



Bug-O Systems

Automated Cutting and Welding Systems

412-331-1776 www.bugo.com

Bug-O Systems is guided by honesty, integrity and ethics in service to our customers and in all we do.

K-BUG 5100

**DIGITAL, COMPACT, ALL POSITION
PENDULUM WEAVE WELDER**

**A Hi-Flex Track guided travel carriage with
oscillation for welding in all positions**

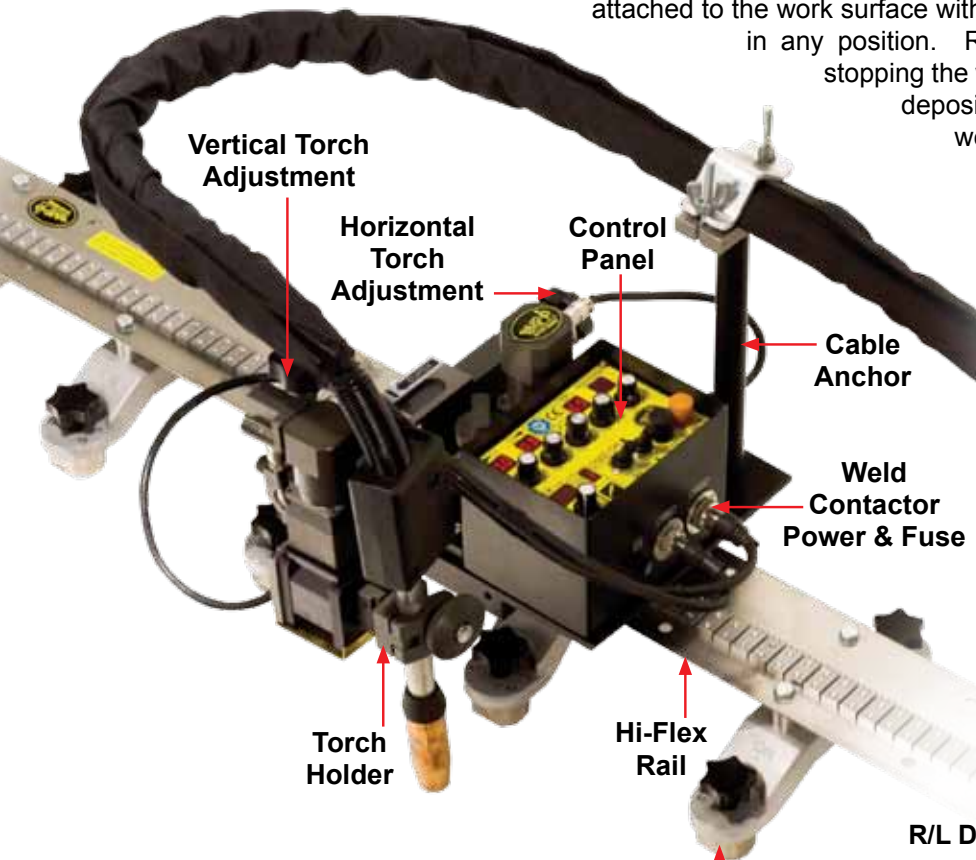
**Increases welding production, improves weld
quality and reduces operator fatigue**



K-BUG 5100 DIGITAL COMPACT ALL POSITION WEAVE WELDER

The **KBUG-5100** is a compact portable welding unit with an integrated pendulum weaver for all position welding. Mounted to BUG-O Systems Hi-Flex rail and attached to the work surface with magnets or vacuum cups and pump system in any position. 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 m). Remote includes a magnetic back for operator convenience.



On/Off Magnet Bar Assembly



Five Weave Patterns to choose from with just a push of a button.

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



K-BUG 5100 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)
- Hi-Flex Rail with rack and pinion drive insures precise path and consistent speed
- Hi-Flex Rail flat or bent inside/outside to a radius of 30" (762 mm)
- 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)

KBUG-6083

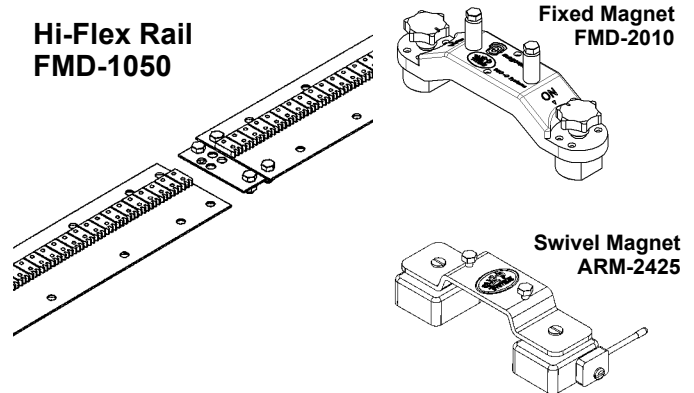
Plasma Torch Holder Assembly



Rail Options:

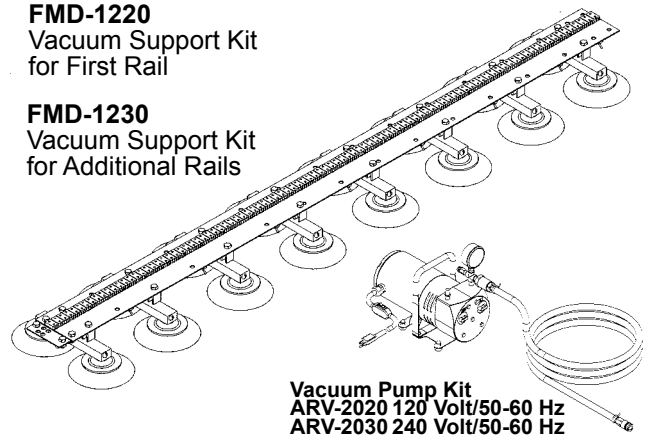
The **K-BUG 5100** package is designed to run on Bug-O Systems Hi-Flex Rail (FMD) for uses in curved or straight line applications. Carriage wheels run on stainless steel rail that can be mounted with magnets or vacuum system.

**Hi-Flex Rail
FMD-1050**



**FMD-1220
Vacuum Support Kit
for First Rail**

**FMD-1230
Vacuum Support Kit
for Additional Rails**



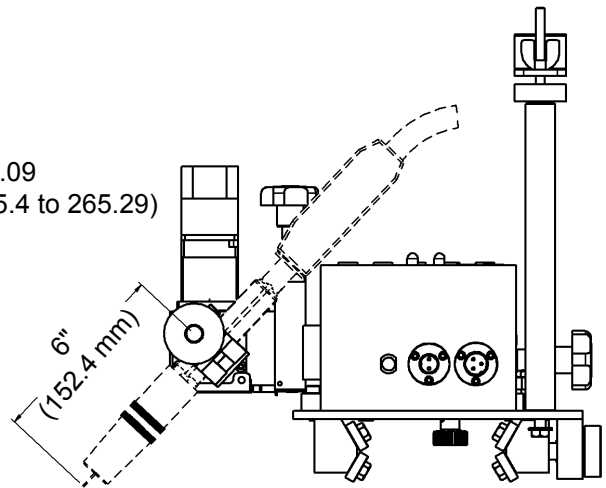
**Vacuum Pump Kit
ARV-2020 120 Volt/50-60 Hz
ARV-2030 240 Volt/50-60 Hz**



K-BUG 5100 DIGITAL COMPACT ALL POSITION WEAVE WELDER

Technical Data:

Power Requirements:		Weaver Speed:	0 to 188 in/min (477 cm/min)
KBUG-5100	120VAC/50-60Hz/1Ph	Weave Width*:	0 to 1.23" (31.24 mm)
KBUG-5102	240VAC/50-60Hz/1Ph	Cycles*:	68 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
Net Weight:	18 lbs. (8.2 kg.)	Welding Position:	All position
Shipping Weight:	24 lbs. (10.9 kg.)		Digital LED speed indicator: 1 to 34.7 ipm (25 to 88 cm/min)
Torch Holder:	Fits straight torch		
Vertical Lifting Power:	50 lbs. (22.7 kg.)		
Tractor Dimensions:			
(WxLxH) inch:	12.34 to 14.9 x 9.67 x 8.48 to 10.09		
mm:	(313.44 to 378.46 x 245.62 x 215.4 to 265.29)		
Torch Support Adj.:			
Y-Stroke:	2.05" (52 mm) ± 5%		
Z-Stroke:	1.69" (43 mm) ± 5%		



* 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:

