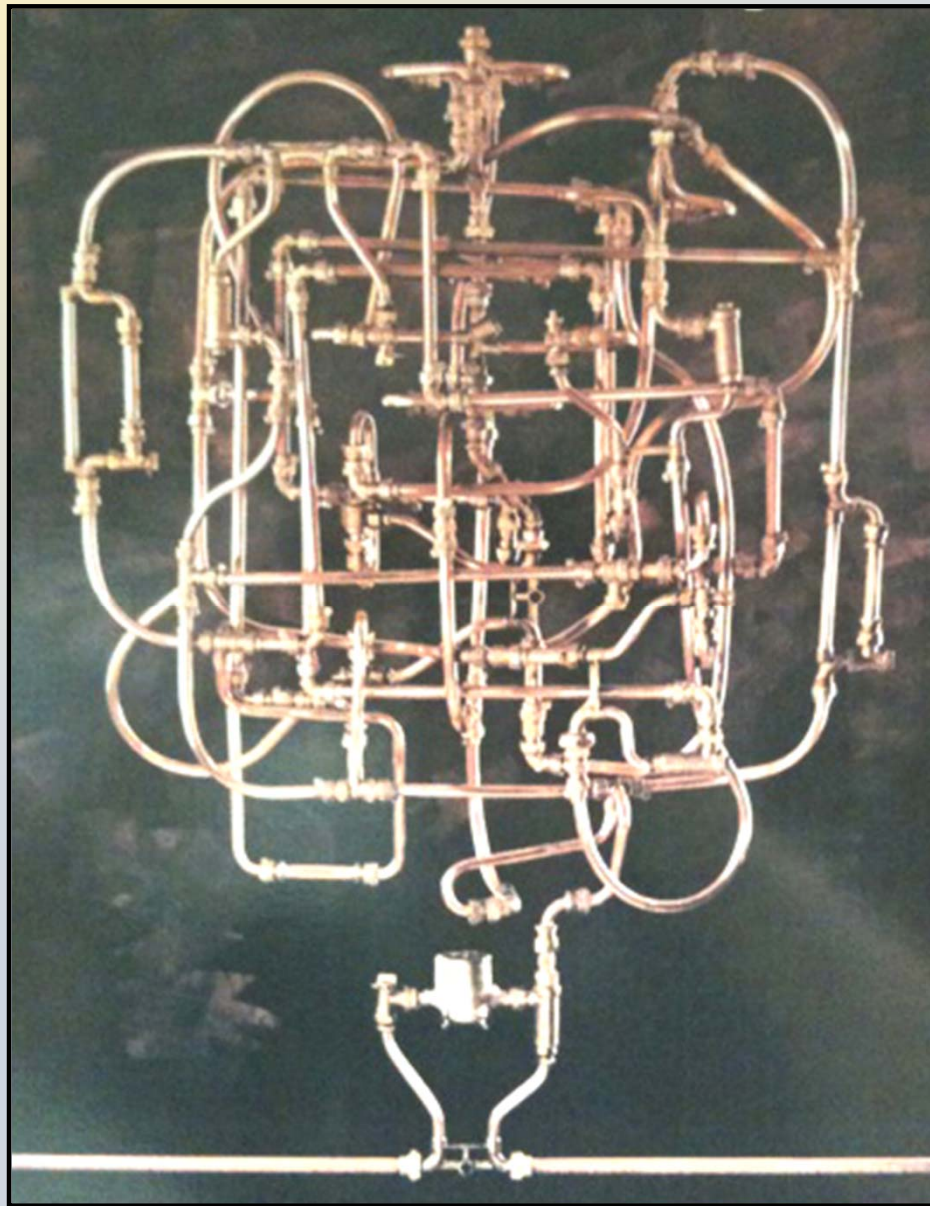




**NO LEAD
BRASS**



2006 ⇨

2016 ⇨

Change Timeline



The Basics

- Initially the Safe Drinking Water Act defined lead-free as 8.0% maximum lead content
- Then, in January 2014, Lead-free came to mean 0.25% maximum lead content
- Equivalent industry terms:
lead-free, no-lead, low-lead

0.25% Lead Change Drivers For Plumbing and Waterworks

NSF 61 and NSF 372

What?!

- ❖ Product lead content determined by weighted average lead content formula using wetted components and surface areas
- ❖ Exemptions: water not **anticipated** for human consumption, non-potable services, service saddles, distribution main gate valves 2" and larger
- ❖ Provincial bodies initiating spot check for compliance to NSF 61 NL



NSF Standards

- **Standard 61**
- **Standard 61 Annex G**
- **Standard 372**
- **Performance vs. Prescriptive**

NSF/ANSI Standard 61

- Performance based
- Leach test over time for metals and chemicals, organics evaluation
- Test varies by product type
- Product size and configuration impact
- Lead limit change: **15 ppb** ⇔ **5 ppb**

July 1, 2012

NSF/ANSI Standard 61 Annex G

- Performance & prescriptive based
- Annex G mandates a 0.25% max lead content – for Lead only
- Products must first have NSF 61 approval before obtaining Annex G
- Annex G was then retired and is currently replaced by NSF 372

NSF/ANSI Standard 372

- Prescriptive based, 0.25% max lead, no NSF 61 prequalification
- Product lead content determined by weighted average lead content formula using wetted components and surface areas
- Does not consider coatings or lead washes, only the base material content

NSF/ANSI Standards

- Products may carry more than one NSF certification and regulatory mark
- NSF Standard 372 addresses the new national lead-free law
- Some lead-free products will not meet NSF 61 but can meet NSF 372



Look for NL stamps

- The brass fittings must have an identifiable marking molded into the NL – stamps do not guarantee compliance
- Connections such as compression nuts, tee heads, etc. do not need to be NL because they don't come in contact with the water





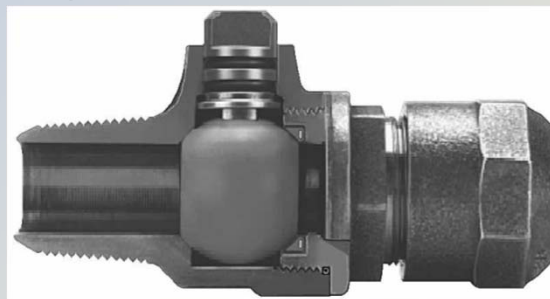
**Impact on
finished
goods**



- Handling & processing
- Different pattern molds
- Melts and molds differently
- Modified manufacturing methods
- More QC checks after each stage

What does this mean to you?

- Ensure proper placement of tools
- Use the correct tools
- Do not over torque
- Follow manufacturers installation instructions
- The same, but different: they do the same but not all brass is BUILT the same – understand how it goes together so you don't fall apart



SMOOTH JAW CORP WRENCH

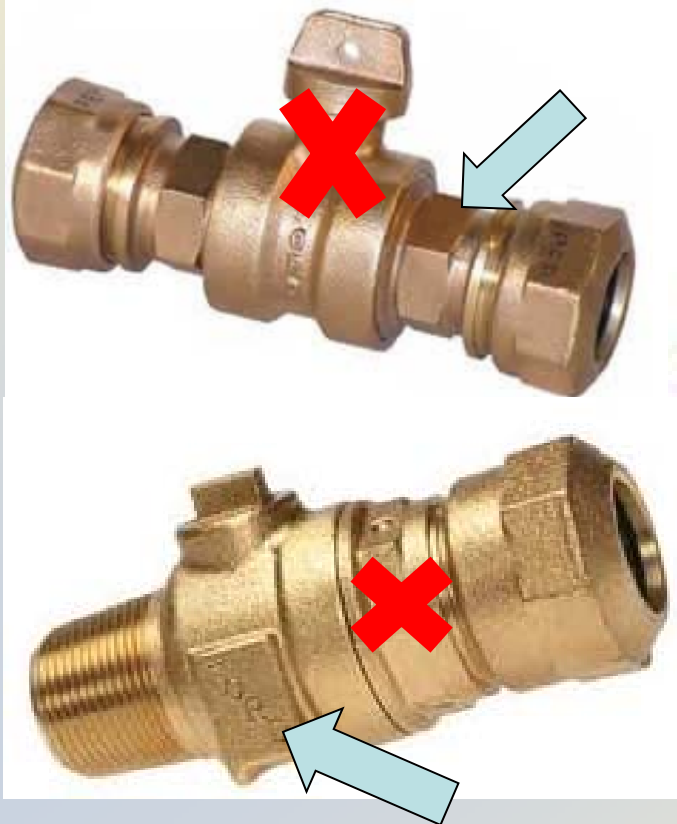


When being
TOOTHLESS is a
GOOD THING



PLACEMENT IS KEY

Double check with manufacturer installation instructions for optimal wrench placement.



GENERAL BRASS INSTALLATION INSTRUCTIONS

No-Lead alloys, as a minimum, require the same care as traditional waterworks brass. For best results, besides specific product instructions provided, follow these general instructions for any brass alloy.

1. Handle carefully...protect threads...keep clean...do not drop or throw.

Do not use a pipe wrench.

2. Always use a suitable sealant or Teflon tape on tapered threads.

3. Use only smooth-jawed, adjustable wrenches that fully and evenly engage the wrench flats. Loose fitting wrenches and pipe wrenches will distort the valves and fittings and cause leaks.

4. **Place wrenches only on wrench flats provided**, not on round surfaces.

5. Use extra care not to over tighten connections, which could distort or break the brass.

6. Use extra care not to exert side / down forces on the brass to avoid distorting or breaking the valves and fittings.

7. **Always inspect and pressure test before backfilling.**

8. Backfill and compact carefully to ensure the brass and service line are properly supported and not stressed by the weight of the earth.

9. Protect from freezing. Frozen water can expand and damage brass, causing leaks.

WARRANTY - READ BEFORE INSTALLING

All merchandise is warranted to be free from defects in material and factory workmanship.

We will provide free of charge new products in equal quantities for any that prove defective within one year from the date of shipment from our factory.

Manufacturer should not be liable for any loss, damage, or injury, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use and user assumes all risk and liability whatever in connection therewith. No claims for labor or consequential damage will be allowed.

The foregoing may not be changed except by agreement signed by an officer of the manufacturer.

DAMAGE CAUSED BY IMPROPER TOOLS OR HANDLING WILL VOID OUR WARRANTY

THE FORD METER BOX COMPANY, INC.

P.O. Box 443, Wabash, Indiana, USA 46992-0443

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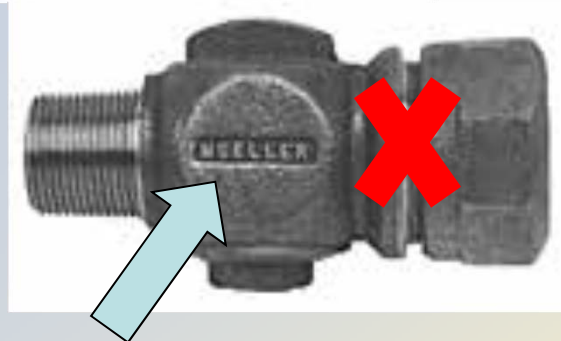
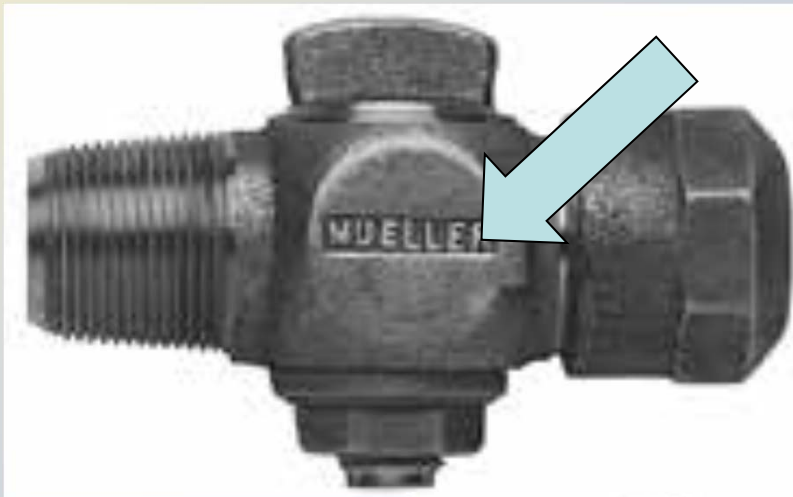
Overseas FAX: 260-563-0167

<http://www.fordmeterbox.com>

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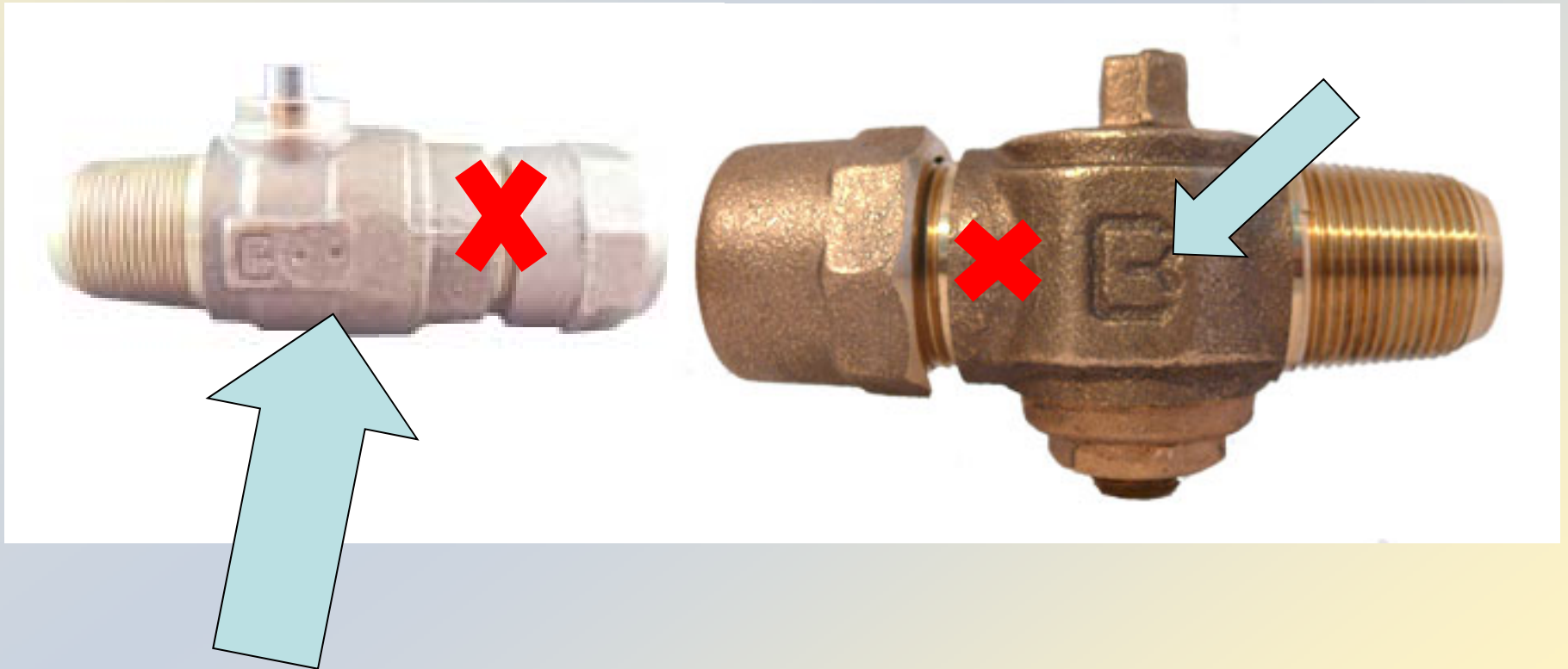
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PLACEMENT IS KEY

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DO NOT USE PIPE WRENCHES



PIPE WRENCHES **KILL** BRASS

What happens if you over torque?





SUMMARY

- **NSF61 – applies only to items coming in direct contact with potable water**
- **Brass must be NO LEAD to comply**
- **5ppb**
- **HANDLE WITH CARE**