

Ergonomic Solutions

OWNER'S MANUAL

INDUSTRIAL BICYCLES SERIES IBIKE

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IMPORTANT NOTES

This is a recreational unit, not designed for excessive speeds or misuse.

Do not brake or turn at high speeds. This may cause cycle to roll over. Careless operation may cause rider to lose control and result in SERIOUS INJURY.

THINGS TO KNOW BEFORE RIDING YOUR CYCLE:

- Know your local bicycle laws and wear a helmet.
- Do not exceed the recommended weight limit of 250 lbs.
- No more than one rider at a time.
- Do not stand on unit.
- Be sure to install safety flags.
- Wear light-colored clothing and protective gear.
- Do not ride at night.
- Children must be supervised by an adult at all times.

WARNINGS & SAFETY INSTRUCTIONS

Ensure that all employees understand and follow the following.

- Read and understand the owner's manual before using.
- Ensure that all safety and warning labels stay in place and are legible.
- Do not use the I-BIKE if any damage or unusual noise is observed.
- Do not perform any modifications to the Uni-Tilt without the manufacturer's approval. Failure to receive authorization for changes to the equipment could void the warranty.
- Maintenance and repairs are to be done only by personnel qualified to perform the required work. Warranty labor charges will not receive consideration without prior written authorization by the manufacturer.

RECEIVING INSTRUCTIONS

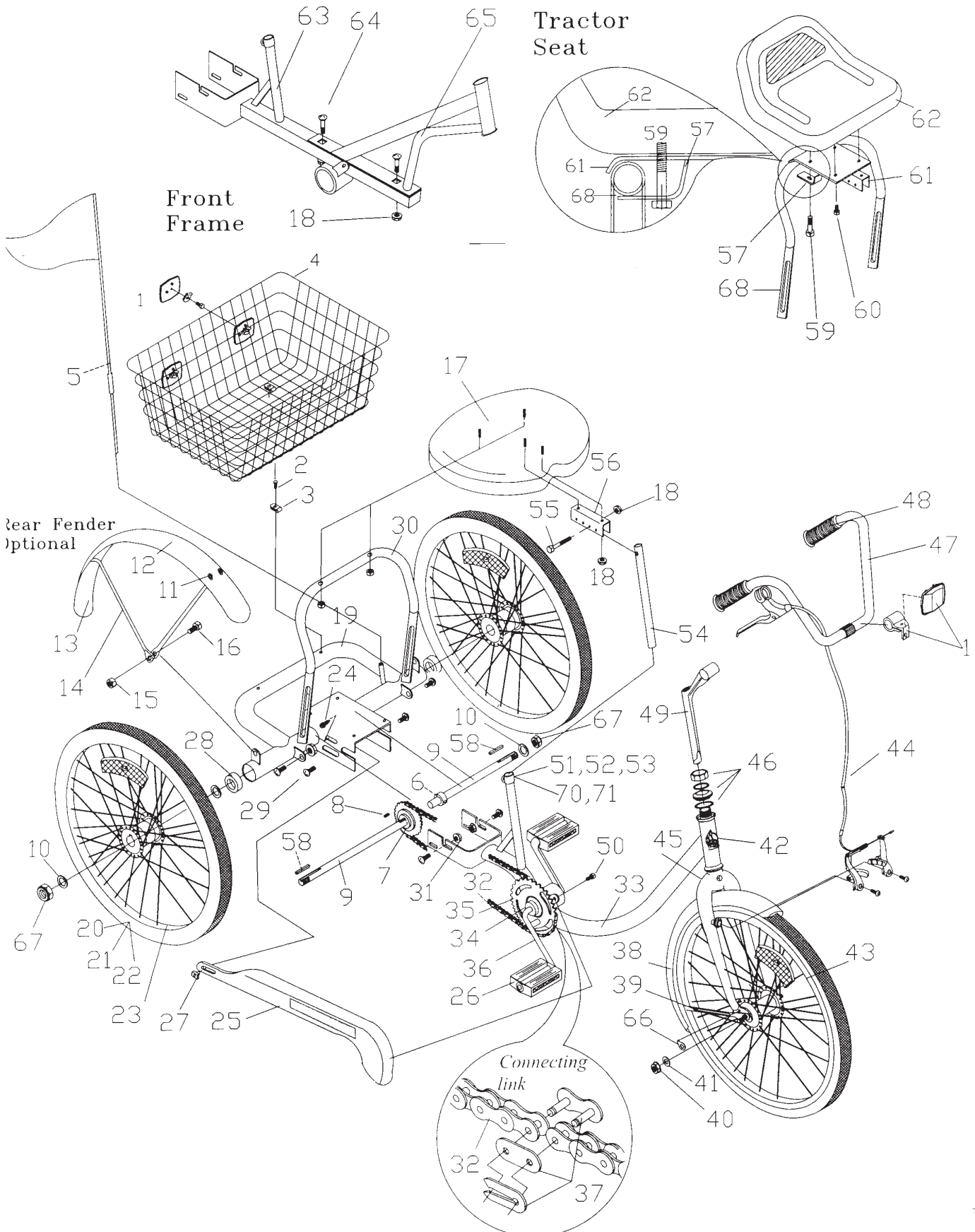
We take pride in using quality parts on the equipment we manufacture. We are not responsible for equipment problems resulting from the use of unapproved replacement parts.

To order replacement or spare parts for this equipment, contact the factory.

In any communication with the factory please be prepared to provide the machine's serial number, which is indicated on the machine dataplate.



ILLUSTRATED PARTS BREAKDOWN



PARTS LIST

Item	Part #	Description	QTY	Item	Part #	Description	QTY
1	11871	REFLECTOR KIT TRIKE	1	35	11934	SPROCKET 36T 1/2X1/8	1
2	12199	SCREW #14 x 3/4	4	36	11694	CRANK 4-1/2" (20" TRIKE)	1
3	12069	BASKET HOLD DOWN	6		11695	CRANK 5-1/2" (24" & 26" TRIKE)	1
4	11639	BASKET	1	37	11679	CONNECTING LINK	1
5	12102	FLAG SAFETY W/POLE	1	38	11743	FENDER, 20" MWT FRONT	1
6	12241	SET COLLAR 5/8	2		11747	FENDER, 24" MWT FRONT	1
7	11949	FREEWHEEL 22T W/ADAPTER	1		11752	FENDER, 26" MWT FRONT	1
8	12246	KEY SQUARE 3/16X5/8	1	39	11762	FENDER BRACE, 20" MWT	1
9	19869	AXLE DRIVE W/2KEYWAYS	2		11764	FENDER BRACE, 24" MWT	1
10	12240	WASHER SPACER	8		11766	FENDER BRACE, 26" MWT	1
11*	19171	SCREW #10-32X3/8	8	40	12176	NUT 5/16--24 HEX	2
12*	12170	NUT #10-32	8		19002	NUT 3/8-24 FLANGED (MAG WHL. ONLY)	2
13*	11745	FENDER, 20" MWT REAR	2	41	12236	WASHER 5/16 SAE	2
*	11748	FENDER, 24" MWT REAR	2		12301	WASHER 3/8 SAE	2
14*	19360	BRACE, 20" REAR	4	42	11718	DECAL TM HEAD	1
*	19358	BRACE, 24" REAR	4	43	12009	WHEEL, 20"X1.75"X.080 FRONT	1
15*	12178	NUT 3/8-16 FLANGE	8				
16*	12223	SCREW 3/8-16X1HHCS	2	18240	WHEEL, 24"X1.75"WHITE MAG FRONT	1	
17	11894	SEAT WESTERN SADDLE	1	20158	WHEEL, 24"X1.75"ALLOY FRONT	1	
18	12175	NUT 5/16-18 FLANGED	6	12020	WHEEL, 26"X1.75"X 0.80 FRONT	1	
19	14272	FRAME, TRIKE REAR ST COLOR	1	44	20019	BRAKE-V CANTILEVER COMPLETE	1
20	11957	TIRE, 20"X1.75 BSW	3	45	19697	FORK, 20" MWT CANTILEVE ST COLOR	1
	11961	TIRE, 24"X1.75 BSW	3		19337	FORK, 24" MWT CANTILEVE ST COLOR	1
	11969	TIRE, 26"X1.75 BSW	3		19403	FORK, 26" MWT CANTILEVE ST COLOR	1
21	11970	TUBE, 20"X1.75"	3	46	11831	HEAD SET, COMPLETE	1
	11976	TUBE, 24"X1.75"	3	47	11805	HANDLEBAR, HI RISE	1
	11978	TUBE, 26"X1.75"	3	48	11801	GRIP BLACK 7/8	2
22	11984	RIMSTRIP, 20"X1.75"	3	49	11813	STEM, HANDLEBAR	1
	11985	RIMSTRIP, 24"X1.75"	3	50	12188	SCREW 10X3/8 TYPE B SHH	1
				51	13225	CLAMP BOLT M8X38MM	1
23	12005	WHEEL, 20"X1.75"X.080 REAR	2	52	13226	CLAMP WASHER M8 FLAT	1
				53	13227	CLAMP NUT M8 HEX	1
	18239	WHEEL, 24"X1.75"X MAG REAR	2	54	12076	POST 9" SEAT	1
	20159	WHEEL, 24"X1.75"ALLOY REAR	2	55	12212	SCREW 5/16-18X1-1/2 HHCS	1
	12022	WHEEL, 26"X1.75"X.105 REAR	2	56	11898	BRACKET, WESTERN SADDLE	1
24	18714	SCREW 8X1/2 PAN PHIL	1	57	12066	BRACKET "L" REGAL	2
25	11708	CHAINGUARD ST COLOR	1	58	20012	KEY SQUARE 3/16 x 1-1/4	2
	11709	CHAINGUARD ST COLOR	1	59	12214	SCREW 5/16-18X1-3/4 HHCS	2
26	11857	PEDALS, 1/2" (PAIR)	1	60	12208	SCREW 5/16-18X3/4	2
27	13198	SCREW GROMMET	1	61	12068	BRACKET SEAT MOUNTING	1
28	11643	BEARING SP	4	62	11900	SEAT, TRACTOR	1
29	12218	CARRIAGE BOLT 3/8-16X3/4	6	63	14271	FRAME MID ST COLOR	1
30	12075	SISSY BAR ST COLOR	1	64	12211	CARR. BOLT 5/16-18X1-3/4	2
31	12178	NUT 3/8-16 FLANGE	6	65	14270	FRAME FRONT ST COLOR	1
32	12918	CHAIN, 109 PITCH FW	1	66	18867	FORK WHEEL RETAINER	2
	18643	CHAIN/CL DES 93 P CB/3SP	1	67	19720	NUT 5/8-18 NYLON INSERT	2
	11682	CHAIN, 123 PITCH REGAL FW	1	68	12070	SISSYBAR ST COLOR	1
	11687	CHAIN/CL REG 107 P CB/3SP	1				
33	14268	FRAME FRONT ST COLOR	1				
34	11697	CRANK BEARING SET, COMPLETE	1				
				70	20213	SEAT POST CLAMP,	1
				71	20214	SEAT POST 12",	1

TOOLS NEEDED

3/8" WRENCH	1/2" WRENCH	9/16" WRENCH
ADJUSTABLE WRENCH	PLIERS	5/32" ALLEN WRENCH
COMMON SCREWDRIVER	PHILLIPS SCREWDRIVER	HAMMER
AIR PUMP	AIR GAUGE	15/16" WRENCH

* - Options fenders parts ONLY

ASSEMBLY INSTRUCTIONS - PAGE 1

1. Preparation

Remove all parts from the frame and wheel cartons. Check air pressure and inflate tires to 35 psi. Make sure tires are properly seated on rims.

2. Rear Frame and Wheels

Loosen set collars (6) on the axles inside the transmission box. Slide set collars to the end of the axles and retighten. Slide the axles outward for wheel installation.

Install drive and non-drive side wheel.

Align wheel-axle keyways and tap 1-1/4" key square (58) into keyway. Install washer (10), and 5/8" nylon lock nut (67) on axle. **IMPORTANT:** Be certain the axle thread fully engages the nylon-locking portion of nut. Loosen drive wheel set collar. Remove all axle end play and tighten set collar. Note: Mag wheel hub faces in.

If there is any side-to-side movement of the axles, loosen the nut and set screw in collars. Slide collars to eliminate excess side movement, and re-tighten set screws. Then re-tighten the nut. **(DO NOT** over-tighten it. This may cause bearing damage)

For coaster brake kit and three-speed coaster brake kit installation instructions, see "Installation Guide".

3. Frame Assembly

Slide front frame (33 Desoto) or mid frame (63 Regal) into rear frame (19) with transmission box open side down, as far as possible. Install four 3/8" carriage bolts (29) through the slots in the sides of the transmission box from the outside inward. Be sure the square shoulders of the bolts seat into each slot. Install flange nuts (31). **DO NOT** tighten at this time.

4. Front Fender and Wheel

Install front wheel in the slots in the fork. Install fork wheel retainers (66). Be sure the tabs on the washers are seated into the holes in the fork. Insert bolt through center hole in fork. Slide the fender bracket over the bolt. Install washer & hand tighten nut. Place the fender brace (39) over wheel axle ends. Install washers (41) & nuts (40) on wheel axle.

Check that the wheel is centered between the fork blades. Tighten nuts.

5. Pedals

To install pedals (26), screw the pedal marked "R" into the right side of the crank in a clockwise direction. Install the left pedal (marked "L") by turning in a counter-clockwise direction. Use a 9/16" open-end wrench to tighten.

6. Chain

Install drive chain (32) over front and rear sprockets and join together with connecting link (37). Install connecting link, and spring clip, using pliers. Slide the frame section apart evenly, until the chain is tight (approximately 3/4" total up and down chain movement at middle is permissible) and securely tighten all four rear frame bolts. Rotate the pedal several times to check that the chain is running freely.

KEEP FINGERS CLEAR!

If binding is encountered, the chain may have to be loosened until the binding is eliminated. Chain binding is usually the result of a sprocket misalignment. Re-positioning the sprocket on the rear axle, or re-squaring the trike rear to the front frame section can correct this.

7. Chain Guard

To install chain guard (25), place over chain and slide rear of guard under top of transmission box. When the plastic screw grommet (27) on the rear of the guard is lined up with the slotted hole in the side of transmission box, secure with screw (24). Before tightening it is necessary to line up the holes in the front mounting bracket. Remove and re-install screw (50) and tighten. Tighten the rear screw. Turn the pedals to make sure the chain does not rub on the chain guard. If the chain rubs, adjust the back or front mounting bracket to obtain clearance.

ASSEMBLY INSTRUCTIONS - PAGE 2

8a. Western Saddle Seat

To install western saddle seat (17), secure Desoto sissy bar (30) to the two 5/16" studs on the underside of the seat. The sissy bar should be installed so the top curves to the rear of the trike.

Remove the seat-mounting bracket (56) (it is loosely installed on the seat post) and install on the two remaining studs on the bottom of the seat. You will need to use a 1/2" socket wrench to reach the nut. Secure the seat mounting bracket and seat to the seat post (54) using any of the four sets of holes with the 1-1/2" long screw (55) and nut (18). **NOTE:** The four sets of holes in the seat-mounting bracket will determine the distance from the handlebar. You may have to re-position later. Attach the sissy bar long slotted holes to the two tabs welded to the axle housing. Install carriage bolts (29) and attach nuts (31). **DO NOT** tighten at this time.

8b. Tractor Seat

To install tractor seat (62), attach the bracket seat mounting regal (61) to the seat. Insert two 3/4" long bolts (60) through the front two holes of the bracket and into the threaded holes in the bottom of the seat. Next, position the sissy bar (58) under the seat plate, as shown in illustration. Secure the sissy bar to the seat plate with two L-brackets (57) and the 1-3/4" long bolts (59). Position the "tab" on the L brackets forward of the sissy bar and pointing upwards (as illustrated). Secure the seat bracket/assembly to the seat post (54) using any of the four sets of holes with the 1-1/2" long bolt (55) and nut (18). Attach the sissy bar long slotted holes to the two tabs welded on the rear frame. Install carriage bolts (29) and attach nuts (31). **DO NOT** tighten at this time.

8c. Seat Adjustment

Loosen clamp hardware (51, 52, 53) on the seat post and raise seat to desired height. **DO NOT** expose more than 6-1/2" of seat post. Pull up on back of seat until level. Tighten seat post clamp and sissy bar bolts securely. **NOTE:** The four sets of holes in the seat-mounting bracket allow 3-1/4" front/back adjustment to the handlebar. Reposition height & front back setting for rider's maximum comfort.

9. Handlebar

Slide the handlebar (47) through the clamp on the stem (49) with the portion containing the long bolt to the rear of handlebar. Install clear reflector. Install the stem into the fork (45) until the line marked on the stem is not visible. Align handlebar to the fork as it faces straight ahead and tighten bolt in stem firmly. **DO NOT** over tighten; this can damage the fork tube.

CAUTION: Check that head set (46) is tight. **DO NOT** over tighten, however, as this can damage the fork bearings. Fork assembly should rotate freely.

Slide handbrake lever (44.1) onto right side of handlebar and tighten lightly. Slide hand grips (48) on handlebar until they bottom out. A small amount of soapy water inside the grip will make installation much easier. **NEVER** use oil or other lubricants! Slide handbrake lever against grip, adjust position and secure tightly.

10. Cantilever Brake Installation, and Adjustment

The front V-brake cantilever pad assembly comes attached to front fork. Unwrap the *brake lever cable* and insert the "ball" end into round slot in the brake lever. Slide open end of cable through cable guide. Install cable guide into cable guide holder. Slide cable boot onto cable (open end first). Feed the *brake cable wire* through the hole on the lock bolt (the cable clamp) and snugly tighten the clamp. Pull the slack out of the cable so that the brake pad faces are within 1/8" of the wheel rim & tighten. Refer to **cantilever v-brake setup** for final adjustment.

11. Basket

Place basket (4) onto rear frame, center between the rear wheels and immediately behind the sissy bar. Using hold down tabs (3) and sheet metal screws (2), secure the basket to the two holes in the rear frame crossover tube and two rear holes in the top of the transmission box. Rotate the hold down tabs as necessary to capture the wire of the basket in the tab. Tighten screws with a 3/8" socket wrench.

ASSEMBLY INSTRUCTIONS - PAGE 3

12. Reflectors and Safety Flag

Install the red reflectors on the back of the basket. Insert the screw provided with the reflector through the reflector clip and thread partially into hole in the back of the reflector. Place the reflector on the basket so the clip will capture one of vertical and horizontal wires and tighten the screw. Repeat for the other side. The basket reflectors should be about one foot apart.

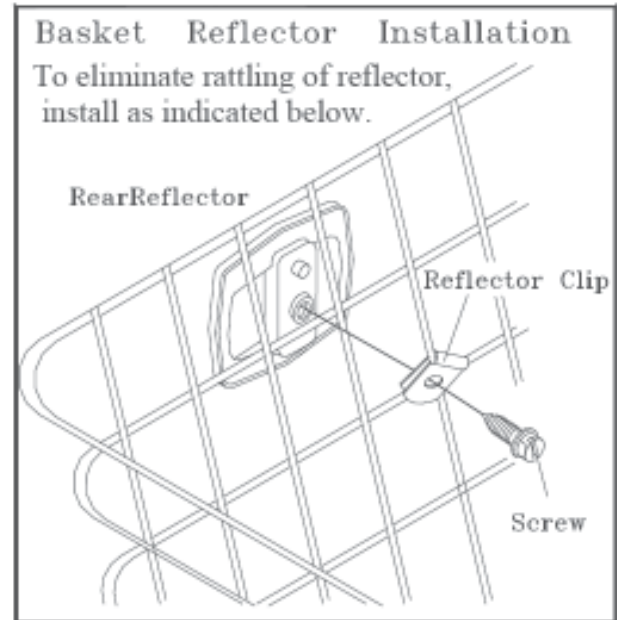
*Spoke Wheels

Install the clear wheel reflectors by placing between the spokes, as near the rim as possible. Locate the spoke in the reflector groove and secure with the plastic rivet-clip provided in the reflector bolt bag. Repeat for other wheels.

*Plastic MAG Wheels

Install reflectors on tabs using bolts and nuts.

Place the **Safety Flag** (71) in flag holder on the rear frame.



13. Rear Fenders (Optional)

To install rear fenders first attach the fenders (13) to the fender braces (14). **DO NOT** tighten at this time. **NOTE:** The curved tops of the fender braces point outward. Attach fender braces to the tabs welded to the top of the rear frame and secure with bolt (16) and nut (15). Before tightening, center fender over top of wheel in both directions (front to back and left to right). Tighten bolts.

14. Final Check

Review the instructions, check connecting bolts and screws for tightness, and Re-adjust the seat and handlebar as necessary.

MAINTENANCE AND INSPECTION

REGULAR MAINTENANCE: Bi-Monthly

1. Keep all painted parts cleaned and waxed for a long-lasting luster.
2. Spray all chrome parts with recommended protective spray coating (LPS-1, WD-40, etc.).
When spraying with protective coatings, it is recommended that you let parts set overnight so the coating will penetrate.
3. Lubricate the following:
 - a. Pivot points at top and bottom of seat
 - b. Axle shafts
 - c. Inside bearings of both pedals
 - d. Chain – turn pedal crank forward and spray freely
4. When storing over prolonged periods, turn upside down to prevent flat spots from occurring on the tires. If stored outside, cover to protect finish and moving parts.

PREVENTATIVE MAINTENANCE: Every Six Months

These are services that should be performed by your local bicycle shop. A fee may be charged.

1. Check tires for wear, rim cuts, and valve core alignment (usually caused by improper air pressure).
2. Check wheels for cracks and alignment.
3. Check brakes for proper operation.
4. Clean and repack all bearings and adjust all cones.
5. Check for worn bearings, cones, and cups.
6. Check chain for adjustment and clean as needed.
7. Check for loose bolts and nuts.

INSPECTION

Check the following, as it applies to your cycle, on a regular basis:

1. Coaster brake – Make sure the brake engages, by pedaling backwards.
2. Wheels – Check wheels for alignment.
3. Pedals – Inspect pedal bearings and make sure pedal is tightly attached to crank.
4. Handle grips – Replace worn or loose grips.
5. Chain – Check for proper tightness. Replace damaged chain immediately.
6. Seat – Adjust seat for rider comfort and safety.
7. Tires – Keep tires inflated to the recommended tire pressure, as indicated on the tire's sidewall.
8. Chainguard – Replace damaged or missing chainguard immediately.
9. Frame – Replace damaged frame immediately.