

Always use fuel through a Thimble Drome filler cap with stainless steel retainer to prevent stopping up carburetor jet. Do not overtighten. Do not use gasoline fuel. Excess oiliness after running does not mean a fuel leak. This is unburned castor oil from the exhaust. A hole can be drilled in the tank and the hose brought through for connecting to special tanks. Rear part of tank must always be right side up. Rest of engine can be bolted to the rear in any position.

TROUBLE SHOOTING

1. Engine refuses to fire:
 - (a) Weak or dead battery. (b) Bad wire connections. (c) Burned out glow plug—plug should glow red. Glow plugs are not guaranteed. Buy replacements from your dealer. Also buy a wrench to change them, catalogue #320, @\$.25. Do not overtighten plug, just snug it up
2. Engine starts, slows down, stops, excess fuel at ports—too rich. Close needle valve. Flip propeller till engine starts and burns out excess fuel. Open needle valve and restart. Holding an inverted engine sideways helps prevent flooding when priming and starting.
3. Engine starts with lots of power and dies—too lean, not getting fuel. Open needle valve another ½ turn. If trouble persists, disassemble tank and check for clogged fuel passages. Probe a fine wire through passages to dislodge foreign particles. Wash parts in fuel or solvent. Use care to prevent crossthreading the needle valve.
4. New engine—runs well but sporadically slows down or “sags out.” Crankshaft bearing fitted too closely. Needs more than normal lubrication until engine is broken in. Put drop of light oil or Thimble Drome Fuel on shaft behind rear propeller washer.
5. Engine pops and fires repeatedly—will not run. Dirt under reed. Disassemble tank. Carefully unsnap reed retainer wire. Remove reed. Wash all parts in fuel or solvent. Replace reed with same side out. When properly assembled, reed is free to turn underneath retainer wire.

BABE-BEE ENGINE CAT. No. 350

ENGINE PARTS LIST

302-A	Glow Head .....	.65
302-J	Piston & Rod	1.50
304-JA	Cylinder	1.50
365	Crankshaft	1.50
309	Needle Valve & Spring .....	.60
352	Propeller Drive Washer .....	.15
368	Fuel Tank Front with Reed Assembly .....	.75
354	Set of Gaskets .....	.10
369	Screws .....	.20
320	Wrench .....	.25
351	Crankcase	1.25
358	Tank Back .....	.75
364	Reed .....	.25
363	Reed Retainer .....	.15

Send \$1.00 in with engine for ANY service. For charge in excess of \$1.00 you will be notified. Complete overhaul, new performance guaranteed, \$2.50.

L. M. COX Manufacturing Co., Inc.

P. O. Box 476 ◆ 730 Poinsettia St.

SANTA ANA, CALIFORNIA

THIMBLE - DROME

Prop Rod



This car is a very durable unit, but the very nature of its use causes it to be subject to considerable abuse. Paying heed to the following suggestions may add many times to the life of the car.

GENERAL

1. Read engine instructions very carefully to learn proper starting and running procedure.
2. Always use a good grade of fuel—do not use gasoline fuels or any engine fuel that smells like shoe polish. The fines fuel you can use in this engine is **Thimble-Drome** fuel in the blue can.
3. Do not run the car on bare ground if possible to run it elsewhere. The dirt and dust will greatly shorten the life of the engine.
4. Since the engine runs (clockwise) in the opposite direction to which a plane engine would normally run, it is necessary to put the propeller on the engine shaft with the large end of the propeller hub toward the nut. The small end of the propeller hub toward the engine. This seems backward, but if it is put on in the normal manner, not enough thrust will be developed to run the car properly.
5. Always note which way the propeller blows wind before releasing the car. To drive the car forward it must blow wind to the rear. If the car is run backward, a sharp impact against a curb or stone may damage the engine.
6. Oil wheels occasionally for best running.
7. A 6" x 3" pitch propeller will develop the most thrust and speed. Various other propellers will lessen the top speed of the car.
8. If greater than the top speed of the car is desired, a Space Bug engine will give you the greatest thrust and greatest speed of any 1/2-A engine you can possibly buy to put on the car.
9. If the engine is replaced on this car, the rear half of the tank must always be right side up. Remove the screws and turn over only the crankcase and cylinder. If the rear half of the tank is turned over the engine will not pick up fuel properly.
10. The end of the fuel pickup hose within the tank must be placed 45° up on the side of the tank toward the left side of the car. When the car goes round the tether the fuel is forced to the left side because of centrifugal force. If the pickup tube is located on the bottom or on the wrong side it will not pick up all the fuel and the car will quit sooner than it should.

RUNNING FREE

1. If it is desired to run the car so that it skids and spins it is only necessary to fire it up, be sure the engine is running in the right direction, then turn it loose.

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BABE-BEE

Engine

Instructions

2. If straightaway running is desired it will be necessary to remove the chassis and add weight. A hole can be drilled and additional weight screwed down.
3. Free running is best done on a smooth surface.
4. Different propellers have considerable effect on spins. The car will not spin at all with certain propellers.

TETHER RUNNING

1. Equipment for tether racing comes complete in the Thimble-Drome Prop-Rod accessory Kit priced at \$1.95.
2. Anchor the center post securely to a heavy weight or fasten it to the floor.
3. If a longer cable is used some difficulty may be experienced as the weight of the cable may cause it to drag and pull the car in. To overcome this the car must be thrown to start it so it gets off at high enough speed to hold the cable tight.

FACTORY SERVICE

If factory service on the engine is deemed necessary, remove the engine from the car and send in only the engine along with 80c for handling charges. Charges for repairs will be billed when repairs are completed. Refer to your manual.

Under no circumstances is the entire car to be sent to the factory. There is no service that the factory could give you on the car that you can not do as well yourself. If the car is sent to the factory it will not be returned to you for less than \$2.00 handling charge plus repair charges. Parts may be ordered from the factory and you can easily assemble them yourself.

GUARANTEE:

Due to the rough service that most Prop Rod cars are subject to the car is in no way guaranteed, except for the engine, which carries the normal guarantee. Refer to engine manual. Should the engine show signs of dirt and grit internally, the engine guarantee is void.

PARTS PRICE LIST

901	Aluminum Chassis.....	\$2.00
907	Set of Plastic Body Parts.....	1.50
908	Front Axle .....	.30
909	Rear Axle .....	.30
910	Set of 4 Hub Nuts .....	.25
911	Front Wheels, each .....	.20
912	Front Tire, each.....	.20
913	Front Wheel, with tire mounted, each.....	.40
914	Rear Wheel, each.....	.30
915	Rear Tire, each.....	.30
916	Rear Wheel, with tire mounted, each.....	.60
917	Set of Decals .....	.15
919	Set of Screws.....	.20

ACCESSORIES

Bridle.....	.15
Cable—7-ft. stainless steel .....	.35
Center Post .....	.75
Battery Clip.....	.15

Can of Thimble-Drome fuel, 1 pint 95c. Buy fuel from your nearest dealer. Shipping fuel by mail prohibited by law. Do not order fuel from the factory.

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SANTA ANA, CALIFORNIA

STARTING AND RUNNING YOUR ENGINE

1. Starting procedure must be carried through without delay, otherwise the engine will flood out and refuse to start quickly. Familiarize yourself with the procedure before actually trying to start engine. If delays should occur after the tank is filled the needle should be closed to prevent flooding.
2. Close needle valve (do not force or tighten) then open 2 ½ turns.
3. Fill through filler tube on top of tank till fuel runs out other tube. Use neoprene or plastic hose for this purpose. Fill with Thimble Drome glow fuel. The filler hose is connected to the can by means of a pump or Thimble Drome filler cap made especially for this purpose. The other end of the hose slips over the tank filler tube. The Thimble Drome filler cap is especially recommended as it has a fine stainless steel strainer to keep foreign matter from entering the tank and clogging up the fuel jet.
4. Squirt a few drops of fuel into cylinder exhaust ports and flip propeller over 6 or 8 times.
5. Connect 1 ½ volt battery to glow head; one terminal to center post, one to any part of the engine. Or slip regular glow plug clip on glow plug. It is necessary that the battery be a large 1 ½ volt battery generally referred to as a door bell battery. If you use a glow plug clip, an insulated wire 18" long should be connected to each terminal of the clip and it is desirable that the connections be soldered and taped. The other ends of the wires connect to the battery.
6. Hook the spring starter over a blade of the propeller. Take hold of a blade tip (between the thumb and first finger) and pull it around one complete turn, keeping the rest of your hand clear. When one turn is made, allow the prop to slip from fingers as you pull them out of the way.
7. After the engine starts close needle valve slowly till maximum speed is reached, the disconnect battery. After engine warms up a bit, open the needle valve a little. Best running is attained when the needle valve is opened until the engine barely begins to cough, but this adjustment must be made after the engine warms up.
8. The inside of the fuel pickup hose should be on the side of the tank toward the outside of the circle of travel and up from the bottom about 45°. Fuel is always thrown to one side of the tank because of centrifugal force. If the hose picks up fuel from the wrong position all the fuel will not be used and the engine will stop prematurely. Fuel should be picked up from the bottom of the tank only for straight away running or free flight. Make sure hose is not kinked.

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