

## OPERATOR CHECKLIST



**DO NOT USE THIS EQUIPMENT IF YOU HAVE NOT BEEN TRAINED!**

For your personal safety always ensure that you have read and understood the **Operation and Safety Manual** and follow the instructions when installing tooling and using the machine. *Download from [www.picotegroup.com](http://www.picotegroup.com)*



**Danger** risk of serious injury or death by electrocution, follow instructions



**Danger** risk of serious injury, follow instructions



**Danger** risk of serious injury from rotating parts

### Personal Protective Equipment (PPE)

Always use Personal Protective Equipment including suitable protective clothing, footwear plus:



Suitable eye protection to protect against sewage, chemicals or dust from irritating eyes.



Suitable ear protection to protect against hearing loss.



Suitable heat and cut-resistant gloves to help prevent any hand injuries. Any open injuries or skin irritations should always be covered to avoid contact with sewage, chemicals or dust.



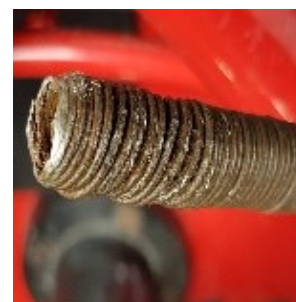
Suitable respirator to prevent any dust or fumes being inhaled or consumed, which could cause occupational asthma or dermatitis.

**Only use Picote Tools designed for 12mm shaft. Recommended diameter range DN70-150**

### BEFORE OPERATION

**Before installing Picote tools, always make sure that the machine is fully turned off and unplugged.**

- Always lay the machine down horizontally on the floor.
- Always inspect the flexible shaft before each use. If there are potential weak points, or the shaft is damaged, cut off the damaged length using a band saw or replace the entire shaft as needed.
- Round-off any sharp edges of the shaft to avoid cuts and to make it easier to insert the shaft into the tooling.
- Check that there is sufficient length of exposed flexible shaft, without its outer casing, to attach tooling and allow for shaft movement.
- Check that all tooling screws have been loosened, so that the shaft can be easily inserted inside the tooling. Position the shaft inside the tooling as far as it will go. Tighten the screws starting with the screw furthest away from the end of the shaft.
- Use a 12mm THIN Sleeve over the end of the outer casing to prevent it from melting.



Trim back damaged Shaft



Sleeve



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## **STARTING & USING THE MACHINE**

- Make sure the pipe has been opened and ventilated to prevent any gases accumulating.
- Choose the correct size tool for your job. Always use the largest size that will fit inside the pipe and go around any bends.
- To reduce friction and increase torque pull out 6m of the flexible shaft off the reel.

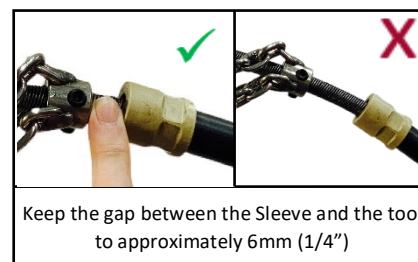
**\*DO NOT USE THE MACHINE IN REVERSE OR THE SHAFT WILL UNRAVEL\***

*For your own safety, if not using a Leader, attach a visual marker (tape) on the outer casing of the flexible shaft around 500mm from the end of the shaft. The marker will indicate the tooling's location and help prevent possible injury from the rotating parts by alerting you when the tooling is about to exit the pipe.*

- Dust produced can be dangerous to your health, inflammable or explosive.
- Ensure water is flowing in pipe or that vacuum extraction is used (dry cleaning).
- Do not extend the shaft by more than one 10m extension. Only use a Picote Shaft Extension & Connector.

## **DURING USE**

- Do not force the tooling through the pipe — let the tool do the work. Too much force or speed may cause the tooling to get stuck, resulting in tooling or shaft breakage and possible pipe damage.
- Use either water or vacuum to remove debris.
- Where water cooling is not used (air / vacuum situations), take breaks every 15 - 20 minutes, as the tool head gets very hot during use.
- Always observe temperature of the outer casing and let the machine cool down after every 30 minute period of constant work.
- For safety and efficiency always check the ventilation openings on the motor are kept clear when working in dusty conditions. If it should become necessary to clear the dust, first unplug the machine. Avoid damaging internal parts.



**Always wear heat and cut resistant gloves when handling the tools after the machine has been switched off and unplugged. The tools can be cooled down by placing them in a bucket of cold water or left to cool in the open air.**

## **MAINTENANCE**



**Before performing maintenance always make sure that the machine is fully turned off and unplugged.**

- Always inspect the condition of the shaft and when needed apply Picote Miller Flexible Shaft Lubricant between the flexible shaft and its outer casing. If necessary, remove the shaft from its casing to treat. When the casing has been replaced, rotate the shaft for even coverage.
- Once a week remove the hand guard and check the tightness of the screws on the shaft connection. If loose, apply Loctite 542 to the threads and re-tighten.
- Every 3 months lubricate the flexible shaft with Picote Miller Flexible Shaft Lubricant (available from your reseller).
- Replace any fastener screws immediately if you are unable to fully tighten them due to worn out hex socket heads as the tooling could fall into the pipe.



**Please refer to the Operation and Safety Manual before undertaking any work. Ask your Reseller or contact Picote for further information: [support@picotesolutions.com](mailto:support@picotesolutions.com)**