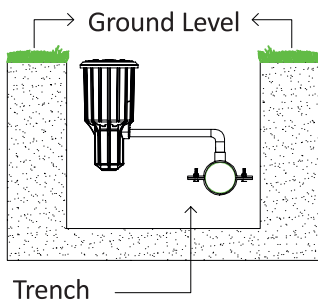




# Sure Throw™ Pop-Up Impact Sprinkler

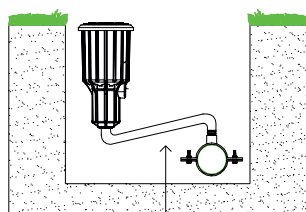
## INSTALLATION INSTRUCTIONS

### Option One:



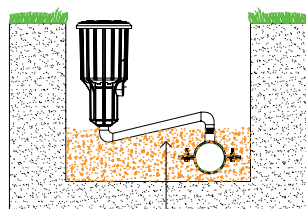
Connect the water pipe to pop-up side inlet.

### Option Two:



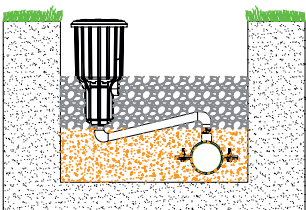
a) Connect the water pipe to pop-up bottom inlet through the swing assembly.

Swing Joint

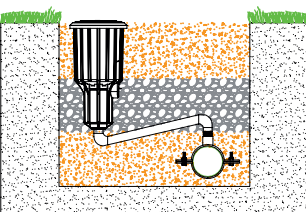


b) Fill the bottom layer with sand.

Swing Joint



c) Fill the second layer with gravel/ small stones.

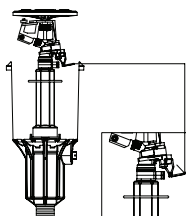


d) Fill the third layer with sand/ excavated soil.

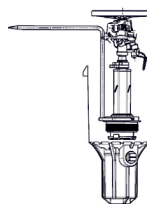
## MAINTENANCE



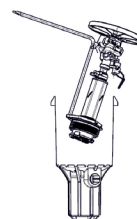
**a) Raise Cover**  
Insert Key and lift inner mechanism as shown.



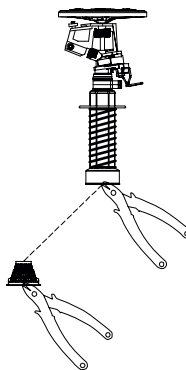
**b) Lift Slip Spring**  
Lift slip spring as shown.



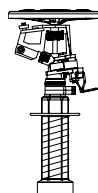
**c) Insert The Wrench**  
Insert wrench into housing from the right side of the sprinkler (near the diffuser screw) as shown. Ensure that bottom of wrench handle completely support the cover.



**d) Removing Sprinkler Assembly**  
Turn anti-clock wise to unscrew stem and sprinkler assembly, and lift out of housing.



**e) Removing Filter**  
Remove filter and clean by flushing with water use pliers for filter remove as shown to disassemble and reassemble the sprinkler.



**f) To Re-assemble**  
Insert complete assembly and turn clock wise. Lower slip spring and remove wrench.

## PERFORMANCE DATA

NOZZLE Size/Color	PRESSURE			FLOW RATE			RADIUS		PRECIPITATION			
	PSI	kPa	Bars	GPM	L/M	M <sup>3</sup> /H	Ft.	M.	in/hr		mm/hr	
									■	▲	■	▲
2.9 ●	28	196	2,0	2.0	7,6	0,46	37	11,3	0.28	0.33	7	8
	36	245	2,5	2.2	8,5	0,51	39	11,8	0.28	0.34	7	9
	43	294	2,9	2.5	9,3	0,56	39	11,9	0.32	0.36	8	9
	50	343	3,4	2.7	10,1	0,60	39	12,0	0.34	0.38	8	10
	57	392	3,9	2.8	10,8	0,65	40	12,3	0.33	0.39	9	10
3.2 ●	28	196	2,0	2.4	9,4	0,57	37	11,4	0.34	0.40	9	10
	36	245	2,5	2.8	10,6	0,64	39	11,9	0.35	0.41	9	10
	43	294	2,9	3.0	11,7	0,70	40	12,3	0.36	0.42	9	11
	50	343	3,4	3.3	12,6	0,76	39	12,0	0.41	0.44	10	11
	57	392	3,9	3.5	13,4	0,81	41	12,6	0.39	0.46	10	12
3.5 ● Standard Nozzle Size	28	196	2,0	2.9	11,3	0,68	38	11,5	0.40	0.47	10	12
	36	245	2,5	3.3	12,7	0,76	39	12,0	0.41	0.48	11	13
	43	294	2,9	3.7	14,1	0,85	41	12,4	0.43	0.50	11	13
	50	343	3,4	3.9	16,1	0,91	42	12,7	0.43	0.51	11	13
	57	392	3,9	4.2	16,3	0,98	42	12,8	0.46	0.55	12	14
4.0 ●	28	196	2,0	3.7	14,4	0,87	38	11,6	0.50	0.58	13	15
	36	245	2,5	4.2	16,0	0,96	39	12,0	0.52	0.61	13	15
	43	294	2,9	4.5	17,4	1,04	41	12,5	0.52	0.61	13	15
	50	343	3,4	4.9	18,8	1,13	42	12,8	0.53	0.63	14	16
	57	392	3,9	5.2	19,9	1,19	42	12,8	0.56	0.67	15	17

\*Precipitation based on half circle operation.

■ Square spacing based on 50% diameter of throw.

▲ Triangular spacing based on 50% diameter of throw.

## SPECIFICATIONS

- Inlet: 1/2" and 3/4" female threaded inlet, 1/2" female threaded side inlet
- Arc adjustment range: 15° to full 360° adjustable
- Flow range: 2.0 – 5.2 GPM (7,6 – 19,9 L/M)
- Pressure rating: 28 – 57 PSI (2,0 – 3,9 Bars)
- Precipitation rate: 0.28 – 0.56 in/hr (7 – 17 mm/hr)
- Radius: 37' – 42' (11,3 – 12,8 m)
- Nozzle trajectory: 25°
- Recommended spacing: up to 39' (12 m)
- Overall height (popped down): 9.4" (23.9 cm)
- Riser height: 2.6" (6.5 cm)

## MODEL

- ST-IS45** Sure Throw™ Pop-Up Impact Sprinkler
- ST-IS45-TOOL** Tool, Sure Throw™ Impact Sprinkler

## OPTIONAL POP-UP TOOL

Pop-up tool use for open in idle condition as well as circle adjustment in running condition, dismantle for maintenance.



To dismantle for maintenance or arc adjustment in field (either in running condition or in idle condition):



To lift the pop-up in idle condition:



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 FAX: 1-561-842-9493  
[www.krain.com](http://www.krain.com)