



PRODUCT MANUAL Model 1065

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MODEL 1065 FINAL ASSEMBLY 44115804
1065 DRUM ASSEMBLY 44063100
1065 PM MOTOR COVER ASSEMBLY 44292300
1065 FRAME ASSEMBLY 44118500 27 Parts required to Secure drum. 29
1065 DISTRIBUTOR ARM 03444500
CABLE GUIDE ASSEMBLY 44225300
PM MOTOR ASSEMBLY
MOTOR SUPPORT ASSEMBLY
FORWARD REVERSE SWITCH 44221500
E-Z LIFT DOLLY - 03436000
3/4" CABLE
.66 UNIVERSAL ANCHOR ASSEMBLY 44292400
AIR FOOT SWITCH - 44225800
.66 MAGNUM CABLE
TOOL BOX AND ACCESSORY KIT
PNEUMATIC TIRE UPGRADE KIT 44250700
HOIST BRACKET UPGRADE KIT 44295110
WARRANTY INFORMATION



- Read the safety and operating instructions before using any Spartan Tool products. Drain and sewer cleaning can be dangerous if proper procedures are not followed and appropriate safety gear is not utilized.
- Before starting unit, be sure to wear personal protective equipment such as safety goggles or face shield and protective clothing such as gloves, coveralls or raincoat, rubber boots with metatarsal guards, and hearing protection.
- Drains and sewer can carry bacteria and other infectious micro-organisms or materials which can cause death or severe illness. Avoid exposing eyes, nose, mouth, ears, hands, and cuts and abrasions to waste water or other potentially infectious materials, wash hands, arms and other areas of the body, as needed, with hot, soapy water and, if necessary, flush mucous membranes with water. Also, disinfect potentially contaminated equipment by washing such surfaces with a hot soapy wash using a strong detergent.
- For any questions, contact the company at the address shown below.

CONTACT US

Spartan Tool LLC 1618 Terminal Road Niles, MI 49120 800.435.3866 SpartanTool.com

CALIFORNIA PROP. 65

This product may contain an extremely small amount of lead in the coating. Lead is a material known to the State of California to cause cancer or reproductive toxicity.



The Spartan Model 1065 electric drain and sewer cleaning machine has been designed and manufactured with high quality materials and care in workmanship. The instructions in this manual have been prepared to ensure that, when followed, the Spartan Model 1065 will provide long and efficient service.



WARNING: It is the responsibility of the operator to read and understand the Product Manual and other information provided and use the correct operating procedure. Machines should be operated only by qualified operators. Failure to do so can result in personal injury, death, or machine damage.

Read the entire manual before the initial start-up of the machine. It is important to know the correct operating procedures of the machine and all safety precautions to prevent the possibility of property damage and/or personal injury.



NOTE: Information in this manual is current at the time of printing. Spartan Tool reserves the right to make changes and improvements to its products at any time without notice or obligation.

SERVICE INFORMATION

All requests for information, service, or parts should include machine serial number. Additional copies of this Product Manual can be downloaded free of charge from www.SpartanTool.com.

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SPARTAN MODEL 1065
Unit Model Number
Unit Serial Number



Specifications and Features

Drum Capacity	110' of 3/4" innercore of sewer cable, or 160' of .66 Magnum cable
Cleaning Capacity	Up to 250'
Recommended Line Size	3" to 10" diameter
Motor	Permanent magnet; 120 volt AC (rectified); 0.65 amps (DC) @3050 rpm (no load); 4.2 amps (DC) 200 ozin torque @1800 rpm
Weight	166 lbs. for a 1065 Power Feed machine w/10' anchor cable
Height	43' to top of handle
Width	25"
Length	33" with Dial-A-Cable Power Feed
Drum Speed	220 RPM with no load
Cable Feed	Spartan Dial-A-Cable Power Cable Feed
Frame	Extra strength aluminum magnesium alloy

- · Heavy duty permanent magnet motor with reverse capability.
- Inner drum rotates independently of outer drum, virtually eliminates cable kinking, buckling, and controls torque buildup.
- Outer drum keeps dirt inside, off operator and work area.
- Air foot switch with cord assembly keeps both hands free for safe, easy operation.
- Compact, portable design.
- Extra-strength aluminum and magnesium alloy construction.
- Integral continuous belt stair skids.
- Retractable "sure-grip" extending handle.
- · Permanently attached power cord connection to assure electrical safety at the machine.



IMPORTANT: FOR YOUR OWN SAFETY—Before assembling and operating this unit, read this product manual carefully and completely. Learn the operation, applications and potential hazards peculiar to this unit.

Safety Instructions

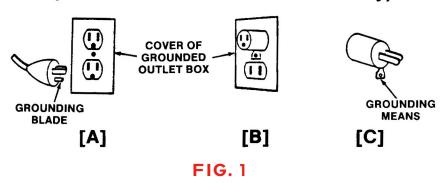


Use of any electrical equipment in a wet or damp environment can cause fatal shock if not properly guarded against by the operator.

- 1. **Know your drain cleaning machine.** Read this Product Manual carefully. Learn the operation, applications, and limitations of this machine.
- 2. **Grounding instructions:** Before using your Spartan equipment, make sure that a properly grounded, (three hole) electrical outlet is available. If not, as in older homes, use a three-prong adapter and connect the green pigtail or grounding lug to a known ground, such as a (metallic) cold water pipe.

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with a three-conductor cored and proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect this wire to a live terminal. Units designed for use on less than 150 volts, have a plug that looks like that shown in Fig. 1A. An adapter (Fig. 1B and 1C), is available for connecting three-prong plugs to two-prong receptacles (except in Canada). If such an adapter is used, the green colored rigid ear, lug, or the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

GROUNDING METHODS (For use in 110 VAC USA circuits only)



This machine is equipped with a Ground Fault Circuit Interrupter (GFCI), which should always be plugged directly into an inspected, grounded receptacle. Plug the three-pronged plug on the machine power cord with GFCI directly into an inspected grounded outlet and then test and reset the GFCI.

Never cut off the grounding prong on the power cord for use in a two-hole outlet. Doing so cuts off your protection from shock. Replace or repair all damaged power cords and components.

Safety Instructions

3. Extension cords



DANGER: Improper use of an extension cord will cause death or severe injury. The GFCI on the machine's power cord does not protect the operator from electrical shock along the extension cord.

If an extension cord must be used, it must be approved, three-wire construction, equipped with a three-pronged plug, and in good condition. Replace or repair damaged cords.

Do not use an undersized extension cord. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Use the following minimum gauges depending upon the length of the extension cord:

- · 16 Ga.: for cords of less than 100 feet in length
- 14 Ga.: for cords of 100 feet to 150 feet in length

If in doubt, use the next heavier gauge. (The smaller the gauge number, the heavier the cord.) When the machine is used outdoors, use only extension cords intended for use outdoors and so marked. Do not allow an extension cord to be exposed to water.

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.

- **4. Don't abuse cord.** Never move or lift tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- 5. Disconnect power cord. When not in use, before servicing, and when changing accessories, such as blades and cutters.
- **6. Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, refrigerator enclosures.
- 7. Avoid accidental starting. Don't move plugged-in tools. Make sure switch is in OFF position before plugging in power cord.
- 8. Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- **9. Keep work area clean.** Cluttered areas invite injuries.
- 10. Consider work area environment. Don't expose power tools to rain. Keep work area well lit.

Do not use tool in presence of flammable liquids or gases.

Avoid operating the machine in areas of standing water.

11. Dress properly. Do not wear loose clothing or jewelry. They can be caught in moving parts. Wear protective hair covering to contain long hair.

Wear standard equipment (Spartan riveted gloves). Never grasp a rotating cable with a cloth or loose-fitting glove, which would get wrapped around a cable. Replace gloves if rivets or staples start to pull out.

Wear rubber boots and wear rubber gloves inside your Spartan cable handling gloves to further insulate yourself.

- **12. Use safety glasses.** Guard against foreign material that might fly off cable.
- **13. Don't overreach.** Keep proper footing and balance at all times.

Safety Instructions

- 14. Keep children away. Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- 15. Use recommended equipment and accessories. Use of improper equipment may be hazardous.

Don't force small cable with attachment to do the job of heavy-duty cable.

- 16. Don't force tool. It will do the job better and safer at the rate for which it was intended.
- **17. Remove punches and wrenches.** Form a habit of checking to see that punches and adjusting wrenches are removed from tool before turning it on.
- **18. Keep guards in place.** Never operate machine with guard removed.
- **19. Avoid operating machine in reverse.** Operating machine in reverse can result in cable damage and is used only to back tool away from an obstruction.



WARNING: Continued drum rotation in reverse position will cause cable to "jump" out of drum. Possible operator injury could result.

- **20. Do not over torque cables.** Excessive and/or continued rotation of the drum once an obstruction has been encountered will over torque the cable. Kinking or breakage of cable may result. A worn cable can be identified as being very limber, kinked, or having flattened coils on the outside of cable. Worn cable should be replaced as soon as possible.
- 21. Maintain tools with care. Keep tools sharp and clean for better and safer performance.

Follow instructions for lubricating and changing accessories.

Never use damaged power cords.

Inspect tool cords periodically and, if damaged, repair with proper Spartan replacement parts.

Inspect extension cords periodically and replace if damaged.

Keep handles dry, clean, and free from oil and grease.

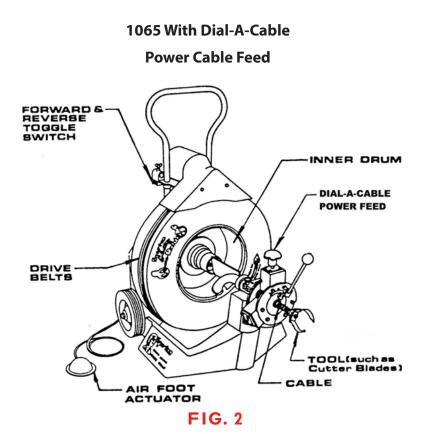
22. Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding or moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

Replace defective switches with proper Spartan replacement parts.

Do not use tool if switch does not turn on and off

- 23. Store idle tools. When not in use, tools should be stored in a dry and locked up place, away from children.
- 24. Handling cables. Be very careful when cleaning drains exposed to cleaning compounds. Wear protective gloves when handling cable, and avoid direct contact of skin and especially the eyes and facial areas as serious burns can result from some drain cleaning compounds.







STUDY THESE INSTRUCTIONS CAREFULLY BEFORE YOU OPERATE YOUR EQUIPMENT

JOINING CABLES

All cables and leaders are coupled together by male and female couplings, and held securely by means of expansion pins as illustrated.

The cable and coupling stand is furnished with the optional tool box to provide a support on which to rest your able when assembling or disassembling the couplings.

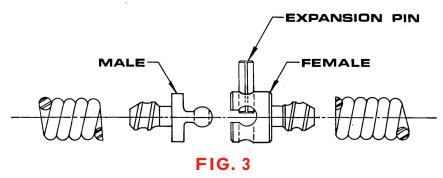
Assembly

Place coupling in groove on top of stand with portion of expansion pin in upright position. Using hammer, drive expansion pin down flush with coupling. Assembly is complete, cable and machine are ready for use.



Disassembly

Position coupling stand at convenient distance from machine (2-3 feet.) Place coupling in groove, expansion pin up, on top of stand. Place tip of punch (provided with machine) in expansion pin. Drive expansion pin down with hammer. Note the shoulder on tip of punch, acts as a stop. Drive the punch until shoulder is flush with the coupling. This is sufficient to permit the male and female portions of the coupling to be separated but leaves the expansion pin, held securely in one half of the female coupling, in ready position for reassembly.



LOADING CABLE INTO MACHINE



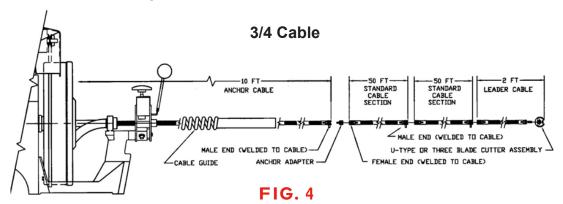
WARNING: Due to the amount of initial tension wound into your Spartan cable, care must be taken when uncoiling the bundle of cable. The cable will spring apart after the wire ties, which secure the cable, are cut.

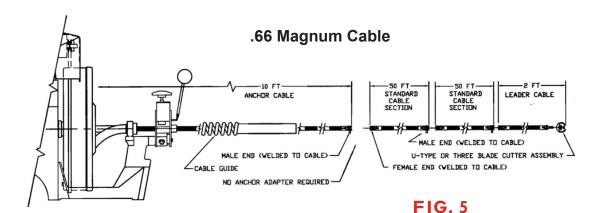
After uncoiling the cable and laying out flat, attach the male end of the cable to the female end of the 10' anchor in the drum. With the machine plugged in, depress the foot actuator and check the rotation of the drum. The drum should rotate in a counter-clockwise direction, as you face the front of the machine. If the drum rotates in the wrong direction, reverse the toggle switch located (refer to Figure 2) on the motor support and check rotation again. With the drum rotating in the proper direction, start feeding the cable into the drum.



CAUTION: Always wear your riveted Spartan gloves when handling a rotating cable. Read the section "How to Operate the Power Cable Feed" before you begin to feed cable into the drum. Feed the cable into the drum with the drum rotating. This insures proper distribution of cable inside the drum.

Leave about 2-3 feet of cable out of the machine to allow for attaching the next section of cable. After loading your desired length of cable, attach either a two foot leader cable or a double male coupling. You are now ready to attach your Spartan cutter blade assembly. (See Figures 4 & 5 for Cable Connection Diagram).





ASSEMBLY OF BLADES TO CABLE



WARNING: Always disconnect power cord before attaching or changing blades.

Each U-Type Cutting Assembly consists of:

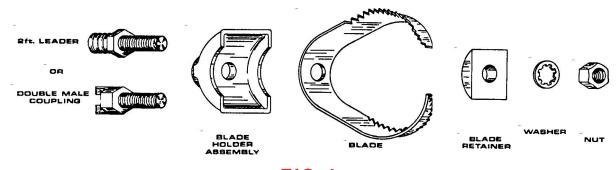
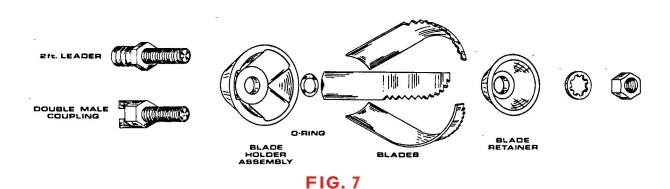


FIG. 6

Each Three-Blade Cutting Assembly consists of:



Blades

The optional tool box is furnished with a number of different sizes and shapes of blades for various size sewers and types of cleaning work. (Additional tools are listed on page 13.)

Your Spartan blades can be attached to either a 2' leader cable or a double male coupling. To attach a cutter assembly the base of the blade holder assembly needs to be seated onto the hex part of the leader or double male coupling. Next, the proper blade size is placed into the blade holder base. After inserting the blade, secure with blade retainer, lock washer and nut. **Draw up all blades assemblies tightly** with your T-wrench, otherwise vibrating may cause unnecessary loss of blades. A T-wrench is furnished so you can quickly and conveniently assemble blades. With the blade assembly attached, your now ready to operate your Spartan machine.`

OPTIONAL TOOLS

Part Number	Description	Use
44006700	Extra Heavy Razor Sharp 2½" Round Cutter Blade	Used to cut roots and clear blockages in 3", 4", and 6" lines. High water resistance
44052600	Boring Tool	Used in 3", 4", and 6" lines for penetrating major blockages.
03416600	3" Grease Blade	For cleaning grease or muck lines. Integral "paddles" act as a scoop and cause a churning action within the line for quicker, more efficient cleaning.
03416700	4" Grease Blade	For cleaning grease or muck lines. Integral "paddles" act as a scoop and cause a churning action within the line for quicker, more efficient cleaning.
44063702	3/4" Tandem Cutter Assembly	Combination tool used to penetrate blockages and
44063704	.66 Tandem Cutter Assembly	clean lines in one operation. Penetrating blades and cleaning blades are interchangeable in a wide variety of sizes and types.

OPTIONAL ACCESSORIES

Tool box and the following accessories:

- 3-blade cutters in sizes 2", 2-1/2", 3", 4", 6"
- · 3-blade holder assembly
- · Cable coupling stand
- · Punch for expansion pin
- "T" wrench
- 3" and 3-1/2" "P" trap blades with blade holder assembly
- 4" saw blade
- · Spear Blade
- 2" and 2-1/2" blades with blade holder assembly
- 3", 4", and 6" blades with blade holder assembly
- Retriever
- Riveted Gloves
- Expansion pins, double male, male and female couplings, splicer
- 2' flexible leader

Operation



WARNING: Never wear loose fitting clothing or jewelry when operating this machine. **Always** wear your Spartan riveted gloves when handling cable.

- 1. Couple the leader or double male coupling, complete with the proper tool, onto working end of the cable. See assembly instructions.
- 2. Use a small blade or spear blade on the end of your cable first. Most lateral lines are 4" to 6" in diameter. It is advisable to use a 3" blade or spear blade first. That enables you to cut the core out of the obstruction, to get the water running. Then remove the 3" blade, or spear blade. Put on a blade the size of the sewer line to be cleaned, so you can actually scrape the line thereby giving a thorough, efficient cleaning job.
 - a. A good rule of thumb is to use a tool at least 1" smaller than the line to be cleaned. The style of tool is determined by the nature of job and is left to the discretion of the operator.
 - b. Flexible trap leaders should be used to negotiate p-traps and severe bends in line.
 - c. Double male couplings should be used when operating in heavy root build up or severe obstructions.
- Place your machine as close to the cleanout as possible. Do not allow more than 4 feet of cable between the machine and the cleanout. Always use the Cable Safety Guide.



WARNING: Operator should be thoroughly familiar with the Safety Instructions section before attempting to operate this equipment.

- 4. Place foot switch, in a comfortable and accessible position in order to have power at all times.
- 5. Place the switch in the "F" (forward) position. Check by pressing down on footswitch making sure that drum rotates in counter clockwise direction as you face the drum.
 - a. Hand-feed the tool into the opening of the line and feed about 6" of cable in before turning machine on.
 - b. Refer to the section "How to Operate the Power Cable Feed" before proceeding.
- 6. Exert sufficient downward pressure on the Cable Safety Guide to keep cable in line while depressing foot actuator to start cable rotating.
 - a. When using a Dial-A-Cable Power Cable Feed, keep one hand on the Cable Safety Guide halfway between the cleanout and the power feed outlet. Keep your other hand on the power feed control handle.
- 7. When your blade meets an obstruction, it will no doubt fail to rotate. A reduction in RPM will be noticed. If RPM of the motor and drum decrease, quickly pull back on the cable to disengage blade from the root or other obstructions. Thereby releasing torque or tension on your cable—preventing buckling or kinking of cable.



WARNING: Do not permit blade end to get hung up in an obstruction for more than 2 to 3 seconds. Your job as an operator of this machine is to keep the cable rotating. Remember, do not operate the machine to the point where the cable begins to buckle. This practice is dangerous and could damage the cable.



NOTE: Kinkage and breakage of cable is caused solely by one thing: you permit the working end of the cable to get hung up in an obstruction and you keep on twisting the other end of same with your motor, until something must give. Remember, the only way you can clean an obstruction from a line, or negotiate a bend in a line, is when your blades are rotating. Let us repeat: your job is to keep the blades rotating. The design of your motor is such that as soon as the blade end of your cable gets hung up in an obstruction, your motor RPM reduces. That reduction in speed is notice to the operator to pull the blade away from the obstruction, thereby releasing the tension that has been built up in the coil-spring cable. That release of tension prevents buckling, kinking or breakage of the cable.

8. A good rule to follow for releasing tension on a cable is this: when your blade gets hung up in the obstruction and fails to rotate, an RPM reduction will be noticeable which indicates it is time to pull the blade away from the obstruction. As you pull it away, all tension in the cable will be released immediately and your blades will turn at a high speed. As soon as the blade is free, push it back into the obstruction quickly so as to utilize the built-up power which enables you to clean the line more quickly and efficiently.



WARNING: Do not allow a tool to get hung up in an obstruction. If a tool gets hung up in an obstruction, a reverse feature is provided on this machine for just this purpose. In the event your blade gets hung up on an obstruction and you are unable to release it in the normal manner, move the toggle switch to the "OFF" position, and permit your machine to come to a dead stop. Then, move the toggle switch in the "R" (reverse) position. Now start your machine slowly. See if you can remove the blade from the root or other obstruction by this reverse action. When the blade is released, let your machine come to a dead stop again. Then place the toggle switch in the "F" (forward) position. Make sure that the cable/blade rotates counter clockwise, when standing in front of the machine, except when reversing it to free cutting tool from obstruction.



WARNING: Do not reverse machine until motor and drum come to a dead stop.

Avoid operating this machine in reverse for any other purpose.

- 9. When you cut through one group of roots, it is always good to pull back your cable and take another cut. This final cut is what gives you a thorough cleaning job.
- 10. When the job is complete, feed the cable back into drum, making sure that your machine is running, so that the distributor arm can feed and distribute cable in the drum properly.
 - KEEP MACHINE RUNNING in the forward direction.



WARNING: Never retract tool from sewer inlet while cable is rotating.



NOTE: It is recommended that a continuous flush of water can be used to clean cable and tool as they are retrieved.

Operation

- 11. When tool is close to the clean out opening, release foot actuator and allow machine to come to a complete stop.
- 12. Move toggle switch to the "OFF" position and disconnect machine from power source.
- 13. Pull remaining cable and tool from the line and hand-feed cable back into the drum.



Operating the Power Cable Feed

- 1. The adjusting knob on the top controls the tension on the cable. It should be set so that the cable feeds freely in-and-out of the drum. Tension can be increased by turning handle to the right. Don't apply too much tension—just enough to keep the cable moving is sufficient.
- 2. Adjust the knobs on the Power Feed to match the size of the cable installed in the drum for optimal performance.
- 3. Cable is fed into the line by putting the handle in forward position. This speed will vary from 0-30 feet per minute depending on size of the cable and how far forward you push the handle.
- 4. Cable is brought out of the line by putting the handle in reverse position. You can also vary the speed in reverse.
- 5. When the handle is straight up, the drive is in neutral position. There is no lateral movement of cable at this point. This enables the operator to position the blade against the stoppage and chew it away if necessary.
- 6. Another feature of the Dial-A-Cable Power Cable Feed is its ability to change from FORWARD to REVERSE by simply moving the handle. The feed reacts immediately.
- 7. New drive design permits repair right in the field. Entire unit can be taken apart and put back in working order in just ten minutes.



WARNING: (1) Never try to force the cable into the line. Choose a proper feeding speed that gives a smooth cutting action. (2) Refer to operating and maintenance instructions for proper maintenance.

Special Applications Procedure



CLEANING LINES THROUGH A MANHOLE

- 1. Position your machine at top and about 1' away from manhole.
- 2. Use a length of $1\frac{1}{2}$ " pipe with 45° elbow screwed there to (the depth of the manhole determines the proper length of pipe to be used).
- 3. Hand-feed your cable, less leader and blade, through proper length of 1½" pipe.
- 4. Fasten leader or double male coupling with proper size blade to end of cable.
- 5. Place blade into line by the use of extension pipe. The length of pipe referred to provides a guide for your flexible shaft from the top of the manhole to the entrance of the line, thereby preventing your cable from buckling or kinking. It likewise enables the operator to operate the machine in a convenient, comfortable position at the top of the manhole. **Never enter the manhole.**

RODDING FARTHER THAN 100' (3/4" CABLE*)

The object of the 10' anchor cable is in the drum is this: When you have fed 100' of cable into the line, the female coupling on the end of the 10' piece will show up at the end of the distributor arm on your machine. You will then know that you have 100' of cable in the line. Now, let's suppose that the line you are cleaning requires more than 100' of cable.

This is the procedure to follow:

- 1. Disconnect the 100' of cable and leave it in the line. Insure that it cannot fall into the pipe beyond the opening.
- 2. Take the male end of your extension and add it to the 10' piece in the drum, feeding the whole extension piece into the drum.
 - **NOTE:** The machine should be operating in the forward direction.
- 3. Hook up to the 100' piece in the sewer and resume rodding.
 - *NOTE: 150' of .66 magnum cable can fit in the drum at one time.

MAIN SEWER OR SEPTIC TANK OVERRUN

It is very important to know the approximate distance from inlet to main sewer or septic tank. Overrunning cable too far into main sewer or septic tank can allow cables to knot up and prevent their retrieval.



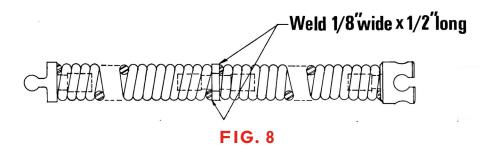


WARNING: Make sure machine is unplugged from the electrical system before making any adjustment.

INSTRUCTIONS FOR SPLICING OR REPAIRING CABLE

Splicing Cable (Standard Single Wound Cable)

- 1. Square ends of cable to be spliced or repaired by placing each end against a grinding wheel, grinding down so that the shoulder of splicer or coupling will butt squarely against the cable ends. (If splicing "INNER-CORE CABLE", and inner-core protrudes from cable at point of repair, pull the inner-core out of the cable just far enough to allow for the insertion of the connector. Then cut the inner-core off and push back into cable.)
- 2. Put cable in vice and open ends slightly with drive punch so that opening is just large enough to allow connector to be inserted.
- 3. Clean splicer or coupling of rust or grease.



- 4. Connect cables to splicer, or coupling and draw up tightly to shoulder of connector, as illustrated above.
- 5. Put cable in vice and open ends slightly with drive punch so that opening is just large enough to allow connector to be inserted.

Splicing the .66 Magnum Cable and Installing New .66 Couplings

Itom	Part Number	Description
Item	Part Number	Description
1	44120400	.66 Long Male Coupling
2	44120500	.66 Female Coupling
3	44053400	.66 Splicer
4	44120600	.66 Male Coupling
or	44120300	.66 Leader Male Coupling

NOTE: Couplings and splicer for the .66 Magnum Cable are **not** interchangeable with ¾" or %" Spartan cable connectors.

- 1. Grind cable square by placing the cable end against a grinding wheel. Care is to be taken to assure the innercore is flush with outer cable. Grind outer cable and innercore down enough to produce a flat contact surface between the cable and connector (splicer or coupling).
- 2. Secure the cable into a vise, making sure innercore remains flush with outer cable.
- 3. Clean connector and inside of cable from rust or dirt. (Care to be taken on cleaning connector threads.) Also it may be necessary to deburr inside of cable.
- 4. Insert connector into innercore in the manner of tightening a right hand threaded screw. Tighten connector enough so that contact is made between outer cable and the connector face. If required, step two through four should be repeated for the other cable end.

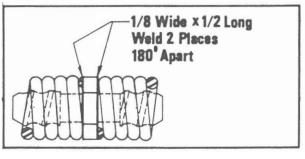


FIG. 9

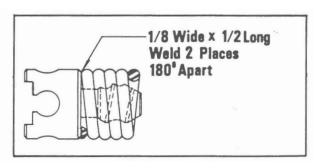


FIG. 10

5. Since the coupling and the wire in the cable are of high carbon steel, a special welding process is required. Before welding, use a propane torch to preheat the area where the weld will be. Hold the torch 4-5" away from the metal surface and heat for 2 minutes. Immediately, weld with an arc welder, using 3/32" diameter unit rod #70 or equivalent chromium-stainless steel rod. Use a heat range of 90-100 amps. Be sure weld bead is 1/8" wide and 1/2" long, where each wire end contacts the coupling.

After welding, it will be necessary to stress relieve the welded area. Again, using a propane torch holding 4-5" away from metal surface, heat up to approximately 5 minutes. Allow to cool and cable will be ready for use.



NOTE: Never heat the cable to a cherry red color. This indicates too high a temperature and will weaken the cable.

LUBRICATING MACHINE

All the lubrication required to keep your machine in working order is to keep it greased the two zerk fittings that are provided require greasing.

CHANGING MOTOR BRUSHES



WARNING: Make sure machine is unplugged from electrical system.

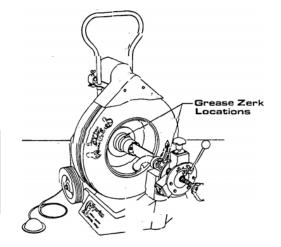


FIG. 11



FIG. 12

- 1. Unscrew brush cap. (See Figure 12).
- 2. Remove brush, mark the top of the brush. Note the condition of brush end and brush length. If brush end is chipped or damaged in any way, replace brush. Brush length of ¼" or less indicates time for replacement.
- 3. If brush is still good, replace into holder or; if not good, replace with new brush. Repeat procedure on other side then assemble cover and your machine is ready to run.



NOTE: If new brushes are used, run the machine for about 5 minutes before operating. Check brushes every 300 hours of operation and replace motor brushes every 5 years.

CARING FOR CABLES



NOTE: A new 10' anchor cable should be replaced each time new cable is installed.

Spartan cables are of such design that no special care is required. At the end of each day of use, cables and the inside of drum should be rinsed throughly with water to prevent damaging effects of drain cleaning compounds, acids and other organic compounds that eat away the cable's strength.

Cables should be replaced when they become severely corroded or worn. A "worn cable" can be identified when outside coils of cable become flattened and/or the cable becomes limber. A light weight rust inhibiting oil is recommended for use on cables when not in use. This serves to delay the effects of acid but only for a limited time.



NOTE: Worn or corroded cable reduce the machine efficiency in removing obstructions. New cable reduces chances of downtime and the time it takes to get the job done.

REMOVING 10' ANCHOR CABLE

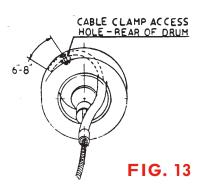
- 1. Loosen nut on cable clamp assembly.
- 2. Remove cable clamp.
- 3. Pull cable out of machine from front.

HOW TO INSTALL 10' DRUM ANCHOR CABLE

- 1. Position distributor arm to left side of cable clamp access hole in the outer drum (looking at machine from the front).
- 2. Push cable through distributor until about 3' of cable is in the drum. Distributor arm will move to the right of the access hole as shown in diagram.
- 3. Secure cable clamp assembly and push remainder of cable inside of the drum.

NOTE: If any maintenance is required other than listed above or any other problem, call your nearest Spartan Tool Territory Manager or contact Spartan Tool.

10'ANCHOR DIAGRAM



NOTE: Anchor cable end should be at least 6"-8" from clamp.

MACHINE STORAGE

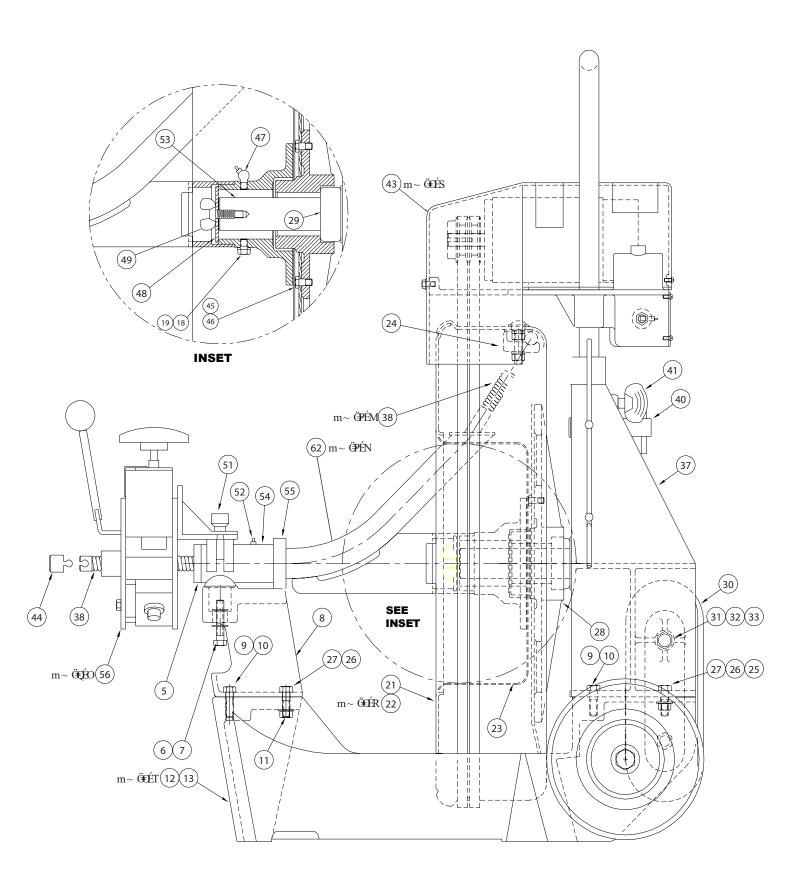
Electric motor driven equipment must be kept indoors or well covered in rainy weather.



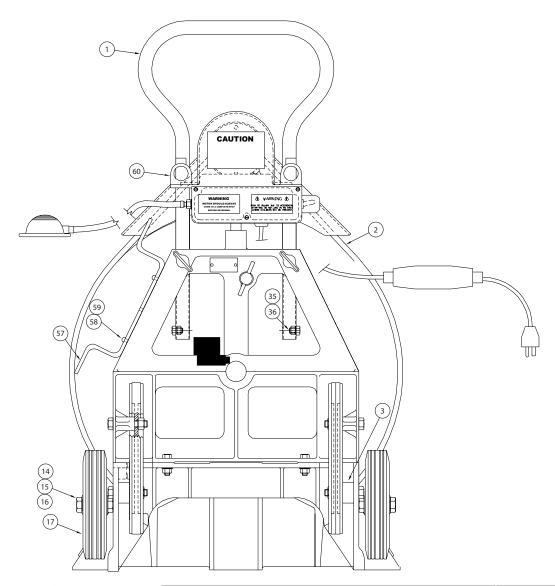
NOTE: After every job, rotate drum so that the drain hole is on the bottom to allow for drainage before storage. A lightweight rust inhibiting oil is recommended for use on cables when not in use.



Model 1065 Final Assembly 44115804



Model 1065 Final Assembly 44115804



ltem	Part Number	Description	Qty.
1	04206100	Handle Assy (Includes Items 35, 36)	1
2	02882400	V-Belt - 1/2 hp 82" 4L 820	2
3	44289200	Spacer, Nylon 1" OD	2
5	02751600	Set Collar Assy (Includes Set Screws)	1
6	02847700	Retaining Ring	1
7	04204400	Screw Assy (Includes Item 6)	1
8	03414700	Upper Front Casting Assy (Includes Items 7, 9, 10, 11)	1
9	02826500	Screw, Hx Hd 3/8-16 x 1-1/4	2
10	00167200	Lockwasher, 3/8 Internal Tooth	2
11	02821100	Nut, Hex 3/8-24	2
12	44118500	Frame Assy (Includes Items 8, 13, 14, 15, 16, 17, 30, 37, 43)	1

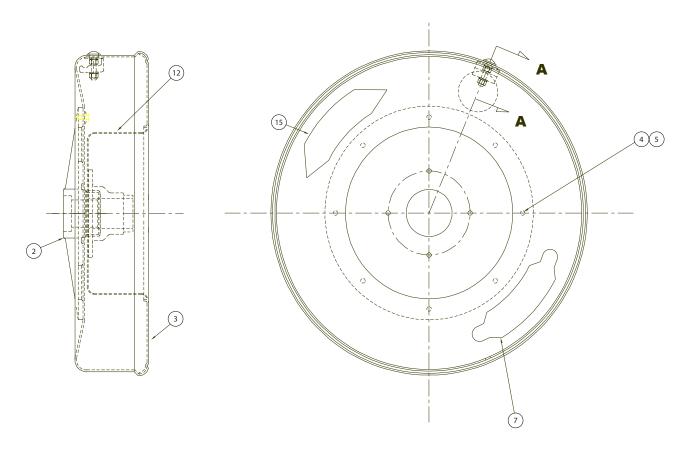
Model 1065 Final Assembly 44115804

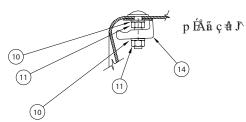
Item	Part Number	Description	Qty.
13	04204700	Lower Casting Assy (Includes Items 9, 10, 11, 25, 26, 27)	1
14	02994400	Screw, HX Hd 5/8-18 x 4	2
15	02820800	Nut, Hex Jam 5/8-18	2
16	00167600	Lockwasher, 5/8	2
17	02897800	Rubber Tired Wheel 8 x 2.50	2
18	00114800	Screw, Hx Hd 5/16-18 x 5/8	1
19	00165600	Lockwasher, Kantlink	1
21	04205100	Outer Drum and Cover Spinning Assy (Includes Item 24)	1
22	44063100	External Drum Assy (Includes Items 21, 28, 29, 45, 46)	1
23	02756900	Internal Drum Assy (Includes Flanged Bearing Riveted to Drum and Items 18, 19, 47)	1
24	44110600	1065 Cable Clamp Assy	1
25	02821100	Nut, Hex 3/8-24	4
26	00167200	Washer, 3/8 Internal Tooth Lock	4
27	02826500	Screw, Hex Hd 3/8-16 x 1-1/4	4
28	04205200	Outer Drum Hub and Bearing Assy	1
29	02769100	Thrust Bearing	1
30	04205500	Crawler Tread Assy (Includes Items 31, 32, 33 and belt)	2
31	00118900	Hex Head Cap Screw 1/2-13 x 2-1/2	4
32	00167400	Washer, Lock-Internal Tooth	4
33	00778000	Nut, Hex 1/2-13 Zn Plt.	4
35	00116000	Screw, Hx Hd Cap 3/8-16 x 1/2	2
36	00140000	Square Nut, 3/8-16 x 1/2	2

Item	Part Number	Description	Qty.
37	04205400	Back Casting Assy (Includes Items 25, 26, 27, 31, 32, 33, 41, 53)	1
38	44053501	.66" x 10' Magnum Anchor Cable	1
40	04205300	Tangent Lock Assy	1
41	02853800	Thumb Screw, 3/8-16 x 1-1/2	2
43	44292300	Motor Cover Assy (Includes Mounting Screws and Washers)	1
44	44291501	.66-3/4" Anchor Adapter	1
45	00114800	Screw, Hx Hd 5/16-18 x 5/8	12
46	02825000	Int/Ext Tooth Lockwasher	12
47	02796300	Grease Zerk, 1/8" IPT 45 deg	1
48	02750200	Drum Washer	1
49	02822300	Thumb Screw, 3/8-16 x 3/4	1
51	03410500	Adjustable Knob	2
52	02796200	Grease Fitting	1
54	03411400	Distributor Arm Bearing Assy for use with Power Cable Feed (Includes Swing Bolts, Adj Knobs, Grease Fitting)	1
55	03409800	Shaft Collar	1
56	04221000	Model 75 Power Feed	1
57	44280700	Cord Wrap	1
58	02824000	Screw Slotted Rd Head	2
59	03850100	Hex Nut #10-32	2
60	44291100	Motor Support Complete	1
61	44282500	Decal Package Complete 1065	
62	03444500	Distributor Arm Assembly	1
63	44225300	Cable Guide Assembly	1

1065 Drum Assembly 44063100



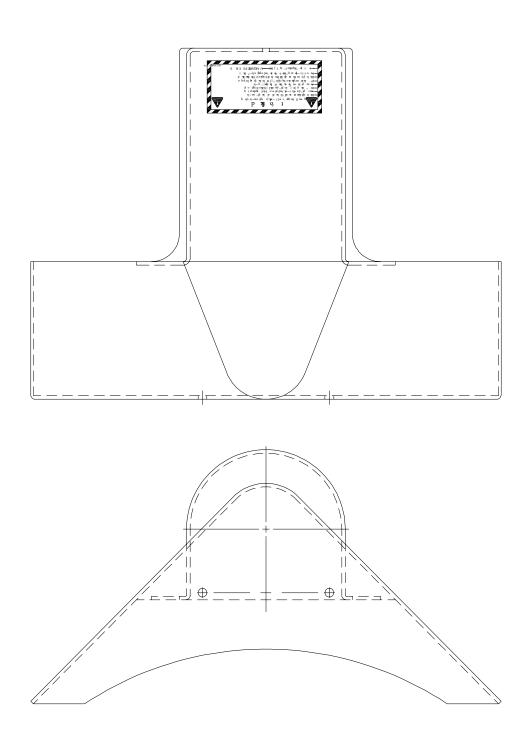




ltem	Part Number	Description	Qty.
2	04205200	Outer Drum Hub Assy 1065	1
3	04205100	External Drum Assy 1065	1
4	02825000	Int/Ext Tooth Lockwasher	12
5	00114800	Screw, Hex Hd Cap 5/16-18 x 5/8	12
7	04717700	Decal, Model 1065	1
10	00165800	Washer Lock-Split Medium 3/8	2
11	02934100	3/8-16 Hex Nut Zinc Pltd	2
12	02756900	Internal Drum Assembly-1065	1
14	44110600	1065 Cable Clamp Assy.	1
15	02761200	Decal, Spartan Warning	1

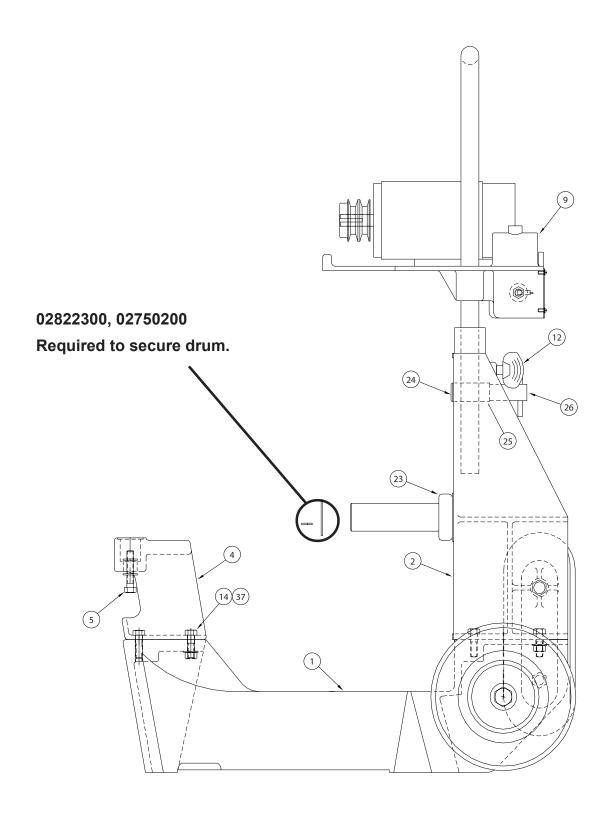


1065 PM Motor Cover Assembly 44292300

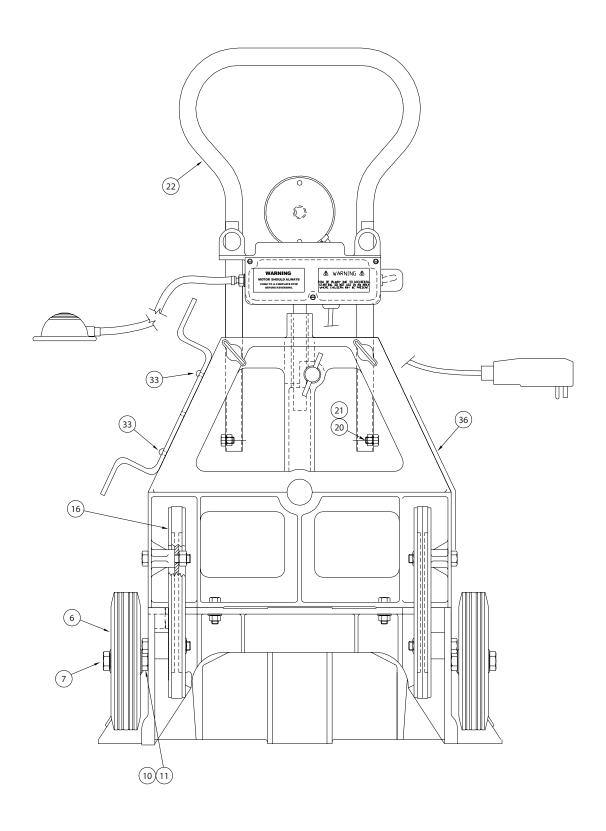


1065 Frame Assembly 44118500





1065 Frame Assembly 44118500



1065 Frame Assembly 44118500

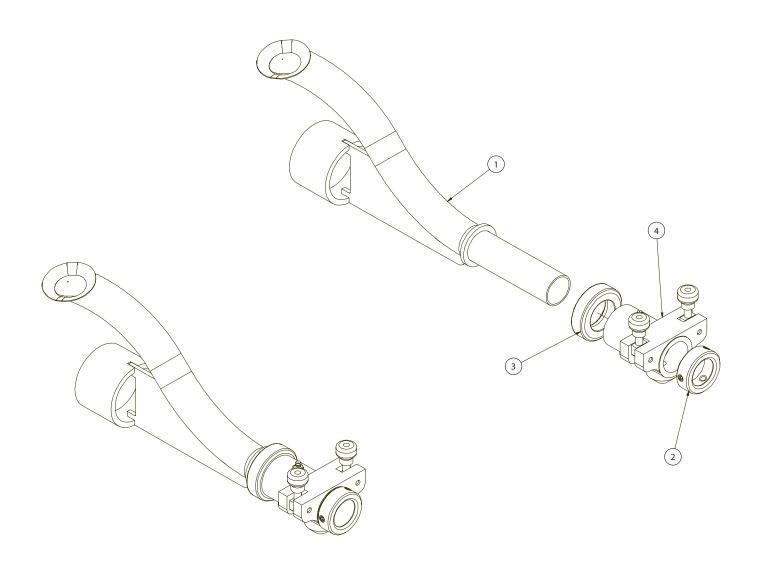
ltem	Part Number	Description	Qty.
1	04204700	Lower Casting Assy 1065	1
2	04205400	Back Casting Assy 1065	1
4	03414700	Upper Front Casting Assy	1
5	04204400	Thumb Screw Assy M	1
6	02897800	Rubber Tired Wheel 8 x 2.50	2
7	44302400	Screw, Hex Hd Cap 5/8-18 x 3-1/2	2
9	44291100	Ass'y, Pm Motor Support 1065	1
10	02820800	Nut, Hex Jam 5/8-18	2
11	00167600	5/8 Lockwasher	2
12	02853800	Thumb Screw 3/8" -16 x 1-1/2"	2
16	04205500	Crawler Tread Assy Universal	2
20	00116000	Screw, Hex Hd Cap 3/8-16 x 1/2	2
21	00140000	Square Nut 3/8-16 Zinc Pltd	2
22	02818200	Handle-1" Od x 16 Ga. Welded	1
23	02769100	Thrust Bearing 621	1
24	04205300	Tangent Lock Assy.	1
26	03426500	Ass'y, Handle & Screw	1
33	02824000	Phillips Fillister Hd Mach.	2
36	44281400	Decal, 1065, 300, 2001 Safety	1

PARTS REQUIRED TO SECURE DRUM

Item	Part Number	Description	Qty.
1	02750200	Washer, Zn. Plated	1
2	02822300	Thumb Screw, 3/8-16	1



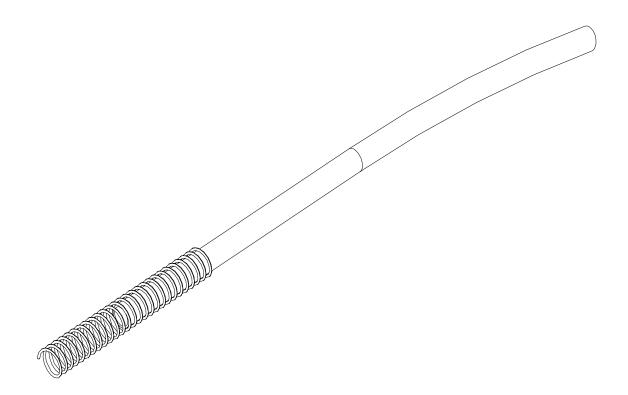
1065 Distributor Arm 03444500



ltem	Part Number	Description	Qty.
1	02757300	Distributor Arm Assembly 1065	1
2	02751600	Collar Assy-Set	1
3	03409800	Shaft Collar	1
4	03411400	Distributor Arm Bearing Assy Feed	1

Cable Guide Assembly 44225300



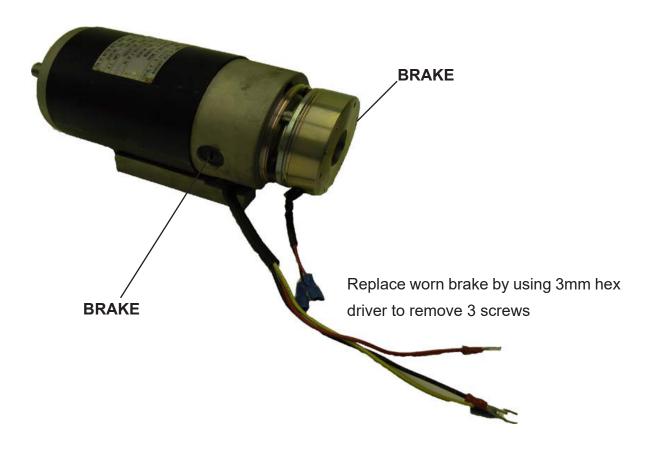




PM Motor Assembly

44290000 (110 VOLT)

44293400 (220 VOLT)



Part Number	Description
04231300	Repair Brush Kit 100-300-1065-2001
44304200	115 V Brake
44304250	220 V Brake

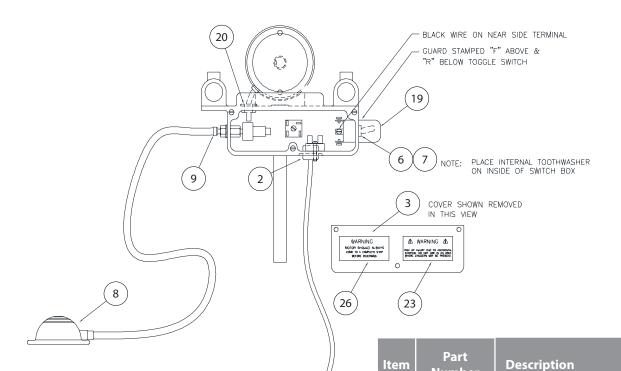
Motor Support Assembly



44291100 (110 VOLT) 44293900 (220 VOLT) NOTE: PLACE HEAT SINK PAD TO BACK SIDE OF BRIDGE RECTIFIER PRIOR TO MOUNTING 24 1 28 27 TERMINALS TO THIS SIDE 12 16 11 14 16 17 GREEN WHITE 13 YELLOW WITH GREEN STRIPE 21 MOTOR LEADS 13 BRIDGE RECTIFIER RED 10 BLACK 22 29 BLACK BROWN 30 (15 YELLOW RED BLACK TIP AC (30) 18 NO POLARITY (29)(22 NEEDED TIT BLACK TERMINAL DISCONNECT FEMALE 18

BRIDGE RECTIFIER

Motor Support Assembly



					12	00125100	SI Rd Hd Machine Screw #8-32 x 3/8	3	3
					13	44216100	Terminal Quick Connect Female	2	2
					14	00165400	Lockwasher, Kantlink 1/4"	4	4
ltem	Part	Description	220 V	110	15	44290800	Jumper Wire Assy Yellow 5"	1	1
itein	Number	Description	Qty.	Qty.	16	44002600	Pressure Switch (Barb Conn)	1	1
1	44291100	Motor Support (complete		1	17	02822800	Butt Connector	1	1
	4420000	as shown)		1	18	44294200	Jumper Wire 7" Black	2	2
	44290000	PM Motor Assy		ı	19	44120000	Switch Guard	1	1
	44293400	PM Motor 220 V (1065)	1		20	44221600	Grommet	1	1
2	44041700	Strain Relief Bushing	1	1	21	44290700	Jumper Wire Assy Brown 5"	1	1
3	44109500	Outlet Box Cover	1	1	22	44290500	Bridge Rectifier	2	2
4	44109200	Motor Mount w/Support	1	1	23	44283200	Decal, Warning-Accidental Start	1	1
5	71103300	Interrupter, Ground Fault		1	24	02824000	Philips Hd Mach Screw #10-32 x 1	1	1
6	44221500	Toggle Switch Assy	1	1				1	1
7	00167400	Internal Tooth Washer	1	1	25	03850100	Hex Nut #10-32	•	•
,		1/2"	'	•	26	44290400	Label. Stop Motor	1	1
8	44225800	Air Bulb & Hose Assembly	1	1	27	02755400	Sheave, 2 Grove	1	1
9	04652700	Crimp Type Hose Clamp	1	1	28	02751300	Key	1	1
10	44292200	Jumper Wire Assy Black 4"	1	1	29	44290501	Pad, Thermo Conductive	2	2
		Hex Head Cap Screw 1/4-			30	44294100	Jumper Wire Piggyback	2	2
11	02827200	20 x 7/8	4	4	31	44170700	Cord Assy Europe 16A 250V	1	

Number

220

Qty.

SI Rd Hd Machine Screw #8-32 x

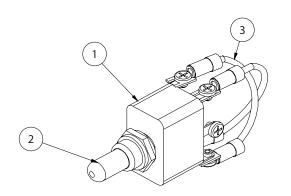
110

V

Qty.

Forward Reverse Switch 44221500

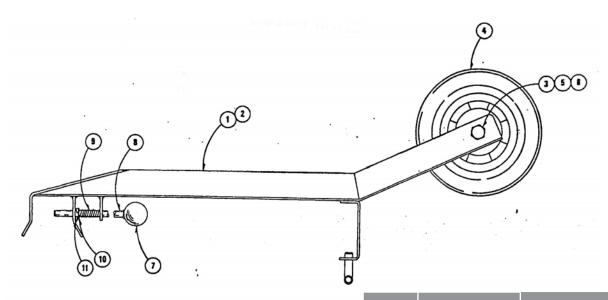




Item	Part Number	Description	Qty.
1	44221550	Toggle, ON/OFF/ON	1
2	44110500	Rubber Boot	1
3	44038900	Assy, Jumper Wire - 2-1/2	2

E-Z Lift Dolly - 03436000





ltem	Part Number	Description	Qty.
1	03436000	E-Z Lift Dolly	1
2	03435900	Rail Assembly	1
3	02821300	Stop Nut	1
4	02811900	Wheel	1
5	00760400	Washer	2

ltem	Part Number	Description	Qty.
6	02826200	Hex Head Cap Screw	1
7	02856900	Knob	1
8	03428400	Locking Rod	1
9	02897900	Spring	1
10	00162600	Washer	1
11	02825900	Cotter Pin	1



3/4" INNER-CORE

Dia - Lth	Part Number
3/4" x 25'	03442101
3/4" x 50'	03442102
3/4" x 75'	03442103
3/4" x 100'	03442105
3/4" x 110'	03442106
3/4" x 2'	04214010

3/4" NO-CORE

Dia - Lth	Part Number
3/4" x 25'	04209901
3/4" x 50'	04209902
3/4" x 75'	04209903
3/4" x 100'	04209905
3/4" x 110'	04209906
3/4" x 2'	Trap Leader

3/4" NO TENSION INNER-CORE

(Loose wound for "P" Traps)

Dia - Lth	Part Number
3/4" x 25'	03442501
3/4" x 50'	03442502
3/4" x 75'	03442503
3/4" x 100'	03442505
3/4" x 110'	03442506

Part Number Listing (For 3/4" Cable)

(1) = Long Male Coupling 44120500

(4) = Male Coupling 02795000

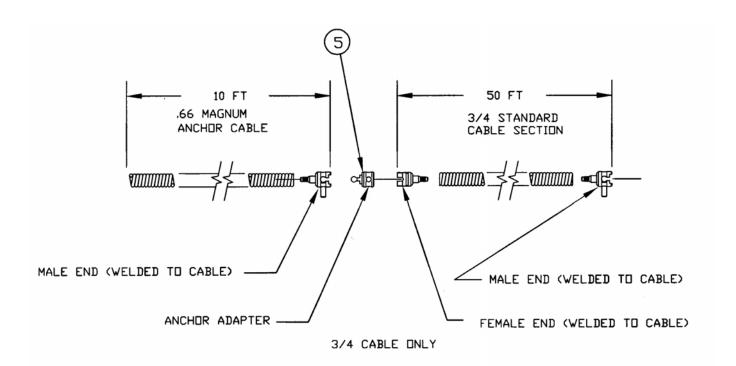
(2) = Female Coupling

44053400

(5) = Anchor Adapter 44291500

(3) = Splicer

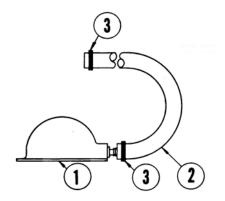
44120600



Air Foot Switch - 44225800

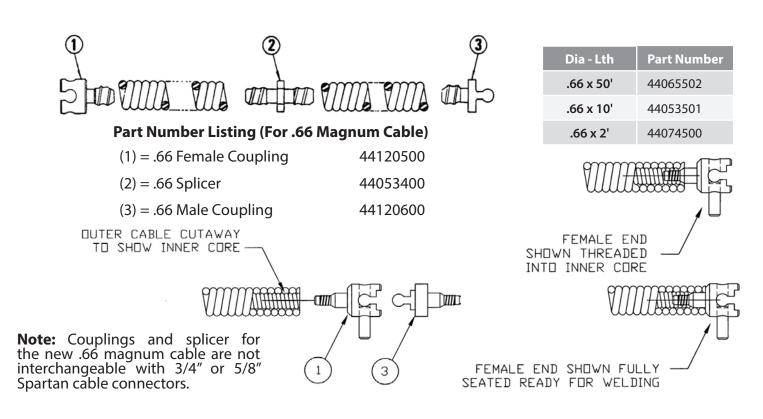


ltem	Part Number	Description	Qty.
	44055500	Air Foot Switch (Complete As Shown)	1
1	04576900	Pressure Transmitter	1
2	04577100	Air Hose	1
3	04652700	Crimp Type Hose Clamp	2



.66 Magnum Cable







Pneumatic Tire Upgrade Kit 44250700



Item	Part Number	Description	Qty.
1	44218000	Axle	1
2	44250900	Casting, Wheel Adapter LH	1
3	44251000	Casting, Wheel Adapter RH	1
4	50HW12F0	Washer, Flat	2
5	50H61600	Screw, Hex Hd	2
6	71100700	Tire, 10" 1/2-13 x 1-1/2	2
7	77747600	Cotter Pin 1/8 x 1	2
8	77759900	Screw, Hex Head 3/8-16 x 1-1/4	2



Hoist Bracket Upgrade Kit 44295110



Item	Part Number	Description	Qty.
1	00113901	Screw, Hex Hd	4
2	01950800	Nut, Kep Hex 1/4-20	4
3	44295100	Bracket, Hoist 1065	1
4	44296000	Instruction Sheet 1065 Hoist	1

Tool Box and Accessory Kit



.66 CABLE (44060700) 3/4 CABLE (04647000)



Tool Box and Accessory Kit

Item	Part Number	Description	Qty.
	44060700	Tool Box & Assy Kit (.66)	
	04647000	Tool Box & Assy Kit (3/4")	
1	02752500	Tool Box	1
2	02883200	Cable Uncoupling Stand	1
3	02807700	Retriever	1
4	02893900	Glove (Pair)	1
5	02799400	3", 4" and 6" Blade Holder Assy	1
6	02799500	"P" Trap Blade Holder Assy	1
7	03406800	T Wrench	1
9	44225300	Cable Guide (Not Included in Tool Box)	1
10	02813500	6" Blade	1
11	02790900	4" Blade	1
12	02786600	3" Blade	1
13	02799000	2" Blade	1
14	03400600	2-1/2" Blade	1
15	02799100	3" "P" Trap Blade	1
16	02799200	3-1/2" "P" Trap Blade	1
17	02798700	4" Saw Blade	
18	02799600	2" - 3 Blade Cutter	
19	02791700	3" - 3 Blade Cutter	
20	02791800	4" - 3 Blade Cutter	3
21	02870300	6" - 3 Blade Cutter	3

ltem	Part Number	Description	Qty.
22	02797500	3 - Blade Holder Assy	1
23	44053300	Expansion Pin (.66)	6
23	02821800	Expansion Pin (3/4")	6
24	55054900	Pin Punch (.55 & .66)	1
24	02819100	Pin Punch (5/8" & 3/4")	1
26	02798800	Spear Blade	1
27	02799300	2" and 2-1/2" Blade Holder Assy	1
28	44120600	.66 Male Coupling	1
28	02795000	3/4" Male Coupling	1
29	44120400	.66 Long Male Coupling	1
29	02797100	3/4" Long Male Coupling	1
30	44053400	.66 Splicer	1
30	02790600	3/4" Splicer	1
31	44120500	.66 Female Coupling	1
31	02788300	3/4" Female Coupling	1
32	44054800	.66 Double Male Coupling	
32	04204100	3/4" Double Male Coupling	1
33	44074500	.66 x 2' (Trap Leader)	
33	04214010	3/4" x 2' (Trap Leader)	1

Spartan Accessory Blades



SPARTAN ACCESSORY BLADES



02799000 2" U-Blade



02799100 3" P-Blade



44261000 2" Double Cutter



03416600 3" Grease Blade



02786601 3" Half Blade



03400600 21/2" Blade



02799200 31/2" Blade



02786600 3" U-Blade



03416700 4" Grease Blade



02790901 4" Half Blade



02799300 2 - 21/2" Blade Holder



02799500 P-Trap Blade Holder



44165200 4" Knife Blade



44006700 21/2" Round Cutter



02807700 Retriever



02798800 Spear Blade



02791700

3" 3- Blade Cutter

02813500 6" U-Blade



3" Knife Blade



02798700 3½" Saw Blade





02797500 Tri Blade Holder



02870300 6" 3- Blade Cutter



02818400 8" U-Blade



02799400 3" - 4" - 6" Blade Holder



034068 T-Wrench

For our terms and conditions, including warranty, please visit https://spartantool.com/pages/terms-and-conditions. For warranty assistance, please contact us at (800) 435-3866 or customerservice@spartantool.com.

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