

LIGHT KIT

Instruction Sheet

Loose Parts

Use the chart below to verify that all parts have been shipped.

Kit No. 116-1154

Item	Part No.	Description	Qty
1 ▲	109-9689	Harness	1
2	116-1114	Asm, Light Bracket W/Decal.....	1
3	116-1106-03	Bracket, Light Switch.....	1
4	116-0426	Light, Halogen.....	2
	116-0429	Bulb, Replacement.....	2
5	116-1107-03	Plate, Mounting Light	2
6	92-8875	Switch, Rocker.....	1

Item	Part No.	Description	Qty
7	3230-9	Bolt, Carriage 5/16-18 x 2 3/4.....	6
8	3296-29	Nut, Nyloc 5/16-18	6
9*	1-303335	Tie, Wire.....	10
10*●	103-9422	Harness, Wire.....	1
11	116-0626	Harness, Lamp Jumper.....	2
12	116-0723	Screw, HH 5-16-18 x 6 1/2.....	2
13	3218-2	Nut, Jam 5/16-18.....	4

* Items not shown.

▲ Type A ROPS – For some mowers 2009 & Newer (see Figure 1 on page 2).

● Type B ROPS – For all mowers 2008 & Older and some 2009 & Newer (see Figure 2 on page 2)

Safety Alert Symbol

This Safety Alert Symbol is used in this instruction sheet and on the machine to identify important safety messages which must be followed to avoid accidents.

This symbol means: **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



Figure 3

Safety alert symbol

The safety alert symbol appears above information which alerts you to unsafe actions or situations and will be followed by the word **DANGER, WARNING, or CAUTION.**

DANGER: White lettering / Red background. Indicates an imminently hazardous situation which, if not avoided, **Will** result in death or serious injury.

WARNING: Black lettering / Orange background. Indicates a potentially hazardous situation which, if not avoided, **Could** result in death or serious injury.

CAUTION: Black lettering / Yellow background. Indicates a potentially hazardous situation which, if not avoided, **May** result in minor or moderate injury.

Important calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

WARNING

While maintenance or adjustments are being made, someone could start the engine. Accidental starting of the engine could seriously injure you or other bystanders.

Remove the key from the ignition switch, engage parking brake, and pull the wire(s) off the spark plug(s) before you do any maintenance. Also push the wire(s) aside so it does not accidentally contact the spark plug.

Note: Determine the left and right sides of the machine from the normal operating position.

Identifying the ROPS Type

Determine whether Type A or B ROPS is mounted on the mower. For Type A, proceed with the following instructions. If Type B, see page 5.

Installing the Mount Brackets and Lights for Mowers with Type A ROPS

Important: Multiple accessories added to a base unit can change the stability of the machine. Read the unit operator's manual to determine if counterbalance weights are necessary for the accessories installed on the unit.

1. Make sure all moving parts have stopped, parking brake is engaged, and the key has been removed. Allow unit to cool before starting these instructions.
2. Position the bracket with switch mount (item 3) on the upper right side of the ROPS. Secure with one mount plate (item 5), three 5/16-18 x 2 3/4 inch bolts (item 7), and three 5/16-18 inch nyloc nut (item 8) as shown in Figure 1 and Figure 6.
3. Position the bracket with decal assembly (item 2) on the left side of the ROPS and secure with the same components as step 2.
4. Remove and retain the nut that is installed on the headlight (item 4). Insert the headlight mount shaft into the hole on the light brackets (items 2 and 3) and fasten with the nut.
5. Install the 5/16-18 x 6 1/2 inch screw (item 12) into the light brackets (items 2 and 3) and fasten with two jam nuts (item 13) as shown in Figure 1.

Routing the Wire Harness

Note: Be sure the unit is not running and key is removed from ignition switch prior to proceeding with the harness installation.

1. Lay the harness across the unit with the switch connection on the right side of the machine.

Push the two bottom harness clips into the holes on the rear hydro guards.

Important: If the fuel lines are secured to the rear hydro guards, Do Not wire tie the harness to the fuel lines. Wire tie the harness through a slot in the rear hydro guard so that they Do Not come in contact with the fuel lines.

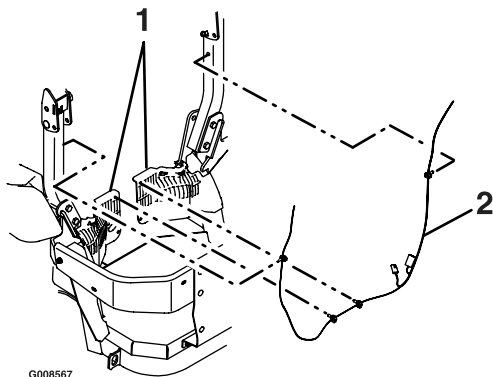


Figure 4

1. Rear hydro guards
2. Harness

2. Route harness up the lower right ROPS tube and push the harness clip into the hole as shown in Figure 4. Install the remaining harness clip inside the light mounting plate. Repeat for the left side.
3. Remove the cap from the accessory wire on the main harness and plug into the light wire harness (see Figure 5).

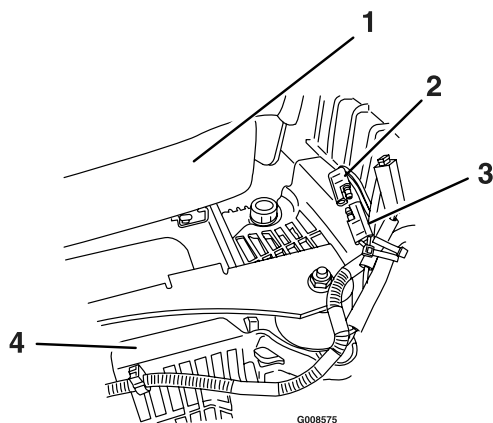


Figure 5

1. Seat
2. Light harness plug
3. Accessory harness plug
4. Rear hydro guard

Installing the Switch

Pass the wires for the switch through the rectangular cutout on the switch mounting bracket as shown in Figure 6. Connect the terminals on the switch to the harness connectors. Be sure the connectors are fully inserted onto the terminals. Carefully snap the switch into the cutout.

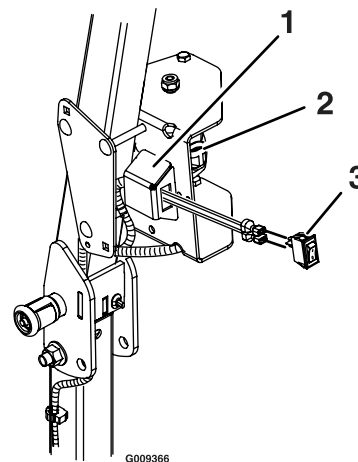


Figure 6

Rear of Unit Shown-Right Side

1. Rectangular cutout
2. Harness connectors
3. Switch

Connecting the Headlights

On both sides of the machine, route the harness ends through the bottom hole in the mount bracket. Connect the black wire on the harness to the black wire on the headlight. Connect the orange wire on the harness to the white wire on the headlight.

Wire Tie Excess Harness

1. Use wire ties (item 9) to coil and secure any excess wire harness to the frame away from moving components (brake components, tires, etc.).
2. Tie wrap the connector wires on the headlight by routing it through the two holes in the main headlight bracket as shown in Figure 7.

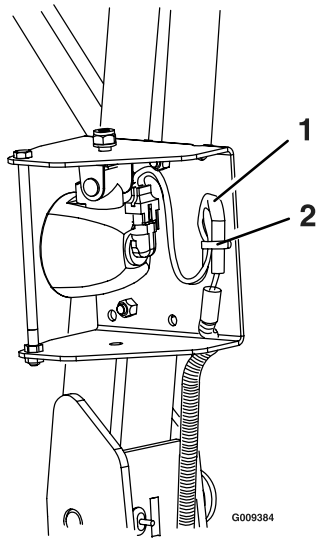


Figure 7

Rear of Unit Shown-Left Side

1. Connector wires - cover exposed connectors with electrical tape as necessary.
2. Tie wrap

Installing the Mount Brackets and Lights for Mowers with Type B ROPS

1. Make sure all moving parts have stopped, parking brake is engaged, and the key has been removed. Allow unit to cool before starting these instructions.
2. Position the bracket with switch mount (item 3) on the upper right side of the ROPS. Secure with one mount brackets (item 5), three 5/16-18 x 2 3/4 inch carriage bolts (item 7) and three 5/16-18 inch nyloc nuts (item 8) as shown in Figure 2. Tighten with a 1/2 inch wrench.

Note: Position the bracket as close to the radius in the top ROPS bar as possible.

3. Position the bracket with decal (item 2) on the left side of the ROPS and secure with the same components as step 1.
4. Remove and retain the nut that is installed on the headlight (item 4). Insert the headlight mount shaft into the hole on the light brackets (items 2 and 3) and fasten with the nut.
5. Install the 5/16-18 x 6 1/2 inch screw (item 12) into the light brackets (items 2 and 3) and

fasten with two jam nuts (item 13) as shown in Figure 2.

Routing the Wire Harness

Note: Be sure the unit is not running and key is removed from ignition switch prior to proceeding with the harness installation.

Flip the seat up to gain access to the harness connection point. Lay the harness across the unit with the switch connection on the right side of the machine. Route the switch/light connectors around the brake components then up the lower right ROPS tube. Route the wire as shown in Figure 8 (this will reduce the possibility of pinching or cutting the wires when folding). Repeat for the left side of the unit.

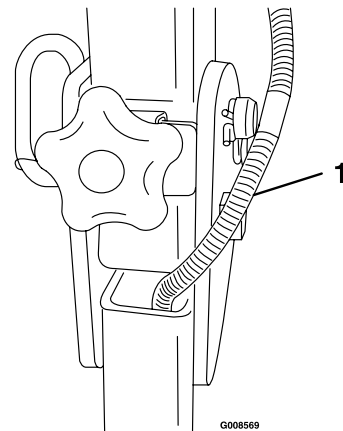


Figure 8

1. Route harness here

Installing the Switch

Pass the wires for the switch through the rectangular cutout on the switch mounting bracket (similar to Figure 6). Locate the switch (item 6), connect the brown wire to the center terminal of the switch and connect white wire to the other terminal on the switch (it will be positioned above the center terminal when inserted into the switch bracket). Be sure the connectors are fully inserted on to the terminals. Now carefully snap the switch into the cutout for the switch (similar to Figure 6).

Connecting the Headlights

On both sides of the machine, route the harness ends through the bottom hole in the mount

bracket. Connect the black wire on the harness to the black wire on the headlight. Then connect the white wire on the harness to the white wire on the headlight.

Connecting to Unit Harness

On units with a standard seat and spring activated seat switch, locate the seat switch on the unit (see Figure 9 for typical location). This will be the main connection point of the Light Kit to the unit harness. Carefully disconnect the main harness from the seat switch and then connect the wire harness from the kit to the seat switch and main wire harness.

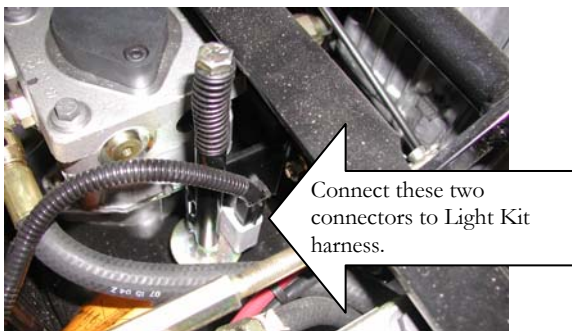


Figure 9

On units with a suspension seat or with a standard seat with the switch in the bottom seat cushion, locate the connection between the main wire harness and the harness to the seat (see Figure 10 for typical location.) This will be the main connection point of the Light Kit to the unit harness. Carefully disconnect the seat harness from the main harness and connect the wire harness from the kit to the seat harness and main wire harness.

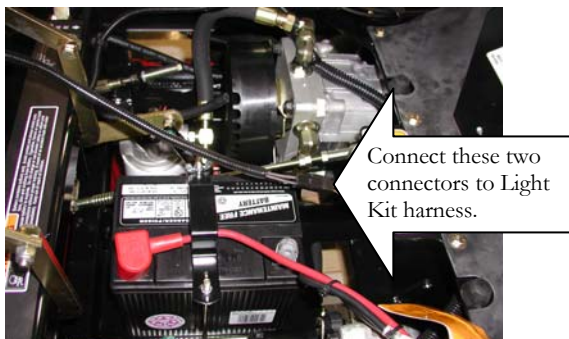


Figure 10

Carefully route the ground cable (black wire with ring terminal) to the negative (-) terminal of the battery as shown in Figure 11. Using a wrench, remove hardware, install ring terminal and reconnect the hardware.



Figure 11

Wire Tie Excess Harness

1. Use wire ties (item 9) to coil and secure any excess wire harness to the frame away from moving components (brake components, tires, etc.)
2. Tie wrap the connector wires on the headlight by routing it through the two holes in the main headlight bracket.

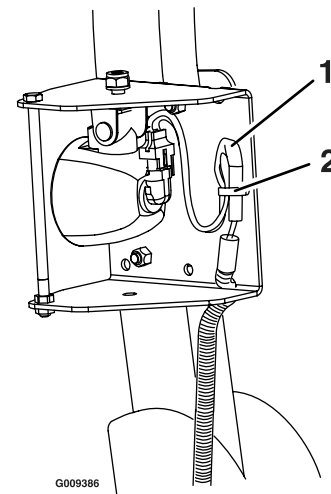


Figure 12

1. Connector wires – cover exposed connectors with electrical tape as necessary.
2. Tie wrap