



MILITEC-1 Dynamometer Evaluation Test

The purpose of this test was, to verify a real and consistent increase of engine power, due to the friction reduction, as result of the addition of MILITEC-1 to the engine oil.

In order to proof this, a factory original AP 1.6 Alcohol engine, with a Two Barrel carburetor (mini progressive), was chosen and prepared.

Test performance date: 12/13/2001

Temperature: 25°C

Correction factor: 1.16

Lubricating Oil: LUBRAX SJ 20W50 (PETROBRÁS)

Dynamometer used: MOTOR POWER

Location: **IOST RIEDEL PREPARATIONS** Shop, 390 Rua Sobrália, São Paulo, SP, BRAZIL Phone: (55 11) 5631-5378

Phase 1: Engine run-in

After installation, the engine run during 90 minutes, lubricated only with oil, at 2.500 RPM and 1,5 kgfm (3,30 HP). In continuation, successive loads were applied, reaching the following results:

78,88 HP at 4.000 RPM

83,52 HP at 4.500 RPM

87,00 HP at 5.000 RPM

Final temperature of this test: **160°**

F

Phase 2: MILITEC-1 application

To the still hot engine, 200 ml of MILITEC-1 (approximately 6% of oil pan) were applied and the engine was maintained running during 15 minutes at 1.500 RPM and 3,3 HP load.

Starting from there 2 additional readings, as described below, were performed:

N.º 1

82,59 HP at 4.000 RPM

88,54 HP at 4.500 RPM

92,80 HP at 5.000 RPM

N.º 2

83,52 HP at 4.000 RPM

90,82 HP at 4.500 RPM

92,80 HP at 5.000 RPM

Final temperature of this test: **120° F**

Conclusion:

A minimum of **5%** engine power **increase**, compared to the Phase 1 results, at **minus 40° F** (-25%) engine temperature. It is very important to note that after the engine run-in

and in between the tests, no further ignition, carburetor, nor any other engine adjustments were performed. The ONLY modification to Phase 1, was the addition of 200 ml of MILITEC-1 to the engine oil.

We also have to take into consideration, that the time for MILITEC-1 to work into the metal surfaces was relatively short (15 min) and expectations for even better results in medium, long range operation are very high.

This result of MILITEC-1 performance increase can be looked at, as being superior to the performance gain (at a fraction of the cost), of chip re-powering, we perform every day in our shop.

THE TEST IN A NUTSHELL:

12/13/2001 - 'MOTOR POWER' DYNAMOMETER TEST					
Original - AP 1.6 - Two Barrel Carburetor (mini progressive) Alcohol Engine					
RPM	*PHASE 1	*PHASE 2 - HP		POWER INCREASE	
	HP	N.º 1	N.º 2	N.º 1	N.º 2
4.000	78,88	82,59	83,52	5%	6%
4.500	83,52	88,54	90,82	6%	9%
5.000	87,00	92,80	92,80	7%	7%
	TEMP. °F		TEMP. °F	TEMP. DECREASE	
ENGINE	160		120	-25%	
PHASE 1 = Motor Oil ONLY (LUBRAX SJ 20W50) PHASE 2 = 6% MILITEC-1 added (no other changes)					
CORRECTION FACTOR: 1.16					
BLOWER COMPANY Phone: (55 11) 3115-2855 - S. Paulo - Brazil					

THE BLOWER COMPANY is the first Brazilian company specialized in SUPERCHARGER Kits manufacturing for the National automotive lines, representing the worlds largest SUPERCHARGER manufacturers, since 1999 and specializing in race and street cars engines preparation for the past 10 years.

Since January 2001, the company uses MILITEC-1 in engines assembling / preparation jobs, as well as for routine maintenance of these engines, since they have experienced, in practice, the products additional protection features on moving parts. These additional benefits are extremely important, specially for engines, which run today with ever increasing, heavier workloads.

Due to their trust in the product, result of their consistent findings of engine power improvements, additional wear protection and/or fuel consumption reduction, they recommend the use of MILITEC-1 to all their customers, weather they race or will use the conditioner in their serial street cars.

For more detailed information, please contact Mr. César Simões of BLOWER.