

Talon™ Series Rotor Operations and Maintenance Manual

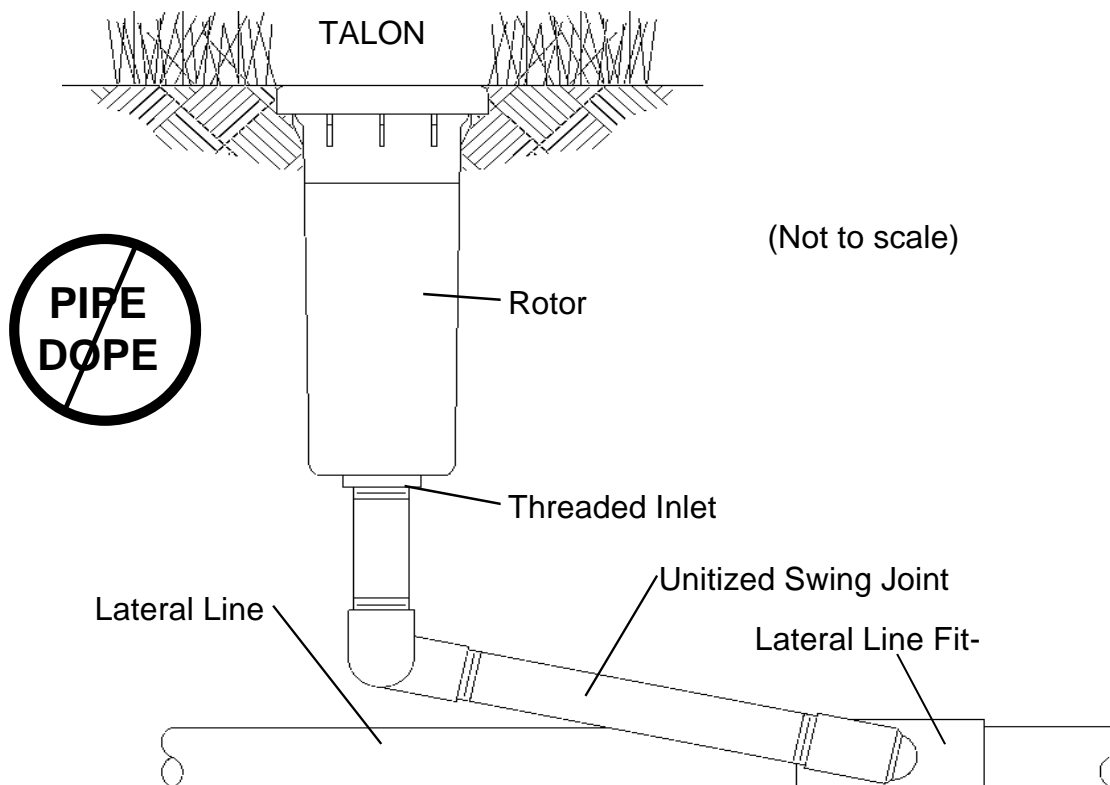
IMPORTANT INSTALLATION / MAINTENANCE TIPS

We are aware that you have a choice and we're happy you chose Rain Bird.

The Talon™ rotor offers a wide range of features plus easy maintenance.

This manual shows how to perform common installation and maintenance procedures. If you have any comments or questions, please call your local Rain Bird distributor, or

- Flush the system prior to installing the head on the swing joints (or pipe riser) to avoid debris problems.
- For NPT and BSP thread configurations: Apply 2-2 1/2 wraps of teflon tape to the threaded pipe connection. Do not use pipe dope.
- Thread the rotor onto the thread connection and securely hand tighten, making sure the top of the rotor is level.
- Part-circle application: Locate the fixed left edge by rotating the nozzle turret counterclockwise.
- Talon™ rotors may be installed at ground level in all soil types.
- International users: According to FFF specifications, rotors should be installed 2.5 cm lower than ground level.



ARC ADJUSTMENT

Required Tool: Flat-head screwdriver

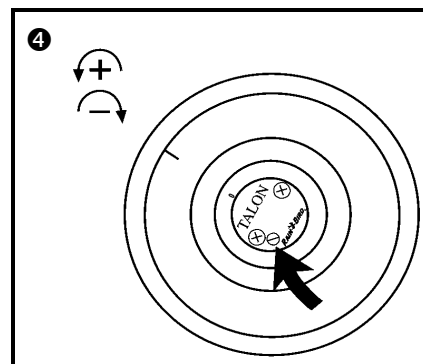
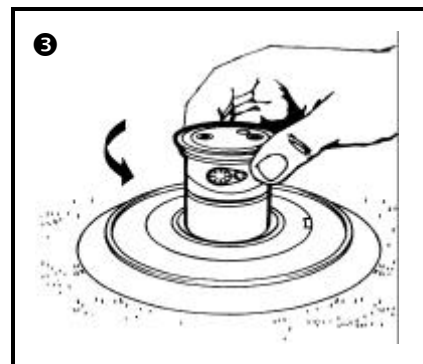
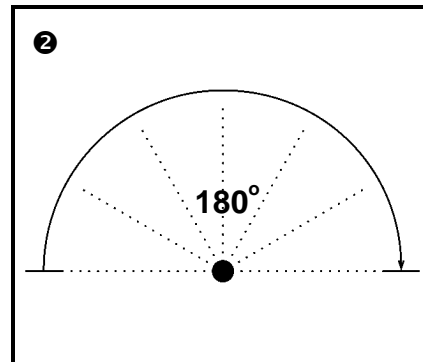
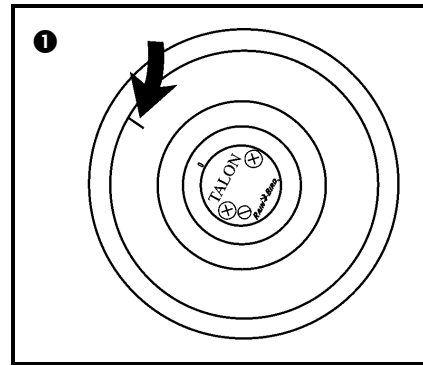
❶ On all talon part-circle rotors, the LEFT edge of the sprinkler's arc is fixed. The alignment mark shows where the left edge is placed.

❷ The **RIGHT** edge of the arc is adjustable. It is shipped from the factory at approximately 180 degrees arc.

❸ For best results, turn the head ON to see where both edges trip. To manually advance the nozzle housing, *SLOWLY* move it in the same direction it is currently moving. After noting where the head trips, return the head to the left trip point.

❹ Using a flat-head screwdriver, turn the arc adjustment screw on top of the nozzle housing. Turn the screw counterclockwise to add arc, or clockwise to subtract arc. One complete turn of the adjustment screw is approximately 90 degrees of adjustment.

Turn the head on and let it run through the forward and backward trip points, to verify the arc setting. Repeat steps 1 through 4 as needed. You may also pull the internal assembly out of the rotor and adjust the arc. Then, reinstall and check for performance.



REMOVING THE INTERNAL ASSEMBLY

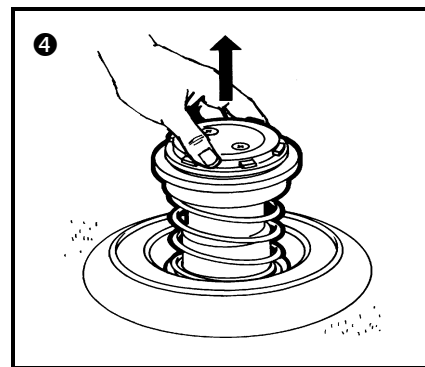
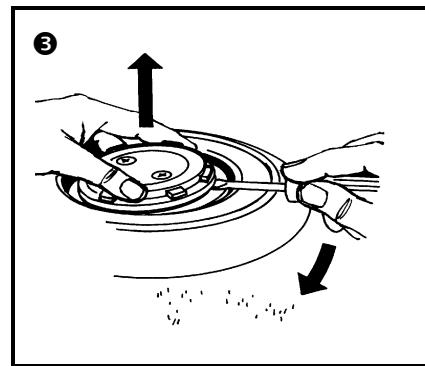
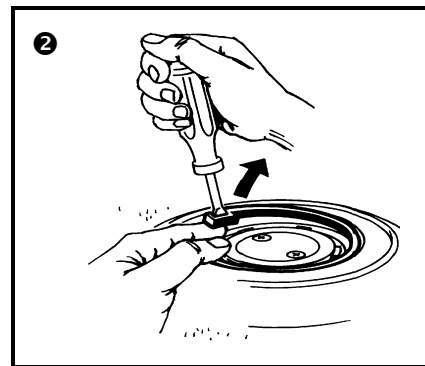
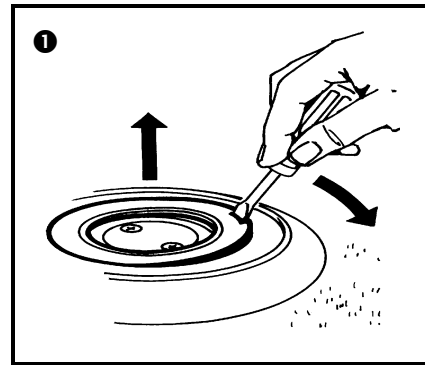
IMPORTANT NOTE:

Make sure the sprinkler does not operate automatically while you are removing the internal assembly, by turning off the water. Before removing the internal assembly always tighten the nozzle housing screws.

Required Tool: Flat-head screwdriver

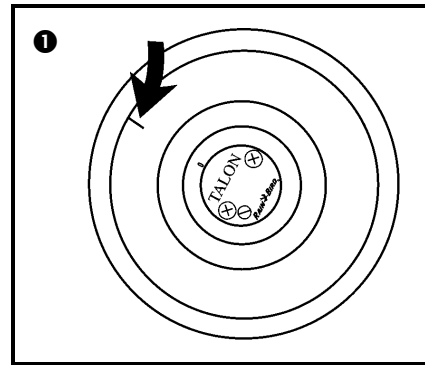
- ❶ Use a small flat-head screwdriver to pry off the snap ring cover.
- ❷ To remove the snap ring, press down firmly on top of the internal assembly. Insert a flat-head screwdriver into the tab on the snap ring. Pull up, twisting slightly, to remove the snap ring.
- ❸ Insert a flat-head screwdriver into the groove on the bearing guide, and gently pry up the internal assembly.
- ❹ Lift the internal assembly up and out of the case.

NOTE: Check the bearing guide O-ring for swelling. If it is swelled (or stretched) allow it to dry out or replace it with a new one.

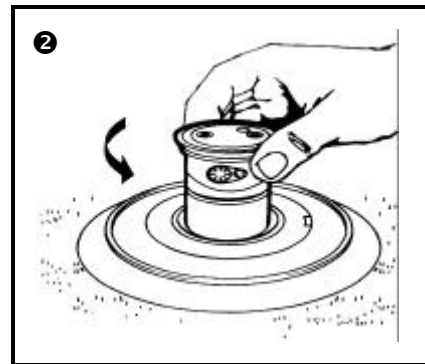


INSTALLING THE INTERNAL ASSEMBLY

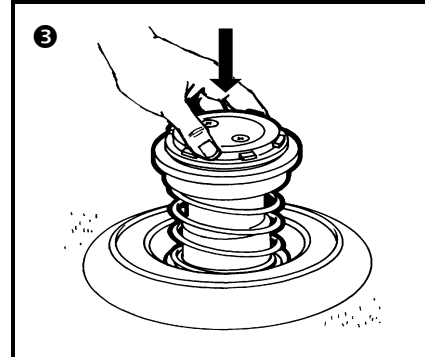
1 2 PART-CIRCLE: Find the left-stop by turning the nozzle housing to the right until it clicks, then back to the left until it clicks again. The location of the arrow on top of the nozzle housing indicates the direction of the nozzle.



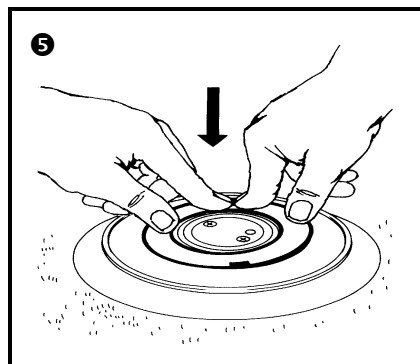
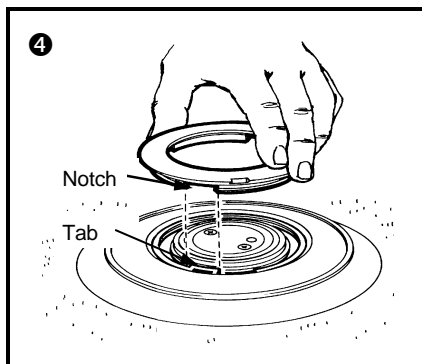
3 Align the arrow with the left edge of the grass line. Then, make your right arc adjustment. Lower the internal assembly back into the case and press down firmly. Place the snap ring in the case with the thick portion facing “down” and allow it to snap into position.



4 5 Align a large notch in the snap ring cover with the tab in the snap ring. Starting near the snap ring tab, press the cover down in a circular motion. Check to be sure that the cover fastens completely in place.



FULL-CIRCLE: Installation of the full-circle internal assembly is the same as the part-circle except that the arc adjustment is not necessary.



REPLACING THE NOZZLE

IMPORTANT NOTE:

Make sure the sprinkler does not operate automatically while you are changing the nozzle, by turning off the water.

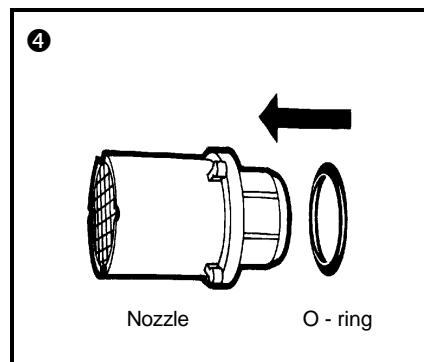
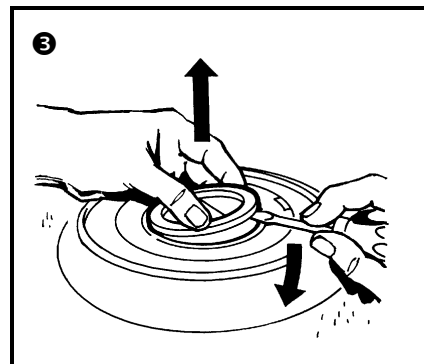
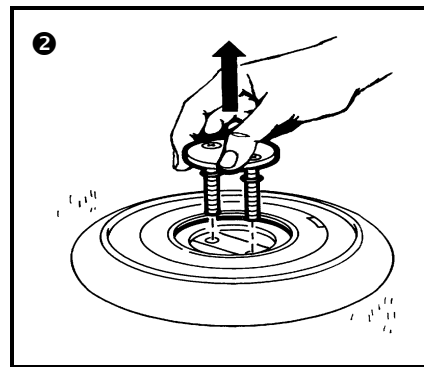
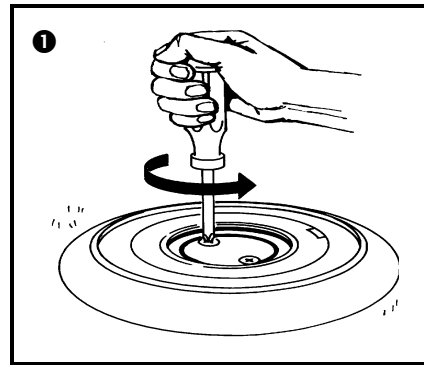
Required Tools: Phillips-head screwdriver.
Flat-head screwdriver

- ❶ Use a Phillips-head screwdriver to loosen the nozzle housing screws.
- ❷ Remove the nozzle housing screws and cover.
- ❸ Use a flat-head screwdriver to pry the nozzle housing out of the case. Then take out the old nozzle. Press the replacement nozzle into the nozzle housing, making sure the nozzle front is flush with the outside of the housing.

CAUTION: If the nozzle is not flush and seated properly in the nozzle housing, performance will be lost.

- ❹ An O-ring seal is required.

NOTE: When you replace a nozzle, you may also need to change the stator to maintain consistent rotation.



REPLACING THE STATOR

IMPORTANT NOTE:

Make sure the sprinkler does not operate automatically while you are changing the stator, by turning off the water.

Required Tool: Flat-head screwdriver

Remove the internal assembly. See instructions on page 3.

❶ Use a flat-head screwdriver to pry the stator and/or internal screen from the internal assembly.

❷ Replace with the appropriate stator size. Position the poppet as required. Snap the new stator / internal screen onto the rotor and place the internal assembly back in the case. See instructions for replacing the nozzle.

NOTE: The purpose of the stator is to control the speed of the rotor. When changing the stator make sure to use all the parts in the nozzle / stator kit.

Nozzle to Stator Settings, Talon 80 and 85

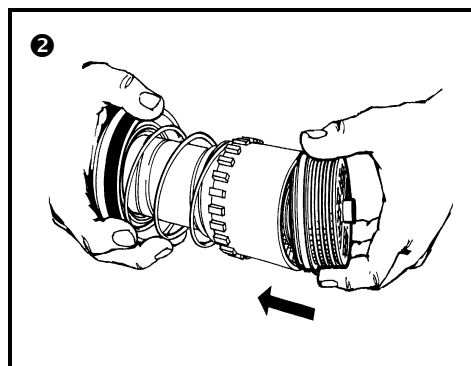
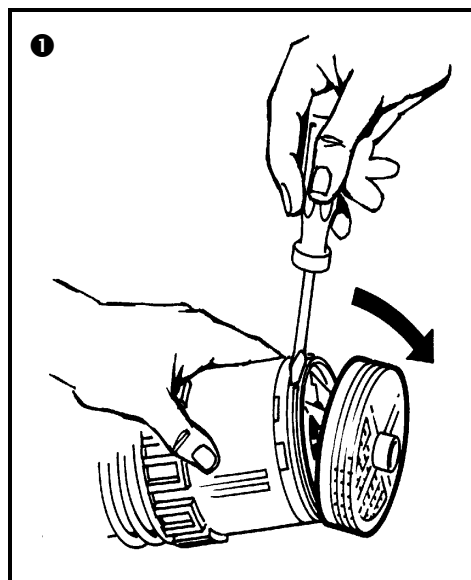
Color	Size	Setting
Red	12	SNP8
White	14	SPC
Blue	16	SPO
Yellow	18	SPO
Orange 20		SNP
Green	22	SNP
Black	24	SNP

SNP8 Stator with 8 holes, no poppet

SPC Stator with poppet closed

SPO Stator with poppet opened

SNP Stator with no poppet



RAIN BIRD®

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TalonTM Series Rotor

Full, or part-circle, closed-case rotor, designed for large commercial and industrial turf areas such as parks, schools, cemeteries and ball fields.

Benefits

Reliable, Tough

- Water-lubricated gear drive provides durable, reliable operation
- Rubber cover for safety on play areas
- Nozzles provide effective close-in watering and large radius, up to 82 feet (25.0 m)
- Larger nozzle sizes deliver water quickly for areas with short watering windows
- Stainless steel riser deters vandalism and resists damage on public turf areas
- Heavy-duty retract spring ensures positive retraction
-

Easy to Use/Maintain

- Single snap ring (removable from the top) makes the Talon rotor easy to maintain or service without digging
- Rotors are pre-nozzled, ready to go straight from the box into the ground for fast installation
- Arc is easy to adjust with a slotted screwdriver from the top of the rotor
- Six color-coded, interchangeable nozzles are easy to identify and stock

Operating Range

- Flow: 11.0 to 39.6 GPM (2.52 to 9.04 m³/h; 0.70 to 2.51 l/s)
- Pressure: 50 to 100 psi (3.5 to 7.0 Bars)
- Radius: 56 to 82 feet (17.1 to 25.0m)

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