

HOBART®

HOBART BROTHERS CO.
TROY, OHIO USA

5/3/1
INDUSTRIAL
WARRANTY

Handler® 190

230V Wire Feed Welder



251091
March 2012



Includes:

- Comfortable 10-ft. (3 m) H100S4-10 gun
- 10-ft. (3 m) work cable with clamp
- Built-in gas solenoid valve and dual-gauge regulator with gas hose
- Spool hub assembly accommodates 4 or 8 in. spools
- Sample spool of .030 in. (0.8 mm) self-shielding flux-cored wire
- .030 in. (0.8 mm) contact tips
- Power cord with plug
- Weld set-up chart
- Owner's manual with parts lists, installation, operation and maintenance guidelines

Built with Hobart quality and durability, the Handler 190 is a wire welding package with industrial performance capable of operating on 230/240 volt circuits. The broad output range of 25–190 amps allows you to weld 24 gauge up to 5/16 inch steel.

The Handler 190 is capable of running the following wires: .023–.035 in. (0.6–0.9 mm) mild steel or stainless steel, .030–.045 in. (0.8–1.2 mm) flux-cored, and .030–.035 in. (0.8–0.9 mm) aluminum. Seven output voltage settings and infinite wire feed speed control make the unit easy to set and adjust for different materials, thicknesses and wires.



An integrated spool gun control circuit allows direct plug-in for the **optional SpoolRunner™ 100** spool gun. The spool gun eliminates wire

feeding problems associated with soft aluminum wire and also runs mild or stainless steel wire. A selector switch for MIG gun or spool gun operation makes switching guns quick and easy.

Features

Benefits

7 voltage selections, enhanced magnetics and infinite wire feed speed control	Offers easier fine control of the output parameters for improved arc performance with less spatter for a better bead appearance and less clean up.
Accepts uncomplicated, easy-to-install direct plug-in SpoolRunner™ 100 Spool Gun	Spool guns enhance feedability and reduce “bird-nesting” associated with soft aluminum wires.
Integrated spool gun control circuitry is standard	No additional control box or adapter is required to connect the SpoolRunner 100 spool gun.
Door chart with initial settings	Quickly reference initial settings for different wires, gases, materials and thicknesses. Provides quick starting point for novices and professionals alike.
Built-in contactor	Eases use and excellent safety feature which makes wire electrically “cold” until trigger is pulled.
Durable feed head with quick-release drive roll tension lever	Positive feed with adjustable tension plus easy accessibility to thread new wire.
Convenient polarity changeover with tip holder	Access makes it quick and easy to change polarity for solid or tubular wire. Includes convenient storage holes for spare tips.
Dual-groove quick-change drive roll	Makes it easy to change from one wire size to another. One knurled groove and one smooth groove for .030–.035 in. (0.8–0.9 mm) wire.
Short circuit protection	Protects unit against current overload.
Self-resetting thermal overload	Protects power transformer to ensure reliability.
Self-resetting motor protection	Protects wire feed system from overload, no fuses to change or circuit breaker buttons to reset.
Hobart's 5/3/1 Industrial Warranty	Five-year warranty on transformers, three years on electronics (drive motors, rectifiers) and one year on guns.

Specifications (SUBJECT TO CHANGE WITHOUT NOTICE.)



Rated Output	Current Range	Max. Open-Circuit Voltage	Wire Feed Speed Range	Amps Input at Rated Output, 60 Hz			Dimensions	Net Weight
				230 V	KVA	KW		
130 A, 21.5 VDC at 30% Duty Cycle on 60 Hz	25–190 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)

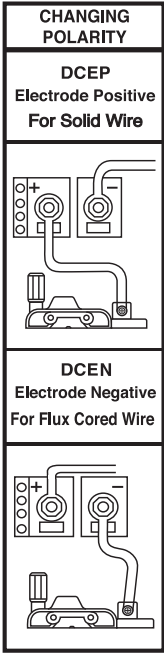
Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Handler 190 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 cfm Flow Rate	Diameter of Wire Being Used	Recommended Voltage and Wire Speed Settings for thickness of metal being welded.							
				24 ga. .024 in. (0.6 mm)	20 ga. .036 in. (0.8 mm)	18 ga. .048 in. (1.2 mm)	16 ga. .060 in. (1.6 mm)	11 ga. 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	Solid Wire ER70S-6 "Set Polarity for (DCEP)"	C ₂₅ Gas Mixture 75%Argon/25%CO ₂ , Produces less spatter. Better Appearance	.024" (0.6 mm)	1 / 30	2 / 40	3 / 50	4 / 60	5 / 80	6 / 90	-	-
			.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 ₂	.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 ₂	.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*	-
Steel	Flux Core 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*	-
			.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*
Aluminum With Optional SpoolRunner™ 100 Spool Gun	Aluminum ** 4043 AL "Set Polarity for (DCEP)"	100% Argon**	.030" (0.8 mm)	-	-	-	1 / 55	5 / 80	6 / 85	-	-
			.035" (0.9 mm)	-	-	-	-	5 / 60	6 / 70	7 / 80	-
	Aluminum ** 5356 AL "Set Polarity for (DCEP)"	100% Argon**	.030" (0.8 mm)	-	-	-	1 / 75	5 / 95	6 / 100	-	-
			.035" (0.9 mm)	-	-	-	-	5 / 75	6 / 90	7 / 100	-



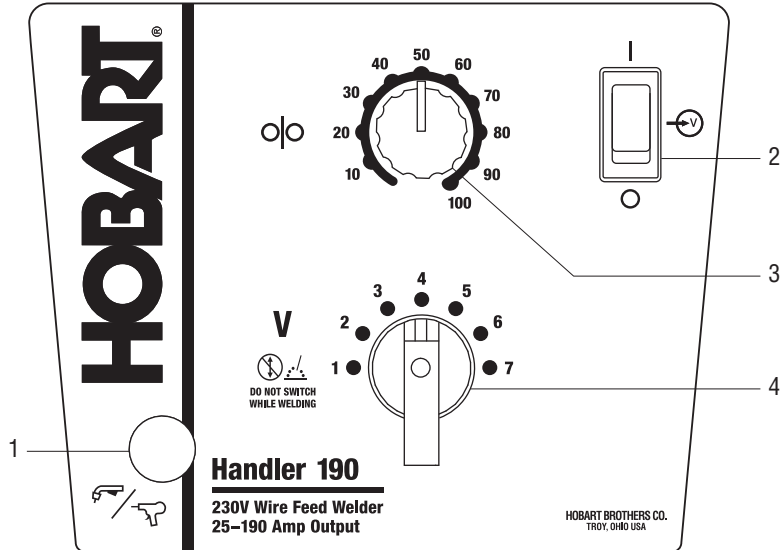
Match feedroll groove to diameter of wire being used. Set Tension Knob Setting to 3 at start. Adjust tension per instructions in the manual.

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 may be required depending on the application and joint design.
- ** Aluminum wire settings are with the SpoolRunner™ 100 attached. A spool gun eliminates many feedability issues associated with the soft aluminum wire. A "push angle" for the torch is normally recommended for aluminum.

Control Panel

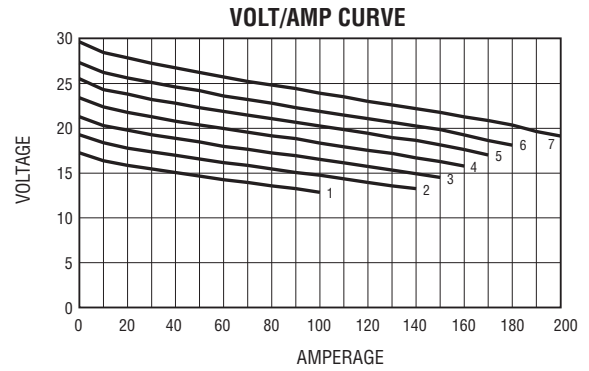
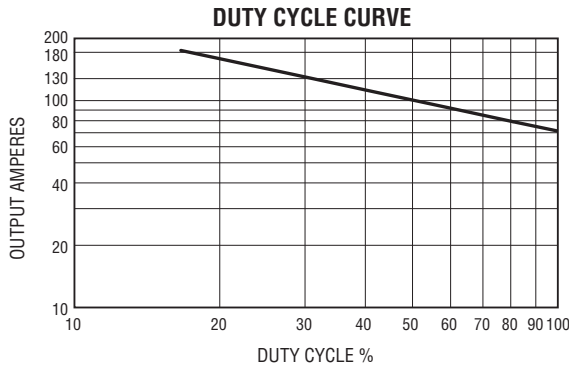


1. Trigger Lead Connection
2. Power Switch
3. Wire Speed Control
4. Voltage Control Switch

Handler 190
230V Wire Feed Welder
25–190 Amp Output

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Performance Data



Accessories



SpoolRunner™ 100 Spool Gun #300796

- 10-ft. (3 m) cable
- Weld 16 gauge–3/16 in. (1.6–4.8 mm) aluminum with the Handler 190
- Rated 150 amps, 60% duty cycle
- For .023–.035 in. (0.6–0.9 mm) aluminum, steel and stainless steel wire on 4 in. (102 mm) diameter spools
- Includes rugged plastic carrying case
- Shipped with three .030 in. (0.8 mm) and three .035 in. (0.9 mm) contact tips

H100S4-10 Replacement MIG Torch #245926

Comes in 10-ft. (3 m) length with liner for .030–.035 in. (0.8–0.9 mm) diameter wire.



Portable CO₂ Cylinder Kit #770626

Includes one 20 oz. CO₂ cylinder (paintball style), pre-set regulator and gas hose, spare “O” rings, and mounting hardware.



Small Cart/Cylinder Rack #194776

Designed for portable MIG welders. Accommodates large and small gas cylinders.



Running Gear/Cylinder Rack #770187

Heavy-duty construction. Accommodates large and small gas cylinders.



Protective Cover #195186

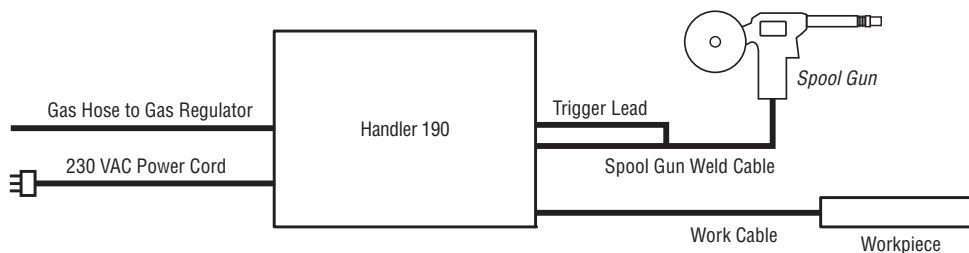
Weather-resistant nylon resists stains and mildew while protecting the finish of your welder.

Consumables

Item	For H100S4-10 Gun/Power Source — Hobart Package Part #	For H100S4-10 Gun — Miller Package Part #	For SpoolRunner 100 — Hobart Package Part #
Contact Tips			
.023/.025 in. (0.6 mm)	#770174 (5 per package)	#087 299 (10 per package)	#199730 (5 per package)
.030 in. (0.8 mm)	#770177 (5 per package)	#000 067 (10 per package)	#186419 (5 per package)
.035 in. (0.9 mm)	#770180 (5 per package)	#000 068 (10 per package)	#186406 (5 per package)
.045 in. (1.2 mm)	#770183 (5 per package)	#000 069 (10 per package)	—
MIG Nozzle			
	#770404	#169 715	#186405
Gasless Flux-cored Nozzle			
	#770487	#226 190	—
Tip Adapter			
	#770402	#169 716	—
Liners			
.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	—
Power Source Drive Rolls			
Dual-groove, V-smooth — For .023/.025 in. (0.6 mm) and .030–.035 in. (0.8–0.9 mm) wire	#237338	—	—
Dual-groove, V-knurled — For .030–.035 in. (0.8–0.9 mm) and .045 (1.2 mm) flux-cored wire	#202926	—	—
Dual-groove, V-knurled and V-smooth — For .030–.035 in. (0.8–0.9 mm) flux-cored and solid wire	#246565	—	—
SpoolRunner 100 Drive Roll			
For .023 in. (0.6 mm) wire	—	—	#199731
For .030/.035 in. (0.8/0.9 mm) wire	—	—	#186413
SpoolRunner 100 Push Roll			
For .023 in. (0.6 mm) wire	—	—	#199732
For .030/.035 in. (0.8/0.9 mm) wire	—	—	#186414

Typical Installation for Optional SpoolRunner™ 100 Spool Gun to Handler® 190

It's quick and easy to install the SpoolRunner 100 Spool Gun on the Handler 190. Just plug the power pin of the spool gun into the feedhead, attach the trigger lead and flip the switch on the inside panel for spool gun operation. Install the correct wire and gas for the job and it's ready to go.



Hobart Welders An Illinois Tool Works Company

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