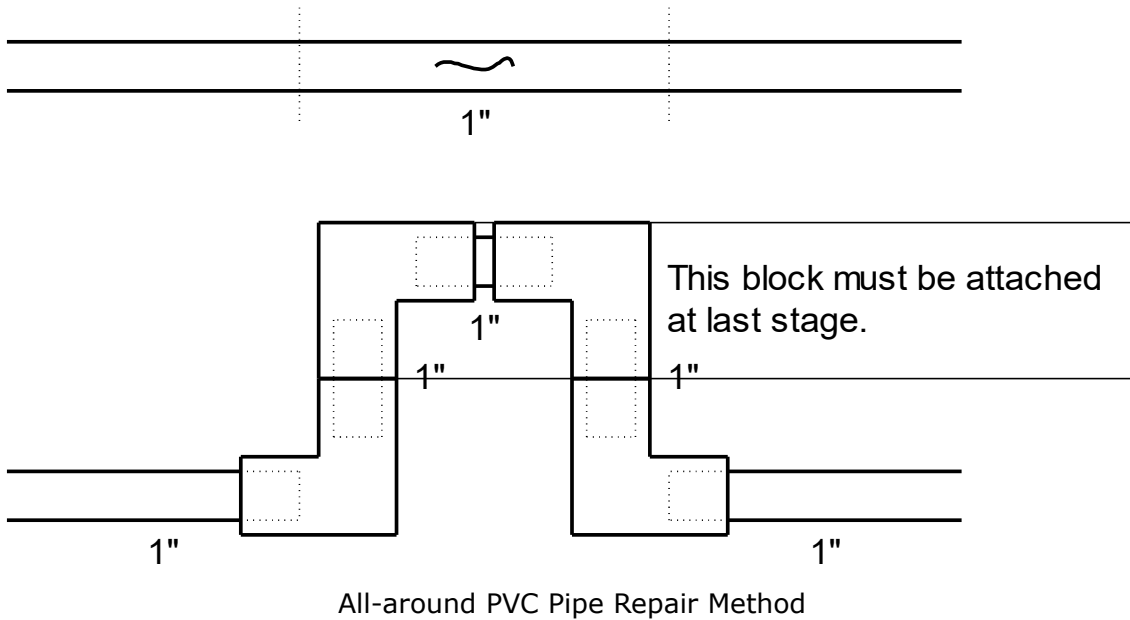


## Yardwork Splinkler System



Leaking (Due to Undesired Connection at Curving (not Straight) Overstretched Pipes)



Repaired (Applied by All-around PVC Pipe Repair Method; Two Pipes are not Straight (Curved))

Gardener's PVC routing skill level looks so low because water leak at many places were observed. The reasons obtained as a result of my repair works are;

- (1) Pipe connection where pipe is forced to curve (not straight) as shown above.
- (2) Less cautious treatment for pipe connection (1" PVC pipe gets more water pressure than 3/4" PVC pipe)
- (3) Piping near trees which root breaks pipe
- (4) Sloppy pipe routing (Ex. overlaid pipes) without making schematic, etc.

These cases are introduced below one by one although some were omitted.



## Tools



- PVC Pipe Solvent Cement & Primer,
- Big Jaw Slip-joint Pliers,
- Thread Seal Tape (Teflon Tape, PTFE (Poly Tetra Fluoro Ethylen) Tape),
- Nipple Extractor,
- Ratcheting PVC Pipe Cutter





Shield Cap Assembly Cracked (Elastic Seal Exposed)



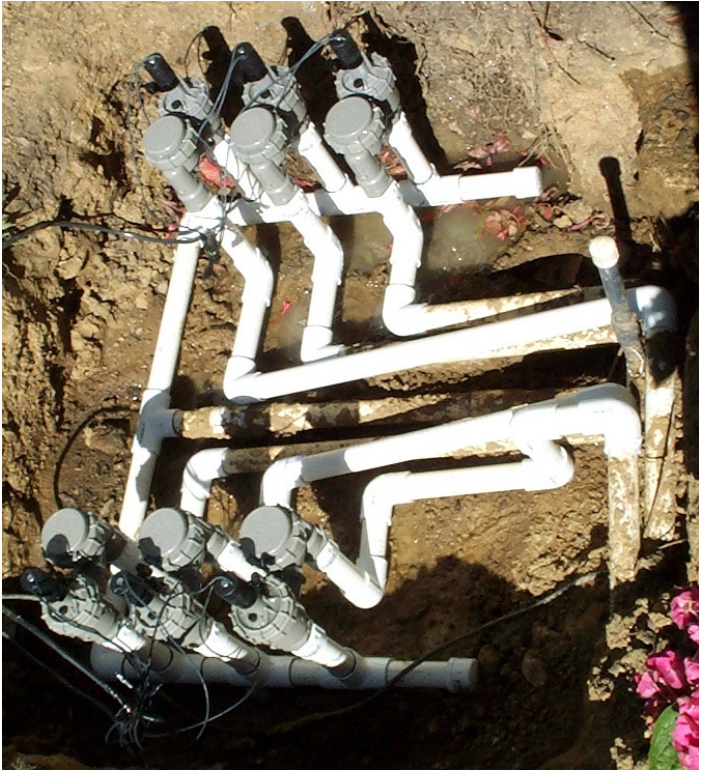
Cracked Shield Cap Assembly



Cap Assembly Replaced

Shield cap assembly is for back flow protection. The quality was insufficient and cracked at the weakest portion. In my long term piping experience, 1" "Orbit" Anti-siphon Valve is better than "Lawn Genie (Example above)".





Totally Renewed Valves & Routing



Leaking Sprinkler Main Pipe (Lowest Layer)



Cut & Rerouted



Sprinkler Main Pipe Rerouted to Valves

PVC pipes are stacked together with rain water drain pipe as well as connected under curving together. This is a gardener's symbolized sloppy work that incurred water leak everywhere.





Leaking Sprinkler Main Pipe (Newly Attached Sprinkler Main Valve (Red; Left))



Cut



Repaired





Reduced Number of Valves (Sprinkler Zones)



Newly Attached Zone Main Valve (Black)



Leaking Sprinkler Main Pipe



Repaired & Removed Broken Pipe by Tree Root

So many water leaks happened on sprinkler main pipe found. It is so bad because water leaks all the time unlike water leak on PVC pipes connected after sprinkler valve.

It is hard to find water leak happened on pipes after sprinkler valve and it reduces water pressure drastically and incurs fatal result.





Utility Water Main Pipe Leaking



28" Curb Key



Repaired Putting External Water Main Valve



Utility Water Main Valve (Stop Water Flowing (Close) Position)



Utility Water Main Valve (Water Flowing (Open) Position)

This 1 1/4" PVC piping for utility water main pipe was done by gardener who did not have sufficient skill of PVC piping. This is ultimate evidence of my judgement for the gardener's work. Give me a break!