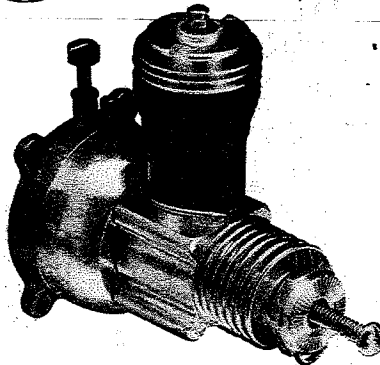




BABE BEE .049

CARE AND OPERATION



The Cox Babe Bee .049 engine is the ideal choice for both control line and free flight model planes. These features make it an outstanding value:

- Snap starter system—engine will not run backwards!
- Metal fuel tank with safety vent overflow
- Sturdy radial mounting
- Needle valve located at rear of tank
- Redesigned cylinder porting—for maximum power with Cox muffler (optional)

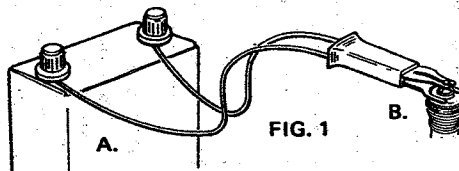
NOTES:

- A. The fuel pick-up tube inside the tank is positioned (at factory) for control line flying. For free flight flying, tank must be removed from engine and end of pick-up tube repositioned to bottom of tank. If this tube is located in wrong position, all the fuel will not be used and engine will stop prematurely.
- B. When adjusting engine speed, allow for a short delay between movement of needle valve and change in engine speed.
- C. Using fuel with less than 5% castor oil will void warranty. Always use Cox Super Power Fuel or other high quality fuel.
- D. You will need a 1½ volt battery, a glow head clip, Cox Super Power fuel, and a filler hose to start your engine. These items are all available in the COX 400 or 990 Accessory kits.

PREPARATION FOR RUNNING

1. Mount engine in plane or on board. Never hold engine in hand or vise.
2. Obtain a 1½ volt Cox dry cell battery or equivalent. Never use a higher voltage battery or the glow head may burn out.

Connect Cox glow head clip wires to battery as shown in Figure 1A.



3. Install propeller on engine shaft. Flat side of propeller should face engine. Tighten propeller screw securely.

CAUTION

A propeller which has been damaged with nicks, chips or cracks, or one which has been altered in any way can break apart during operation of the engine and causing serious injury to you and others.

- Inspect propeller before each use.
- Do not alter, modify or customize your propeller.
- Discard and replace nicked, chipped, cracked or altered products.
- Use only propellers approved for use with your engine.

STARTING ENGINE

1. Close needle valve (turn clockwise). Do not force or overtighten valve. After closing, open valve (turn counterclockwise) 3 turns.
2. Fill fuel tank. Fuel will flow from overflow on top of tank when tank is full. Wipe any excess fuel from engine and tank.
3. Prime engine. Close exhaust ports by rotating crankshaft until piston blocks ports. Squirt several drops of fuel into exhaust ports. Flip propeller over 3 or 4 times to work fuel into engine.
4. Connect glow head clip to glow head. Bottom clip should rest on top of glow head. See Figure 1B.
5. Start engine. Wind propeller backwards (clockwise) until spring hook catches on notch in snap starter cam. After cam is engaged, wind propeller backwards one full turn. (To prevent damage to starter spring, never wind propeller more than one turn.) Release propeller, engine should start.

NOTE: If, after a few attempts, the engine does not start, open needle valve another ½ turn, reprime, and repeat starting procedure. If engine still won't start, refer to engine trouble-shooting section.

6. Slowly tighten needle valve (clockwise) until engine is running at top speed. At top speed, engine should produce a shrill whine. After engine has reached top speed, loosen needle valve approximately ½ turn, or until engine runs with a "crackling," or "burbling," sound. Remove glow head clip and let engine run until fuel tank runs dry.

Restart and repeat procedure until engine has burned a minimum of 3 tanks of fuel.

7. Restart engine. Tighten needle valve until engine is running at top speed. Remove glow head clip. If engine holds top RPM, it is broken in.
8. If engine is mounted in place, tip nose of plane up to 45 degree angle. If engine speed changes readjust needle valve.

ENGINE CARE

Cleaning. Engine may be taken apart for cleaning or replacement of parts. Refer to diagram with "Parts List" for position of engine parts.

Disassemble and clean engine whenever it is

dirty. Wash and clean parts before reassembly. Always disassemble and clean engine after crash or whenever you suspect that dirt may have gotten into parts. Dirt in engine will drastically shorten engine life.

Glow Head: Replace burned out glow head.

Never attempt to remove hot glow head. A hot glow head will stick, and forced removal may damage cylinder. To cool glow head, pour fuel over head.

Use both wrenches when removing glow head. The top fin on the cylinder has two flats. Insert one wrench over these flats and hold in place while using other wrench to remove the glow head.

When installing glow head make sure it is tight!

Storage: Before storing, run engine until fuel tank is dry. Lubricant in fuel thickens upon exposure to air and may clog parts if allowed to remain in tank.

Oil engine with light oil such as SAE 10, 3-IN-ONE oil, or sewing machine oil, then wrap in plastic bag or clean cloth to protect it from dust and dirt.

WARNING

USE OF THE FOLLOWING EQUIPMENT CAN DAMAGE YOUR ENGINE AND WILL VOID YOUR WARRANTY!

- ELECTRICAL STARTERS
- DIESEL CONVERSION KITS
- SHAVED OR EXTREMELY HIGH COMPRESSION HEADS

WARRANTY

Your Cox engine is fully warranted against factory defect for 90 days from the date of purchase. **GLOW HEADS** are **NOT WARRANTED** since they normally require periodic replacement. Should your engine require warranty service, you may contact Cox at the address given on back page.

FACTORY REPAIR SERVICE

Minor repair, examination, or adjustments - \$4.00 plus parts. Complete overhaul, new engine performance guaranteed: \$12.25 These prices include parts.

CUSTOMER SERVICE

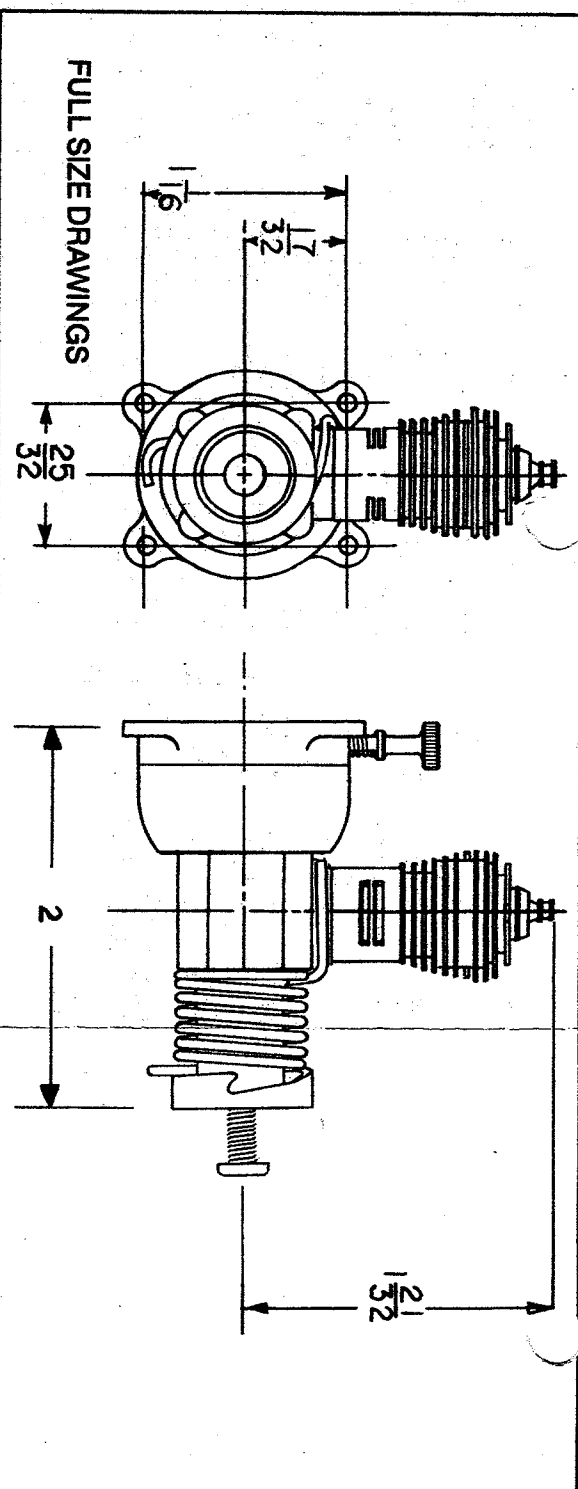
For any questions or service regarding any Cox products please contact our Customer Service Department at 1-800-451-0339. Customer Service hours are from 8:00 AM to 4:30 PM Pacific Time, Monday through Friday.

REPLACEMENT PARTS

We have listed those items which are most likely to require replacement during the life of this product. We have also included an exploded assembly drawing which identifies all replacement items available.

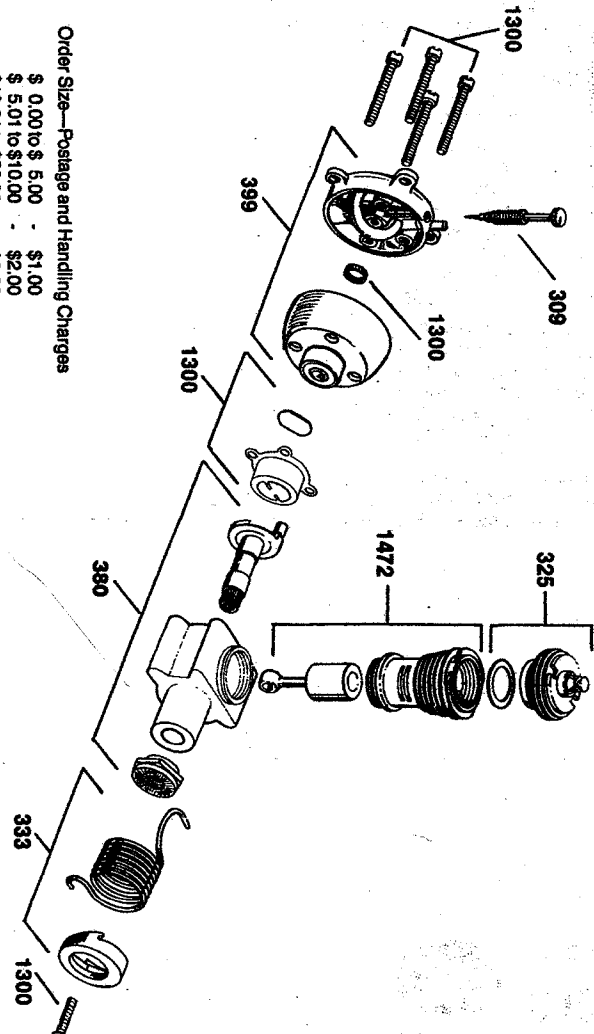
Ordering Instructions: You may order parts from Cox by telephone or mail. Orders may be charged to your Visa or MasterCard. For a credit card order please give the following information: Name, card number and expiration date. For other orders please send check or money order made payable to Cox Hobbies, for the full amount including the following postage and handling charges:

PRICE AND DESIGN OF PARTS SUBJECT TO CHANGE WITHOUT NOTICE.



NOTE

The inside fuel pickup tube location is shown for control line flying. The end of this tube must be relocated to the bottom of the tank for free flight or R/C flying.



Order Size—Postage and Handling Charges

\$ 0.00 to \$ 5.00	- \$1.00
\$ 5.01 to \$10.00	- \$2.00
\$10.01 to \$20.00	- \$3.00
\$20.01 to \$30.00	- \$4.00
\$30.01 and up	- \$5.00

All international orders \$5.00 additional. Calif. residents only add state sales tax. No C.O.D. orders accepted. Telephone orders by Visa or MasterCard only.

CAT. NO.	DESCRIPTION	LIST PRICE EACH
309	Needle valve & spring	1.35
325	Glow head & gasket	3.00
333	Snap starter, R.H.	1.25
380	Crankcase, crankshaft & drive plate assembly	4.45
399	Tank front & back, tube, spring, & venturi gasket, reed, retainer	8.90
1300	Overhaul kit (reed, retainer, gasket, screw set, spinner, prop screw & venturi gasket)	2.55
1472	Cylinder, piston & rod	5.00

RECOMMENDED PROPELLERS

CAT. NO.	DESCRIPTION	LIST PRICE EACH
858	5" Dia. x 3" Pitch	1.25
862	6" Dia. x 3" Pitch	1.25
994	5" Dia. x 3" Pitch (3 bladed)	1.25

ACCESSORIES

CAT. NO.	DESCRIPTION	LIST PRICE EACH
2630	Muffler assembly	4.50
7556	Glow plug clip with wires	1.75
1530	Wrench	1.10
1796	Piston/rod reset tool & holder	2.50

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FOR QUESTIONS REGARDING YOUR COX PRODUCTS CALL THE COX COURTESY LINE TOLL FREE 800/451-0339