1.0 Safety Precautions

ELECTRIC SHOCK can kill.

Touching live electrical parts can cause fatal shocks or severe burns. The electrode and work circuit is electrically live whenever the output is on. The input power circuit and machine internal circuits are also live when power is on.

Do not touch live electrical parts.

Wear dry, sound insulating gloves and body protection.

Insulate yourself from work and ground using dry insulating mats or covers big enough to prevent any physical contact with the work ground.

Additional safety precautions are required when any of the following electrically hazardous conditions are present: in damp locations or while wearing wet clothing; on metal structures such as floors, gratings, or scaffolds; when in cramped positions such as sitting, kneeling, or lying; or when there is a high risk of unavoidable or accidental contact with the work piece or ground.

Disconnect input power before installing or servicing this equipment. Lockout/tagout input power according to Safety Standards.

Properly install and ground this equipment according to national and local standards.

Always verify the supply ground - check and ensure that input power cable ground wire is properly connected to ground terminal in the receptacle outlet.

When making input connections, attach proper grounding conductor first - double-check connections.

Frequently inspect input power cable for damage or bare wiring - replace cable immediately if damaged - bare wiring can kill.

Turn off all equipment when not in use.

Do not use worn, damaged, under sized, or poorly spliced cables.

Do not drape cables over your body.

If earth grounding of the work piece is required, ground it directly with a separate cable.

Do not touch electrode if you are in contact with the work, ground, or another electrode from a different machine.

Use only well-maintained equipment. Repair or replace damaged parts at once. Maintain unit according to manual.

Wear a safety harness if working above floor level.

Keep all panels and covers securely in place.

Clamp work cable with good metal-to-metal contact to work piece or worktable as near the weld as practical.

Insulate work clamp when not connected to work piece to prevent contact with any metal object.

Welding produces fumes and gases. Breathing these fumes and gases can be hazardous to your health.

FUMES AND GASES can be hazardous.

Keep your head out of the fumes. Do not breathe the fumes.
If inside, ventilate the area and/or use local forced ventilation at the arc to remove welding fumes and gases.

If ventilation is poor, wear an approved respirator.

Read and understand the Material Safety Data Sheets (MSDS's) and the manufacturer's instructions for metals, consumable, coatings, cleaners, and de-greasers.

Work in a confined space only if it is well ventilated, or while wearing an air-supplied respirator. Always have a trained watch person nearby. Welding fumes and gases can displace air and lower the oxygen level causing injury or death. Be sure the breathing air is safe.

Do not weld in locations near de-greasing, cleaning, or spraying operations. The heat and rays of the arc can react with vapours to form highly toxic and irritating gases.

Do not weld on coated metals, such as galvanized, lead, or cadmium plated steel, unless the coating is removed from the weld area, the area is well ventilated, and while wearing an air-supplied respirator. The coatings and any metals containing these elements can give off toxic fumes if welded.

ARC RAYS can burn eyes and skin.
Arc rays from the welding process produce intense, visible and invisible (ultraviolet and infrared) rays that can burn eyes and skin. Sparks fly off from the weld.

Wear an approved welding helmet fitted with a proper shade of filter lense to protect your face and eyes when welding or watching

Wear approved safety glasses with side shields under your helmet.

Use protective screens or barriers to protect others from flash, glare and sparks; warn others not to watch the arc.

Wear protective clothing made from durable, flame resistant material (leather, heavy cotton, or wool) and foot protection. Welding on closed containers, such as tanks, drums, or pipes, can cause them to blow up. Sparks can fly off from the welding arc. The flying sparks, hot work piece, and hot equipment can cause fires and burns. Accidental contact of electrode to metal objects can cause sparks, explosion, overheating, or fire. Check and be sure the area is safe before doing any welding.

WELDING can cause fire or explosion.
Remove all flammables within 10m of the welding arc. If this is not possible, tightly cover them with approved covers.

Do not weld where flying sparks can strike flammable material.

Protect yourself and others from flying sparks and hot metal.

Be alert that welding sparks and hot materials from welding can easily go through small cracks and openings to adjacent areas.

Watch for fire, and keep a fire extinguisher nearby. Be aware that welding on a ceiling, floor, bulkhead, or partition can cause fire on the hidden side.

Do not weld on closed containers such as tanks, drums, or pipes, unless they are properly prepared according to local regulations

Connect work cable to the work as close to the welding area as practical to prevent welding current from travelling along, possibly unknown paths and causing electric shock, sparks, and fire hazards.

Wear oil-free protective garments such as leather gloves, heavy shirt, cuffless trousers, high shoes, and a cap. Remove any combustibles, such as a butane lighter or matches, from your person before doing any welding.

FLYING METAL can injure eyes.
Welding, chipping, wire brushing, and grinding cause sparks and flying metal. As welds cool they can throw off slag. Wear approved safety glasses with side shields even under your welding helmet.

BUILDUP OF GAS can injure or kill.
Shut off shielding gas supply when not in use. Always ventilate confined spaces or use approved air-supplied respirator.

HOT PARTS can cause severe burns.
Do not touch hot parts with bare hands.

Allow cooling period before working on gun or torch.

To handle hot parts, use proper tools and/or wear heavy, insulated welding gloves and clothing to prevent burns.

MAGNETIC FIELDS can affect pacemakers.
Pacemaker wearers keep away.

Wearers should consult their doctor before going near arc welding, gouging, or spot welding operations.

NOISE can damage hearing.
Noise from some processes or equipment can damage hearing.

Wear approved ear protection if noise level is high.

Shielding gas cylinders contain gas under high pressure.

CYLINDERS can explode if damaged.
Protect compressed gas cylinders from excessive heat, mechanical shocks, physical damage, slag, open flames, sparks, and arcs. Install cylinders in an upright position by securing to a stationary support or cylinder rack to prevent falling or tipping. Keep cylinders away from any welding or other electrical circuits. Never drape a welding torch over a gas cylinder. Never allow a welding electrode to touch any cylinder. Never weld on a pressurized cylinder - explosion will result. Use only correct shielding gas cylinders, regulators, hoses, and fittings designed for the specific application; maintain them and associated parts in good condition.

Turn face away from valve outlet when opening cylinder valve.

Use the right equipment, correct procedures, and sufficient number of persons to lift and move cylinders.

Read and follow instructions on compressed gas cylinders, associated equipment, and Compressed Gas Association (CGA) recommendations.

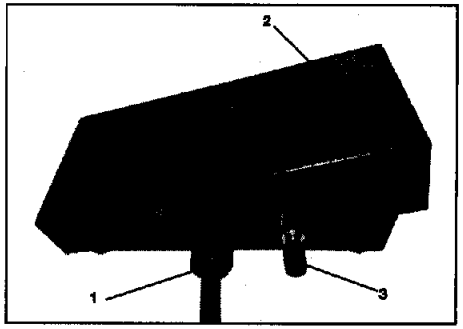
2.0 Product Description

This foot control is designed to give the operator manual control of the welding current through operation of the foot pedal.

3.0 Technical Specifications

	XTI-902T	XTI-902D
Input voltage	42V max	42V max
Resistance rating	10K Ohm	10K Ohm

4.0 Description of Controls



1) Control Cable

2) Moving foot control. The first part of the travel switches on the machine and the remainder of the travel increases the current until the maximum of the machine or that set by the trimmer pot (3)

3) Trimmer control, used to limit the output of the machine when the pedal is fully depressed. (rotate fully to the right and you will get maximum current when the pedal is fully depressed)

5.0 Installation

Read entire installation section before starting installation.

SAFETY PRECAUTIONS

- **ELECTRIC SHOCK can kill.**
- **Only qualified personnel should perform this installation.**
- **Only personnel that have read and understood the Operating Manual should install and operate this equipment.**
- **Machine must be grounded per any national, local or other applicable electrical regulations.**
- **The power switch is to be in the OFF position when installing work cable and electrode cable and when connecting other equipment.**

5.1 Location

Be sure to locate the foot control on a flat stable surface just ahead of where you would normally place you foot

In areas, free from moisture and dust.

Ambient temperature between 0-40°C.

In areas, free from oil, steam and corrosive gases.

In areas, not subjected to abnormal vibration or shock.

In areas not exposed to direct sunlight or rain.

5.2 Connection,

Connect the control socket on the cable from the foot control to the socket on the front panel of the machine ensuring the keyway in the plug is located before pushing it home and securing with the hand nut.

Note:- On certain models e.g. the XTI303 AC DC it is necessary the put the control panel in the **remote** operation mode using the selector switch

6.0 Operation

WARNING

When using an open arc process, it is necessary to use correct eye, head, and body protection.

6.1 XTI181 DV

1) Set the maximum current on the front panel of the machine using the main current control.

2) use the trimmer on the side of the foot control to limit the start/ final current.

3) To start welding press the foot control until the pre-gas and HF start. Allow the arc to establish and then increase the current by depressing the pedal until you reach the required level.

4) To stop welding remove pressure on the pedal and the amps will reduce until the trigger is operated which will switch off the arc.

6.2 XTI201 AC/DC

1) Use the trimmer on the side of the foot control to limit the maximum current.

3) To start welding press the foot control until the pre-gas and HF start. allow the arc to establish and then increase the current by depressing the pedal until you reach the required level.

4) To stop welding remove pressure on the pedal and the amps will reduce until the trigger is operated which will switch off the arc.

6.3 XTI202 AC/DC

1) Use the trimmer on the side of the foot control to limit the maximum current.

3) To start welding press the foot control until the pre-gas and HF start. allow the arc to establish and then increase the current by depressing the pedal until you reach the required level.

4) To stop welding remove pressure on the pedal and the amps will reduce until the trigger is operated which will switch off the arc.

6.4 XTI303 AC/DC

1) Ensure the selector switch at the side of the control socket is set to "remote"

2) Use the trimmer on the side of the foot control to limit the maximum current.

3) To start welding press the foot control until the pre-gas and HF start. allow the arc to establish and then increase the current by depressing the pedal until you reach the required level.

4) To stop welding remove pressure on the pedal and the amps will reduce until the trigger is operated which will switch off the arc.

6.5 XTI353 AC/DC

1) Ensure the selector switch at the side of the control socket is set to "remote"

2) Use the trimmer on the side of the foot control to limit the maximum current.

3) To start welding press the foot control until the pre-gas and HF start. allow the arc to establish and then increase the current by depressing the pedal until you reach the required level.

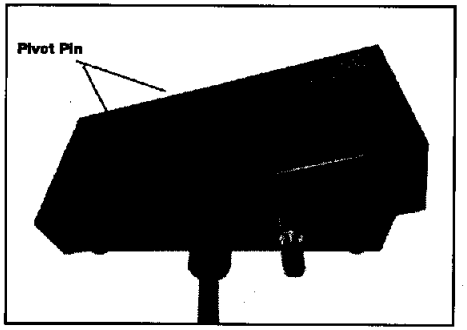
4) To stop welding remove pressure on the pedal and the amps will reduce until the trigger is operated which will switch off the arc.

7.0 ROUTINE MAINTENANCE

The only routine maintenance required for the foot switch is a thorough cleaning and inspection, with the frequency depending on the usage and the operating environment.

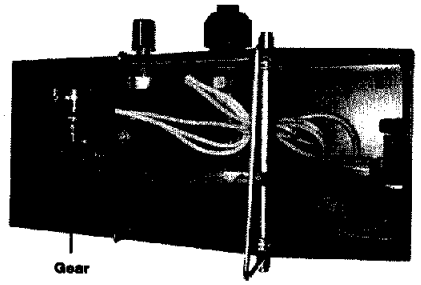
Disconnect from the welding machine

1) Remove the cover by depressing the pivot buttons on both sides and lifting up the cover.



2) Blow out the inside with low pressure compressed air ensuring to wear goggles.

3) lightly grease the gear



4) Refit the cover by depressing the pivot pins