



1.0 General

Raised pavement markers have been installed on the state trunk highway system since the early 1990's. Most of the earlier installations were made in the "gore area" on freeway sections between the driving lanes and off ramps. In 1999, a major effort was undertaken to install 100,000 raised pavement markers on the centerline of freeway and expressway sections throughout the state. Raised pavement markers aren't as common now, but are still in place in some pavements throughout the state yet.

2.0 Snowplowing Techniques

Since raised pavement markers extend 0.25-0.35" above the roadway surface, snowplow operators need to modify their plowing techniques in order to avoid causing damage to their plow and/or plow blade when plowing over the top of these markers. While the following snowplowing guidelines have been provided by the manufacturer of the raised pavement markers, the department recognizes that the speeds recommended by the manufacturer will most likely not reflect the actual speeds that the snowplows must travel in order to reduce risk to the operators and motorists.

1. Plowing speeds should not exceed 25 m.p.h. when plowing with tungsten carbide blades or 35 m.p.h. when plowing carbon steel blades;
2. The blade angle of attack should not exceed 40 degrees;
3. The plowing vehicle should be traveling in a direction parallel to the marker casting ramps to avoid side hits to the marker casting causing damage to the plow blade and the casting;
4. When using carbide insert blades with a cover blade, the cover blade should be set approximately $\frac{1}{4}$ " lower than the carbide insert blade in order to protect the carbide inserts;
5. Pronged ice blades should not be used when plowing over raised pavement markers since the prongs are likely to damage the reflector on the marker;
6. Avoid running over the raised pavement markers with an underbody plow blade to avoid applying excessive downward pressure on the marker casting;
7. Avoid using leading edge nose shoes, moldboard shoes, or metal casters when plowing over raised pavement markers. Modifications made to these plow accessories may be required to prevent damage to the reflector or the marker casting;
8. If plowing techniques are modified to avoid traveling and plowing directly over the top of centerline raised pavement markers, additional quantities of salt may be required in order to remove the snow left along the centerline between the raised pavement markers.

3.0 Reimbursement for Blades Damaged by Raised Pavement Markers

Snowplow blades damaged as a result of plowing over raised pavement markers on the state trunk highway system will be reimbursed directly by the Department. Refer to Section 5.54-Reimbursement of Blades Damaged by Raised Pavement Markers for the specific details of this reimbursement of eligible costs.