



FORCE 21 P4 FORCE 21 P4 PULL START FORCE BLACK T8 ENGINES

Thank you for purchasing a OFNA engine. We appreciate your choice and know you will enjoy running it. Please note that theForce 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 OR BYRON'S 2000 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. Let 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. Run the car from a slow to fast speed with short bursts of speed. You need to buildup 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. Make sure you start at bottom of needle seat!!

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.

FOR THREE NEEDLE CARBURETORS, DO NOT ADJUST MID RANGE NEEDLE, PRESET BY FACTORY

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

**USE LONG GLOW PLUG WITHOUT IDLE BAR,
OFNA/PICCO #51007 IS RECOMMENDED**



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FORCE .21 AND SUPER FORCE .21

52010	FM-2101	HEAD, TALL BLUE	38.50
52011	FM-2101-1	HEAD, BUTTOM REPLACEMENT	10.95
52030	FM-2103	HEAD, SHIM	1.75
52040	FM-2104/5-4P	CYLINDER SLEEVE AND PISTON, 4 PORT	64.95
52041	FM-2104/5-6P	CYLINDER SLEEVE AND PISTON, 6 PORT	75.95
52060	FM-2106	CONNECTING ROD (ALUM. 7075S)	14.95
52070	FM-2107	CRANKCASE, FORCE P4	29.95
52071	FM-2107A	CRANKCASE, SUPER FORCE P6	29.95
52080	FM-2108	CRANKSHAFT, P4 12mm	29.95
52081	FM-2108PS	CRANKSHAFT PULL START, P4 12mm	29.95
52082	FM-2108SG	CRANKSHAFT SG, P4 12mm	38.95
52090	FM-2109	REAR BACK COVER	6.25
52091	RS-12/17	REAR BACK PLATE UNIT, PULL START	24.95
52098	RS-18/19	SPRING AND PIN, PULL START	3.95
52099	RS-1/11	PULL START UNIT W/ ROPE	24.95
52100	FM-2110	CARBURETOR SET PIN	3.25
52110	FM-2111	SLIT METAL CONE	2.95
52120	FM-2112	DRIVE HUB	3.25
52130	FM-2113	CARBURETOR BODY, P4 / P6	11.75
52131	FM-21131(7mm)	CARBURETOR COMPLETE, 7mm	61.95
52140	FM-2114	THROTTLE BARREL	6.75
52150	FM-2115	THROTTLE NEEDLE	3.75
52160	FM-2116	SPRING, THROTTLE NEEDLE	1.25
52170	FM-2117	BOOT, THROTTLE	2.50
52180	FM-2118	CAP, THROTTLE NEEDLE(OLD)	2.25
52181	FM-2118ST	BALL END, THROTTLE NEEDLE	5.95
52190	FM-2119/20	BARREL STOP BASE AND NUT	2.25
52219	FM-2121	BARREL STOP SCREW	2.25
52220	FM-2122	LOW END NEEDLE	4.75
52230	FM-2123	WASHER, ALUMINUM, 1 PC	0.95
52240	FM-2124	FUEL SUPPLY NIPPLE	2.50
52250	FM-2125	MAIN NEEDLE SEAT	4.25
52260	FM-2126	MAIN NEEDLE	3.75
52270	FM-2127	CRANKSHAFT, P6 13mm, THREADED	31.95
52271	FM-2127S	CRANKSHAFT, SG, P6 13mm, SG	64.95
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
52960	FML-4	SEAL, MAIN NEEDLE	0.95
52970	FMP-1	PIN, PISTON	2.25
52980	FMS-1/2	SCREW SET, 8 PCS	2.50
52990	FMW-1	CLIPS, "G", 2 PCS.	1.25
DELTA FORCE .21 P8 AND T8			
52012	FM-2101-1T	DELTA HEAD, BUTTON, TURBO PLUG	19.95
52013	FM-2101-1S	DELTA HEAD, BUTTON, STD PLUG	19.95
52015		HEAD, T8 FORCE, BLACK	43.95
52043	FM-2104/5T-P8	BLACK DELTA CYLINDER SLEEVE AND PISTON, P8 PORT	85.95
52044	CP-2104/5ST-T8	BLACK DELTA CYLINDER SLEEVE AND PISTON, T8 PORT	85.95
52062	FM-2106S	DELTA CONNECTING ROD (ALUM. 7075S), P8	19.95
52063	FM-2106ST	DELTA CONNECTING ROD (ALUM. 7075S), T8	19.95
52072		CRANKCASE, SILVER P8	36.95
52073		CRANKCASE, BLACK T8	39.95
52101	FM-2110	CARBURETOR SET PIN (P8)	4.95
52135	FM-2113ST-1	DELTA, CARB, 3 NEEDLE (NEW) T8	65.95
52272	FM-2127T	CRANKSHAFT P8, SG, TURBO	67.95
52273	CS-2198T	CRANKSHAFT T8, SG, TURBO	75.95



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