



MINI-BIKE

Assembly Guidelines

#3540

WARRANTY INFORMATION

Products manufactured by Manufacturer bear the following limited warranty:

Manufacturer warrants that goods delivered will be of the kind and quality described in the retailer's order or contract and will be free of defects in workmanship or material. Should any failure to conform to this warranty appear within thirty (30) days after the initial date of delivery, Manufacturer shall, upon notification and substantiation that the goods have been stored, installed, maintained and operated in accordance with Manufacturer's recommendations and standard industry practice, correct such defect by suitable repair or replacement as its own expense.

This warranty is exclusive and is in lieu of any warranty of merchantability, fitness for a particular purpose or other warranty of quality, whether expressed or implied except of title and against patent infringement. Correction of non-conformities, in the manner and for the period of time provided above, shall constitute fulfillment of all liabilities of the seller to the purchaser with respect to, or arising out of the goods, whether based on contract, negligence, strict tort or otherwise.

Limitation of Liability: Manufacturer shall not under any circumstances be liable for special or consequential damages such as, but not limited to damage, or loss of property or equipment, loss of profits or revenue, loss of capital, cost of purchased or replacement goods, or claims of customers or purchaser for service interruptions. The remedies of the purchaser set forth herein are exclusive, and the liability of manufacturer with respect to any contract, or anything done in connection therewith such as the performance or breach thereof, or from the manufacture, sale, delivery, resale, installation or use of any goods covered by or furnished under this contract whether arising out of contract, negligence, strict tort, or under warranty, or otherwise, shall not, except as expressly provided herein, exceed the price of the goods upon which such liability is based. **This is the only warranty on any of Manufacturer's products. NO other writing or description shall be construed as a warranty.**

Products manufactured by other than Manufacturer bear the following limited warranty: Manufacturer warrants that the goods manufactured by others will conform to the description herein stated. NO other warranty express or implied is made. Any warranty of the manufacturer is hereby assigned and transferred to the buyer. Furthermore, except for the manufacturer's warranty, if any, the products sold hereunder are sold AS IS. Manufacturer is not liable for any incidental or consequential damages in connection with these products.

IMPORTANT!
READ THIS PAGE BEFORE ANY ASSEMBLY

Mini-bikes must be operated in accordance with all applicable laws and regulations and riders must comply with all requirements regarding head, eye and body protection. Please check with appropriate government agencies before operating your mini-bike. Prior to any operation, all riders must be properly trained in, and fully knowledgeable of all mini-bike functions and safe operation and procedure. Full compliance with all information set forth in these guidelines is mandatory. **FAILURE TO FULLY COMPLY IS UNSAFE AND COULD POSSIBLY RESULT IN SERIOUS INJURY OR DEATH.**

CHAIN GUARD

WARNING: This kit does NOT contain a Chain Guard. IT IS UNSAFE TO OPERATE A MINI-BIKE WITHOUT A CHAIN GUARD. DO NOT OPERATE WITHOUT A CHAIN GUARD COVERING BOTH SPROCKETS AND THE CHAIN. Ask your engine provider to provide with an appropriate Chain Guard.

ASSEMBLY SAFETY

Assembly should be performed by knowledgeable individuals using appropriate tools. Please consult with your retailer or a Kart or Mini-Bike shop or your local, knowledgeable mechanic if you experience problems with, or have questions about any portion of the assembly process, individual or overall function or operation whatsoever.

CAUTION! COMPRESSED AIR CAN BE DANGEROUS! Containment guards and eye protection should be used when inflating tires. Assemble tires and wheels with care. Never force a tire onto a wheel by prying against the wheel rim. A properly assembled tire will seat itself onto the wheel rim with less than 15 pounds per square inch (psi) of air pressure.

MINI-BIKE ASSEMBLY GUIDELINES

UNPACK & ORGANIZE

As you unpack, identify, inventory and group the components according to their function and assembly step. Hardware referenced throughout the remainder of this booklet is packaged in four (4) poly bags, marked as follows:

Quantity	Description	Bag#
1	Wire Stop with Screw	A
1	Wire Swivel with Screw	
6	Conduit Clips	
1	Conduit Clamp	
1	Straight Conduit Retainer	
1	Spring	
2	Jamnuts, 5/16-24	
6	Bolts, 5/16-18 x 3"	B
6	Locknuts, 5/16-18	
3	Steel Bushings, 5/8" ID x 1" OD 1-1/4"	
1	Steel Bushing, 5/8" ID x 1" OD x 1-1/8"	
1	Steel Bushing, 5/8" ID x 1" OD x 1-7/8"	
3	Bolts, 1/4-20 x 5/8"	C
4	Locknuts, 5/8-18	
4	Clamp Halves	D
2	Bolts, 5/16-18 x 1"	
2	Locknuts, 5/16-18	
2	Lockwashers	

Now, on to the fun stuff

1. PAINT FORK & FRAME

- Thoroughly clean the Fork (Item 18), and Frame (Item 19), making sure to remove the rust proofing oil.
- The 5/16-18 x 6" Bolt (Item 28) connects the Fork to the Frame. If you wish, you may paint its head of the bolt, but the threaded portion should be left unpainted.

IMPORTANT: DO NOT OVER-PAINT. Too much paint or spill may result in parts not fitting properly.

- Allow the paint to dry thoroughly before any assembly.

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2. ATTACH FORK TO FRAME

- Attach the Fork to the Frame using the 5/16-18 x 6" Bolt (Item 28) and the 5/8-18 Locknut (Item 30) (which for packing purposes only is installed onto the 5/16-18 x 6" Bolt).
- Tighten the Locknut until snug, and then back it off slightly to allow the Fork to move freely back and forth.

3. ASSEMBLE FRONT WHEEL

- Insert the Front Innertube (Item 4) into the Front Tire (Item 3) so that it is snug and resting completely within the tire. Inflate the Innertube with just enough air to remove the folds from the tube (1 or 2 psi).

- Mount the Tire onto the Front Wheel set (Item 1) as follows:

- Insert one Wheel half into each side of the Front Tire and over the Innertube.

CAUTION: Do not pinch the tube between the wheel halves.

- Carefully position both Wheel halves so that the half moon cuts on the inside rims form a circular opening around the valve stem of the innertube.
- Secure the Wheel halves together using three of the 5/16-18 x 3" (or 3.5" – see Components Checklist) Bolts and three of the 5/16-18 Locknuts. For now, tighten the Locknuts only finger tight. Do not inflate the tire yet.
- Insert the threaded 6.75" Front Axle (Item 21) into the wheel assembly through the 5/8" bearings. Doing so aligns the wheel halves.
- Carefully tighten each nut in sequence. Torque down each nut tightly, but do not over torque. If you have a torque wrench, which is suggested, tighten each nut to 5 ft-lbs.

CAUTION: If you use a source of compressed air to inflate the tires, use eye protection and a tire cage during inflation. A simple bicycle tire hand-pump is sufficient to provide adequate inflation.

- Inflate the tire to 15 psi and make sure it is seated properly on the wheel (tire bead flush with wheel rim and the wheel halves showing no gap at the center line).

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WARNING! 15 PSI IS APPROACHING THE MAXIMUM FOR THIS TIRE AND WHEEL COMBINATION. **DO NOT** INFLATE TO THE RUNNING PRESSURE STATED ON THE TIRE.

4. ASSEMBLE REAR WHEEL INCLUDING BRAKE DRUM & SPROCKET

- Assemble the Rear Innertube (Item 4), the Rear Tire (Item 2) and the Rear Wheel set as described in Step 3; but **DO NOT** PUT THE BOLTS IN YET.
- Center the Brake Drum & 72 tooth Sprocket unit (Item 10), sprocket side out, onto the Rear Wheel. Align the bolt holes in the Drum with those in the wheels.
- Insert the three Rear Wheel Set Bolts into the Brake Drum and through the corresponding holes in the Rear Wheel.
- Align the Rear Wheel halves using the 8.75" Rear Axle (Item 22) and complete the Rear Wheel assembly by installing and torquing down three 5/16-18 Locknuts.

IMPORTANT: Follow the same wheel assembly and tire mounting and inflation procedures and precautions set forth in Step 3 above.

5. MOUNT FRONT WHEEL

NOTE: The following procedure will result in centering the Front Wheel between the Fork legs.

- Support the Frame on a work table or other flat work area so that the Fork ends are least 12" above the work surface.
- Partially insert the 6-3/4" Front Axle (Item 21) into a fork leg hole from the outside.
- Slip one 5/8" ID x 1" OD x 1-1/4" Steel Bushing (Item 24) onto the end of the Axle between the Fork legs.

NOTE: One or both front Axle Bushings may need to be trimmed for exact alignment and spacing of wheel.

- Position the Front Wheel assembly between the Fork legs and insert the end of the Front Axle through the Wheel Bearings.
- Rotate/twist the Axle while pushing it through the Bearings, until it just exits the second Bearing.

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- Place another Steel Bushing (Item 24) onto the Axle end now peeking through the second Bearing.
- Insert the Axle through the hole of the second fork leg and center it between both fork legs.
- Place a 5/8-18 Locknut (Item 30) onto each front Axle end. Tighten each until snug. There should be no space between the steel Bushings, Wheel Bearings and Fork legs.
- When completed properly, this procedure will allow the Wheel to spin freely, without binding or drag against the Front Wheel Bearings.

6. MOUNT REAR WHEEL & BRAKE

- Begin Rear Wheel mounting with the Rear Wheel and Brake Drum/Sprocket assembly previously completed in Step 4.
- Partially insert the 8-3/4" Rear Axle (Item 22), from the right side, through the Frame's axle hanger tab.
- Place a 5/8" ID x 1" OD x 1-7/8" Steel Bushing (Item 25) onto the Axle end now inside of the Frame's hanger tab.
- With the Sprocket/Brake Drum side to the left, Place the Rear Wheel assembly in between the Frame's axle hanger tabs and onto the leading end of the Axle.
- Rotate/twist the Axle while pushing it through the Wheel Bearings until it extends out about 1-1/2" beyond the Sprocket side.
- Install the 5/8" ID x 1" OD X 1-1/8" Steel Bushing (Item 32) onto the leading end of the Axle.

7. BEGIN BRAKE ASSEMBLY INSTALLATION

- Place the 4-1/2" Brake Assembly (Item 9) onto the end of the Rear Axle and into the Brake Drum so that it is flush against the 5/8" ID x 1-1/8" Steel Bushings.
- Position the Brake Assembly with the "long fingers" of its anchor brackets pointing forward, *i.e.*, horizontal to the ground and pointing toward the front of the Mini-Bike, with the Brake actuating arm pointing straight up.

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8. COMPLETE REAR WHEEL & BRAKE ASSEMBLY INSTALLATION

- Install a 5/8" x 1-1/4" Steel Bushing (Item 24) onto the end of the Rear Axle (now extending out of the Brake Assembly).
- Push the Axle through the Frame's left axle tab and center the Axle between the tabs.
- Slide the fingers of the brake onto the welded pin.
- Place a 5/8-18 Locknut (Item 30) on each end of the Axle. Tighten the Locknuts until the Steel Bushings are snug and can't be rotated easily.

9. MOUNT BRAKE LEVER

- Loosen both clamp screws on the Brake Lever (Item 6) and install it onto the Frame's left handlebar about 4" from the end with the steel ball end of the Lever pointing left and forward.
- Secure the Brake Lever into position by tightening the mounting collar screws.

CAUTION: Prior to any operation, be sure to adjust the position of the Brake Lever so that it is readily available to and easily accessed and operated by the intended rider.

10. INSTALL BRAKE CABLE

- Locate the Brake Cable & Conduit Assembly (Item 8) (56" Cable, 48" Black Conduit Housing).
- Seat the barrel end of the Brake Cable into the hole in the Brake Lever on the left handlebar and rotate the Cable so that the barrel end fits into the slot in the brake adjuster housing.
- Slide the Housing up over the cable until it fits into the opening in the Brake Lever.
- Route the Brake Cable and Housing down the Fork and left of the Frame toward the brake, using three Conduit Clips (Item 14) to secure the Cable and Housing to the Fork and frame as you go.

IMPORTANT: Cable and Housing should be routed and secured to the inner surfaces of the fork and frame. Avoid sharp bends. Also, make sure that routing allows the fork to move freely from side to side without binding or pinching.

11. SECURE BRAKE CABLE TO BRAKE

- Run one 5/16-24 Jamnut (Item 31) almost all the way onto the threaded end of the 5/16-24 x 2" Straight Conduit Retainer (Item 16).
- Insert the threaded end of the Conduit Retainer through the hole in the upper tab on the Brake backing plate, from the front, and secure it in place with the second 5/16-24 Jamnut (Item 31).
- Thread the Brake Cable through the Conduit Retainer until the Housing has been inserted into the Retainer as far as it will go without forcing it further.
- Slide the 1/4" ID x 3" Spring (Item 17) over the end of the Brake Cable and up to the retainer.
- Insert the barrel of the Wire Swivel (Item 13 – small internally threaded cylinder with a hole drilled through its diameter) into the Brake actuating arm so that the hex head is on the tire side of the arm.
- Insert the end of the Brake Cable through the drilled hole in the Wire Swivel and pull it snugly up against the Spring.
- Insert one (small, silver-colored) Fillister head screw into the hole in the diameter of the Wire Swivel and carefully but snugly tighten to secure the cable in place.

12. ADJUST BRAKE

- Adjust the Brake by loosening the Jamnut on the rear of the Conduit Retainer and tightening the opposing Jamnut on the front. When adjusted properly, the brake should fully engage and lock a spinning rear wheel, well before the depressed brake lever comes into contact with the handlebar.
- Cut off excess Brake Cable which remains past the end of the Wire Swivel.

NOTE: You may choose to leave a small length necessary for ease of adjustment. Make certain, however, that excess cable remaining will not interfere with any other vehicle operation and will not come into contact with the rider.

13. MOUNT ENGINE

NOTE: Engine, engine mounting hardware, clutch and clutch installation hardware are not provided and must be obtained. Seek the recommendation of your dealer about a engine suitable for your rider. Be sure to obtain all appropriate installation hardware and take note of any special instructions and recommendations regarding installation of your engine and clutch.

- Place the Engine on the Frame's engine mounting plate, aligning the engine's mounting holes with the slots in the Frame's mounting plate.

- Insert the engine mounting bolts down into the engine's mounting holes until they extend through the bottom of the Frame's mounting plate slots.

- Carefully slide the engine as far to the rear of the mounting plate as possible and then place recommended washers and/or Locknuts onto the bolts. At this time, hand-tighten only.

NOTE: The engine must remain in this temporary pushed-to-the-rear position until after you have installed the clutch and the chain as described in Steps 15 & 16.

14. INSTALL CLUTCH

- Install the clutch onto the engine drive shaft, with the *clutch's sprocket facing in, toward the engine*. DO NOT INSTALL THE CLUTCH WITH ITS SPROCKET FACING OUT AND AWAY FROM THE ENGINE.

- Do not yet lock the clutch in place.

15. ALIGN CLUTCH & REAR SPROCKETS

- Lay a yardstick or other suitable straight-edge along the rear wheel Sprocket with the end sticking forward far enough to touch the clutch sprocket.

- Adjust the clutch by sliding it on the engine drive shaft into a position where it is aligned EXACTLY with the rear wheel sprocket and then lock it into its aligned position.

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16. INSTALL CHAIN

- Item 20 includes a length of #35 roller Chain and a Connecting Link with side plate and spring clip. For the time being, put the connecting link pieces safely aside.
- Wrap the chain around both sprockets forming a closed loop. With a piece of chalk, mark the link where the chain must be “broken.”

NOTE: Cutting too long is better than too short — you can always remove additional links.

- Using a chain-breaker, cut the Chain at the marked link.
- Once sized, reform the loop around both sprockets and complete it by installing the connecting link.

NOTE: The closed end of the spring clip should point in the direction that the chain travels during operation.)

17. POSITION & SECURE ENGINE

- Carefully slide the engine forward until the chain is snug. In doing so, do not allow the engine to slip sideways as this will ruin the sprocket alignment. (If the sprockets sneak out of alignment, leave the engine in its forward, chain-snug position, unlock the clutch and realign.)
- After the engine is in its forward, chain-snug position and the clutch and rear sprockets are aligned, torque down tightly the Locknuts on all engine mounting bolts.

18. INSTALL DUMMY & TWIST GRIPS

- Locate the components of the Throttle Kit (Item 11).
- Twist the Dummy Grip onto the Frame's left handle bar (under the installed Brake Lever) as far as it will go.
- Slide the Twist Grip/Throttle Control all the way onto the Frame's right handlebar and then back it off by 1/2".

NOTE: Adjust the Twist Grip/Throttle Control on the handlebar so that the attached Throttle Conduit and Cable connection point is to the front of the handlebar with the Throttle Conduit and Cable pointing down and slightly forward.

19. SIZE THROTTLE CABLE AND CONDUIT

- The 54" length of Throttle Cable housed inside the 50" length of Throttle Cable Conduit must be sized so that they may be properly routed from Twist Grip/Throttle Control to engine throttle. However, accurate sizing calculations cannot be made accurately without knowing how the Throttle Conduit and Cable are routed and fastened, as described in Step 21, "Install the Throttle Conduit & Cable," and Step 22, "Fasten Throttle Cable to Engine," that follow, below.
- Review Steps 21 and 22 below to familiarize yourself with how the Throttle Conduit and Cable will be routed and fastened to estimate sizing and cutting.
- Complete your sizing calculations and cut down the Throttle Conduit and Cable accordingly.

NOTE: The Throttle Cable should be approximately 4" longer than the Throttle Conduit.

20. INSTALL THROTTLE CONDUIT & CABLE

- In routing the Throttle Conduit and Cable make sure there are no sharp bends. Further, when the handlebars are turned lock-to-lock, the Throttle Conduit should not bind or catch.
- With the Twist Grip/Throttle Control positioned on the handlebar so that the Throttle Conduit and Cable are pointing down and slightly forward, tighten the Twist Grip's mounting collar screws to lock it into position.
- Route the Throttle Conduit and Cable down through the fork and then back to the left angled member of the frame just below the Fork-to-Frame Bolt bushing.
- Fasten the Throttle Conduit and Cable to the inner side of the frame with two 1/4" x 7/32" Conduit Clips (Item 14).
- Use another Conduit Clip to fasten the cable conduit onto the Frame at a point near or on the engine.

NOTE: Make sure that the Conduit/Cable will not come into contact with any of the engine's hot or moving parts or with the rider.

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21. FASTEN THROTTLE CABLE TO ENGINE THROTTLE

- The Throttle Cable is fastened to the engine with the Wire Stop with Screw (Item 12) where it engages the engine's throttle arm.
- Properly installed, the throttle should operate smoothly, from full-on to full-off. If this is not the case, or throttle operation is restricted in anyway, check the cable routing/fastening and the position of the Wire Stop.

22. INSTALL THE SEAT

- On the bottom of the 12" Plush Mini-Bike Seat (Item 5), there are three threaded inserts.

NOTE: You may have to trim away some of the seat cover material to expose the inserts.

- Place the Seat onto the Frame. Line up the threaded inserts with the stamped holes in the 2 flat cross-bars of the Frame.
- Fasten the Seat to the Frame by inserting the three 1/4-20 x 5/8" bolts (Item 26) up through the Frame and into the threaded inserts.
- Your assembly is now almost, but not quite, complete and should not be operated

However If you feel like it, and, provided you do so carefully—mini-bike upright and stationery, engine off, brake fully engaged—let the rider mount up!—(Optional, Not Required—if you want to keep working, by all means, proceed.)

23. ASSEMBLY & OPERATIONS REVIEW

- Time to review all assembly and check all operations. Then, additional items need to be installed.
- First review the section entitled on "ASSEMBLY SAFETY" at the beginning of this booklet. Review your assembly and determine whether you have unanswered questions or unresolved problems.

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- Re-read each assembly step and inspect your assembly.
- Check all fasteners (bolts, screws, clips, clamps, etc.) to make sure they are secured, installed, tightened, etc., properly.
- Check the steering operation, making certain that full-range of operation is available and un-hindered throughout the entire range of steering operation—lock-to-lock.
- Check both wheels making certain they are securely and properly fastened to the Frame, but spin freely.

NOTE: No additional items or accessories should be added to the mini-bike, nor worn or carried by any rider which would in any manner hinder operation or interfere with moveable parts of the mini-bike including the engine.

- Check to see that the throttle operation is working properly throughout its entire range of operation, including but not limited to:
 - dummy and throttle twist grip properly installed and securely on the handlebars?
 - full-range, smooth, un-hindered Twist Grip/Throttle
 - Throttle Conduit and Cable from Twist Grip to engine throttle properly routed, fastened and fully operable and compatible with other operations—e.g., steering and braking?
 - Upon release of Twist Grip, Throttle disengages completely?
- Check for proper installation of the braking system. Test braking operation. When braking is initiated by depressing the brake lever, the brake should lock the rear wheel well prior to a point at which the depressed lever touches the handlebar or grip.
- Check for proper sprocket alignment and snug chain tension.

WARNING! AFTER YOUR ASSEMBLY IS COMPLETE AND PRIOR TO ANY OPERATION, HAVE THE VEHICLE EXAMINED BY A QUALIFIED AND KNOWLEDGEABLE PROFESSIONAL TO ENSURE PROPER ASSEMBLY, OPERATION, SAFETY AND COMPLIANCE WITH ALL APPLICABLE LAWS. THE SAFETY OF THE RIDER DEPENDS ON IT.

24. INSTALL THE CHAIN GUARD

- At this time, please review the following items: the boxed **“NOTE”** in bold type near the top of the Components Checklist; the section entitled “CHAIN GUARD” on page 3 of this booklet; and “ABOUT THIS KIT’S CONTENTS” in the first paragraph of page 4 of this booklet.
 - One purpose of a Chain Guard is to prevent injury to riders and/or bystanders as a result of the chain breaking and then flying up or out from the sprockets.
 - A chain guard may, but is **NOT** guaranteed to prevent items from becoming entangled in the chain or sprockets during operation. Examples: scarves, baggy, loose or long clothing, shoelaces, etc. Such entanglements could cause serious injury, such as throwing a rider from the mini-bike, choking, etc. Even with the required chain guard in place, these and similar items should not be worn nor in any manner brought into the area of any moving parts during operation.
- Procurement and installation of an appropriate chain guard, fabricated to fit your engine-sprocket drive system and that covers the chain and both sprockets is MANDATORY.

25. INSTALL THE FOOT PEGS

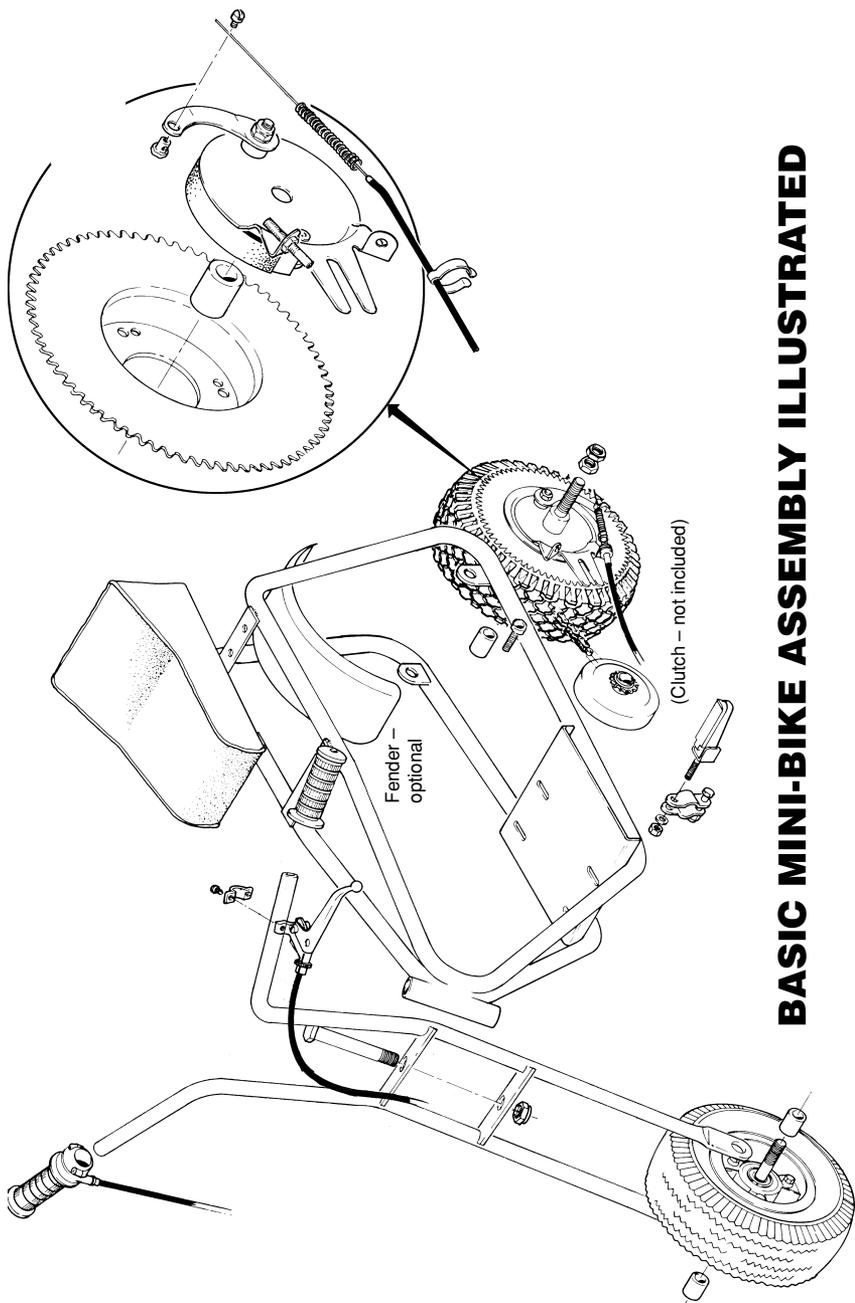
- Secure the pair of Folding Foot Pegs (Item 7) to the Frame with four Clamp Halves (Item 23), two 5/16-18 x 1" Bolts, (Item 27) and two 5/16-18 Locknuts (Item 29).
- Beginning with either side, position a Clamp half onto the outside of the lowest horizontal Frame member just in front of the engine mounting plate.
- Remove the pre-installed Lockwasher and Jamnut from one of the Foot Pegs. In its “down” position, twist the bolt end of the Foot Peg into the top hole of the positioned clamp half .
- Position another Clamp half on the inside of the frame member, aligning its top hole with that of the first half and twist the bolt end of the Foot Peg through the second clamp hole.
- On the threaded end of the Foot Peg , re-install the Lockwasher and Jamnut you removed previously, but do not tighten down yet.

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- Twist a 5/16-18 x 1" Bolt through the bottom holes of the outside Clamp halves and install a 5/16-18 Locknut, but do not tighten down yet.
- Position the foot peg so that when folded down it is horizontal with the ground and its foot pad is pointing straight up and then tighten down the upper Jamnut and lower Locknut until the clamp and Foot Peg are secure.
- Repeat the same procedure with the second Foot Peg on the opposite side of the Mini-Bike.

PRIOR TO OPERATION. . .

- Read/follow the engine manufacturer's instructions carefully.
- Check the engine crankcase for proper engine oil levels and the fuel line connections before adding fuel and starting the engine.
- Ride safe and have fun!



BASIC MINI-BIKE ASSEMBLY ILLUSTRATED

MINI-BIKE ASSEMBLY GUIDELINES

- NOTES -