

Operator's Manual
SUPPLEMENT
Model No. 594B-0X

⚠ WARNING:

Read Engine
Owner's Manual,
Vehicle Operator's
Manual, and
Supplement
Carefully Before
Operating Vehicle.

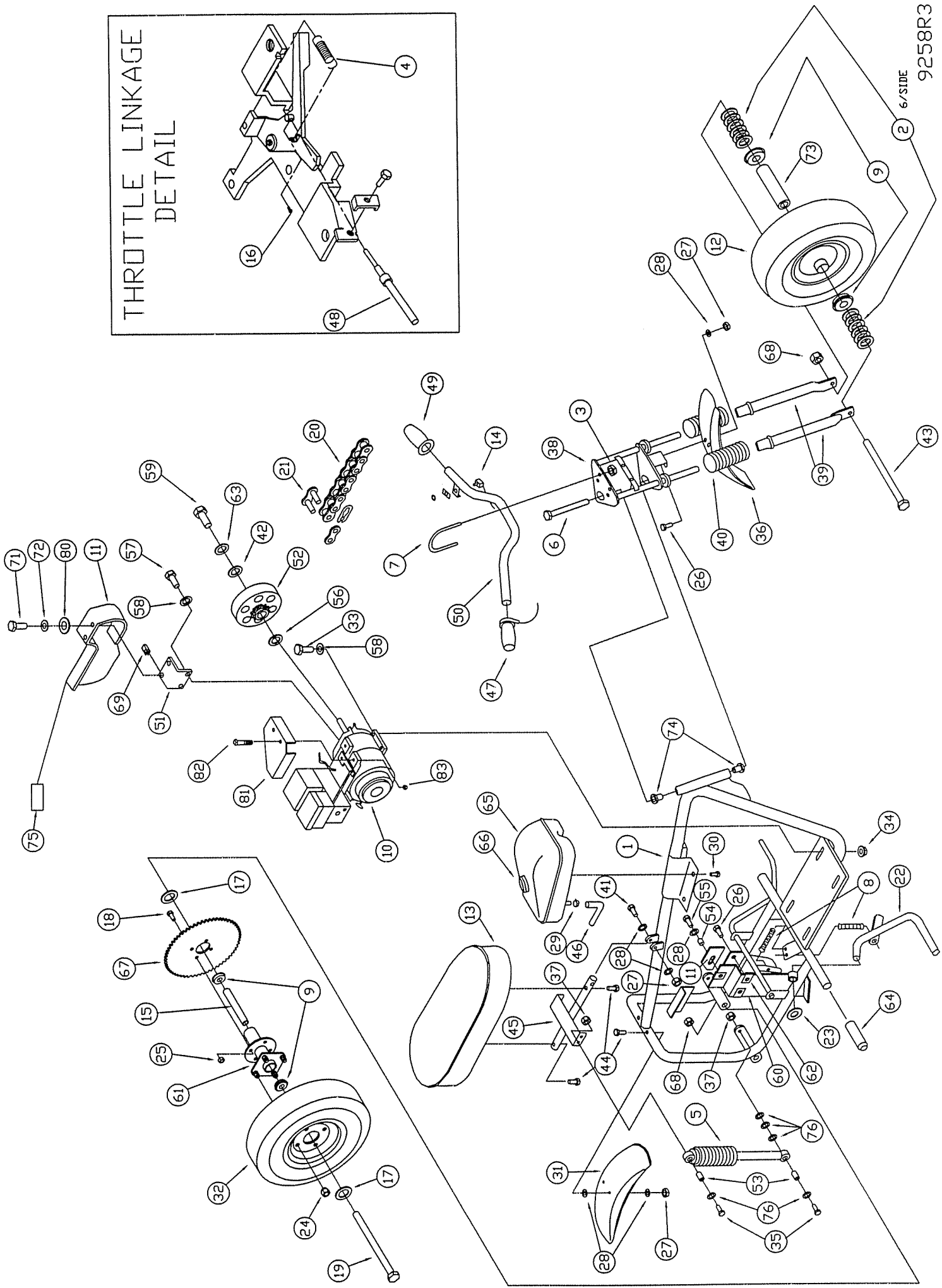
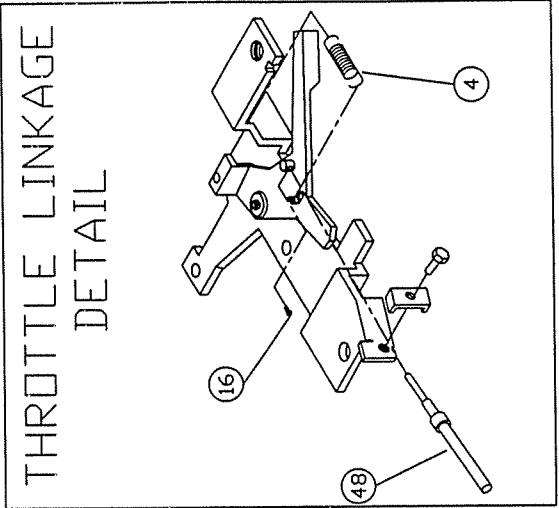
Parts List



4404 Engle Ridge Drive, Fort Wayne, IN 46804
ph (219) 432-1596 fx (219) 432-7870

**THIS VEHICLE IS FOR
OFF-ROAD USE ONLY**

BEFORE OPERATING THIS VEHICLE, THE OWNER AND/OR OPERATOR MUST UNDERSTAND THE VEHICLE WAS NOT DESIGNED OR MANUFACTURED TO MEET SPECIFICATIONS FOR USE ON STREETS, HIGHWAYS, OR THOROUGHFARES AND HAVE READ AND HAVE AN UNDERSTANDING OF ALL THE INSTRUCTIONS FOR SAFE ASSEMBLY AND OPERATION AS WELL AS THE INSTRUCTIONS GOVERNING THE ENGINE AND OTHER PORTIONS OF THE VEHICLE.



6/SIDE
9258R3

PARTS LIST FOR 594

REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	11586-5	Frame	45	4950-2	Seat Frame
2	1119	Spacer 5/8 ID 1 1/16 OD 1/8	46	6641	Fuel Hose, 7"
3	1189	Nut, 5/16-18 Toplock	NI	12383	Fuel Filter
4	12348	Return Spring	47	11160	Grip Assembly (inc. # 48)
5	4561	Shock Absorber	48	11525	Throttle CBLE 56.25IN
6	1138	Bolt, 5/8-11 x 7"	49	11158	Grip, Dummy
7	6124	U-Bolt, 5/16-18	50	2154-2	Handlebar
8	PX1079	Spring	51	6480-2	Bracket, Chain Guard
9	5090	Bearing	52	4195	Clutch, 420 Chain x 10 Tooth
10	12248	Engine 5HP W/O Tank	53	6634	Bushing, 3/8"ID x 13/16" Long
11	6489R	Chainguard, (inc. #75-79)	54	9949	Bushing, 1/4"ID x 1/4" Long
ASM	6234B	Frt Wheel Asmbly (inc. #12, 9)	55	1845	Bolt, 1/4-20 x 5/8"
12	6225B	Tire/Wheel, Front	56	PX2340	Bushing, 3/4 ID Machine
13	8594	Seat	57	9101	Bolt 5/16-24 x 1/2 HHCS G5 NL
14	12305	Stopswitch Asm W/Nut & Plate	58	9030	Washer, 5/16" Interlock
15	6788	Spanner 5/8 ID x 2 5/8 Long	59	9073	Bolt, 3/8-24 x 3/4"
16	12347	Swivel Screw For Robin	60	6475-2	Chainguard, Lower
17	1469	Washer, 1 OD x 5/8 ID x 1/16"	61	6542	Axle, Rear
18	9099	Bolt, 3/8-16 x 1"	62	2449	Nut, Tinnerman
19	9005	Bolt, 5/8-11 x 8"	63	1130	Washer 3/8 SL Z
20	4995	Chain, 420 x 115 Pitch	64	1980	Grip, Foot
21	2037	Masterlink, 420 Chain	65	10497	Fuel Tank
22	4968-2	Kickstand	66	5246	Fuel Cap
23	9150	Pushnut, 1/2"	67	4187-2	Sprocket, 420 x 72 Tooth
24	1428	Cone Wheel Nut, 1/2-20	68	1046	Nut, 5/8-11 Lock
25	9085	Nut, 3/8-16 Lock	69	5135	Nut, Tinnerman
26	9006	Bolt, 1/4-20 x 1/2" Flange	70	-----	-----
27	9057	Nut, 1/4-20 Lock	71	6046	Screw, #10-24 x 1/2"
28	1854	Washer, #14 Flat	72	6039	Washer, #10 Internal Lock
29	5607	Clamp, Fuel Line	73	6789	Spanner 5/8 ID x 2 5/8 Long
30	PX2304	Screw, #14 x 5/8" Self-Tapping	74	9507	Bushing, Steering
31	2127	Fender, Rear	75	11330	Decal, Sheet Warning
32	6224B	Tire/Wheel, Rear	76	9125	Washer Flat 3/8 USS W
33	9186	Bolt, 5/16-18 x 1-1/2"	80	9104	Washer, No. 10 Flat
34	1263	Nut, 5/16-18 Whiz Flange	81	12295-2	Guard Robin Engine GBLK
35	9145	Bolt, 3/8-16 x 1-3/4"	82	1848	Bolt 1/4-20 X 1.250 HHCS G5 Z
36	2152	Fender, Front	83	9057	Nut 1/4-20 TL Z
37	9085	Nut, 3/8-16 Lock			
ASM	8638-5	Fork Assembly (inc. #38,39,40)	NI	12268	Engine Owner's Manual
38	8612-5	Fork	NI	4198	Mini-Bike Operator's Manual
39	8611-5	Fork Extension	NI	1019	Ty-Wrap
40	8608	Spring	NI	9258R3	Illustrated Parts List
41	1849	Bolt, 1/4-20 x 1-1/2"			
42	8186	Washer, 3/8 Flat			
43	1007	Bolt, 5/8-11 x 6"			
44	1848	Bolt, 1/4-20 x 1-1/4"			

ASM = Assembly
NI = Not Illustrated



WARNING: The Fork must be able to rotate freely for safe operation.

THROTTLE/HANDLEBAR ASSEMBLY

1. Remove the rear-most Ty-Wrap holding the Twist Grip (REF 47) and Stop Switch (REF 14) secure during shipping. Discard the Ty-Wrap. Also remove the Ty-Wrap holding the two Handlebar Grips together. Discard the Ty-Wrap. Slide the Dummy Grip (REF 49) onto the Left Handlebar (REF 50).
2. Separate the Throttle Cable and Stop Switch Wire. Lay the Stop Switch to the Left side of the Frame. Rout the Throttle Cable (REF 48), as shown in Figure 2, along the Top, Right side of the Frame, under the Top Crown Plate, and between the Pivot Tube and Right Fork Tube.

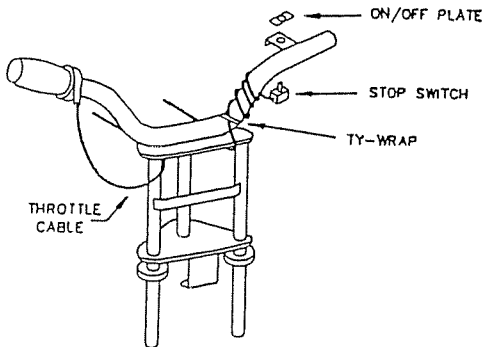


Figure 2: Routing Diagram

3. Loosen the two Screws on the Twist Grip. Slide the Twist Grip all the way onto the Right Handlebar, then back off approximately 1/4". This will ensure that the Twist Grip will not bottom out on the end of the Handlebar. Secure the Handlebar to the Fork using two U-Bolts (REF 7) and four Nuts (REF 3). Adjust the tilt of the Handlebars so that the Operator has adequate reach throughout the entire rotation of the Forks. Ensure Operator's knees do not interfere with the rotation of the Handlebars. Securely tighten all hardware mounting the Handlebar to the Fork.



CAUTION: Inadequate tightening of the Handlebar fasteners may result in the Handlebars moving under normal operational loads, possibly causing loss of control.

4. Rotate the Twist Grip so that the Throttle Cable points downward and slightly ahead. The Throttle Cable and Housing should form a smooth curve from

the Twist Grip to the upper Frame tube, see Figure 2. Tighten the two Screws in the Twist Grip securely.



CAUTION: Rotate the Twist Grip counterclockwise to the full open position and release it to insure that it snaps back to the idle position. The Twist Grip must rotate easily in both directions to ensure safe operation. If the Twist Grip does not rotate easily in both directions, repeat the assembly procedure.

STOP SWITCH ASSEMBLY

1. Rout the Stop Switch Wire (REF 14), as shown in Figure 2, along the Top, Left side of the Frame, under the Top Crown Plate, and between the Pivot Tube and Left Fork Tube. Wrap the Wire around the Left Handlebar three times. Remove the Nut and On/Off Plate from the Stop Switch. Pass the Stop Switch up through the mounting hole on the Handlebar. Replace the On/Off Plate and the Nut. Work any slack in the Stop Switch Wire towards the Pivot Tube and apply one Ty-Wrap (REF 77) as shown in Figure 2. Securely tighten the Nut.
2. Turn the Handlebar through its full range of movement to ensure that neither the Throttle Cable Housing nor the Stop Switch Wires bind, stretch, or are pinched in the process. Correct any problems.

FUEL TANK ASSEMBLY

1. Mount the Fuel Tank (REF 65) to the Frame using four Screws (REF 30). Tighten snugly, but do not over-tighten. Screw the Fuel Tank Cap (REF 66) onto Fuel Tank.
2. Slide one Fuel Line Clamp (REF 29) onto the Fuel Line (REF 46) approximately 2" from the end. Repeat this step using the remaining Fuel Line Clamp and the opposite end of the Fuel Line. Push one end of the Fuel Line completely onto the Fuel Tank Outlet and the other end onto the Carburetor Inlet on the Engine, reference Figure 3 in the Engine Owner's Manual. Slide the Fuel Line Clamps to within 1/2" of the ends of the Fuel Line.



WARNING: Ensure the Fuel Line is pushed fully onto the Fuel Tank Outlet and the Carburetor Inlet and that the Fuel Line Clamps securely hold each end of the Fuel Line. Failure to do so may result in injury to the operator and/or damage to the vehicle through leakage of gasoline and/or possible fire.

ASSEMBLY PROCEDURES

GENERAL

1. Carefully unpack all parts from shipping containers.
2. Locate and unpack the Mini-Bike Operator's Manual.
3. Complete the information block on the back page of the Operator's Manual.
4. Identify and verify all parts in the Parts Pack.
5. Reference the Exploded View for correct assembly of all parts.

SEAT ASSEMBLY

1. Attach the Seat (REF 13) to the Seat Frame (REF 45) using two Bolts (REF 44). Tighten until snug.
2. Mount the Seat Frame Assembly to the Frame using one Bolt (REF 41), two Washers (REF 28), and one Nut (REF 27). Fasten securely. Do not over tighten. Seat Frame Assembly should rotate freely.

SHOCK ABSORBER ASSEMBLY

NOTE: Do not tighten any hardware until both Shocks and all hardware is installed. See Figure 1 below for possible mounting configurations.

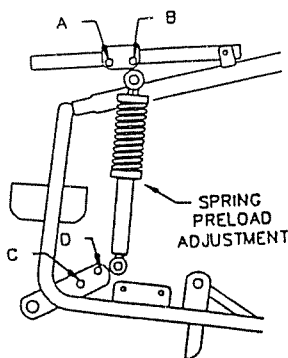


Figure 1: Shock Mounting Holes

Four mounting holes are provided for Shock adjustment. Holes B-D for lighter riders, A-D for heavier riders, and B-C may also be used. Be certain both Shocks are mounted in the same position. The Shock also has a Spring preload adjustment. This may be used to fine tune the system.

1. Mount the Spring end of the Shock to the outside of the Seat Frame using one Bolt (REF 35), one Washer (REF 42), one Bushing (REF 53), and one Nut (REF 37). Note the location of the Washer, between the Bolt and the Shock. Repeat this step for the remaining Shock making sure to use the same mounting hole as the opposite side.

2. Mount the bottom end of the Shock to the outside of the Frame using one Bolt (REF 35), four Washers (REF 42), one Bushing (REF 53), and one Nut (REF 37). Note the location of the Washers, one between the Bolt and the Shock, and three between the Shock and the Frame. Repeat this step for the remaining Shock making sure to use the same mounting hole as the opposite side.

3. Tighten all hardware securely. Do not over tighten. Seat Frame Assembly should move allowing the Shock Absorbers to compress.

FRONT WHEEL ASSEMBLY

1. Insert one Bolt (REF 43) through the Fork Assembly lower Axle mounting hole. Place six Spacers (REF 2) on the Bolt. Insert the Bolt into the Front Wheel Assembly. HINT: If the bolt will not slide into the Front Wheel Assembly, insert a long screw driver, or similar object, from the other side of the Axle. Use the screw driver to move the internal spanner so that it does not interfere with the Bolt. Place the remaining six Spacers on the Bolt. Insert the Bolt through the other hole in the Fork Assembly and secure with one Nut (REF 68). Tighten until all side play is removed from the Front Wheel Assembly. Ensure that the Wheel rotates freely.

FORK ASSEMBLY

1. Place one Bushing (REF 74) in each end of the Frame Pivot Tube. HINT: The Bushings may be held in place with a small strip of tape. Do not place tape over the hole.

2. To mount the Fork Assembly to the Frame, align the Fork Pivot Holes with the Frame Pivot Tube and insert the Bolt (REF 6) through the Fork Holes and Bushings. It may be necessary to tap the head of the Bolt with a hammer to seat it in position against the Nut welded to the bottom side of the Lower Fork Plate. Tighten the bolt until there is no play between the Fork and the Pivot Tube but will still allow the Fork to rotate freely. See Warning top of next page.

MISCELLANEOUS ASSEMBLY

1. Mount the Face Plate (REF 4) to the Forks using two Bolts (REF 26), two Washers (REF 28), and two Nuts (REF 27). The Washers should be positioned between the Bolts and the Face Plate. Tighten securely.
2. Mount the Front Fender (REF 36) to the Forks using two Bolts (REF 26), two Washers (REF 28), and two Nuts (REF 27). The Washers should be positioned between the Nut and the Fender. Tighten securely.
3. Slide Foot Grips (REF 64) onto the Frame.
4. Cut the Decal Pad to separate the two Decals. Carefully peel away the heavy paper backing while leaving the Decal attached to the wax paper. Position the Decals as shown in Figure 3 and smooth out any air bubbles. Slowly peel away the wax paper leaving the Decals on the Fuel Tank.

Figure 3: Decal Location

PRE-RIDE MAINTENANCE

1. Carefully and completely read the Engine Owner's Manual. Fill the Engine Crankcase with oil as described in the Engine Owner's Manual.



CAUTION: The Engine is shipped without oil in the crankcase.

2. Carefully and completely read the Mini-Bike Operator's Manual. Follow the Pre-Ride Inspection steps. Fill the Fuel Tank with Fuel and lubricate appropriate points as described in the Mini-Bike Operator's Manual.

3. If there are any problems or discrepancies, contact your Dealer or the Customer Service Department at Manco Products, Inc.

NOTES

Technical Service Bulletin 138

Date: January 30, 2003
Subject: Model 594 Front Fork Assembly
Models Affected: Model 594B-01
Serial Number Ranges 1002717 thru 1002722
and 1006780 thru 1006834

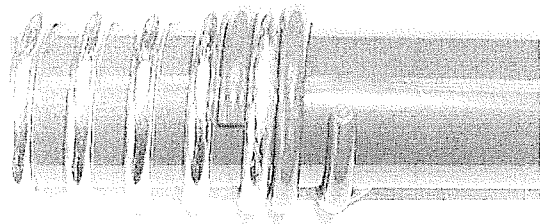
Description of Problem: The spring retainer on the fork slider tube is welded in such a way as to not allow full engagement of the spring.

Do not operate this mini bike until these repairs have been made!

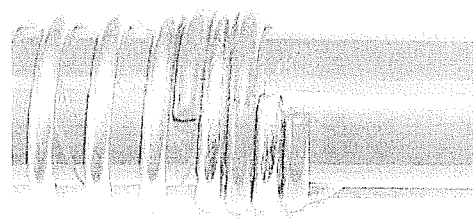
Solution: The fork slider tubes must be replaced.

1. Remove the front wheel assembly from the front forks.
2. Remove the slider tube by holding the spring and rotating the slider clockwise until the spring disengages.
3. Install the new slider tubes by engaging the spring into the retainer, holding the spring and rotating the slider tube counterclockwise until the spring is fully engaged in the retainer. See the pictures below for the full engagement position.
4. Reinstall the front wheel.

New slider tubes are available through customer service to help in this rework. The part number for these tubes is **8611-37**.



Incorrect



Correct