

**Maccdonald**

**Operating  
Instructions  
for  
Vibration Reduced  
Air Tools**

# HAVS

Prolonged exposure to vibration when using paving breakers can cause damage to the hands and arms.

This damage can take the form of hand arm vibration syndrome(HAVS) which affects the blood vessels, nerves , muscles and joints of the hands , wrists and arms.

HAVS can become severely disabling if ignored and it's best known form of vibration white finger (VWF), can be aggravated by cold or wet weather and can cause severe pain in the affected fingers.

By using only vibration reduced Air Tools in accordance with the following recommendations you can substantially reduce your exposure to vibration and therefore the risk of contracting HAVS or VWF :-

# PERSONAL PROTECTIVE EQUIPMENT

Always wear GLOVES, HEARING PROTECTION, GOGGLES AND STEEL TOECAPPED BOOTS when operating any Pneumatic Tool.

If the application you are working on is likely to generate dust wear a face mask or wet the surface. Also wear a hard hat and suitable insulated waterproof and wind proof clothing to suit prevailing weather conditions..



# MANUFACTURERS INSTRUCTIONS

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Before using any Pneumatic Tool  
read the SAFETY, OPERATING  
and MAINTENANCE  
INSTRUCTIONS  
supplied by the breaker  
manufacturer.

*Never exceed the maximum  
operating pressure  
recommended (7 bar).*

# SELECT THE CORRECT CUTTING TOOLS FOR THE JOB.

Make sure any cutting tool you are about to use is sharp, not blunt, and is the correct length to enable you to adopt a comfortable stance when operating the Tool. Sometimes it is best to start with a shorter cutting tool, say 300mm below collar, then change to a longer one, say 450 or 500mm below collar as you move deeper below the work surface.

Don't use an asphalt or tarmac cutter when cutting concrete. Use only a moil point or narrow chisel ( see back page for recommended types of cutting tool).

Always turn off the air supply and release the air in the hose before attempting to change a cutting tool.

moil points



narrow chisels



speedibust point



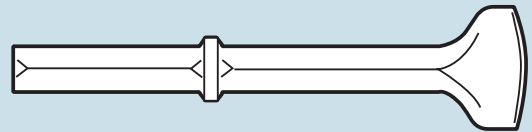
tarmac cutter ( tapered



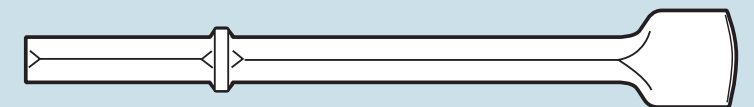
tarmac cutter (flat)



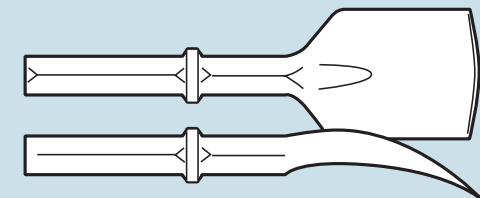
asphalt cutter - 5"  
Chisel end



asphalt cutter - 3"  
Chisel end



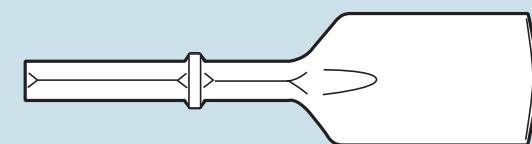
clay spade - straight



digger steel - narrow



digger steel - wide

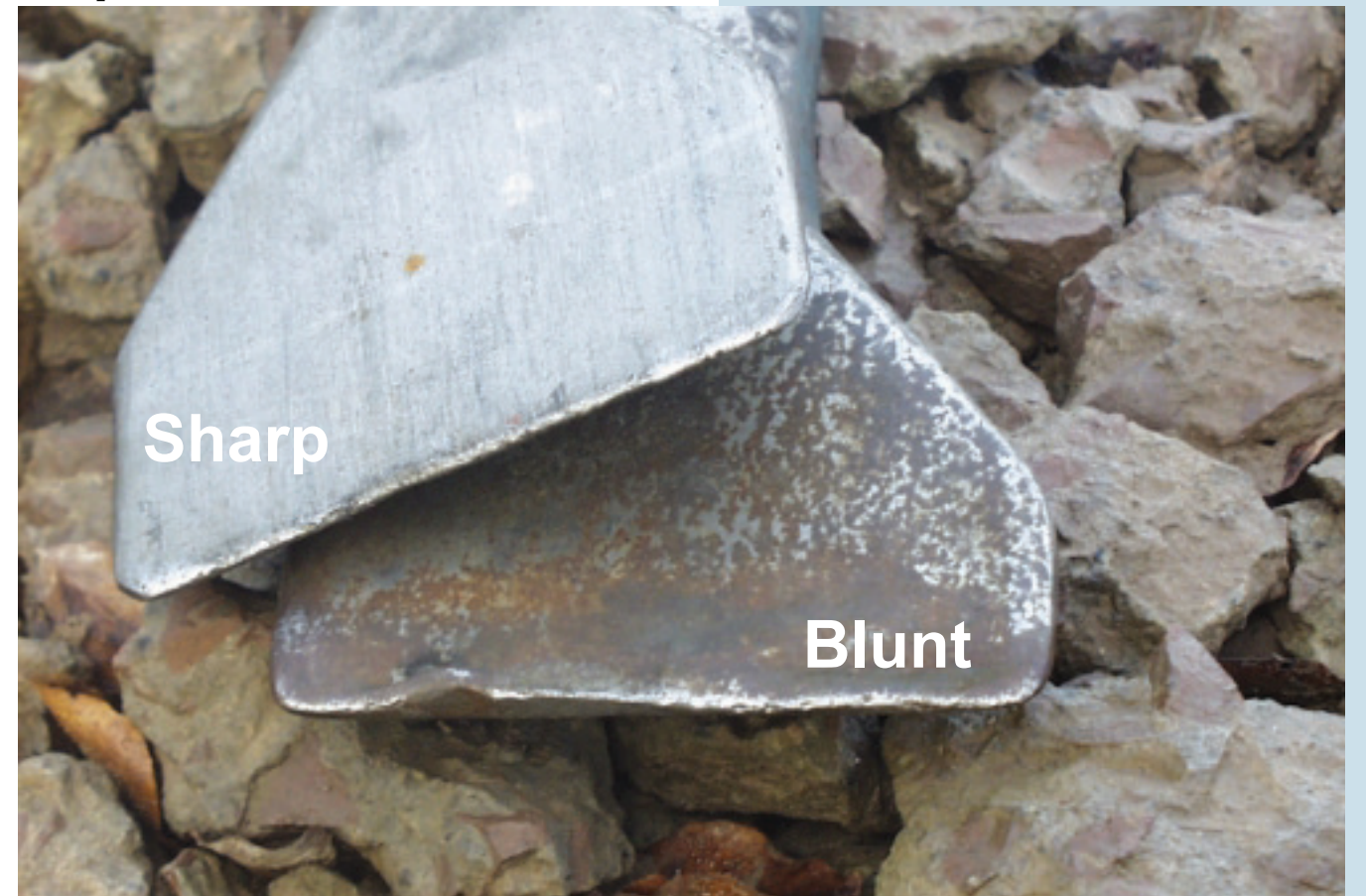


*Make sure any cutting tool you are about to use is sharp, not blunt.*

**Moil Point**



**Asphalt Cutter**



**Vibration Reduced  
Demolition Picks**

**Correct  
Operation**



# CORRECT DEMOLITION PICK OPERATION

## HANDLE SHOULD BE ONLY LIGHTLY LOADED

Before squeezing the tool throttle lever place the cutting tool against the work surface and push forward to apply sufficient load to the demolition pick handle to compress the handle return springs by about 10mm(3/8").

Grip the plastic cover of the demolition pick close to the front of the tool with the other hand.

**If you overload the handle below the 10mm position you increase vibration. You need only apply enough force to the handle to stop the chisel point bouncing on the work surface.**

## Pre-Start





# APPLY ONLY MINIMUM HANDLE GRIP FORCE

Don't squeeze the throttle lever or handle of the demolition pick tightly.

Whilst looking at the cutting tool, which is resting against the work surface, squeeze the throttle lever slowly. When the tool starts to run, maintain only enough forward force on the handle and plastic cover of the machine to prevent the cutting tool from bouncing around on the work surface.

If too much forward feed force is applied to the pick, vibration transfer levels will increase and the pick will operate less efficiently.

After a few pro-active runs you will get a feel for the correct load to apply to ensure the cutting tool does not bounce and penetrates the work surface.

**During operation of the tool make sure it does not contact any part of your body other than your hands.**



## MOVE THE TOOL OFTEN

After the angled cutting faces of the cutting tool have entered the work surface the rate of cutting tool penetration of the work surface decreases substantially.

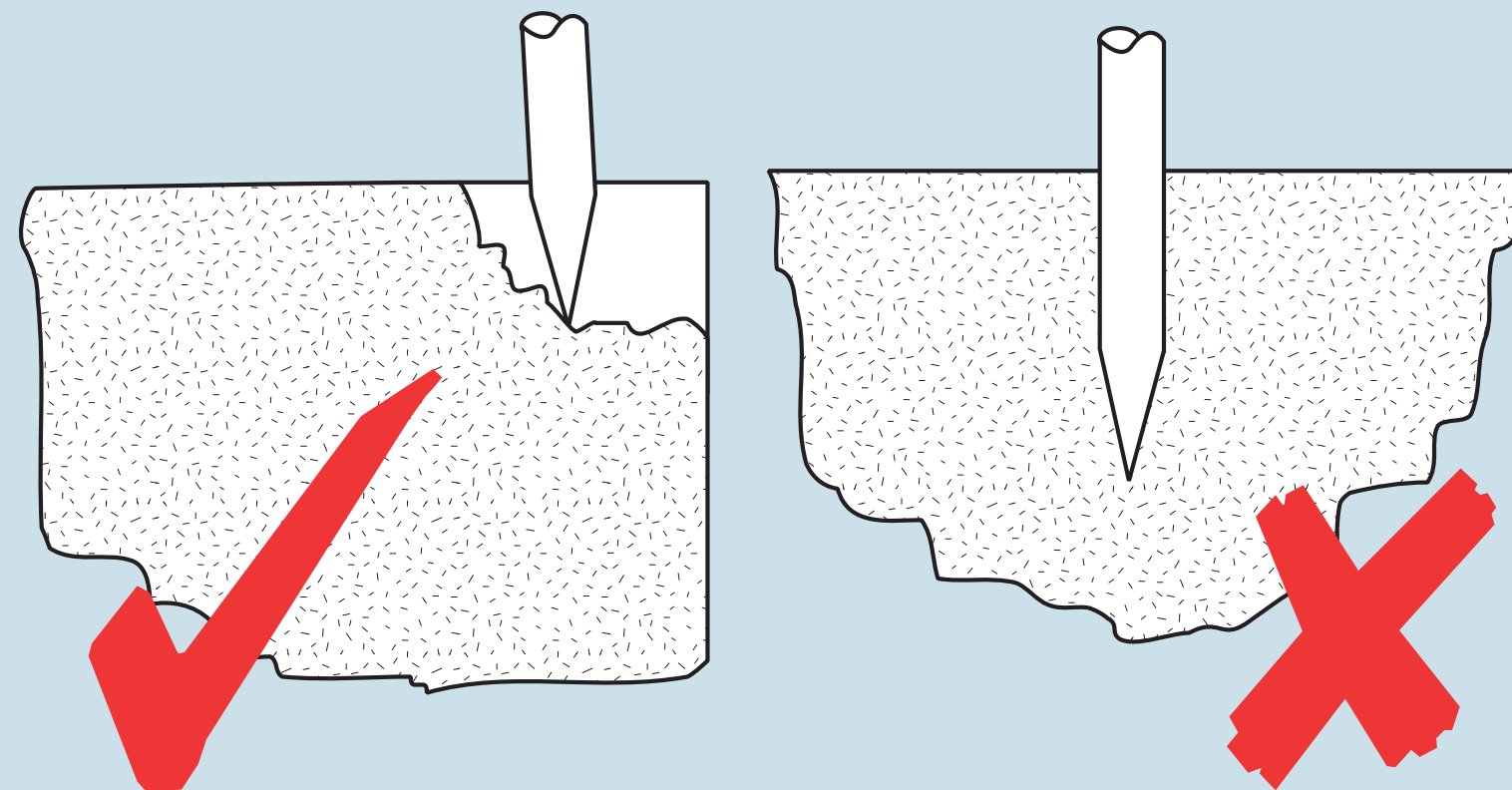
Therefore, reduce vibration exposure by moving the cutting tool every 8 to 10 seconds to avoid jamming the cutting tool in the work surface.

## STOP THE PICK WHEN MOVING THE CUTTING TOOL POSITION

The throttle should be released and with one hand underneath the pick handle and the other gripping the plastic body lift the pick to move it to the next selected cutting tool position.

## MAKE SURE THE CUTTING TOOL DOES NOT BECOME JAMMED

The main cause of jamming or sticking of the cutting tool, especially in concrete surfaces, is by trying to remove too large pieces of material in one go. Take smaller "bites". Start by leaving approximately 50mm between successive cuts, then increase or decrease this distance to suit the material being cut.



## WHEN CUTTING CONCRETE

- a) Use a moil point or narrow chisel of the correct length to give a comfortable operating position.
- b) Tilt the pick slightly towards you, but make sure it does not touch any part of your body other than your hands.
- c) Remove the concrete in shallow layers ( approximately 50mm deep) by moving the cutting tool after the angled cutting faces have penetrated the concrete (after 8 to 10 seconds of operation).



*Tilt the pick slightly towards you, but make sure it does not touch any part of your body*

# WHEN CUTTING ASPHALT OR TARMACADAM

- a. Use a straight bladed asphalt cutter rather than one with a curved blade.
- b. Try to keep the pick as near vertical as possible during operation. Do not tilt the pick except when using it as a lever to loosen pieces of Asphalt and only when the tool is switched off.
- c. Once again make sure no part of your body, other than your hands contacts the demolition pick whilst it is running.



*Try to keep the pick as near vertical as possible during operation.*