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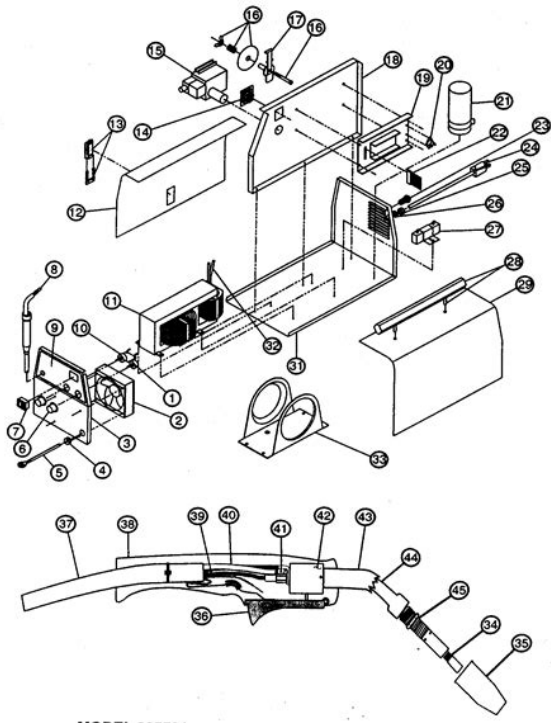
Book Descriptions:

Craftsman wire welder manual



Page Count 36 DO NOT OPERATE YOUR WELDER UNTIL YOU HAVE READ AND UNDERSTAND THESE INSTRUCTIONS welding rod or welding wire. Any metal parts on the electrode holder or MIG gun. NEVER attempt to weld if any part of clothing or body is wet. NEVER allow the welding equipment to come in contact with water or moisture. In Addition, make certain that anyone who uses this welding equipment or is a bystander in the welding area understands and follows these safety instructions as well. NEVER Stand, Sit, Lie, Lean On, Touch, or come into physical contact in any way with any part of the welding current circuit including the work piece or any conductive material in contact with it. The ground clamp. The electrode NEVER drag welding cables or MIG gun assembly or weld powercord through or allow them to come into contact with water or moisture. NEVER touch welder, attempt to turn welder on or off, or attempt to plug welder into powersource if any part of body or clothing is wet or damp, or if standing in or in physical contact of any kind with water or moisture. NEVER connect welder ground clamp to or weld on electrical conduit. NEVER alter powercord or powercord plug in any way. NEVER attempt to plug welder into powersource if ground prong on powercord plug is bent over, broken off, or missing. NEVER allow welder to be connected to power source or attempt to weld if welder, welding cables or MIG gun assembly, welding site, or welder powercord are exposed to rain, snow, sleet, mist, fog or other forms of atmospheric precipitation or mist or spray off an ocean or other body of water. NEVER carry coiled welding cables around shoulders, or any other part of the body, when they are plugged into the welder. NEVER modify any wiring, ground connections, switches, or fuses in this welding equipment. ALWAYS wear welding gloves to help insulate hands from welding circuit. <http://pwr-tech.ru/userfiles/ford-d-series-engine-manual.xml>

- **craftsman wire welder parts, craftsman wire feed welder parts, craftsman professional wire feed welder manual, craftsman 20511 mig wire feed welder manual, 1.0, craftsman wire welder parts, craftsman wire feed welder parts, craftsman professional wire feed welder manual, craftsman 20511 mig wire feed welder manual.**



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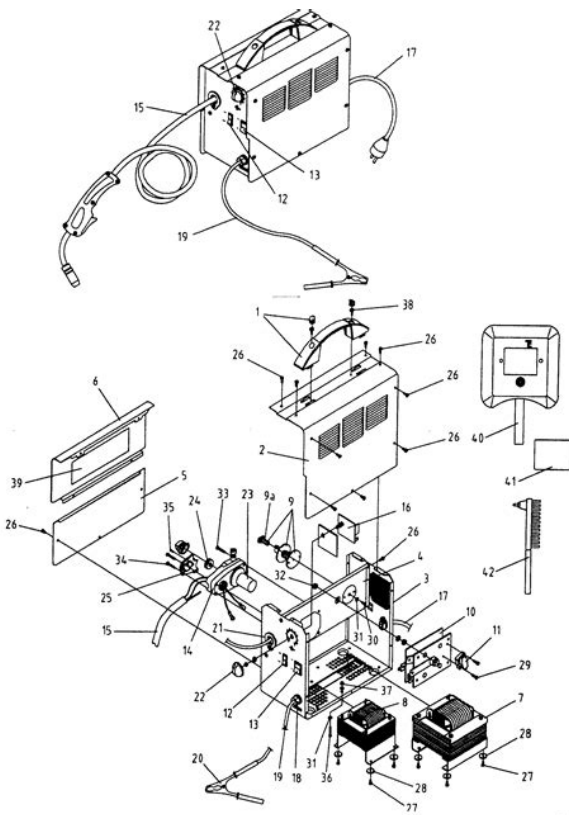
ALWAYS replace any cracked or damaged parts that are insulated or act as insulators such as welding cables or MIG gun assembly, or power cord IMMEDIATELY. In addition, make certain that anyone else that uses this welding equipment, or is a bystander in the welding area, understands and follows these safety instructions as well NEVER look at an electric arc without proper protection. A welding arc is extremely bright and intense and, with inadequate or no eye protection, the retina can be burned, leaving a permanent dark spot in the field of vision. A shield or helmet with a number 10 shade filter lens minimum must be used. NEVER wear a cracked or broken helmet and replace any cracked or broken filter lenses IMMEDIATELY. ALWAYS provide bystanders with shields or helmets fitted with a number 10 shade filter lens. ALWAYS wear protective clothing. The intense light of the welding arc can burn the skin in much the same way as the sun, even through light weight clothing. Wear dark clothing of heavy material. The shirt worn should be long sleeved and the collar kept buttoned to protect chest and neck. ALWAYS protect against REFLECTED ARC RAYS. Arc rays can be reflected off shiny surfaces such as a glossy painted surface, aluminum, stainless steel, and glass. It is possible for your eyes to be injured by reflected arc rays even when wearing a protective helmet or shield. If a reflective background exists in your welding area, either remove it or cover it with something nonflammable and nonreflective. Reflective arc rays can also cause skin burn in addition to eye injury. In addition, make certain that anyone else that uses this welding equipment, or is a bystander in the welding area, understands and follows these safety instructions as well. REMEMBER! Arc welding by nature produces sparks, hot spatter, molten metal drops, hot slag, and hot metal parts which can start fires, burn skin and damage eyes. <http://igoseating.com/files/ford-cvt-transmission-repair-manual.xml>



NEVER wear gloves or other clothing that contain oil, grease, or other flammable substances. NEVER wear flammable hair preparations. BE AWARE that sparks and slag can fly 35 feet and can pass through small cracks and openings. If work and combustibles cannot be separated by a minimum of 35 feet, protect against ignition with suitable, snugfitting, fire resistant covers or shields. NEVER weld on walls until checking for and removing combustibles touching the wall on the other side. NEVER weld, cut, or perform other hot work on used barrels, drums, tanks, or other containers that contained a flammable or toxic substance. The techniques for removing flammable substances and vapors, to make a used container safe for welding or cutting, are quite complex and require special education and training. NEVER strike an arc on a compressed gas or air cylinder or other pressure vessel. Doing so will create a brittle area that can result in a violent rupture immediately or at a later time as a result of rough handling. NEVER handle hot metal, such as the workpiece or welding wire, with bare hands. ALWAYS wear leather gloves, heavy long sleeve shirt, cuffless trousers, hightopped shoes, helmet, and cap. As necessary, use additional protective clothing such as leather jacket or sleeves, fire resistant leggings, or apron. Hot sparks or metal can lodge in rolled up sleeves, trouser cuffs, or pockets. Sleeves and collars should be kept but buttoned and pockets eliminated from the front. ALWAYS have fire extinguishing equipment handy for instant use. A portable chemical fire extinguisher, type ABC, is recommended. ALWAYS wear ear plugs when welding overhead to prevent spatter or slag from falling into ear. ALWAYS make sure welding area has a good, solid, safe floor, preferably concrete or masonry, not tiled, carpeted, or made of any other flammable material. ALWAYS protect flammable walls, ceilings, and floors with heat resistant covers or shields.

ALWAYS check welding area to make sure it is free of sparks, glowing metal or slag, and flames before leaving the welding area. In addition, make certain that anyone else that uses this welding equipment or is a bystander in the welding area, understands and follows these safety instructions as well. NEVER weld, cut, or heat lead, zinc, cadmium, mercury, beryllium, or similar metals without seeking professional advice and inspection of the ventilation of the welding area. These metals produce EXTREMELY TOXIC fumes which can cause discomfort, illness, and death. NEVER weld or cut in areas that are near chlorinated solvents. Vapors from chlorinated hydrocarbons, such as trichlorobethylene and perchloroethylene, can be decomposed by the heat of an electric arc or its ultraviolet radiation to form PHOSGENE, a HIGHLY TOXIC gas, along with other lung and eyeirritating gasses. Do not weld or cut where these solvent vapors can be drawn into the work area or where the ultraviolet radiation can penetrate to areas containing even very small amounts of these vapors. NEVER weld in a confined area unless it is being ventilated or the operator and anyone else in the area is wearing an airsupplied respirator. NEVER bring gas cylinders into or allow gas leaks in a confined space. Leaked gas can rapidly reduce oxygen concentration levels in a confined space. ALWAYS shut off shielding gas supply at its source before leaving a confined area and check to make sure that the area is safe before reentering it. ALWAYS stop welding if you develop momentary eye, nose, or throat irritation as this indicates inadequate ventilation. Stop work and take necessary steps to improve ventilation in the welding area. Do not resume welding if

physical discomfort persists. In addition, make certain that anyone else who uses this welding equipment or is a bystander in the welding area understands and follows these safety instructions as well.

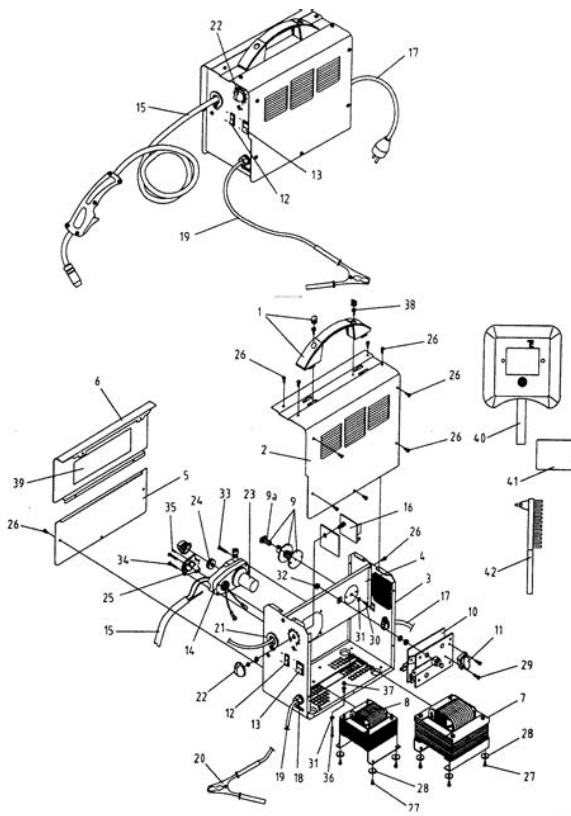


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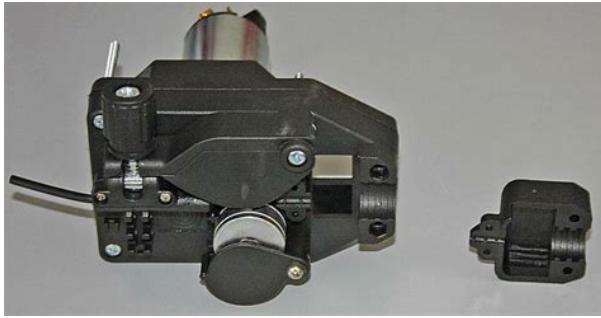
Only inert or nonflammable gasses are suitable for MIG welding. Examples are Carbon Dioxide, Argon, Helium, etc. NEVER attempt to mix gasses or refill a cylinder yourself. NEVER expose cylinders to excessive heat, sparks, slag, and flame, etc. Cylinders exposed to temperatures above 130 degrees F. will require water spray cooling. NEVER expose cylinders to electricity of any kind. NEVER use cylinder or its contents for anything other than its intended use. Do not use as a support or roller. NEVER locate cylinders in passageways or work areas where they may be struck. NEVER lift cylinders off the ground by their valves or caps or with chains, slings, or magnets. NEVER use a wrench or hammer to open a cylinder valve that cannot be opened by hand. Notify your supplier. NEVER modify or exchange gas cylinder fittings. NEVER deface or alter name, number, or other markings on a cylinder. It is illegal and hazardous. NEVER use cylinders without the name of the gas marked on the cylinder. Do not rely on cylinder color to identify the content. NEVER connect a regulator to a cylinder containing gas other than that for which the regulator was designed. NEVER attempt to make regulator repairs. Send faulty regulators for repair to manufacturer's designated repair center. NEVER attempt to lubricate regulator. ALWAYS handle cylinders carefully to prevent leaks and damage to their walls, valves, or safety devices. ALWAYS secure cylinders with a steel chain so that they cannot be knocked over. ALWAYS protect cylinder, especially valve, from bumps, falls, falling objects, and weather. ALWAYS make sure cylinder cap is securely in place, on the cylinder, whenever cylinder is moved.

WIRE SPEED This control adjusts the speed at which the wire is fed out of the gun. Some things that affect wire speed selection are the type and diameter of the wire being used, the heat setting selected, and the welding position to be used.

DUTY CYCLE NOTE: When using.



035 Flux Core wire your duty cycle may be shorter than 20%. SPECIFICATIONS The duty cycle rating of a welder tells the operator how long he or she can weld and how long the welder must rest to cool. Primary input volts. 120 VAC Primary input Amps. 18 Phase. Single Frequency. 60 Hz Kilovolt Amps. 2.2 Secondary output volts. 18 Secondary output amps. 75 Duty Cycle Rating. 20% Open Circuit Volts Max.. 31 VDC WELDER CONTROLS AND THEIR FUNCTIONS POWER SWITCH Has three settings LOW, OFF, and HIGH. Setting the switch to OFF shuts the welder off. When set to LOW, the welder can produce up to 45 amps of welding current. When set on HIGH, up to 75 amps of welding current will be available. NOTE The actual amperage will vary depending on wire speed, length of the arc held when welding, the type of wire being used, and the ACTUAL voltage available at the wall receptacle. Your new welder has a duty cycle rating of 20%. You can weld for 2 minutes out of 10, with the remaining 8 minutes required for cooling. Duty Cycle Rating Maximum Required Welding Time Resting Time 20% 2 Minutes 8 Minutes 40% 4 Minutes 6 Minutes 60% 6 Minutes 4 Minutes 80% 8 Minutes 2 Minutes 100% 10 Minutes 0 Minutes INTERNAL THERMAL PROTECTION If you exceed the duty cycle of your welder, and internal thermal protector will open and shut off ai. To reduce risk of electric shock, DO NOT PLUG WELDER IN TO AC POWER SOURCE UNTIL TOLD TO DO SO later in this manual. UNPACKING YOUR WELDER 1. Open the top of the shipping carton. 2. Remove any cartons or bags containing accessories. 4. Lay out the parts and compare to following illustrations to familiarize yourself with the parts and what they are called. This will help you when reading the manual. 5. Grasp the top handle of the welder and lift the welder out of the carton. INSTALL THE GROUND CLAMP Connect the ground clamp to the ground cable coming out of the front of the welder according to the instructions packaged with the ground clamp. 3.



Open the cartons or bags packed with your welder and inspect their contents for damage. Report any missing or damaged items immediately! **IMPORTANT** Hand tighten only. The connectors will lock together when properly connected. **PROVIDE REQUIRED POWER** Power Requirements This welder is designed to operate on a properly grounded 120 volt, 60 hertz, single phase, alternating current AC power source on a 20 amp branch circuit. It is recommended that a qualified electrician verify the **ACTUAL VOLTAGE** at the receptacle into which the welder will be plugged and confirm that the receptacle is properly fused and grounded. **DO NOT OPERATE THIS WELDER** if the **ACTUAL** power source voltage is less than 105 volts AC greater than 132 volts AC. Contact a qualified electrician if this problem exists. **NEVER ALTER** the AC powercord or powercord plug provided on the welder. **NEVER ALTER** and extension cord or extension cord plugs. Connect Welder to Power Source 1, **DO NOT ALTER** the AC power cord or power cord plug on the welder. Doing so may **VOID THE WARRANTY**. If the welder's AC powercord plug does not mate with your existing receptacle, have an appropriate receptacle installed by a qualified electrician in accordance with the National Electrical Code and local codes and ordinances. Then plug the welder's powercord plug into the AC power source receptacle. If necessary, care must be taken in selecting an extension cord appropriate for use with your specific welder. Select a properly grounded extension cord that the AC powercord of the welder and AC power source receptacle will mate with directly without the use of adaptors. Make sure the extension cord is properly wired and in good electrical condition.

For an extension cord length not exceeding 25 feet, choose one with the same AWG wire size as that stamped on the welder's powercord, Extension cord lengths longer than 25 feet will require heavier wire gauges to compensate for voltage losses that will cause decreased performance. **INSTALL TANK TRAY AND BRACKET** 1. Remove the screw from the bottom rear corner of each side of the welder. Slide the tank tray into position, lining up the slotted holes in the tabs of the tank tray with the two holes in the welder. The straps should be mounted to the outside surface of the tank tray. This chain will restrain a tank from falling over and should always be used. If you select a cylinder larger than 20 cubic feet, it must be chained to a wall or other fixed support. Inadequate shielding will result in porous, brittle welds. Not only is shielding the weld important, but selecting the proper gas to shield with is of equal importance. Generally, the shielding gas selected is dependent upon the type and thickness of metal being welded. Although there are many gasses and mixtures available for MIG welding, the following recommendations are based on the electrical output characteristics and metal thickness welding capabilities of this specific MIG welder. **GAS SELECTION FOR STEEL WELDING WITH STEEL WIRE** Gas Selection For Aluminum Gas Welding 100% ARGON Our only recommendation for shielding an aluminum weld is pure Argon. This gas mixture helps to prevent burn through and distortion on very thin steel, yet provides good penetration on thicker steel. Its ability to minimize spatter results in clean, smooth weld appearances. In addition, it provides good puddle control when welding vertically or overhead. Also this mixture can cause a decrease in the ability of the stainless steel weld to resist corrosion. Either mixture can be obtained in a single cylinder from your local gas distributor.

<https://avenirpourtous.fr/wp-content/plugins/formcraft/file-upload/server/content/files/1628705484b551---cadillac-fleetwood-owners-manual.pdf>

Note Potential Shielding Gas Problems Moisture or other impurities in the gas can create dirty porous, brittle welds with greatly reduced penetration. The only remedy is to replace the cylinder.

2. MIXTURE COMPOSITION CHANGE This problem concerns only cylinders that contain a mixture of two or more gases. The mixture composition in a cylinder can be changed if the cylinder is stored in cold temperatures. For the 75% Argon 25% Carbon Dioxide mixture, the cylinder should not be stored below 40 degrees R This information is normally found on the label on the cylinder that indicates the contents of the cylinder. This problem can create a variety of unfavorable weld characteristics including porosity, brittles, and improper penetration.

3. INSUFFICIENT SHIELDING GAS COVERAGE This problem can be created by several causes as listed in the TROUBLESHOOTING section of this manual. The symptoms are the same for all.

INSTALL THE SHIELDING GAS IMPROPER HANDLING AND MAINTENANCE OF COMPRESSED GAS CYLINDERS AND REGULATORS CAN RESULT IN SERIOUS INJURY OR DEATH! Always secure gas cylinders to the tank bracket kit, a wall, or other fixed support to prevent the cylinder from falling over and rupturing. Read, understand, and follow all the COMPRESSED GASES AND EQUIPMENT HAZARDS in the SAFETY INSTRUCTION section of this manual.

1. Secure gas cylinder to the tank bracket kit, a wall or other fixed support. 2. Remove the protective cap from the cylinder and inspect the regulator connecting threads for dust, dirt, oil, and grease. Remove any dust or dirt with a clean cloth. DO NOT ATTACH THE REGULATOR IF OIL, GREASE, OR DAMAGE ARE PRESENT.. Open the cylinder valve FOR JUST AN INSTANT to blow out any foreign matter inside the valve port to reduce the risk of plugging or damaging the regulator. NEVER AIM THE CYLINDER VALVE PORT AT YOURSELF OR ANY BYSTANDERS WHEN OPENING CYLINDER TO REDUCE THE RISK OF PERSONAL INJURY. 4.

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Screw the regulator into the cylinder valve and tighten with a wrench while keeping gauges upright for easy and accurate reading. NOTE If the cylinder you have is equipped with male regulator connecting threads instead of female, you will need to obtain a special compressed gas cylinder adapter from your gas supplier to install between your gas cylinder and regulator.

5. Locate the brass barbed fitting and brass retaining nut in the parts bag and place the fitting through the nut as pictured on next page. Then thread the nut onto the male threaded outlet port on the regulator and wrench tighten. Brass Brass barbed retaining nut fitting Outlet port fitting on regulator

6. Slide the spring clamp in parts bag down one end of the gas hose about three inches. Push the same end of the gas hose onto the barbed fitting. Then compress the ears of the spring Turn the fitting into the solenoid port WITH YOUR FINGERS ONLY until you cant turn any more.

ASSEMBLY AND INSTALLATION Page 11 3. Pull the trigger on the gun to allow the gas to flow. KEEP PULLED. Listen for gas to flow from the end of the welding gun. If no gas is heard or felt, check all previous steps in connecting the gas. 4. Release the trigger. Your gas regulator has been factory set for delivery of 20 Cubic Feet Per Hour of shielding gas. If welding outside or in a draft, it may become necessary to set up a windbreak to keep the shielding gas from being blown from the weld area. This polarity is required when using gasshielded steel welding wires. If you wish to use selfshielding fluxcore wire, it will be necessary to set the welder for DC Negative Polarity operation. To do this, refer to on sticker on the inside of hood. SELECT THE WELDING WIRE Selecting the Type of Wire It is very important to select a type of wire that is compatible with the metal to be welded base metal. If the wire is incompatible with the base metal, the quality of important characteristics such as penetration and strength may be sacrificed.

The welding wires recommended for most of the mild and low carbon steel applications you will have are AWS classification numbers E70S3 and E70S6. These two wires are very similar, but the E70S6 tends to work a little better on moderately dirty steel and on sheet metal where smooth weld beads are required. These differences are very subtle, so in most applications, either wire is acceptable.

Selfshielding, fluxcore, steel wire is used primarily for welding mild steel without the use of a shielding gas. It is especially good to use when welding needs to take place in windy environment. However, it produces more spatter than solid wire gas shielded welding and leaves a slag on top of the weld that needs to be chipped off. Our recommendation NOTE Failure to utilize these setup recommendations will result in wire feeding problems and poor quality welds.

1. Stainless Steel Wire Selection When welding stainless steel, the alloy of the welding wire must be the same as the alloy of the base metal. Otherwise, seek the advice of someone who may have had previous experience with the same or similar welding application. Stainless steel wire is quite expensive, the trialanderror method of alloy determination should be avoided if at all possible.
2. SiliconBronze Wire Selection The most popular application for siliconbronze MIG welding is nonstructure sheetmetal welding, especially auto body work. A weld with siliconbronze wire is very similar to that produced by oxygenacetylene brazing. It is fairly flat and easy to grind smooth. However, welding wire oxidizes over time, so it is important to select a spool size that will be used up within the times recommended below.. STEEL WIRE is usually coated with copper to prevent the wire from rusting and to enhance the transmission of welding current from the contact tip to the wire. It is recommended that copper coated steel welding wire be bought in spool sizes that will be consumed in six months or less.

In the early stages of aging, the copper coating will begin oxidizing. The more time passes, the heavier the oxidization will get. To check the wire for copper oxidization, unspool about two feet of wire, pinch wire between thumb and forefinger, then pull thumb and forefinger down the length of wire. Look at thumb and forefinger; there will be a line created by the copper oxidization. A fairly fresh spool will leave a light gray line, whereas a welloxidized spool will leave a darker line. Heavy copper oxidization will cause arc flutter and possibly wire drive slippage. If steel wire continues to oxidize, the steel wire under the copper coating will rust causing even worse arc flutter and drive problems.

2. SELFSHIELDING, FLUXCORE, STEEL WIRE spools should be selected based on the same guidelines as for steel wire.. ALUMINUM WIRE is even more of a potential storage problem than steel. It tends to oxidize much faster and the oxidation is much heavier. The early stages of oxidation are virtually invisible, but as time passes, a white powder will develop that will cause extreme arc flutter, wire drive problems, contamination buildup in the liner, wire burnback into the contact tip, and a poor weld. However, because stainless steel wire is quite expensive, it is still a good practice to follow the storage recommendations.
5. SILICONBRONZE WIRE spools should be selected based on the same guidelines as for coppercoated steel wire. Although these factors are out of your control, there are some things that you can do to slow down the oxidization process store in a dry place when not in use; store in sealed plastic bag when not in use and leave unopened in the manufacturer's package until ready to use. NOTE If spool has developed heavy oxidation, the only solution to the problem is to discard the spool of wire.

However, if you have an oxidized spool of wire, do not discard it until trying the following unspool a few turns of wire to see if the wire further down on the spool is in usable condition, if not discard the spool. Always turn the POWER SWITCH to its OFF position and unplug the welder's powercord from the AC power source before installing wire.

1. Remove the nozzle and contact tip from the end of the gun assembly.
2. Unscrew turn counterclockwise the tension adjusting screw ALL THE WAY.
3. Make sure that the wire diameter stamped on the outside of the drive roller is the same as the diameter of the wire being installed. If it is not the same, change the drive roller as follows

CHANGING THE DRIVE ROLLER ELECTRIC SHOCK CAN KILL. Put the end of the wire into the hole on the outside edge of the spool and bend it over to hold the wire in place, then remove the spool of wire from the welder. Push the drive roller onto the drive motor shaft. Make sure the side stamped with the desired wire diameter is facing out. Make sure that you push the hex head of the bolt all the way into the hex hole in the bottom of the wire spool holder.- 6. Reinstall the wire spool holder onto the welder making sure to push it all the way into the hold down tabs.
- 7. Unwrap the spool of wire then find the leading end of the wire it goes through a hole in the outer edge of the

spool, and is bent over the spool edge to prevent the wire from unspooling, BUT DO NOT UNHOOK IT YET! 9. If you are installing a 4inch spool of wire, install the drive brake hardware on top of the spool of wire according to the following illustration. The purpose of the drive brake is to cause the spool of wire to stop turning at nearly the same moment that wire feeding stops. NOTE If TOO MUCH tension is applied, the wire will slip on the drive roller or will not be able to be fed at all. If TOO LITTLE tension is applied, the spool of wire will want to unspool itself.

Readjust the drive brake tenion as necessary to correct for either of these problems. 11. After checking to make sure that your welder is disconnected from the AC power source, free the leadingend of the wire from the spool, but do not let go of it until told to do so, or the wire will unspool itself. t2. Using a wire cutter, cut the bent end off the leadingend of the wire so that only a straight leadingend remains. 13. Hold the tension arm up off the drive roller and insert the leadingend of the wire into the inlet guide tube. Then push it across the drive roller and into the gun assembly about six inches. 14. Line the wire up in the outside groove of the drive roller, then allow the drive tension arm to drop onto the drive roller. 15. Tighten turn clockwise the tension adjusting screw until the tension roller is applying enough force on the wire to prevent it from slipping out of the drive assembly. NOW YOU CAN LET GO OF THE WIRE. 16. Plug the welders powercord into the AC power source, turn the POWER SWITCH on the front of the welder to either HIGH or LOW, and set the WIRE SPEED control to the middle of the wire speed range. 17. Pull the trigger on the welding gun to feed the wire through the gun assembly. Install the nozzle on the end of the gun assem bly, then coat the inside of the nozzle with antistick spray or gel not supplied. Cut off excess wire that extends past the end of the nozzle. 23. Set the wire drive tension. The wire should slip at the drive roller. How ever, if the birdnests at the drive roller, re thread the drive system using less drive tension and try again. Aluminum wire is very sensitive to slight changes in drive tension. LL It is a must that the welding work area be cleared of all flammables and that a type ABC chemical fire extinguisher is always close at hand. READ The SAFETY INSTRUCTIONS. They wilt tell you how to properly prepare for welding by 1. Preparing a safe welding work area. 2.

Providing the necessary personal eye and skin protection for you and all bystanders in the weld ing area. FIRE OR EXPLOSION CAN CAUSE DEATH, INJURY, AND PROPERTY DAMAGEI 3. Providing adequate ventilation, or respiration equipment if necessary, to protect you and any bystanders in the welding area. The SAFETY INSTRUCTIONS will tell you how to REDUCE THE RISKS OF DEATH, INJURY, ILLNESS, DISCOMFORT, AND PROP ERTY DAMAGE to you, the bystanders in the welding area, and property in the vicinity of the welding area from SHOCK HAZARDS, FLASH HAZARDS, FIRE HAZARDS, FUME HAZARDS, AND COMPRESSED GASSES AND EQUIP MENT HAZARDS. An important factor in making a satisfactory weld is preparation. This includes the study of the welding process and equipment by the operator and then practicing on scrap material before actual welding jobs are attempted. Failure to do so may result in a porous, brittle weld., Select a type of joint appropriate for your appli cation. The more popular types of welding joints are illustrated in the TYPES OF JOINTS chart at the end of this section. NOTE If you select a BUTT WELD JOINT, you may have to prepare the edges of the metal to be joined by grinding a bevel on the edges. During the welding process, the work pieces will become hot and tend to expand causing the pieces to shift from their initial position. If possible, it is best if the work pieces can be securely clamped before welding into the position desired after welding is completed. However, and anodized surface will NOT conduct electricity. Therefore, to weld ano dized aluminum, you must sand or grind the anodized coating from the weld joint area and from the site where the ground clamp will be connected. To determine if the aluminum you intend to weld is anodized, simply touch the two probes of an elec trical continuity test light or ohmmeter to the alumi num in question. The probes should be an inch or two apart. If there is no indication of electrical continuity, the aluminum IS anodized.

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