



# AirCrafter™ T-200 Owner's Manual

Product:	AirCrafter T-200
Manual:	091-0491
Serial:	06120001
Voltage Rating:	120 VAC
Revision:	June 2011 Rev G
Model Number:	127-005



*Shown with optional turntable*

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# SAFETY CONSIDERATIONS

## ELECTRIC ARC WELDING EQUIPMENT

**CAUTION : READ BEFORE ATTEMPTING INSTALLATION, OPERATION OR MAINTENANCE OF THIS EQUIPMENT**

### 1-1 INTRODUCTION

This equipment is intended for ultimate application by commercial/industrial users and for operation by persons trained and experienced in the use and maintenance of welding equipment. Operation should not be undertaken without adequate training in the use of such equipment. Training is available from many public and private schools or similar facilities.

Safe practices in the installation, operation and maintenance of this equipment requires proper training in the art, a careful study of the information provided with the equipment, and the use of common sense. Rules for safe use are generally provided by suppliers of welding power sources, compressed gas suppliers, and electrode suppliers. Careful compliance with these rules will promote safe use of this equipment.

The following Safety Rules cover some of the more generally found situations. **READ THEM CAREFULLY.** In case of any doubt, obtain qualified help before proceeding.

### 1-2 GENERAL PRECAUTIONS

#### A. Burn Prevention

**ELECTRIC ARC WELDING PRODUCES HIGH INTENSITY HEAT AND ULTRA-VIOLET RADIANT ENERGY WHICH MAY CAUSE SERIOUS AND PERMANENT EYE DAMAGE AND WHICH MAY DAMAGE ANY EXPOSED SKIN AREAS.**

Wear helmet with safety goggles or glasses with side shields underneath, appropriate filter lenses or plates (protected by clear cover glass). This is a must for welding or cutting (and chipping) to protect the eyes from radiant energy and flying metal. Replace cover glass when broken, pitted, or spattered.

Medical first aid and eye treatment. First aid facilities and a qualified first aid person should be available for each shift unless medical facilities are close by for immediate treatment of flash burns of the eyes and skin burns.

Wear protective clothing - leather (or asbestos) gauntlet gloves, hat, and high safety-toe shoes. Button shirt collar and pocket flaps, and wear cuffless trousers to avoid entry of sparks and slag.

Avoid oily or greasy clothing. A spark may ignite them.

Flammable hair preparations should not be used by persons intending to weld or cut.

Hot metal such as electrode stubs and work pieces should never be handled without gloves.

Ear plugs should be worn when working on overhead or in a confined space. A hard hat should be worn when others work overhead.

#### B. Toxic Fume Prevention

**WARNING:** The use of this product may result in exposure to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Adequate ventilation. Severe discomfort, illness or death can result from fumes, vapors, heat, or oxygen enrichment or depletion that welding (or cutting) may produce. Prevent them with adequate ventilation. **NEVER** ventilate with oxygen.

Lead-, cadmium-, zinc-, mercury-, beryllium-bearing and similar materials, when welded or cut, may produce harmful concentrations of toxic fumes. Adequate local exhaust ventilation must be used, or each person in the area, as well as the operator, must wear an air-supplied respirator. For beryllium, both must be used.

Metals coated with or containing materials that emit toxic fumes should not be heated unless coating is removed from the work surface, the area is well ventilated, or the operator wears an air-supplied respirator.

Work in a confined space only while it is being ventilated and, if necessary, while wearing an air-supplied respirator.

Gas leaks in a confined space should be avoided. Leaked gas in large quantities can change oxygen concentration dangerously. Do not bring gas cylinders into a confined space.

Leaving confined space, shut OFF gas supply at source to prevent possible accumulation of gases in the space if downstream valves have been accidentally opened or left open. Check to be sure that the space is safe before reentering it.

Vapors from chlorinated solvents can be decomposed by the heat of the arc (or flame) to form PHOSGENE, a highly toxic gas, and other lung and eye irritating products. The ultraviolet (radiant) energy of the arc can also decompose trichloroethylene and perchloroethylene vapors to form phosgene. **DO NOT WELD** or cut where solvent vapors can be drawn into the welding or cutting atmosphere or where the radiant energy can penetrate to atmospheres containing even minute amounts of trichloroethylene or perchloroethylene.

#### C. Fire and Explosion Prevention

Causes of fire and explosion are: combustibles reached by the arc, flame, flying sparks, hot slag, or heated material, misuse of compressed gases and cylinders, and short circuits.

**BE AWARE THAT** flying sparks or falling slag can pass through cracks, along pipes, through windows or doors, and through wall or floor openings, out of sight of the goggled operator. Sparks can fly many feet.

To prevent fires and explosion:

Keep equipment clean and operable, free of oil, grease, and (in electrical parts) of metallic particles that can cause short circuits.

If combustibles are in area, do NOT weld or cut. Move the work if practicable, to an area free of combustibles. Avoid paint spray rooms, dip tanks, storage areas, ventilators. If the work cannot be moved, move combustibles at least 35 feet away, out of reach of sparks and heat; or protect against ignition with suitable and snug-fitting, fire-resistant covers or shields.

Walls touching combustibles on opposite sides should not be welded on (or cut). Walls, ceilings, and floor near work should be protected by heat-resistant covers or shields.

Fire watcher must be standing by with suitable fire extinguishing equipment during and for some time after welding or cutting if:

1. Appreciable combustibles (including building construction) are within 35 feet.
2. Appreciable combustibles are further than 35 feet, but can be ignited by sparks.
3. Openings (concealed or visible) in floors or walls within 35 feet may expose combustibles to sparks.
4. Combustibles adjacent to walls, ceilings, roofs, or metal partitions can be ignited by radiant or conducted heat.

Hot work permit should be obtained before operation to ensure supervisor's approval that adequate precautions have been taken.

After work is done, check that area is free of sparks, glowing embers, and flames.

An empty container that held combustibles, or that can produce flammable or toxic vapors when heated, must never be welded on or cut, unless container has first been cleaned in accordance with industry standards.

This includes: a thorough steam or caustic cleaning (or a solvent of water washing, depending on the combustible's solubility), followed by purging and inerting with nitrogen or carbon dioxide, and using protective equipment.

Water-filling just below working level may substitute for inerting.

A container with unknown contents should be cleaned (see paragraph above). Do NOT depend on sense of smell or sight to determine if it is safe to weld or cut.

Hollow castings or containers must be vented before welding or cutting. They can explode.

Explosive atmospheres. NEVER weld or cut where the air may contain flammable dust, gas, or liquid vapors (such as gasoline).

#### **D. Compressed Gas Equipment**

The safe handling of compressed gas equipment is detailed in numerous industry publications. The following general rules cover many of the most common situations.

##### **1. Pressure Regulators**

Regulator relief valve is designed to protect only the regulator from overpressure; it is not intended to protect any downstream equipment. Provide such protection with one or more relief devices.

Never connect a regulator to a cylinder containing gas other than that for which the regulator was designed.

Remove faulty regulator from service immediately for repair (first close cylinder valve). The following symptoms indicate a faulty regulator:

Leaks - if gas leaks externally.

Excessive Creep - if delivery pressure continues to rise with downstream valve closed.

Faulty Gauge - if gauge pointer does not move off stop pin when pressurized, nor returns to stop pin after pressure release.

Repair. Do NOT attempt repair. Send faulty regulators for repair to manufacturer's designated repair center, where special techniques and tools are used by trained personnel.

##### **2. Cylinders**

Cylinders must be handled carefully to prevent leaks and damage to their walls, valves, or safety devices:

Avoid electrical circuit contact with cylinders including third rails, electrical wires, or welding circuits. They can produce short circuit arcs that may lead to a serious accident. (See 1-3C)

ICC or DOT marking must be on each cylinder. It is an assurance of safety when the cylinder is properly handled.

Identifying gas content. Use only cylinders with name of gas marked on them; do not rely on color to identify

gas content. Notify supplier if unmarked. NEVER DEFACE or alter name, number, or other markings on a cylinder. It is illegal and hazardous.

Empties: Keep valves closed, replace caps securely; mark MT; keep them separate from FULLS, and return promptly.

Prohibited use. Never use a cylinder or its contents for other than its intended use, NEVER as a support or roller.

Locate or secure cylinders so they cannot be knocked over.

Passageways and work areas. Keep cylinders clear of areas where they may be stuck.

Transporting cylinders. With a crane, use a secure support such as a platform or cradle. Do NOT lift cylinders off the ground by their valves or caps, or by chains, slings, or magnets.

Do NOT expose cylinders to excessive heat, sparks, slag, and flame, etc. that may cause rupture. Do not allow contents to exceed 55 degrees C (130 degrees F.) Cool with water spray where such exposure exists.

Protect cylinders, particularly valves from bumps, falls, falling objects, and weather. Replace caps securely when moving cylinders.

Stuck valve. Do NOT use a hammer or wrench to open a cylinder valve that cannot be opened by hand. Notify your supplier.

Mixing gases. NEVER try to mix any gases in a cylinder.

NEVER refill any cylinder.

Cylinder fittings should never be modified or exchanged.

##### **3. Hose**

Prohibited use. Never use hose other than that designed for the specified gas. A general hose identification rule is: red for fuel gas, green for oxygen, and black for inert gases.

Use ferrules or clamps designed for the hose (not ordinary wire or other substitute) as a binding to connect hoses to fittings.

No copper tubing splices. Use only standard brass fittings to splice hose.

Avoid long runs to prevent kinks and abuse. Suspend hose off ground to keep it from being run over, stepped on, or otherwise damaged.

Coil excess hose to prevent kinks and tangles.

Protect hose from damage by sharp edges, and by sparks, slag, and open flame.

Examine hose regularly for leaks, wear, and loose connections. Immerse pressured hose in water; bubbles indicate leaks

Repair leaky or worn hose by cutting area out and splicing. Do NOT use tape.

##### **4. Proper Connections**

Clean cylinder valve outlet of impurities that may clog orifices and damage seats before connecting regulator. Except for hydrogen, crack valve momentarily, pointing outlet

away from people and sources of ignition. Wipe with a clean, lintless cloth.

Match regulator to cylinder. Before connecting, check that the regulator label and cylinder marking agree, and that the regulator inlet and cylinder outlet match. NEVER Connect a regulator designed for a particular gas or gases to a cylinder containing any other gas.

Tighten connections. When assembling threaded connections, clean and smooth seats where necessary. Tighten. If connection leaks, disassemble, clean, and retighten, using properly fitting wrench.

Adapters. Use a CGA adapter (available from your supplier) between cylinder and regulator, if one is required. Use two wrenches to tighten adapter marked RIGHT and LEFT HAND threads.

Regulator outlet (or hose) connections may be identified by right hand threads for oxygen and left hand threads (with grooved hex on nut or shank) for fuel gas.

##### **5. Pressurizing Steps:**

Drain regulator of residual gas through suitable vent before opening cylinder (or manifold valve) by turning adjusting screw in (clockwise). Draining prevents excessive compression heat at high pressure seat by allowing seat to open on pressurization. Leave adjusting screw engaged slightly on single-stage regulators.

Stand to side of regulator while opening cylinder valve.

Open cylinder valve slowly so that regulator pressure increases slowly. When gauge is pressurized (gauge reaches regulator maximum) leave cylinder valve in following position: for oxygen and inert gases, open fully to seal stem against possible leak; for fuel gas, open to less than one turn to permit quick emergency shut-off.

Use pressure charts (available from your supplier) for safe and efficient recommended pressure settings on regulators.

Check for leaks on first pressurization and regularly thereafter. Brush with soap solution. Bubbles indicate leaks. Clean off soapy water after test; dried soap is combustible.

##### **E. User Responsibilities**

Follow all Safety Rules.

Remove leaky or defective equipment from service immediately for repair. Read and follow user manual instructions.

##### **F. Leaving Equipment Unattended**

Close gas supply at source and drain gas.

##### **G. Rope Staging-Support**

Rope staging-support should not be used for welding or cutting operation; rope may burn.

## 1-3 ARC WELDING

Comply with precautions in 1-1, 1-2, and this section. Arc Welding, properly done, is a safe process, but a careless operator invites trouble. The equipment carries high currents at significant voltages. The arc is very bright and hot. Sparks fly, fumes rise, ultraviolet and infrared energy radiates, weldments are hot, and compressed gases may be used. The wise operator avoids unnecessary risks and protects himself and others from accidents.

### A. Burn Protection

Comply with precautions in 1-2.

The welding arc is intense and visibly bright. Its radiation can damage eyes, penetrate lightweight clothing, reflect from light-colored surfaces, and burn the skin and eyes. Skin burns resemble acute sunburn; those from gas-shielded arcs are more severe and painful. DON'T GET BURNED; COMPLY WITH PRECAUTIONS.

#### 1. Protective Clothing

Wear long-sleeve clothing in addition to gloves, hat, and shoes. As necessary, use additional protective clothing such as leather jacket or sleeves, flameproof apron, and fire-resistant leggings. Avoid outer garments of untreated cotton.

Bare skin protection. Wear dark, substantial clothing. Button collar to protect chest and neck, and button pockets to prevent entry of sparks.

#### 2. Eye and Head Protection

Protect eyes from exposure to arc. Eyes may be damaged by radiant energy when exposed to the electric arc, even when not looking in the direction of the arc. Never look at an electric arc without protection.

Welding helmet or shield containing a filter plate shade no. 12 or denser must be used when welding. Place over face before striking arc.

Protect filter plate with a clear cover plate.

Cracked or broken helmet or shield should NOT be worn; radiation can be passed through to cause burns.

Cracked, broken, or loose filter plates must be replaced IMMEDIATELY. Replace clear cover plate when broken, pitted, or spattered.

Flash goggles with side shields MUST be worn under the helmet to give some protection to the eyes should the helmet not be lowered over the face before an arc is struck. Looking at an arc momentarily with unprotected eyes (particularly a high intensity gas-shielded arc) can cause a retinal burn that may leave a permanent dark area in the field of vision.

#### 3. Protection of Nearby Personnel

Enclose the welding area. For production welding, a separate room or enclosed bay is best. In open areas, surround the

operation with low-reflective, noncombustible screens or panels. Allow for free air circulation, particularly at floor level.

Viewing the weld. Provide face shields for all persons who will be looking directly at the weld.

Others working in area. See that all persons are wearing flash goggles.

Before starting to weld, make sure that screen flaps or bay doors are closed.

### B. Toxic Fume Prevention

Comply with precautions in 1-2B.

Generator engine exhaust must be vented to the outside air. Carbon monoxide can kill.

### C. Fire and Explosion Prevention

Comply with precautions in 1-2C.

Equipment's rated capacity. Do not overload arc welding equipment. It may overheat cables and cause a fire.

Loose cable connections may overheat or flash and cause a fire.

Never strike an arc on a cylinder or other pressure vessel. It creates a brittle area that can cause a violent rupture or lead to such a rupture later under rough handling.

### D. Compressed Gas Equipment

Comply with precautions in 1-2D.

### E. Shock Prevention

Exposed electrically hot conductors or other bare metal in the welding circuit, or in ungrounded, electrically-HOT

equipment can fatally shock a person whose body becomes a conductor. DO NOT STAND, SIT, LIE, LEAN ON, OR TOUCH a wet surface when welding without suitable protection.

To protect against shock:

Keep body and clothing dry. Never work in damp area without adequate insulation against electrical shock. Stay on a dry duckboard, or rubber mat when dampness or sweat cannot be avoided. Sweat, sea water, or moisture between body and an electrically HOT part - or grounded metal - reduces the body surface electrical resistance, enabling dangerous and possibly lethal currents to flow through the body.

#### 1. Grounding the Equipment

When installing, connect the frames of each unit such as welding power source, control, work table, and water circulator to the building ground. Conductors must be adequate to carry ground currents safely. Equipment made electrically HOT by stray currents may shock, possibly fatally. Do NOT GROUND to electrical conduit, or to a pipe carrying ANY gas or a flammable liquid such as oil or fuel.

Three-phase connection. Check phase requirement of equipment before installing. If only three-phase power is available, connect single-phase equipment to only two wires of the three-phase line. Do NOT connect the equipment ground lead to the third (live) wire, or the equipment will become electrically HOT - a danger-

ous condition that can shock, possibly fatally.

Before welding, check ground for continuity. Be sure conductors are touching bare metal of equipment frames at connections.

If a line cord with a ground lead is provided with the equipment for connection to a switch box, connect the ground lead to the grounded switch box. If a three-prong plug is added for connection to a grounded mating receptacle, the ground lead must be connected to the ground prong only. If the line cord comes with a three-prong plug, connect to a grounded mating receptacle. Never remove the ground prong from a plug, or use a plug with a broken ground prong.

### 2. Connectors

Fully insulated lock-type connectors should be used to join welding cable lengths.

### 3. Cables

Frequently inspect cables for wear, cracks, and damage. IMMEDIATELY REPLACE those with excessively worn or damaged insulation to avoid possibly lethal shock from bared cable. Cables with damaged areas may be taped to give resistance equivalent to original cable.

Keep cable dry, free of oil and grease, and protected from hot metal and sparks.

### 4. Terminals and Other Exposed Parts

Terminals and other exposed parts of electrical units should have insulating covers secured before operation.

### 5. Electrode Wire

Electrode wire becomes electrically HOT when the power switch of gas metal-arc welding equipment is ON and welding gun trigger is pressed. Keep hands and body clear of wire and other HOT parts.

### 6. Safety Devices

Safety devices such as interlocks and circuit breakers should not be disconnected or shunted out.

Before installation, inspection, or service of equipment, shut OFF all power, and remove line fuses (or lock or red-tag switches) to prevent accidental turning ON of power. Disconnect all cables from welding power source, and pull all 115 volts line-cord plugs.

Do not open power circuit or change polarity while welding. If, in an emergency, it must be disconnected, guard against shock burns or flash from switch arcing.

Leaving equipment unattended. Always shut OFF, and disconnect all power to equipment.

Power disconnect switch must be available near the welding power source.

# Thank You

For selecting a quality product. We want you to take pride in operating this product...as much pride as we have in bringing the product to you!

## **Please Examine Carton and Equipment For Damage Immediately**

When this equipment is shipped, title passes to the purchaser upon receipt by the carrier. Consequently, claims for material damaged in shipment must be made by the purchaser against the transportation company at the time the shipment is received.

Please record your equipment identification information below for future reference. This information can be found on your machine nameplate.

Model Name & Number \_\_\_\_\_

Code & Serial Number \_\_\_\_\_

Date of Purchase \_\_\_\_\_

Whenever you request replacements parts for, or information on this equipment always supply the information you have recorded above.

Read this Owner's Manual completely before attempting to use this equipment. Save this manual and keep it handy for quick reference. Pay particular attention to the safety instructions we have provided for your protection.

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## FEATURES



## OPERATING PROCEDURE

1. Connect positioner to 120 VAC power source.
2. Connect welding ground cable to grounding lug assembly on positioner.

### NOTE:

***Failure to attach a welding ground cable to the AirCrafter™ grounding lug will result in damage to the positioner electrical circuit and void unit's warranty.***

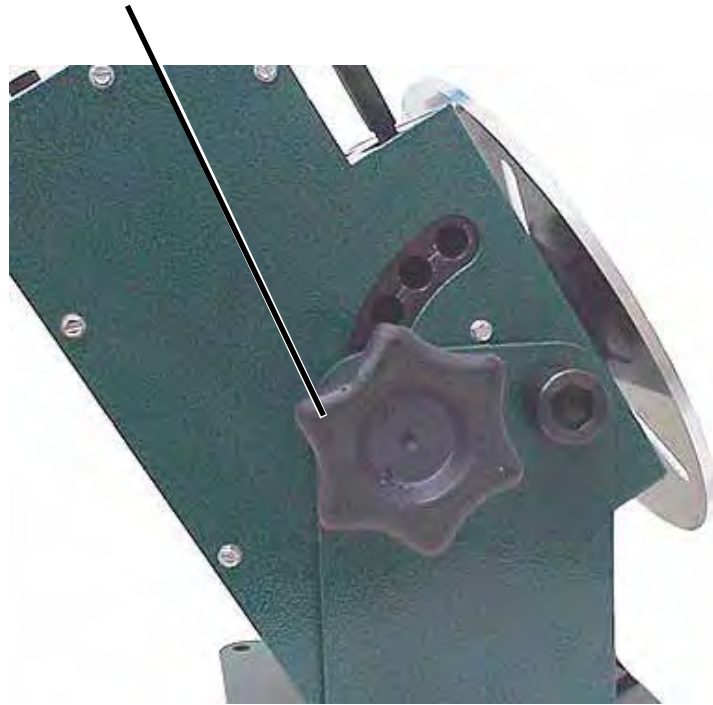
3. Set high/low range switch to proper position.
4. Set forward/reverse switch to proper position.
5. Establish desired speed setting using the potentiometer and read the LED on the positioner.



# SPECIFICATIONS

Model	Standard Turntable Diameter	Turntable Capabilities with Balanced & Centered Load		Degrees Tilt	Speed Range R.P.M.		Ground Capacity AMPS	Motor	Shipping Weight	Transmission
		Turntable Horizontal	Turntable Vertical		Low	High				
T-200	10"	200 lbs	50 lbs	0° to 105°	.3-2	1-10	300A 60% Duty Cycle	120VAC 50/60 Hz	45 lbs	Gear

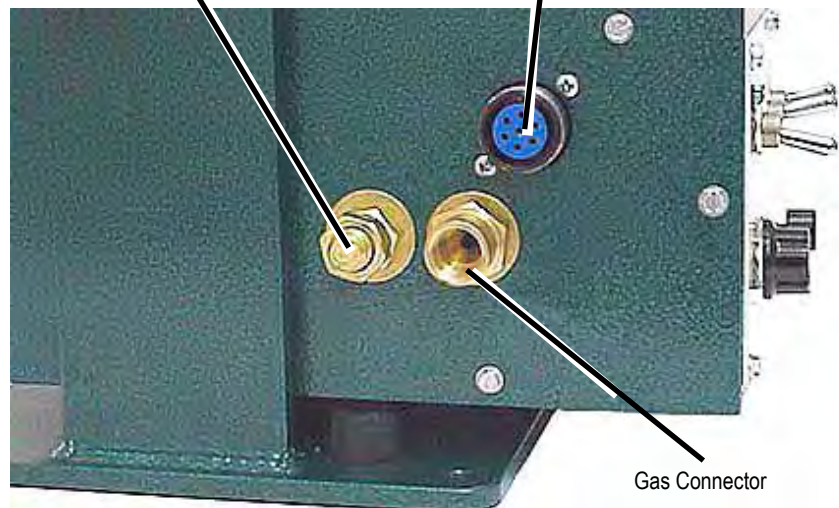
Tilt Release/Locking Pin



Ground/Gas/Foot Pedal connections

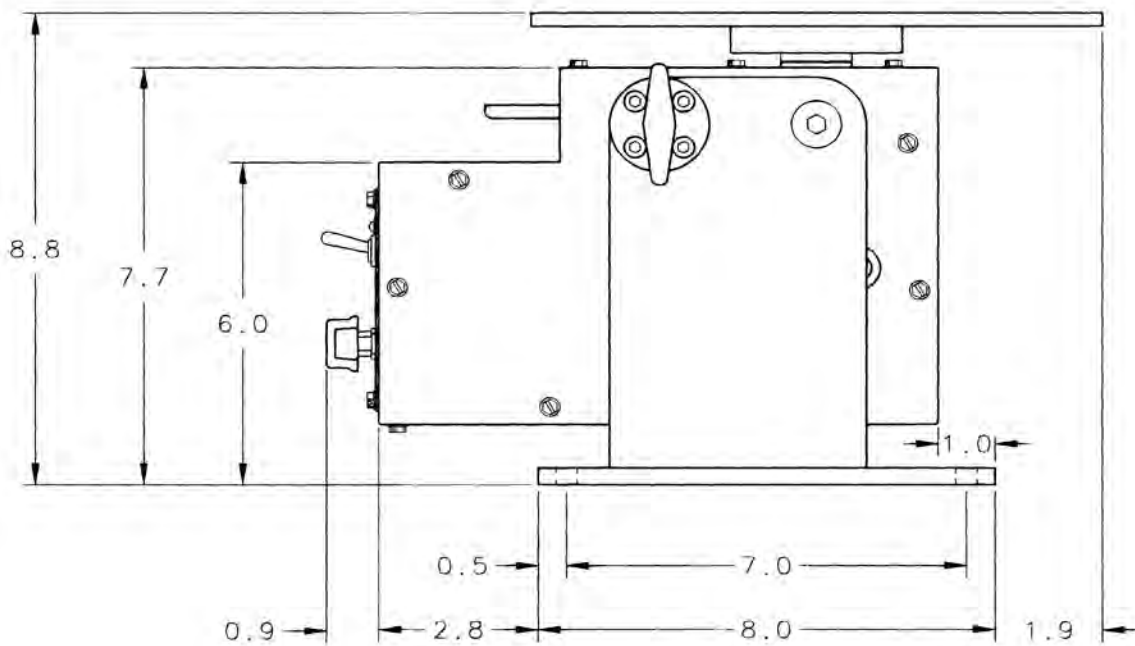
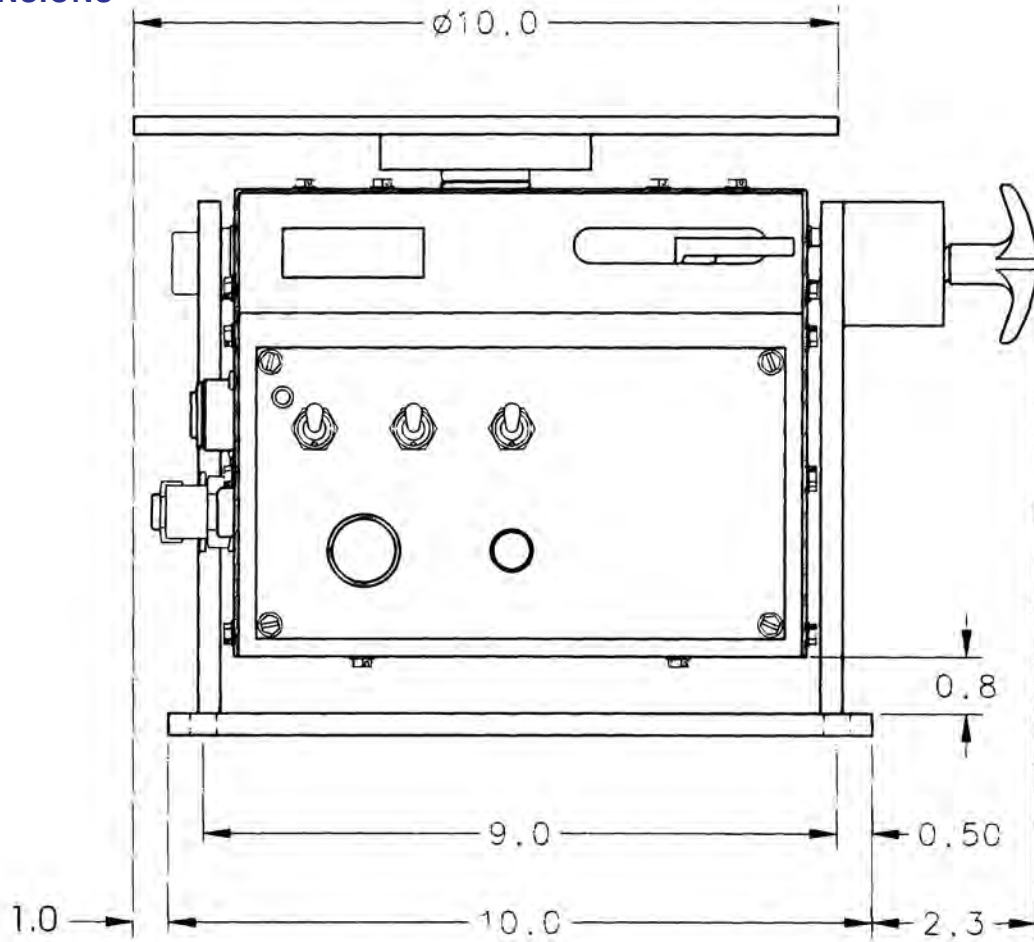
Ground Lug

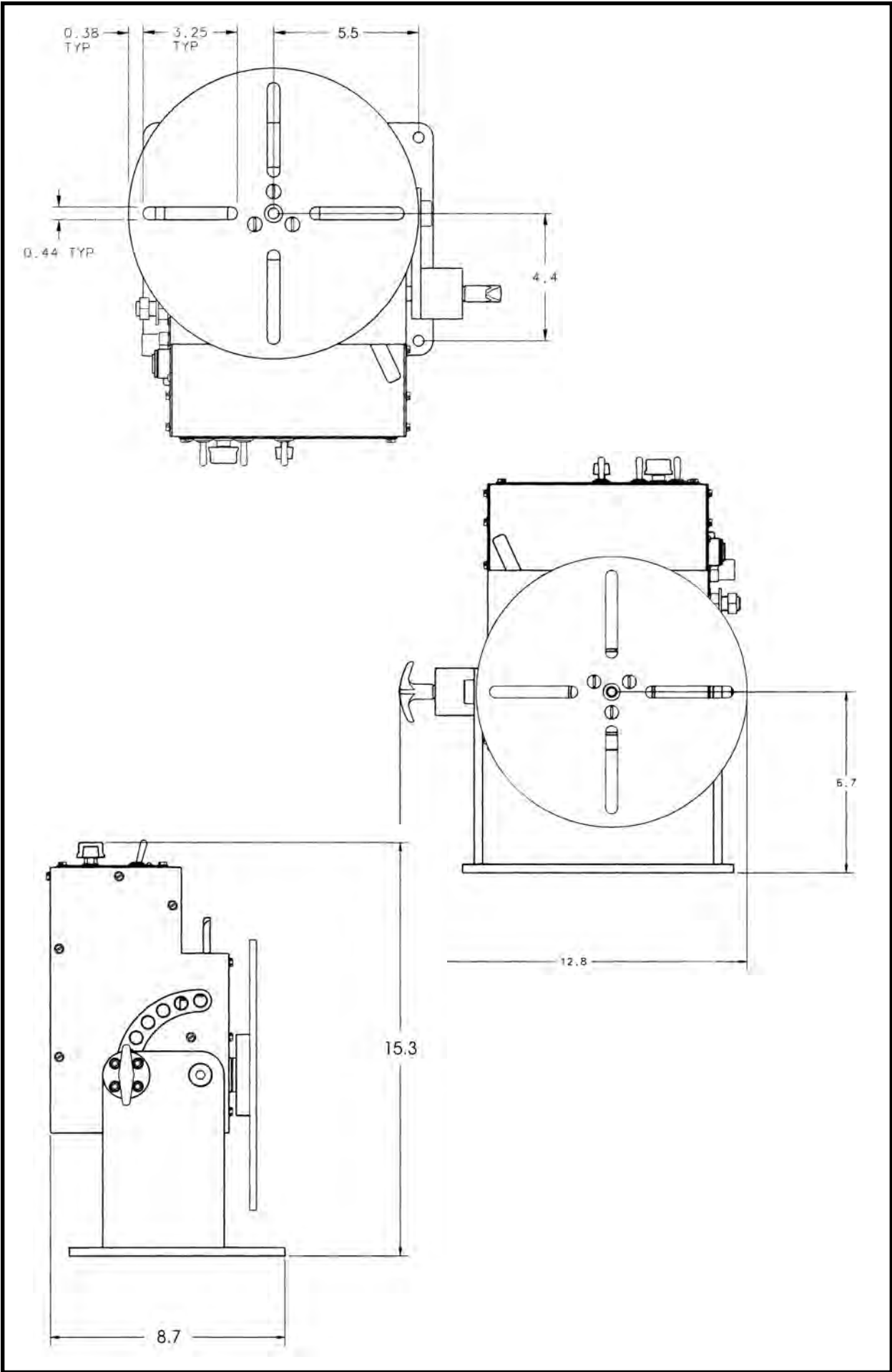
Foot Pedal/Remote Connector



Gas Connector

# DIMENSIONS

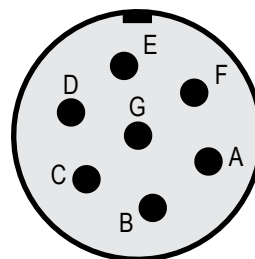
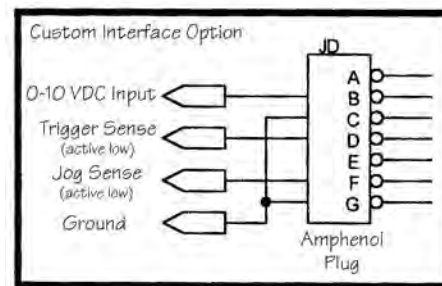
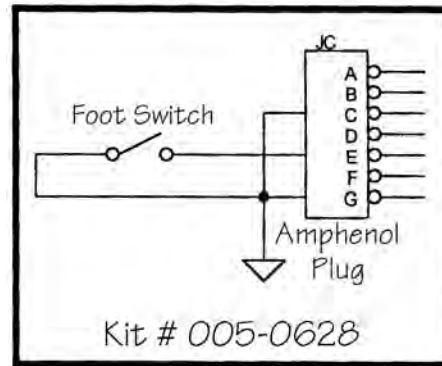
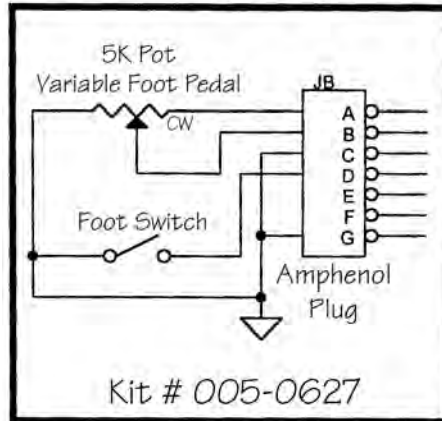




## REMOTE HOOKUPS

This section explains how to interface external controls to the AirCrafter™ T-200 including the optional Foot Switch and Variable Speed Foot Control available from MK Products.

The Trigger and Jog inputs may be Switches or Signals Levels. (low=0v high=5v)



Amphenol Connector  
Viewed from the front of connector

## OPTIONAL ACCESSORIES

005-0040  
3-Jaw Chuck



005-0677  
10" Turntable



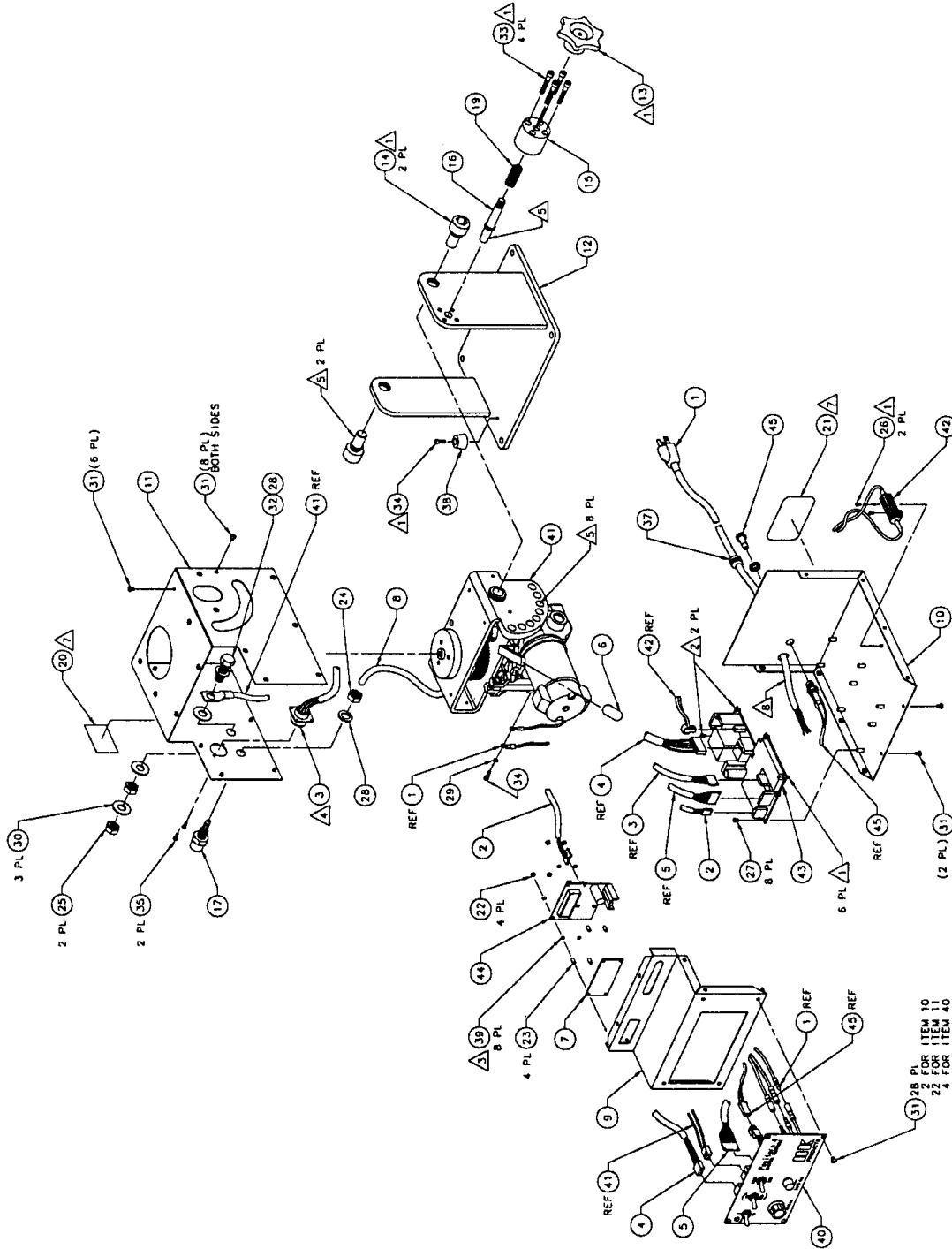
005-0628  
On/Off Foot Switch

005-0627  
Heavy Duty  
Variable Speed Foot Control



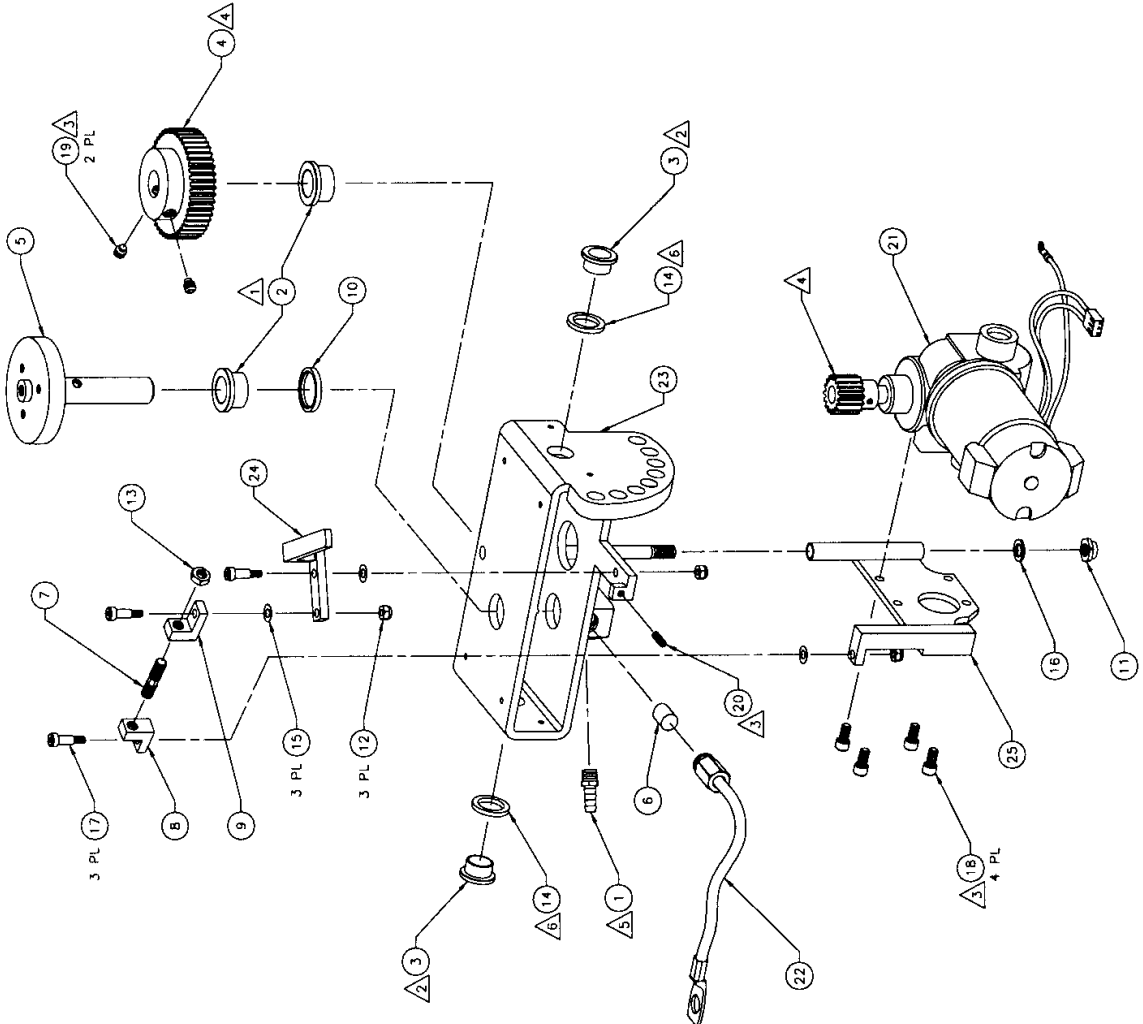
# Top Level Assembly 001-1295C

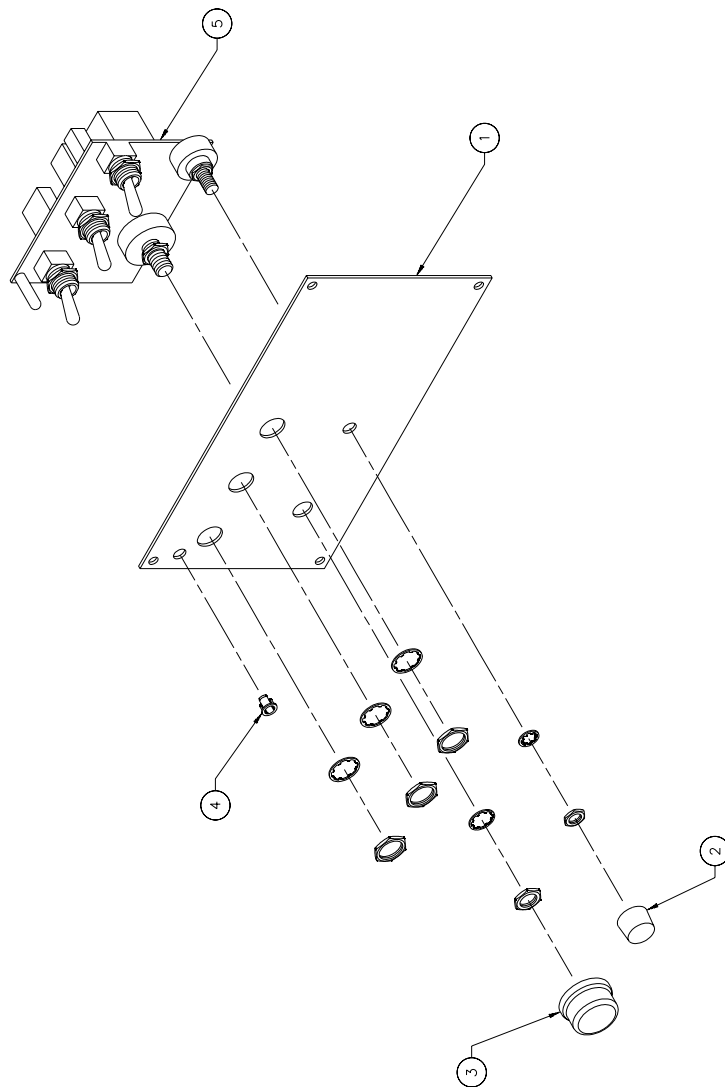
No.	Qty.	Part No.	Description
1	1	843-0534	Assy Cable Power
2	1	843-0533	Assy Cable Meter
3	1	003-1642	Assy Con 7P "W"
4	1	843-0531	Assy Cable
5	1	843-0530	Assy Cable Panel
6	1	751-0012	Cap Plug Ø0.406 x 1.5 Vnl Blk
7	1	707-0126	Lens Dspl
8	0.67ft	551-0015	Tubing Plastic 1/4D
9	1	438-0048	Paint Wrap Fr Psnr 4
10	1	438-0047	Paint Wrap Bottom Psnr 4
11	1	438-0046	Paint Wrap Top Psnr 4
12	1	438-0027	Base Assy Paint
13	1	431-1606	Knob Star Mold Black
14	2	431-1579	Mod Scr Shc 3/4-16x1 1/4St
15	1	431-1519	Plunger Case
16	1	431-1605	Plunger
17	1	431-0568	Fitting Gas
18	A/R	823-0043	Thread Locking Cmpd Low Str
19	1	419-0084	Sprg Comp .609OD x 1.44
20	1	405-0923	Label Warning
21	1	405-0918	Plate Serial
22	4	345-0004	Nut Hex Lock 4-40
23	4	342-0573	Spacer Nylon #4 5/16
24	1	342-0055	Nut Jam 1/2x20 Brass
25	2	342-0039	Nut Jam 1/2-13 Brass
26	2	336-0106	Scr Ph P 4-40x1/4 SS
27	8	336-0086	Scr Ph P 6-32x1/4 SS
28	2	333-0013	Washer Spring Lock 1/2
29	1	333-0006	Washer Lock #8
30	3	331-0176	Washer Flat 1/2 Brass
31	28	336-0230	Scr Pan Ph 8-32 1/4 Blk
32	1	329-0236	Scr Hex 1/2-13x1 1/2 Brass
33	4	328-0062	Scr Sk 1/4-20 x 1-1/2 Blk
34	2	328-0025	Scr Shc 8-32 x 1/2 Blk
35	2	327-0110	Scr Ph P T/B 6x3/8
36	A/R	835-0014	Lubricant Teflon Tri-Flow
37	1	315-0696	Strain Relief Bushing Ø.625
38	1	301-0073	Foot Rubber
39	8	261-0126	Insul Shldr Wshr #4 x.31
40	1	003-1287	Assy Pnl Fr Psnr 4
41	1	003-1286	Assy Gear Hsg Psnr 4
42	1	003-1277	Assy Resistor Mtr Disch
43	1	003-1272	Assy Pcv Ctl Psnr 4
44	1	003-1269	Assy Pcv Meter Display
45	1	003-2121	Assy Fuse Holder
46	3	411-0020	Tie Wrap 4 in
47	1	411-0194	Tie Wrap 8 in blk



## Gear Housing Assembly 003-1286b

No.	Qty.	Part No.	Description
1	1	757-0009	Fitting Hose
2	2	501-0063	Bearing O/F Bronze 3/4 x 5/8
3	2	501-0024	Bearing O/F Bronze 5/8 x 1/2
4	1	431-1603	Gear Mod 48T
5	1	431-1602	Shaft Flg Mod Psnr 4
6	1	431-1551	Brush Concaved
7	1	431-1542	Scr Adj Lt Rt 5/16-18
8	1	431-1541	Link Adj Lt P4
9	1	431-1540	Link Adj Rt P4
10	1	431-1508	Spacer 1018 Ø1.25xØ1.0x0.125
11	1	345-0043	Nut Hex Lock 3/8-16
12	3	345-0012	Nut Locking Sll 10-24
13	1	342-0012	Nut Hex Jam 5/16-18
14	2	331-0310	Washer Sll .754x1.06x.121
15	3	331-0263	Wshr 0.255IDx0.50ODx0.01Thk Brz
16	1	331-0007	Washer Flat 0.375ID
17	3	330-0002	Scr Shdr 1/4 x 1/2 10-24
18	8	328-0056	Scr Sk 1/4-20 x 1/2 Blk
19	2	321-0960	Scr Hfldog Pt 5/16-18 x 3/8
20	1	321-0064	Scr Set Cup Pt 10-24x0.50
21	1	003-1278	Assy Mot Psnr 4
22	1	003-2143	Assy Gnd Cbl/Br Hldr
23	1	002-0622	Assy Wld Gear Hsg Psnr 4
24	1	002-0602	Weld Assy Handle
25	1	002-0600	Weld Asy Motor Mount Plate P4



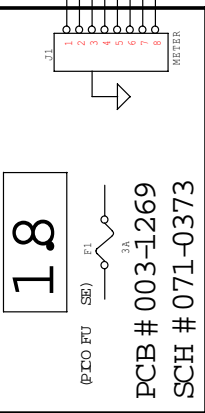


## Front Panel Assembly 003-1287

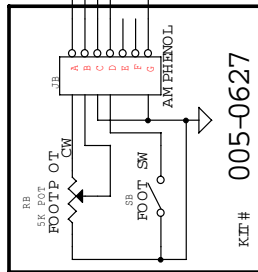
No.	Qty.	Part No.	Description
1	1	436-0142	SS Pnl Fr Psnr 4
2	1	401-0029	Swx Cap Blk Psh Btn
3	1	401-0012	Knob Ø1.0 Blk
4	1	301-0023	Grommet Panel Mount
5	1	003-1271	Assy Pcb Pnl Fr



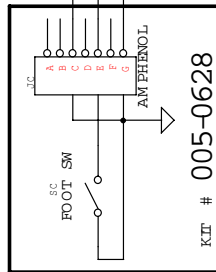
### RPM METER



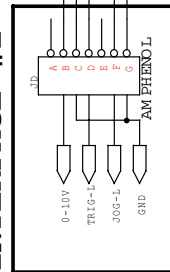
### FOOT SPEED CONTROL



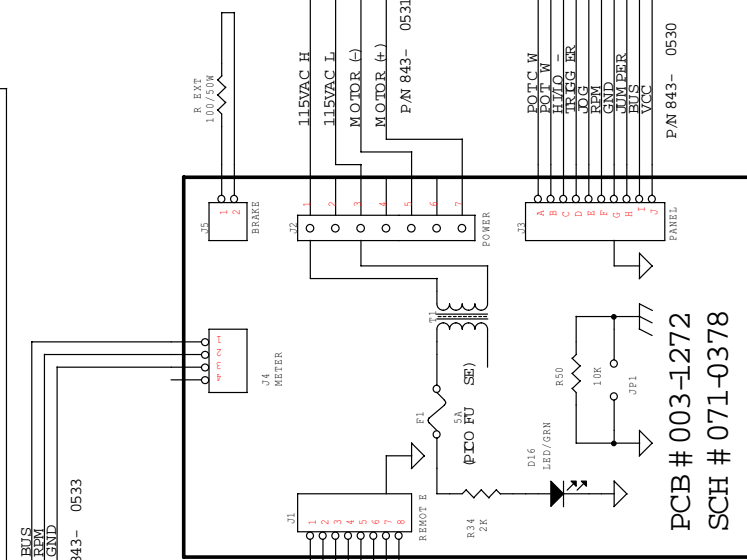
### FOOT SW. CONTROL



### INTERFACE #1



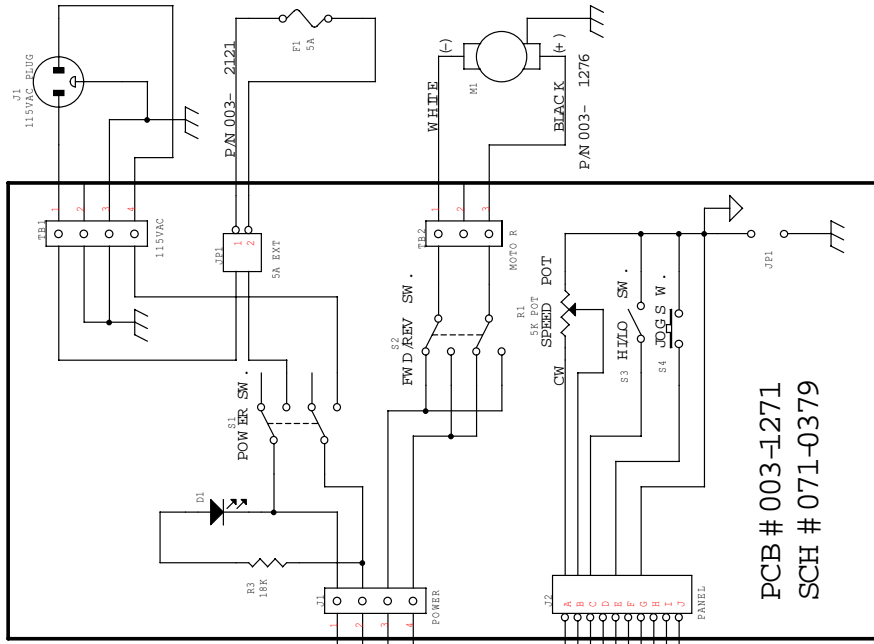
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### SPEED CONTROL

REV	DESCRIPTION / DCN	APRV	DATE
-	RELEASE PER N # 3129		9/9 9
A	DCN # 12 175		11/9 9

### PANEL CONTROL



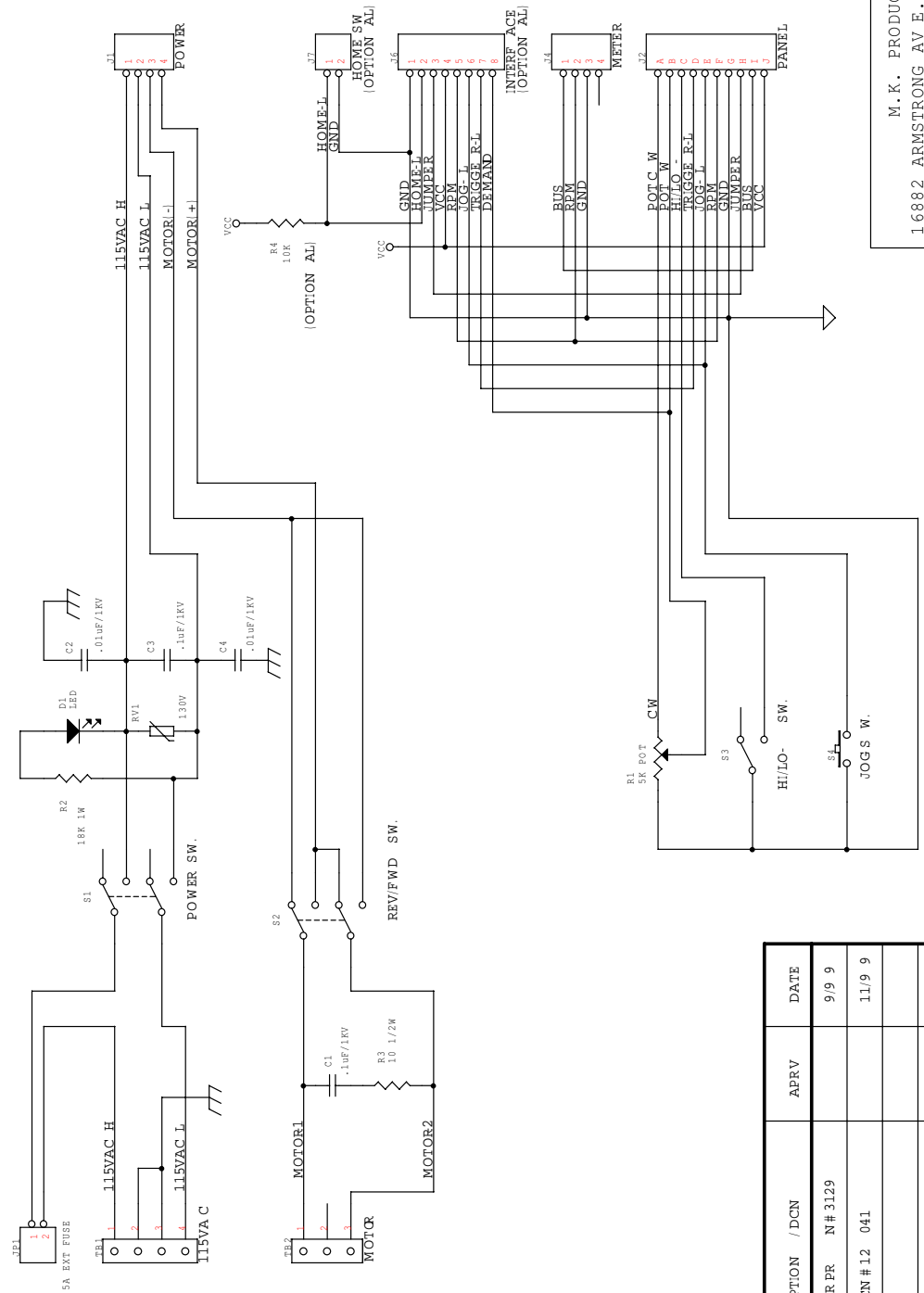
M.K. PRODUCTS  
16882 ARMSTRONG AV E. IRVINE, CA., 92714

POSITIONER 4A BLOCK DIAGRAM

Document Number 071-0380

Rev A

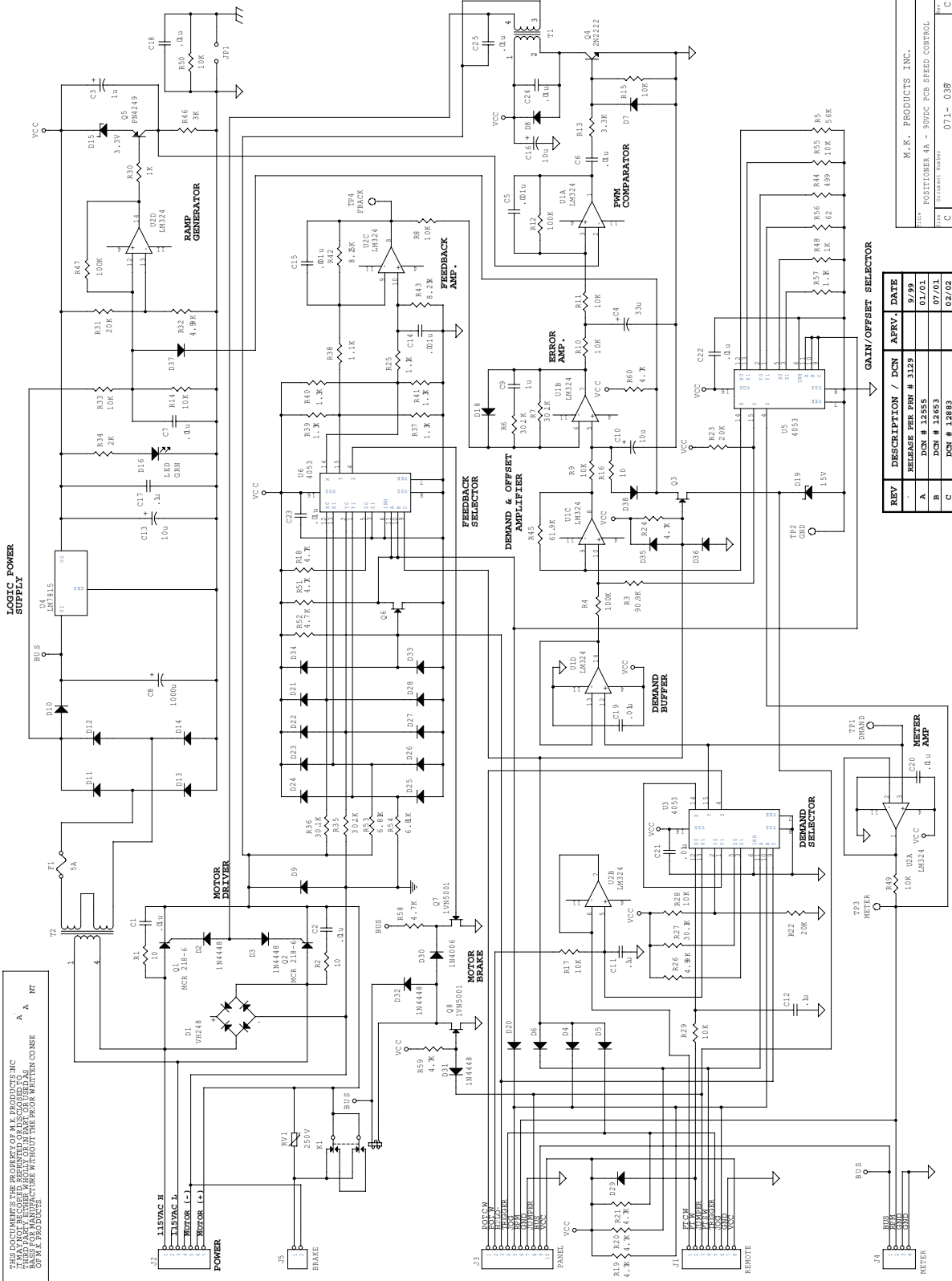
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REV	DESCRIPTION / DCN	APRV	DATE
-	RELEASE PER PR N# 3129		9/9 9
A	DCN # 12 041		11/9 9

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 Title POSITIONER 4A - FRONT PANEL  
 Size Document Number  
 B 071- 0379  
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A	RELEASE PER DRN # 3129	9/69
B	DCN # 12155	01/01
C	DCN # 12653	07/03
C	DCN # 12852	02/02

M.K. PRODUCTS, INC.	
FORM	POSITIONER 1A - RMDC FEE SPEED CONTROL
REV	071-039

# LIMITED WARRANTY

**Effective August 1, 2010**

This warranty supersedes all previous MK Products warranties and is exclusive, with no other guarantees or warranties expressed or implied.

**LIMITED WARRANTY** - MK Products Inc., Irvine, California warrants that all new and unused equipment furnished by MK Products is free from defects in workmanship and material as of the time and place of delivery by MK Products. No warranty is made by MK Products with respect to trade accessories or other items manufactured by others. Such trade accessories and other items are sold subject to the warranties of their respective manufacturers, if any.

MK Products' warranty does not apply to components having normal useful life of less than one (1) year, such as relay points, wire conduit, tungsten, and welding gun parts that come in contact with the welding wire, including gas cups, gas cup insulators, and contact tips where failure does not result from defect in workmanship or material.

MK Products shall, exclusively remedy the limited warranty or any duties with respect to the quality of goods, based upon the following options:

- (1) repair
- (2) replacement
- (3) where authorized in writing by MK Products, the reasonable cost of repair or replacement at our Irvine, California plant.

As a matter of general policy only, MK Products may honor an original user's warranty claims on warranted equipment in the event of failure resulting from a defect within the following periods from the date of delivery of equipment to the original user:

- 1. Power Supplies and Wire Feed Cabinets ..... **3 years**
- 2. Weldheads, Coolers, Positioners, and Push-Pull Guns ... **1 year**
- 3. Spool Guns, and Spool Gun Modules ..... **180 days**
- 4. Repairs/Exchanges/Parts ..... **90 days**

Classification of any item into the foregoing categories shall be at sole discretion of MK Products. Notification of any failure must be in writing within 30 days of such failure.

A copy of the invoice showing the date of sale must accompany product returned for warranty repair or replacement.

All equipment returned to MK Products for service must be properly packaged to guard against damage from shipping. MK Products not be responsible for any damages resulting from shipping.

Normal surface transportation charges (one way) for products returned for warranty repair or replacement will be borne by MK Products, except for products sold to foreign markets.

ANY EXPRESS WARRANTY NOT PROVIDED HEREIN AND ANY IMPLIED WARRANTY, GUARANTY, OR REPRESENTATION AS TO PERFORMANCE AND ANY REMEDY FOR BREACH OF CONTRACT WHICH, BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION, OPERATION OF LAW, CUSTOM OF TRADE, OR COURSE OF DEALING, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR PARTICULAR PURPOSE, WITH RESPECT TO ANY AND ALL EQUIPMENT FURNISHED BY MK PRODUCTS, IS EXCLUDED AND DISCLAIMED BY MK PRODUCTS.

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USE OF OTHER THAN **GENUINE** MK PRODUCTS' CONSUMABLES, PARTS, AND ACCESSORIES MAY INVALIDATE YOUR PRODUCT WARRANTY.



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August 1, 2010



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