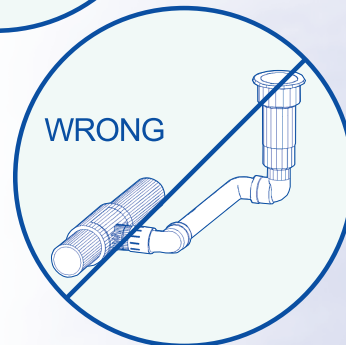
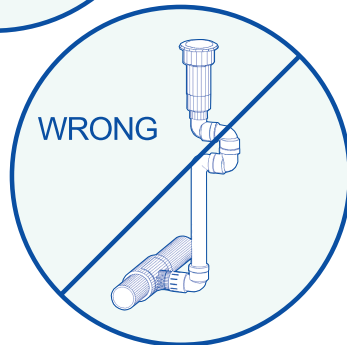
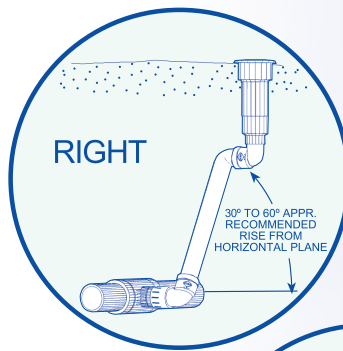
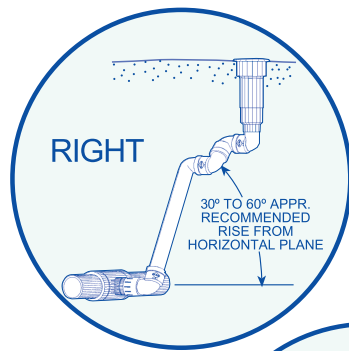




"QUALITY BY DESIGN"

INSTALLATION INSTRUCTIONS



ULTRA UNIBODY

STANDARD UNIBODY

Please read all instructions before installing swing joints

Do not disassemble the parts that come pre-assembled.

Do not use pipe joint compound or tape in the sealed components.

Always hand tighten O-Ring seal until male part is bottomed out then back off male part one complete revolution.

On all solvent weld joints, prime and glue according to solvent manufacturer's recommendations. (CAUTION: keep primer and solvent away from all O-Ring sealing surfaces.)

Dura recommends installation at 30° to 60° rise from the horizontal plane. Prior to final installation and backfill, check all swing components to insure that no O-Rings are exposed. If any O-Rings are exposed, readjust the component to eliminate this exposure.

System Start-up

This procedure is recommended for new installations, after repairs, and in the spring if the system was drained for winterization.

1. Bleed all air from system while filling. Do not compress air and then relieve.
2. Fill system at a velocity fill rate based on pipe size and rates shown in the table.

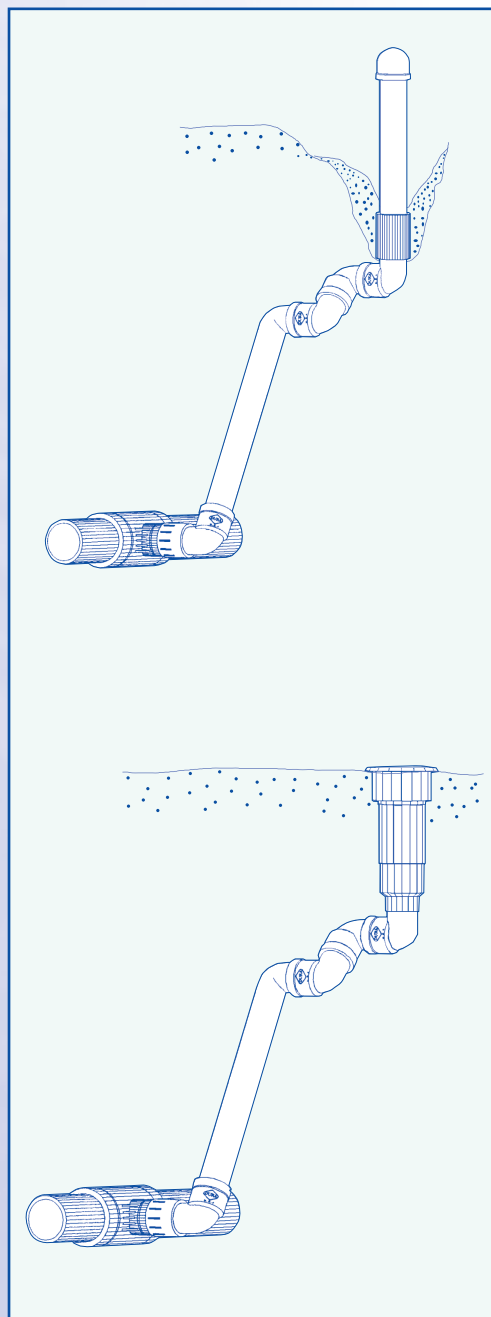
WARNING: Failure to comply with procedure can result in a "water hammer" effect which can cause damage to system components and possible injury to personnel.

Pipe Size	Gallons/Minute	Velocity (Ft/Second)
1/2"	2	1.60
3/4"	3	1.92
1"	5	1.50
1 1/4"	10	1.86
1 1/2"	10	1.41
2"	20	1.80
2 1/2"	30	1.84
3"	45	1.86
4"	75	1.87
6"	150	1.73
8"	250	1.70
10"	450	1.97
12"	500	1.55



"QUALITY BY DESIGN"

INSTALLATION INSTRUCTIONS



INSTALLATION STEP 1:

- To avoid possible damage to swing joint components by direct sunlight or high temperatures, store in a cool, shady place.
- Upon installation, **immediately** fill ditch around swing joint with native soil.
- If sprinkler head is not affixed, set up a standby unit as shown at left.

INSTALLATION STEP 2:

- Remove standby unit and install the sprinkler head.
- Finish backfilling and adjust to grade.