



FORCE 15R STOCK(P3) FORCE 15R OUTLAW, P8 FORCE 15R, PULL START

Thank you for purchasing a OFNA engine. We appreciate your choice and know you will enjoy running it. Please note that the Force information in engine box is subject to change with not notice.

Carburetor Low end and barrel stop screws are pre-set by factory.... Do not change until break-in is done.

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 freer.

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 OFNA engine. So, you must run the engine rich (COOL) for the first three tanks of fuel. We recommend using one gallon of 20% BLUE THUNDER as break-in fuel. Other break-in type fuels or added oil is NOT needed. DO NOT OVER REV THE ENGINE WHEN FIRST STARTING, this could break the piston and over heat sleeve.

Break-in the engine in the car, by running the engine at a rich setting. Run the car from a slow to fast speed with short bursts of speed. You need to build-up a little heat in the engine, but not too hot. In a rich setting, the engine will run cold. In the leaner setting the engine run hot, this is not good yet. Do not heat up the engine too much at this time. After about one (1) 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, too a leaner point and in which the engine runs at high RPM and power, but still keep max temp. of 250 deg. F. At this point you must stop, too lean of a setting will heat up engine and damage the piston. A normal operating temperature is around 220 to 270 Deg. Temperatures of 300 Deg. and above will damage engine and shorten life.

NEEDLE SETTINGS

Master Needle Valve - main control for fuel mixture. Set at 1 1/2 to 2 turns from closed. Adjust this needle for maximum RPM and power without being too lean or too hot.

Side Carburetor Needle (Low Speed) - This needle is in the center side of the carburetor and provide throttle response. It is not the idle adjustment. Set FLUSH with the brass sleeve. 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.

GLOW PLUGS - Use MC-09 or O.s. 08 glow plugs.



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FORCE .15

52510	FM-1501	HEAD, TALL BLUE	38.50
52511	FM-1501-1	HEAD, BUTTOM REPLACEMENT	10.95
52540	FM-1504/5-4P	CYLINDER SLEEVE AND PISTON, 3 PORT	64.95
52560	FM-1506	CONNECTING ROD (ALUM. 7075S)	14.95
52570	FM-1507	CRANKCASE, FORCE	29.95
52580	FM-1508OFNA	CRANKSHAFT, OFNA	29.95
52590	FM-1509	REAR BACK COVER	6.25
52591	15RS-PART B	REAR BACK PLATE UNIT, PULL START	24.95
52599	15RS-PART B	PULL START UNIT W/ ROPE	24.95
52600	FM-1510	CARBURETOR SET PIN	3.25
52610	FM-1511	SLIT BRASS CONE(SAME AS 10330)	2.95
52630	FM-1513OFNA	CARBURETOR BODY	11.75
52631	FM-15131 OFNA	CARBURETOR COMPLETE, OFNA	61.95
52640	FM-1514	THROTTLE BARREL	6.75
52650	FM-1515	THROTTLE NEEDLE	3.75
52660	FM-1516	SPRING, THROTTLE NEEDLE	1.25
52670	FM-1517	BOOT, THROTTLE	2.50
52680	FM-1518	CAP, THROTTLE NEEDLE	2.25
52690	FM-1519/20	BARREL STOP BASE AND NUT	2.25
52629	FM-1521	BARREL STOP SCREW	2.25
52621	FM-1522OFNA	.15 LOW END NEEDLE (MODIFIED)	4.75
52630	FM-1523	WASHER, ALUMINUM, 1 PC	0.95
52640	FM-1524	FUEL SUPPLY NIPPLE	2.50
52650	FM-1525	MAIN NEEDLE SEAT	4.25
52670	FM-1527	CRANKSHAFT, 13mm	31.95
52900	FMB-1	BEARING, OUTSIDE, 607Z	5.95
52910	FMB-2	BEARING INSIDE, 6901	8.50
52920	FMB-3	BEARING INSIDE, 13mm	18.95
52930	FML-1	SEAL, REAR COVER	1.75
52940	FML-2	SEAL, CARBURETOR	1.25
52950	FML-3	SEAL, LOW END NEEDLE	0.95
52950	FML-3-1	SEAL, LOW END NEEDLE, SUPER	0.95
52960	FML-4	SEAL, MAIN NEEDLE	0.95
52970	FMP-1	PIN, PISTON	2.25
52980	FMS-1/2/4	SCREW SET	2.50
52990	FMW-1	CLIPS, "G", 2 PCS.	1.25