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Subject Lubrication			www.grindex.com

Dear Distributor,

Change of oil quality

The supply of the oil type BP Enerpar M006 has been discontinued.

From spring 2005, GRINDEX has changed to a new type of oil, **BP Energol WM 2**.

It is a transparent white mineral oil, highly purified and has neither taste nor odour. It is suitable also where ordinary mineral oil is unacceptable because of possible contamination risk.

Which oil can be used?

New pumps are filled with the white **BP Energol WM 2** oil. An ordinary engine oil **SAE 10W-30 non-detergent** can be used, but for environmental reason a white oil with same properties and quality as the BP Energol WM 2 is preferred. White oil is becoming pale whitish like light milk at more than **2%** of water content.

Filling up the oil housing

The quantity of oil for each pump has been checked and measured. A few changes have been introduced. The new recommended quantities are shown in table below. The tolerance of filling quantity is **+/-5%**. Quantity of oil for a pump can also be found in the pump spare parts list, and the workshop manuals.

Pump model	Quantity of oil, litres	Quantity of oil, us quarts	Volume %
Tuff One / Solo	0,16	0,17	84
Tuff Two	0,32	0,34	84
Minex	0,30	0,32	86
Minette	0,40	0,42	83
Tubo 8"	0,30	0,32	65
Minor / Major / Master	0,50	0,53	83
Midi / Semi	1,10	1,16	84
Matador / Senator	1,00	1,06	85
Maxi	4,50	4,76	85
Magnum	4,00	4,23	75
Salvador	0,30	0,32	81
Senior, Sandy, Super	0,40	0,42	83
MSHA pumps			
Minex	0,28	0,30	85
Minette	0,38	0,40	84
Minor / Major / Master	0,45	0,48	82
Midi	1,10	1,16	80
Matador / Senator	1,20	1,27	85
Salvador	0,28	0,30	82
Senior	0,38	0,40	84

General requirements

The oil chamber is the buffer zone between the motor and the pumped liquid. The oil main functions are: Lubrication, cooling and emulsification of leakage, to show the condition of the lower shaft seal. It is important that oil chamber of each pump model is filled with the specific quantity of oil. Too much oil will lead to increased pressure in oil chamber and too little will lead to reduced cooling and lubrication. Both situations can be harmful and lead to unnecessary damages.

If the oil chamber is completely filled, the expansion pressure of the heated oil may force the oil into the stator housing.

Checking the oil

The oil is not supposed to be completely undiluted. A certain amount of leakage can occur when the shaft seal is new; this does not mean that the shaft seal is defective. A new seal needs a certain time for running in. It is therefore advisable to check the oil one week after the start up. If the oil is free from water, no further action has to be taken. If the oil contains water, i.e. is emulsified (cream-like) or if the water has settled out, oil has to be changed. Check the oil again after one week to determine if shaft seal is in good conditions. If the oil is still discoloured, pale, whitish, of high viscosity, or if any oil/water separation is noted, replace the lower shaft seal and change the oil.

The oil must not contain any abrasive dust or dirt.

Filling up the oil housing

Make sure that all parts, the new oil and the oil can are clean. Lay the pump on its side with the oil filling hole up. Fill with the specified quantity of oil. **Note!** In case of uncertainty of the right volume, turn pump with the filling hole sideways at “two o’clock” and fill with oil up to this level.

Fit a new O-ring and tighten the oil screw properly.

Yours faithfully,

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