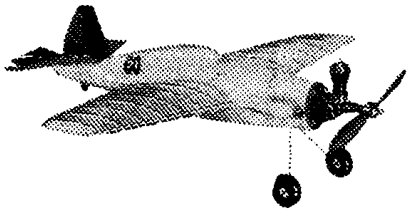
THIMBLE-DROME TD-3 AIRPLANE

Replica Manual TD-3 Thimble Drome

This Airplane is designed to fly beautifully and gracefully.



The power plant is one of the finest made, and is engineered for very easy starting.

You have available in this plane many hours of flying pleasure without the days and weeks of tedious work involved in building a plane yourself. **YOU HAVE PURCHASED A SPORT, NOT A TOY.** It is a perfect a father and son sport.

It takes several hours to earn the price of a plane.
Spend just part of an hour to save it.

PROTECT YOUR INVESTMENT, READ THE FOLLOWING:

Any plane, real or toy, if light enough to fly well, is subject to damage or complete loss in a crash landing. This plane, while rugged and tough, is **not** guaranteed against such damage, and will break up as easily on the first flight as any other. The plane is guaranteed to fly, but the factory cannot guarantee that you can or will control it. Most damage to the TD-3 can be easily repaired, but your complete investment can be washed out in an instant through carelessness, impatience or over-confidence.

1. Do not attempt to fly just anyplace. Be sure the area is large enough, smooth, and there are no overhead wires. Flying over grass is recommended for the beginner, taking off of a smooth surface at the edge, or a piece of cardboard about 8 ft. long.
2. **Do not fly in a wind or even in a light breeze until you are experienced. Wait for a dead calm.**
3. If you are inexperienced, a Thimble-Drome Training Aid Kit will help you get going with minimum risk to your plane, or proceed as on page 3, Lessons for the beginner.
4. To learn flying or to feel out the ship use 1½" to 2" line spacing at the handle. More spacing makes the control too sensitive. Each and every time you fly, be sure to test **the controls the last instant before the plane is released to see that they respond correctly.**
5. Prepare yourself in advance so you will not get dizzy while at the control. Practice turning around to the left about 1 turn every 3 seconds until you can make 25 or 30 turns without excessive dizziness. Trying this 3 or 4 times a day for 4 or 5 days should do the trick. Do not overdo this at first or you might become ill.
6. You will find flying on public flying circles with other flyers most interesting and helpful. If you are not too proud to ask, any good flyer will help and instruct you. He will be flattered at being asked and more than eager to help. Go to your local hobby shop for information on flying fields, clubs, and instruction.
7. Do not attempt to fly this plane until you fully understand how to operate the Babe-Bee engine. Read engine manual carefully.

IMPORTANT

If adjustment or service is required from the factory do not under any circumstances return the entire plane. Return only the part in question. For engine repair or service remove the engine and send it alone. Packaging the plane for safe transportation is expensive and difficult. Should the entire plane be sent to the factory without sufficient cause it will not be returned until or unless packaging and postage are paid for. Suitable packaging will be billed at $1.00 extra, whether requested or not, if it is deemed necessary. Postage extra. We will not be responsible for planes smashed in transit.

The engine and wheels are held on as per Figure 1. Should you remove the engine for any purpose be careful when replacing it. **Do not overtighten the screws. Plastic threads will hold well but strip easily if overtightened.**

REEL LOADING AND ASSEMBLY

If your plane came equipped with the Thimble-Drome Skylon control reel, load it as follows:

1. First lift Spring A, figure 3, and slide it out. This lets pins B come out and also the two spools. Unroll the nylon line from spool D, Figure 3. There is enough line for two 35 foot control lines. Double the line back, and cut it in two. Put the end of the line through the tiny hole in the reel, knot it so it will not pull out and wind it on the spool, one line on each spool. Roll it on so the line does not become twisted. Be sure to wind the lines on in the correct direction.

Replace the spool D with the notched side toward the back of the case and with the end of the line going out through hole C, Figure 3. Re-assemble the other reel, pin, and spring. Lace the lines through the holes in the case to the desired flying position and tie on the snaps as illustrated in Figure 4.

2. Knob F, Figure 3, when turned to the raised position disengages the reels from each other so the length of the lines can be adjusted individually for the best control position of the handle. Always turn the knob to the raised position to unreel the lines. This will prevent the lines from becoming tangled in the case. To unreel the lines raise spring A, Figure 3, and move it to one side. Turn knob F to the raised position. Pull out the lines and adjust them to the same length. Lock the reels with spring A and snap knob F down. Before flying, again check the handle position with tight lines after they are attached to the plane. After flying, merely move spring A to one side and wind the lines, walking up to the plane as you do so.

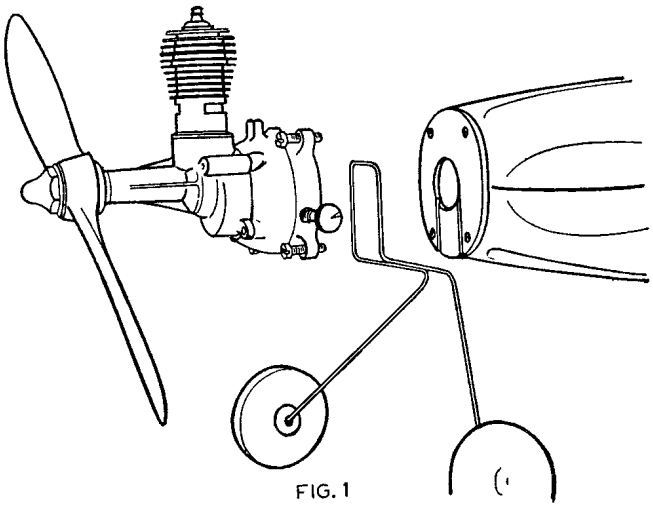


FIG. 1

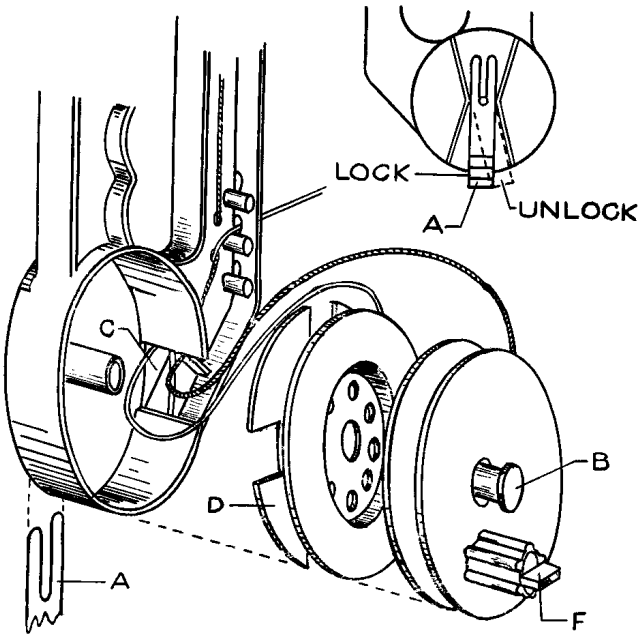


FIG. 3

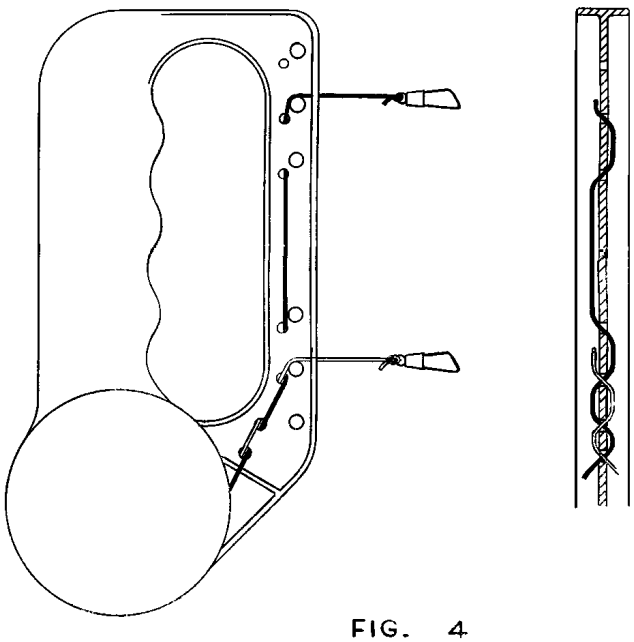


FIG. 4

FLYING THE PLANE

1. Always take off **down** wind. Upwind takeoff may cause crash.

2. Use 15 ft. line for slow speed.
   Use 30 ft. line for high speed.

3. Beginners must use narrow line spacing at control handle, and not attempt to fly in slightest breeze.

4. Pull out lines from reel. Attach top line to rear wing wire. Attach lower line to front wing wire. (Fig. 2) Hold with lines tight and adjust so handle position corresponds to elevator position. (Fig. 5)

5. Start engine. Make sure it is running in the right direction. After 15 seconds adjust to desired speed.

6. Plane is held on ground and released on signal from pilot who is in center of circle with control in level position. (Fig. 5.) Never throw plane to launch. Let it take off with rolling start. Hold plane pointed slightly out so lines remain tight after release.

7. With the handle held straight up and down for level flight the plane will rise in the air of its own accord when released. Be sure to give a little down control to level it off. Many beginners on their first attempt to fly, get "buck fever" and fail to use down control to level off after the plane leaves the ground. This results in a flight which goes right overhead, then a power dive to the ground. Result: a demolished plane. Do not fly until you know you can overcome this tendency. Raise the arm to make it climb. Lower the arm to make it descend. The beginner should control from the elbow, Fig. 5.

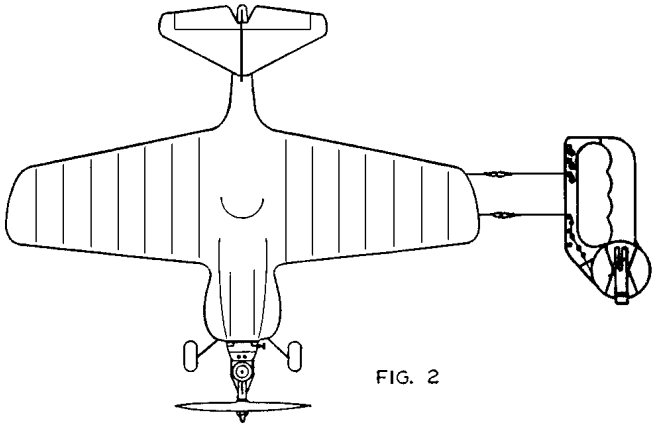


FIG. 2

8. If you are an inexperienced pilot it is best to let the engine run a while to use up most of the fuel before releasing the plane, so it will make a short flight, just in case you get dizzy. Some pilot do get dizzy the first few flights.

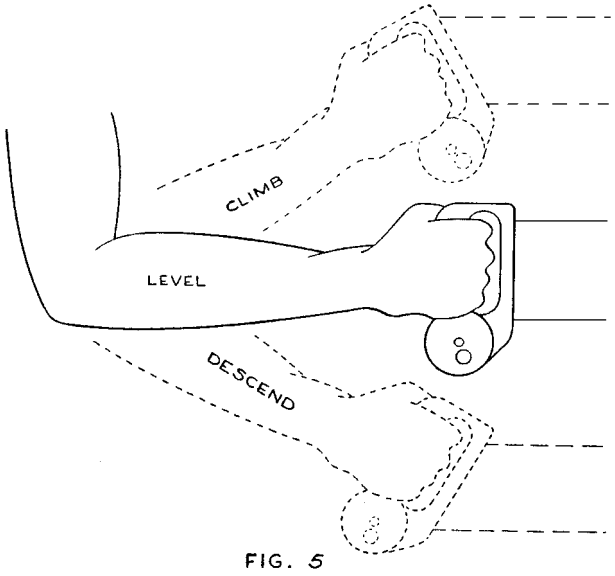
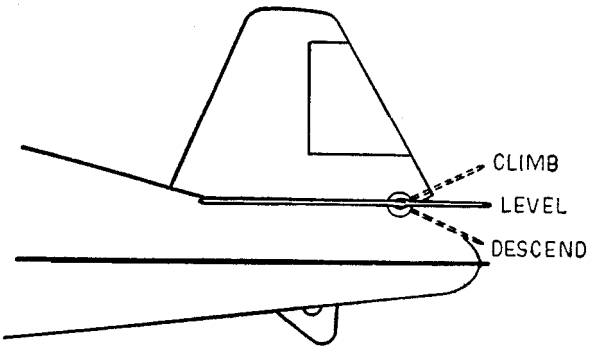


FIG. 5



FLYING LESSONS FOR THE BEGINNER WHO HAS NO INSTRUCTOR

LESSON NO. 1

Read all instructions very carefully, be sure you understand **everything**. Follow general directions as given in the previous section except as modified here.

LESSON NO. 2

Turn to the left, one turn every 2 or 3 seconds until you begin to get dizzy. Do not get too dizzy or sickness may result. Do this each day until 20 or 25 turns can be made without getting excessively dizzy—4 or 5 days may be required. You are then ready for your first lesson at the controls.

LESSON NO. 3

Get a training aid kit. from your dealer for only 50c. The training aid kit is a good insurance value as it may save your plane while learning. It consists of an aluminum disk with a hole in the center and a rubber prop spinner. Install as per directions which come with the kit. The disk will set up frontal resistance and cause the plane to fly very slowly so that you can better feel out the control. The rubber spinner provides extra weight on the nose which has a stabilizing influence on control. It also absorbs sharp impact in case of nose crashes and minimizes damage.

On a smooth surface, concrete or macadam, get the plane ready with only 15 feet of line out. If the plane will not take off, adjust the needle valve for higher R.P.M. When it takes off keep it low (under 5 feet high) otherwise it may peel off toward you and drop in nose first. Do not attempt slow flying unless the air is dead calm. Make several flights keeping the plane 3 or 4 feet off the ground. When you can properly control the plane unser these conditions you are ready for the next lesson.

LESSON NO. 4

Let out 25 feet of line and remove the disk from the propeller. This time do not adjust to peak R.P.M., but slightly less. Again fly level and not too high. About 6 or 7 feet high is about right. This time you are high enough to drop in hard if landing procedure is not followed. The instant the engine dies the plane will settle down very rapidly. At the first sign of dropping the nose, give full up on control, so the plane will drop in on the wheels instead the prop. After a half dozen flights of this kind you are ready for the works.

LESSON NO. 5

This time a good lawn is preferable for a field. Let out about 30 ft. of line and lean out the engine for peak speed. The plane will take off quickly so be ready to level off at about 12 ft. high. From this height you can begin to get the feel of control by climbing and dipping. You are now a flyer and on the way to becoming a finished pilot.

REPAINING THE PLASTIC BODY

At the first sign of a crack or break a patch should be applied immediately. If you fly with a cracked body the break may spread during flight so that repairs are nearly impossible. A solvent type cement is required to use the patching material furnished with the plane. This solvent comes under many names and your hobby dealer can probably furnish it to you. Toluene is the proper chemical name of the best solvent for this purpose.

To repair a crack, cut a strip of material 1/8" or 3/16" wide and shape it to follow the crack and overlap at the ends. Apply toluene to the surface along the crack and to the patch. As soon as the excess liquid has evaporated and while the surfaces are still soft, apply the patch and hold it on firmly with the fingers for 3 or 4 minutes. Bad breaks can be mended by putting on a number of small patches. Where a crisscross patch is necessary the strips should be well softened before applying so they will contour and form together easily. A very well softened piece is necessary to double around the bead without breaking. Remember . . . a stitch in time may save the plane.

TIPS AND GENERAL INFORMATION

1. Elevator: Always be sure the elevator works smoothly and easily. Oil the center bearing if necessary. In case a hinge pin breaks off, a hole can be bored where the pin was and a short piece of wire or nail will answer nicely for a new pin; or a hinge strap can be applied as on home made airplanes.

2. For maximum performance always use a 6"-3" pitch propeller on this plane. For slower flying try different propellers. Thimble-Drome Glow fuel will give you the very finest performance with this engine.

3. A good coat of fuel proofer will make the decals last much longer. Get this from your local hobby shop. Never wash the plastic parts in gasoline or petroleum thinners. Gasoline will discolor and fog the finish. Certain waxes will also fog the finish. Wash plastic parts with soap and water or just wipe clean.

4. When returning parts for replacement or service never under any circumstances return the entire plane to the factory. Remove the part you wish to return.

STUNT FLYING

Do not use less than two inch line spacing at the control handle—2½ inch is better.

A light wooden propeller makes the ship more responsive.

AVOID INVERTED CRACKUPS. They almost always demolish the fuselage at the nose.

The plane is not guaranteed against damage from crash landings.

Do not attempt to stunt when the plane has run long enough to be low on fuel. If the engine quits in a steep climb, or inverted, a crash landing is in order.

Flying over grass is recommended for stunting. Crash landings on a good lawn usually result in less damage.

5. Always use **Thimble-Drome Glow Fuel** in the blue can for best results. Never use gasoline or Nitro-benzine fuels with the shoe polish odor.

6. If the plastic body gets cracked, or slightly broken, do not fly it that way otherwise the break will rapidly become worse. Repair the break before flying again if you want to save the ship.

7. Tail assembly may be removed by removing tail skid key. Press body up slightly to dis-engage key from tail skid.

PARTS LIST FOR TD-3 AIRPLANE

IMPORTANT: See your local hobby shop for parts. If he does not have them you may order direct from factory. Use part numbers as shown below when ordering. Send your remittance with your order. **No. C.O.D.s please.** If you live in California, add 3% sales tax.

PART NO.	PART NAME	LIST PRICE
635-2	Body—Fuselage & Wing (complete with firewall, bellcrank & control wire).....	$3.95 each
636	Horizontal Stabilizer.....	.50 each
637	Elevator.....	.35 each
638	Rudder	.50 each
639	Rudder Key	.15 each
641	Decal Set	.15 each
642	Mounting Screw Set.....	.15 each
643-2	Landing Gear Assembly (complete with wheels).....	.60 each
675-2	Plane (less engine).....	5.95 each
618	Plastic Propeller 6"-3 Pitch	.20 each

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