

INSTALLATION INSTRUCTIONS

I-80 GEAR-DRIVEN ROTORS

Hunter®

I-80 Arc Adjustments

Adjustments (not for "ON" opposing-nozzle models)

All I-80 adjustable arc rotors are preset to approximately 180°. Sprinklers can be adjusted with water on or off. It is recommended that initial arc adjustments be made before installation.

- 1 Use your hand to rotate the nozzle turret counterclockwise to the left stop to complete any interrupted rotation cycle.
- 2 Next, 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.
- 3 The ratchet feature allows the right fixed stop to be moved when water is off. Pull the riser up, grab the riser below adjustment ring, and rotate the right fixed arc stop to the desired landscape alignment.

To Increase Arc

- 1 Slide the adjustment wrench P/N 382800SP onto the gray adjustment ring below the nozzle turret (Figure 1).
- 2 While holding the nozzle turret at the right stop, turn the wrench counterclockwise.
- 3 Adjust to any arc between 70° and 360°. The wrench will stop turning when the maximum arc (360°) is reached. When set to 360°, the sprinkler will rotate continually counterclockwise.

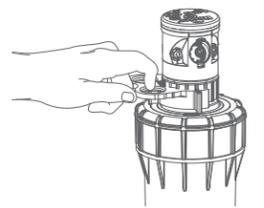


Figure 1

To Decrease Arc

- 1 Slide the adjustment wrench P/N 382800SP onto the gray adjustment ring below the nozzle turret.
- 2 If the arc is set to less than 360°, hold the nozzle turret at the right stop and turn the wrench clockwise.
- 3 If the arc is set to 360°, turn the wrench clockwise. Then proceed with #2 above to complete the adjustment.
- 4 Adjust to any arc between 60° and 360°. The wrench will stop turning when the minimum arc (50°) is reached.

Radius Adjustments

Individual I-80 nozzles cannot be adjusted to reduce the radius. To change the radius, install a larger or smaller nozzle.

Primary Nozzle Removal and Installation

- 1 Insert the hex-key end of the Hunter wrench into the primary nozzle "arrow" located on the top of the rubber cover.
- 2 Raise the nozzle-retainer screw by turning counterclockwise. Raise the screw until the screw clears nozzle opening.
- 3 Using small needle-nose pliers, firmly insert tip of pliers into the opening below the nozzle (Figure 2). This action will collapse the nozzle's retaining hook (Figure 3). While gripping the nozzle, pull outward to remove.
- 4 Slip the desired nozzle firmly into the nozzle socket. Lower the nozzle-retainer screw to retain the nozzle.

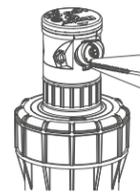


Figure 2



Figure 3

Short-Range/Mid-Range Nozzle Removal and Installation

- 1 Reference the I-80 and I-80-ON performance charts to determine the correct nozzle part number and color.
- 2 Use nozzle installation and removal tool P/N 803700SP to service all short-range and mid-range nozzles.
- 3 When facing directly toward the nozzles, short-range nozzles are on the left and mid-range nozzles are on the right. To remove a nozzle, firmly align and press the tool against it while turning counterclockwise (Figure 4).
- 4 To install the nozzle, engage the tool to the nozzle. Then carefully align the nozzle to the housing. Use care to prevent cross-threading and turn clockwise (Figure 5).
- 5 Each short-range and mid-range nozzle has an alignment pointer. Turn the nozzle clockwise until the pointer is facing the 12:00 position (Figure 6).



Figure 4



Figure 5



Figure 6

Stator Adjustments

All I-80 rotors with nozzles #23 through #53 have a manually adjustable stator to control rotation speed (Figure 7).

When the primary nozzle size is changed, the stator must be changed or adjusted to match the nozzle in use. To make stator adjustments, first remove the riser assembly using the instructions below.

- 1 Remove the screen at the base of the riser by grabbing, turning counterclockwise, and lifting away.
- 2 Remove the stator assembly and adjust by turning the black stator plate until the arrow aligns with the nozzle in use (Figure 8).
- 3 Install the stator assembly with the black stator plate facing the screen. Insert the screen and turn clockwise to lock.



Figure 7

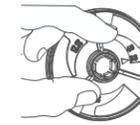


Figure 8

Pop-Up and Riser-Mount Models

All I-80 rotors have a traditional body cap that may be unscrewed to gain riser assembly access. To facilitate easy riser assembly removal, all I-80 rotors also include a removable snap ring on the body cap. To access the riser assembly using the snap ring, use tool P/N 984400SP.

- 1 Insert the tool into the snap ring's access point (Figure 9). Press downward, slightly twist the tool's handle, and pull upward to remove the snap ring (Figure 10).
- 2 Engage the pull-up socket in the riser's logo cap using the Hunter wrench or T-handle tool P/N 319100SP. Pull upward to remove the riser.
- 3 To install the riser assembly, insert the riser into the body. First, install the snap ring's left side. Then press downward in a counterclockwise direction.



Figure 9



Figure 10

Turf Cup Models

All I-80 rotors with turf cups have a removable snap ring on the body cap to facilitate easy riser assembly removal. To gain access to the snap ring, the turf cup must be removed first.

- 1 Pull the turf cup upward using flat-nosed pliers. Hold the riser assembly in the popped-up position.
- 2 Slide the adjustment wrench P/N 991300SP onto the gray or black adjustment ring below the nozzle turret. Then release the cup downward (Figure 11 and Figure 12).
- 3 Hold the turret with the tool in one hand and the riser and turf cup in the other. Remove the cup with a quick counterclockwise turn and lift away (Figure 13).
- 4 Use the Hunter wrench or T-handle tool P/N 319100SP to engage the pull-up socket in riser's retainer cap (Figure 14).
- 5 Lift the riser assembly slightly while removing the adjustment wrench P/N 991300SP. Then lower the riser assembly into position (Figure 15).

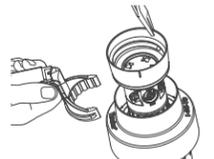


Figure 11



Figure 12



Figure 13

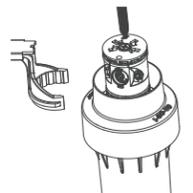


Figure 14



Figure 15



Figure 16

Use the pop-up riser removal instructions below to complete riser removal and installation.

- 1 To install the turf cup to the top of the riser, the cup must be correctly aligned with the top of the riser assembly.
- 2 Locate the protruding vertical indicator on the outside of the turf cup's vertical surface near the top (Figure 16).
- 3 While holding the turf cup over the riser assembly, orient the turf cup's indicator mark to the riser's nozzle retaining screw.
- 4 While maintaining this orientation, place the turf cup onto the top of the riser. Then turn quickly clockwise to lock the cup to the riser.

PERFORMANCE DATA

I-80 GEAR-DRIVEN ROTORS



I-80-ON NOZZLE PERFORMANCE DATA*

Nozzle Set	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr			
				■	▲		
● Tan 803611	● Green 23	● Lt. Blue 315311	50 60 65 70 80	63 65 66 67 68	21.6 23.0 24.0 24.9 26.6	0.52 0.52 0.53 0.53 0.55	0.60 0.61 0.61 0.62 0.64
● Tan 803611	● Blue 25	● Lt. Blue 315311	65 70 80 90 100	71 73 74 75 77	28.6 29.7 31.7 33.7 35.8	0.55 0.54 0.56 0.58 0.58	0.63 0.62 0.64 0.67 0.67
● Tan 803611	● Gray 33	● Lt. Blue 315311	65 70 80 90 100	74 75 77 79 81	30.9 32.0 34.2 36.2 38.2	0.54 0.55 0.56 0.56 0.56	0.63 0.63 0.64 0.64 0.65
● Tan 803611	● Red 38	● Lt. Blue 315311	65 70 80 90 100	77 79 82 84 87	35.1 36.6 38.9 41.3 43.6	0.57 0.56 0.56 0.56 0.55	0.66 0.65 0.64 0.65 0.64
● Tan 803611	● Dk. Brown 43	● Lt. Blue 315311	70 80 90 100	83 85 87 89	41.3 43.6 46.3 48.8	0.58 0.58 0.59 0.59	0.67 0.67 0.68 0.68
● Tan 803611	● Dk. Green 48	● Lt. Blue 315311	70 80 90 100	90 92 94 96	46.9 48.9 50.5 53.5	0.56 0.56 0.55 0.56	0.64 0.64 0.63 0.65
● Tan 803611	● Dk. Blue 53	● Lt. Blue 315311	70 80 90 100	91 93 95 97	49.8 52.2 55.5 58.5	0.58 0.58 0.59 0.60	0.67 0.67 0.68 0.69

● = Nozzle plug P/N 315300 installed in the front side of the nozzle housing.

I-80 NOZZLES



I-80 NOZZLE PERFORMANCE DATA*

Nozzle Set	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr			
				■	▲		
● Orange 803603	● Tan 23	● Lt. Green 315313	50 60 65 70 80	64 65 66 67 69	22.1 20.2 22.1 24.2 25.9	0.52 0.46 0.49 0.51 0.52	0.60 0.53 0.56 0.59 0.60
● Orange 803603	● Blue 25	● Green 315313	65 70 80 90 100	71 72 73 74 75	28.3 29.3 31.5 33.4 35.4	0.54 0.54 0.57 0.59 0.61	0.62 0.63 0.66 0.68 0.70
● Orange 803603	● Gray 33	● Green 315313	65 70 80 90 100	72 73 75 77 79	30.6 31.6 33.9 35.8 37.9	0.57 0.57 0.58 0.58 0.58	0.66 0.66 0.67 0.67 0.67
● Orange 803603	● Red 38	● Green 315313	65 70 80 90 100	76 78 80 82 84	34.9 36.2 39.1 41.2 43.5	0.58 0.57 0.59 0.59 0.59	0.67 0.66 0.68 0.68 0.69
● Orange 803603	● Dk. Brown 43	● Green 315313	70 80 90 100	81 83 86 89	41.2 43.5 46.2 48.7	0.60 0.61 0.60 0.59	0.70 0.70 0.69 0.68
● Orange 803603	● Dk. Green 48	● Dk. Green 315313	70 80 90 100	83 85 89 91	46.3 48.4 51.7 54.5	0.65 0.64 0.63 0.63	0.75 0.74 0.73 0.73
● Orange 803603	● Dk. Blue 53	● Dk. Green 315313	70 80 90 100	87 89 92 94	50.7 53.1 56.4 59.6	0.64 0.65 0.64 0.65	0.74 0.75 0.74 0.75

● = Indicates installed nozzle plug P/N 315300

* Complies with ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral.

I-80-ON NOZZLE PERFORMANCE DATA*

Nozzle Set	Pressure bar	Pressure kPa	Radius m	Flow		Precip mm/hr			
				m³/hr	l/min	■	▲		
● Tan 803611	● Green 23	● Lt. Blue 315311	3.4 4.1 4.5 4.8 5.5	344 413 450 482 551	19.2 19.8 20.1 20.4 20.7	4.91 5.22 5.45 5.66 6.04	81.8 87.1 90.8 94.3 100.7	13.3 13.3 13.5 13.6 14.1	15.4 15.4 15.6 15.7 16.2
● Tan 803611	● Blue 25	● Lt. Blue 315311	4.5 4.8 5.5 6.2 6.9	450 482 551 620 689	21.6 22.3 22.6 22.9 23.5	6.50 6.75 7.19 7.65 8.12	108.3 112.5 119.8 127.5 135.3	13.9 13.6 14.1 14.6 14.7	16.0 16.0 16.3 16.9 17.0
● Tan 803611	● Gray 33	● Lt. Blue 315311	4.5 4.8 5.5 6.2 6.9	450 482 551 620 689	22.6 22.9 23.5 24.1 24.7	7.02 7.27 7.77 8.22 8.68	117.0 121.1 129.5 137.0 144.6	13.8 13.9 14.1 14.2 14.2	15.9 16.1 16.3 16.4 16.4
● Tan 803611	● Red 38	● Lt. Blue 315311	4.5 4.8 5.5 6.2 6.9	450 482 551 620 689	23.5 24.1 25.0 25.6 26.5	7.97 8.31 8.84 9.38 9.90	132.9 138.5 147.3 156.3 165.0	14.5 14.3 14.1 14.3 14.1	16.7 16.6 16.3 16.5 16.3
● Tan 803611	● Dk. Brown 43	● Lt. Blue 315311	4.8 5.5 6.2 6.9	482 551 620 689	25.3 25.9 26.5 27.1	9.38 9.90 10.52 11.09	156.3 165.0 175.3 184.7	14.7 14.8 15.0 15.1	16.9 17.0 17.3 17.4
● Tan 803611	● Dk. Green 48	● Lt. Blue 315311	4.8 5.5 6.2 6.9	482 551 620 689	27.4 28.0 28.7 29.3	10.65 11.11 11.46 12.15	177.5 185.1 191.0 202.5	14.2 14.1 14.0 14.2	16.3 16.3 16.1 16.4
● Tan 803611	● Dk. Blue 53	● Lt. Blue 315311	4.8 5.5 6.2 6.9	482 551 620 689	27.7 28.3 29.0 29.6	11.31 11.86 12.61 13.29	188.5 197.7 210.1 221.4	14.7 14.8 15.0 15.2	17.0 17.0 17.4 17.6

I-80 NOZZLES



I-80 NOZZLE PERFORMANCE DATA

Nozzle Set	Pressure bar	Pressure kPa	Radius m	Flow		Precip mm/hr			
				m³/hr	l/min	■	▲		
● Orange 803603	● Lt. Green 315313	● Lt. Green 315313	3.4 4.1 4.5 4.8 5.5	344 413 450 482 551	19.8 20.1 20.4 20.4 21.0	4.59 5.02 5.43 5.50 5.88	76.5 83.7 90.5 91.6 98.0	11.7 12.4 13.0 13.2 13.3	13.5 14.3 15.0 15.2 15.4
● Orange 803603	● Blue 25	● Lt. Green 315313	4.5 4.8 5.5 6.2 6.9	450 482 551 620 689	21.6 21.9 22.3 22.6 22.9	6.43 6.66 7.16 7.59 8.04	107.1 110.9 119.2 126.4 134.0	13.7 13.8 14.5 14.9 15.4	15.8 16.0 16.7 17.2 17.8
● Orange 803603	● Gray 33	● Lt. Green 315313	4.5 4.8 5.5 6.2 6.9	450 482 551 620 689	21.9 22.3 22.9 23.5 24.1	6.95 7.18 7.70 8.13 8.61	115.8 119.6 128.3 135.5 143.5	14.4 14.5 14.7 14.8 14.8	16.7 16.7 17.0 17.0 17.1
● Orange 803603	● Red 38	● Lt. Green 315313	4.5 4.8 5.5 6.2 6.9	450 482 551 620 689	23.2 23.8 24.4 25.0 25.6	7.93 8.22 8.88 9.36 9.88	132.1 137.0 148.0 156.0 164.7	14.8 14.5 14.9 15.0 15.1	17.1 16.8 17.2 17.3 17.4
● Orange 803603	● Dk. Brown 43	● Lt. Green 315313	4.8 5.5 6.2 6.9	482 551 620 689	24.7 25.3 26.2 27.1	9.36 9.88 10.49 11.06	156.0 164.7 174.9 184.3	15.4 15.4 15.3 15.0	17.7 17.8 17.6 17.4
● Orange 803603	● Dk. Green 48	● Lt. Green 315313	4.8 5.5 6.2 6.9	482 551 620 689	25.3 25.9 27.1 27.7	10.52 10.99 11.74 12.38	175.3 183.2 195.7 206.3	16.4 16.4 16.0 16.1	19.0 18.9 18.4 18.6
● Orange 803603	● Dk. Blue 53	● Lt. Green 315313	4.8 5.5 6.2 6.9	482 551 620 689	26.5 27.1 28.0 28.7	11.52 12.06 12.81 13.54	191.9 201.0 213.5 225.6	16.4 16.4 16.3 16.5	18.9 18.9 18.8 19.0

● = Indicates installed nozzle plug P/N 315300

* Complies with ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral.