



ACCESSIBLE LOCK-BAR TOILET PAPER DISPENSER

Lester A. Sinclair, Project Leader

Background

A lock-bar toilet paper dispenser has been widely used at Forest Service recreation sites because of its low cost, low maintenance, and rugged steel bar construction that can withstand heavy use while saving paper. This dispenser was designed to compress and stretch the toilet paper core to prevent the toilet paper roll from spinning freely, thereby reducing waste. This device was last presented to the field in the San Dimas Technology and Development Center (SDTDC) *Equip Tips* "Toilet Paper Dispenser" (February 1981).

The original toilet paper dispenser—manufactured from a heavy, 1/4-in thick steel bar— provides for the mounting of one to three rolls of paper at a time, thereby reducing installation labor. The 19-in long dispenser, which is 2-in wide, was designed to be fixed to the wall at studs that are the standard 16 in apart. The steel bar is painted white, to give the lock-bar device a sanitized appearance. It is now also available in stainless steel, and in two shorter lengths to accommodate either two or only one roll of paper. The 2-in wide lock-bar dispenser has been very successful in reducing toilet paper waste, and it has performed admirably in preventing vandalism. For the most part, the lock-bar dispenser has been a widely successful product.

Latest Requirement

The Americans with Disabilities Act (ADA) of 1990 provided a new awareness and insight into the needs of persons with disabilities. Recreation managers are seeking out new products and changes to existing technologies to provide universal access. The lock-bar dispenser is no exception. The unique features that made the lock-bar dispenser an outstanding product also caused complications for persons with disabilities in using the product.

Thus, suppliers currently manufacture both two- and three-roll lock-bar toilet paper dispensers that are universally accessible. However, the design of these dispensers, which are only 1-1/4-in wide, allow toilet paper rolls to spin too freely, eliminating the key paper-saving feature of the original lock-bar dispenser. This change created a new challenge—redesign a toilet paper saving feature into the accessible model (fig. 1).

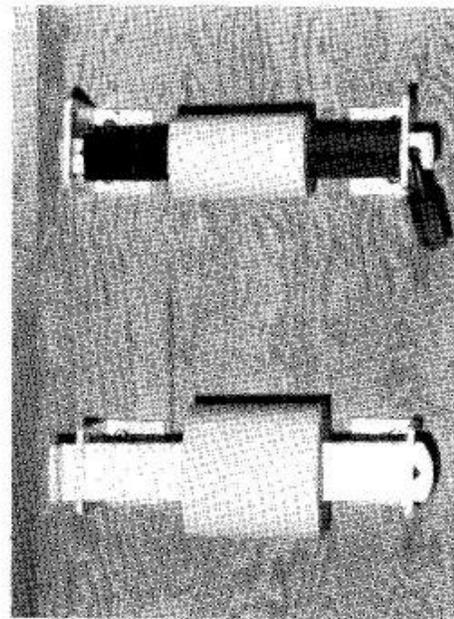


Figure 1. Accessible lock-bar dispenser with 1-1/4-in wide bar and neoprene sleeve and (below) original lock-bar dispenser with a 2-in wide bar. (Only one roll of paper is mounted on these to display the neoprene sleeve used in the accessible approach.)

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Design Solution

The painted steel bars in the accessible dispenser have a low friction coefficient that allows the paper rolls to spin too fast; this can result in waste or vandalism. In searching for a way to increase the friction coefficient without losing accessibility, several alternatives were explored. The best solution was a simple neoprene sleeve with a 60-shore hardness durometer reading. The neoprene sleeve provides enough friction to slow down the free spin of the toilet paper rolls when they are pulled without defeating accessibility (fig. 2).

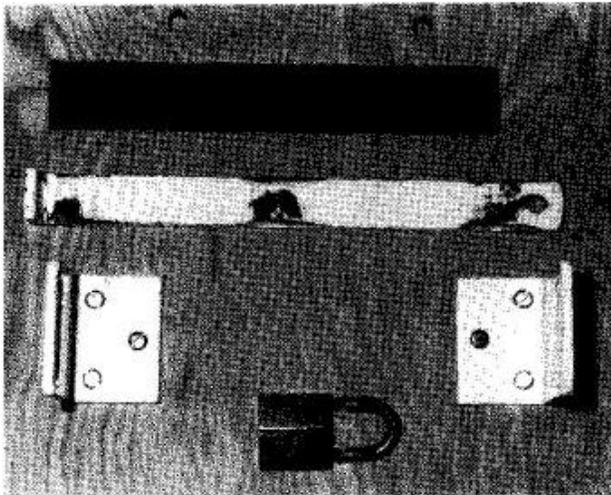


Figure 2 Used accessible lock-bar dispenser showing the neoprene sleeve in addition to the original individual parts: Brackets, bar, and lock.

Samples of the neoprene sleeve have been produced and successfully tested. The neoprene sleeve can be ordered from the following companies:

Aslin Industries
P.O. Box 294
North Bend, OR 97459
503/269-1903

Romtec, Inc.
18240 N. Bank Road
Roseburg, OR 97470
503/469-3541

NOTE: If the ordering unit still has the original dispensers, it will need to replace the original 2-in wide bar with the one that is 1-1/4-in wide in addition to obtaining the neoprene sleeve.