

3. Wrench will stop turning when adjusted to the minimum arc (40°). Do not go past this stop.
4. Adjust to any arc between 40°–360°.

Radius Adjustment:

To decrease radius:

1. Turn nozzle-retainer/range-adjustment screw clockwise using hex end of tool or slot screwdriver. This can reduce radius up to 25%.
2. If an even smaller radius is desired, install a smaller nozzle. This will affect precipitation rate.

To increase radius:

1. Turn nozzle-retainer/range-adjustment screw counterclockwise using hex end of tool or slot screwdriver.
2. If larger radius is desired, install larger nozzle. This will affect precipitation rate.

Arc Adjustment:

(All CSP-050 adjustable heads are PRESET to approximately 40°)

1. Rotate the nozzle turret counterclockwise to the left stop.
2. Now, rotate the nozzle turret clockwise to the right stop. This is the fixed side of the arc. The nozzle turret must be held in this position for all arc adjustments.

To increase arc:

1. Insert the key end of the wrench into the adjustment socket on top of the sprinkler.
2. While holding the nozzle turret at the right stop, turn the wrench clockwise.
3. Wrench will stop turning when adjusted to the maximum arc (360°). Do not go past this stop.
4. Adjust to any arc between 40°–360°.

To decrease arc:

1. Insert the key end of the wrench into the adjustment socket.
2. While holding the nozzle turret at the right stop, turn the wrench counterclockwise.

Precipitation Rate Adjustment:

To increase precipitation:

1. Remove existing nozzle.
2. Replace with larger size.
3. Adjust radius.

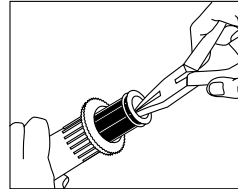
To decrease precipitation:

1. Remove existing nozzle.
 2. Replace with smaller size.
 3. Adjust radius.
- Note: Undamaged nozzles are reusable.

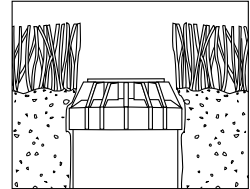
Nozzle Installation:

1. Insert the plastic key end of the wrench into the lifting socket of the sprinkler and turn 90°. Pull the riser up to gain access to the nozzle socket.
2. Using the hex key of the wrench, turn the radius adjustment screw counterclockwise to be sure it is not blocking the nozzle socket opening. If a nozzle is already installed, it can be removed by backing out the adjustment screw and turning on the water, or by prying outward under the nozzle.
3. Slip the desired nozzle into the nozzle socket. Note that the socket is angled up 25° so that the nozzle range screw threads directly down. Then tighten the nozzle range screw. The arrow on the rubber cover will always indicate the location of the nozzle and direction of the water flow when the sprinkler is retracted.

Removing Filter Screen for Cleaning



Proper Installation Height



CSP-050 Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	■ Precip in/hr	▲
.75	30	15'	0.64	0.55	0.63
	40	16'	0.75	0.56	0.65
	50	17'	0.85	0.57	0.65
1.0	30	18'	0.85	0.51	0.58
	40	19'	1.0	0.53	0.62
	50	19'	1.1	0.59	0.68
1.5	30	21'	1.3	0.57	0.66
	40	22'	1.5	0.60	0.69
	50	22'	1.7	0.68	0.78
2.0	30	24'	1.7	0.57	0.66
	40	25'	2.0	0.62	0.71
	50	25'	2.3	0.71	0.82
2.5	30	27'	2.2	0.58	0.67
	40	28'	2.5	0.61	0.71
	50	28'	2.8	0.69	0.79
3.0	30	30'	2.5	0.53	0.62
	40	31'	3.0	0.60	0.69
	50	31'	3.4	0.68	0.79
4.0	30	33'	3.7	0.65	0.76
	40	34'	4.0	0.67	0.77
	50	34'	4.3	0.72	0.83
5.0	30	36'	4.7	0.70	0.81
	40	37'	5.0	0.70	0.81
	50	37'	5.3	0.75	0.86

Note: All precipitation rates calculated for 180 degree operation.
For the precipitation rate for a 360 degree sprinkler, divide by 2.

Data represented test results in zero wind. Adjust for local conditions. Radius may be reduced up to 25% with adjustment screw (this may alter the uniformity of spray pattern).

Optimum performance is shown in bold type.

CSP-050 Nozzle Performance Data – Metric

Nozzle	Pressure Bars	kPa	Radius m	Flow m³/hr	l/min	■ Precip mm/hr	▲
.75	1.7	172	4.3	0.13	2.2	14	17
	2.0	200	4.6	0.14	2.4	14	16
	2.5	248	4.9	0.16	2.7	13	15
	3.0	303	5.2	0.18	3.0	13	15
	3.5	352	5.2	0.19	3.2	14	17
	3.8	379	5.5	0.20	3.4	13	15
1.0	1.7	172	5.2	0.18	3.0	13	15
	2.0	200	5.5	0.19	3.2	13	15
	2.5	248	5.5	0.21	3.5	14	16
	3.0	303	5.8	0.23	3.8	14	16
	3.5	352	5.8	0.24	4.1	15	17
	3.8	379	6.1	0.25	4.2	14	16
1.5	1.7	172	6.1	0.27	4.5	15	17
	2.0	200	6.4	0.29	4.8	14	16
	2.5	248	6.4	0.32	5.4	16	18
	3.0	303	6.7	0.36	6.0	16	18
	3.5	352	6.7	0.39	6.4	17	20
	3.8	379	7.0	0.40	6.7	16	19
2.0	1.7	172	7.0	0.34	5.6	14	16
	2.0	200	7.3	0.37	6.2	14	16
	2.5	248	7.3	0.42	7.1	16	18
	3.0	303	7.6	0.48	8.0	17	19
	3.5	352	7.6	0.53	8.8	18	21
	3.8	379	7.9	0.56	9.3	18	20
2.5	1.7	172	7.9	0.46	7.6	15	17
	2.0	200	8.2	0.49	8.1	14	17
	2.5	248	8.2	0.54	9.0	16	18
	3.0	303	8.5	0.59	9.8	16	19
	3.5	352	8.5	0.63	10.5	17	20
	3.8	379	8.8	0.65	10.9	17	19
3.0	1.7	172	8.8	0.51	8.5	13	15
	2.0	200	9.1	0.56	9.3	13	15
	2.5	248	9.1	0.64	10.6	15	18
	3.0	303	9.4	0.72	12.0	16	19
	3.5	352	9.4	0.78	13.1	18	20
	3.8	379	9.8	0.82	13.7	17	20
4.0	1.7	172	9.8	0.80	13.3	17	19
	2.0	200	10.1	0.83	13.8	16	19
	2.5	248	10.1	0.89	14.8	18	20
	3.0	303	10.4	0.94	15.7	17	20
	3.5	352	10.4	0.98	16.3	18	21
	3.8	379	10.7	1.00	16.7	18	20
5.0	1.7	172	10.7	1.02	17.0	18	21
	2.0	200	11.0	1.06	17.6	18	20
	2.5	248	11.0	1.11	18.5	18	21
	3.0	303	11.3	1.17	19.4	18	21
	3.5	352	11.3	1.21	20.1	19	22
	3.8	379	11.6	1.23	20.5	18	21

Note: All precipitation rates calculated for 180 degree operation.
For the precipitation rate of a 360 degree sprinkler, divide by 2.

CSP-075 INSTALLATION:

The CSP-075 pop-up sprinkler should be installed at finished grade as shown in the illustration (Fig. 1).

Arc Adjustments:

Adjustable heads are preset to approximately 180°. Sprinklers may be adjusted with water on or off. It is recommended that initial adjustments be made before installation.

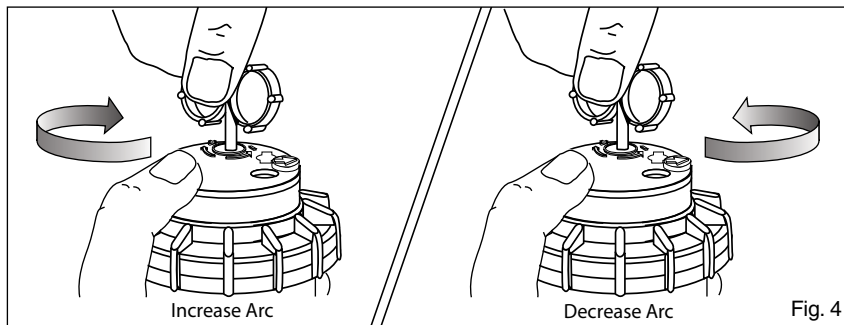
1. Using the palm of your hand, rotate the nozzle turret counterclockwise to the left stop to complete any interrupted rotation cycle (Fig. 2).
2. Rotate the nozzle turret clockwise to the right stop. This is the fixed side of the arc. The nozzle turret must be held in this position for arc adjustments. The right stop does not change.

To Increase the Arc:

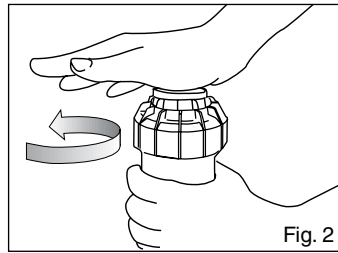
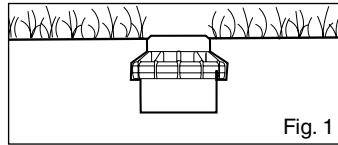
1. Insert the plastic key end of the wrench into the adjustment socket (Fig. 3 & 4).
2. While holding the nozzle turret at the right stop, turn the wrench clockwise. Each full 360° turn of the wrench will increase the arc 90°.
3. Adjust to any arc between 50° and 360° (Fig. 5).
4. The wrench will stop turning, or there will be a ratcheting noise, when the maximum arc of 360° (full circle) has been reached.
5. **When set to 360, the sprinkler will rotate continually counterclockwise.**

To Decrease the Arc:

1. Insert the plastic key end of the wrench into the adjustment socket (Fig. 3 & 4).
2. While holding the nozzle turret at the right stop, turn the wrench counterclockwise. Each full 360° turn of the wrench will decrease the arc 90°.
3. Adjust to any arc between 50° and 360° (Fig. 5).
4. The wrench will stop turning, or there will be a ratcheting noise, when the minimum arc of 50° has been reached.



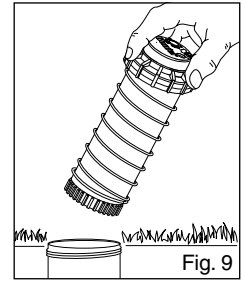
Note: It is not necessary to disassemble the sprinkler to make adjustments.



ALIGNING THE RIGHT (FIXED) SIDE OF ARC

If the right side of the arc is not properly aligned, the results may be a wet walkway or a dry turf area. The right side arc can easily be realigned. One way to realign the right stop is to turn the whole sprinkler body assembly and the fitting below it, left or right to the desired position. This may require temporary removal of the soil around the sprinkler to allow you to grip the sprinkler housing.

Another way to reset the right arc is to unscrew the body cap counterclockwise and remove the internal assembly from the body. Once removed, rotate the nozzle turret to the right stop, screw the internal assembly back into the body with the nozzle aligned to the right side of the area you want irrigated (Fig. 9). At this point you have realigned the right arc stop, and you can adjust the left arc to an appropriate setting.



Note: It is not necessary to dig up and remove the whole sprinkler to realign the right arc.

NON-REVERSING 360

This CSP-075 sprinkler is designed as a part- and full-circle in one model. When the sprinkler is adjusted to the full-circle position, the sprinkler will rotate in a continuous counterclockwise direction. This saves everyone from stocking additional full-circle only models while efficiently irrigating the landscapes.

NON-STRIPPABLE BACKDRIVE

This CSP-075 sprinkler is designed with an internal device that prevents damage to the internal gear drive if it should be turned by vandals. This important feature works when the nozzle turret is turning in either direction. This makes the sprinkler very durable in all applications.

AUTO ARC RETURN

This CSP-075 sprinkler is designed with an internal device that re-aligns the arc if it is turned by vandals. This important feature works when the nozzle turret is turning in either direction. When forced outside of the originally set arc, the sprinkler takes the shortest path back to the pattern without going completely around. This saves the non-irrigated areas from getting wet! Always a good thing!

