

FIG. 8

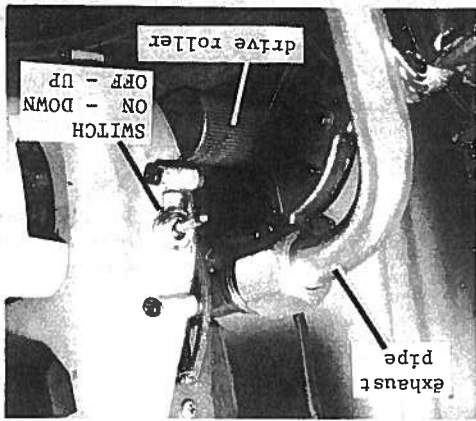


FIG. 7

- a. Attach muffler to exhaust pipe (figure 8).
6. Assemble and attach the exhaust system to engine and clamp to fork.

- d. Place the gauge board (1/8 inch thick)(figure 4, 5) between tire and drive roller. Reposition mounting bracket/engine until drive roller rest on gauge board (figure 4, 5). Tighten four nuts evenly to secure bracket position (figure 6). Drive roller must be straight across tire.
- c. Turn wheel until highest part of tire is beneath drive roller.
- b. Place mounting bracket/engine in position on fork (figure 2, 6). Use remaining half of clamping devices selected to secure to fork. Retain with lock washer and nut, DO NOT TIGHTEN. Leave approximately 1/2 inch space between tire and drive roller.

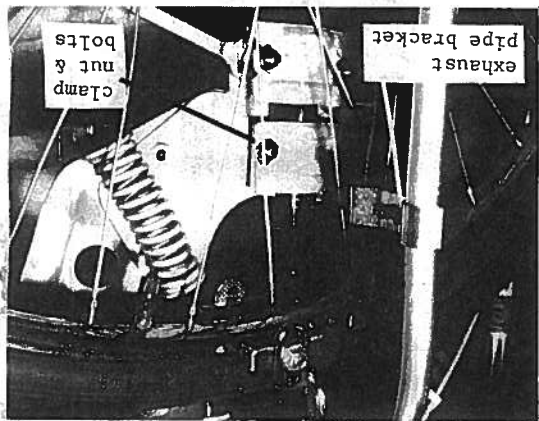


FIG. 6



FIG. 5

## WARRANTY

For 90 days from date purchase for homeowner usage, or 30 days for commercial usage, Advanced Engine Products, Inc., warrants that it will repair or replace, FREE OF CHARGE, any part or parts found upon examination by any Advanced Engine Products, Inc. Factory Authorized Service Outlet or by the Factory at Los Angeles, California, to be defective in materials and/or workmanship. (See NOT WARRANTY SECTION for details on what is not warranty)

All transportation charges on parts submitted and returned for replacement must be borne by purchaser. Neither Advanced Engine Products, Inc., the Distributor or Dealer assumes any responsibility under this warranty for loss of time, inconvenience, commercial loss or any consequential damages.

THIS WARRANTY IS EXPRESSLY IN LIEU OF any other warranty, condition, or guarantee agreement or representation by the Distributor, Dealer, or any other person including ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS.

OWNER'S RESPONSIBILITY: The purchaser of this product acknowledges and accepts this warranty as the only one applicable.

## NOT WARRANTY

- |  |  |
|--|--|
| 1. Repairs or alterations by non-authorized service outlet.                        | 8. Damage due to lack of user maintenance.   |
| 2. Lack of adequate lubrication.   | 9. Damage in transit.  |
| 3. Damage due to inferior fuels or premium (ethyl) grade gasoline                  | 10. Damage due to improper or lack of preparation for storage.   |
| 4. Damage due to loss or air filter or lack of maintenance of same.                | 11. Damage due to over speeding engine.  |
| 5. Normal maintenance or spark plug.   | 12. Damage due to overloading engine.  |
| 6. Minor carburetor re-adjustments due to varying altitude and climate conditions. | 13. Negligence, misuse or abuse.   |
| 7. Normal wear.  | 14. Installation of other than Advanced Engine Products, Inc. original equipment parts or accessories. |
|  | 15. Damage due to improper installation of engine on product.  |

**Advanced Engine Products Incorporated**

3340 Emery Street  
Los Angeles, Calif. 90023



**Pedal out...**

**power back.**

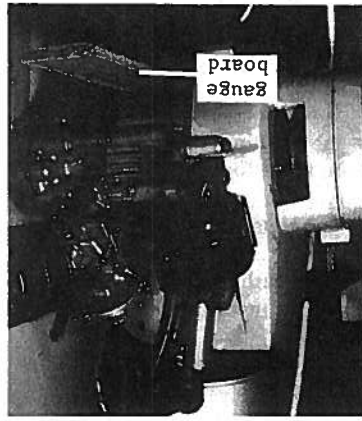


FIG. 4

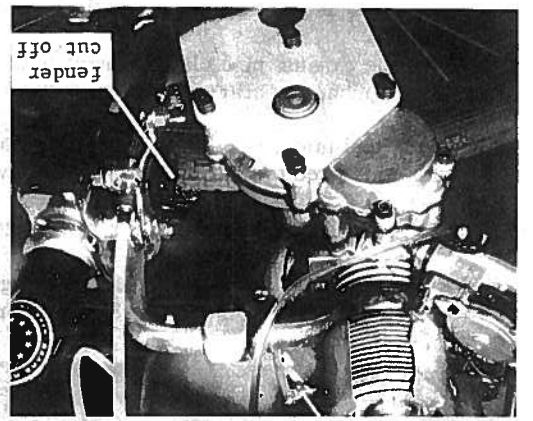


FIG. 3

- a. Position half of each clamping configuration selected onto mounting bracket studs (figure 6).
  5. Work with mounting clamps to determine which arrangement will provide most secure clamping to fork. Items without holes are inserts and may be used in combination with curved clamps for small diameter forks. Make up two sets.
  4. Check the position of engaging lever, it must be toward engine. (figure 2, 3)
  3. Remove the parts from the package, place in easily reached position.
  2. Support the bike to prevent it from falling. Lay the bike on its right side.
- PREPARE THE ENGINE FOR MOUNTING**
- to recommended pressure.
- IMPORTANT:** Check tire pressure, inflate to at least 40 pounds. If the recommended pressure is greater, inflate to at least 40 area of the fender to be removed (figure 3).
- NOT:** At this point determine if Chicken Power will be used with or without the front fender. It will be necessary to cut off the end or cut a hole in the fender to allow the drive roller to contact tire. Position the engine and select the true a damaged wheel.
- b. TRUING THE WHEEL** - It is best to have a local bike shop perform this work since they have the necessary tool and experience. Spoke adjustment will not correct this condition.
- a. WHEEL CONDITION** - If wheel is 1/8 inch or more out of round or alignment out of round and alignment. Check spokes, tighten as required.

**PREPARE THE BIKE FOR INSTALLATION**

**INITIAL MOUNTING OF CHICKEN POWER ON BIKE**



# Owner's Manual

ABOUT YOUR CHICKEN POWER! ENGINE

Your Chicken Power! engine has a heritage that goes back 26 years, to the time that saw the full development in the United States of miniature, high speed engines for model airplanes, boats and racing cars.

These engines powered models that in the 1940's held the majority of the world's speed and endurance records. From those pioneering days has come today's O & R Industrial engines. These compact, but ruggedly dependable power plants are now used for portable power tools of every description: chain saws, circular saws, earth and ice augers, drills, hedge trimmers, mowers, water pumps, generators - and for recreation: trolling outboard motors, motor bikes, starter units for one-man autogyros. It is this experience and enormous quantity of production that helps assure the quality, reliability and nation-wide serviceability of your Chicken Power! engine.

No less than four (4) full roller bearings are used on the crankshaft of this miniature power plant. (By comparison, a car engine with 8 times as many cylinders will have only 5 to 7 crankshaft bearings). Roller bearings are also used at the engine's main gear box shaft and throughout the Chicken Power! drive train.

The Chicken Power! auxiliary-assist system for bicycles employs a proven, practical concept - thousands of units are now in operation, the result of some five years of continuous development. Welcome to a new bicycling experience!

**The power of almost one full horse - or 650 chickens.**



FIG. 1

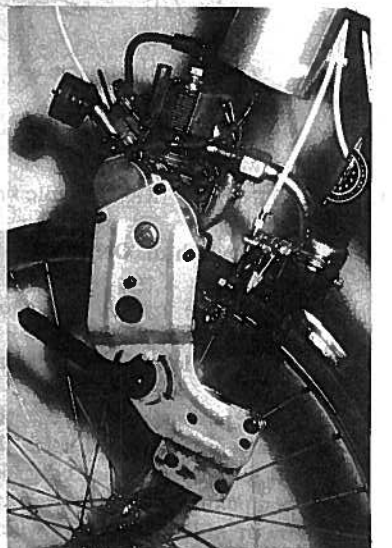


FIG. 2

- b. Fasten exhaust pipe to exhaust collector on engine (figure 3, 7).
- c. Assemble exhaust pipe clamp loosely with screws and nuts. Position on fork opposite mounting bracket, tighten screws (figure 6).

- 7. Attach the fuel tank and bracket as an assembly to the handle bar stem (figure 9). It must be mounted to that portion that turns with the front fork.

- 8. Prepare the handle bar for mounting the throttle trigger clamp.

- a. May be positioned for use by the index finger (underneath) or by the thumb (inside - illustrated figure 12, 13). Left or right hand installation operators choice.

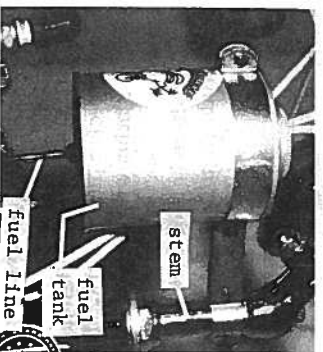


FIG. 9

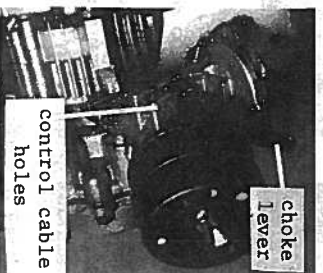


FIG. 10

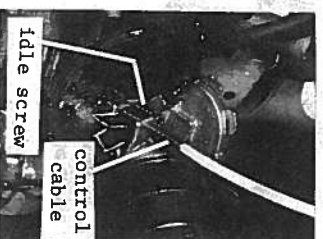


FIG. 11

CAUTION: Install throttle trigger to prevent interference with brake levers or other controls.

- b. Place end of throttle control cable into holes in carburetor boss (figure 10, 11). Insert until center wire contacts throttle lever firmly (figure 11). Position grooved side of clamp toward throttle control cable, secure (figure 11).
- c. Throttle trigger and lever on carburetor must operate freely.

**STARTING AND OPERATING**

- 9. Check engagement lever (figure 2) must be in disengaged position. (figure 5)

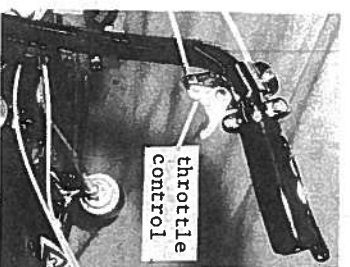


FIG. 12

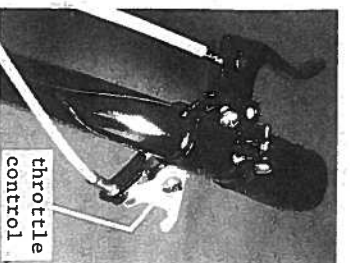


FIG. 13

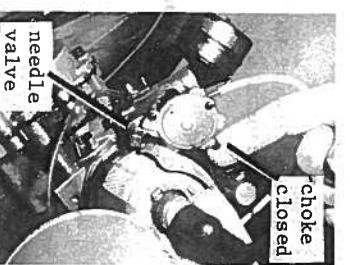


FIG. 14

- 10. Prepare fuel mixture, using cup furnished for measure oil for 24-1 mixture. Use regular gasoline and 30 weight S.A.E. oil with or without detergent. DO NOT use 10W30, outboard or 2 cycle oils. Use fresh gasoline only.

CAUTION: PREPARE MIXTURE OUT OF DOORS, AWAY FROM FIRE, FLAME OR PILOT LIGHTS. DO NOT SMOKE.

- 11. Fill fuel tank. (If mixture has been in storage 60 days or longer, discard and prepare fresh mixture.)

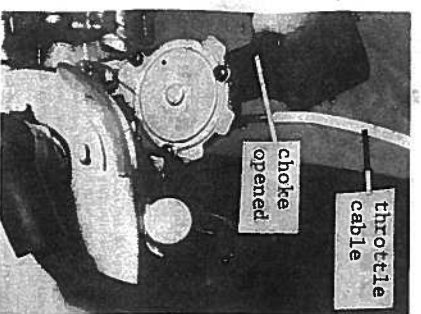


FIG. 15

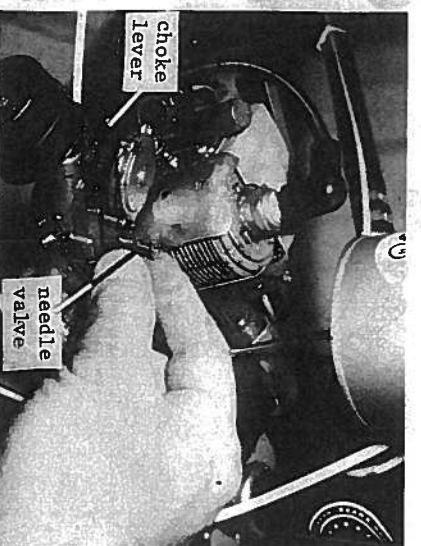
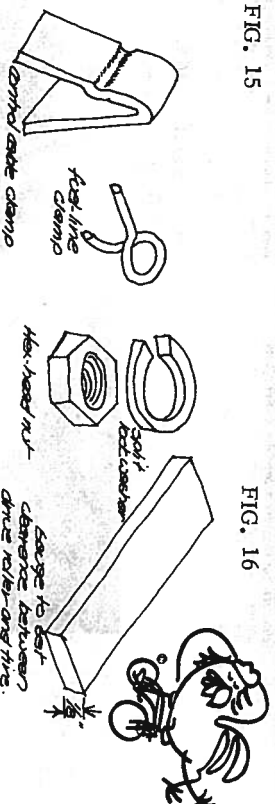


FIG. 16



- 12. STARTING ENGINE - Needle valve preset at factory. Do not adjust. (figure 18).

- a. Move switch to ON (DOWN) position (figure 7).
- b. Move choke lever to full choke position, toward engine (figure 14).
- c. Hold throttle trigger (squeeze) in wide open position (figure 13).
- d. Slowly pull starter rope until engaged with starter dogs, then pull sharply 18 to 24 inches. Continue until "POP" is heard, move choke lever to half, continue to pull starter rope until engine starts. After engine starts move choke lever to open position, release throttle trigger slowly (figure 15). Place toe of shoe on rim or side wall of tire when starting from a standing position (figure 18).

CAUTION: DO NOT LOWER DRIVE ROLLER ONTO TIRE WHILE ENGINE IS OPERATING. THIS MAY CAUSE DAMAGE TO TIRE.

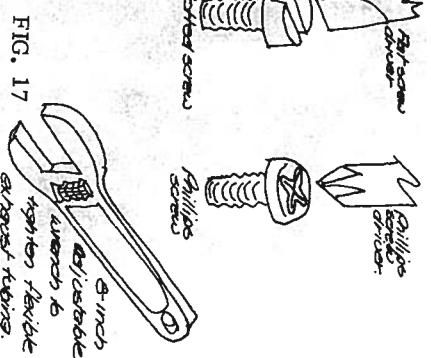


FIG. 17

- 13. RIDING WITH CHICKEN POWER - (Experienced riders will initially start engine while dismounted, STOP engine, lower to tire, mount bike, restart and ride.)

- a. Mount bike, engine must be engaged with tire before starting engine.
- b. Switch must be in ON (DOWN) position (figure 7).
- c. Start engine (figure 18). Squeeze throttle trigger to open position, pull starter rope. See paragraph 12, Starting Engine.
- d. Control engine power with throttle trigger (figure 12, 13). Throttle trigger completely pulled back (squeezed) is full power, other positions are less power. Release throttle trigger to slow or stop bike.

- 14. STOPPING ENGINE - (If riding, release throttle trigger, stop bike, move switch to OFF (UP) position.)

- a. Release throttle trigger, move switch to OFF (UP) position (figure 7).

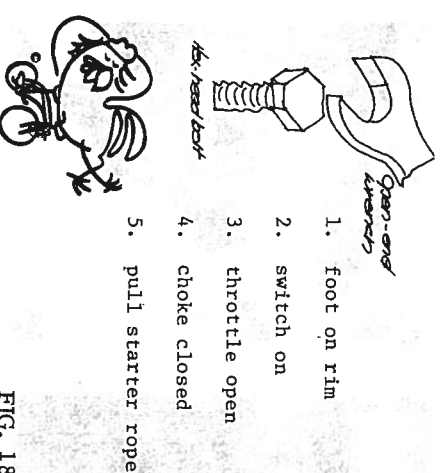
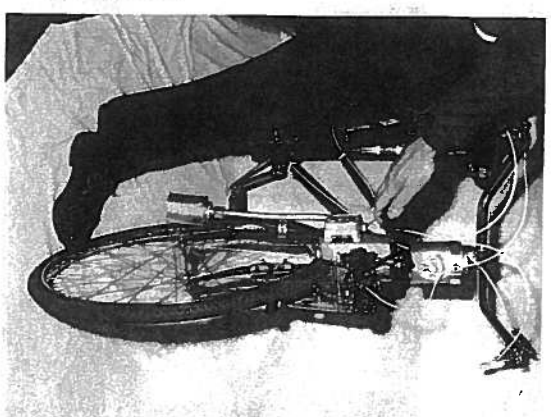


FIG. 18



- 15. RIDING - Pedal a few times when leaving a standing start to assist engine and gain momentum. (Experienced riders operate as a team with the engine, they pedal lightly on grades, in wind, to help maintain desired speed when engine power may be less than adequate.) (figure 17).

S A F E T Y: It is the owner/operators responsibility to determine the condition of stopping devices, and assure that they are functioning properly.

NOTE: Performance will vary, affected by riders weight, road surface, grade, wind, tire inflation, mechanical condition of the bike.

- 16. Engine is factory adjusted, do not readjust until it has been mounted, started and ridden. Should adjustments be required, perform as follows:

- a. Needle valve (figure 16) controls engine performance. Initial adjustment, turn clockwise until finger tight, turn off seat counter-clockwise 1 1/4 turns. Start engine, allow time for warm-up, fine tune.
- b. Engine idle is adjusted by turning screw under diaphragm (figure 10, 16), also work with needle valve to establish satisfactory idle. Make carburetor adjustments after engine has warmed-up. Control cable must make firm contact with throttle lever on carburetor to establish accurate adjustment.

**TROUBLE SHOOTING ENGINE**

IF ENGINE DOES NOT START OR FAILS TO PERFORM: Make sure ON/OFF switch is in ON (DOWN) position.

Check fuel tank, refill if empty. If stored for 60 days or more, drain fuel tank and refill with FRESH fuel mixture. See paragraph 10, Preparing Fuel Mixture. Use FRESH gasoline, do not use gasoline that has been stored.

Flooded engine. Engine may be flooded due to excessive use of Choke. Observe muffler for discharge of liquid fuel, indicates flooded condition. Excessively wet spark plug also indicate a flooded condition.

**CLEARING FLOODED ENGINE:**

1. Disengage drive roller from tire.
2. Move switch to ON (DOWN) position.
3. Move choke lever to open position while pulling starter rope.
4. Hold throttle trigger in open position while pulling rope
5. Pull starter rope as required to start.
6. Continue to hold throttle trigger in open position until engine runs.

Check Spark Plug. Remove, connect to wire, hold threads against unpainted surface of engine. Pull starter rope, observe for spark, replace spark plug if no spark. Switch must be in ON position. If no spark, problem is probably in ignition system.



Overheating. Caused by wrong fuel mixture, prepare new fuel mixture, drain fuel tank, refill with correct mixture. Also check needle valve, very lean setting may cause overheating of engine.