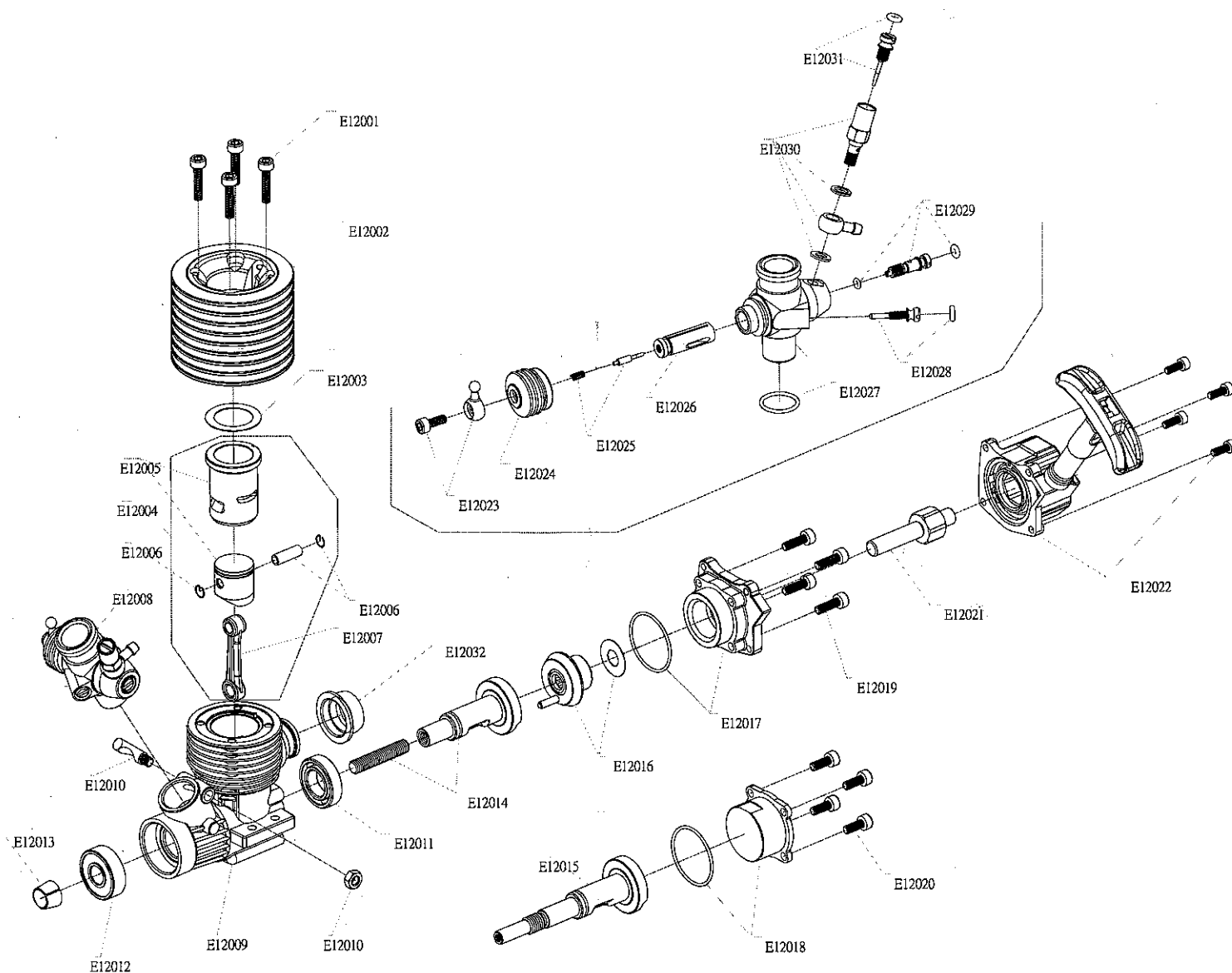


TECHWELL R1204H ENGINE



PARTS LIST

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
E12001	SCREW SET FOR SYLINDER HEAD (4)	E12019	PULL REAR COVER SCREW M3*10L (4)
E12002	CYLINDER HEAD	E12020	REAR COVER SCREW M3*6L (4)
E12003	HEAD GASKET (ALU.) 0.3mm	E12021	HEX AXLE
E12004	CYLINDER COMPLETELY SET (4P)	E12022	PULL STARTER COMPLETE SET
E12005	CYLINDER SLEEVE (4P) & PISTON	E12023	THROTTLE UNIBALL & SCREW
E12006	PISTON PIN & "G" CLIPS	E12024	DUST RUBBER COVER
E12007	CONNECTING ROD	E12025	SUB THROTTLE NEEDLE & SPRING
E12008	CARBURETOR COMPLETE SET	E12026	CARBURETOR THROTTLE
E12009	CRANKCASE	E12027	CARBURETOR BODY & O-RING
E12010	CARBURETOR RETAINER & NUT	E12028	THROTTLE STOP SCREW
E12011	REAR BALL BEARING 10x19x5	E12029	MIXTURE CONTROL VALVE
E12012	FRONT BALL BEARING 7x19x6	E12030	MAIN NEEDLE VALVE HUB SET
E12013	CONE FOR CAR	E12031	MAIN NEEDLE & O-RING
E12014	STD. CRANKSHAFT	E12032	SILICONE MANIFOLD SEAL
E12015	SG. CRANKSHAFT	E12033	O-RING COMPLETELY SET
E12016	ONEWAY BEARING & WASHER		
E12017	PULL REAR COVER & O-RING		
E12018	REAR COVER & O-RING		

TECHWELL ENGINE

BEFORE STARTING YOUR TECHWELL ENGINE, READ THESE INSTRUCTIONS CAREFULLY!!!

TECHWELL ENGINE INSTRUCTION

TW12 engine. These engines are of high technology and need to be treated with precision. If you are not sure how to operate or repair your engine, contact your local dealer. Techwell motors should run on no less than 11% oil and 15 - 30% Nitro. While running Techwell engines it is recommended that 18% oil be used, it is also advisable for novices or beginners to use 18% oil

Running-in Procedure:

This running-in procedure is vitally important and will determine the eventual performance and life of your engine.

- Once you have started your engine, let the engine run at low RPM for 1.5 tanks (125cc) of fuel, the must remain regular, if the RPM goes down and the engine stalls, you must lean (clockwise) the idle needle 1/4 turn at a time, If the engine RPM goes up, richen (anti-clockwise) the needle 1/4 turn at a time.
- After the engine has idled for 1.5 (125cc) tanks, you should let the engine cool down before restarting (be certain the piston is stopped at TDC), and richen (anti-clockwise) the main needle 1/2 a turn more than it was originally set.
- We now suggest you run the engine on the road so it will be cooled properly. During this process be sure not to use too much throttle, as the motor must remain at low RPM (engine should be running rough with excess fuel coming out of the pipe). If the motor is running at high RPM easily, you should richen (anti-clockwise) the needle another 1/2 turn (running the motor to lean at this stage will result in irreparable damage).
Run your engine at this tune for 5 tanks (375cc) of fuel.
- Start leaning the main mixture needle 1/8 of a turn (turning clockwise) at a time, so that the engine runs cleaner and produces low-to-medium RPM (there must be smoke coming from the exhaust at all times).
Run your engine at this tune for 3 tanks (225cc) of fuel
- Lean (clockwise) the main needle a further 1/8 of a turn at a time , until reaching 80% of the engines performance (more RPM but still smoking).
Run your engine at this tune for 2 tanks (150cc) of fuel.

Now you are ready to tune the engine to go too 90 - 95% of it's power, but you must take care not to overheat the engine, causing it to lose power, if this happens immediately richen mixture 1/4 of a turn (anti-clockwise).

Important Note: The engine should always have a small amount of smoke coming from the exhaust.

- Techwell motors should never be run without a quality air filter, as this will dramatically shorten the life of your engine.
- Techwell motors should only run on the highest quality fuel available, as these engines operate at extremely high RPM which produce incredible loads inside the motor. Poor quality fuel will dramatically shorten the life of your engine. It is recommended that you use HHQ's Ultra Slick Extreme Racing Fuel.

