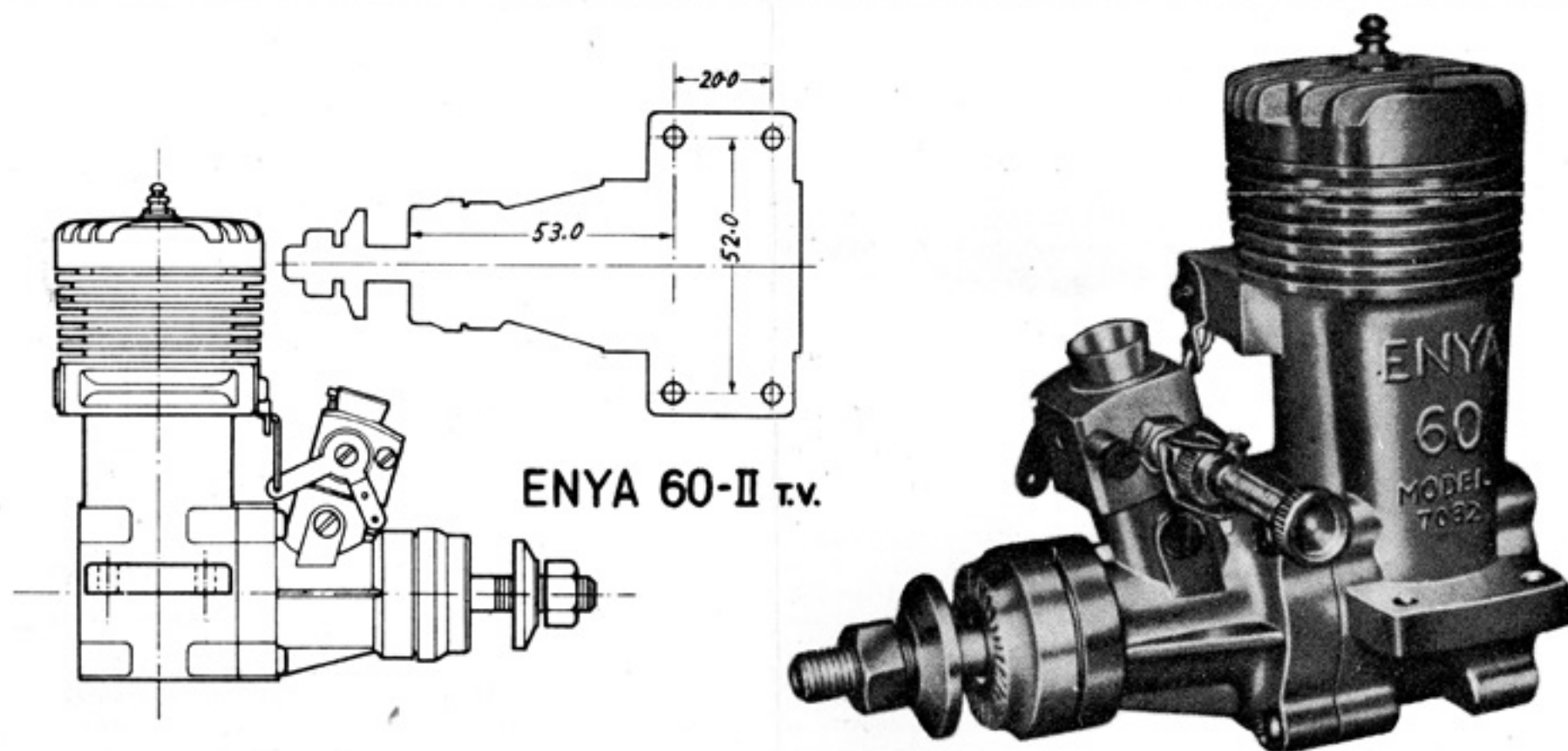


ENYA

60-11 BB TV
\$47.95

60-II

Gas Model Engines



ENYA 60-II and 60-II T.V. engines are designed and produced for the highest class model airplanes and boats.

◎ DISTINCTIVE FEATURES

- Exceptional performances
- Easy handling quality
- Smooth running
- Minimum breaking in period
- Long life and great dependability
- Sturdy construction
- Precise workmanship

◎ SPECIFICATION

	ENYA 60-II Standard	ENYA 60-II T.V.	ENYA 60-II Marine T.V.
Type	2 stroke cycle glow plug ignition		
Induction	Crank shaft rotary valve		
Displacement	0.606 cu. in. (9.94cc)		
Bore × Stroke	0.944 × 0.865 in. (24.0 × 22.0mm)		
Main Bearing	2 ball bearings		
Weight	13.0 oz. (365g)	13.6 oz. (380g)	14.0 oz. (390g)
B.H.P.	0.9~1.3	0.9~1.1	0.9~1.1
R.P.M.	8,000~13,000	2,000~12,500	2,000~12,500

ENYA METAL PRODUCTS CO., LTD.
1-29 ARAICHO NAKANOKU, TOKYO, JAPAN.

OPERATING INSTRUCTIONS

● BREAKING IN

Run your ENYA 60-II 30~60 minutes with slightly rich mixture.

It is recommended to use a 12"×6" propeller during this period. After that, you may run it in full power. But it will take about 2 hours running for the engine to reach its peak in power and smoothness.

● FUEL

ENYA 60-II will operate satisfactorily on most kinds of high quality fuel for model glow plug engines sold on the market. But it is recommended never to use a fuel which contains less than 20% of castor oil.

The standard mixing ratios of fuel components are as follows.

Standard mixing ratios of fuel components (volumetric)		
	NO. 1	NO. 2
Methanol alcohol	75%	70~65%
Nitro-methane	0	5~10%
Castor oil	25%	25%

● GLOW PLUG

Almost all $\frac{1}{4}$ -32 thread glow plugs are available for ENYA 60-II.

But as the glow plug has a very delicate nature, it is recommended that you test your engine with different kinds of glow plug to get the best performance.

ENYA glow plug No.3, No.4, No.5 are very suitable to ENYA 60-II and 60-II T.V.

● PROPELLER

ENYA 60-II.....12"×6", 11"×8" (U control)

ENYA 60-II T.V. 12"×6", 11"×7" (Radio control)

● STARTING ENYA 60-II

ENYA 60-II starts quite easily with proper handling.

1. The proper opening of needle valve for starting ENYA 60-II and 60-II T.V. is 3~4 turns.
2. Injection of several drops of fuel into the exhaust port is quite effective for starting.
3. Start your ENYA 60-II T.V. with the throttle valve opened widely.

● CONTROLLING SPEED OF ENYA 60-II T.V.

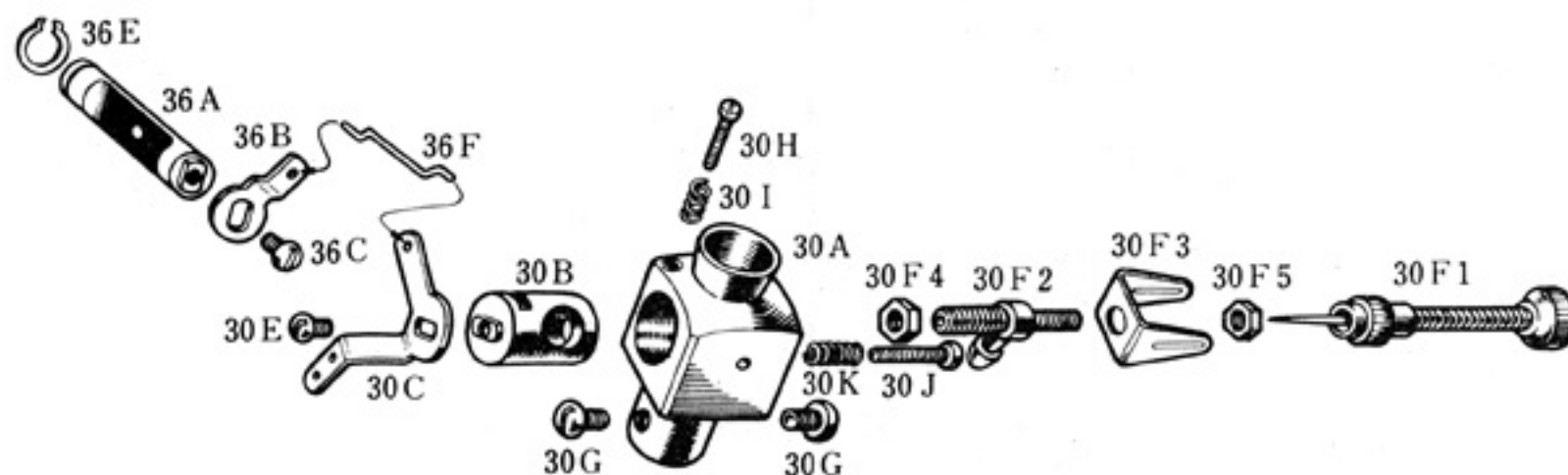
It is recommended to test the throttle valve of your ENYA 60-II T.V. before you fly your plane, because the idling performance is strongly influenced by the nature of fuel and glow plug.

1. Warm your engine up reasonably at high speed. And then close the throttle valve. The engine will slow down.
2. Open the throttle valve again after 30~40 seconds idle running. In case the conditions of throttle valve are good, the speed of engine will respond to the opening of throttle valve smoothly and instantly.
 - (a). If the idling mixture is too rich, open the idling mixture adjusting air valve(30J) 1 or 2 turns.
 - (b). If the idling mixture is too lean, close it 1 or 2 turns.
3. The most suitable idling speed is about 2,500r.p.m. When the idling is too low or too high, make adjustment with the idling speed adjusting screw(30H).

● ADJUSTMENT OF VENTURI SIZE OF ENYA 60-II T.V.

You can adjust the size of venturi of ENYA 60-II T.V. quite easily by changing the setting position of the spray bar.

1. The standard position of the tip of spray bar is the centre of the venturi tube of throttle valve.
2. When you want a stronger suction of fuel or less fuel consumption, screw in the spray bar 1 turn.
3. When you want more power at higher speed, return the spray bar 1 turn. In this case the engine will consume more fuel than the standard.



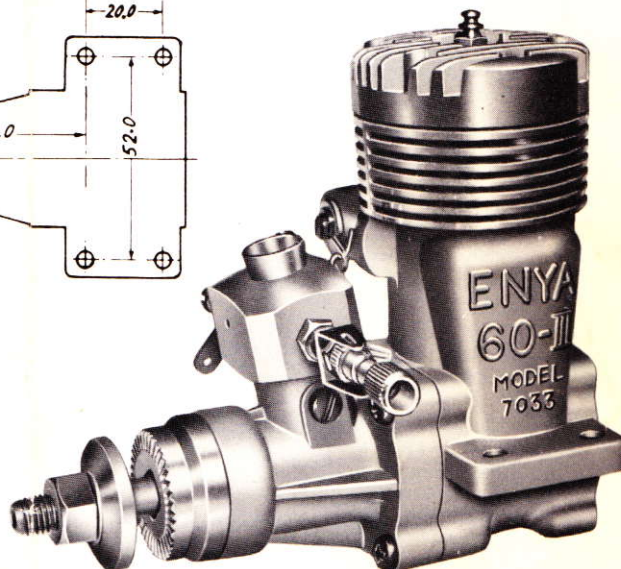
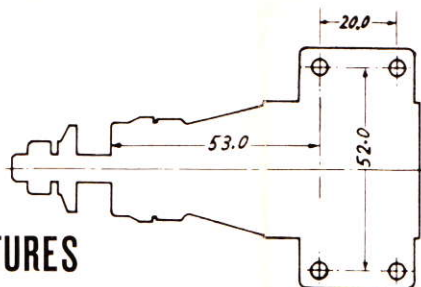
PARTS LIST OF THE THROTTLE VALVE FOR ENYA 60-II

Part No.	Description of Part	Qty.	Part No.	Description of Part	Qty.
60 2 30	Throttle valve assembly	1 set	30H	Idling speed adjusting screw	1 set
30A	Throttle valve body	1	30I	Locking spring A	1
30B	Throttle valve	1	30J	Idling mixture adjusting air valve	1
30C	Throttle lever	1	30K	Locking spring B	1
30E	Throttle lever setting screw	1	23	Gasket of T.V. body	1
30F	T.V. needle valve assemly.	1	36	Exhaust restrictor assemly.	1 set
30F1	T.V. needle only	1	36A	Exhaust restrictor	1
30F2	T.V. spray bar	1	36B	Exhaust restricting lever	1
30F3	Needle setting spring	1	36C	Setting screw	1
30F4	5 mm nut	1	36D	Spring washer	1
30F5	4 mm nut	1	36E	Stop ring	1
30G	T.V. assemly. setting screw	2	36F	Pull push rod	1

ENYA 60-III B T.V.

Gas Model Engines

60B 111 BB TV G8



* DISTINCTIVE FEATURES

- * Exceptional performances
- * Easy handling quality
- * Smooth running
- * Minimum breaking-in period
- * Long life
and great dependability
- * Sturdy construction
- * Precise workmanship

* SPECIFICATIONS

	ENYA 60-III T.V.	ENYA 60-III MARINE T.V.
Type	2 stroke cycle glow plug ignition	
Induction	Crank shaft rotary valve	
Displacement	0.606 cu. in. (9.95cc)	
Bore x Stroke	0.944 x 0.865 in. (24.0 x 22.0 mm)	
Main Bearing	2 ball bearings	
Carburetor	ENYA G-Type throttle valve, 7mm dia. ventury	
Weight	15.0 oz. (420g)	15.3 oz. (430g)
B.H.P.	1.0~1.3	1.0~1.3
R.P.M.	2,500~14,000	2,500~14,000

* Large intake carburetor (G-Type, 8mm dia. ventury) is optional.

* BREAKING IN

Run your ENYA 60-III B T.V. 30~60 minutes with a rich mixture. It is recommended to use a 12" x 6" propeller during this period. After this period, you may run it in full power. But it is important to run the engine always with a slightly rich mixture. It will take 2~3 hours for the engine to reach its peak in power and smoothness.

* FUEL

ENYA 60-III B will operate satisfactorily on most kinds of high quality fuel for model glow plug engines sold on the market. But it is recommended to use a fuel which contains 20~24 % castor oil.

The standard mixing ratios of fuel components are as follows.

Standard mixing ratios of fuel components (volumetric)		
	No. 1	No. 2
Methanol alcohol	78 %	73~68 %
Nitro-methane	0 %	5~10 %
Castor oil	22 %	22 %

* GLOW PLUG

Almost all 1/4-32 thread glow plugs are available for ENYA 60-III B T.V.

But as the glow plug has a very delicate nature, it is recommended that you test your engine with different kinds of glow plug to get the best performance.

ENYA glow plug No. 3, No. 4, No. 5 are very suitable to ENYA 60-III B T.V.

ENYA METAL PRODUCTS CO., LTD.

5-11-13 TOYOTAMA-KITA, NERIMAKU, TOKYO, JAPAN.

✿ PROPELLER

11" x 7", 11" x 7½", 11" x 8", 12" x 6".

✿ STARTING

ENYA 60-III B starts quite easily with proper handling.

1. The proper opening of needle valve for starting ENYA 60-III B T.V. is 2~3 turns.
2. Injection of several drops of fuel into the exhaust port is quite effective for starting.
3. In cold weather, increase the quantity of the priming fuel into the exhaust port.
4. Start your 60-III B T.V. with the throttle valve opened widely.

✿ THE ENYA "G-TYPE" THROTTLE VALVE

The ENYA "G-Type" throttle valve is especially designed and produced to feed the engine constantly with the most suitable (slightly rich) mixture at all speeds.

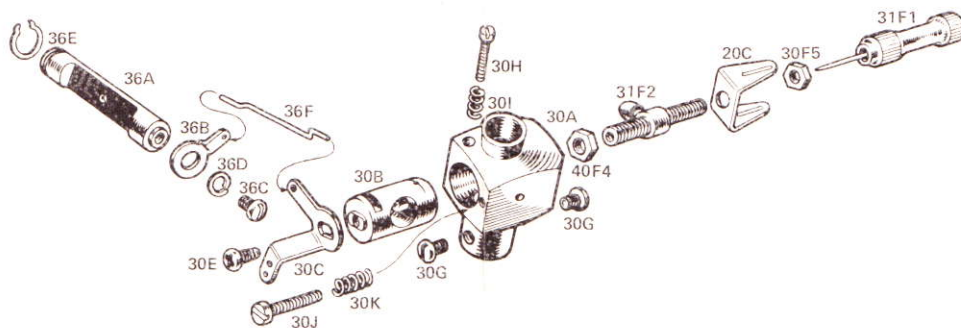
It has a precisely machined, taper fuel-metering groove on the surface of the throttle drum. And the size of the fuel passage changes in accordance with the throttle valve moving so as to feed the engine constantly with a slightly rich mixture at all speeds. Consequently, the response of the engine to the throttle valve moving becomes very quick. And moreover, as the suction of fuel is always strong, the engine has no tendency to stop even if any hard speed controlling be made during the maneuvers.

✿ ADJUSTMENT OF THE "G-TYPE" THROTTLE VALVE OF ENYA 60-III

1. Usually, the best idle running position of the "G-Type" throttle valve is where it is just closed. The best possible idling speed is about 2,500r.p.m on 11" x 7" or 11" x 8" propeller. And the safety idling is 2,500 ~ 3,000r.p.m.
2. Start your 60-III B T.V., and warm it up about 30 seconds at high speed. Then try Hi-Lo and Lo-Hi operations taking an interval of 5 ~ 10 seconds on each side.
3. In case the idling speed is proper and the engine speed raises up smoothly from Lo to Hi within 1 or 2 seconds, it means all the conditions are good.
4. If the idling mixture is too rich and the Lo-Hi response is slow, open the idling mixture adjusting air valve (30J) ¼ ~ ½ turn.
5. If the idling is too slow or lean, open the throttle valve 0.2~0.4 mm by screwing-in the idling speed adjusting screw (30H) a little bit.
6. It is recommended to make the final test before flying. Start your engine and warm it up, and turn your plane over vertically upwards with your both hands. Then repeat Hi-Lo and Lo-Hi operations 2 or 3 times. In case all the adjustments are right, the Lo-Hi response must be quick and the engine will never have any tendency to lean out.

✿ MAINTENANCE OF THE "G-TYPE" THROTTLE VALVE

1. Make sure that your fuel is clean. Never use a dirty fuel. It is recommended to set a filter between the fuel tank and the engine.
2. If the fuel passage is stopped up by some dirts, remove the needle valve and throttle drum, and clean them with a piece of wire and a brush, washing with gasoline.
3. When you install the spray-bar on the TV body, screw-in it 3 turns, and never too far.
4. In case you change the throttle lever for some other thick one made of nylon, use a longer throttle lever setting screw, and make sure that the top of the screw reaches to the inner surface of the venturi.



PARTS LIST OF THE "G-TYPE" THROTTLE VALVE FOR ENYA 60-III B

Part No.	Description of Part	Q ty.	Part No.	Description of Part	Q ty.
60331	Throttle valve assembly	1 set	60230I	Locking spring A	1
60330A	Throttle valve body	1	60230J	Idling mixture adjusting air valve	1
60330B	Throttle valve	1	60230K	Locking spring B	1
60330C	Throttle lever	1	60223	Gasket of T. V. body	1
60330E	Throttle lever setting screw	1	60336	Exhaust restrictor assembly.	1 set
60331F	T.V. needle valve assembly.	1	60236A	Exhaust restrictor	1
60331F1	T.V. needle only	1	60236B	Exhaust restricting lever	1
60331F2	T.V. spray bar	1	60236C	Setting screw	1
15220C	Needle setting spring	1	60236D	Spring washer	1
29440F4	5 mm nut	1	60236E	Stop ring	1
09230F5	4 mm nut	1	60336F	Pull push rod	1
60230G	T.V. assembly. setting screw	1			
60230H	Idling speed adjusting screw	1			