



SunFlash™

Operator and Parts Manual



331130

Rev. 00





This manual is furnished with each new TENNANT Model SunFlash™ machine. It provides necessary operating and preventive maintenance instructions. Read this manual completely and understand the machine before operating or servicing it.

This machine will provide excellent service. However, the best results will be obtained at minimum costs if:

- The machine is operated with reasonable care.
- The machine is maintained regularly – per the maintenance instructions provided.
- The machine is maintained with TENNANT supplied or equivalent parts.

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SAFETY PRECAUTIONS

The following symbols are used throughout this manual as indicated in their description:



WARNING: To warn of hazards or unsafe practices that could result in severe personal injury or death.



CAUTION: To warn of unsafe practices that could result in minor or moderate personal injury.

FOR SAFETY: To identify actions that must be followed for safe operation of equipment.

This machine is designed solely for the purpose of curing floors using the Eco-UVS™ floor coating. Tennant does not recommend using this machine with any other floor coating.

The following information signals potentially dangerous conditions to the operator or equipment. Read this manual carefully. Know when these conditions can exist. Locate all safety devices on the machine. Then, take necessary steps to train machine operating personnel. Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition.



WARNING: Hazardous voltage. Do not operate with damaged power cord. Do not modify plug. Unplug power cord before servicing machine.



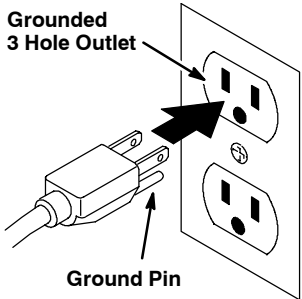
CAUTION: Ultraviolet (UV) exposure may cause eye damage. Do not operate without coverings. Do not look into UV source. Wear UV eye protection.

FOR SAFETY:

1. **Do not operate machine:**
 - Unless trained and authorized.
 - Unless operation manual is read and understood.
 - Unless cord is properly grounded.
 - With damaged cord or plug.
2. **Before operating machine:**
 - Make sure all safety devices are in place and operate properly.
3. **When using machine:**
 - Do not run machine over cord.
 - Do not pull machine by plug or cord.
 - Do not pull cord around sharp edges or corners.
 - Do not unplug by pulling on cord.
 - Do not stretch cord.
 - Do not handle plug with wet hands.
 - Keep cord away from heated surfaces.
 - Report machine damage or faulty operation immediately.
 - Never allow children to play on or around.
4. **When servicing machine:**
 - Unplug cord from wall outlet.
 - Use manufacturer supplied or approved replacement parts.
 - Allow bulbs to cool before replacing.
 - All repairs must be performed by a qualified service person.
 - Do not modify the machine from its original design.
5. **When transporting machine:**
 - Get assistance when lifting machine.
 - Unplug cord from wall outlet.
 - Use tie-down straps to secure machine to truck or trailer.

GROUNDING INSTRUCTIONS

Machine must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electrical shock. This machine is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed in accordance with all local codes and ordinances. Do not remove ground pin; if missing, replace plug before use.

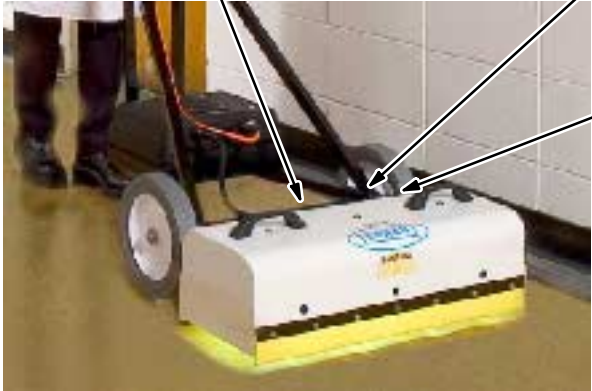


The safety labels appear on the machine in the locations indicated. If these or any label becomes damaged or illegible, install a new label in its place.



FOR SAFETY LABEL - LOCATED ON THE LIGHT HEAD ASSEMBLY.

ELECTRICAL CORD WARNING - LOCATED ON THE LIGHT HEAD ASSEMBLY.



UV CAUTION - LOCATED ON THE LIGHT HEAD ASSEMBLY.



OPERATION

MACHINE COMPONENTS



- A. Light head assembly
- B. Front view windows
- C. Power indicator light
- D. Circuit breaker
- E. Power cord
- F. Side shields
- G. Power supply box

PLANNING FLOOR COATING APPLICATION

Before applying the ECO-UVS™ floor coating, determine which electrical outlet you will plug the SunFlash™ machine into. Apply the coating to the floor near that outlet first so that you can operate the machine without the cord dragging on the uncured floor. Continue applying the floor coating working your way across the room in the same order that you will later be curing the floor.

NOTE: Refer to the Eco-UVS™ product bulletin for floor coating application instructions or contact your TENNANT representative for advice.

HOW THE MACHINE WORKS

The SunFlash™ machine cures floors instantly when used with the Eco-UVS™ floor coating. It does this by exposing UV light to the coating which cures this special coating. This machine is not made to be used with any other floor coating.

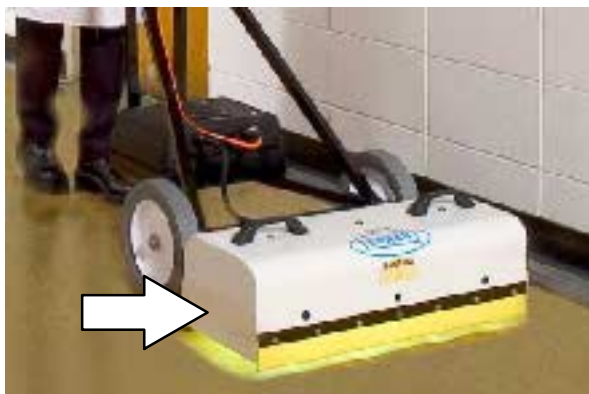


BEFORE OPERATING

1. Allow the Eco-UVS™ floor coating to *relax* for a minimum of 15 minutes before using the SunFlash™ machine. This will allow any roller marks to level and application bubbles to release to the surface.

NOTE: Refer to the Eco-UVS™ product bulletin for floor coating application instructions or contact your TENNANT representative for advice.

2. Adjust the side shields so that they are about 8 mm (.25 in) off the ground. If the floor surface is rough and the side shields touch the floor when operating, raise them higher.

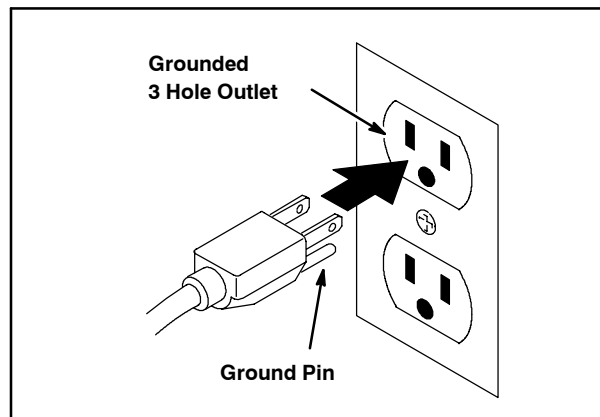


3. Place the light head assembly over a floor that is not carpeted. (The UV lights could damage the carpeting if left in one spot over a period of time).
4. Plug the machine in and allow the lights to warm up for about 5 minutes. Do not use a cord that is less than 14 gauge or that is longer than 30.5 meters (100 feet).



WARNING: Hazardous voltage. Do not operate with damaged power cord. Do not modify plug. Unplug power cord before servicing machine.

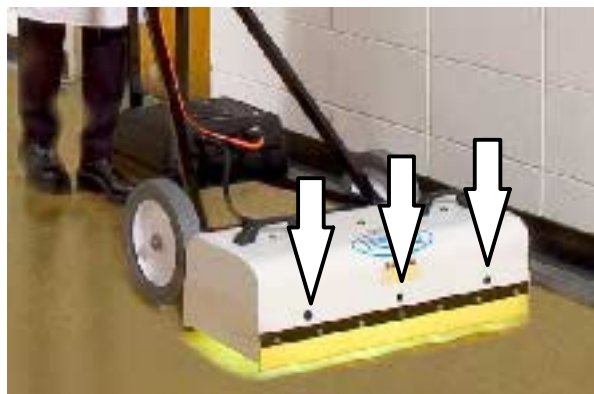
NOTE: If the machine has just been unplugged, the lights must be cooled for about 5 minutes before they will come on again.



5. Check the three front view windows to make sure that the bulbs are on.



CAUTION: Ultraviolet (UV) exposure may cause eye damage. Do not operate without coverings. Do not look into UV source. Wear UV eye protection.



OPERATION

CURING WITH THE MACHINE

CAUTION: Ultraviolet (UV) exposure may cause eye damage. Do not operate without coverings. Do not look into UV source. Wear UV eye protection.

When the Eco-UVS™ floor coating has *relaxed* for a minimum of 15 minutes, push the machine to the area of the floor that you are going to cure. Start on an end where you can have the electrical cord trail behind you without it dragging on any of the uncured floor. It is helpful if an assistant holds the cord until enough of the floor is cured to allow the cord to drag behind.

Begin curing the floor by pushing the machine slowly at a rate of about 305 mm (12 in) every 4 seconds. If the floor feels *tacky* on your shoes after the machine has just passed over it, you are pushing it at a rate that is too fast.

Overlap each pass by about 50 mm (2 in). Push the machine in a straight line as possible to make it easier to make the next pass. It is better to overlap too much than to miss an area and not have it cured.

NOTE: If the lighting conditions are too poor to see where the last pass ended, it may be helpful to use a laser level as a guide.

MACHINE TROUBLESHOOTING

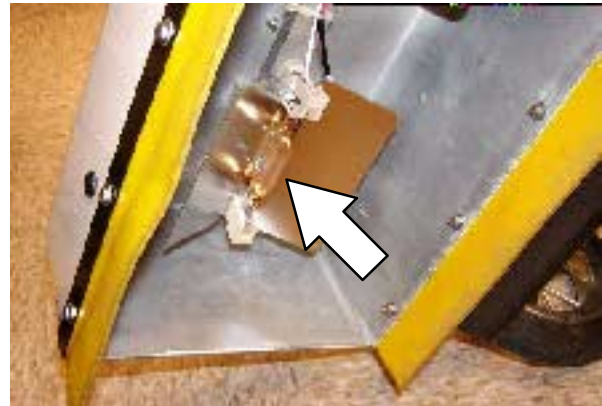
Problem	Cause	Remedy
Bulbs do not come on	Machine not plugged in	Plug machine in
	Machine recently unplugged	Allow the bulbs / machine 5 minutes to cool down
	Bulbs burned out	Replace bulb
	Outlet CB tripped / fuse blown	Reset CB or replace fuse
	Machine CB tripped	Reset machine CB
	Defective cord	Replace cord
Sticky or tacky floor after curing	Curing speed too fast	Push machine at a slower pace
	Lights not on	See "Bulbs do not come on" above
Surface looks rough after curing	Coating not relaxed enough	Allow longer time for coating to relax before curing with machine
Visible overlap stripe	Side shields too high	Lower side shields

CHANGING LIGHT BULBS

WARNING: Hazardous voltage. Unplug power cord before servicing machine.

Unplug the machine, then allow the bulbs to cool before replacing them. Clean the new bulb with the Isopropylalcohol towel provided with the replacement bulb before inserting it into the machine. Do not touch the bulb with your hands as that will shorten the life of the bulb.

FOR SAFETY: When servicing machine, allow bulbs to cool before replacing.



SPECIFICATIONS

Item	Dimension/capacity
Width	692 mm (27.25 in)
Height	953 mm (37.5 in)
Length	1143 mm (45 in)
Bulbs	400 watt each / 1200 watt total with 3 bulbs
Volts	110V
Amps	12
Cord length (machine)	152 mm (6 in) 14 / 3 gauge
Extension Cord maximum length (option)	30.5 M (100 ft) 14 / 3 gauge
Curing speed / walking pace	305 mm (12 in) every 4 seconds
GVWR	25 kg (55 lb)

Fig. 1 - Main Frame Group

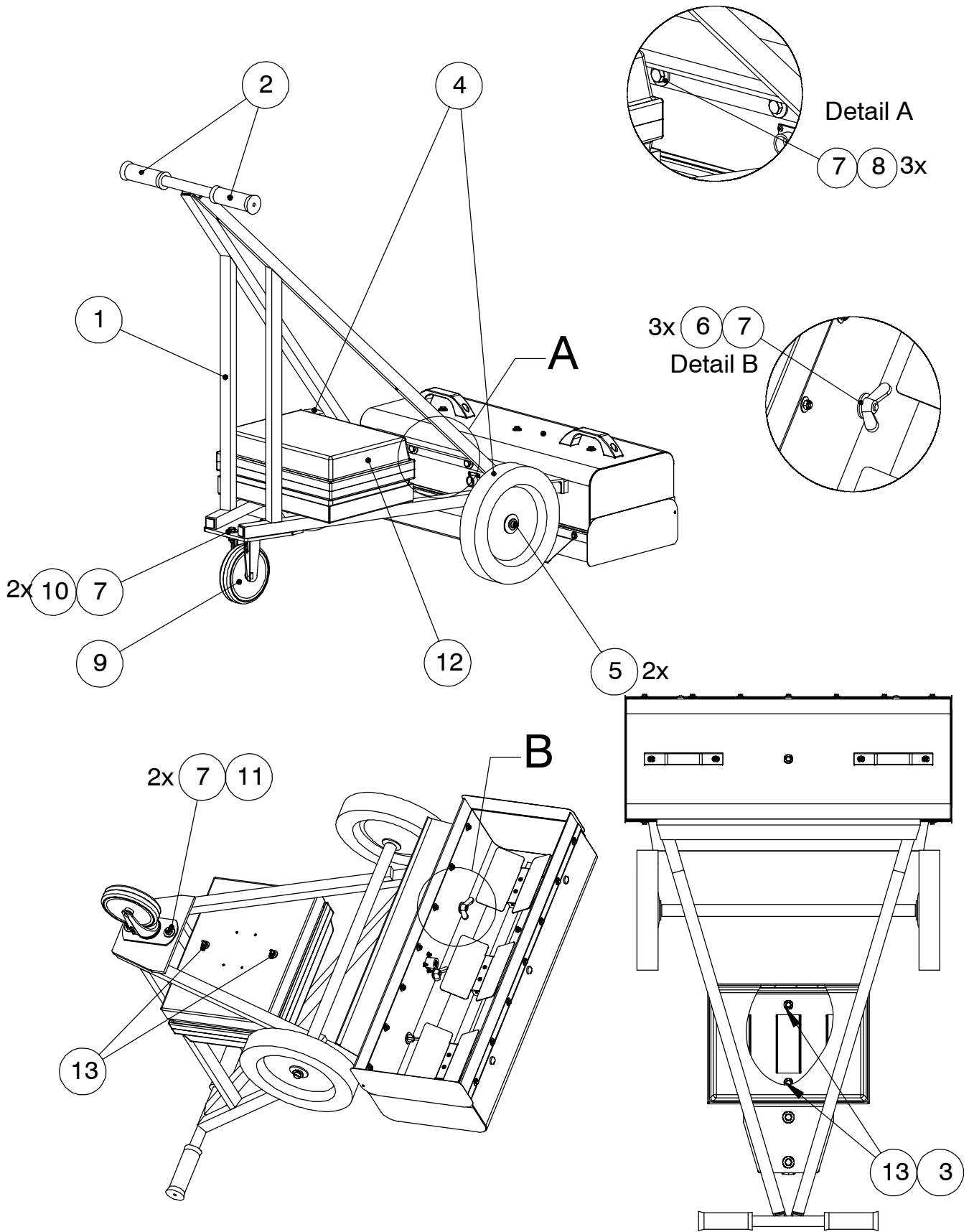


Fig. 1 - Main Frame Group

Ref.	Tennant Part No.	Description	Qty.
1	381253	Frame Wldt, Cart	1
2	04765	Grip, Handle	2
3	06944	Screw, Hex, M6 X 1.0 X 25, 8.8	2
4	381254	Tire Assy, 10.0 Od	2
5	381281	Retainer, Cap, Wheel	2
6	49701	Nut, Wing, M08 X 1.25	3
7	39349	Washer, Flat, 0.31 Sae	10
8	06955	Screw, Hex, M8 X 1.25 X 35, 8.8	3
9	80028	Caster	1
10	39277	Screw, Hex, M8 X 1.25 X 25, 8.8	2
11	08709	Nut, Hex, Lock, M8 X 1.25, NI	2
12	381255	Controlbox Assy	1
13	32483	Washer, Flat, 0.25 Sae	4
	26395-2	Clamp, Cable, Stl, 0.38d X 0.38w, 1h	2
	223198	Screw, Hex, M5 X 0.8 X 10, Fmg	2

Fig. 2 - Light Head Group

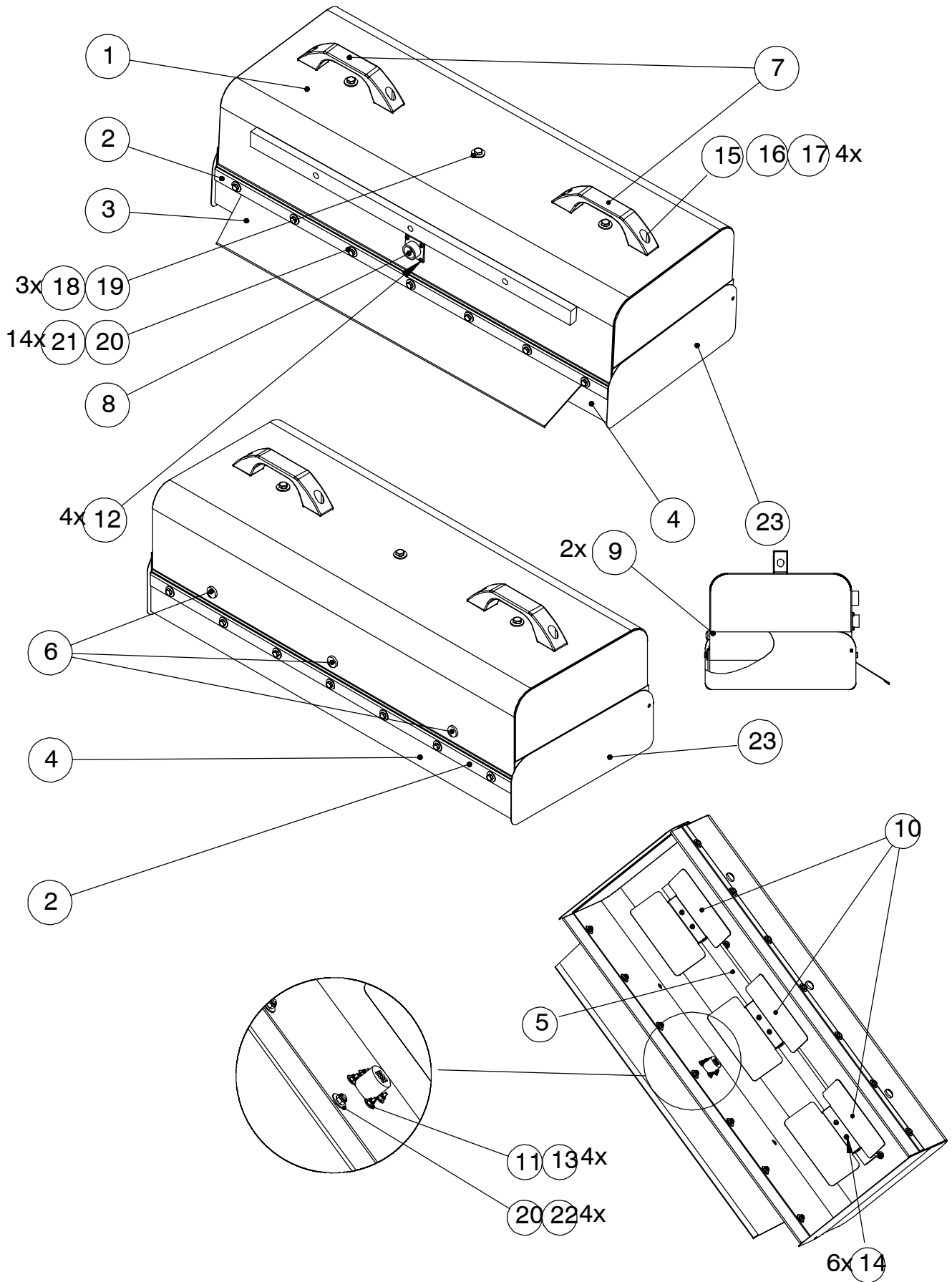
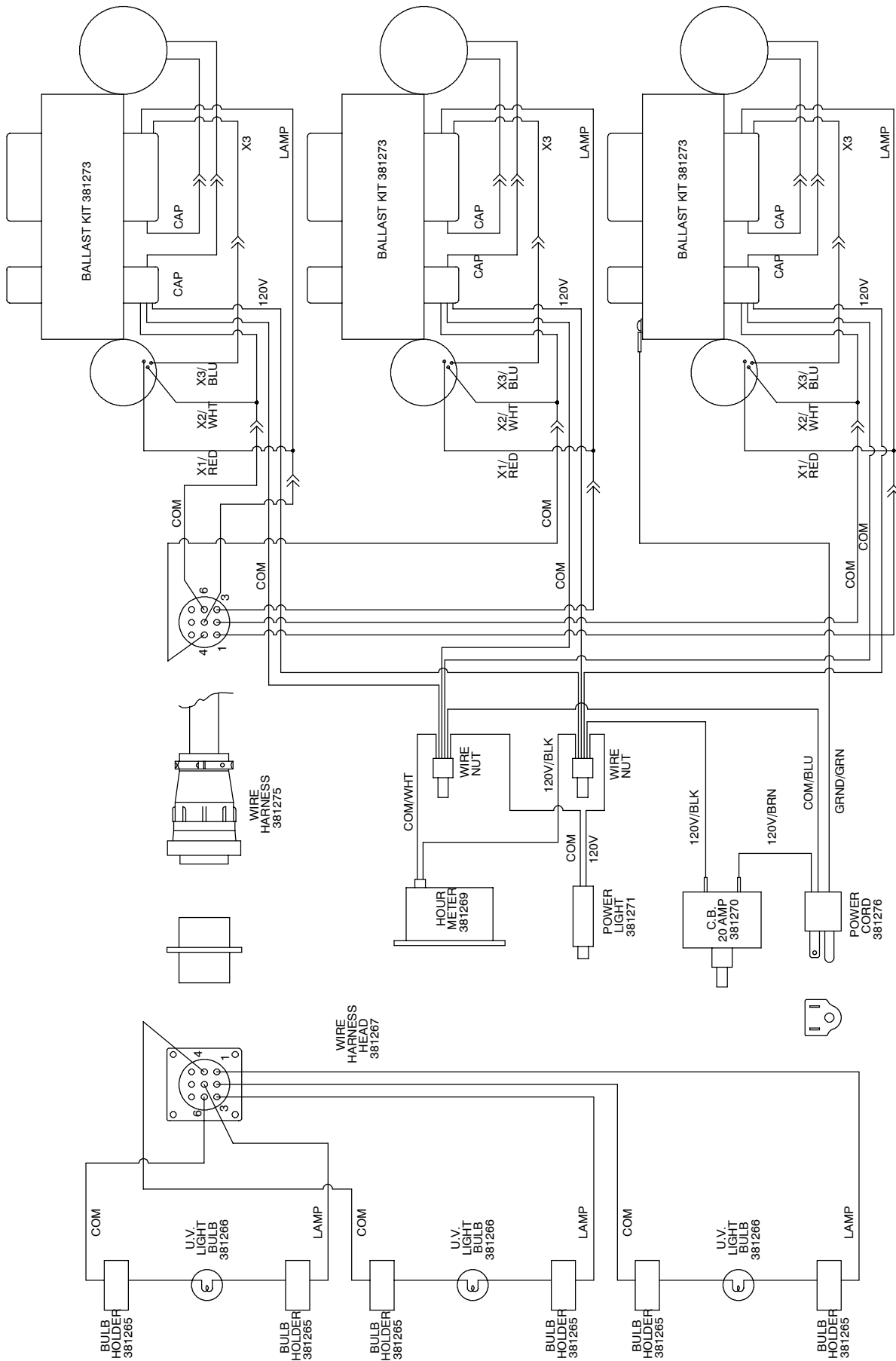


Fig. 2 - Light Head Group

Ref.	Tennant Part No.	Description	Qty.
▽	381256	Head Assy, 27" [Instacure Sunflash]	1
▲	1 381258	Shroud Wldt, Head	1
▲	2 381260	Retainer, Skirt, Front / Rear	2
▲	3 381262	Deflector, Light, Rear	1
▲	4 381259	Skirt, .12th, 2.38w, 27.00l, 6/.22h	2
▲	5 381263	Bar Wldt, Light	1
▲	6 381261	Light, Indicator, 36vdc, Blu	3
▲	7 382264	Handle, Hood	2
▲	8 381267	Harness, Head	1
▲	9 381285	Magnet, Attmnt, End Plt	2
▲	10 381264	Deflector, Light	3
▲	11 19064	Washer, Flat, #06	4
▲	12 09146	Screw, Pan, M3 X 0.5 X 12, 4.8	4
▲	13 579211	Nut, Hex, Lock, M3 X .5, Ss	4
▲	14 06926	Screw, Pan, M4 X 0.7 X 10, 4.8	6
▲	15 06927	Screw, Pan, M4 X 0.7 X 16, 4.8	4
▲	16 19066	Washer, Flat, #10	4
▲	17 02850	Nut, Hex, Lock, M4 X 0.7, NI	4
▲	18 87308	Screw, Hex, M6 X 1.0 X 12, 8.8	3
▲	19 32483	Washer, Flat, 0.25 Sae	3
▲	20 19324	Washer, Flat, #10 Sae	28
▲	21 09244	Screw, Hex, M5 X 0.8 X 16, 8.8	14
▲	22 09739	Nut, Hex, Lock, M5 X 0.8, NI, Ss	14
▲	23 381286	Plate, End, Side Shield	2
▲	381266	Lamp, 400watt	3
▲	381280	Label, Model [Instacure Sunflash]	1
▲	993852	Warning (elect Haz)	1
▲	381279	Label, Hzrd [Eye Protection Required]	1

Fig. 3 - Electrical Schematic



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