

# K-BUG 5000

## DIGITAL, COMPACT, ALL POSITION PENDULUM WEAVE WELDER

A track guided travel carriage with  
oscillation for welding in all positions

Increases welding production

Improves weld quality

Reduces operator fatigue



### Bug-O Systems

Operator Controlled Mechanization

412-331-1776    [www.bug-o.com](http://www.bug-o.com)

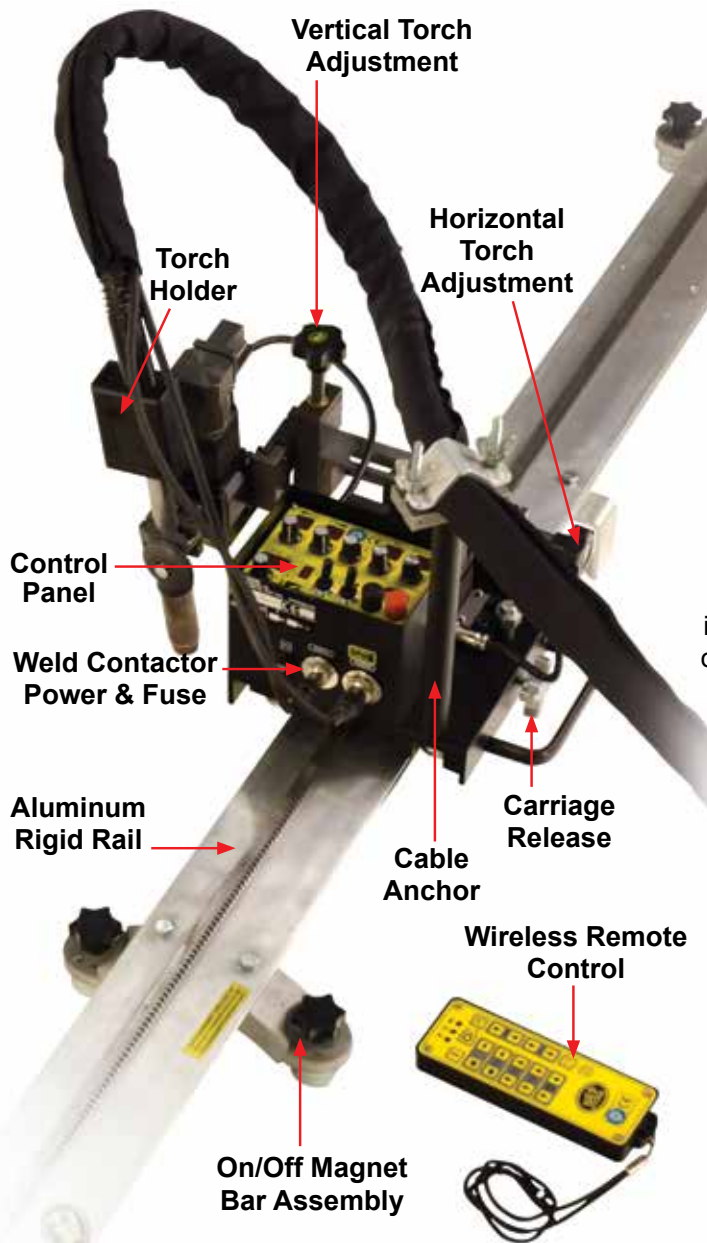
Bug-O Systems is committed to empowering our customers  
by providing operator controlled mechanized solutions for  
their welding, cutting and custom applications.



# K-BUG 5000 DIGITAL COMPACT ALL POSITION WEAVE WELDER

The **K-BUG 5000** is a compact portable welding unit with an integrated pendulum weaver for all position welding. It mounts to BUG-O Systems Aluminum Rigid Rail and attaches to work surface via magnets or vacuum system in any position. It will perform continuous welding at a constant travel speed producing high quality uniform welds in a fraction of the time required for manual welding. Regulated travel speed without starting and stopping the welding process will eliminate excessive weld deposition and help reduce defects. Precise weld weaving with programmable dwells will improve weld penetration and control undercut.

Control of all tractor and welding functions can be set or adjusted on the tractor's panel or remotely via wireless remote control. Maximum wireless remote control range is 32 ft (10 meters). Remote includes a magnetic back for operator convenience.



## Five Weave Patterns

to choose from with just a push of a button.

- |  |   |
|--|---|
|  | 1. <b>NO WEAVE</b> - Straight line  |
|  | 2. <b>RUN</b> - The tractor moves continuously during the weave and dwell   |
|  | 3. <b>WEAVE</b> - The tractor and weave both stop during dwells   |
|  | 4. <b>STEP</b> - The tractor is stationary during the weave and moves only during the dwell   |
|  | 5. <b>TRACTOR STOP ON DWELL</b> - When the weave moves away from tractor, the tractor is stationary<br>When weave moves towards tractor, the tractor also moves |





# K-BUG 5000 DIGITAL COMPACT ALL POSITION WEAVE WELDER

## Features:

- High torque, low inertia motor for precise stops and starts
- Lightweight and easy to carry, weighing just 18 lbs. (8.2 kg)
- Aluminum Rigid Rail with rack and pinion drive insures precise path and consistent speeds
- Precision drive motor prevents unit from moving when power is off
- High geared pendulum motor prevents torch movement when power is off
- High speed motor for pendulum weaving
- Programmable puddle control and crater fill
- Independent control of pendulum weaving right and left dwell times
- Drive unit motor overload protection
- Closed loop speed and position control for adjustable and repeatable operation
- Closed loop speed control to prevent drift from center weld position
- Storage of welding parameters after power is turned off
- Carriage Travel and arc start in one switch
- Wireless Remote Control
- Independent control of puddle build and crater fill
- Weld Contactor ON/OFF Switch

## Torch Options:



**SBG-450-L-(A)-(B) 450 Amp Gun/Lincoln 3/4" (19 mm)**  
For LN7, LN8, LN9, LN25, LN742, Synergic 7 & LN10 w/ adapter

**SBG-450-T-(A)-(B) 450 Amp Gun/Lincoln Std.**  
For all other Lincoln products

**SBG-450-M-(A)-(B) 450 Amp Gun/Miller**

**SBG-450-E-(A)-(B) 450 Amp Gun/Euro**

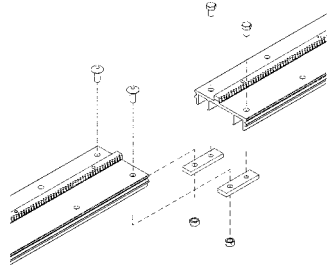
(A)- Contact Tip Size 0.035" to 1/16" (0.89 to 1.59 mm)

(B)- Cable Length 15 ft (4.57 m) / 25 ft (7.62 m)

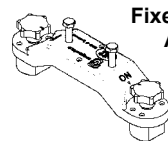
## Rail Options:

The **K-BUG 5000** package is designed to run on Bug-O Systems Aluminum Rigid Rail (ARR) and Semi-Flex Rail (AFR) for uses in straight line applications. Carriage wheels run in recessed V-grooves that are protected from dirt and spatter. Both rails can be mounted with magnets, vacuum cups or bolted to a permanent fixture.

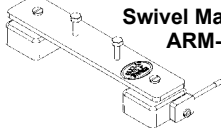
### Heavy Duty Rigid Rail ARR-1080 & ARR-1085



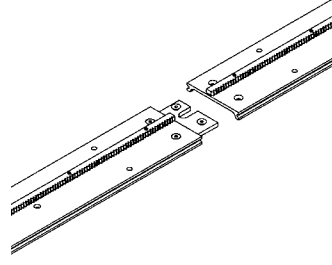
### Fixed Magnet ARM-2010



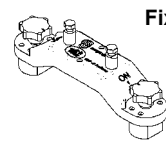
### Swivel Magnet ARM-2325



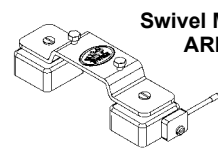
### Semi-Flex Rail AFR-3000



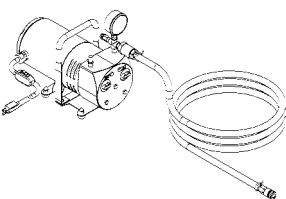
### Fixed Magnet AFR-2010



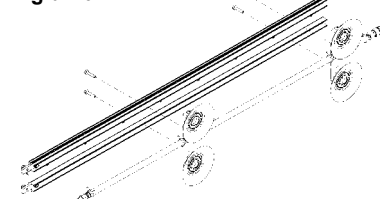
### Swivel Magnet ARM-2425



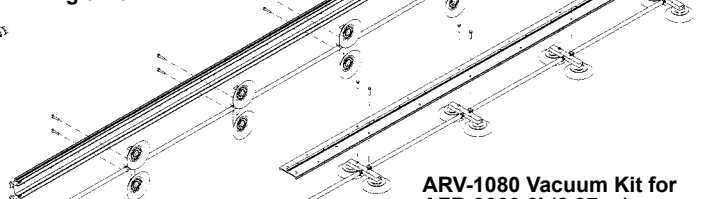
### Vacuum Pump Kit ARV-2020 120 Volt/50-60 Hz ARV-2030 240 Volt/50-60 Hz



### ARR-1085 Vacuum Kit for ARR-1085 4' (1.17 m) Rigid Rail



### ARR-1080 Vacuum Kit for ARR-1080 8' (2.37 m) Rigid Rail



### ARR-1080 Vacuum Kit for AFR-3000 8' (2.37 m) Semi-Flex Rail



# K-BUG 5000 DIGITAL COMPACT ALL POSITION WEAVE WELDER

## Technical Data:

### Power Requirements:

<b>KBUG-5000</b>	120VAC/50-60Hz/1Ph
<b>KBUG-5002</b>	240VAC/50-60Hz/1Ph

**Net Weight:** 18 lbs. (8.2 kg.)

**Shipping Weight:** 24 lbs. (10.9 kg.)

**Welding Position:** All position

**Torch Holder:** Fits straight torch

**Vertical Lifting Power:** 50 lbs. (22.7 kg.)

### Tractor Dimensions:

<b>(WxLxH) inch:</b>	13 <sup>5</sup> / <sub>8</sub> to 16 x 9 x 10 <sup>1</sup> / <sub>4</sub>
<b>mm:</b>	(346 to 406 x 228 x 260)

### Torch Support Adj.:

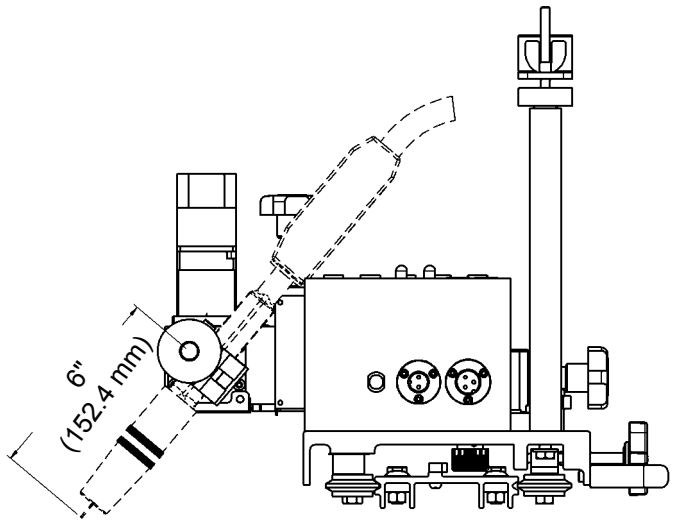
<b>Y-Stroke:</b>	2.05" (52 mm) ± 5%
<b>Z-Stroke:</b>	1.69" (43 mm) ± 5%

**Weaver Speed:** 0 to 188 in/min (478 cm/min)

**Weave Width\*:** 0 to 1.05" (26.7 mm)

**Cycles\*:** 80 cycles per min. at 1.05" (26.67 mm) stroke  
115 cycles per min. at .525" (13.34 mm) stroke  
200 cycles per min. at .25" (6.35 mm) stroke

Digital LED speed indicator: 1 to 34.7 ipm (25 to 881 mm/min)



\* When torch Pivot-to-Tip length is 6" (152.4 mm) as shown above. Increasing the Pivot-to-Tip length will increase the maximum speed and the weave width.

## Dimensions:

