

## SCHEDULE "12"

### Equipment Fleet Operations Policy

#### MINISTRY OF TRANSPORTATION EQUIPMENT FLEET OPERATIONS POLICY FOR MINISTRY AND MAINTENANCE CONTRACTOR VEHICLES AND EQUIPMENT

The following are the **minimum standards** for the operation of ministry and maintenance contractors' equipment fleets. This policy applies to vehicles and equipment licensed for operation on Provincial Highways including **all Ministry-owned or leased and contractor-owned or leased equipment**.

#### DEFINITIONS

- (a) **Contractor Operational Vehicles:** Vehicles used in the performance or inspection of activities related to maintenance of the highway system; includes vehicles used to transport workers to the work site
- (b) **High Conspicuity Lighting:** Technically improved lighting for severe visibility environment approved by the Ministry
- (c) **High Visibility Markings:** Light reflective surfaces or striping
- (d) **Highways:** As defined in Article 1 of this Maintenance Agreement
- (e) **Ministry Operational Vehicles:** Vehicles used in the performance or inspection of activities related to the design, construction, rehabilitation and maintenance of the highway system including vehicles used to transport workers to the work site
- (f) **Non-Operational Vehicles:** Vehicles used for going from point A to point B without stopping on the road or on the side of the road to perform or inspect work or to transport workers to the work site
- (g) **Performing or Inspecting Work:** Performance or inspection of activities related to the design, construction, rehabilitation or maintenance of the highway system

**GUIDING PRINCIPLES:**

1. All Operational Vehicles and Equipment used to perform work on provincial Highways shall be at least 80% yellow.
2. Equipment lighting shall conform to Division 4 of the Motor Vehicle Act Regulations (B.C. Reg. 26/58).

**POLICY:**

1.
  - (a) All Contractor Operational Vehicles and Equipment shall be painted at least 80% yellow (Sherwin-Williams # 36889-67) or if no longer available, a similar colour as selected by the Ministry; outfitted with a fixed amber rotating or strobe light as outlined in Section 3 below; and must be clearly identified as a maintenance contractor vehicle (See Appendix C to this Schedule).
  - (b) Contractors' employees shall not use personal vehicles on mileage to Perform or Inspect Work, unless the vehicles are painted yellow and are outfitted with a magnetic-mount amber rotating or strobe light as outlined in Section 3.
2.
  - (a) All Ministry Operational Vehicles and Equipment shall be painted at least 80% yellow (Sherwin-Williams # 36889-67) or if no longer available, a similar colour as selected by the Ministry; outfitted with a fixed amber rotating or strobe light as outlined in Section 3 below; and must be clearly identified as a ministry vehicle (See Appendix C to this Schedule).
  - (b) Ministry staff Performing or Inspecting Work using their personal vehicles (i.e., on mileage) shall use a temporary magnetic-mount amber rotating or strobe light (light output must meet criteria outlined in Section 3 below). Should the operator request a permanently mounted light, the Ministry will provide and install one at no cost to the operator.
3. All fixed amber rotating or strobe lights shall meet the following criteria:
  - (a) 360° visibility;
  - (b) be visible under all operating conditions;
  - (c) have light intensity sufficient to warn motorists of the vehicle or equipment's presence under variable operating conditions;
  - (d) high intensity lamps must be utilized during daylight hours;
  - (e) be dimmable for night work; and
  - (f) have light duration of at least 30% of the on/off cycle.

Technically improved lighting, tested and approved by the Ministry may be used, provided the standards outlined in this policy are not altered in a way that would affect public or operator safety.

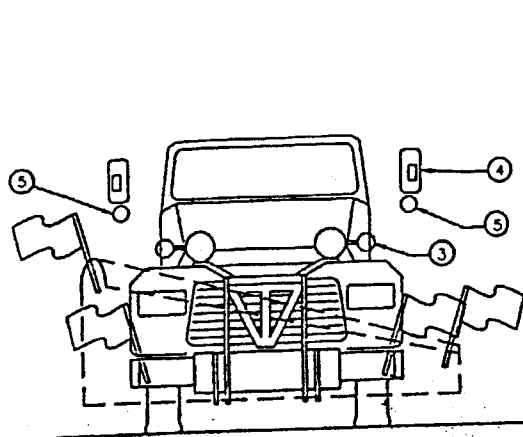
4. All Equipment (contractor and ministry) which restricts traffic flow (e.g. sanding/clearing trucks, sweeping trucks, graders) must display High Visibility Markings and High Conspicuity Lighting (See Appendices A and B). Lighting used to warn traffic of over width projections must have light intensity sufficient to warn motorists under all variable operating conditions.
5. Non-Operational Vehicles (contractor and ministry) are exempt from this policy.

The following are the **minimum standards** for the operation of **sub-contracted/hired/rented equipment** provided the equipment is not operating on a regular basis, i.e., 180 days or more a year. Equipment operating 180 days or more a year shall comply with the standards for Ministry or Contractor owned equipment.

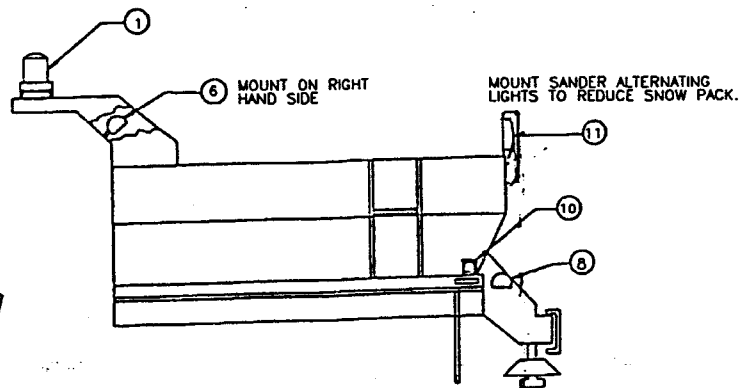
Sub-contracted/hired/rented equipment:

1. is exempt from the colour requirements outlined in this policy;
2. shall comply with the Traffic Control Manual for Work on Roadways;
3. shall display a temporary magnetic-mount amber rotating or strobe light provided the light output is not diminished from the above noted standards;
4. equipment used for winter maintenance activities shall display High Visibility Markings and High Conspicuity Lighting (See Appendices A and B to this Schedule).

APPENDIX A

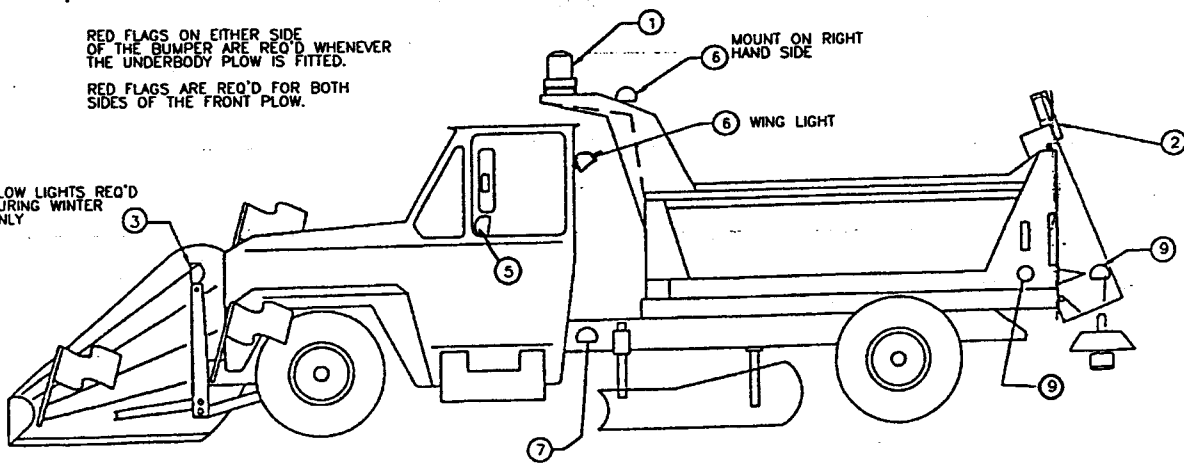


RED FLAGS ON EITHER SIDE OF THE BUMPER ARE REQ'D WHENEVER THE UNDERBODY PLOW IS FITTED.  
RED FLAGS ARE REQ'D FOR BOTH SIDES OF THE FRONT PLOW.



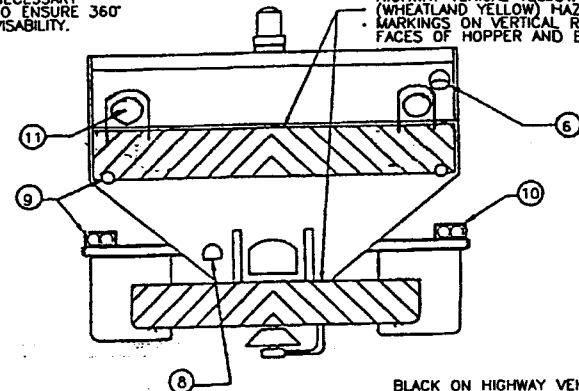
MOUNT SANDER ALTERNATING LIGHTS TO REDUCE SNOW PACK.

PLOW LIGHTS REQ'D DURING WINTER ONLY



ELEVATE AS NECESSARY TO ENSURE 360° VISIBILITY.

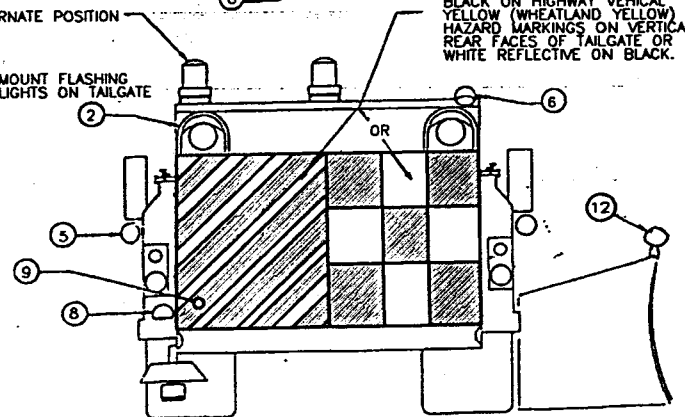
45' X 100mm (4") BLACK ON HIGHWAY VEHICAL YELLOW (WHEATLAND YELLOW) HAZARD MARKINGS ON VERTICAL REAR FACES OF HOPPER AND BUMPER.



ALTERNATE POSITION

MOUNT FLASHING LIGHTS ON TAILGATE


BLACK ON HIGHWAY VEHICAL YELLOW (WHEATLAND YELLOW) HAZARD MARKINGS ON VERTICAL REAR FACES OF TAILGATE OR WHITE REFLECTIVE ON BLACK.



**STANDARD LIGHTING CONFIGURATION FOR SANDING/CLEARING TRUCKS**

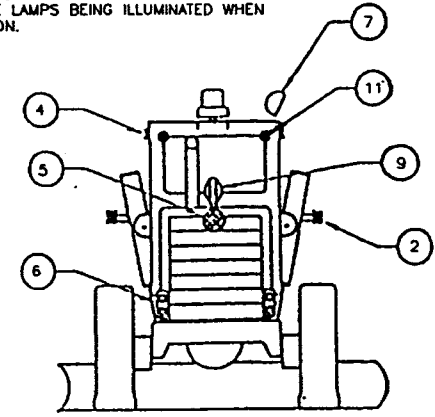
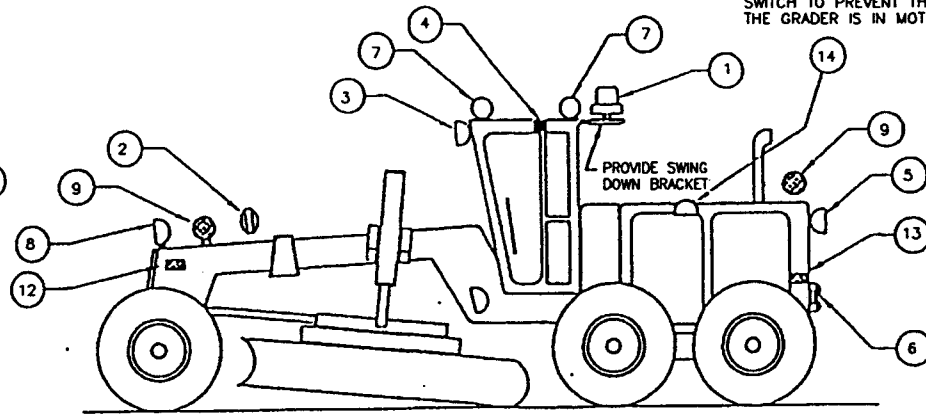
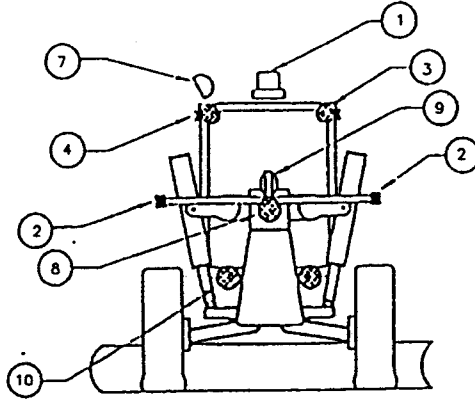
ITEM	DESCRIPTION	QTY	
1	WARNING LIGHT, ROTATING AMBER OR STROBE	1	
2	TAILGATE WARNING LIGHTS, FLASHING AMBER	2	
3	SNOWPLOW LIGHTS C/W TURN SIGNALS	2	
4	MIRROR SIDE CLEARANCE LIGHT, MIRROR HEAD	2	OPTIONAL
5	BACK-UP LIGHTS, WHITE #4415 SEAL BEAM	2	
6	WING/DUMP/HOPPER BOX LIGHT, AMBER ONLY	1	OPTIONAL
7	UNDERBODY PLOW LIGHT, AMBER ONLY	1	OPTIONAL
8	SANDER SPINNER LIGHT, AMBER ONLY	1	OPTIONAL
9	REFLECTOR, RED	4	
10	TAIL/STOP/TURN LIGHT SYSTEM (4 LAMP SYSTEM)	4	
11	HOPPER REAR FLASHING AMBER (AS IN ITEM #2)	2	
12	WING FLASHING AMBER OR STROBE	1	

**NOTE: ALL LAMPS TO MEET OR EXCEED MINISTRY OF TRANSPORTATION AND HIGHWAYS SPECIFICATIONS.**

SCALE NO SCALE DESIGNED: _____ DATE _____ CHECKED: _____ DATE _____ DRAWN: _____ DATE _____		 Province of British Columbia MINISTRY OF TRANSPORTATION AND HIGHWAYS
PREPARED BY: _____ REGIONAL MANAGER, PROFESSIONAL SERVICES: _____ DATE: _____		
REVISIONS		SAFETY LIGHTING STANDARD REGIONAL DIRECTOR OF HIGHWAYS: _____ DATE: _____ PROJECT NO: _____ REG: _____ DRAWING NO: _____

APPENDIX B

OPTIONAL LIGHTS (ITEM 14) USED TO ILLUMINATE THE REAR TANDEM SHALL BE WIRED THROUGH A NEUTRAL SAFETY SWITCH TO PREVENT THE LAMPS BEING ILLUMINATED WHEN THE GRADER IS IN MOTION.



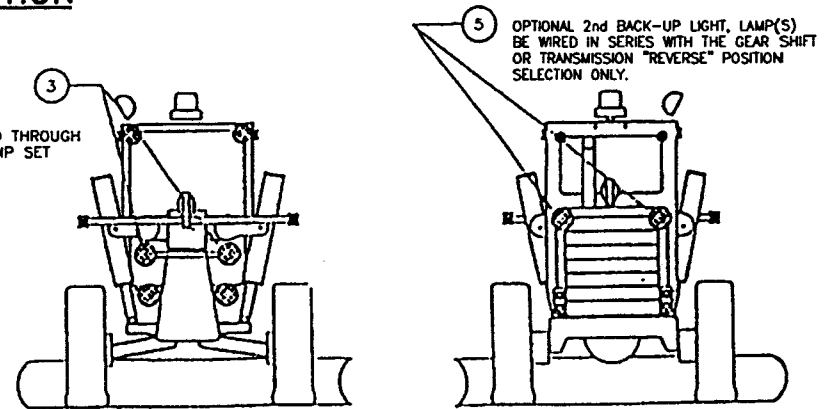
**STANDARD LIGHTING CONFIGURATION FOR GRADERS**

DRIVE LIGHT (ITEM #8) TO OPERATE WHEN HIGH BEAM IS USED ON HEAD LIGHTS (ITEM #3).

INTERSECTION LIGHTS (ITEM #9) AND REAR AMBER WARNING (ITEM #11) TO BE CONTROLLED BY SEPERATE SWITCHES.

TURN SIGNALS TO FUNCTION AS 4-WAY FLASH HAZARD WARNING LIGHTS.


OPTIONAL 2nd HEADLAMP SET SHALL BE WIRED THROUGH SWITCH TO PREVENT MORE THAN ONE HEADLAMP SET FROM BEING ON AT ONE TIME



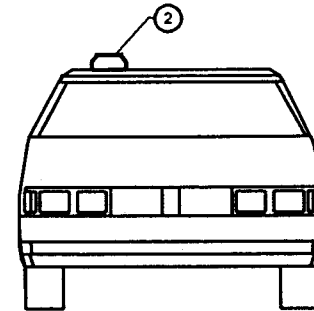
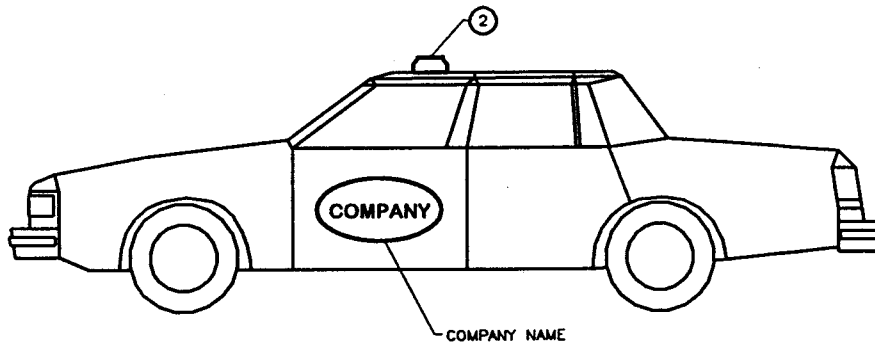
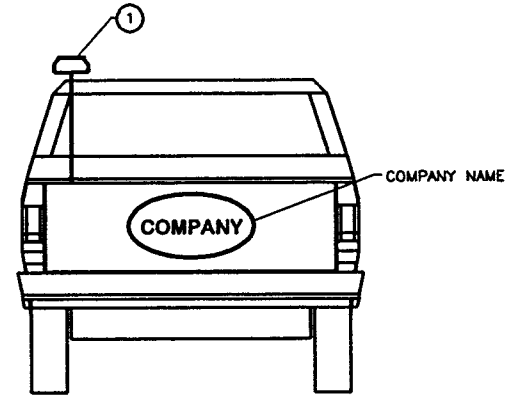
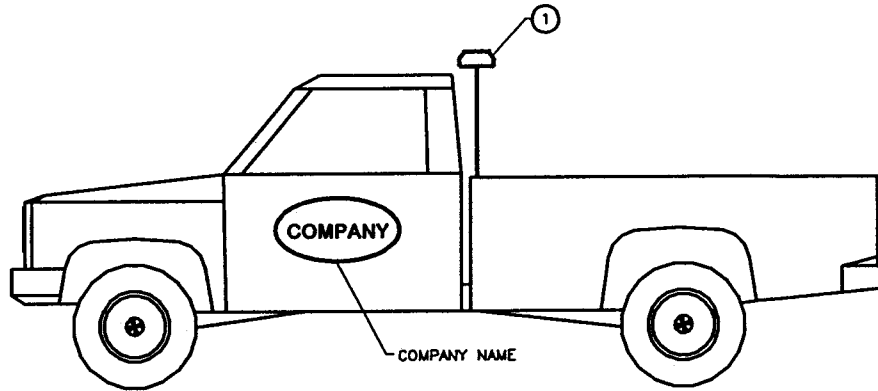
**OPTIONAL HEADLAMP & BACK-UP LIGHTING**

ITEM	DESCRIPTION	
1	WARNING LIGHT, ROTATING AMBER OR STROBE	
2	TURNING SIGNAL, SIDE MARKER	
3	HEAD LIGHTS	
4	CLEARANCE LIGHTS, SIDE MARKER	
5	BACK-UP LAMP	
6	TAIL/STOP/TURN SIDE MARKER	
7	WING LIGHTS	
8	DRIVING LIGHTS	
9	INTERSECTION LIGHTS	
10	BLADE LIGHTS	
11	REAR AMBER WARNING	
12	FRONT REFLECTOR, AMBER	
13	REAR REFLECTOR, RED	
14	REAR TANDEM LIGHTS	OPTIONAL

**NOTE: ALL LAMPS TO MEET OR EXCEED MINISTRY OF TRANSPORTATION AND HIGHWAYS SPECIFICATIONS.**

SCALE NO SCALE		DESIGNED _____ DATE _____	 <b>Province of British Columbia</b> MINISTRY OF TRANSPORTATION AND HIGHWAYS	
		CHECKED _____ DATE _____		
		DESIGNER _____ DATE _____	<b>SAFETY LIGHTING STANDARD</b>	
PREPARED BY _____	RECOMMENDED _____	ACCEPTED FOR CONSTRUCTION _____		
DATE _____	REGIONAL MANAGER _____ DATE _____	REGIONAL DIRECTOR OF WORKS _____ DATE _____		
FILE NO _____	PROJECT NO _____	REG. DRAWING NO _____		

APPENDIX C



**STANDARD LIGHTING CONFIGURATION  
FOR LIGHT VEHICLES**

ITEM	DESCRIPTION	QTY
1	PERMANENTLY MOUNTED ROTO OR STROBE LIGHT	1
2	MAGNETIC MOUNT ROTO OR STROBE LIGHT	1

NOTE: ALL LAMPS TO MEET OR EXCEED  
MINISTRY OF TRANSPORTATION AND  
HIGHWAYS SPECIFICATIONS.

SCALE NO SCALE		DESIGNED _____ DATE _____	
		CHECKED _____ DATE _____	
		DRAWN _____ DATE _____	
Rev.	Date	Description	Rev.



Province of British Columbia  
MINISTRY OF TRANSPORTATION AND HIGHWAYS

**SAFETY LIGHTING STANDARD**

PREPARED BY _____	RECOMMENDED _____	ACCEPTED FOR CONSTRUCTION _____
DATE _____	REGIONAL MANAGER PROFESSIONAL SERVICES _____	REGIONAL DIRECTOR OF HIGHWAYS _____
FILE NO. _____	PROJECT NO. _____	REG. _____
		URBAN NO. _____