



MONTGOMERY COUNTY FIRE AND RESCUE SERVICE  
MONTGOMERY COUNTY, MD.

## FLEET MANAGEMENT BULLETIN

**NUMBER: 24-05**

**August 13, 2024**

### **Deck gun tips**

**Background:** MCFRS engines are equipped with a traditional assortment of deck gun tips, specifically 1.375", 1.5", 1.75", and 2", which at 80 psi nozzle pressure yield flows of 500, 600, 800, and 1000 gpm respectively. There has been strong interest in expanding the ability of companies to engage in transitional offensive suppression operations ("fast water") with tank water while assuring minimal wastage of water and an efficient use of personnel. It is impractical to retrofit all existing engines with valving and piping that allows personnel to safely control the deck gun valve from the top of the engine.

To mitigate these issues, the Small Tools Section has tested a number of smaller tips and found that a 1.125" tip will flow 300 gpm at 80 psi with a similar (if not better) reach as the 1.375" tip.

It is also important to understand that different generations of engines have differing tank to pump valve/piping capabilities. The NFPA minimum standard for this is 500 gpm and the 2019 Pierce engines meet this. The 2008 Crimsons, and the new 2024 EOnes have larger piping that will support 1000 gpm.

**Current State:** The Small Tools Section has procured a 1.125" tip for each front-line and bravo engine company. Changing to these tips will lessen the amount of water wasted before personnel are able to train the deck gun stream on fires and will allow for more efficient use of tank water for fire suppression. Larger tips will still continue to be available for use when companies are able to transition to an external pressurized water source (hydrant or other supply operation).

**Action Needed:** Once the items are received:

1. Station Commanders should ensure that the existing 1.375" tip on each deck gun is replaced with the new 1.125" tip. The new set of tips would then be 1.125", 1.5", 1.75" and 2" yielding flows of 300, 600, 800, and 1000 gpm respectively. The new tip is distinguished by a white ring/bumper (see picture below)
2. The apparatus inventories should be updated to reflect the additions of the 1.125" tip. The 1.375" tip may be retained in the engine driver's compartment and can still be used at the OIC's discretion.

3. Companies should train on deck gun operations in order to better understand the reach available from the various tips.
4. CMF staff has tested the new tip stack for nesting on all county owned engines. Any mounting issues should be communicated via a small tools defect report.

**End State:**

If you have any questions, please contact the Small Tools Section via email [FRS.SmallTools@montgomerycountymd.gov](mailto:FRS.SmallTools@montgomerycountymd.gov) or (240)777-2217

