



OPERATION/MAINTENANCE MANUAL

ALL EQUIPPED VIBRATORY HAMMERS & POWER UNITS

7032 SOUTH 196TH-KENT, WA. 98032-(253)872-0141 / FAX (253)872-8710

COLD WEATHER WARM-UP PROCEDURE



This Hydraulic Tank Imersion Heater that is installed in the Power Unit is equipped with a 250V 4 Prong male cord. When Power unit is shut down it is mandatory to be plugged into the appropriate power source when a unit has Iso 32 or Iso 15 grade hydraulic oil in it and temperatures have reached -10° C or colder. If the power unit is equipped with Veggie Oil then it is mandatory to be plugged into the appropriate power source at +6° C or colder.



You will need a generator or Light tower that is equipped with a 250 volt Power outlet. The side picture shows an example, so you can be prepared in advance before rental arrives on-site.

Anytime the weather is below the outlined temperatures, and the Vibratory Hammer & the Power Unit are not being worked, this 250 volt 4 prong Heater must be plugged in.



There is also 3 plugs in the control panel compartment all 120 volt grounded plugs. Engine oil heater, Coolant heater, & Battery Warmers. These heaters must be plugged in as well during shut-down time, to keep from having cold weather damage done to the equipment. Some Power Units may have only one plug here as there will be a Junction Box installed.

- 10° C ISO 15-32
- 5° C BATTERY, ENGINE & COOLANT HEATERS
- +6° C Veggie oil



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Remove the Hose Bundle FWD And Return Quick Disconnects from the Power Unit. Once you have warmed up the engine (When Thermostat is opening and closing) at about 1800 RPM, switch the FWD to the on position to warm up the hydraulic oil.

Once the hydraulic oil is warmed up to 80° F you can switch the pump back to off position, and re-connect the hose bundle securely.



Remove the Clamp Close line at the Vibro

Be sure to put caps provided on open lines to eliminate leaks



Remove the Case Drain Line at the Vibro



Attach the Flush Line Supplied by Ape



Once attached run the clamp close circuit for about 10 minutes to flush all cold hydraulic fluid from the case drain line.

(Be sure that hose bundle is connected to power unit)



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COLD WEATHER SERVICING



The Gear Box inside the power unit as well as the gear box in the Vibro is mandatory in cold weather to use only Neptune 150. It is Customers responsibility to ensure that appropriate oil is added when fluctuation of weather is a variable.

LIST OF COLD WEATHER LUBRICANTS

ENGINE OIL	5W 40
GEAR OIL	NEPTUNE 150
HYDRAULIC OIL	RSC Envirollogic HF 46 MSDS
ANTI FREEZE	DEAC OR DELO (ALL EQUIPMENT WILL BE SENT OUT WITH -50° C MIXTURE)

Manufacturers Note:

All APE Equipment must be Wrapped with Insulated Tarping, and Have forced air Heaters running during all down times and through the night. Customer is responsible for any damage done to APE Equipment due to negligence. If you are unsure of warm up Procedures contact your local rep and get clarification so your crew can be familiar with what approach is accepted by APE to avoid damage to equipment rented. No APE Equipment shall be operated colder then -35° C(-31°F), This is the lowest Permissible Operating Temperature. Always refer to Equipment Manuals for more detailed procedures, if there is any discrepancies in wording please contact your APE Representative for Clarification or correction.

REFER TO OWNERS MANUAL FOR THE HOURS AT WHICH SERVICING IS MANDATORY

Ape Canada has in stock at all times the required lubricants for your winter and summer servicing. Cold oil can and will destroy your rental equipment, be sure your ground crew is aware of the proper procedures. An Ape technician is available to fully orientate your crew if requested.

Contact your Sales Rep for lube & servicing information on your rental equipment.