

OFFICE MEMORANDUM



MICHIGAN
STATE HIGHWAY DEPARTMENT

March 19, 1965

To: W. W. McLaughlin
Testing and Research Engineer

From: E. A. Finney

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Subject: Snap-In Reflector Buttons. Research Project 65 NM-132.
Research Report No. R-502.

After discussion by the Subcommittee on Traffic Signs and Devices regarding better methods for securing reflector buttons in sign legends, on February 20, 1964 the Research Laboratory wrote to button manufacturers, proposing a specification to provide for improved fastening methods. At that time, no manufacturer was producing to this requirement, and none wished to modify his manufacturing process. Subsequently, when one manufacturer did change his mounting method so that some of these requirements were met, the subject was raised at the December 7, 1964 meeting of the New Materials Committee. The matter was then referred to the Laboratory for further study. Meanwhile, another manufacturer has also changed his button mounting method.

In view of these developments, it is recommended that the following paragraph be adopted as a supplement to Section 7.26 i of the Standard Specifications (p. 746 in the 1965 edition), to follow the existing paragraphs under the heading "Type 1":

"Reflector buttons shall be securely mounted in the aluminum frame independent of support from the sign backing material. The mounting for the button shall prevent rotation, permanently securing the button

in the orientation for maximum reflectivity, should the manufacturer of the reflector button consider the orientation significant. The method of attaching the button to the frame shall insure that the button does not drop out or become loose when mounted vertically. The use of tape or mastic for supporting the reflector button in the frame will not be permitted."

Both the Rupert Manufacturing Company and A. G. A. Division of ESNA Company can now produce reflector buttons of the "snap-in" type. The first company provides cast lugs on the reflector button to secure it once it is snapped in. This type of mount does not prevent rotation of the button in the panel. The second company secures the button in the frame by forming a small edge flange after the button is placed in position either by adhesives or heating the button along the edge to form the flange. The latter method prevents button rotation, but also does not permit removal of the button and replacement with another since the process of securing the reflector to the frame can be accomplished only by the manufacturer.

We feel that the suggested specification change, while permitting both types of mounting methods, is an improvement over the existing specification.

OFFICE OF TESTING AND RESEARCH



E. A. Finney, Director
Research Laboratory Division

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