

## DEFENDER SERIES® P/V VENT ANNUAL INSPECTION WITH IN-LINE VAULT & END-OF-LINE CONFIGURATIONS

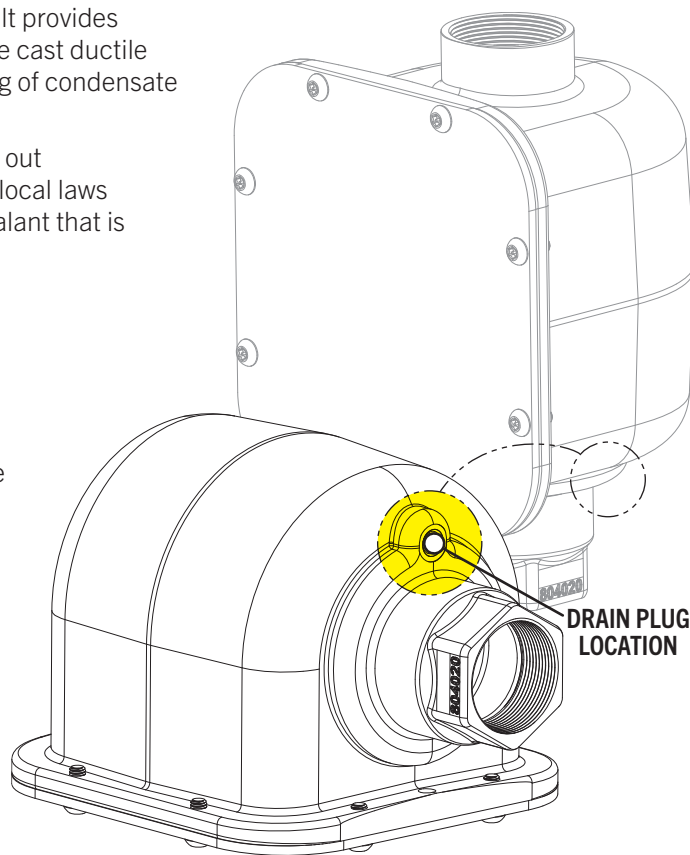
The Defender Series® Pressure/Vacuum (P/V) vent with in-line vault provides added protection and facilitates at-grade servicing and testing. The cast ductile iron enclosure has an integrated drain plug to facilitate the draining of condensate (see illustration).

Open the drain plug during quarterly maintenance activity to drain out condensation liquid trapped inside the vault (if any). Please follow local laws governing the disposal of the condensate liquid and use thread sealant that is compatible with hydrocarbons and re-tighten the drain plug.

### ANNUAL INSPECTION

#### IN-LINE INSTALLATION

1. Relieve pressure/vacuum on the tank prior to accessing the in-line vault.
2. Remove the drain plug and empty any contents into an approved (petroleum and chemical-resistant) container.
3. Use a T-40 tamper-resistant Torx® tool to remove the eight  $\frac{5}{16}$ " - 18 Torx® tamper-resistant bolts from the cover. Allow the cover to rotate and hang from the lower pin. Do not remove the pin.
4. Use a  $\frac{3}{4}$ " wrench or socket in the top of the P/V vent, and unthread the P/V vent from the Defender Series® vent stack adapter.
5. Inspect the outside of the P/V vent, including the O-ring (available in the Maintenance Kit, p/n **804110901**). Clean or replace as necessary.
6. Remove the inlet disc screen from the adapter and inspect for debris. Clean or replace as necessary.
7. Reinstall the inlet disc screen with the stem oriented upwards.
8. Make sure the O-ring is properly lubricated with synthetic O-ring grease, and thread the P/V vent into the in-line vault until it bottoms out (120 in-lbs maximum torque).
9. Make sure the O-ring is fully seated in the channel on the face of the in-line vault flange.
10. Close the cover, reinstall the eight tamper-resistant bolts, and torque to 120–144 in-lbs.
11. From ground level, visually inspect the rain cap for signs of bird nests or insect activity.



#### END-OF-LINE INSTALLATION

1. Relieve pressure/vacuum on the tank prior to accessing/removing end-of-line P/V vent
2. Apply a  $\frac{3}{4}$ " wrench or socket in the top of the P/V vent, and then unthread the P/V vent from the Defender Series® vent stack adapter.
3. Inspect the outside of the P/V vent. This includes the O-ring and screen (available in the Maintenance Kit, p/n **804110901**). Clean or replace as necessary.
4. Remove the inlet disc screen from the adapter and inspect for debris. Clean or replace as necessary.
5. Reinstall the inlet disc screen and P/V vent according to previous instructions.