

RCML893-G Specifications

1. The PORTABLE RUNWAY CLOSURE MARKER (RCM) must be designed to form a lighted X which contains twenty-one (21) LED 15 watt par38 bulbs. It consists of light sources that transmit an aviation white color per SAE-AS25050. It provides a minimum day effective intensity of 70,000 candela (cd) at the beam center, 34,000 cd at 10 degrees radius, and 13,000 cd at 15 degrees radius. The minimum night effective intensity must be 2,000 cd at beam center, 970 cd at 10 degrees radius and 370 cd at 15 degrees radius. 25 degree weather proof outdoor standard base clear NFL25 (narrow flood lamp) with one (1) bulb located in the center and five (5) bulbs located in each of the four (4) legs. All X panel bulbs, light sockets, wiring and connections must be enclosed in a weather resistant housing.

2. The lighted X formed when opened and operating will be 20' 6" (6.248m) each continuous leg and 14' 6" (4.420m) on the peripheral.

3. The (RCM) must collapse for transport and storage so that all parts are inside the trailer frame dimensions to prevent damage.

4. Illumination of the (RCM) will be in flashing mode. This must be controlled by a SOLID STATE CONTROLLER. MECHANICAL CONTROLLERS ARE NOT ACCEPTABLE.

5. A photo cell must be used to reduce the bulb output for nighttime operations.

6. Flash interval time will be:

* Bright Mode - Approximately 2.5 seconds on and 2.5 seconds off.

* Dim Mode - Approximately 2.5 seconds on and 2.5 seconds off.

7. The (RCM) must have at least one (1) light mounted at the back. One light is mounted on the upper portion of the X. This light indicates power is being supplied to the (RCM) and it is operating in the flash mode.

8. A LED 24VDC safety light will be mounted on the Runway Closure Marker in such a way as to be visible by the tower or airport personnel if for any reason the machine should stop functioning or service is due. The light will be capable of flashing both day and night and have the means to stand alone.

10. The (RCM) must be able to withstand winds of 40 MPH (64.37 KPH) while in operational mode. THIS MUST BE DOCUMENTED.

11. The runway closure marker must be discernible from a distance of 3 to 5 miles (4.828 to 8.047 km) VFR daytime and a minimum of 6 miles (9.656 km) VFR nighttime. These distances must be determined from an aircraft using a GPS. Documents substantiating these tests shall be provided by an independent third party.

12. Set up time for the (RCM) must be accomplished by one person in five (5) minutes or less. This means the (RCM) can be raised and operating within this time frame.

13. The (RCM) must have the power capacity to run at FULL LOAD for a **MINIMUM** of 200 hours without refueling.

14. The (RCM) must have the capability of being 120V AC hard wired for the convenience of operating without the use of a battery or generator for prime power.

B. LIGHTED X SUPPORT FRAME (Electrically Operated Angle Mechanism):

1. **IN THE INTEREST OF SAFETY**, the angle mechanism will be operated by an electro hydraulic lifting mechanism which both raise and lower the X will frame with power from 12 volt DC. The lifting mechanism is powered independent from the generator, this way allowing the X panel to be lowered without using the generator. The actuator must be approved by the manufacturer for this application.

2. The angle mechanism must be capable of tilting 5 degrees from vertical and have trailer adjustments to accommodate this angle no matter what the degree of the runway.

3. The angle mechanism will be constructed of 2" (60.96 cm) square tubing.

C. LIGHTED X ASSEMBLY:

1. The (RCM) arms will be constructed from aluminum.

2. A locking system will be installed to secure the arms from expanding when the (RCM) is in the transport mode.

D. TRAILER:

1. The trailer frame will be constructed from 2" (60.96 cm) square tubing.

2. Trailer dimensions: 7'6" (2.29m) wide, 10' (3.05m) long.

3. A 2000# (1 ton) axle with built-in independent Henschen type suspension or equal. Axle springs, shackles, or shock absorbers are not acceptable.

4. 4.80 x 12" (203.20 x 30.48 cm) tubeless 4-ply tires, 12" (30.48 cm) wheels and fenders.

5. 2" FAS-LOC coupling rated at 3500# (1.588 t) GVW. With safety chains.

6. A two inch (5.08 cm) ball will be mounted at the rear of the trailer to facilitate towing of a second (RCM).

7. Provisions to accommodate safety chains will be mounted at the rear of the trailer.

8. D.O.T. approved brake, tail and turn signal lights with flat 4 wiring are provided.

9. Four (4) 5000 lb. (0.91 t) jack stands are located inside the frame at each corner.

10. A fold-up tongue will be provided to ease storage and shipping.

E. PAINT COATING:

1. Frame paint with gloss black.

2. The arms of the unit must be powder coated on all sides with No. 13538, Aviation Yellow, per FED- STD- 595.

F. GASOLINE POWERED GENERATOR:

* Rated Watts - 4000W Max

* Voltage - 120

* Amperage – 33.3

* Fuel Capacity - 20 Gallons (75.708 Liters)

* Run Time - **Minimum** 35 hours @ 75% load

* Unleaded Gasoline with minimum octane rating (anti-knock index) of 87

* Starting System - 12VDC Auto and manual

ADDITIONAL FEATURES

* Low Oil Pressure Safety Protection System

* Running Time Meter

* Circuit Breaker Protection

* Anti-Vibration Rubber Mounts

* Dry Air Cleaner

* 12V Battery Charging System

GENERATOR MUST BE APPROVED BY THE GENERATOR MANUFACTURER FOR THIS APPLICATION.

G. HEAVY DUTY COVER:

Base Fabric Woven Polyester
Finished Width 60"
Finished Square Yard Weight 8.75 oz./sq. yd.
Base Fabric Count 96x33
Finish/Coating Face Pigmented Vinyl Resin Coated
Finish/Coating Underside Clear Water Resistant
Tongue Tear, lbs. 22x20
Tensile, lbs. ASTM 5034 450x350
Chatillon Hand lbf: 6.00
Height Hydrostat, cm: AATCC Method 127 90+
Spray Rating: AATC Method 22 100
Bag Test, 8 and 24 hours: GSF Method Pass
UV Resistance 5 Years

H. WARRANTY

- 1. Repairs Covered:** The (RCM) is warranted by Sherwin Industries, Inc. to the original owner during the WARRANTY PERIOD. The warranty covers repairs to correct any (RCM) defect related to materials or workmanship occurring during the WARRANTY PERIOD.
- 2. Warranty Period:** The WARRANTY PERIOD for all coverage begins on the date the (RCM) is first delivered and ends at the expiration of the COVERAGE period. The warranty provided herein extends only to the repair and/or replacement of those components on the equipment covered above and does not cover labor costs.
- 3. Coverage Period:** The complete (RCM) is covered for one (1) year from date of delivery except for other coverage listed under "WHAT IS NOT COVERED."
- 4. What Is Not Covered:** Labor, tires, battery, and generator carry specific manufacturer's warranties. Buyer is responsible for any and all associated costs for service calls or delivery of the "non covered" items to authorized repair centers.

Damage due to accident, misuse, or alteration.

Damage causes as the result of any of the following is NOT covered:

- * Collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking (RCM).
- * Misuse of the (RCM) such as towing over curbs; overloading trailer or making contact with obstructions such as building, posts, or other vehicles.
- * Alterations or modifications to the (RCM) including the chassis and components, after final assembly by Sherwin Industries, Inc.

Damage or corrosion due to environment, chemical treatments, or aftermarket products

- * Damage caused by airborne fallout (chemical, tree sap, etc.), stones, hail, earthquake, water or flood, windstorm, lightning, and applications of chemicals subsequent to manufacture, etc., is not covered.

Damage caused by lack of maintenance or by the use of fuel, oil, and lubricants not recommended.

- * Also, items requiring replacement or repair from routine wear, use, and exposure are not covered.