

# Written Description

## THIS DOCUMENT DISCLOSES DETAILS ON THE INVENTION OF THE *Sparky Socket Set*

**DOCUMENT VERSION:** Original

**INVENTOR'S NAME:** Example 2

**INVENTION NAME:** The "Sparky Socket Set"

**INVENTION FUNCTION:** The "Sparky Socket Set" allows lock nuts of ring format to be mechanically accessed in a faster, easier and safer format.

**SPECIFIC, UNIQUE FUNCTION OR PROPERTY OF INVENTION:** The "Sparky Socket Set" is a wrench socket with a castellated facing for application upon, and rotational control of, lock nuts used on the box connectors of junction boxes.

**INVENTION FEATURES:** The "Sparky Socket Set" features a cylindrical wrench socket, a socket recess in one (1) end and a castellated perimeter about the opposite end.

**INVENTION BENEFITS:** The "Sparky Socket Set" allows lock nuts to be applied and removed easily.

The "Sparky Socket Set" allows lock nuts to be applied and removed without the need of unrelated tools.

Whereas lock nuts are typically tightened and loosened by application of a screwdriver upon the lock nuts, and then by application of a hammer upon that screwdriver, the "Sparky Socket Set" allows lock nuts to be tightened and loosened with a tool that is ordinarily used with most nuts.

The "Sparky Socket Set" allows lock nuts to be applied and removed without subsequent damage to the junction box and its contents.

Whereas both the screwdriver and hammer can slip or be accidentally misaimed, and thus cause damage to the junction box and its contents, the "Sparky Socket Set" eliminates that risk of such damage.

The "Sparky Socket Set" allows lock nuts to be applied and removed without risk of damage to the tools being used.

Whereas the forcible contact of the hammer upon the screwdriver can damage that screwdriver, the "Sparky Socket Set" imposes no such risk and by eliminating both unnecessary tools from the process.

The “Sparky Socket Set” allows lock nuts to be applied and removed without risk of danger to its user.

Whereas the hammer and/or the screwdriver can slip during their contacting process to apply/remove lock nuts, the “Sparky Socket Set” imposes no such risk and by eliminating both unnecessary tools from the process.

The “Sparky Socket Set” allows lock nuts to be applied and removed much faster than the typical method.

Whereas use of a hammer and screwdriver to direct lock nuts leaves its success open to trial-and-error methodology, the “Sparky Socket Set” ensures that lock nuts are immediately applied/removed as desired.

By allowing lock nuts to be applied and removed much faster, the “Sparky Socket Set” reduces the costs of such labor.

By allowing lock nuts to be applied and removed much faster, the “Sparky Socket Set” can improve the overall speed of operation and productivity of its users.

By allowing lock nuts to be applied with no risk of damage to other tools, the “Sparky Socket Set” provides a needed improvement to the cost-effectiveness of its users.

By allowing lock nuts to be applied with no risk of damage to the junction box or its contents, the “Sparky Socket Set” eliminates the risks of liabilities upon its users.

By allowing lock nuts to be applied with no risk of injury to the users, the “Sparky Socket Set” eliminates the risk of liabilities upon their employers.

The “Sparky Socket Set” can be used by communications workers, electricians, construction workers, heating and air conditioning tradesmen, and technicians in many employment fields.

**INVENTION VARIATIONS:** The sockets of the “Sparky Socket Set” can be made of various applicable materials, such as but not limited to chrome vanadium steel, stainless steel, die-cast zinc and copper-free aluminum.

The castellated facing of the “Sparky Socket Set” can be made in various patterns.

The sockets of the “Sparky Socket Set” can be made in shallow, deep and/or semi-deep formats.

The sockets of the “Sparky Socket Set” can be produced in various sizes.

The sockets of the “Sparky Socket Set” can be made in a variety of sizes under the approved English measurements of the Society of Automotive Engineers (SAE) and/or metric sizes.

The socket recesses of the “Sparky Socket Set” can be of various drive sizes, including but not limited to quarter inch ( $\frac{1}{4}$ ”), three-eighths of one inch ( $\frac{3}{8}$ ”), half inch ( $\frac{1}{2}$ ”) and three-quarter inch ( $\frac{3}{4}$ ”).

The “Sparky Socket Set” can be made in bell design variations, in which the castellated area extends in both length and diameter from the cylindrical socket.

The “Sparky Socket Set” can be made in non-castellated formats, in which the lock nut design itself is featured as a recess in the proximal end of the socket.

The sockets of the “Sparky Socket Set” can be made in impact socket formats, and produced with use of various materials, such as but not limited to as chrome molybdenum steel. In such formats, a non-chrome corrosion-preventing coating made of black oxide or various plastics may or may not be applied.

The “Sparky Socket Set” can be sold as a set with a variety of sockets of various sizes, and/or with an accompanying ratchet, and/or as individual sockets.

The “Sparky Socket Set” can be made in specific variations for use with various threaded lock nuts.

The “Sparky Socket Set” can include various containers of various sizes, shapes and designs for its final packaging.

The “Sparky Socket Set” can include various accessories, including but not limited to an adapter, universal joint(s) and extender(s), in its final packaging.

The “Sparky Socket Set” and/or its final packaging may contain various images, designs and/or logos, which may or may not be of registered trademark and/or copyright status.

**MECHANICAL DESCRIPTION:** *(This mechanical description is provided for specificity purposes only, and is not intended in any way to limit the dimensions, materials of production and/or scope of use regarding the “Sparky Socket Set.”)*

The “Sparky Socket Set” is a cylindrical wrench socket made of chrome vanadium steel.

The distal end of this socket features a recess for application of the drive from a ratchet wrench, and of half-inch ( $\frac{1}{2}$ ”) size.

The proximal end of this socket is castellated for application upon a lock nut.

The “Sparky Socket Set” includes various sockets of this format, and in the individual circumferential sizes of quarter-inch ( $\frac{1}{4}$ ”), three-eighths of one inch ( $\frac{3}{8}$ ”), half inch ( $\frac{1}{2}$ ”), three-quarters of one inch ( $\frac{3}{4}$ ”), one inch (1”), one and one-half inches (1  $\frac{1}{2}$ ”) and two inches (2”).

Included in the final packaging of these various sized sockets with castellated proximal ends is a ratchet wrench with a half-inch ( $\frac{1}{2}$ " ) drive.

**USAGE:** After applying an appropriate socket from the "Sparky Socket Set" upon a ratchet wrench, the user may simply apply the castellated perimeter of that socket to make direct and correlative contact upon a lock nut.

The user may then apply or remove the lock nut.