

Operator's Manual  
SUPPLEMENT

Model No.  
593B-0

**⚠ WARNING:**

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

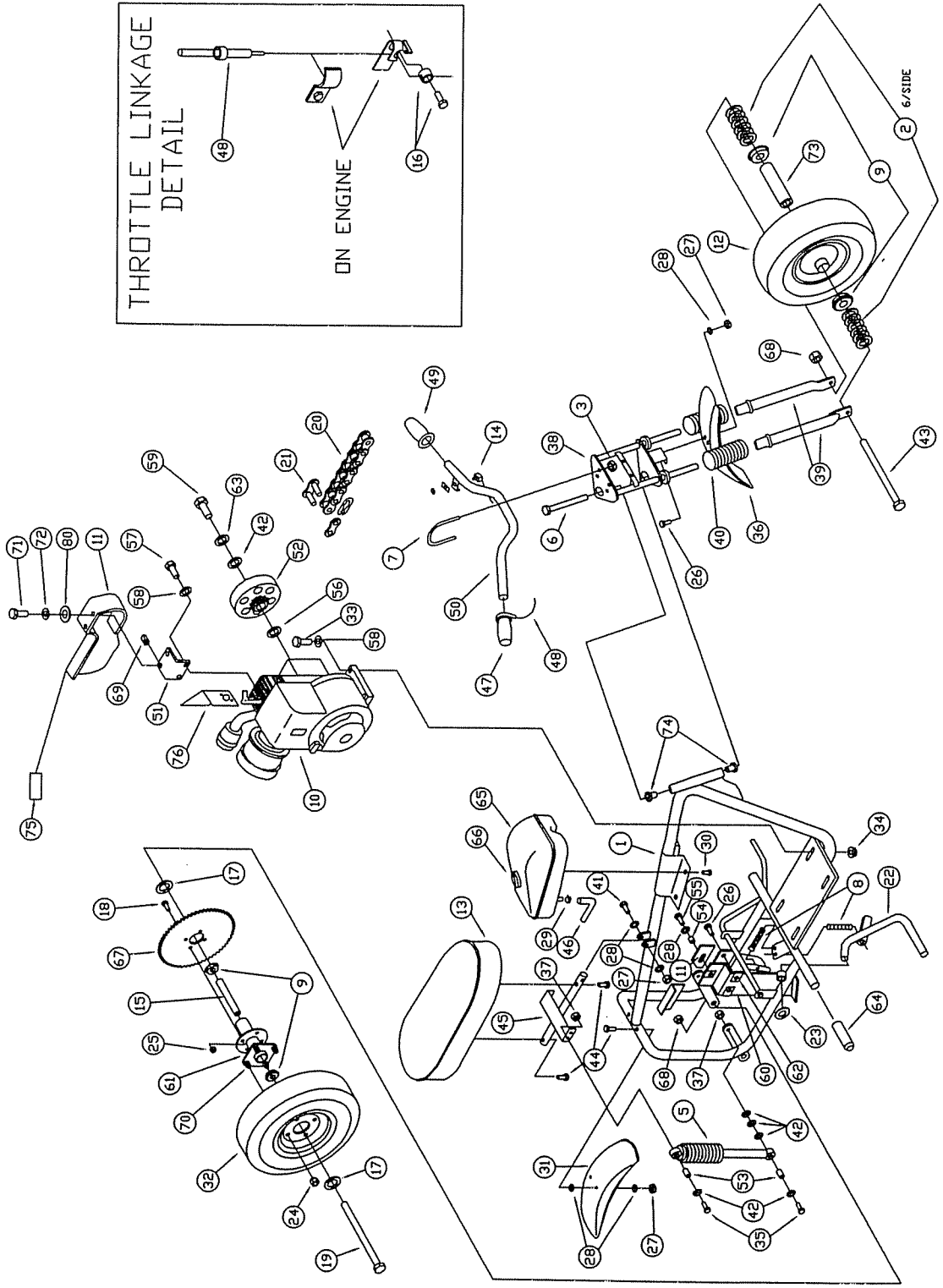
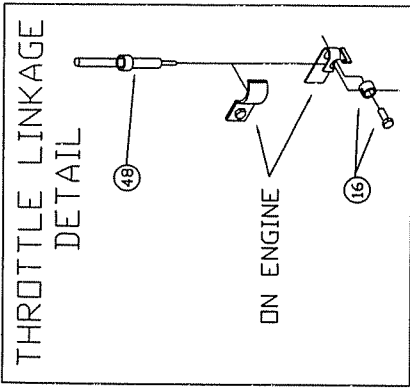
Parts List  
Assembly  
Instructions



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**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.



REF NO.	PART NO.	DESCRIPTION
1	4969-5	Frame
2	1119	Spacer 5/8 ID 1 1/16 OD 1/8
3	1189	Nut, 5/16-18 Toplock
4		NOT USED
5	4561	Shock Absorber
6	1138	Bolt, 5/8-11 x 7"
7	6124	U-Bolt, 5/16-18
8	PX1079	Spring
9	5090	Bearing
10	4267C	Engine, 3.5HP Tecumseh
11	6489	Chainguard, (inc. #75-79)
ASM	6234	Frnt Wheel Asmbly (inc. #12, 9)
12	6225	Tire/Wheel, Front
13	8594	Seat
14	6417	Stop Switch
15	6788	Spanner 5/8 ID x 2 5/8 Long
16	1018	Cable Stop with Screw
17	1469	Washer, 1 OD x 5/8 ID x 1/16"
18	9099	Bolt, 3/8-16 x 1"
19	9005	Bolt, 5/8-11 x 8"
20	4995	Chain, 420 x 115 Pitch
21	2037	Masterlink, 420 Chain
22	4968-2	Kickstand
23	9150	Pushnut, 1/2"
24	1428	Cone Wheel Nut, 1/2-20
25	9085	Nut, 3/8-16 Lock
26	9006	Bolt, 1/4-20 x 1/2" Flange
27	9057	Nut, 1/4-20 Lock
28	1854	Washer, #14 Flat
29	5607	Clamp, Fuel Line
30	PX2304	Screw, #14 x 5/8" Self-Tapping
31	2127	Fender, Rear
32	6229B	Tire/Wheel, Rear
33	9186	Bolt, 5/16-18 x 1-1/2"
34	1263	Nut, 5/16-18 Whiz Flange
35	9145	Bolt, 3/8-16 x 1-3/4"
36	2152	Fender, Front
37	9085	Nut, 3/8-16 Lock
ASM	8638-5	Fork Assembly (inc. #38,39,40)
38	8612-5	Fork
39	8611-5	Fork Extension
40	8608	Spring
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"
45	4950-2	Seat Frame
46	6641	Fuel Hose, 7"
47	11160	Grip Assembly (inc. # 48)
48	8253	Throttle Cable with Housing

REF NO.	PART NO.	DESCRIPTION
49	11158	Grip, Dummy
50	2154-2	Handlebar
51	6480-2	Bracket, Chain Guard
52	4195	Clutch, 420 Chain x 10 Tooth
53	6634	Bushing, 3/8"ID x 13/16" Long
54	9949	Bushing, 1/4"ID x 1/4" Long
55	1845	Bolt, 1/4-20 x 5/8"
56	PX2340	Bushing, 3/4 ID Machine
57	9101	Bolt 5/16-24 x 1/2 HHCS G5 NL
58	9030	Washer, 5/16" Interlock
59	9073	Bolt, 3/8-24 x 3/4"
60	6475-2	Chainguard, Lower
61	6542	Axle, Rear
62	2449	Nut, Tinnerman
63	1130	Washer 3/8 SL Z
64	1980	Grip, Foot
65	PX2257	Fuel Tank
66	PX2731	Fuel Cap
67	4187-2	Sprocket, 420 x 72 Tooth
68	1046	Nut, 5/8-11 Lock
69	5135	Nut, Tinnerman
70	1560	Stud, 1/2-20 x 1-1/2"
71	6046	Screw, #10-24 x 1/2"
72	6039	Washer, #10 Internal Lock
73	6789	Spanner 5/8 ID x 2 5/8 Long
74	9507	Bushing, Steering
75	8585	Decal, Sheet Warning
76	<del>9964-16</del>	Muffler Shield - 9964
80	9104	Washer, No. 10 Flat
NI	2684	Engine Owner's Manual
NI	4198	Mini-Bike Operator's Manual
NI	1019	Ty-Wrap
NI	9258R2	Illustrated Parts List

ASM = Assembly  
 NI = Not Illustrated

## 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.

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

## NOTES

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.



**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.

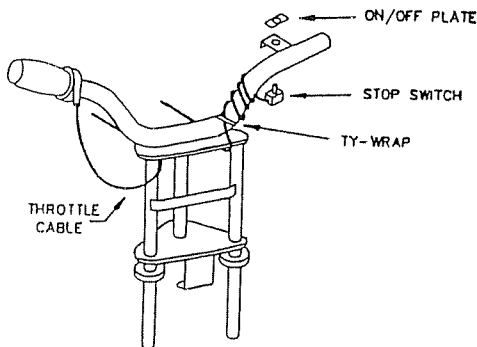


Figure 2: Routing Diagram

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.

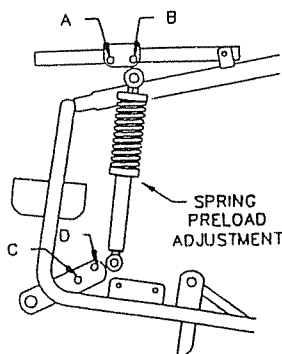


Figure 1: Shock Mounting Holes

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.