



ELECTRON MACHINE CORPORATION

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Procedure for Safely Removing Sensing Head or Maintenance Plug from Electron Machine Corporation Isolation Valve Adapter

Always wear appropriate Personal Protective Equipment (P.P.E.) as required by your company's safety procedures.

Please refer to www.electronmachine.com for an online demonstration or click here for [video](#):

1. Disable steam purging on the sensing head being removed.

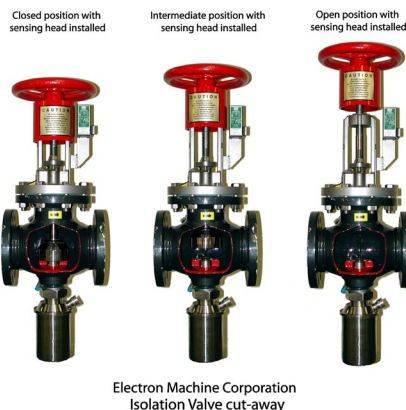


2. Close isolation valve to **intermediate position** by turning red hand-wheel clockwise. Middle of wheel should contact proximity switch. Leave in this position allowing internal components time to heat up and wash away any trapped material.

If Isolating a sensing head used with MDS System: Confirm offline status of refractometer on MDS system display.

3. Continue closing the hand wheel to fully closed position. "Rock" hand-wheel shut several times to ensure clean closure.

4. Verify the bottom of hand-wheel is in the "closed" position as indicated on the bonnet casting.



5. Do not over-tighten or use leverage increasing tools (cheater bars, etc). If hand-wheel does not fully close, **STOP!! DO NOT REMOVE THE SENSING HEAD OR MAINTENANCE PLUG.**



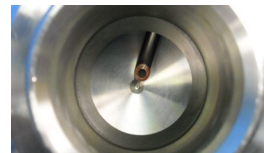
Suggested to Install Isolation Valve Adapter Safeguard Tool

6. Loosen sensing head or maintenance plug mounting nut one (1) complete turn.

7. Relieve trapped pressure on the sensing head or maintenance plug before proceeding. Push and pull the sensing head in and out between the mounting nut and the adapter. You should be able to move the sensing head about 1/4" (6mm). Continue the movement until liquor drains from the adapter and no pressure is felt on the sensing head. (The liquor is under pressure until it is drained.)

STOP!! IF THERE IS A RESISTANCE AGAINST THE SENSING HEAD RETIGHTEN THE MOUNTING NUT. DO NOT REMOVE THE SENSING HEAD OR MAINTENANCE PLUG.

8. When there is no sign of pressure felt, standing to one side, completely remove the mounting nut.



9. After removing the sensing head, **flush all liquor** from the adapter for easy installation next time

10. Inspect steam purge tube for damage. If you have a spare sensing head skip to step 14.

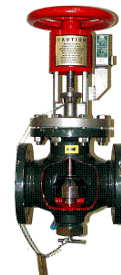
11. Before installing maintenance plug check the o-ring for damage and to ensure it is in place

12. Install maintenance plug with o-ring and tighten to 50 foot-pounds of torque (68 Newton-Meter) using supplied wrench.



13. Leave isolation valve in closed position and tag appropriately as required by your company's safety procedures.

14. Install Spare Sensing head with o-ring. Note proper alignment of sensing head. (Alignment mark with steam purge fitting and interconnecting cable squeeze fitting downstream).



15. Tighten to 50 foot-pounds of torque (68 Newton-Meter) using supplied wrench.

16. Open Isolation valve slowly while checking for any possible indications for leaks

17. Hand-wheel should be turned counter-clockwise to the fully opened position by hand for normal operation. Do not use leverage increasing tools to open. "Rock" valve clockwise to relieve tension.



18. Enable Steam Purging on the installed sensing head