



Made in USA

K-BUG 5100

COMPACT PENDULUM WEAVE WELDER



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

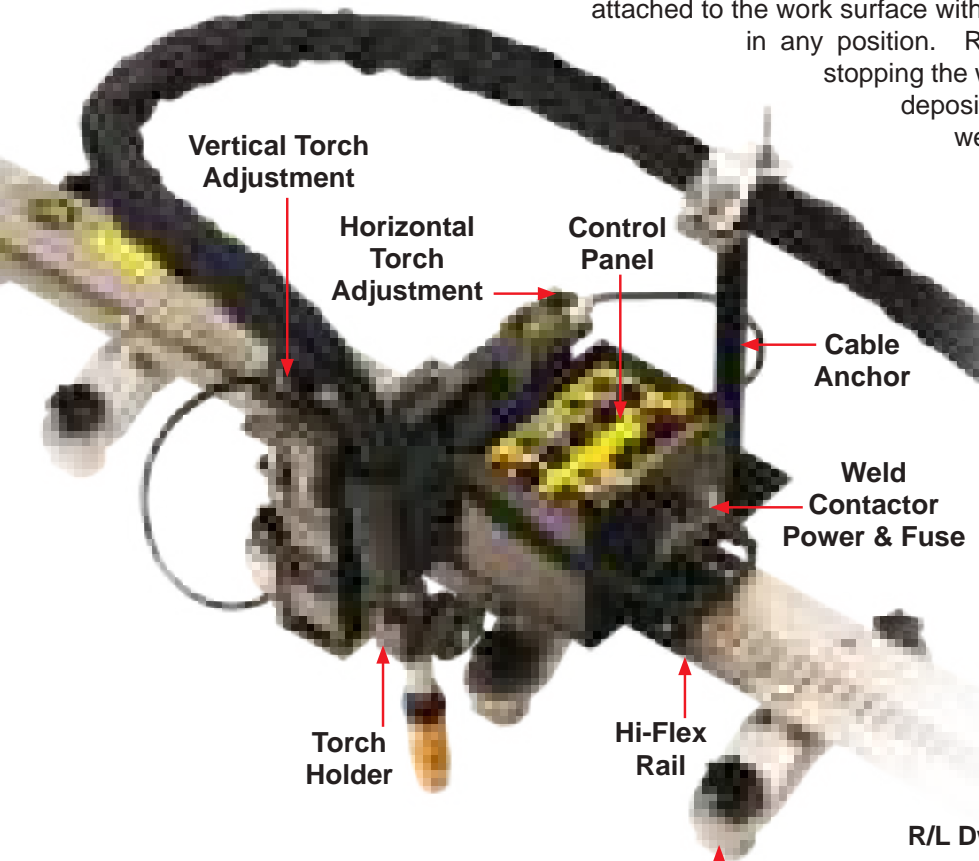
412-331-1776 www.bugo.com



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.



Vertical Torch Adjustment

Horizontal Torch Adjustment

Control Panel

Cable Anchor

Weld Contactor Power & Fuse

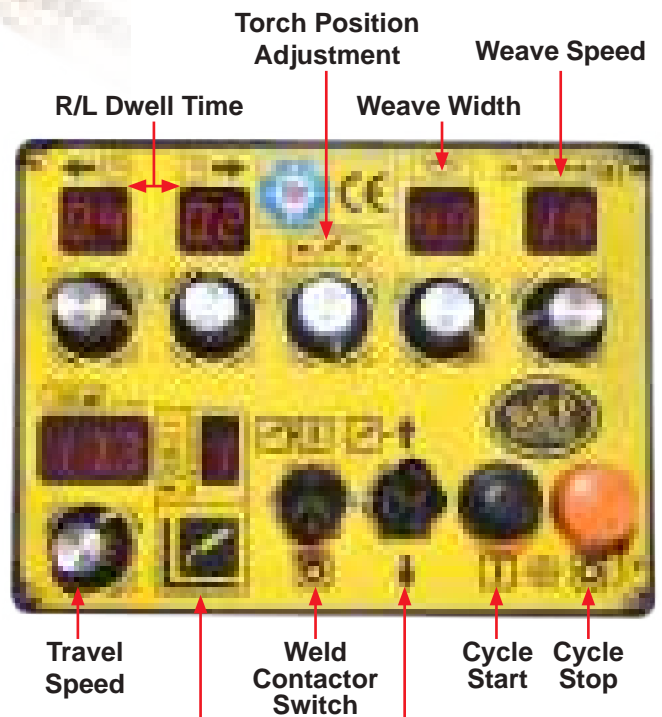
Torch Holder

Hi-Flex Rail



Wireless Remote Control

On/Off Magnet Bar Assembly



Torch Position Adjustment

Weave Speed

R/L Dwell Time

Weave Width

Travel Speed

Weld Contactor Switch

Cycle Start

Cycle Stop

Weave Pattern

Travel Direction

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



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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**

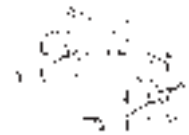
(A)- Contact Tip Size 0.035" to 1/16" (0.89 to 1.59 mm)
 (B)- Cable Length 15 ft (4.57 m) / 25 ft (7.62 m)

KBUG-6083 Plasma Torch Holder Assembly

Racking Options:



KBUG-5115
Optional Bug-O Style racking group

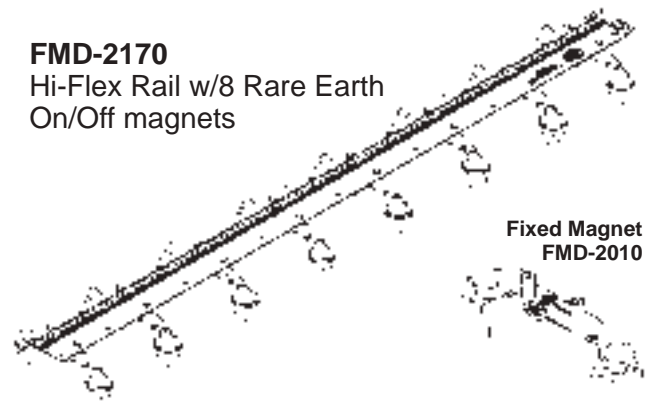


KBUG-4190
Optional Gun Clamp for gooseneck torches

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.

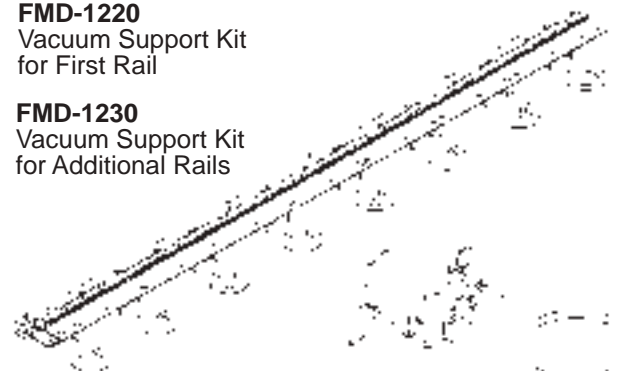
FMD-2170
Hi-Flex Rail w/8 Rare Earth On/Off magnets



Fixed Magnet
FMD-2010

FMD-1220
Vacuum Support Kit for First Rail

FMD-1230
Vacuum Support Kit for Additional Rails



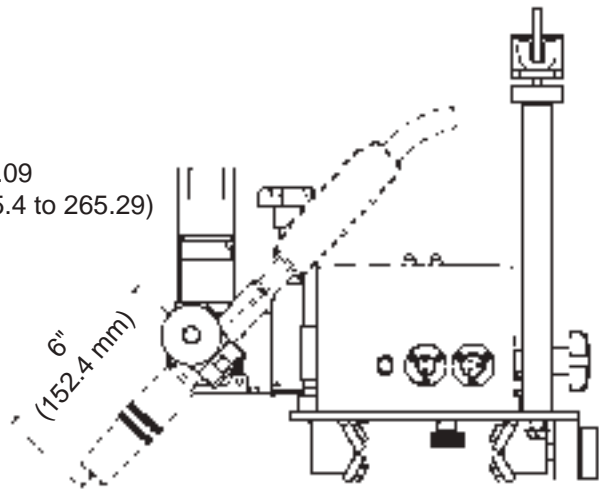
Vacuum Pump Kit
ARV-2020 120 Volt/50-60 Hz
ARV-2030 240 Volt/50-60 Hz



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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:			
	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%		
SPK-KBUG-5000:	Spare Parts Kit		



* 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:

