WESTERN CHEMICAL PUMPS, INC. 603 SOUTH KANSAS OLATHE, KANSAS 66061-4524

The ANX nozzle atomizes chemical at the point of injection. It was especially designed to extend the usefulness of Western Chemical Pumps. Western Models DF, DFF, MA, and MT, have metering actions which rapidly inject a measured quantity of chemical, then pause before injecting another. It is this rapid injection that allows the ANX nozzle to function. Atomization is not effective when a small quantity of chemical is dribbled in continuously. Thus, for maximum effectiveness of the ANX nozzle, always use Western Chemical Pumps.

Model ANX is designed so that it may be removed for servicing without dumping pressure in the line being treated. A typical "Hot Tap Installation" is shown on the next page together with the part numbers and installation particulars.

The pipe, AN21, slides through the clamp packing nut, AN19, and is held against line pressure by the clamping force exerted when the cap screw, D1-2, is tightened. ALWAYS HOOK THE SAFETY CHAIN AN27, ON THE HOOK, AN25, IMMEDIATELY AFTER POSITIONING THE PIPE.

To re-position the pipe against line pressure, first be sure safety chain is attached securely. Position yourself to positively resist and control the thrust of the pipe. Then, and only then, cautiously loosen the cap screw, D1-2. Push against the pipe to get enough slack in the chain to unhook it. This is the force you will have to control when retracting the pipe. Do not unhook the chain unless you are sure you can maintain positive control. Force on the pipe in pounds is approximately 1/5 the line pressure in PSI.

When starting the ANX, open the gage shutoff valve AN16-2, to the stop screw (less than 1/2 turn); loosen bleed valve D16-2, approximately one turn. Then start the chemical pump. When all air is bled out of the chemical line feeding chemical from the pump, close bleed valve. Pressure on gage will build up to line pressure plus atomizing differential pressure. Atomizing differential pressure is preset when building the AN3S to a value between 500 and 1200 PSI.

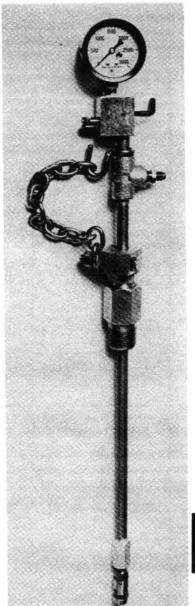
Periodically check operation of the nozzle by closing bleed valve and opening gage shutoff valve. If pressure fluctuates normally, the nozzle is operating properly. Weak or no fluctuation indicates foreign matter lodged under the jet stem. Nozzle may have to be removed to correct this condition. De-activate pressure gage after checking operation by closing gage shutoff valve and then opening the bleed valve to release pressure trapped on the gage.

NOTE

Use the AN8Y cap for injection service into gas lines. Remove the AN8Y cap for injection service into oil or liquid. Loosen AN9 set screw to unscrew cap.

NOTES ON ASSEMBLY

- 1. Unless otherwise requested nozzles will be shipped with D46-5V, Viton O-ring.
- The pipe end of the coupling, AN20, is 1/4NPT. The other end is 1/2-2OUNF. Do not confuse the two ends.
 The hole in the pipe end appears deeper than the hole in the nozzle end. Later models of the AN20 have a "P" stamped near the pipe end.
- Install AN16-2 and tighten to shutoff position. Install set screw AN16-3 in one of the two possible installation holes so that AN16-2 may be loosened about 1/4 to 1/2 turn before being stopped by the set screw.
- 4. To install Teflon O-Rings cover the threads of the cutoff valve with something solid. Heat Teflon rings in boiling water, then push them on while hot.

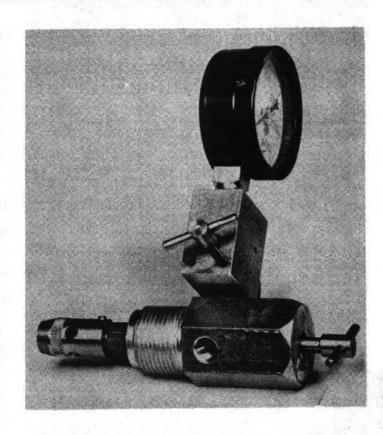


The AN nozzle atomizes chemical at the point of injection. It was especially designed to extend the usefulness of Western Chemical Pumps. Western Models DF, DFF, MA, and MT pumps have metering actions which rapidly inject a measured quantity of chemical, then pause before injecting another. It is this rapid injection that allows the AN nozzle to function. Atomization is not effective when a small quantity of chemical is dribbled in continuously. Thus, for maximum effectiveness of the AN nozzle, always use Western Chemical Pumps.

Model AN is designed to fit into any standard 1" or 3/4" internal pipe threaded boss on a line. (Specify AN 3/4 when 3/4" pipe thread is desired.)

The AN nozzle has 3 controls; (1) A gage shutoff valve with "T" handle, AN16-2; (2) A gage bleed valve with "L" handle, D16-2; (3) An atomizing control screw with "T" handle, AN2.

When starting the AN, open the gage shutoff valve, AN16-2, to the stop screw (less than 1/2 turn); loosen bleed valve, D16-2, approximately one turn. Then start the chemical pump. When all air is bled out of the chemical line feeding chemical from the pump, close bleed valve. Pressure on gage will build up to line pressure plus atomizing differential pressure.



Atomizing differential pressure can be controlled by the atomizing control screw, AN2. Turning clockwise decreases differential pressure until gage reads the same as line pressure. At this point the nozzle is completely open to line pressure.

Turning the atomizing control screw counterclockwise increases atomizing differential pressure. 100 PSI above line pressure will atomize most chemicals. However, nozzles are built to give a maximum differential pressure from 500 to 1200 PSI. Turn the control screw counterclockwise until the control screw shoulder stops against the stop screw head, AN26, to get full differential pressure from the nozzle.

De-activate pressure gage after checking operation of the nozzle by closing gage shutoff valve and then opening the bleed valve to release pressure trapped on the gage.

Periodically check operation of the nozzle by closing bleed valve and opening gage shutoff valve. If pressure fluctuates normally, the nozzle is operating properly. Weak or no fluctuation indicates foreigh matter lodged under the jet stem. To correct this condition turn the control screw to right and left approximately 1/2 turn while unit is pumping. If this does not work turn the control screw all the way in. This lifts the jet stem completely off its seat so that foreign matter can pass through. Return the control screw to operating position.

NOTE

Use the AN8Y cap for injection service into gas lines. Remove the AN8Y cap for injection service into oil or liquid. Loosen AN9 set screw to unscrew cap.