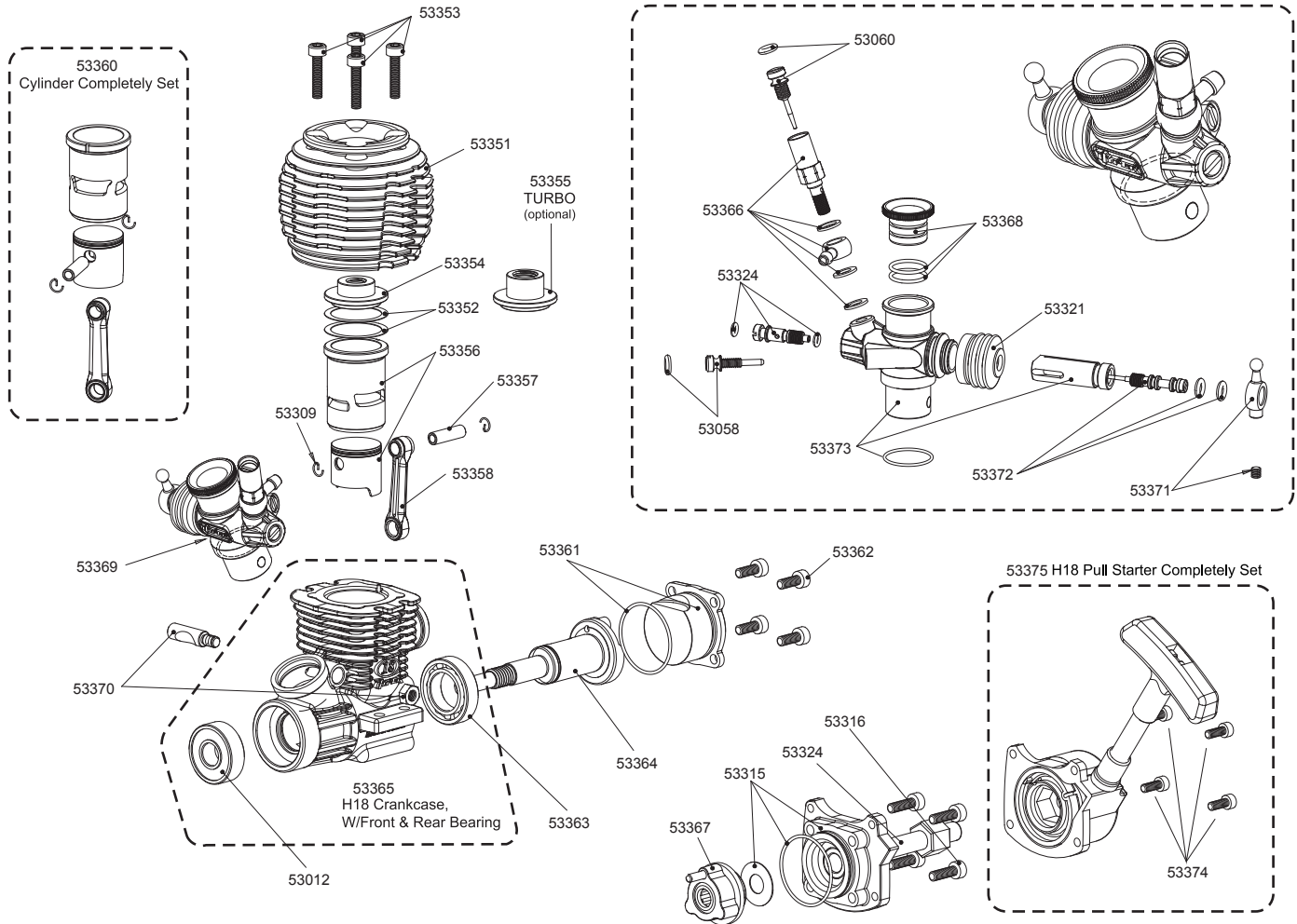


Hyper18

HIGH POWER ENGINE

Nitro Engine Exploded View

Part # 53121



HYPER 18

53121 HYPER 18 SG W/PULLSTART

OFNA	DESCRIPTIONS	RETAIL	OFNA	DESCRIPTIONS	RETAIL
53012	BEARING, FRONT 7x19x6mm	6.95	53358	CONNECTING ROD HYPER 18	27.95
53024	HEX AXLE, PULL START, HYPER	10.95	53359	SCREWS SET HYPER 18	9.95
53058	BARREL STOP SCREW, HYPER	4.95	53360	PISTON, SLEEVE, ROD COMBO H18	109.95
53060	MAIN NEEDLE AND SEAL, HYPER	5.95	53361	BACK COVER & O-RING HYPER 18	13.95
53309	CLIPS, G, 5PCS	1.95	53362	O-RING COMPLETE SET HYPER 18	7.95
53312	CAP SCREW 3x16mm (4PCS)	1.95	53363	BALL BEARING, 12x21x5mm H18	23.95
53315	REAR COVER PULLSTART & O-RING	13.95	53364	CRANKSHAFT HYPER 10	39.95
53316	CAP SCREW 3x10mm (4PCS)	1.95	53365	CRANKCASE W/FR&RR BEARING H18	75.95
53318	SILICONE MANIFOLD SEAL	3.95	53366	MAIN NEEDLE HOUSING SET H18	14.95
53321	THROTTLE RUBBER COVER	3.45	53367	TURBO FAN & ONE WAY HYPER 18	29.95
53324	SUPPLY FUEL NOZZLE & O-RING	5.95	53368	CARB. RESTRICTOR HYPER 18	5.95
53351	HEAD, HYPER 18 ENGINE	34.95	53369	CARBURETOR COMPLETE HYPER 18	69.95
53352	HEAD BUTTON HYPER 18	2.95	53370	CARB LOCKING PIN HYPER 18	9.95
53353	HEAD CAP SCREWS 3x12mm H18	2.95	53371	THROTTLE BALL STUD HYPER 18	6.95
53354	HEAD BUTTON STANDARD HYPER 18	22.95	53372	LOW END NEEDLE HYPER 18	7.95
53355	HEAD BUTTON TURBO HYPER 18	24.95	53373	CARB BODY AND THROTTLE H18	34.95
53356	PISTON & SLEEVE HYPER 18	82.95	53374	CAP SCREWS 2.6x7mm FOR PS H18	2.95
53357	WRIST PIN & G CLIPS HYPER 18	5.95	53375	PULLSTART COMPLETE HYPER 18	39.95

HIGH QUALITY RADIO CONTROL MODEL

Hobao Racing

OFNA

7 VANDERBILT
IRVINE, CA 92618
PHONE: (949) 586-2910
WWW.OFNA.COM
WWW.RCDEAL.COM



HYPER 18 ENGINE

PART # 53121

Thank you for purchasing a OFNA engine. We appreciate your choice and know you will enjoy running it. Please note that the OFNA information in engine box is subject to change without notice.

NEW ENGINE BREAK-IN

Your OFNA engine is extremely tight when the piston is at the top of the stroke and turning the crankshaft by hand. This is normal for a new ABC type engine. The piston and sleeve are matched for fit and the top of the sleeve is tapered for a tight fit. As you run your engine, this tightness Should diminish. There is no cause for alarm, because as the engine warms up, the brass sleeve will expand faster than the aluminum piston and the engine will turn free.

As with any new engine, there are many high spots and tight fits in the matching process. High spots create hot spots that must be broke-in. Therefore, the break-in process is very important to provide good service by the engine. So, you must run the engine rich (COOL) for the first two tanks of fuel. We recommend using 20% O'Donnell OR BYRON'S 2000 as break-in fuel. Other break-in type fuels or added oil is NOT needed. DO NOT OVER REV. THE THE ENGINE WHEN FIRST STARTING, this could break the rod, piston and over heat the sleeve. Let the engine run at low RPM for one tank to break-in connecting rod bearing before starting full break-in.

Break-in the engine in the car, by running the engine at a rich setting. Factory high end or master needle is 4 turn Out from all the way close. Run the car from a slow to fast speed with short bursts of speed. You need to build Little heat in the engine, but not too hot. In a rich setting, the engine will run cool. In the leaner setting the engine run Hot running hot is **NOT** good yet. Do not heat up the engine too much at this time. After about two (2) tank, turn the Master Needle Valve, clock wise, 1/8 of a turn leaner or clockwise. Keeping the fuel tank full, continue the process until you slowly turn the Master Needle Valve, 1/8 of turn each time, to a leaner point and in which the engine runs at high RPM and power and the master needle should be at 3-3.5 turn out from close, but still keeping The **MAX TEMP UNDER 250 DEGREES F.**

If you go over 250 degrees it is too lean of a setting and will over heat the engine and damage the piston.

Normal operating temperature is around 220 to 250 Deg. Temperatures of 260 Deg. and above will damage Engine an shorten the life of the motor.

NEEDLE SETTINGS After break-in:

Master Needle Valve - **(High End)** Set at 3 to 3 1/2 turns from closed. Adjust this needle for maximum RPM and power without being too lean or too hot. Make sure you start at bottom of needle seat!!

Mid Range needle - The brass needle on the side of the carb. **DO NOT TOUCH.**

Side Carb. Needle **(Low Speed)** - This needle is in the center side of the carburetor where the blue boot is, provide Throttle response. It is not the idle adjustment. Set NEEDLE flush with the ball end. Turning in is Lean and Out is Rich. Do not adjust This needle until the Master Needle is set for power and top speed. This will only effect throttle response.

Barrel Stop Screws - Used for adjusting Idle: Set for 1/16th inch gap to start new engines. You can open more for faster idle.

OFNA/PICCO GLOW PLUG IS RECOMMENDED

- 51010 - B4 STANDARD HOT**
- 51011 - B5 STANDARD MEDIUM**
- 51012 - B6 STANDARD COLD**
- 51013 - T4 TURBO HOT**
- 51014 - T5 TURBO MED**
- 51015 - T6 TURBO COLD**