Safety Instructions
For Your
SPARTAN
Cable Machines

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READ THE “OPERATORS MANUAL” THOROUGHLY BEFORE USING ANY SPARTAN TOOL PRODUCTS. DRAIN/SEWER CLEANING CAN BE DANGEROUS IF PROPER PROCEDURES ARE NOT FOLLOWED. KNOW THE PROPER OPERATION, CORRECT APPLICATIONS AND THE LIMITATIONS OF ALL SPARTAN TOOL PRODUCTS BEFORE USE.

Use of any electrical equipment in a wet environment can cause fatal shock if equipment is not properly grounded, adequately maintained, and if care is not used by the operator.

A. GROUNDING INSTRUCTIONS —
Before using your Spartan Tool equipment, make sure a properly grounded, three hole electrical outlet is available, if not, as in some older homes, use a three-prong adapter and connect the green pigtail (or grounding lug) to a known ground such as a cold water pipe. A three-prong adapter is provided and available through Spartan Tool. Never cut off the grounding prong for use in a two hole outlet receptacle. By doing so, you have cut off your protection from shock.

Spartan Tool equipment must be grounded while in use to protect the operator from electrical shock. Spartan Tool equipment comes with a three-conductor cord and three-prong grounding type plug to fit the properly grounded receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less that 150V, it has a plug that looks like that shown in sketch (A). An adapter, see sketches (B) and (C), is available for connecting, sketch (A) type plugs, to a two-prong receptacle, except in Canada.

The green-colored rigid ear (or lug), extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.
Don’t assume that all three-hole outlets are properly installed. Check the outlet and also the adapter, if used, with an outlet testing device which quickly indicates if a ground is connected. Correct a faulty test indication before proceeding. The use of a Ground Fault Interrupter is the safest means to check for proper grounding.

B. EXTENSION CORDS —
Plug the three-wire cord furnished with your machine directly into an inspected outlet. If an extension cord must be used, it must be of an approved three-wire type in good condition, equipped with a three-prong plug. Never cut off the grounding prong for use in a two hole outlet receptacle. By doing so you have cut off your protection from shock.

C. OUTDOOR EXTENSION CORDS —
When Spartan Tool equipment is used out-doors, use an extension cord intended for use outdoors and so marked.

D. AVOID ELECTRICAL CORDS ABUSE —
Never move or lift Spartan Tool equipment by the cord. Do not yank cord at one end to disconnect it from the receptacle. Keep cord away from heat, oil and sharp edges to avoid damage. Always replace or repair damaged cords.

E. ALWAYS DISCONNECT POWER CORD WHEN NOT ATTENDING EQUIPMENT —
When not in use, before servicing and when changing accessories, make sure equipment is not plugged in. Never leave machine unattended with power connected.

F. AVOID ACCIDENTAL STARTING—
Make sure switch is in the “off” position before plugging in equipment.
G. ALWAYS WEAR RUBBER BOOTS IN WET AREAS FOR ADDED PROTECTION

H. Use rubber gloves inside Spartan Tool riveted gloves to insulate against possible shock.

I. Maintain electrical components in original conditions. Never bypass the foot switch control and hard wire the machine. You must maintain control over your machine for safe operation. Contact your Spartan Tool salesman if your older machine is equipped with an electric foot switch for conversion to air actuation.

J. Spartan Tool motors create a spark while running. They are not to be operated in an environment where a spark could cause an explosion. Avoid areas where flammable gases or vapors exist.

WARNING: SPARTAN TOOL PRODUCTS ARE NEVER TO BE OPERATED IN AN EXPLOSIVE ENVIRONMENT.

CAUTION #2

Continual rotation of the machine drum while cable is not free to turn in the pipe may cause personal injury.

A. Do not permit end of cable to get caught in an obstruction for more than 2-3 seconds while power is applied. Under these circumstances called over-torquing, the cable may buckle. Breakage of the cable is also possible creating an unsafe situation.

When you notice a drop in RPM, it is time to pull the cable away from the obstruction and ease slowly back into it. If the drum has stopped rotating, allow torque to relieve itself by stopping machine before pulling cable back.

B. Never wear lightweight cotton or cloth gloves if touching cable during operation. The cable may grab and twist the gloves causing possible injury to fingers, hand or wrist during overtorquing and normal conditions. If the Spartan Tool Power Feed is used, it is only necessary to guide the cable during operation. By using rubber gloves inside of Spartan Tool riveted gloves, it is possible to guard against electrical shock.
C. Only operate machine in “reverse” position if cable is caught in the pipe and the cable cannot be extracted. If the operator continues to use the machine in reverse, in an over-torque situation, it is possible for the cable to “shoot out” of the drum or break. All Spartan Tool products are designed to be used with the switch in “FORWARD” position. Spartan Tool cables are less likely to kink or break when the switch is in the “FORWARD” position. The Spartan Tool Power Feed (optional) allows the cable to be moved forward and backward while the switch remains in the “FORWARD” position.

D. Avoid loose fitting clothing around moving parts. The danger of personal injury exists if the operator is not properly dressed.

**CAUTION #3**

Excessive distance between the drain/sewer cleaning machine and pipe opening may cause personal injury from rotating, swinging cable.

A. Always locate drain/sewer cleaning machine as close as possible to opening of pipe. Ideally, 2 to 3 feet from the opening.

B. When the machine is positioned for overhead work or if it isn’t possible to locate the sewer/drain cleaning machine within two to three feet of the pipe opening, additional safety precautions are necessary. Place the cable inside an extra piece of pipe or pipe assembly (approximately the size of the pipe being cleaned) the distance between the machine and the opening of the pipe. It may be necessary to cut an extra piece of pipe to length or to carry a variety of lengths of pipes and elbows on the operators vehicle.

**NOTE:** If an extra length of pipe is not used at distances beyond two to three feet, it’s possible, in an over-torque situation, for the cable to twist around the operator causing personal injury.
CAUTION #4

C. Always place end of cable in the drain/sewer 6-12 inches before turning machine on. Never permit the end of cable to tool to rotate out of the pipe being cleaned to avoid accidental contact with people or property.

Avoid eye or skin contact with acids or caustic substances while cleaning drains/sewers.

A. Always wear safety goggles when cleaning drain/sewers to avoid injury to eyes.

B. Before beginning work, ask the customer if either acids or caustic substances are present in the pipe. If in doubt, litmus paper used at the opening of the pipe may give an indication of the type of substance in the line. Litmus paper (acids/caustics) can be purchased at most pharmacies.

C. Exposure to acids or caustic substances can cause cable to break or to become brittle. Depending upon the concentration of acids or caustic substances in the drain/sewer, cables may break or become brittle in the machine drum, in the pipe or when placing the cable back into the machine. If the cable remains exposed to acids or caustic substances for any length of time, the cable can continue to be damaged. A coating of lightweight oil on the cable before exposure to acids or caustic substances and rinsing of the cable in water after exposure will lower the possibility of damage to the cable.

CAUTION #5

Drain/sewers carry bacteria and the possibility of infectious disease exist, if exposed.

A. Always wear safety goggles and Spartan Tool riveted gloves with rubber gloves inside the riveted gloves to minimize exposure to infection from bacteria in pipes.

B. Avoid contact with ears, eyes, or mouth with contents of pipe to lower the risk of infection. DO NOT SMOKE!
C. Avoid exposing any cuts to drains/sewers and sewer cleaning equipment.

**CAUTION #6**

Follow all rules of safety and good housekeeping.

A. Keep work area clean.

B. Keep all safety guards in place.

C. Stay alert.

D. Place machine and controls (especially foot switch) in a stable and accessible position for safe operation.

E. Properly store the tools.

F. Keep children away from all equipment.

G. Use only recommended equipment and accessories. Maintain tools in original working condition.

H. Do not wear loose fitting clothes.

I. Do not exceed limitation of equipment or accessories.

J. Avoid accidental starting by unplugging machine when not in use.

K. Always wear recommended safety gear.

L. Always lift with legs and not your back.

M. Wear ear protectors when using equipment for extended periods of time.

**CAUTION #7**

Due to the amount of initial tension wound into your Spartan cable, care must be taken when uncoiling the bundle of cable. The cable will spring apart after the wire ties, which secure the cable, are cut.