

TWILIGHT GOLF POST LIGHT Setup Guide

Thank you for purchasing a Toro Twilight Golf Post Light (TWGP). The lights are ideal for illuminating practice putting greens, among other things. The Setup Guide is provided to assist you with determining the number of lights needed, how to lay them out properly, make all wire connections, install them into the ground, and make light adjustments.

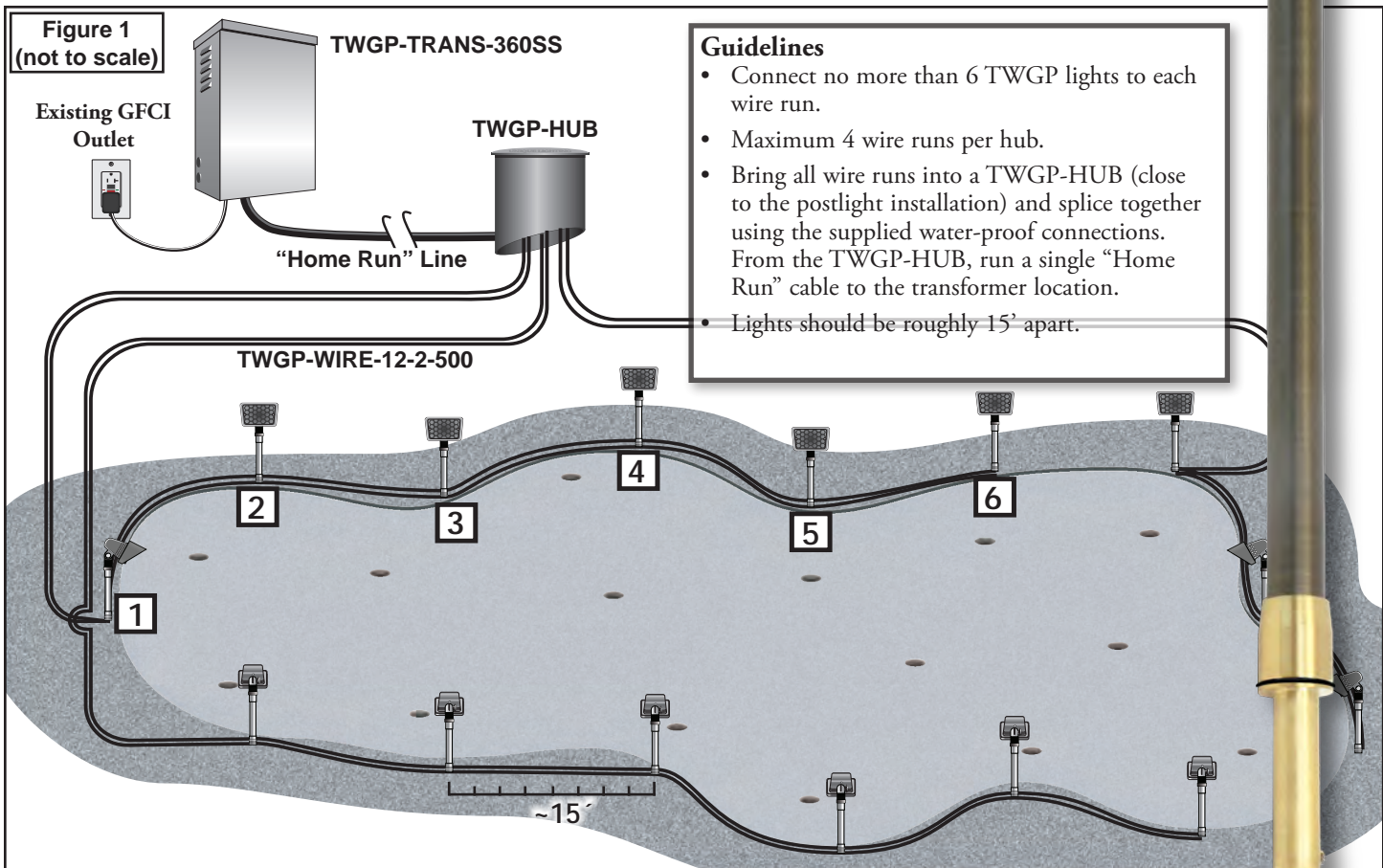
TWGP-STAR36-12-L5

Lighting System Components

Equipment	Part Number	Warranty Period
Transformers	TWGP-TRANS-360SS (Wall Mount) TWGP-TRANS-360DB (Direct Burial) TWGP-TRANS-1120SS (Wall Mount)	Limited lifetime warranty for repair or replacement.
Hub	TWGP-HUB (1 hub for 4 wire runs, 24 light fixtures max.)	3 year
Wire	TWGP-WIRE-12-2-500 (500' per spool)	
Lightpost stake	TWGP-STAKE	3 year
Twilight Golf Postlight	TWGP-STAR36-12-L5	Limited lifetime for repair or replacement. This warranty covers all parts and components with the exception of the lamp.
LED lamp		5 year

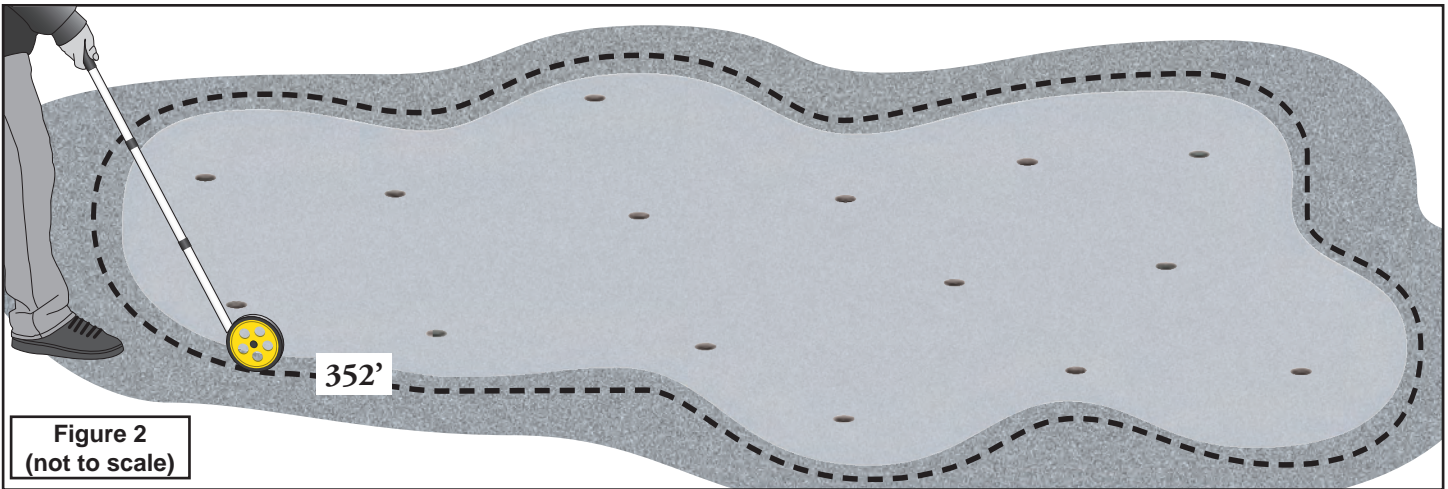
Lighting System Sample Layout

CAUTION: Consult with a qualified electrician and local electrical codes before installing any electrical product.



Determine the Number of Lights Needed and the Spacing

Directions	Example
1. Use a measuring wheel to determine the length of the perimeter of the area to be illuminated.	Perimeter measures 352'.
2. The lights should be roughly 15' apart. Divide the perimeter by 15.	Divide 352 by 15. Equals 23.46.
3. Round that number UP to the nearest whole number. That is the number of lights needed.	Round 23.46 up to 24.
4. Divide the perimeter by the number of lights. That is how far apart the lights should be installed.	Divide 352 by 24. Equals: 14.7'.



Notes Before Installing

Before installing the Twilight Golf Post lights, it is important to keep two things in mind during the installation planning.

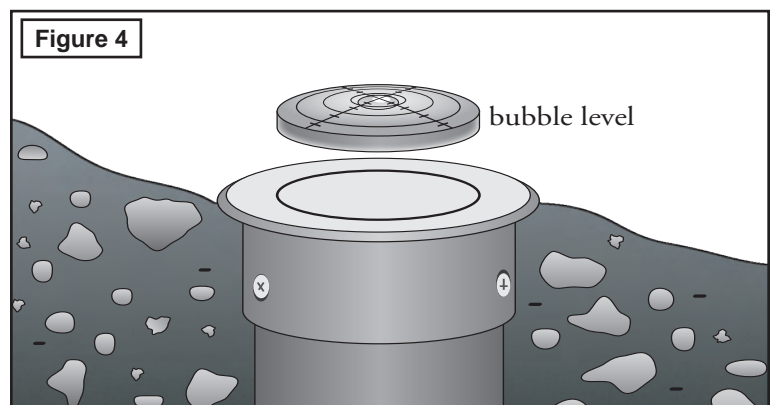
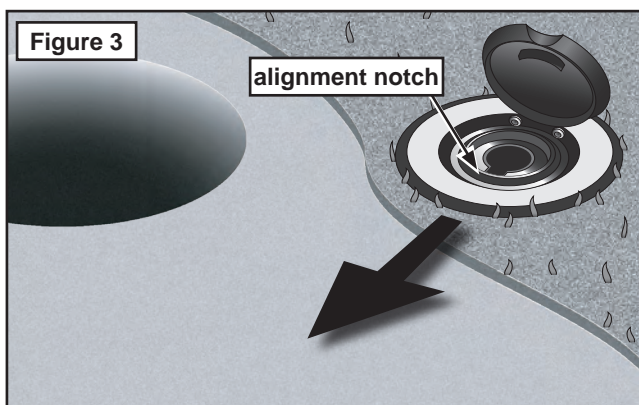
Direction

Before backfilling the hole, rotate the STAKE in the ground so the notch points towards the center of the desired illuminated area.

⚠ WARNING: Do not rotate light post once inserted as this may damage the unit.
(See Figures 8 and 9 for lamp head adjustment.)

Level

Before backfilling, use a bubble level to confirm the TWGP-STAKE is level in the ground. This ensures the light will come out of the ground at 90°.

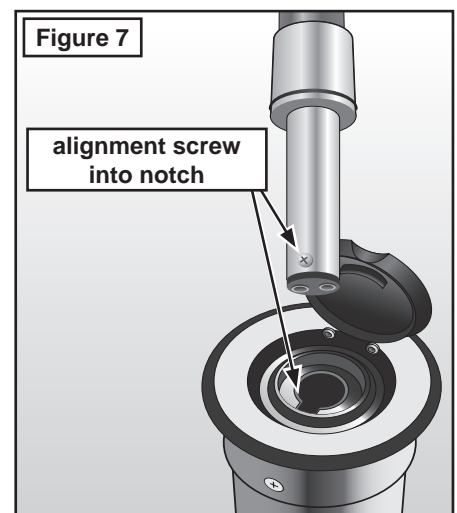
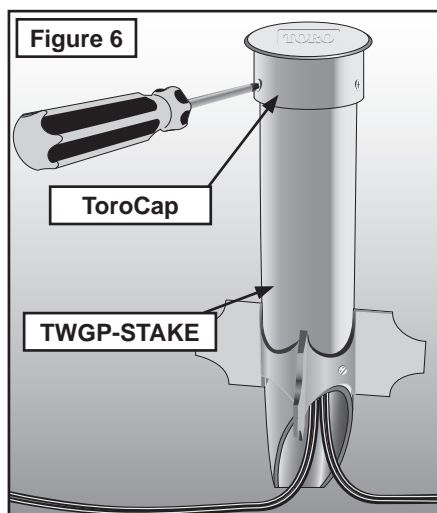
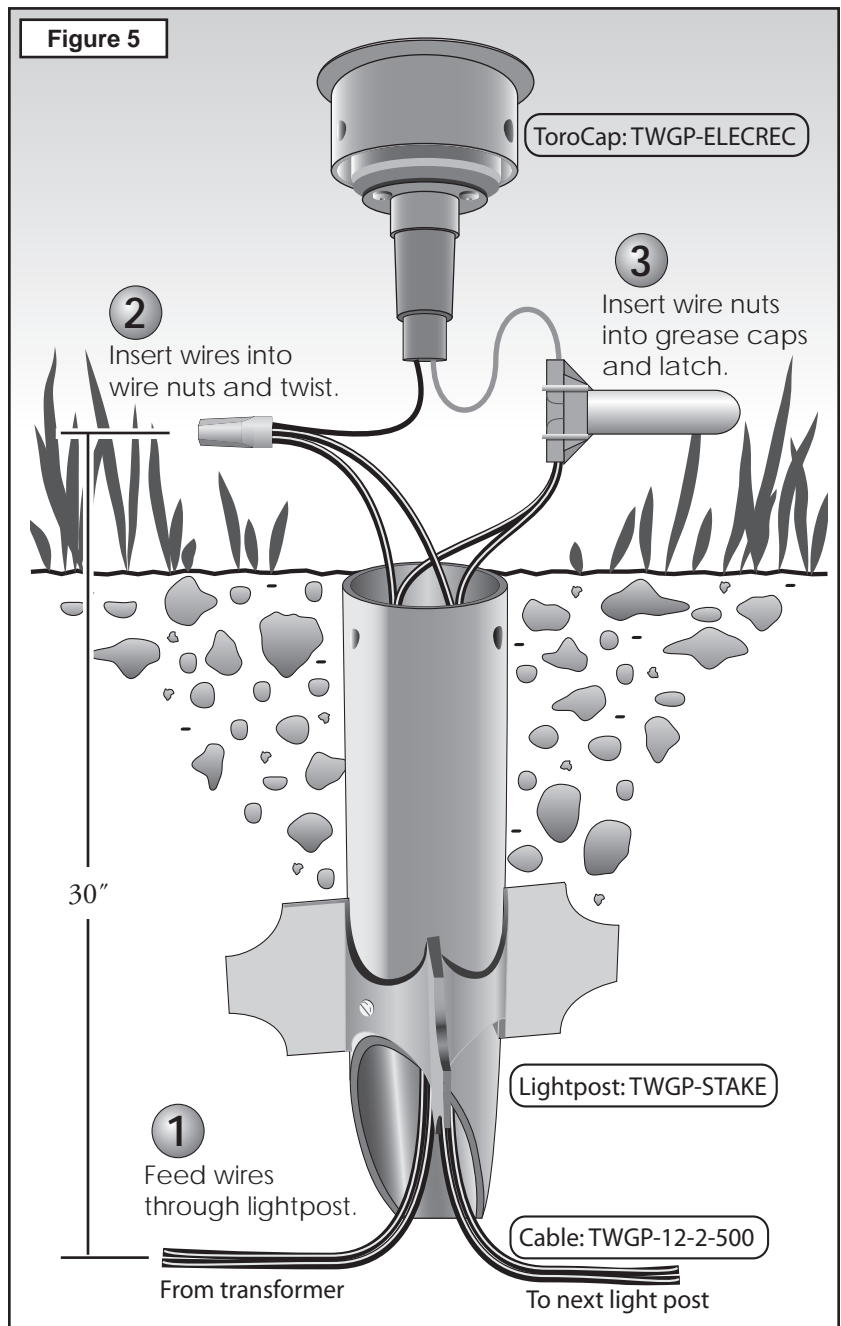


Installing the Twilight Golf Post (TWGP-STAKE)

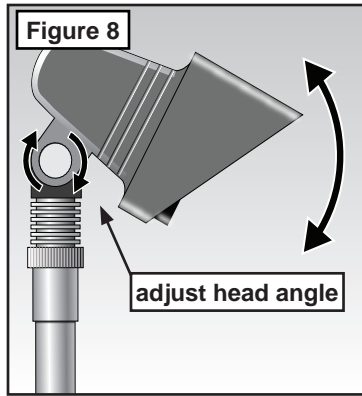
⚠ WARNING: Risk of electric shock. Turn off power before servicing. Install all post lights 10 feet (3.05m) or more from a pool, spa, or fountain.

1. Remove sod and excavate a 12" deep (below aeration depth) trench for the UF supply line cable or conduit and lightpost. The lightpost requires a 10" diameter hole to facilitate installation to a depth of 18".
2. Feed the incoming UF supply line cable or conduit through the slanted bottom of the lightpost (Figure 5-1). Provide 30" of wire from the bottom to allow for future servicing. If wiring multiple light fixtures in a series, make sure you pull the second (continuing) supply wire through the lightpost.
3. Connect the supply wires to the ToroCap's wires using the included wire nuts (Figure 5-2).
4. Encase all wire connections in the supplied water-proof grease caps (Figure 5-3).
5. Push all wires back into the Landscape LightPost and slide ToroCap back on.
6. Align holes on ToroCap with holes on the Lightpost. Start all three included screws, then tighten. (Figure 6).
7. Place the now wired LightPost into the excavated trench and position to the desired height. If wiring multiple fixtures, adjust the incoming and outgoing supply wires or conduit at the bottom of the LightPost so the wires or conduit do not bind.
8. Open the cover-flap on the ToroCap. The Twilight Golf Post Light is keyed with an alignment screw. Align with the slot on the base and insert the light (Figure 7).

(See Figures 8 and 9 for lamp head adjustments.)

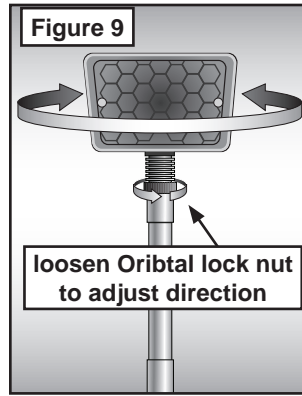


Adjusting the Twilight Golf Post Light (TWGP-STAR36-12-L5)



Head Angle

1. Loosen the brass nut (**Figure 8**) turning it counter-clockwise.
2. Adjust the head to the desired angle.
3. Retighten the brass nut to hold desired angle.

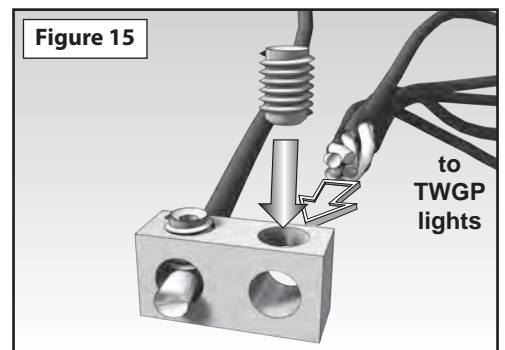
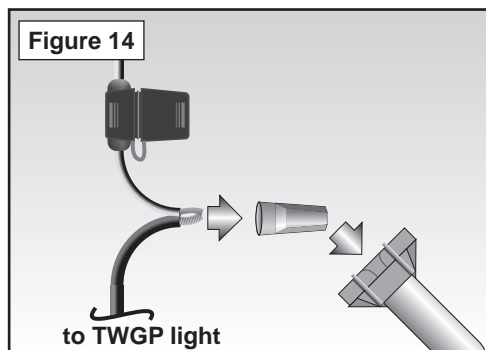
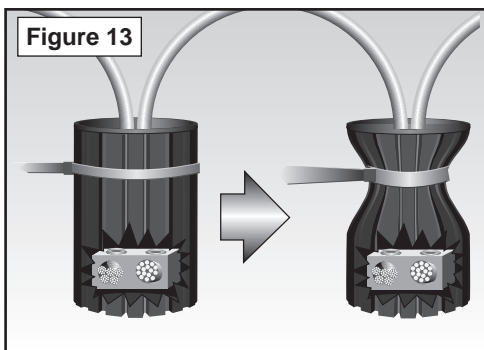
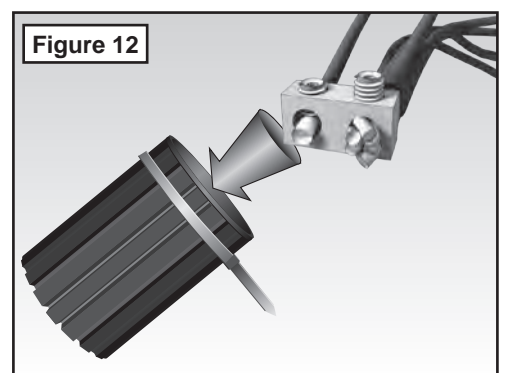
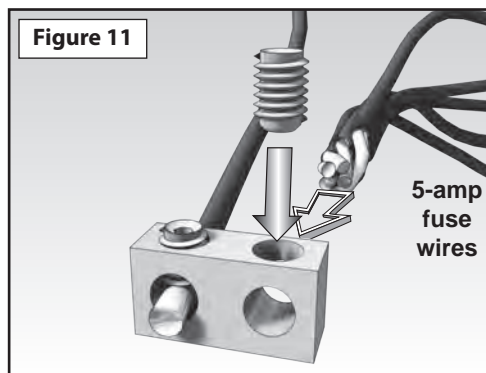
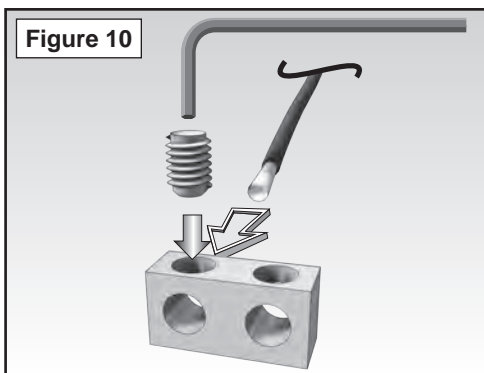


Direction

1. Loosen the Orbital lock nut (**Figure 9**) around the light post.
2. Rotate the head only of the TWGP-STAR to desired direction. *Do not rotate the lightpost as damage may occur.*
3. Tighten Orbital lock nut by hand.

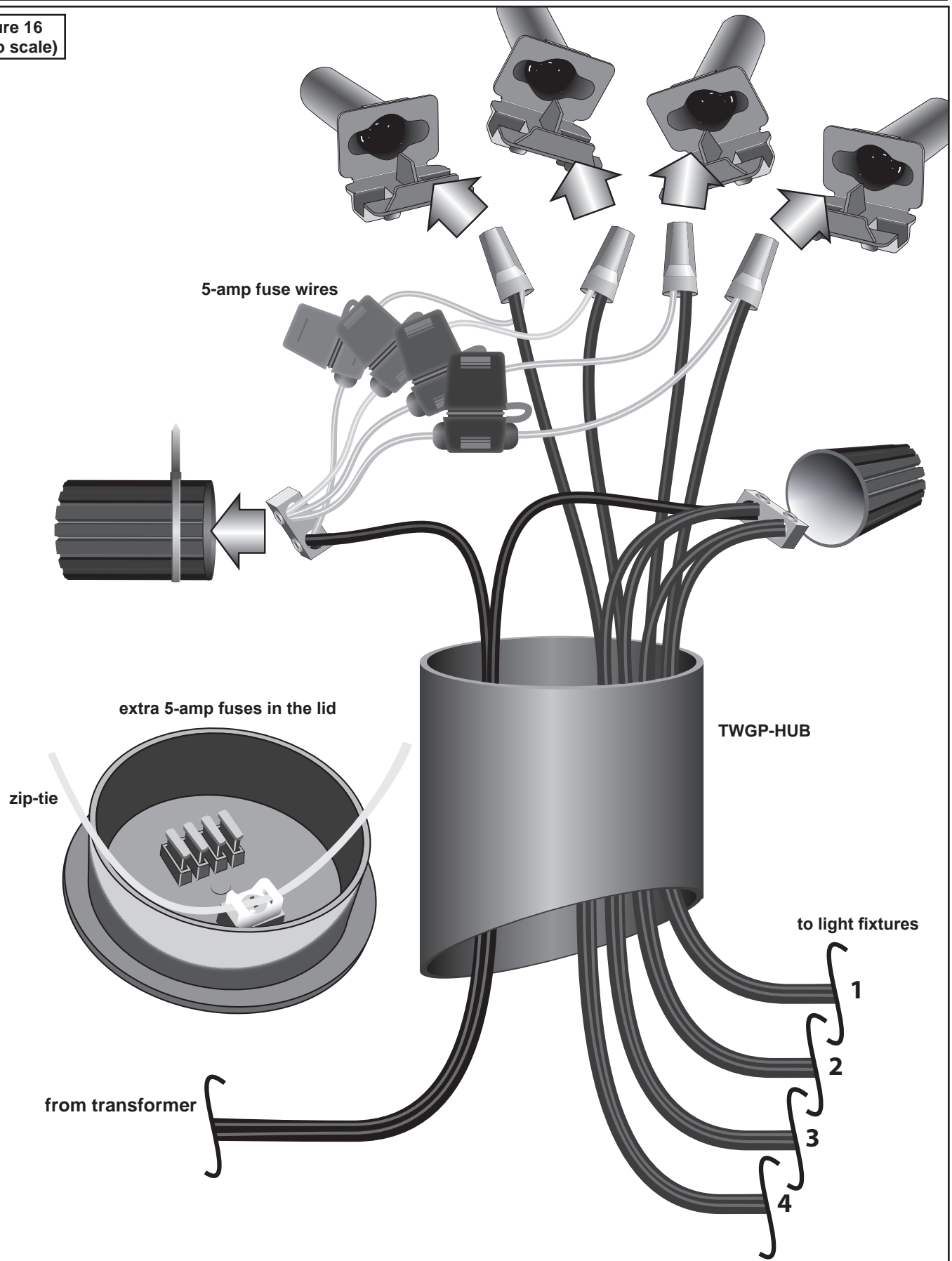
Wiring Inside the Hub

1. Feed all wires into the slanted end of the hub giving 12" of slack to allow for future servicing (**Figure 16**).
2. Strip 1/2" off each transformer wire and feed into an aluminum terminal lug. Tighten with supplied Allen wrench (**Figure 10**).
3. Strip one end of each of the 5-amp fuse wires 1 1/2". Twist the exposed ends together (up to four) (**Figure 11**).
4. Into the same side as the transformer wire of the terminal lug, feed the bundled wires into the other hole. Tighten with an Allen wrench (**Figure 11**). Trim excess.
5. Push the wired terminal lug deep into the supplied grease cap (**Figure 12**).
6. Pull to tighten the zip-tie on the grease cap to secure the terminal lug (**Figure 13**).
7. Twist the other end of the 5-amp fuse wire with one of the brown wires from the light runs (**Figure 14**).
8. Feed the two wires into a provided wire nut (**Figure 14**).
9. Push the wire nut deep into the provided grease cap and close the latch (**Figure 14**).
10. Repeat steps 7-9 for the remaining light run wires.
11. Now, twist the remaining brown TWGP lines together (**Figure 15**).
12. Insert the wired bundle into the other terminal lug, same direction as the transformer line. Tighten with an Allen wrench (**Figure 12**).
13. Push the wired terminal lug deep into the supplied grease cap (**Figure 12**).
14. Tighten the zip-tie on the grease cap to secure the terminal lug (**Figure 13**).
15. Secure wire bundle to bottom of the hub lid using the pre-attached zip-tie (**Figure 16**).
16. Install lid on hub.



Hub Wiring Illustration

Figure 16
(not to scale)



 **CAUTION:** DO NOT OVERLOAD CABLE OR TRANSFORMER. Maintain polarity at all times. Consult with a qualified electrical contractor and local electrical code authorities before installing any electrical product.

Safety and Maintenance Notes

- Use with low-voltage, outdoor lighting system only.
- Lamp is hot when lit. Do not touch when lamp is on.
- Allow fixture to cool before touching or re-lamping fixture.
- Keep away from materials, structures, or landscapes that may burn.
- Do not operate fixture if cover shield is damaged or missing.
- Do not submerge in water.
- Clean fixture with mild soap only. Do not use acid or any other solvent base cleaner.

Specifications

- Lamp: Flex Series 5 Watt LED
- Electrical ratings: 12 VAC, Max 5W MR16 nominal
- 3'6" high from ground to highest point
- Weight – 5.5 lbs.
- 250 lumens
- 2700 Kelvin color temperature
- Solid brass construction
- Light is removeable

Installation Notes

Toro Dedication to Quality

Toro is committed to developing and producing the highest quality, best performing, most dependable products on the market. Because your satisfaction is our first priority, we have provided the Toro Helpline to assist you with any questions or problems that may arise. If for some reason you are not satisfied with your purchase or have questions, please contact your local authorized Toro dealer or e-mail irrigation.support@toro.com.