



Job Performance Review

**Fire
Hydrant
Safety
Flanges**

**Individual
Level
Competency**

JPR Title

Fire Hydrant Safety Flanges

JPR Number

JPR-DOP-4

Reference

NFPA 1001 – Standard for Firefighter Professional Qualifications

IFSTA Pumping Apparatus Driver Operator Handbook

IFSTA Essentials of Firefighting

NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications

Performance Criteria

Fireground operations often utilize fire hydrants for the sake of delivering water to the fire scene. As such, it is critical that pump operators are familiar with the elements for safe and effective fire hydrant operations as it pertains to hydrant safety flanges.

Time Parameters

Safe and efficient manner

Safety Precautions

Safe operations and control of all equipment

Tripping and fall hazards minimized

Appropriate task at hand PPE is utilized

Procedure

Demonstrate / articulate the differences of safety flanges of the fire hydrants in the township or response area.

Fire hydrants are provided with safety flanges. The safety flange for the hydrant serves as the “weakest point” of the hydrant should the hydrant be struck, by say a vehicle, which prevents additional damage to the barrel or internal workings of the hydrant. The safety flange also protects the break-away coupling of the valve stem.

In the township response area, there are two types of flanges provided for the hydrants. One is the bolted flange while the other is the slip or ring flange. Photographs are shown below to further illustrate this discussion point.

There are differences with these hydrants which the operator should be aware of when using such.

The main difference pertains to the slip or ring flange hydrant. It should be noted that with this style hydrant, there is the possibility for the hydrant to “move or spin” slightly when pressurizing the hydrant. The pressure or force of the water, while connected to the truck and hose, will tend to “find itself” and move. This does not imply a defective hydrant. Movement such as this is normal and the hydrant will function properly once fully turned on. Thus – the operator should not shut down the operations and deem the hydrant out of service. There will be no movement with a bolted flange hydrant.



Above – A bolted flange hydrant for the breakaway stem. Typically the older style Mueller hydrants in the Township.



Above – Slip flange “two halves” breakaway barrel hydrant. These are typically the newer U.S. Pipe hydrants in the Township.

These hydrants are prone to “move” or “spin slightly” when charging the hydrant and connected to an apparatus. This does not imply a defective hydrant and can remain in use. Once the hydrant / water “finds itself” the hydrant will operate normally.



Above – A slip flanged hydrant in use. Note the position of this hydrant. When not in use, this hydrant was parallel with the street or curb line. Upon connecting the hose to the apparatus and pressurizing the hydrant, the hydrant turned slightly at the flange as it “found itself.” This is a normal function of this style hydrant.

Firehouse Software Evaluator Notes

Link to “Driver Operator Pumper”

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