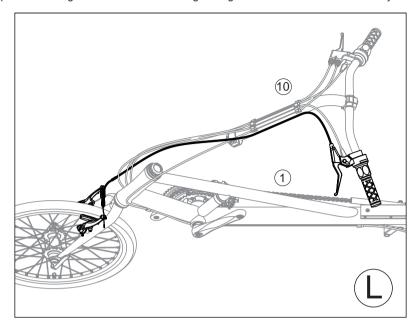
NOTE: DO NOT extend handlebar assembly or handlebar stem past their marked minimum insertion lines. See Figure J and K.



WARNING: Make sure once you have made all your handlebar, stem, and control adjustments that you do not have any leg, knee, or tire interference with the handlebar or controls. Failure to do so may result in loss of control resulting in a serious or fatal accident.

Front Brake Cable Routing

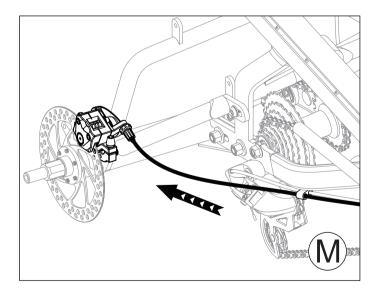
Route front brake cable and housing from left brake lever of #10 Handlebar Asembly down handlebar and into 90 degree brake "noodle" of front brake arm. Route brake housing smoothly to prevent binding. Trim brake cable housing to length after handlebar and control adjustments are made. See Figure L.

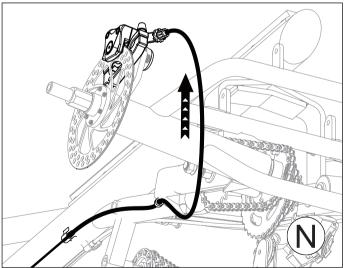


Rear Brake Cable Routing

Route rear brake cable and housing pair from right brake lever of #10 Handlebar Assembly down handlebar and into front frame tabs along #1 Main Frame Assembly. Separate brake cables into left and right sides, route along appropriate frame tabs, and into cable adjusters of left and right rear brake calipers. Route brake housing smoothly into the calipers to prevent binding. Trim brake cable housing to length after handlebar and control adjustments are made. See Figure M and N.

WARNING: Make sure once you have routed all housings that you do not have any body, tire, or pedal interference with the housings. Failure to do so may result in loss of control resulting in a serious or fatal accident.





NOTE: Cables have been pre-installed in correct frame tab positions for ease of assembly. See Figure M and N.

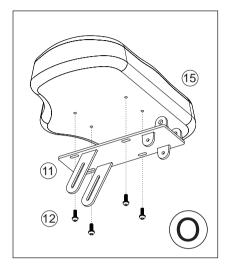
Saddle Assembly and Seat Back Frame Installation

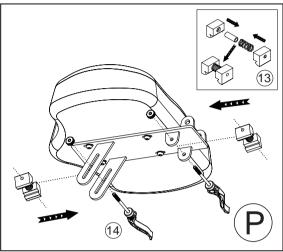
Install #15 Saddle onto #11 Seat Mount using #12 Seat Mount Hardware. See Figure O.

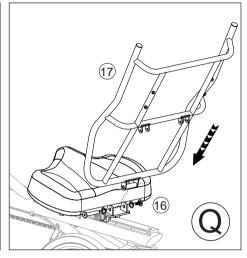
Install #13 Seat Slider Assembly onto #11 Seat Mount lower tabs using #14 Seat Slider Assembly Quick Release Levers. See Figure P.

Install #11 Seat Mount onto #1 Main Frame seat slider channel and secure with #14 Seat Slider Quick Release Levers. Install #17 Seat Back Frame onto #11 Seat Mount using #16 Seat Back Pivot Bolt. See Figure Q.

NOTE: Refer to Sun Seeker Recumbent Bicycle / Tricycle Owner's Manual for proper quick release operation.







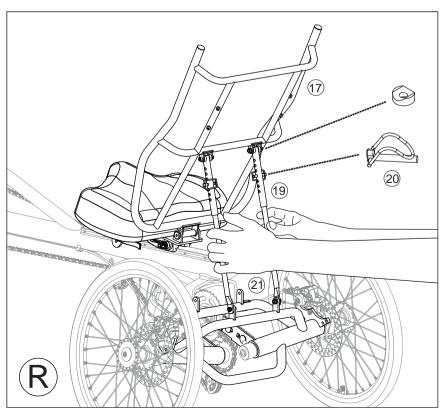
Seat Strut and Seat Mesh Installation

Install #19 Upper Seat Struts and ½ moon washers onto the upper tabs of the #17 Seat Back Frame using the #22 Seat Strut Hardware Set.

Install #21 Lower Seat Struts onto the rear tabs of the Main Frame and Rear Unit Assembly. Use front tabs for shorter riders, rear tabs for taller riders. Insert the lower struts into the upper struts and use #20 Seat Strut Pins to secure the struts. See Figure R.

Install #18 Seat Back Mesh (not shown) onto the #17 Seat Back Frame. Starting from the top edge of the seat back frame, insert upper posts of seat back frame into stitched mesh pockets on square upper corners of seat mesh. Expect a snug fit.

Roll the rounded lower corners of the seat back mesh onto the rounded lower edges of the seat back frame. Finish by buckling and adjusting nylon clips and straps to the rear of the #17 Seat Back Frame.

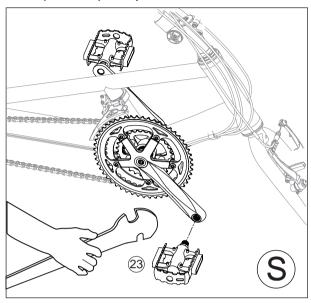


Pedal Installation

Apply grease to the threads of the #23 Pedals. This will protect the threads of the pedal and the crank arm. Use pedal washers where required. Using your hands, thread the #23 Pedals (marked for L or R) into the respective left or right crank arms by turning them toward the front of the bike.

Once the threads catch, use your pedal wrench to finish tightening down the pedals. See Figure S.

NOTE: Tighten the pedals to a minimum of 34Nm (300 in-lbs.) of torque.



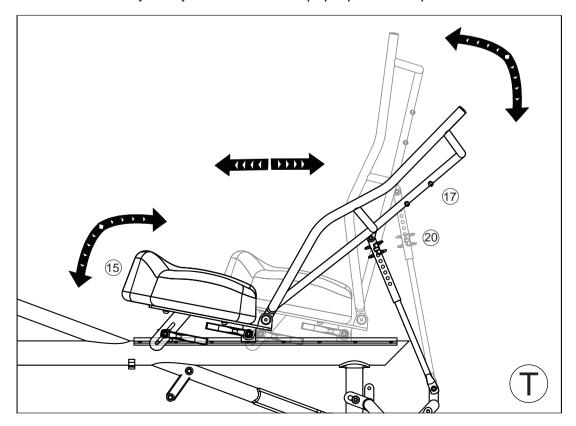
Seat Adjustment

Loosen the #14 Seat Slider Assembly Quick Release Levers and slide the #11 Seat Mount rearward on the #1 Main Frame seat slider channel until in a comfortable seating position. Adjust the #15 Saddle angle by loosening the front #14 Seat Slider Assembly Quick Release Lever. Adjust #17 Seat Back Frame by removing and reinstalling the #20 Seat Strut Pins into a new position on the seat struts if necessary.

Position the #15 Saddle so that when seated your knee is slightly bent when the forward foot is in the farthest pedal position.

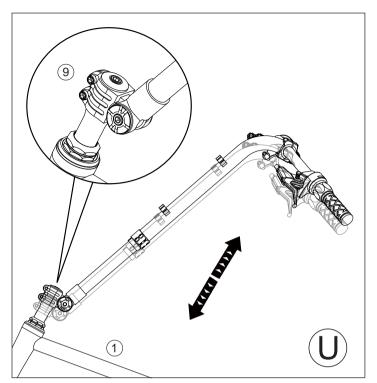
If you cannot extend your leg forward enough you can move the #15 Saddle forward to get the proper fit. Adjust #17 Seat Back Frame Assembly for comfort. See Figure T.

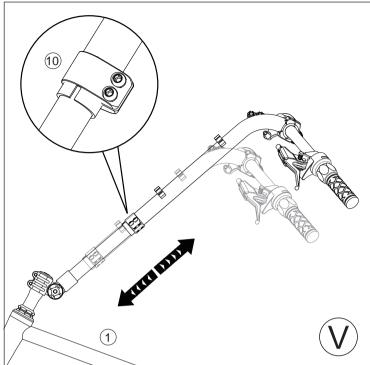
NOTE: Refer to Sun Seeker Recumbent Bicycle/Tricycle Owner's Manual for proper quick release operation.



Handlebar Adjustment

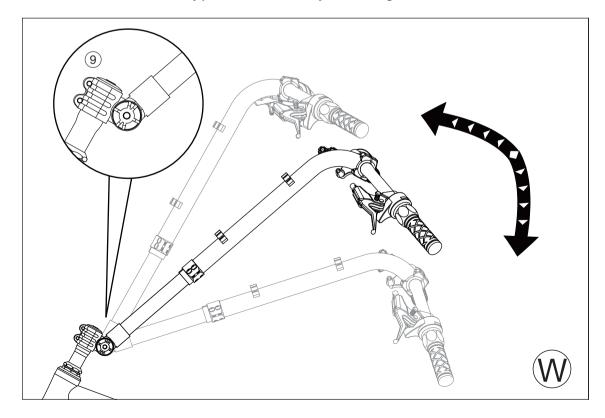
#9 Handlebar Stem can be raised or lowered in the fork of the #1 Main Frame to provide extra height at #10 Handlebar Assembly. See Figure U. #10 Handlebar Assembly can be raised or lowered for comfort by loosening the clamp at base of hand bar assembly. See Figure V.





#9 Handlebar Stem can be pivoted forward or backward for more or less handlebar reach by loosening the pivot bolt on side of stem. Once handlebar position is set you can now adjust the brake and shift controls for comfort. See Figure W.

NOTE: DO NOT extend stem or handlebar assembly past their marked safety line. See Figure J and K.



WARNING: Make sure once you have made all your handlebar, stem, and control adjustments that you do not have any leg, knee, or tire interference with the handlebar or controls. Failure to do so may result in loss of control resulting in a serious or fatal accident.

Finishing Touches

Please remember, this manual is only a supplement to the main Recumbent Bicycle/Tricycle Owner's Manual. Please read the Recumbent Bicycle/Tricycle Owner's Manual in its entirety before taking your first ride on your new recumbent bicycle/tricycle.

As a quick recap: Make all necessary adjustments before riding. Adjust front and rear derailleurs as you would on a bicycle. Adjust brakes and check function of parking brake locks on both left and right-hand brake levers. Check carefully for any handlebar, control, cable or housing interference. Secure housings using cable ties if needed to reduce movement and to eliminate contact with any moving parts. Check that chain tubes are positioned so that tubes do not interfere with normal operation. Check quick release seat mount and seat strut pins for security. Always torque fasteners properly and recheck torque values after the first few rides. Routinely check the condition of your recumbent bicycle/tricycle before every ride. Perform a visual and tactile inspection of the whole recumbent bicycle/tricycle before each ride to check for anything that may be unsafe to the operation of your bicycle/tricycle.

If you have any questions, or if you feel anything about your recumbent bicycle/tricycle is not functioning properly, consult your dealer before you ride again.



NOTE:

This manual is not intended as a comprehensive use, service, repair, or maintenance manual. Please see your dealer for all service, repairs or maintenance. Your dealer may also be able to refer you to classes, clinics or books on bicycle use, service, repair, or maintenance.

THANK YOU AGAIN FOR YOUR PURCHASE OF A SUN SEEKER RECUMBENT.

If you have any questions or concerns please feel free to contact us 24 hours a day at info@sunseeker.bike

Notes		

