

How to Replace Inefficient Sprinkler Nozzles

What makes a sprinkler nozzle inefficient?

Many traditional sprinklers emit tiny droplets of spray that are susceptible to both wind drift and evaporation. These sprinklers apply water to the landscape at a rate that typically exceeds what the soil is able to absorb, causing runoff. To prevent traditional sprinklers from wasting water on your landscape, you can install water efficient multi-stream multi-trajectory (MSMT) nozzles on each of your fixed/VAN spray zones.

How to identify an inefficient nozzle

Take a look at the images below and learn to identify which sprinklers on your landscape are water efficient:



MSMT ✓

- Water efficient
- Adjustable arc and throw distance
- Eligible for a rebate*



Variable Arc Nozzle (VAN) ✗

- Inefficient
- Commonly located in corners
- Fan-like spray
- Adjustable arc



Fixed Spray ✗

- Most common nozzle type
- Inefficient
- Light misty spray
- Not adjustable



Rotor ✓

- Water efficient
- Delivers water in rotating jet
- Adjustable arc and throw distance

How do I replace an inefficient nozzle?

First thing's first - plan your upgrade, one zone at a time:

Step 1: Locate and mark all inefficient heads on a zone with flags or marking paint.

Step 2: Measure and take note of the distance between heads.

Step 3: Take a trip to your local hardware store to purchase nozzles, based on the distances noted between heads.

Instructions for replacing nozzles:

Step 1: While the zone is OFF, place the sprinkler pliers around the rim of the nozzle and pull up until the riser is fully extended. Clamp the sprinkler pliers around the riser base so it does not retract back into the ground.

Step 2: Unthread the traditional spray nozzle from the riser.

Step 3: Thread your new MSMT nozzle onto the riser.

Step 4: Repeat steps 1-3 until all inefficient sprinkler nozzles on the zone have been replaced.

Step 5: Turn the zone ON and adjust each nozzle to its appropriate arc and throw distance. Please note that Hunter MP Rotator nozzles require a manufacturer-specific tool for needed adjustments.

Step 6: Adjust the zone run time on your controller. A good rule of thumb is to schedule two 20 minute cycles per irrigation day, three days per week in July and August when conditions are hot and dry.



**Did you know? The City of Bozeman offers a rebate for the installation of water efficient MSMT nozzles? Visit www.bozemanwater.com and click on the water conservation button to learn more.*