

Body Repair News

MODEL/YEAR	DATE OF ISSUE	BULLETIN NUMBER
MODÈLE /ANNÉE	DATE EN VIGUEUR	NUMÉRO DU BULLETIN
ALL	APRIL 16, 2014	BRN-14-1

BODY SHOP WELDING EQUIPMENT

DISCLAIMER: This publication provides details of the recommended spot welding, MIG/MAG welding machines and welding consumables for use in body repair of Honda vehicles. Always refer to the appropriate service and body repair manuals for complete repair information. A subscription may be purchased at: <u>https://techinfo.honda.com.</u>

Excluding consumables that are noted below to be commercially available, all equipment and supplies are available through the Honda Canada Tools and Equipment program at 1-866-868-3372.

SPOT WELDING MACHINES

Honda Canada has approved the following Spot Welding Machines to correctly repair vehicles that utilize 1500MPa UHSS. These units are microprocessor controlled resistance spot welding machines. These machines are necessary to perform auto body repair work, and are suitable for several sheet metals (steel, galvanized steel, zinc plated steel, high strength steel and ultra-high strength steel).

COMPUSPOT 900 FUSION INTELLIGENT INVERTER SPOT WELDER



This unit is designed to weld modern ultra-high strength dual phase and boron steels, with up to 630 daN (1,386lbf) of tip pressure and 14,000 amps of welding current.

It removes guesswork by providing automatic recognition of sheet thickness and material type (HSS, UHSS, Boron, etc). It provides automatic setting of weld power, welds time, and tip pressure.

A USB port is built in for data transfer of welding report history detailing each welding spot performed (including user, current, force, time, etc). This port is also used for firmware program updates.

This unit has liquid cooling all the way to the electrode tips. A high resolution, colour, 7" touch screen control panel is integrated.

EMF shielded cables are optional.

ELEKTRON MULTISPOT MI 100 CONTROL



The MULTISPOT® MI-100control is specifically designed for high-strength steels such as Boron, USIBOR, TRIP, TWIP, and XIP.

The MULTISPOT® MI-100control features selectable car manufacturer welding programs for your specific needs. You can also easily update the system for new vehicles anytime via a Compact Flash Card.

The MULTISPOT® MI-100control has been quality tested and approved by many car manufacturers. It is also CSA approves for the USA, Canada, and Mexico.

CAR-O-LINER CTR12000



This is a fully automatic, process-regulated, multiple function spot welding machine with

medium frequency inverter operation and water cooling. It's designed for the repair of vehicle bodywork components particularly made of high-strength, maximum-strength and coated and laminated steel panels - with clear quality assurance regarding welding process (welding results).

It automatically recognizes the total sheet thickness via a Pulse-Sonar-System, and automatically recognizes the material type (normal or high strength) via a Virtual Generator. Also it provides automatic definition of the lens diameter via the total energy input. The transformer C-spot welding gun uses 10 kHz technology.

Welding data documentation is provided with the use of WinSpot QS-Software.

MIG BRAZING MACHINES

Honda Canada has approved the following MIG Brazing machine to correctly repair vehicles that utilize 1500MPa UHSS. This machine is necessary to perform auto body repair work, and suitable for MIG Brazing high strength steel (270MPa to 980MPa) to ultra-high strength steel (1500Mpa). Refer to the body repair manual for information regarding the necessary shield gas and filler wire.

ELEKTRON MULTIMIG 522



This unit provides a complete set of synergic programs in memory for brazing, welding and aluminum wire (synergic pulsed technology is required for aluminum welding). Inverter technology enables precision electronic control of output power for better quality welds. GREEN technology - Integrated Power Factor Correction (PFC) technology reduces input power by avoiding energy waste found in most electronic-based equipment and ultimately reduces operating costs. (High Harmonic Distortion is hard on the power grid and contains non-working energy, which is costly & environmentally wasteful.) Two types of torches can be used with a standard MIG torch or the unique push-pull torch. The Elektron push-pull system torch has an up-down digital current adjust at your finger tip, thanks to a feeder built into the grip. The very small and light weight torch (no bulky spool-gun) enables real-time control of welding process by control of the wire feed speed and current level. The push-pull system corrects many of the problems encountered when feeding and welding soft aluminum wire, down to 0.6mm.Many programmable options are available to customize the unit operation to meet most working conditions.

Options include: Arc Length, 2 time, 4 time, Spot Time, Pause Time, Inductance, Burn Back, Soft Start etc.

It can operate in pulse synergic, synergic, or conventional mode.

MIG/MAG WELDERS

Honda Canada has approved the following MIG/MAG welding machines. These machines are necessary to perform auto body repair work, and suitable for MAG welding steel with tensile strengths of 270MPa to 980MPa. Refer to the body repair manual for information regarding necessary shield gas and filler wire.

ULTRAMIG 185 SYNERGIC MIG/MAG WELDER



This portable 200 amp shop model (in a mobile 4 wheel cabinet) 208-240 volt MIG/MAG welder has been created to make welding fast, easy

and spatter free. It is specifically designed for MIG/MAG welding carbon steel and low-alloy steel with either CO₂ or Argon/CO₂ mixture shielding gas using solid or flux cored (tubular) electrode wires. It has a reversible polarity for no-gas applications, and is capable of welding from 24 ga. to 3/8 inch steel. This machine is also suitable for MIG welding stainless steel and aluminum. It features patented synergic control on the torch plus fine tuning of wire speed and a manual mode on the control panel. Included is a regulator and 2 lb spool of wire. The 185 produces less sparks and spatter because wire speed and power are perfectly svnchronized. Damage to glass, painted surfaces, and upholstery is considerably reduced. (Accessories are available.)

Specifications: Input power 208-240 volts. Max. output 200 Amps @ 30% 24VDC. Max. output voltage (c.o.) 26 volts (syn). Power cord 7.5m (25'). Welding cable 3m (10').

ULTRAMIG 200 SYNERGIC MIG/MAG WELDER



This unit is designed to obtain optimum results in any welding application with no compromise on

ULTRAMIG 225 SYNERGIC MIG/MAG WELDER



The UltraMig 225 is a powerful synergic machine designed for a wide variety of applications including MIG welding of steel and aluminum in one package.

performance quality. It is ideal for MIG welding of steel, aluminum and stainless steel. It is programmed for three steel or aluminum wire sizes. A patented "self-compensating" wire drive system adjusts for any wire size and prevents "bird nests". Ultra fine tuning system for optimum results, thanks to 100% microprocessor control. Patented synergic control on the handle allows precise adjustments while welding. There are three welding modes: continuous, spot and stitch (standard). A pool gun receptacle is built in.

Specifications: Output voltage: 11 to 28 VCC Current range: 20 to 225 A Rated: 160A @ 60% Duty Cycle Speed wire: 2,5 - 12 m/min (8 to 40ft/min) Number of drive rollers: 2 (automatic adjustment) AC Cable Length: 6.5m (25ft) Welding torch cable length: 3m (10ft)

The micro-processor controlled system is preprogrammed for selected wire types and sizes.

The UltraMig 225 allows the operator to choose combinations with the touch of a keypad and take total control with one knob on the torch. Voltage and wire speed are perfectly synchronized to deliver a stable arc and achieve optimum results. There is less welding spatter and burn through minimal warping and loss of metal properties, and maximum protection of galvanized coatings.

Specifications: Output voltage: 11 to 28 VCC Current range: 20 to 225 A Rated: 140A @ 50% Duty Cycle, 24VDC speed wire: 2,5 - 12 m/min (8 to 40ft/min) Number of drive rollers: 2 (automatic adjustment) AC Cable Length: 6,5m 25ft) Welding torch cable length: 3m 10ft)Dimensions (L x W x H): 864x 355x 724 mm (34"x 14"x 29") Weight welder: 70kg (155lbs) ULTRAMIG 225HP SYNERGIC MIG/MAG WELDER



The UltraMig 225HP is a powerful synergic machine designed for a wide variety of applications including MIG welding of steel and aluminum in one package. It uses a patented

double wire drive system, with a microprocessor controlled system is preprogrammed for selected wire types and sizes.

Synergic control means easy operation. The UltraMig 225HP allows the operator to choose combinations with the touch of a keypad and take total control with one knob on the torch. Voltage and wire speed are perfectly synchronized to deliver a stable arc and achieve optimum results. There is less welding spatter and burn through minimal warping and loss of metal properties, and maximum protection of galvanized coatings.

Specifications: Output voltage: 11 to 28 VCC Current range: 20 to 225 A Rated: 140A @ 50% Duty Cycle, 24VDC Speed wire: 2,5 - 12 m/min (8 to 40ft/min) Number of drive rollers: 2 (automatic adjustment) AC Cable Length: 6,5m (25ft) Welding torch cable length: 3m (10ft) Dimensions (L x W x H): 864x 355x 724 mm (34"x 14"x 29") Weight welder: 70kg (155lbs

HIGH STRENGTH STEEL (340-980MPa) WELDING CONSUMABLES

1000MPa (145 ksi) Tensile - Solid Welding Wire.

Necessary when plug welding or butt welding body panels (except 1500MPa parts).



This welding wire comes in 2 kg spools, and is 0.8mm thick. When MAG welding high strength steel (HSS), it is necessary to meet or exceed the panel tensile strength with the welding wire. This wire should be used when welding HSS between 270MPa and 980MPa (39 ksi and 142 ksi). Using a lower tensile strength welding wire will result in a weaker-than-intended weld joint resulting in an improper repair.

MAG Welding Shield Gas,

Argon 80%, CO₂ 20%. **Commercially available through welding supply companies**

ULTRA HIGH STRENGTH STEEL (USIBOR OR 1500MPa) WELDING CONSUMABLES

MIG Brazing CuSi3 filler wire.

With a lower melting point than steel wires, resulting in higher travel speeds, better wetting, better gap bridging and excellent corrosion resistance.

Commercially available through welding supply companies

MIG Welding Shield Gas,

Argon 100% **Commercially available through welding supply companies**

SQUEEZE TYPE RESISTANCE SPOT WELDING CONSUMABLES

Replacement welding caps (for spot welding equipment)

ORDERING INFORMATION

Excluding consumables that are noted above to be commercially available, all equipment and supplies are available through the Honda Canada Tools and Equipment program at 1-866-868-3372. Use promotion code: *HAWE01*.

Honda Canada Dealers can purchase this equipment and consumables through your normal process

via the Tools and Equipment web site: http://www.des-canada.ca or by calling 1-866-868-3372.

WARRANTY INFORMATION

Warranties are administered by the equipment manufacturers. Refer to equipment documentation for warranty registration.