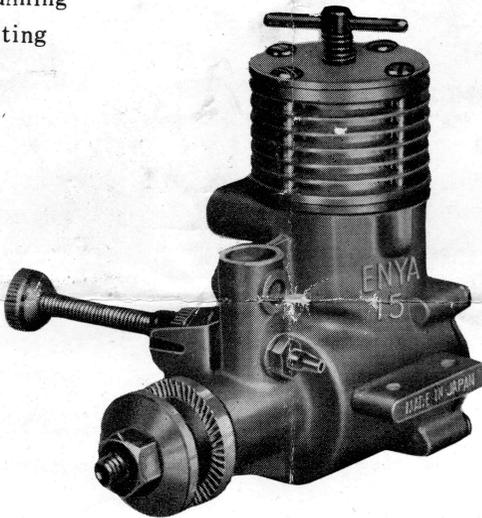




ENYA 15-DIESEL

Gas Model Engine

- Exceptional Power and Torque
- Smooth Running
- Easy Starting
- Long Life



- Unique Loop-scavenging System.
- 2-Needles Type Intake.
- Sturdy Construction.

Enya Metal Products Co., Ltd.

553 ARAICHO NAKANOKU, TOKYO, JAPAN.



ENYA 15-DIESEL

ENYA 15-DIESEL is the best performed 2.5cc. diesel engine, and very useful to all kinds of model airplanes and boats.

2 Stroke Cycle, 1 Cylinder, Shaft Rotary Valve, Special Loop Scavenging System, One Ball Bearing.

Cylinder Bore	0.590 in.
Stroke	0.551 in.
Displacement	0.151 cubic in. (2.48cc.)
Weight	5.2 oz.

PERFORMANCE

Speed	5.000 ~ 15.000 r. p. m.
Power	0.25 HP at 10.000 r. p. m.
	0.30 HP at 15.000 r. p. m.

CORRECT PROPELLER SIZES.

Free Flight	: 11~9 in. dia. × 3~5 in. pitch.
C/L Stunt	: 10~8 in. dia. × 4~6 in. pitch.

FUEL

ENYA 15-Diesel will operate satisfactorily on most kinds of miniature diesel fuel of good quality sold on the market. The standard mixing ratio of components is as follows.

Kerosene	37.5~36%
Ether	37.5~36%
Castor oil	25%
Amyl-nitrate	0~3%

Ether is very volatile. Remember that restored diesel fuel sometimes does not contain amply ether to start the engine.

PREPERATIONS BEFORE STARTING ENYA 15-DIESEL

1. Mount your engine on a test stand firmly. (Whether you are experienced in handling model diesels or not, it is recommended to test your new engine on a test stand before mounting it on a plane.)
2. Clean the fuel tank and line. Dirts in them sometimes cause troubles.



Set the fuel tank behind the engine closely in the position so that the height of the fuel surface is nearly equal to that of the carburetor.

4. Fit the propeller on the engine securely.
5. Make sure the mounting screws of the engine are tight.

HANDLING THE COMPRESSION LEVER.

Most model diesels have contra-piston and compression lever. And by handling the lever, we can get the best compression ratio for starting and running them.

The best position of the compression lever of ENYA 15-DIESEL for starting and running is between $\frac{1}{2}$ and 1 turn from the point where the contra-piston touches the piston in top dead centre. The means to find this point is as follows.

1. Inject some kerosene or ether containing no oil in the exhaust port.
2. Grip the propeller, and turn it slowly until the piston is in the top dead centre.
3. Screw up the compression lever slowly. And then your fingers will feel a slight resistance. It means that the contra-piston touches the piston in top dead centre.
4. Release the lever $\frac{3}{4}$ turn. And it is in the best position for starting.

STARTING ENYA 15-DIESEL

ENYA 15-DIESEL will start very easily by proper handling.

1. Close the needle valve.
2. Fill the fuel tank with fuel.
3. Set the compression lever in the best position for starting.
4. Prime the engine by injecting several drops of fuel both in the air-intake and the exhaust port.
5. Open the needle valve 2 or 3 turns. In case the carburetor is too high compared with the fuel surface, or the fuel line is too long, it is necessary to choke the engine by holding your finger over the air intake and turning the propeller 1 or 2 turns counter-clockwise.
6. Crank the engine counter-clockwise quickly by flipping the propeller with your finger. The engine should start after 10~20 good flicks, when the fuel is of good quality, and the amount of fuel injected and the compression ratio is proper.



When the engine neither starts nor knocks in 20~30 flicks, screw up the compression lever $\frac{1}{8}$ turn, continuing flipping the propeller. If the engine pre-ignites and knocks, release the compression lever $\frac{1}{8}$ turn.

- ★ If the engine stops after 1~2 seconds running, open the needle valve more $\frac{1}{2}$ turn, and after priming continue flipping the propeller.
 - ★ As the overflowed fuel from the carburetor into crank-case makes starting the engine difficult, take care the fuel surface in the tank is not too high.
7. Once your engine starts, adjust the settings of the needle valve and the compression lever alternately to the best running position. Do not raise the compression so highly as the engine slows down. This is very harmful for the engine.
 8. Close the needle valve when you want to stop the engine.
 9. The engine sometimes pre-ignites and knocks when you try to start while it is hot. In such case release the compression lever $\frac{1}{4}$ ~ $\frac{1}{2}$ turn.

BREAKING IN THE ENGINE

To obtain max. power and long life from your ENYA 15-DIESEL, break it in carefully during first one hour with rich mixture and low compression ratio. During this period use a propeller of 10 in. dia. and 4 in. pitch. It may take about 2 hours running for ENYA 15-DIESEL to reach its peak in power.

OTHER NOTE

Do not disassemble your engine unnecessarily.

GUARANTEE

If you find some defective parts or workmanship in your new engine, return it to our factory. We will repair it free of charge. Guarantee will be void if it is handled in an improper manner.

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