



**Ranked Best in its Class by  
Weld Talk Forum Experts**  
**7 Voltage Selections for Finer  
Control with Improved Performance**

### PROCESSES



MIG (GMAW)  
Welding



Flux Cored (FCAW)  
Welding

## 5/3/1 INDUSTRIAL WARRANTY

MADE IN **USA**



**B**uilt with Hobart quality and durability, the Handler 187 is a wire welding package with industrial performance capable of operating on 230/240 volt circuits. The broad output range of 25–185 amps allows you to weld 24 gauge up to 5/16 inch steel. It is also capable of running the following wires: mild steel or stainless steel .023–.035 in. (0.6–0.9 mm), flux cored .030–.045 in. (0.8–1.2 mm), aluminum

.030–.035 in. (0.8–0.9 mm). Seven output voltage settings with wire feed tracking make the unit easy to set and adjust for different materials, thicknesses and wires. Supplied with a sample spool of wire and adaptable for using 4 or 8 in. (102 or 203 mm) spools.

### Comes complete with:

- Rugged constant-voltage DC welder power source
- Durable built-in wire feeder
- Built-in gas solenoid valve
- Dual-gauge regulator and gas hose
- Comfortable 10 ft. (3 m) H10 MIG torch
- 10 ft. (3 m) work lead with clamp
- Spare .030 in. (0.8 mm) contact tips
- Sample spool of .030 in. (0.8 mm) self-shielded flux cored welding wire
- Weld set-up and information chart
- Power cord with plug
- Owner's Manual with parts lists, installation, operation, maintenance and MIG welding guidelines

### FEATURES

**7 voltage selections, enhanced magnetics and infinite wire feed speed control**

**Door chart with initial settings**

**Proven built-in wire feeder with quick-release tension lever**

**Replaceable, built-in contactor**

**Convenient polarity changeover with tip holder**

**Quick-change, dual-groove drive roll**

**Short circuit protection**

**Self-resetting thermal overload**

**Solid-state motor protection**

**Hobart's 5/3/1 Industrial Warranty AND Technical Assistance**

### BENEFITS

Offers easier fine control of the output parameters for improved arc performance with less spatter for a better bead appearance and less clean up.

Quickly reference initial settings for different wires, gases, materials and thicknesses. Provides quick starting point for novices and professionals alike.

Provides positive feed with adjustable tension. Easy access for threading wire.

Eases use and excellent safety feature which makes wire electrically "cold" when not welding.

Access makes it quick and easy to change polarity for solid or tubular wire. Includes convenient storage holes for spare tips.

Easy to change from one wire size to another .023/.025 in. (0.6 mm) or .030–.035 in. (0.8–0.9 mm).

Protects unit against current overload.

Protects power transformer to ensure reliability.

Protects wire feed system from overload, no fuses to change or circuit breaker buttons to reset.

Five-year warranty on transformer and stabilizer; three years on electronics (drive motors, rectifiers); and one year on MIG torch. AND Worldwide Service Network and 1-800-332-3281 Tech Help Line for prompt service and assistance.

### SPECIFICATIONS (SUBJECT TO CHANGE WITHOUT NOTICE.)

INDUSTRIAL

**DC** **CV** **1**  
Phase

Rated Output	Current Range	Max. Open Circuit Voltage	Wire Feed Speed Range	Amps Input at Rated Load, 60 Hz	Dimensions	Net Weight	Shipping Weight
				230 V KVA KW			
130 A, 21.5 VDC at 30% Duty Cycle on 60 Hz, 20% Duty Cycle at 50 Hz	25–185 A	31 V	40–700 IPM, 50–740 IPM at no load	20.5 4.7 3.88	H: 12-3/8 in. (315 mm) W: 10-5/8 in. (270 mm) D: 19-1/2 in. (495 mm)	68 lb. (31 kg)	78 lb. (35.5 kg)

Certified by Canadian Standards Association to both Canadian and U.S. Standards.



**Hobart Welders** An Illinois Tool Works Company

**Hobart Retail Sales** Phone 800-626-9420 FAX 800-424-1544  
**U.S. Distributor Sales** Phone 920-735-4576 FAX 800-637-2315  
**Canadian Sales** Phone 888-489-9353 FAX 519-421-0480  
**International Sales** Phone 920-735-4509 FAX 920-735-4125

Web Site [HobartWelders.com](http://HobartWelders.com)



# HANDLER 187 WELDING GUIDE

Settings are approximate. Adjust as required. Thicker materials can be welded using proper technique, joint preparation and multiple passes.

Recommended Voltage and Wire Speed Settings for thickness of metal being welded. Number on left of slash is Voltage Setting/Number on right of slash is Wire Feed Setting.

Material Being Welded	Wire Type and Polarity Setting	Suggested Shielding Gas 20-30 CFH Flow Rate	Diameter of Wire Being Used	24 ga.	20 ga.	18 ga.	16 ga.	11 ga.	3/16 inch	1/4 inch	5/16 inch	CHANGING POLARITY
				.024 in. (0.6 mm)	.036 in. (0.8 mm)	.048 in. (1.2 mm)	.060 in. (1.6 mm)	1/8 inch (3.2 mm)	3/16 inch (4.8 mm)	1/4 inch (6.4 mm)	5/16 inch (8.0 mm)	
Steel	Flux Cored E71T-11 "Set Polarity for (DCEN)"	No Shielding Gas Required Good for windy or outdoor applications	.030" (0.8 mm)	~	1/35	1/40	2/40	4/60	5/40	6/40*	~	DCEN Electrode Negative For Flux Cored Wire 
			.035" (0.9 mm)	~	1/30	1/35	2/40	3/50	5/50	6/60	7/60*	
			.045" (1.2 mm)	~	~	~	1/25	3/30	4/35	5/35	6/35*	
Steel	Solid Wire ER70S-6 "Set Polarity for (DCEP)"	C <sub>25</sub> Gas Mixture 75% Argon / 25% CO <sub>2</sub> Produces less spatter. Better appearance	.024" (0.6 mm)	1/30	2/40	3/50	4/60	5/80	6/90	~	~	DCEP Electrode Positive For Solid Wire 
			.030" (0.8 mm)	~	1/40	2/50	3/50	5/60	6/60	6/70*	7/80*	
			.035" (0.9 mm)	~	3/40	4/40	5/40	5/50	6/50	7/50*	7/60*	
Steel	Solid Wire ER70S-6 "Set Polarity for (DCEP)"	100% CO <sub>2</sub>	.024" (0.6 mm)	~	~	3/35	5/40	5/60	6/80	7/90*	~	
			.030" (0.8 mm)	~	~	4/40	5/40	5/50	6/50	7/50*	7/50*	
			.035" (0.9 mm)	~	~	3/25	4/25	5/40	6/40	7/40*	7/40*	
Stainless Steel	Stainless Steel "Set Polarity for (DCEP)"	Tri-Mix 90% He/7.5% Ar/2.5% CO <sub>2</sub>	.024" (0.6 mm)	~	3/40	3/40	4/50	6/60	7/70	~	~	
			.030" (0.8 mm)	~	3/30	3/35	4/30	5/35	6/50	7/50*	~	
			.035" (0.9 mm)	~	3/15	3/35	4/30	5/40	7/40	7/50*	~	
Aluminum	Aluminum** "Set Polarity for (DCEP)"	100% Argon**	.030" (0.8 mm)	~	~	~	2/90	6/90	7/90	~	~	
			.035" (0.9 mm)	~	~	~	2/100	6/90	7/90	~	~	

Match feedroll groove to diameter of wire being used. Set Tension Knob Setting to 3 at start. Adjust tension per instructions in the manual.

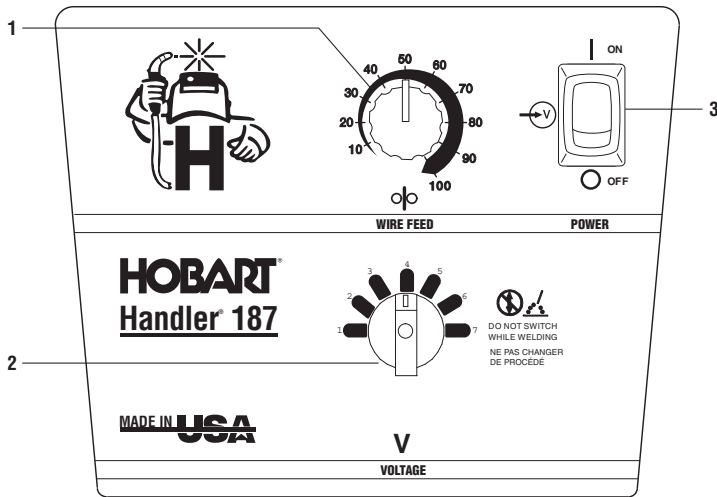
**CAUTION!** Do not change Voltage switch position while welding. See owners manual for more information

**Wire Speed listed is a starting value only.** Wire Speed setting can be fine-tuned while welding. Wire Speed also depends on other variables such as stick out, travel speed, weld angle, cleanliness of metal, etc.

\*Multiple passes required.

\*\*Aluminum wire is soft so feedability is not as good. Make sure that hub tension is not too tight and keep the as torch straight as possible. A "push angle" for the torch is recommended.

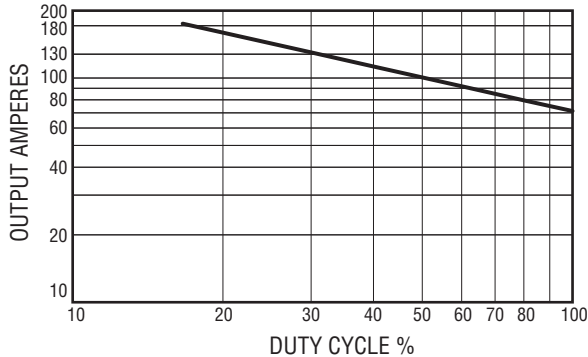
## CONTROL PANEL



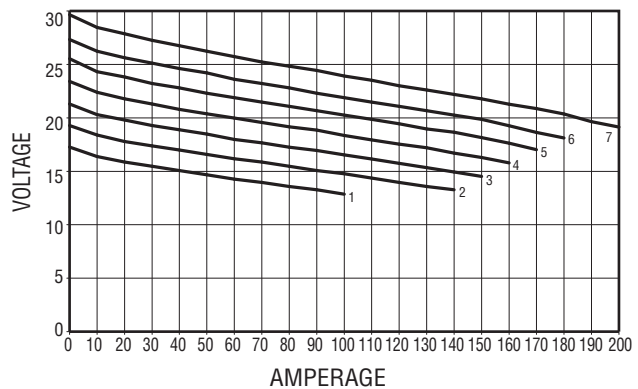
1. Wire Speed Control
2. Voltage Switch
3. Power Switch

## PERFORMANCE DATA

### DUTY CYCLE



### VOLT/AMP CURVE



## OPTIONS/ACCESSORIES



**Small Running Gear/Cylinder Rack #194776**  
Durable construction. For gas cylinders no larger than 7 in. (178 mm) diameter, maximum weight 75 lb. (34 kg).

Purchase #500527 and receive the Handler 187 and #194776 cart packaged together.



**Running Gear/Cylinder Rack #770187**  
Heavy-duty construction. For gas cylinders no larger than 7 in. (178 mm) diameter, maximum weight 100 lb. (45 kg).



**Protective Cover #195186**  
Weather-resistant nylon resists stains and mildew, and protects the finish of your welder.



### Spool Gun 3035-20 #300143

Comes Complete With:

- 20 ft. (6.1 m) cable and gas hose
- Threaded nozzle and contact tips
- Spool gun conversion kit consisting of control switch and gas diverter valve
- Enclosed wire spool compartment with internal spool hub tension adjustment for 4 in. (102 mm) rolls of wire
- For .030–.035 in. (0.8–0.9 mm) aluminum, steel and stainless steel
- Rated 150 amps, 60% duty cycle.



### SGA 100 Spool Gun Control #043856

Required to connect spool gun to the Handler® 135, 140, 175, 180 or 187. Allows you to connect a spool gun to virtually any similar MIG welder—Hobart or other brands.

Includes 10 ft. (3 m) 115 VAC power cable and plug, 6 ft. (1.8 m) interconnecting cable, and 5 ft. (1.5 m) gas hose.

### H10 Replacement MIG Torch #195957

For .030–.035 in. (0.8–0.9 mm) wire. Includes 10 ft. (3 m) cable.



### Drive Rolls

#### Dual-Groove, V-Smooth #237338

For .023/.025 in. (0.6 mm) and .030–.035 in. (0.8–0.9 mm) wire.

#### Dual-Groove, V-Knurled #202926

For .030–.035 in. (0.8–0.9 mm) and .045 in. (1.2 mm) flux cored wire.



### Contact Tips

(See chart on below)



### MIG Nozzle

(See chart below)

Protects tip adapter and focuses gas coverage.



### Gasless Flux Cored Nozzle

(See chart below)

For use with self-shielding flux cored wires. Improves visibility, eases access in

tight corners, protects tip adapter/gas diffuser from spatter and from shorting to the work piece. Usable with H9, H10, H14, M10, and M15 torches.



### Tip Adapter

(See chart below)



### Replacement Liners

(See chart below)

## CONSUMABLES

Item	Hobart Package Part #*	Miller Package Part #**
<b>Contact Tips</b>		
.023/.025 in. (0.6 mm)	#770174 (5 per package)	#087 299 (10 per package)
.030 in. (0.8 mm)	#770177 (5 per package)	#000 067 (10 per package)
.035 in. (0.9 mm)	#770180 (5 per package)	#000 068 (10 per package)
.045 in. (1.2 mm)	#770183 (5 per package)	#000 069 (10 per package)
<b>MIG Nozzle (Standard)</b>	#770404	#169 715
<b>Gasless Flux Cored Nozzle</b>	#770487	#226 190
<b>Tip Adapter</b>	#770402	#169 716
<b>Replacement Liners</b>		
.023/.025 in. (0.6 mm)	#196139	#194 010
.030/.035 in. (0.8/0.9 mm)	#196139	#194 011
.035/.045 in. (0.9/1.2 mm)	#196140	#194 012

\*Available at farm and tool supply retailers.

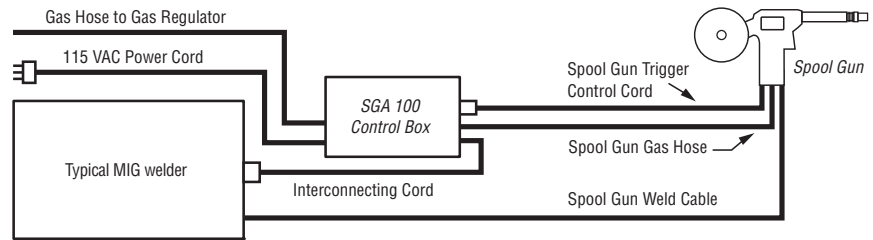
\*\*Available at Hobart/Miller welding distributors.

## TYPICAL INSTALLATION FOR SPOOL GUN TO WELDER REQUIRING AN SGA SPOOL GUN ADAPTER

For Handler® 187, combine Spool Gun 3035-20 with SGA 100 to weld 14 gauge to 3/16 in. thick aluminum.

To weld aluminum with comparable, competitive power sources, the spool gun may also be used with the SGA unit.

*Note: Refer to SGA Owner's Manual for complete installation instructions.*



## ORDERING INFORMATION AND SYSTEM CHECKLIST

Equipment and Options	Stock No.	Description	Qty.	Price
<b>Handler 187</b>	<b>#500525</b>	230/240 VAC, 60 Hz with gas valve, regulator and hose		
UPC: #715959355681; Shipping Weight: 78 lb. (35.5 kg); Carton Dimensions: 24 x 13-3/8 x 19 in. (610 x 340 x 483 mm); Pallet Qty: 12; Pallet Dimensions: 48 x 40 x 43 in. (1219 x 1016 x 1080 mm); Pallet Weight: 966 lb. (439 kg)				
<b>Handler 187 with small running gear/cylinder rack</b>	<b>#500527</b>	230/240 VAC, 60 Hz with gas valve, regulator and hose Packaged with <b>#194776</b> cart		
UPC: #7715959366151; Shipping Weight: 104 lb. (47.3 kg); Carton Dimensions: 31-1/2 x 16-1/2 x 15-1/2 in. (800 x 419 x 394 mm); Pallet Qty: 6; Pallet Dimensions: 34 x 34 x 48-1/2 in. (864 x 864 x 1232 mm)				
<b>Accessories</b>				
Small Running Gear/Cylinder Rack	<b>#194776</b>			
Running Gear/Cylinder Rack	<b>#770187</b>			
Protective Cover	<b>#195186</b>			
Spool Gun 3035-20	<b>#300143</b>	Includes 20 ft. (6.1 m) cable		
SGA 100 Spool Gun Control	<b>#043856</b>			
H10 MIG Torch	<b>#195957*</b>	10 ft. (3 m), .030-.035 in. (0.8-0.9 mm)		
Dual-Groove Drive Rolls	<b>#237338*</b>	V-Smooth 023/.025 in. (0.6 mm) and .030-.035 in. (0.8-0.9 mm)		
	<b>#202926</b>	V-Knurled .030-.035 in. (0.8-0.9 mm) and .045 in. (1.2 mm)		
Contact Tips		See chart on page 3		
Nozzles		See chart on page 3		
Tip Adapter		See chart on page 3		
Replacement Liners		See chart on page 3		
Other				

Date:

Total Quoted Price:

\*Standard with Unit

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