

Comparison of MagLok Tools to Current Vehicle Recovery Tool System

A comparison of the MagLok Tool system and the Current Vehicle Recovery Tool System should be done within a context that addresses the following requirements by:

1. Providing the Warfighter true versatility, with fully inter-changeable tool heads and handles to apply in any situation or theater with the objective that unit efficiency is maximized with multiple Warfighters being simultaneously employed in multiple functions.
2. Providing increased safety, while limiting fatigue for the Warfighter.
3. Providing a "Lifetime Warranty" on all parts, reflective of a proven record of durability.
4. Occupying less space than current tools now in service.
5. Costing less than current recovery tools in use.

Shortcomings of Current Vehicle Recovery Tool System compared to MagLok Tool System

1. **Unit Efficiency.** The currently employed vehicle recovery kit has only 1 handle, and therefore only 1 Warfighter can utilize the product at a time. The MagLok Vehicle Recovery Kit provides 3 handles, so 3 Warfighters can be employed simultaneously in multiple uses. In an emergency critical environment the Warfighters need 'simultaneous and multiple use capabilities' that utilizes the maximum number of available Warfighters to efficiently provide solutions to the situation. The MagLok Vehicle Recovery Kit alone provides this capability.
2. **Functional Optionality.**
 - a. The currently employed Current Vehicle Recovery Tool System provides the warfighter 7 tool functions. Some of these tools are very similar (i.e., there is a need for different sized picks?).
 - b. MagLok Tools provide **13** different usable tool configurations, while fitting in the same space on the vehicle. These tools include a shovel, axe, pick, sledge, and lug buster, all of which are accompanied with a 36" and two 17" handles for both striking and leverage operations. Longer handles for upright digging/striking that require freedom of movement for more leverage. In confined space with restricted range of motion, a shorter version is necessary. This functional optionality exist in no other product. For different theaters of operation, or tactical engagement, many additional tool options are also available such as a 'Grizzly' pry-bar, heavy duty tree saw (any Warfighter's need, MagLok provides a solution). The MagLok Vehicle Recovery system "dual handle" lug wrench for changing any vehicle tires in the field is not an option in any other vehicle recovery kit.
3. **Tool/Handle Connection Integrity.**
 - a. The Current Vehicle Recovery Tool System utilizes a connection mechanism that allows attachment heads to move up to 1.25" longitudinally and 1.5" laterally. This excessive 'play' between tool head and handle (user) creates several problems, including breakage of the connection mechanism which would render the system in-operable.
 - b. MagLok Tools have NO longitudinal or lateral tool head movement in relation to the handle, which translates into direct feedback from tool head to the Warfighter which mitigates fatigue.
4. **Tool Head Independence.**
 - a. The "axe" head on the Current Vehicle Recovery Tool System can *never be removed* when utilizing other attachments. This adds unnecessary weight, increasing Warfighter fatigue, while the exposed blade poses a constant cut hazard.
 - b. All MagLok tools are completely removable and independent, minimizing weight and increasing safety.
5. **Functional Integrity.**
 - a. The connection mechanism of the Current Vehicle Recovery Tool System is a 1/16" 'cotter' type pin that is not connected to the tool in any way. Lose the cotter pin and the entire system is rendered useless.
 - b. MagLok utilizes a 3/8"-16 thumb screw (with a shear strength of over 8,000 lbs.) that is tethered to the handle by a stainless steel cable so it can never be separated from the system.
6. **Pricing.**

MagLok tools are priced materially lower than either the Current Vehicle Recovery Tool System or the stand alone recovery tools currently in use. MagLok Tools also have a "True Lifetime Warranty".

Comparison of MagLok Tools to “E-Tool Shovel”

The Warfighters with the 5-SFG have expressed a preference for the MagLok shovel head over the iconic “E-Tool Shovel” as part of their Squad Kit. It should be noted that 5-SFG Warfighters have indicated that they so dislike the “E-Tool Shovel” that they routinely buy a standard full length shovel and cut the handle to a much shorter length (which is not detachable from the tool head as is the MagLok system)! The preference for the superior MagLok system is based on the following:

1. **Work Efficacy**

Approximately 3 times more work load can be achieved per unit of time because of the slightly larger tools head. This is accomplished because the head size is no longer constrained by the handle mechanism inherent in the “E-Tool Shovel”. The MagLok handle is removable from the shovel head. Because of this feature there is minimal weight and space differential between the two products, while MagLok enjoys a substantial benefit in work efficiency.

2. **Functional Integrity**

Because the “E-Tool Shovel” has a moving part mechanism and spring that allow the handle to fold over the shovel head, it becomes susceptible to corrosion from the elements, rain, mud... This can lead to ‘rusted out’ noise when moved or to being completely inoperable. In fact the “E-Tool Shovel requires constant maintenance with oil/ lubrication. MagLok has no moving parts, so there is nothing to fail, rust, or become inoperable. Stress tests were done with both tools, by placing each in a bucket of mud and then allowed to dry. While the MagLok shovel no negative effects, the E-Tool Shovel had rusted and was inoperable.

3. **Squad Optionality**

MagLok Tools provide optionality for the Warfighter that the “E-Tool Shovel” cannot match. Because vehicles (ATV, JLTV ...) are assuming ever increasing mobility roles for units, all hand held tools should be capable of dual and cross-functional service. A functional tool reduces redundancy, when associated with the vehicle and is equally functional when with the Squad on maneuver away from the vehicle. The “E-Tool Shovel” is barely functional when with the Squad, and is inadequate when trying to address the heavier duty needs of the vehicle. With the MagLok Tool, the squad would simply just take the shovel head and handle (and any other tool) that is with the vehicle (since it will not be needed by the vehicle). Obviously, the MagLok approach has the additional advantage of reducing costs because it is not necessary to buy two products that do the same thing, an “E-Tool Shovel” for the squad and a regular shovel for squad and another (larger) shovel for the vehicle.