

by a soldier, that is a person in the loop. Actuation of the firing device provides sufficient electrical energy to the blasting cap which in turn detonates the explosive charge. The assembly of the mine is shown in Figure 11. A practice version of the mine is shown in Figure 12.

Since there is a person in the loop to initiate the explosive train, a self destruct or self neutralizing device is not necessary unless the mine can be boobytrapped. The boobytrapping will involve a pull fused device. In such a case, a self destruct or self neutralizing device can be incorporated to the pull fuse used for boobytrapping.

5.2 Anti-Tank Mines in Canadian Forces Inventory

The physical characteristics of the anti-tank mines in the Canadian Forces inventory are listed in Table 8.

5.2.1 Single Impulse Pressure fused Anti-Tank Mine Mk7A1

A single impulse pressure fused anti-tank mine Mk7 is shown in Figure 13. The mine consists of a large explosive charge contained in a casing and is initiated by a pressure fuse attached at the top of the casing. When a tank moves over the mine, the pressure plate is depressed, which in turn releases the exploder spring, which activates the firing pin and thereby the explosive train. A general explosive train mechanism is shown in Figure 14.

The retrofit of the Mk7 mine will involve replacing the pressure fuse with an electronic fuse containing a self destruct or self neutralizing device. The new electronic fuse could be fitted in the existing fuse well.

5.2.2 Single or Double Impulse Pressure fused Anti-Tank Mine M15

The M15 mines are originally provided with a double impulse pressure fuse which could also be turned into a single impulse pressure fuse by means of a mechanical nut crusher mechanism. Figure 15 shows a cross section of the M15 anti-tank mine. The pressure fuse is located on the centerline axis and slightly above the top of the mine, while the