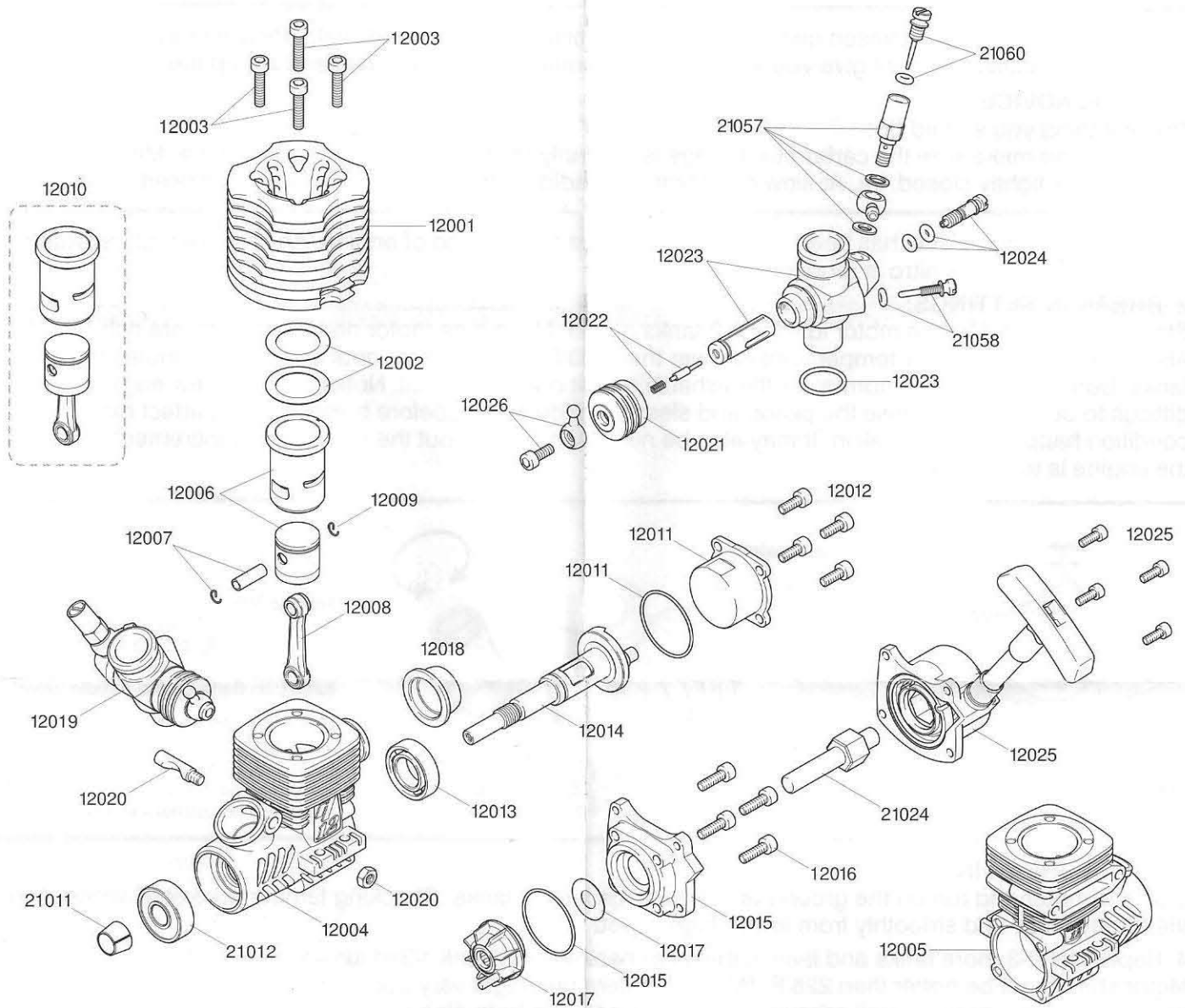


Hyper12

HIGH POWERFUL ENGINE

Nitro Engine Exploded View

>>> Professional Best



HYPER-12 Engine Parts List

Part#	Name	Part#	Name	Part#	Name
12001	Cylinder Head	12013	Ball Bearing 10x19x5mm	12025	Pull Starter Complete Set
12002	Head Gasket (2pcs)	12014	SG Crankshaft	12026	Throttle Rod Unit
12003	Cap Screw for Head 3x14mm (4pcs)	12015	Pull Rear Cover & O-ring	12027	O-ring Completely Set
12004	Crankcase-Rear Exhaust	12016	Cap Screw 3x10mm (4pcs)	12011	Brass Cone (2pcs)
12005	Crankcase-Side Exhaust	12017	Turbo Fan & One Way Bearing	12012	Ball Bearing 7x19x6mm
12006	Cylinder Sleeve & Piston	12018	Silicone Manifold Seal	12024	Hex Axle
12007	Pinston Pin & "G" Clips	12019	Carburetor Complete Set	12057	Main Needle Hub Valve Set
12008	Connecting Rod	12020	Carburetor Bolt Setting Pin	12058	Throttle Adjustable Screw
12009	"G" Clips (5pcs)	12021	Throttle Rubber Cover	12060	Main Needle Valve & O-ring
12010	Cylinder Completely Set	12022	Sub Throttle Needle Valve		
12011	Rear Back Cover & O-ring	12023	Carburetor Body / Throttle		
12012	Cap Screw 3x16mm (4pcs)	12024	Supply Fuel Nozzle & O-ring		

>>> HIGH QUALITY RADIO CONTROL MODEL

Hobao Racing

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Congratulation. You have chosen one of the best competition engines in RC field. Please read the following instructions carefully, it might give you some useful information on how to use and set up the Hyper 12 engine.

HELPFUL ADVICE

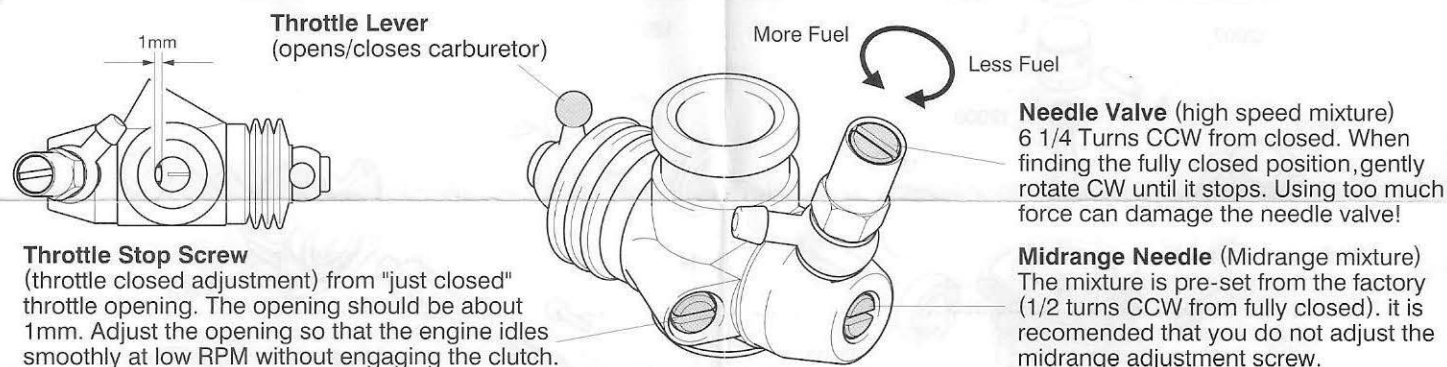
The first thing you should do:

To check and make sure the carburetor linkage is correctly set before starting the motor. i.e. Make sure the carburetor is tightly closed. i.e. At slow condition with radio on, the carburetor should be closed.

1. Fuel. The choice of fuel has been specially developed for this kind of engine. An commercially available fuel from 10% nitro to 25% nitro is required.

2. BREAK IN SETTINGS:

Start motor up and let the motor idle for 1-2 tanks of fuel. Make sure motor needle settings are rich (lot of fuel). Also, make sure the motor temperature is lower than 170°F. Let the motor cool down for 5 minutes between tanks. During break in, it is normal for the exhaust to spit out fuel and oil. Notice that the new engines may be difficult to be started because the piston and sleeve are too closed before break in. The perfect matching condition happens after break in. It may also be necessary to lean out the needle valve increments clockwise if the engine is too rich.



3. AFTER BREAK IN:

Start the motor and run on the ground at rich settings for 1-2 tanks. Checking temperature at all times. Apply the throttle easy and smoothly from low to high speed.

4. Repeat for 2-3 more tanks and lean in the main needle every tank 1/3rd turn and check for temperature. Motor should not be hotter than 225°F. (Motor temperature might vary from place to place! Make sure at full throttle, you can observe small amount of smoke exhausted from pipe.)

5. For long life operation and high performance, make sure you always see trail of smoke exhausted from pipe. Notice that the main-needle is never set to lean. If the engine runs too lean, extra wears and damages might be caused in the engine. The damage will be irreversible when the engine does not exhaust through the pipe.

6. Proper maintenance can extend the life of the Hyper 12 Engine. The air filter should be cleaned or replaced frequently. An in-line fuel filter is recommended to prevent particles from accumulating in the carburetor. Use fresh fuel whenever possible, old fuel is likely to have absorbed water, which might cause unstable engine operation. After you are finished racing, drain out the remaining fuel from the tank. The appearance of the engine can be cleaned with rubbing alcohol.

With proper maintenance, such as treating your engine with care, proper running in, sensible setting - not too lean, you will gain a lot of racing satisfaction and pleasure from you Hyper 12 engine.