X34 Yard Hydrant

1. **Water leaks from the nozzle when the hydrant is off.**
   - Check the closing force of the handle. If the handle does not "snap" closed at the end of the closing stroke, see [Linkage Adjustment instructions](#).
   - If the hydrant leaks just after installation, the valve seat may be fouled with debris, such as small rocks. The operating pipe assembly will have to be removed and the hydrant casing flushed. See [Operating Rod Assembly Removal instructions](#).
   - To inspect and/or replace the plunger if it is worn or damaged, see [Operating Rod Assembly Removal instructions](#).

2. **Water leaks around the brass stem below the handle linkage when the hydrant is on.**
   - The packing nut will occasionally need to be tightened to stop a packing leak. Tighten the packing nut until snug and the leak stops. Persistent leaks will require a new packing #10101. See [X34 Packing Replacement instructions](#).

3. **Water leaks from below ground level when the hydrant is on.**
   - A small leak may be the result of a leak at the drain hole. Replace the plunger if it is old and worn. See [Operating Rod Assembly Removal instructions](#).
   - A large leak may be the result of a hole in the pipe casing caused by electrolysis corrosion. Some soil conditions can cause premature failure of the pipe casing near the valve body. Brass pipe is recommended for these conditions. Contact the factory for details.

4. **Hydrant will not drain when shut off.**
   - Make sure there are no attachments on the nozzle, such as a hose or vacuum breaker.
   - Improper linkage adjustment (not enough tension) may prevent the hydrant from draining properly. See [Linkage Adjustment instructions](#)
   - A poor drain field around the valve body or a blocked drain hole will prevent drainage. See [Yard Hydrant Installation Instructions](#).
X34 Yard Hydrant

Linkage Adjustment

To increase or decrease handle tension.

If the Handle does not “snap” closed approximately 3” from the head casting upon turning off the hydrant, follow the instructions to adjust the linkage and handle tension.

Linkage adjustment can be made with the water supply on by tightening the Packing Nut enough to hold the hydrant closed.

**To increase the Handle tension:**

- With the Handle in a closed position, loosen the Set Screw in the side of the Pivot. Fig 1
- Lift the Handle to the desired position and reset the Set Screw. Fig 2
- *The Handle, at the end of the closing stroke, should “snap” closed against the Head Casting. Fig 2*

**To decrease the Handle tension:**

- Lift the Handle part way open and loosen the Set Screw in the side of the Pivot. Fig 3
- Lower the handle to the desired location and reset the set screw. Fig 4
- *The handle, at the end of the closing stroke, should “snap” closed against the Head Casting. Fig 4*
If rocks or other debris are believed to have settled in the Valve Body, causing the Plunger not to seat properly, follow these instructions for inspecting or replacing the Plunger:

1. Shut off water supply to hydrant.
2. Loosen the linkage Set Screw. Fig 1
3. Loosen, do not remove, the Packing Nut. Fig 1
4. Remove head casting using two pipe wrenches, one on head casting and the other on the pipe. Fig 2
5. Remove operating rod by gripping pipe with vice grips and prying upward. **DO NOT attach vice grips to brass stem. Damage to stem may cause leakage around packing nut.** Fig 2
6. **Turn on water and allow to flow and flush the casing.**
7. Examine plunger for damage and replace if necessary. Fig 3
   7a Remove plunger from operating rod with either pipe wrenches or vise grips.
   7b Install new Plunger #10108 - Fig 3
8. Apply a small amount of Silicone grease to plunger to aid the reinsertion into hydrant. (Do not use petroleum based grease).
9. Insert operating rod assembly in hydrant using a mallet or block of wood. Tap rod assembly until plunger is seated in the valve body.
10. Reinstall head assembly.
11. Adjust linkage so handle will snap closed at very end of closing. See “Linkage Adjustment”
X34 Yard Hydrant
Packing Replacement

If a persistent leak is detected after tightening the Packing Nut, follow these instructions for replacing the Packing:

1. Shut off water supply to hydrant.
2. Loosen the Pivot Set Screw. Fig 1
3. Loosen, do not remove, the Packing Nut. Fig 1
4. Remove head casting using two pipe wrenches, one on head casting and the other on the pipe. Fig 1
5. Remove the Link Bolt and Link Spacer then remove and set aside the Handle and Linkage Assembly. Fig 1
6. Remove the Packing Nut. Fig 2
7. Dig out the graphite Packing with a screwdriver or other instrument. Note: This operation will destroy the Packing and require a new Packing #10101.
8. The Packing Washer #10102 may be reused.
9. Install new Packing #10101.
10. Reinstall the Packing Nut - do not tighten.
11. Reinstall the Handle and Linkage Assembly.
12. Align and carefully reinstall the Head Assembly over the Brass Stem and thread onto the Pipe Casing. Note: Turn Head Assembly down enough so the Set Screw in the Pivot will engage the Brass Stem.
13. Tighten Packing Nut until water stops leaking.
14. Adjust linkage so handle will snap closed at very end of closing. See “Linkage Adjustment”