

# **APE Vibratory Hammer Safety Precautions**



Safety Information and Documentation for APE Vibratory Hammers  
Refer to APE Manual for Comprehensive Safety Instructions



# APE Daily Vibro Checklist

(For use on all Models - Model 200 shown for example)

800-248-8498  
253-872-8710  
Fax: 253-872-8710  
www.apevibro.com

- Checked large elastomers for cracks
- Removed damaged wire rope
- Checked shackle pin cotter key & nut (most models do not use a shackle)
- Inspected small elastomers for cracks
- Inspected pop-off safety valve for leaks
- Inspected hoses for wear
- Line pull safety sticker attached
- Checked all bolts on elastomers
- Checked line pull pin for damage
- Inspected motor couplers for leaks
- Checked suppressor mounting bolts
- Checked bearing covers for damage
- Checked all welds for cracks
- Checked oil level in gearbox
- Checked breather check valve on center of motor bearing cover. Removed any paint that could block breather



**Sight Gauge**

**Oil Level**  
**Schaffer 268 Gear Oil**  
(Do not use vegetable hyd oil)

**WARNING:** Never use 90 weight gear oil or unit will overheat. If you cannot read the level then do not operate the machine. Remove the sight gauge & spray some WD40 to clean the glass. Then replace the sight glass using the Teflon tape on the threads. Avoid overfilling or the unit will overheat. If the level automatically increases it indicates a bad motor shaft seal which results in hydraulic oil entering the gearbox. Remove or replace a motor while the vibro is laying on the ground & motors are facing the sky. Consult factory for instructions.

- Checked both the moveable & fixed jaw teeth
- Monitor jaw teeth wear by noting jaw opening width
- Checked clamp mounting bolts for tightness
- Removed air from clamp lines by cracking them open at the clamp cylinder while power unit engine is at idle speed
- Checked clamp lines & fittings leading to the clamp cylinder
- Checked hose clamp securing clamp lines
- Check condition of hose bundle

**NOTE:** When mounting a new clamp, check machined surfaces on the bottom of the hammer & top of the clamp with a straight edge. Run a bottom tap down each mounting hole. Make sure the surface is clean & flat. Torque down using a hydraulic torque multiplier. Do not drive piles if any clamp mounting bolts are missing. If the clamp attachment falls off, it is due to bolts not being properly tightened. No excuses are accepted.

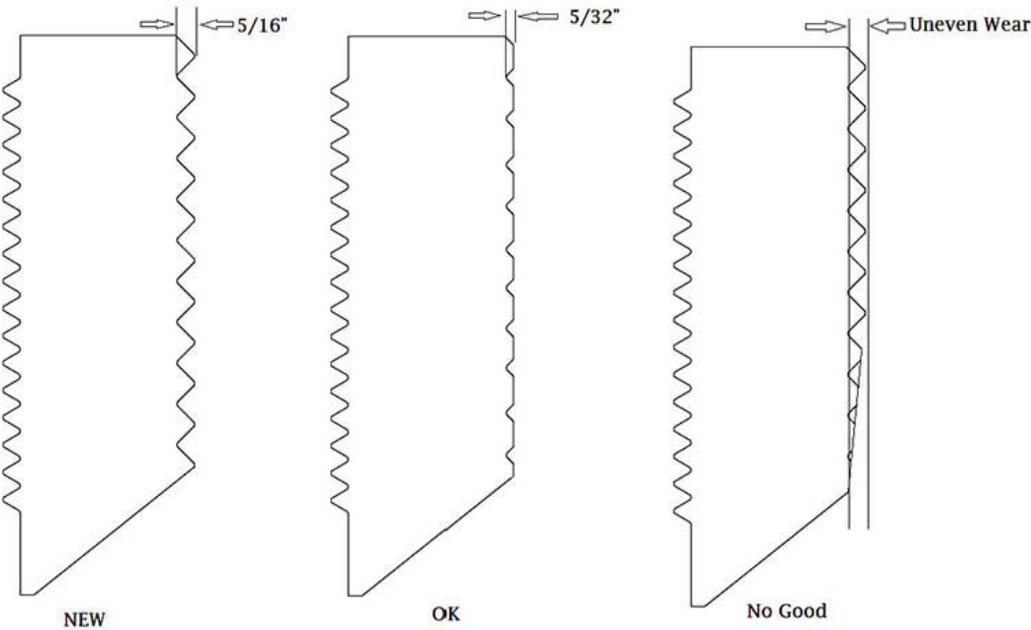
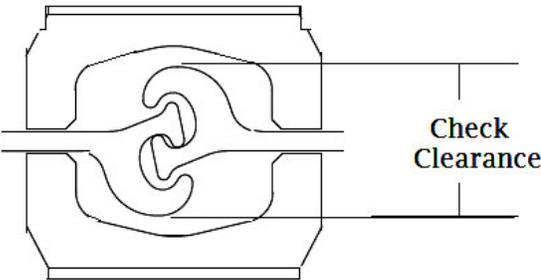
COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Daily inspection performed by: \_\_\_\_\_ Date: \_\_\_\_\_

The APE Daily Vibro Checklist is essential for operating all APE Vibratory Hammers as safely and efficiently as possible. Each point on the checklist should be reviewed prior to the operation of equipment. If equipment or components are damaged or show excessive signs of wear, repair device or consult an APE service technician before operating the vibratory hammer.

# Worn Jaw Protocol

The teeth on either jaw, fixed or movable, can be worn up to half the original depth if the teeth are evenly worn. Note that all teeth must engage the work. Note also that there must be room in the concave area of the jaws to clear the inner-lock of the sheet pile.



## **PILE SURFACE COATING AND VIBRATORY EQUIPMENT**

Note: The pile must be clean of any surface coatings in the clamping area of the vibratory clamping system.

Coatings may include but are not limited to Galvanization, Epoxy, Rust, ETC...

Failure to clean piles in the clamping area may cause clamp slippage and dropped piles.

In addition, the clamping teeth must be in good condition and all the teeth of the jaws must be in the work of the pile. (see "Worn Jaw Protocol")

Always have a safety line attached to the pile while driving or extracting.

Never carry the pile with the clamps.

## Refusal Criteria for Vibros

*The pile must move one foot in 30 seconds of vibro operation at full speed.*

Use heat gun to monitor the temperature of the bearings & related components to prevent use of the machine beyond 195 degrees (F°) at the bearing covers.

000206

# WARNING

**VIBRO GEARBOX MUST  
NOT EXCEED 190-F**

UPDATED: 11/2016

1004527



000124

# DANGER

NEVER PLACE ANY PART OF THE  
BODY UNDERNEATH THE  
HAMMER

SERIOUS INJURY OR DEATH  
MAY RESULT



\*\*\*\*



NUNCA COLOQUE PARTES DE SU  
CUERPO DEBAJO MARTILLO

LESIÓN O MUERTE PUEDE  
RESULTAR

000143

# DANGER

FALLING PILES CAN  
CAUSE SERIOUS INJURY  
OR DEATH.



UPDATED: 2/2015



000304

DO NOT USE VIBRO AS  
A PILE LIFTING DEVICE.

# WARNING

**DO NOT CARRY PILES IN CLAMP  
CLAMP MAY LOSE PRESSURE**

UPDATED: 9/2015

000141

You can carry the pile with the clamp, as long as you have a safety line attached to the pile.



# OPERATION / MAINTENANCE MANUAL

MODEL 200-6 VIBRATORY DRIVER WITH MODEL 700 POWER UNIT

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

## Safety Precautions

(This list of precautions must be followed at all times to ensure personal & equipment safety.)

1. Read this manual from beginning to end before operating or working on this machine.
2. When operating in a closed area, pipe exhaust fumes outside. (**WARNING:** Breathing exhaust fumes can cause serious injury and even death.)
3. When servicing batteries, avoid any type of spark or open flame. Batteries generate explosive gases during charging. There must be proper ventilation when charging batteries.
4. Never Adjust or repair the unit while it is in operation.
5. Make sure the Control Pendant is in the "OFF" position before starting the unit.
6. Remove all tools and electrical cords before starting the unit.
7. Keep oily rags away from the exhaust system.
8. Never store flammable liquids near the engine.
9. Never stand under vibro at any time and keep your eyes on the vibro when it is in operation. Keep a look out for loose bolts or leaking hydraulic lines.
10. Avoid pulling on hose quick dis-connect fittings. Move power unit closer to work if hoses cannot reach. Do not use hoses as a tow line to tug the power unit! If a hose fails at the hydraulic couplers then it is a result of "hose tugging by the pile crew".
11. Avoid kinks in the hoses. Kinks will cut the hose safety factor by 50 percent.
12. Always wear eye and ear protection.
13. Avoid standing downwind of vibrating piles. Dirt and other matter may become airborne and fall into the unprotected eye.
14. Always wear a hardhat, gloves, and safety shoes.
15. When moving, driving or extracting pile, always attach safetyline between pile and crane hook.
16. (**WARNING**) Never clamp vibro to pile and dis-connect from crane line. Lay vibro down on ground when not in use.
17. Do not truck power unit with quick disconnect caps and plugs screwed on to fittings unless the caps and plugs have wire rope safety lines attached. Store in storage box under control panel.

**NOTES:**