


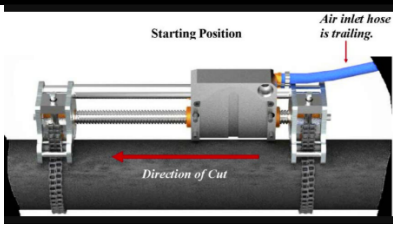

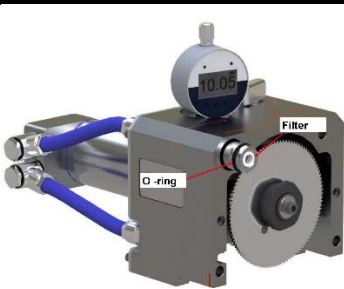
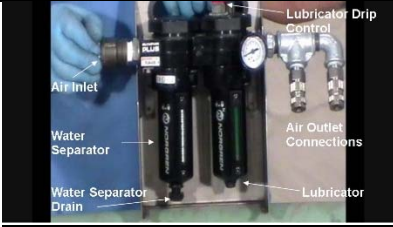



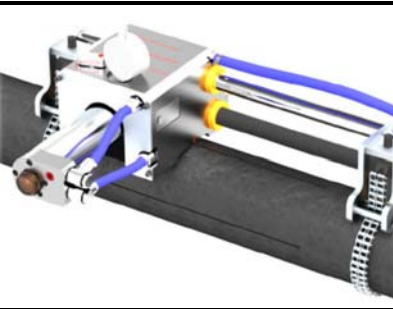

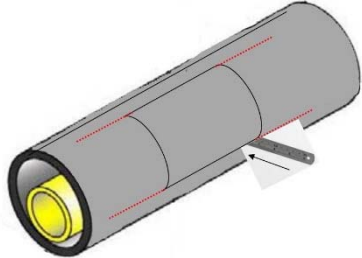
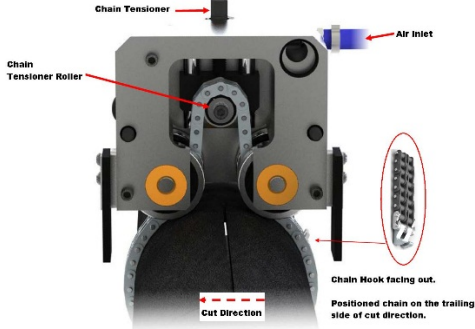
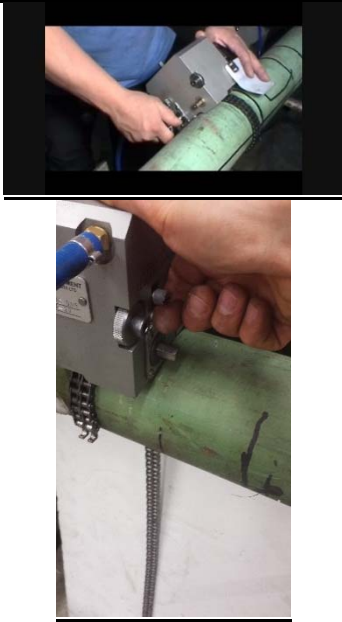
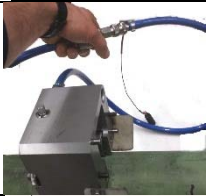
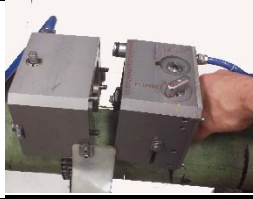





## Precision Module Window Cutter Operator Check List

*Always follow company procedures. This document should be used as a reference only. It does not replace the manual and training.*

<ol style="list-style-type: none"> <li>1. <i>Uncoated Steel: Clean work area top white metal and smooth any uneven areas with a file. Coated Steel: cut through wrap. Not necessary to remove</i> Check thickness of pipe using Ultrasonic Meter. Take reading at multiple locations at 12 o'clock position and write thickness measurement on pipe for easy reference.</li> </ol>	
<b>Perform All Longitudinal Cuts First</b>	
<ol style="list-style-type: none"> <li>2. Attached blade. Make sure blade clicks into the two holding studs and it is fully seated prior to tightening. Use the two wrenches to tighten. The thin wrench holds back blade.</li> </ol>	
<ol style="list-style-type: none"> <li>3. Mount longitudinal bracket assembly onto the pipe at the 12 o'clock position. Tilt bracket and feed chains underneath the bar through assembly. Use hook tool to help bend two chain links to securing chain hooks.</li> </ol>	
<ol style="list-style-type: none"> <li>4. Move bracket to the desired position. Make sure bracket feet are touching pipe and rail is straight. Tighten chain hooks with small ratchet in an alternating sequence. Do not over-tighten.</li> </ol>	 <p>Starting Position</p> <p>Air inlet hose is trailing.</p> <p>Direction of Cut</p>
<ol style="list-style-type: none"> <li>5. Attach dead-man control and depress two times to blow out any debris in line prior to attaching air motor then disconnect dead-man control.</li> </ol>	
<ol style="list-style-type: none"> <li>6. Prior to attaching air motor, check to make sure small air filter is in place and lubricate o-rings.</li> <li>7. Attach air motor into the longitudinal assembly. Push in straight and tighten screws with hex wrench.</li> </ol>	 <p>Filter</p> <p>O-ring</p>

<p>8. Attach dead-man control to air motor. Depress dead-man control and adjust lubricator to 1 drip per second.</p>	
<p>9. Depress dead-man control to start blade. Turn blade feed knob until blade slightly touches / kisses pipe and stop blade. Zero depth gauge and put aside.</p>	
<p>10. Depress dead-man control and plunge cut to desired depth by turning feed knob (1 turn = 1 mm).</p>	
<p>11. Release dead-man control and tighten blade lock nut using 10 mm wrench.</p>	
<p>12. Begin cut by depressing dead-man handle and drive ratchet towards the direction of the red arrows to move the blade forward to begin the longitudinal cut.  13. When module touches the rubber bumper stop driving the cut forward. Depress dead-control and raise the blade by turning feed knob counterclockwise.  14. Disconnect air supply to motor, loosen thumb bolts completely and remove air motor by pulling it straight out.  15. Reverse the ratchet and fully retract longitudinal module to its original starting position.</p>	
<p>16. When cut is done, loosen chain tightening bolts and bring longitudinal module to the 12 o'clock position. Then fully loosen chain nuts. Use hook tool to bend two links to release chains.  17. To make 2<sup>nd</sup> longitudinal cut on opposite side, loosen bracket chain nut, position, re-tighten and repeat steps 3-16.</p>	

Circumferential Cut:	
<ol style="list-style-type: none"> <li>1. Verify end of longitudinal cut with ruler. Position circumferential blade so it will plunge through completed longitudinal cut.</li> </ol>	
<ol style="list-style-type: none"> <li>2. Assemble circumferential unit so chains are outside of cut.</li> <li>3. Feed chains through circumferential unit so chain hooks are facing out away from the pipe.</li> <li>4. Position assembled chain hooks to opposite direction of cut direction.</li> <li>5. Bring circumferential module to 12 o'clock position and tighten chains slightly.</li> </ol>	
<ol style="list-style-type: none"> <li>6. Move circumferential module along chain in order to straighten chain and retighten. Repeat until module can only be moved using a ratchet.</li> <li>7. Tap chains with hammer, retighten and move module forwards and backwards one last time.</li> </ol>	
<ol style="list-style-type: none"> <li>8. Attach dead-man control and depress two times to blow out any debris in line prior to attaching air motor then disconnect dead-man control.</li> </ol>	
<ol style="list-style-type: none"> <li>9. Connect air motor and position module 1/2" behind finished longitudinal cut.</li> </ol>	

<p>10. Push one click forward and pull back until module stops. Make sure module pin is in the down position. This will prevent module from kicking and damaging blade.</p>	
<p>11. Depress lever on dead-man control to start blade. Turn blade feed knob until blade slightly touches / kisses pipe and release dead-man control. 12. Zero depth gauge and put aside.</p>	
<p>13. Depress dead-man control and plunge cut by turning feed knob until desired depth is achieved (1 turn = 1 mm). 14. Stop and lock blade using a 10 mm wrench. 15. Use long handle ratchet and place socket on the far hex towards the direction of the cut. 16. Depress dead-man control and push ratchet to move module forward to make cut. Do not attempt to force cutter, use moderate force to push cutter around pipe. 17. Per each turn on ratchet, make sure pin moves over chain in down position before retracting ratchet. This will prevent module from moving backwards. 18. Cut 1/2" pass end of 2<sup>nd</sup> longitudinal cut.</p>	
<p>19. When cut is complete, release and discount dead-man, loosen blade lock and fully retract blade. 20. Move module to the 12 o'clock position, loosen chains and position for 2<sup>nd</sup> cut. 21. Use off set hook tool to remove chain hooks from the chain. 22. Repeat steps to make final cut.</p>	