

MOVING PROPELLER (MP) ALERT SYSTEM KIT INSTALLATION AND OPERATION

Notice

NOTICE
After completing installation, these instructions should be placed with the product for the owner's future use.
NOTICE
This document is written to aid our dealers and company service personnel in the proper installation or service of our products. Persons who are not familiar with these or similar products produced by Mercury Marine, and who have not been trained in the recommended servicing or installation procedures should have the work performed by an authorized Mercury Marine dealer technician. Improper installation or servicing of the Mercury product could result in damage to the product or personal injury to the installer or persons operating the product.

Purpose for Installing this Kit

The intent of this product is to reduce injuries caused by a moving propeller.

Operation

- The moving propeller alert system's visible light is to alert swimmers that the engine is starting or running and the propeller is moving, warning them to stay away from the transom area until the engine is turned off.
- The moving propeller alert lights turn on by a message from the engine computer that signals when the engine has been started and is in gear.
- 40, 50, and 60 hp models - When the engine is in the process of being started, the light will flash. When the engine is running in neutral or shifted into gear, the lights will flash showing rotation similar to how a propeller rotates.
- All models (except 40, 50, and 60 hp) - When the engine is in the process of being started, the light will flash. The light will remain lit while the engine is running in neutral. When the engine is shifted into gear (forward or reverse), the lights will flash showing rotation similar to how a propeller rotates.
- Each moving propeller alert light has a sensor that will dim the light at dusk, to prevent them from being mistaken for a navigation light.
- When the engine reaches approximately 2500 RPM, the lights will turn off to eliminate any distractions a spinning light may cause while cruising.

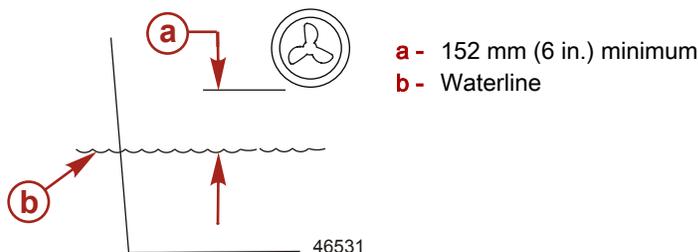
Selecting the Location for the Lights

IMPORTANT: The lights must be clearly visible to the people in the water that are near the vicinity of the boat's propeller.

NOTE: Some boat designs and different boat applications along with different engine configurations may require more than one lights.

The following should be considered while selecting a mounting location on the stern of the boat for the lights:

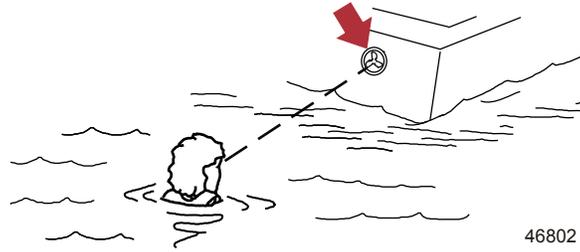
- The lights should be mounted above the waterline 152 mm (6 in.) minimum, if possible, when the boat is not in motion and with normal passenger load.



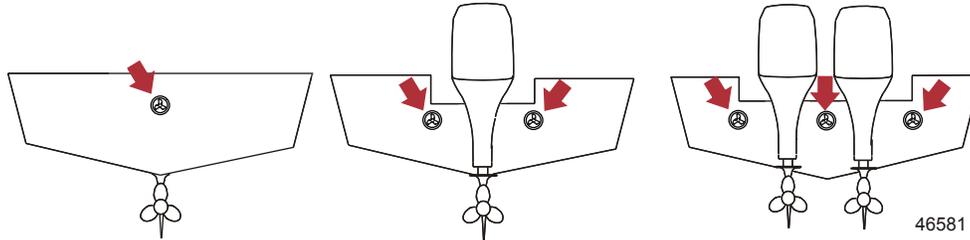
- The lights should be mounted in an area that is clearly visible to people in the water (swimmers, skiers) that are in the vicinity of the boat's propeller or any watercraft approaching the rear of the boat.

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- Verify the location for the lights allows a direct line-of-sight to the people in the water that are in the vicinity of the boat's propeller. Check that the lights will not get obstructed from view by the engine/drive (steered lock to lock), ladders, swim platform, etc.

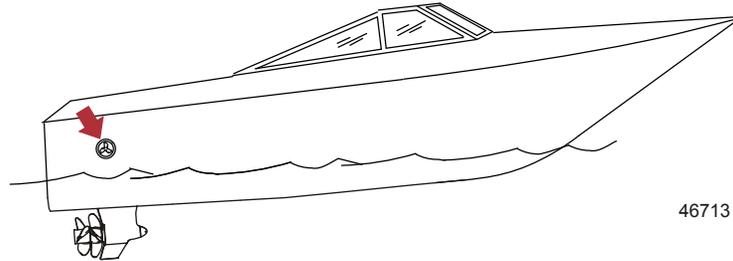


- Additional lights are recommended to provide full coverage of any obstructed areas. The system is designed to use one to six lights.



Possible light arrangements on the stern of the boat

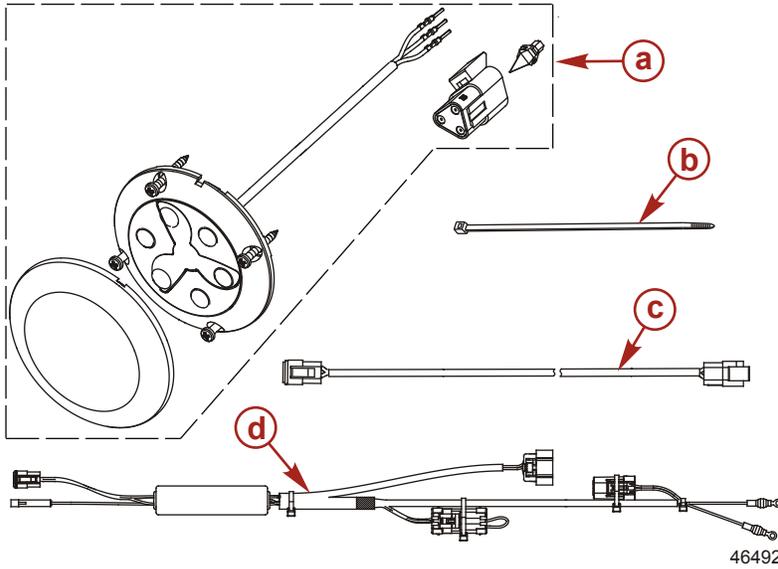
- Boats equipped with pod drives and sterndrives with Axis Control System - Boats with pod drives and Axis Control Systems can be maneuvered (steered) in all directions. Adding an additional light on each side of the boat along with the lights on the stern can help alert the people in the water whenever the drives are in gear and the boat could be moving in any direction.



Boat with pod drives and sterndrives with Axis Control Systems - additional light on each side of boat

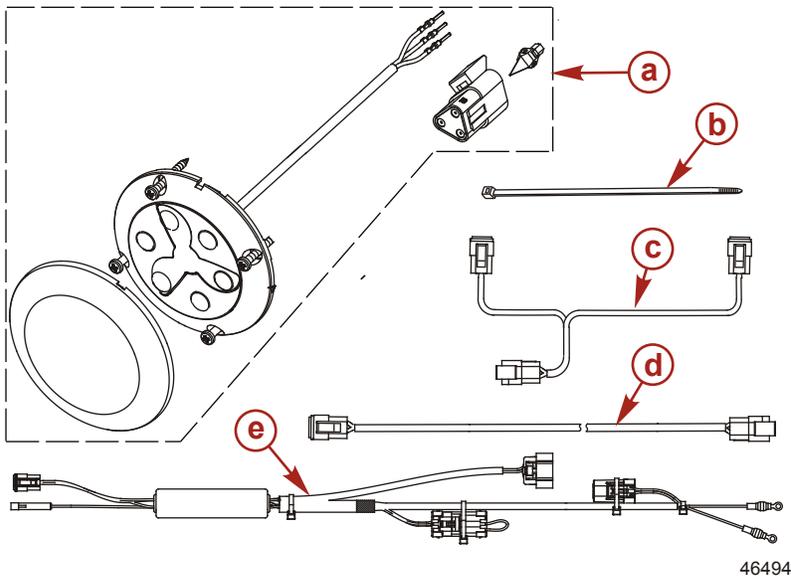
Components in Kit

Kit 8M0052290



- a - Light assembly
- b - Cable tie (2)
- c - Extension harness
- d - Module harness

Kit 8M0052291



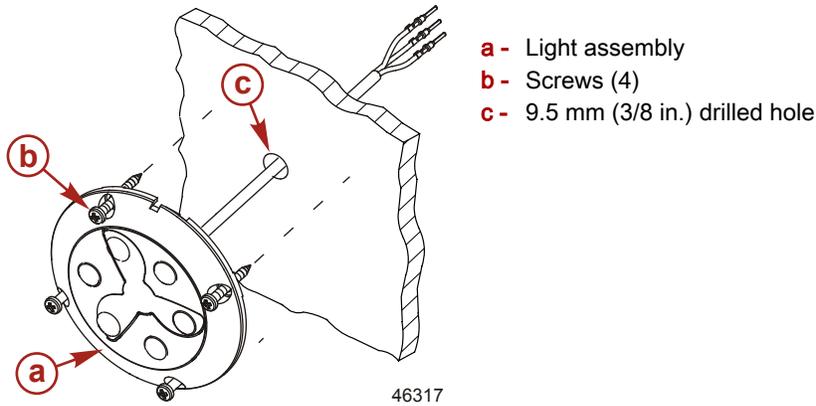
- a - Light assembly (2)
- b - Cable tie (2)
- c - Y harness
- d - Extension harness
- e - Module harness

Installing the Light Assembly

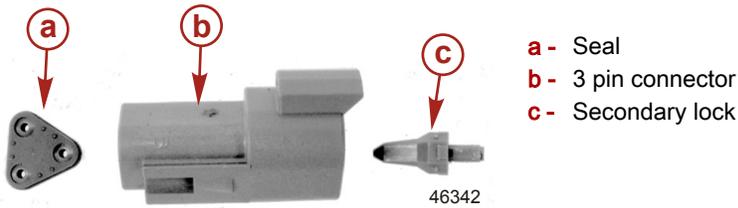
1. Refer to **Selecting the Location for the Lights** preceding and select a mounting location for the light.
2. Drill a 9.5 mm (3/8 in.) hole in the center of the selected location for the light assembly.

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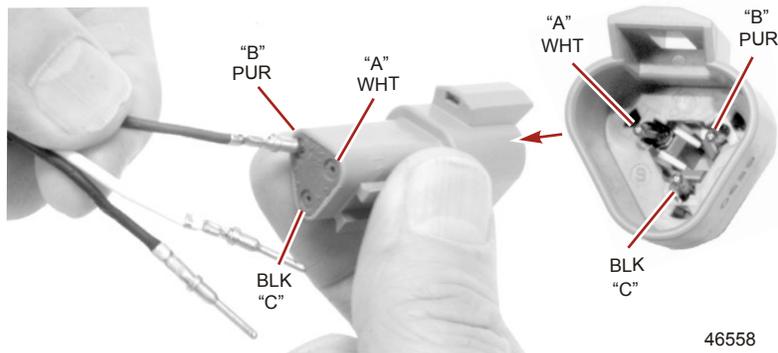
3. Drill four pilot holes for the fastening screws provided. Apply marine sealer into the pilot holes and fasten the light assembly with four screws.



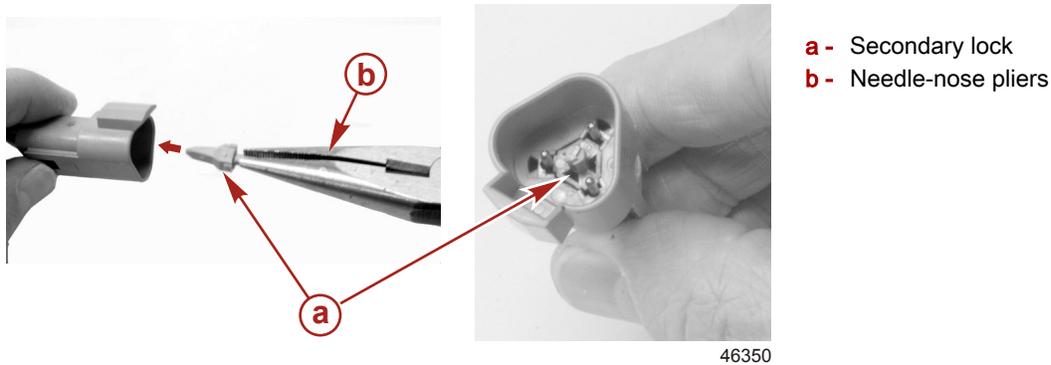
4. Install the 3 pin connector onto the wiring harness as follows:



- a. Insert the wire terminals through the seal and into the connector. Push the wire terminals in until they snap (lock) in place.

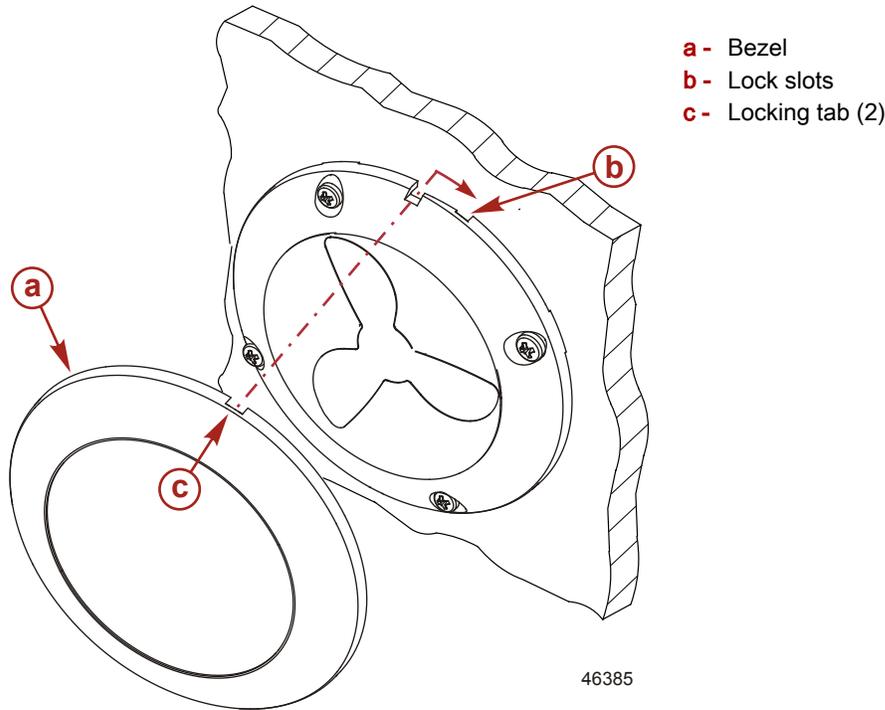


- b. Insert the secondary lock into the connector.



IMPORTANT: The bezel, once installed, cannot be removed. Verify the installation of the light is complete before installing the bezel. Attempting to remove the bezel after installation will damage the bezel and also the light.

- Place the bezel onto the light so that both locking tabs insert into the notches. Rotate the bezel to the right (tighten) until the locking tabs snap into the lock slots.



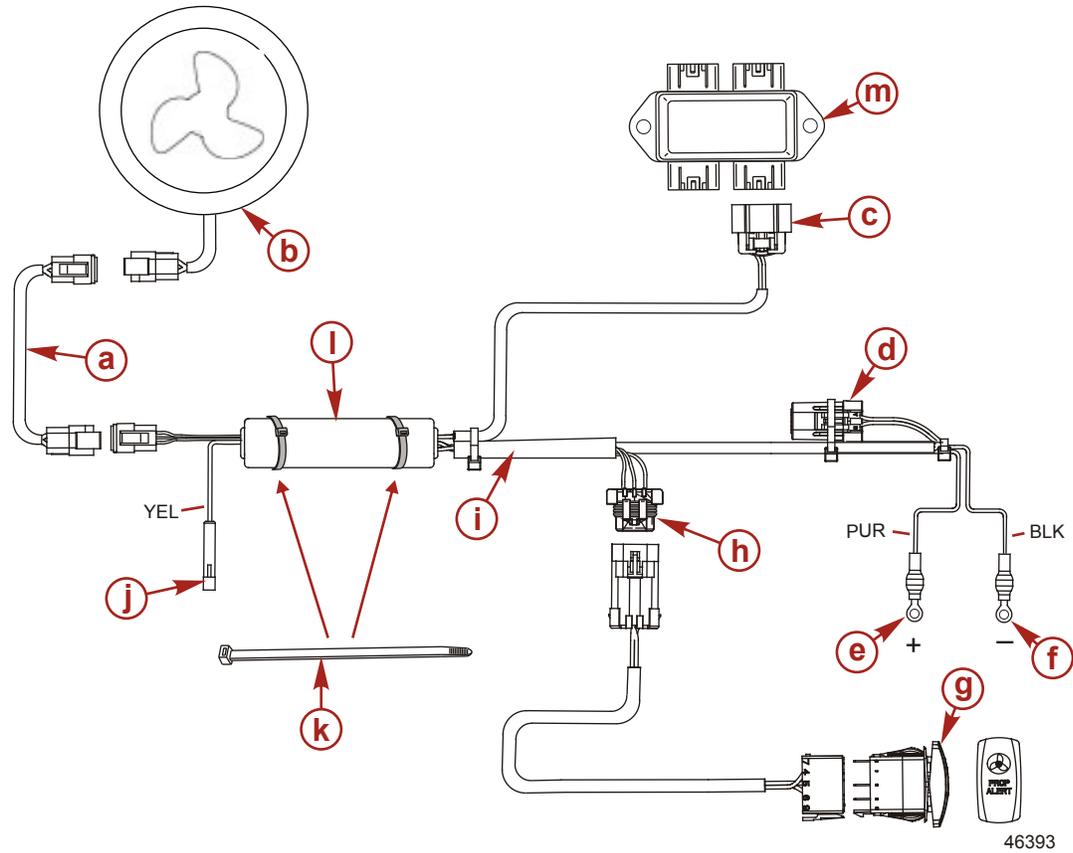
Wire Color Code Abbreviations

Wire Color Abbreviations				
BLK	Black		BLU	Blue
BRN	Brown		GRY	Gray
GRN	Green		ORN or ORG	Orange
PNK	Pink		PPL or PUR	Purple
RED	Red		TAN	Tan
WHT	White		YEL	Yellow
LT or LIT	Light		DK or DRK	Dark

Wiring

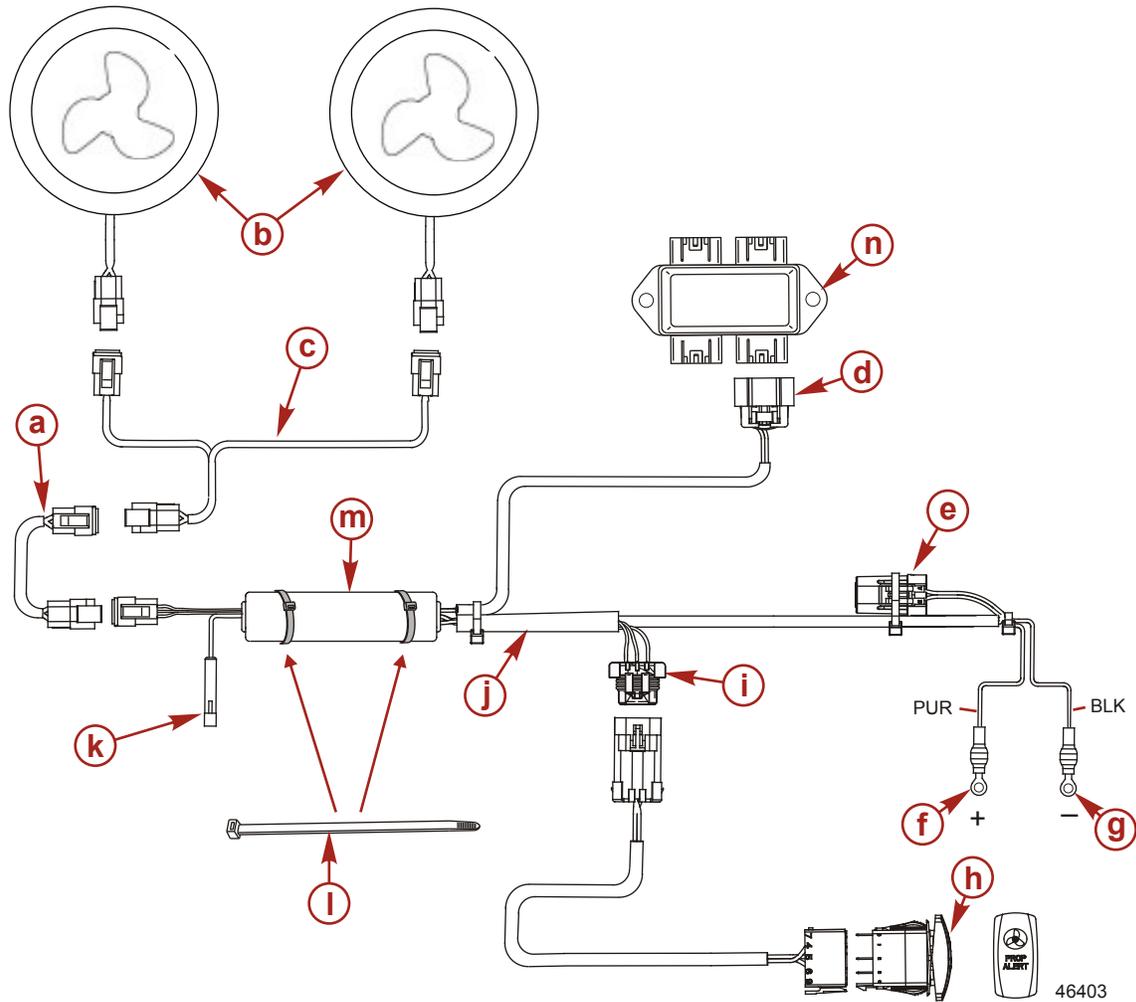
- Connect the purple wire to an ignition switch activated 12 volt source. On multiengine boats, the purple wire is to be connected to the multiengine wake circuit. The moving propeller alert light must turn on with any ignition switch.
- Connect the black wire to a common engine ground.
- Connect the 10 pin connector to the SmartCraft junction box.
- Connect one end of the extension harness to the lights and the other end to the module.
- Fasten the module to an adjacent harness with the cable ties provided.
NOTE: The 5 amp fuse holder (see wiring diagrams) should be accessible for service.
- Secure the harness along the routing path. Fasten the wiring within 25.4 cm (10 in.) of each connection.
IMPORTANT: Avoid sharp bends in the wire harness. The minimum bend radius should not be less than 7.6 cm (3 in.).
- Models with Skyhook (boat positioning system) - connect the yellow wire into the skyhook warning horn circuit so that when the Skyhook system is activated (shifts into gear) the MP alert light will flash in a spinning rotation. This replaces the warning horn.
- Verify that there is sufficient slack in the wiring to prevent stress on the connections and wire harness.

9. Refer to the following wiring diagrams for the proper wiring connections.



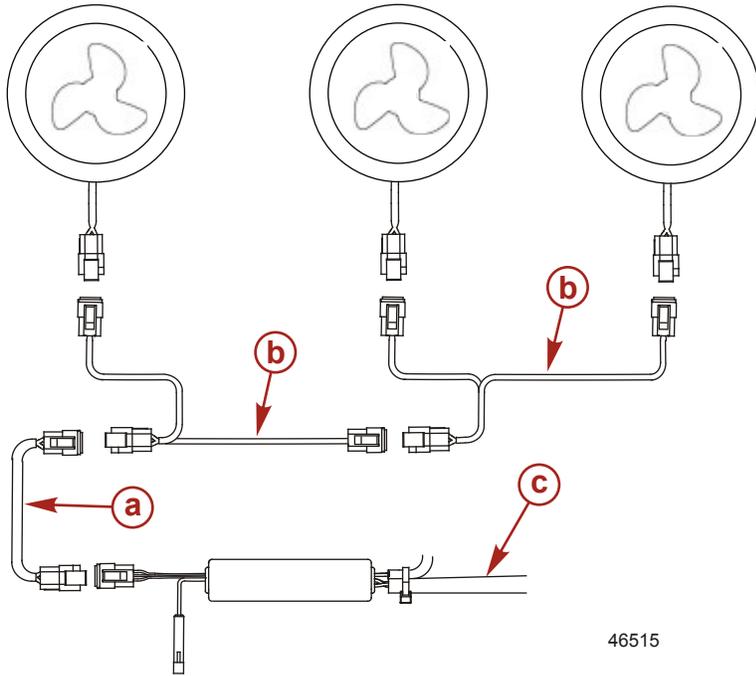
Single light system

- a** - Extension harness
- b** - Light assembly
- c** - SmartCraft junction box connection
- d** - 5 amp fuse holder
- e** - Ignition switch activated 12 volt source
- f** - Engine ground
- g** - Accessory ON/OFF switch (if equipped)
- h** - Accessory ON/OFF switch 3 pin connection
- i** - Module harness
- j** - Skyhook (boat positioning system) connection
- k** - Cable tie (2) - fasten module to an adjacent harness
- l** - Module
- m** - SmartCraft junction box (existing)

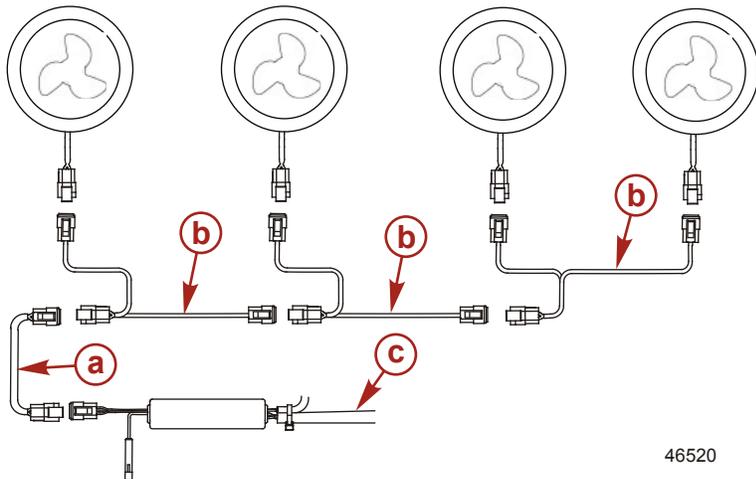


Two light system

- a** - Extension harness
- b** - Light assembly
- c** - Y harness
- d** - SmartCraft junction box connection
- e** - 5 amp fuse holder
- f** - Ignition switch activated 12 volt source
- g** - Engine ground
- h** - Accessory ON/OFF switch (if equipped)
- i** - Accessory ON/OFF switch 3 pin connection
- j** - Module harness
- k** - Skyhook (boat positioning system) connection
- l** - Cable tie (2) - fasten module to an adjacent harness
- m** - Module
- n** - SmartCraft junction box (existing)



- Adding three lights**
- a** - Extension harness
 - b** - Y harness
 - c** - Module harness



- Adding four lights**
- a** - Extension harness
 - b** - Y harness
 - c** - Module harness

Operational Check

After the engine is started, check the operation of the moving propeller alert system. When the engine is in the process of being started, the lights should flash. When the engine is running, the lights should remain lit while the engine is running in neutral. When the engine is shifted into gear (forward or reverse), the lights should flash showing rotation similar to how a propeller rotates.

If the moving propeller alert system is wired with an accessory ON/Off switch, verify the switch is functioning correctly.

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