

# Operator's Manual SUPPLEMENT

MANCO MODEL NO. 593-00

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

**Parts List  
Assembly**



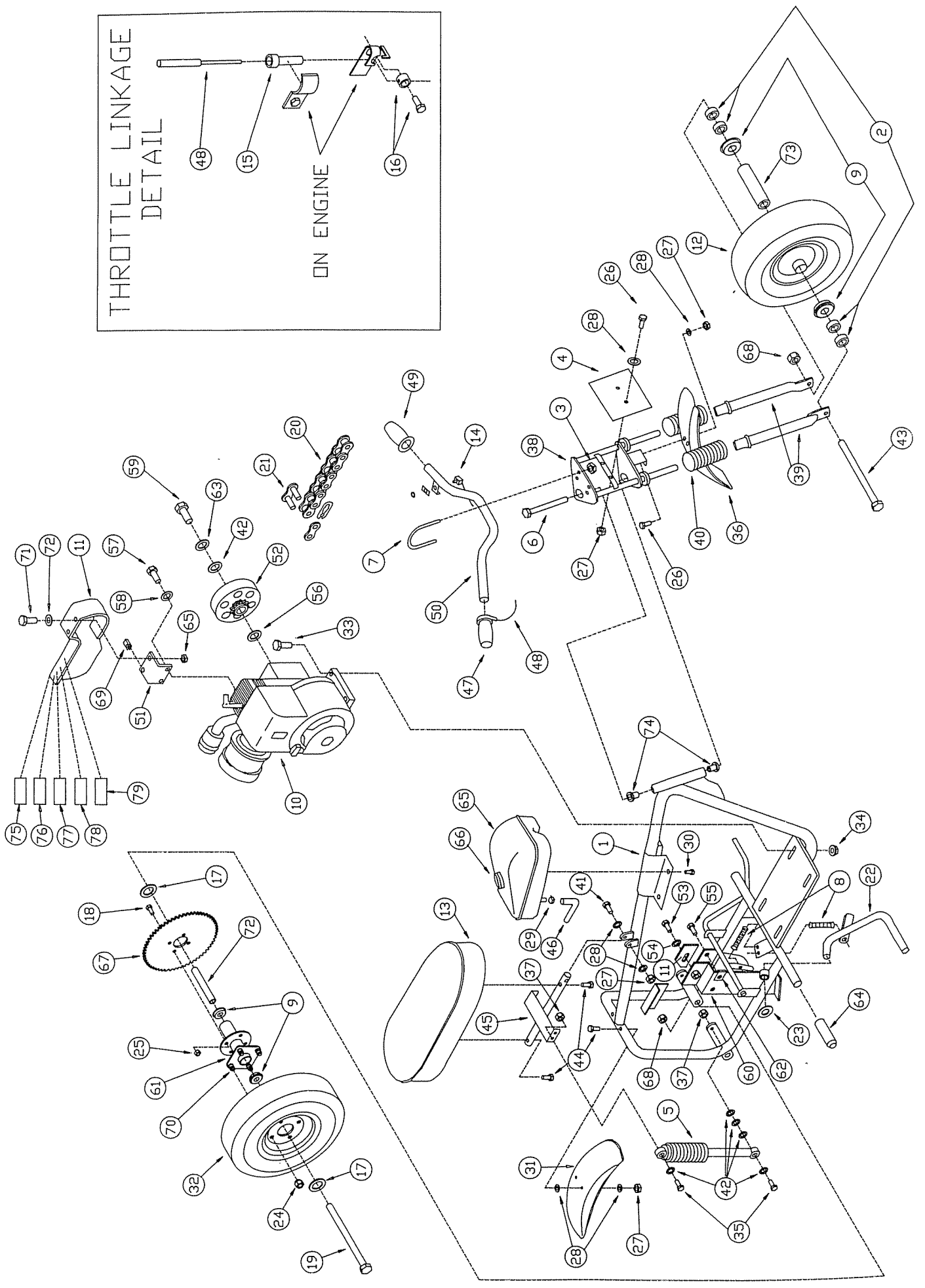
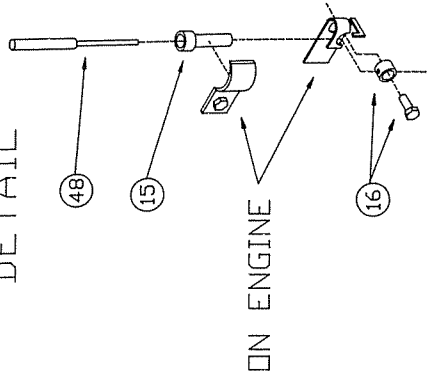
**THIS VEHICLE IS FOR  
OFF-ROAD USE ONLY**

***MANCO***  
***PRODUCTS, INC.***

4404 Engle Ridge Drive Ft. Wayne, Indiana 46804 219-432-1596

BEFORE OPERATING THIS VEHICLE, THE OWNER AND/OR OPERATOR MUST UNDERSTAND THE VEHICLE WAS NOT DESIGNED OR MANUFACTURED TO MEET SPECIFICATIONS FOR USE ON PUBLIC ROADS, 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.

THROTTLE LINKAGE  
DETAIL



# REPAIR PARTS

MODEL 593

REF NO.	PART NO.	<u>DESCRIPTION</u>	REF NO.	PART NO.	<u>DESCRIPTION</u>	
	1	4969-19	Frame	49	1014	Grip, Dummy
	2	1937	Spacer	50	2154-2	Handlebar
	3	1189	Nut, 5/16-18 Toplock	51	6480-2	Bracket, Chain Guard
	4	PX2954	Face Plate	52	4195	Clutch, 420 Chain x 10 Tooth
	5	6784	Shock Absorber	53	1275	Bolt, 5/16-18 x 3/4"
	6	1138	Bolt, 5/8-11 x 7"	54	9060	Washer, 5/16 Flat
	7	6124	U-Bolt, 5/16-18	55	9006	Bolt, 1/4-20 x 1/2" Whiz Flange
	8	PX1079	Spring	56	PX2340	Bushing, 3/4 ID Machine
	9	5090	Bearing	57	5110	Bolt, 5/16-24 x 1/2" Button Head
	10	4267	Engine, 3.5HP Tecumseh	58	9030	Washer, 5/16" Interlock
	11	6489	Chainguard, (inc. #75, 79)	59	9073	Bolt, 3/8-24 x 3/4"
ASM		6234	Frt Wheel Asmbly (inc. #12, 9)	60	6517-2	Chainguard, Lower
	12	6225	Tire/Wheel, Front	61	6542	Axle, Rear
	13	2042	Seat	62	2449	Nut, Tinnerman
	14	6417	Stop Switch	63	9001	Washer, 3/8" Int/External Lock
	15	1628	Throttle Cable Retainer	64	1980	Grip, Foot
	16	1018	Cable Stop with Screw	65	PX2257	Fuel Tank
	17	1469	Washer, 1 OD x 5/8 ID x 1/16"	66	PX2731	Fuel Cap
	18	9099	Bolt, 3/8-16 x 1"	67	4187-2	Sprocket, 420 x 72 Tooth
	19	9005	Bolt, 5/8-11 x 8"	68	1046	Nut, 5/8-11 Lock
	20	4995	Chain, 420 x 115 Pitch	69	5135	Nut, Tinnerman
	21	2037	Masterlink, 420 Chain	70	1560	Stud, 1/2-20 x 1-1/2"
	22	4968-19	Kickstand	71	6046	Screw, #10-24 x 1/2"
	23	9150	Pushnut, 1/2"	72	6039	Washer, #10 Internal Lock
	24	1428	Cone Wheel Nut, 1/2-20	73	6789	Spanner
	25	9085	Nut, 3/8-16 Lock	74	9507	Bushing
	26	9006	Bolt, 1/4-20 x 1/2" Flange	75	4504	Decal, Yellow Warning
	27	9057	Nut, 1/4-20 Lock	76	1049	Decal, Caution Drive Cover
	28	1854	Washer, #14 Flat	77	6791	Decal, Oil Clutch Here
	29	5607	Clamp, Fuel Line	78	2832	Decal, No Passengers
	30	PX2304	Screw, #14 x 5/8" Self-Tapping	79	4912	Decal, Warning Label
	31	2127	Fender, Rear	NI	2684	Engine Owner's Manual
	32	6224	Tire/Wheel, Rear	NI	4198	Mini-Bike Operator's Manual
	33	9186	Bolt, 5/16-18 x 1-1/2"	NI	PX3132	Decal Set, Fuel Tank
	34	1263	Nut, 5/16-18 Whiz Flange	NI	1019	Ty-Wrap
	35	9145	Bolt, 3/8-16 x 1-3/4"			
	36	2152	Fender, Front			
	37	9085	Nut, 3/8-16 Lock			
ASM		4193	Fork Assembly (inc. #38,39,40)			
	38	4982-19	Fork			
	39	4980-19	Fork Extension			
	40	1614	Spring			
	41	1849	Bolt, 1/4-20 x 1-1/2"			
	42	9125	Washer, 3/8 Flat			
	43	1007	Bolt, 5/8-11 x 6"			
	44	1848	Bolt, 1/4-20 x 1-1/4"			
	45	4950-19	Seat Frame			
	46	6641	Fuel Hose, 8"			
ASM		4199	Grip Assembly (inc. #47, 48)			
	7	1013	Grip, Twist			
		5874	Throttle Cable with Housing			

**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.

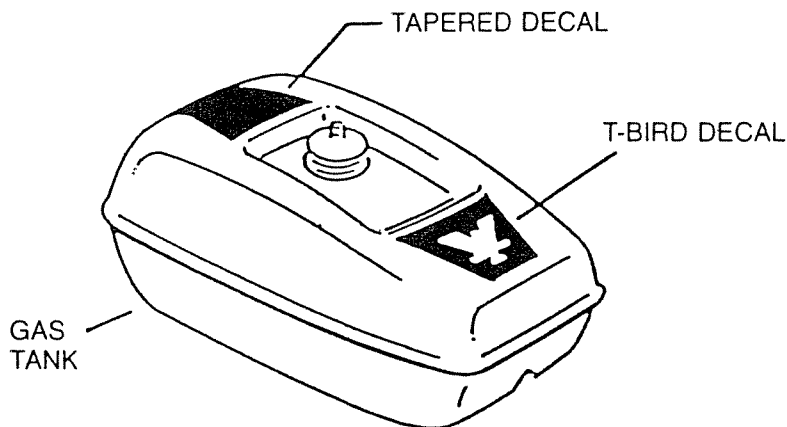


Figure 3: Decal Location

## 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

## 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.

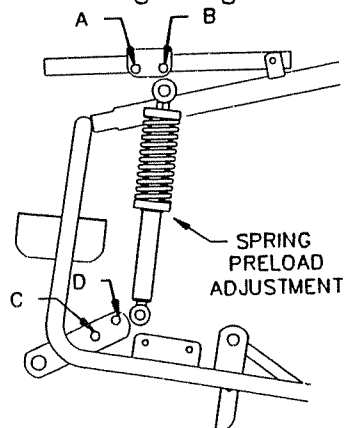


Figure 1: Shock Mounting Holes

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), 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), 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 two 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 two 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.



**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.

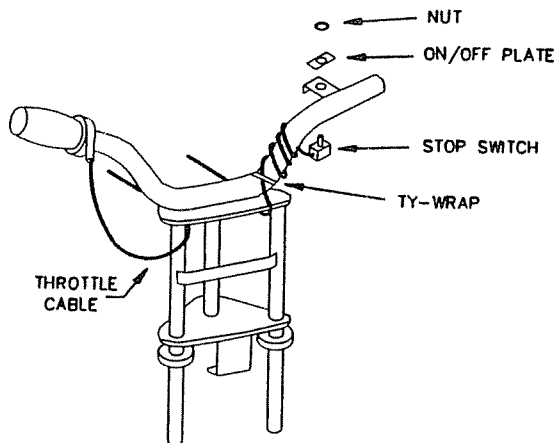


Figure 2: Routing Diagram

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 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.