

# 74100

## TRACTOR LIGHTING KIT

**TRACTOR WITH SNOWPLOW HALOGEN/LED  
PLOW LIGHTING – FOR OFF-ROAD USE ONLY**

### Parts List and Installation Instructions

**⚠ CAUTION**

Read this document before installing the tractor lighting kit.

**⚠ CAUTION**

See your sales outlet/website for specific vehicle application recommendations before installation. The online selection system has specific vehicle and snowplow requirements.

**PARTS LIST**

74100 Harness Kit		
Part	Description	Qty
		74100
26357	Vehicle Lighting Harness	1
74096	Vehicle Switch, Lighting Harness	1
74099	Adapter, 11- to 16-Pin	1
74094	Switch Assembly	1
61548K	Plug Cover	1
-	Cable Ties, 15"	12

## SAFETY DEFINITIONS

### WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

### CAUTION

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**NOTE:** Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

## LIGHTING KIT APPLICATION

**IMPORTANT:** This lighting system, installed per these instructions, is **FOR OFF-ROAD USE ONLY**. Lighting Kit #74100 does not support any snowplow lighting turn signal or hazard light functions.

## FUSES

The vehicle lighting control harness contains a single clear, 25A blade-style, ATC/ATO automotive-style fuse.

The snowplow electrical and hydraulic systems contain several automotive-style fuses. If a problem should occur and fuse replacement is necessary, the replacement fuse must be of the same type and amperage rating as the original. Installing a fuse with a higher rating can damage the system and could start a fire. Snowplow Fuse Replacement, including fuse ratings and locations, is located in the Maintenance section of the snowplow Owner's Manual.

## BATTERY SAFETY

### CAUTION

Batteries normally produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks, or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.

- Batteries contain sulfuric acid, which burns skin, eyes, and clothing.
- Disconnect the battery before removing or replacing any electrical components.

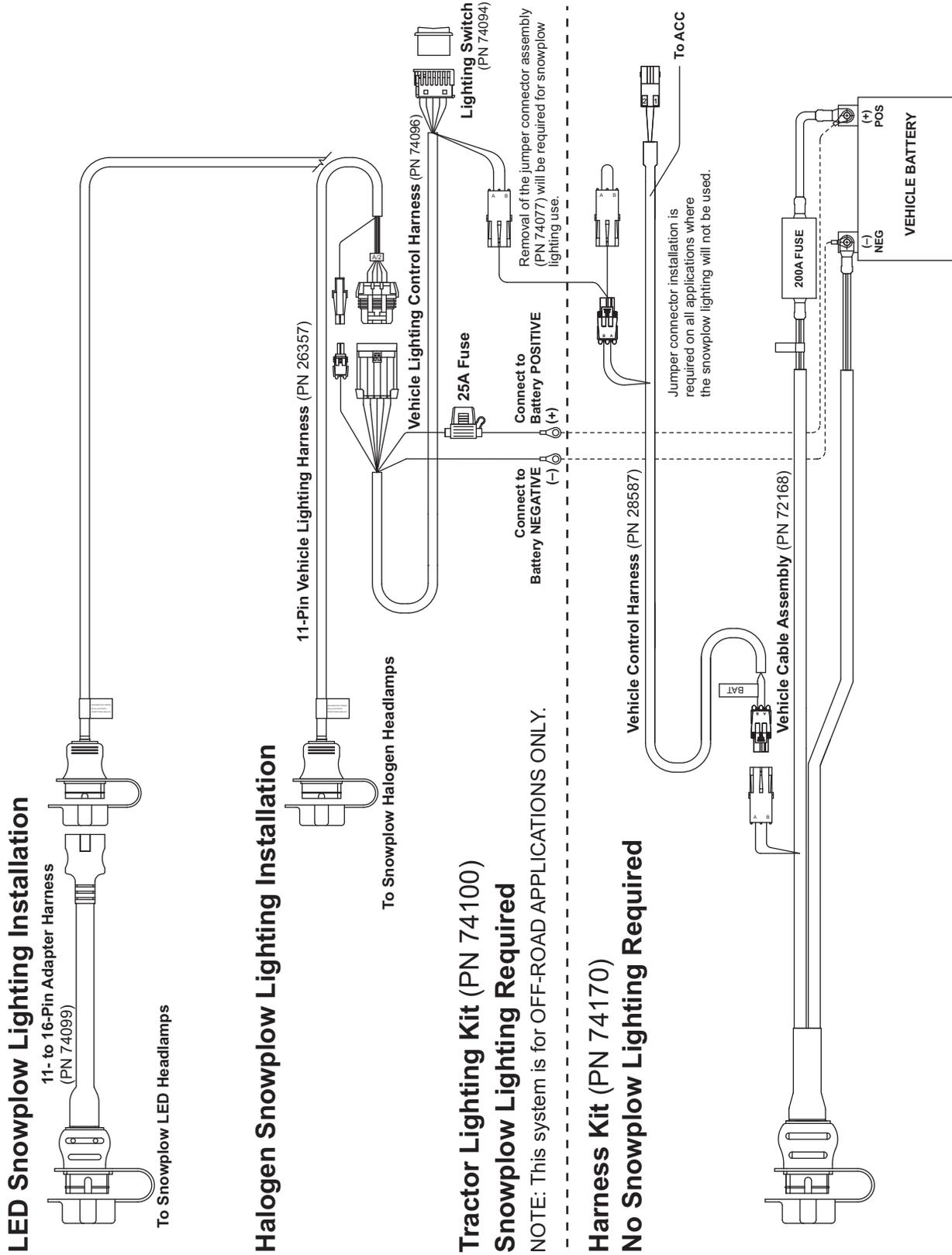
## TORQUE CHART

### CAUTION

Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow, including proper personal protective safety equipment.

Recommended Fastener Torque Chart					
Inch Fasteners Grade 5 and Grade 8					
Size	Torque (ft-lb)		Size	Torque (ft-lb)	
	 Grade 5	 Grade 8		 Grade 5	 Grade 8
1/4-20	8.4	11.9	9/16-12	109	154
1/4-28	9.7	13.7	9/16-18	121	171
5/16-18	17.4	24.6	5/8-11	150	212
5/16-24	19.2	27.3	5/8-18	170	240
3/8-16	30.8	43.6	3/4-10	269	376
3/8-24	35.0	49.4	3/4-16	297	420
7/16-14	49.4	69.8	7/8-9	429	606
7/16-20	55.2	77.9	7/8-14	474	669
1/2-13	75.3	106.4	1-8	644	909
1/2-20	85.0	120.0	1-12	704	995
Metric Fasteners Class 8.8 and 10.9					
Size	Torque (ft-lb)		Size	Torque (ft-lb)	
	 Class 8.8	 Class 10.9		 Class 8.8	 Class 10.9
M6 x 1.00	7.7	11.1	M20 x 2.50	325	450
M8 x 1.25	19.5	26.9	M22 x 2.50	428	613
M10 x 1.50	38.5	53.3	M24 x 3.00	562	778
M12 x 1.75	67	93	M27 x 3.00	796	1139
M14 x 2.00	107	148	M30 x 3.50	1117	1545
M16 x 2.00	167	231	M33 x 3.50	1468	2101
M18 x 2.50	222	318	M36 x 4.00	1952	2701
These torque values apply to fasteners except those noted in the instructions.					

TYPICAL TRACTOR LIGHTING SYSTEM DIAGRAM



## INSTALLATION INSTRUCTIONS

### **⚠ CAUTION**

Batteries normally produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks, or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.

- Batteries contain sulfuric acid, which burns skin, eyes, and clothing.
- Disconnect the battery before removing or replacing any electrical components.

**NOTE:** Prior to installing the Tractor Lighting Kit and the Vehicle Lighting Control Harnesses, installation of the Vehicle Cable Assembly and the Vehicle Control Harness must be completed per the instructions supplied in the Harness Kit (PN 74170) supplied with the snowplow mount kit.

**NOTE:** Use dielectric grease on all electrical connections to prevent corrosion. Fill receptacles and lightly coat ring terminals before assembly.

1. Turn OFF the vehicle ignition.
2. Disconnect both the NEGATIVE (-) and the POSITIVE (+) battery cables.

## HALOGEN SNOWPLOW LIGHTING INSTALLATION – VEHICLE LIGHTING HARNESS

**NOTE:** The tractor lighting kit is for use in applications requiring the illumination of the snowplow lights.

Route the vehicle lighting harness from the front of the vehicle to the area near the vehicle battery avoiding any hot, sharp, or moving parts.

## VEHICLE LIGHTING CONTROL HARNESS

1. Locate the 10-pin and single-pin connector on the vehicle lighting control harness and connect to the mating 10-pin and single-pin connectors located on the vehicle lighting harness.

### **⚠ CAUTION**

**Before installing self-drilling screws or drilling mounting holes, check the selected mounting area for any wires, hoses, or other obstructions.**

2. Route the vehicle lighting control harness to the cab area of the vehicle. Locate an existing opening into the cab, large enough to pass the 10-pin switch connector and 4-pin "ACC" power connector through. If required, drill the appropriate sized hole in a convenient location away from sharp edges and hot or moving parts to pass these two connectors through.

## LED SNOWPLOW LIGHTING INSTALLATION – LED ADAPTER HARNESS WITH VEHICLE LIGHTING HARNESS

**NOTE: The tractor lighting kit is for use in applications requiring the illumination of the snowplow lights.**

Route the vehicle lighting harness from the front of the vehicle to the area near the vehicle battery avoiding any hot, sharp, or moving parts.

1. Mate the 11-pin adapter harness molded plug to the 11-pin plug on the vehicle lighting harness.
2. Route the adapter harness/vehicle lighting harness from the front of the vehicle to the area near the vehicle battery, avoiding any hot, sharp, or moving parts.

## VEHICLE LIGHTING CONTROL HARNESS

1. Locate the 10-pin and single-pin connector on the vehicle lighting control harness and connect to the mating 10-pin and single-pin connectors located on the vehicle lighting harness.

### CAUTION

**Before installing self-drilling screws or drilling mounting holes, check the selected mounting area for any wires, hoses, or other obstructions.**

2. Route the vehicle lighting control harness to the cab area of the vehicle. Locate an existing opening into the cab, large enough to pass the 10-pin switch connector and 4-pin "ACC" power connector through. If required, drill the appropriate sized hole in a convenient location away from sharp edges and hot or moving parts to pass these two connectors through.

## SWITCH MOUNTING LOCATION

**NOTE: The supplied lighting rocker switch fits into an industry standard mounting hole of 1.45" x 0.830".**

1. In the cab area, locate an existing switch knockout that will allow the lighting rocker switch to sit flush with the mounting surface.
2. Remove the knockout and push the switch into the opening until it sits flush with the mounting surface.

**NOTE: If the vehicle manufacturer has not supplied a switch knockout, locate a flat surface within the cab area and cut out a 1.45" x 0.830" hole to mount the lighting rocker switch.**

Prior to cutting the hole, check to confirm that there will be enough space below the chosen surface to allow room for the switch body and harness connector.

3. Route the lighting control harness to the switch location and plug the 10-pin connector into the rocker switch.
4. Referring to the wiring diagram on page 4, locate the 4-pin connector on the vehicle control harness and remove the 4-pin jumper connector if it is installed.
5. Connect the mating 4-pin plug from the vehicle lighting control harness to the 4-pin connector on the vehicle control harness.

## VEHICLE LIGHTING CONTROL HARNESS, POWER CONNECTIONS

Route the red and black leads from the vehicle lighting control harness to the vehicle battery area. *Do not connect at this time.*

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## BATTERY CONNECTIONS

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**NOTE: Use cable ties to secure cable assemblies and control and lighting harnesses away from any sharp edges and hot or moving parts.**

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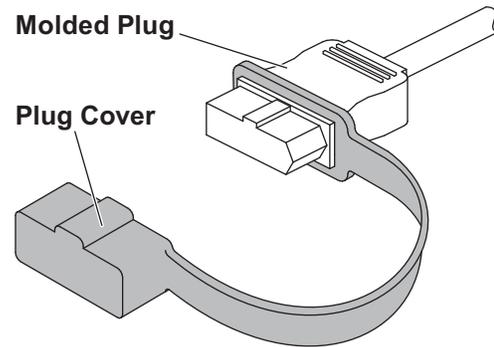
**NOTE: Follow OEM battery cable connection recommendations when attaching to the battery.**

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1. Make the following attachments to the POSITIVE (+) battery terminal:
  - POSITIVE (+) OEM cable assembly
  - Red 8" cable from fuse holder
  - Red cable from vehicle lighting control harness assembly.
2. Make the following attachments to the vehicle NEGATIVE (-) battery terminal:
  - NEGATIVE (-) OEM cable assembly
  - Black wire from the lighting control harness
  - Black wire from vehicle cable assembly.

## PLUG COVER INSTALLATION

Stretch the rectangular opening of the plug cover strap over the end of the vehicle lighting harness. Place the plug cover over the molded plug whenever the snowplow is not in use.



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