TECH-NOTE



For more information contact...

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A Division Of WCM Industries, Inc.

04/10 Rev 2

INSTALLATION INSTRUCTIONS

- 1. Dig hole for hydrant approximately 2 feet in diameter and deeper than the bury depth.
- 2. Flush gravel, debris, etc. out of supply line before connecting hydrant.
- Install hydrant with drain hole below frost line. Use wrenches on supply line fitting and brass valve body only. This avoids over tightening the hydrant assembly which could affect operation.
- 4. If supply line to the hydrant will not support hydrant, use re-bar, length of pipe or other suitable support driven in bottom of pit to help excavation, turn on water and check hydrant connection for leaks.
- 5. Provisions must be made to allow the water to drain from the hydrant drain hole each time the hydrant is closed.
 - (a) If the hydrant is installed inside a structure or concrete driveway, connect 1/8" copper drain tubing to the drain hole and dig a remote drain field outside the structure for the drain pipe to empty into. Without this remote piping drain field, the water from the hydrant drainage
 - surface around or near the hydrant and will damage the floor surface or cause muddy areas around hydrant.
 - (b) Saturated ground in the hydrant drain field can prevent the hydrant from draining and may result in freezing. If the area where the hydrant is located is low lying or has a tendency to have standing water, a largerdrain field or pit may be required to provide the hydrant a place to drain.
 - (c) Fill bottom of pit with ½" gravel to a level about 3" above brass drain valve body, to insure adequate drainage.

MAINTENANCE INSTRUCTIONS Linkage Adjustment

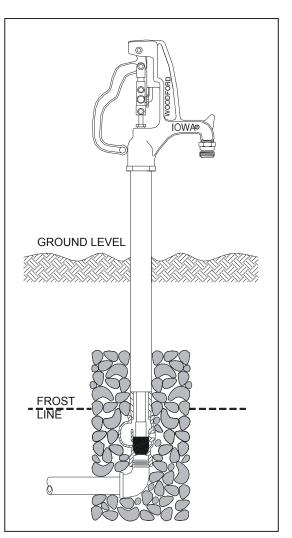
The adjustment can be made with the water supply on by tightening the packing nut enough to hold the hydrant closed.

W34 & X34 To increase the tension: With the hydrant in a closed position, loosen the set screw in the side of the pivot. Lift the handle, which should lift the linkage without moving the stem, to the desired location and reset the set screw.

To decrease the tension: Lift the handle part way open and loosen the set screw in the side of the pivot. Lower the handle, which should lower the linkage without moving the stem, to the desired location and reset the set screw.

The handle, at the end of the closing stroke, should "snap" closed.

Y34 & Y1 To adjust the linkage, remove the lower link bolt that connects the lower link to the clevis assembly. Loosen the set screw in the lower link. Turn the lower link out (counterclockwise) to increase tension and in to decrease tension. The handle, at the end of the closing stroke, should isnapî closed. Tighten set screw. Install lower link bolt.



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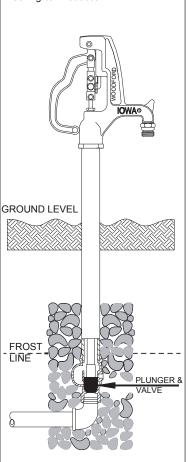


HOW A FREEZE PROOF HYDRANT WORKS

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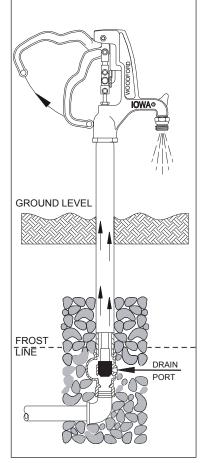
CLOSED

When the hydrant is closed, no water is in the riser pipe or head. The plunger stops water below the frost line where freezing can not occur.



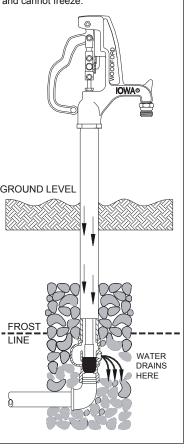
OPEN - WATER FLOWING

Water flows when the handle is raised.
The plunger is lifted allowing water to
flow and seals the drain hole.



CLOSED - DRAINING

Closing the handle pushes the plunger down to shut off the water and open the drain hole. This allows the water in the head and riser pipe to drain into the gravel bed. The hydrant is now empty and cannot freeze.



PLUNGER REPLACEMENT ON ALL YARD HYDRANTS

- 1. Shut off water supply to hydrant.
- 2. Lift handle to open position.
- 3. Remove handle linkage and handle.
- 4. Loosen packing nut.
- 5. Remove head casting using two pipe wrenches, one on head casting, one on pipe.
- 6. Remove operating pipe assembly by gripping pipe with vise grips and prying upward. <u>DO NOT</u> attach vise grips to brass stem. Damage to stem may cause leakage around packing nut.
- 7. Remove plunger from operating pipe with either pipe wrenches or vise grips.
- 8. Install new plunger.
- 9. Apply a small amount of Silicone grease to plunger to aid the reinsertion into hydrant. (Do not use petroleum based grease)
- Insert operating rod assembly in hydrant using a mallet or a block of wood. Tap rod assembly until plunger is seated in the valve body.
- 11. Reinstall head, handle and linkage.
- 12. Adjust linkage so handle will snap closed at very end of closing.

TROUBLESHOOTING LEAKAGE PROBLEMS

- Rocks or other debris in valve seat, causing plunger not to seat properly. Remove head and operating rod per instruction and let the water flow to flush the casing. Examine plunger for damage and replace if necessary.
- 2. Handle linkage out of adjustment. Handle should "snap" closed when it is approximately 2" from the head casting upon turning hydrant off. Adjust linkage as required.
- 3. Damaged plunger: Replace with new plunger.
- 4. Packing nut leakage: Tighten the packing nut as needed, especially in freezing weather. If water is allowed to seep up around the stem, it may freeze and cause the stem to stick.