

- [54] **ELECTRICAL SAFETY SERVICE BLOCK**
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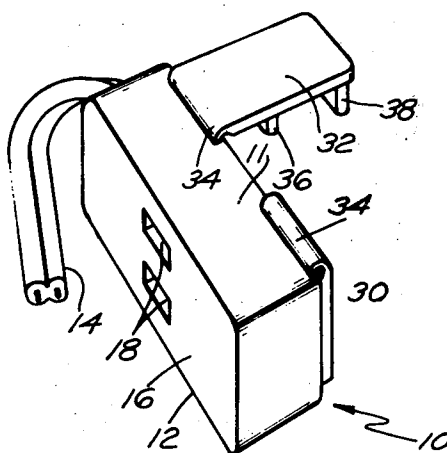
[57] ABSTRACT

A rectangular service block is mounted at one end of an extension cord. The block is provided with two pairs of slots on one face and a single pair of slots on the opposite face for receiving the male contact plugs. The block is preferably molded of a plastic, dielectric material. A pair of rectangular dielectric flaps are molded with the block for each pair of the slots on the face having two pairs of slots. Each flap is integrally connected at one end to the block by a flexible web of material. The connection to the block is from the side in transverse alignment with each pair of slots. Each flap is provided with a pair of spaced, integral, rectangular tabs extending at right angles and adapted to enter the slots. The tab nearest the hinge on each flap being shorter to permit the pivotal action. The tabs are pushed into the slots with a fraction grip to provide a safety capping of the two pairs of slots when only the single pair of slots on the opposite face is in use.

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5 Claims, 6 Drawing Figures



ELECTRICAL SAFETY SERVICE BLOCK

BACKGROUND OF THE INVENTION

The government has become more and more concerned regarding electrical safety requirements in the home. To prevent small children from being electrocuted by pushing things into the wall receptacles, the electrical industry has devised various safety devices for plugging up the slot openings when not in use. One of the disadvantages of these devices is that people forget to use them after removal, or they are lost when needed. The present invention extends this safety concept to a multiple service block but eliminates the disadvantages heretofore encountered.

SUMMARY OF THE INVENTION

The present invention provides a molded, one-piece, rectangular service block with safety flaps having tabs for entering and plugging the unused electrical slot openings. In the present invention, each pair of slots, over and above the usual single pair, is provided with its own closure flap integrally connected to the block by a flexible web of material. The web connections are made at the side in transverse alignment with each pair of slots. The flaps can thus be swung pivotally in toward the slots. For this reason, the closure tabs extending from the flaps are of unequal length, the tabs closer to the hinge webs being shorter. The tabs are pushed into the slots and are frictionally retained therein.

DESCRIPTION OF THE DRAWINGS.

In the drawings:

FIG. 1 is a perspective view of a multiple service block embodying my present invention.

FIG. 2 is an enlarged perspective view of the rear face with one of the safety flaps in open position;

FIG. 3 is a rear elevation showing both safety flaps in open position,

FIG. 4 is a side elevation with the block in use connected to a male plug and the safety flaps closed;

FIG. 5 is a perspective view showing the block in use at the front face and at one of the spare sets of slots at the rear face, the remaining spare slots being closed by the safety flap; and

FIG. 6 is a perspective view of the safety device used with an alternative form of service block.

DESCRIPTION OF THE INVENTION.

The service block of the present invention is preferably molded of a dielectric plastic material, although any other dielectric moldable material may be used. Furthermore, while the service block is illustrated as having two pairs of extra slots in addition to the usual single pair, it is obvious that any multiple number of slots may be used, each pair of slots over and above the main single pair requiring a safety device of the present invention.

Now referring to FIG. 1, the conventional service block 10 comprises a molded, dielectric, rectangular block 12 mounted at one end to an electrical extension cord 14. Conventionally, the cord 14 is provided at one end with a male plug for insertion into a wall receptacle (not shown). The cord 14 provides the block 12 with the electrical connections for the slots (not shown). Since the service block is usually initially placed into use for a specific required electrical extension, the

front face 16 is provided with a single pair of slots 18 for receiving a male plug 20 electrically connected by the cord 22 to the desired electrical appliance.

However, a multiple service block is usually provided with spare slots for connection to more than one appliance. As can be seen in FIG. 3, the rear face 24 of the block 12 is provided with two pairs of slots 26 and 28. It is these spare slots which must be equipped with the safety closures of the present invention when not in use.

As can be seen in FIGS. 1, 2 and 3, I provide the rectangular safety flaps 30 and 32 for the slots 26 and 28, respectively. Each flap 30 and 32 comprises a rectangular slab of dielectric material integrally connected to one side of the block 12 by a flexible web of material 34. Each flap is provided with a pair of spaced integral rectangular tabs 36 and 38 adapted to enter the adjacent pair of slots. Since the flaps are pivoted at the webs 34 to swing from an open position, FIG. 3, down to a closed position, flap 30 in FIGS. 2 and 5, the tab 36 nearest the web 34 must be shorter than the tab 38.

The width of the tabs 36 and 38 is such that they will be frictionally retained in the slots 26 and 28. When it is desired to use one of the spare pair of slots, 28 in FIG. 5, the flap 32 is lifted into the position shown in FIG. 2, and a male plug 40 can be inserted. This will be in addition to the plug 20 in the slots 18.

An alternative form is shown in FIG. 6 in which the extension cord is replaced by a pair of male contact blades 42. This converts a single outlet into a multiple outlet. The safety flaps are the same as in the first form for closing the slots.

I have thus provided a multiple service block in which the unused slots are effectively plugged up with dielectric safety flaps. In the present invention the safety flaps are an integral part of the plug body so that they cannot be lost or forgotten. Their addition to the block adds little to the manufacturing cost. Other advantages of the present invention will be readily apparent to a person skilled in the art.

I claim:

1. A multiple service block comprising a molded rectangular block of dielectric material, means for connecting said block to a source of electric current, said block having a plurality of pairs of slots for receiving male contact plugs, and dielectric means integral with said block for plugging at least one pair of said slots when not in use, said dielectric means including a rectangular flap of dielectric material integrally connected to said block by a web of flexible material, said flap having a pair of integral extending tabs of dielectric material for each pair of slots to be plugged, said tabs frictionally fitting into said slots, said tabs said pair being of unequal length, the tab closer to said web being shorter.

2. A multiple service block as in claim 1, wherein a separate rectangular flap of dielectric material is provided for each pair of slots to be plugged, each flap having an integral web of flexible material extending from one end of the flap to said block.

3. A multiple service block as in claim 1, wherein said means for connecting comprises a pair of male contact blades extending from said block on a face opposite said plurality of pairs of slots.

4. A multiple service block as in claim 1, wherein said means for connecting comprises an electrical extension cord.

5. A multiple service block as in claim 2, wherein said block is provided with a plurality of pairs of slots on one face thereof and a single pair of slots on another opposite face thereof, said each flap being mounted on said block for plugging said plurality of pairs of slots on the one face thereof.

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