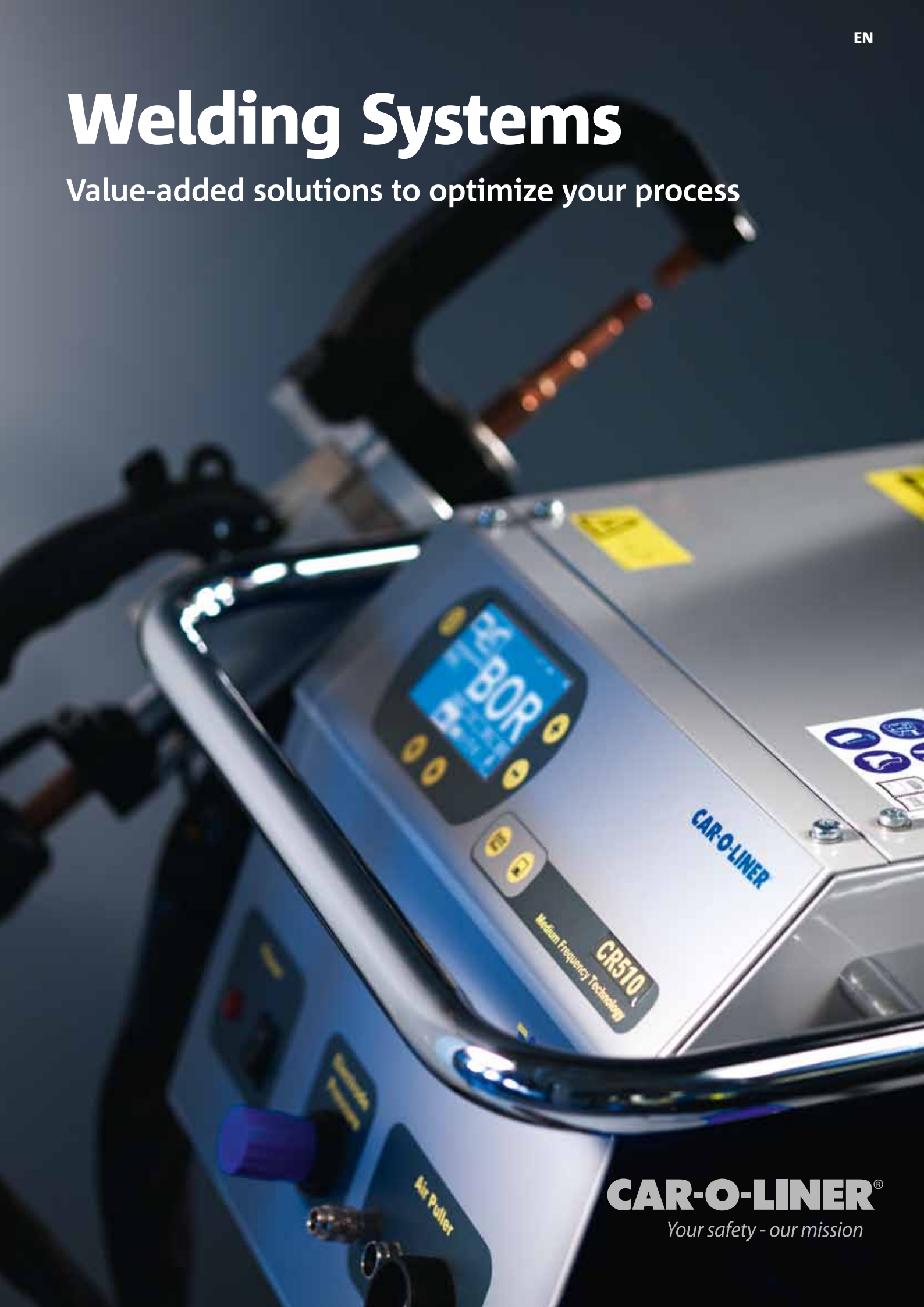


Welding Systems

Value-added solutions to optimize your process



CAR-O-LINER®
Your safety - our mission



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Spot Welder CTR12000

Totally Automatic Spot Welding Machine

Fully automatic process-regulated, multiple function spot welding machine with medium frequency inverter operation and liquid cooling. Designed for the repair of vehicle bodywork, particularly of components made of high or maximum strength, and also coated or laminated, steel panels.



Virtual Machine - Programmable Intelligence



The term “Virtual Machine” refers to the innovative control technology. The integrated quality assurance management system monitors the joining process from end to end; starting with a definition of the initial weld situation, monitoring and adjusting through the weld, and ending with the completion of the weld. The system can recognize and adjust for specific situations such as bonding material and shunt effect.

Rather than having a fixed pre-pulse, the welder uses a dynamic pre-pulse feature which recognizes actual burn through. Easily determine the weld results via the QS Traffic Light indicators. View System Feedback and acknowledge messages right from the C-Gun.

- Automatic recognition of total material thickness via Pulse-Sonar-System
- Automatic recognition of material type via Virtual Generator
- Automatically establishes required settings to ensure the proper weld nugget
- Advanced quality control system that monitors and adjusts the welder to guarantee the total energy input
- Extremely powerful with welding current up to 12,000 Amps
- Greater Power Efficiency via the 10 kHz Transformer C-Gun
- Completely liquid-cooled welding, from the power module all the way to the caps, providing a greater Duty Cycle
- Easily upgraded via convenient USB port
- Reproducible welding quality
- Welding data documentation with the use of WinSpot QS-Software

CTR12000	Article No.	Qty.
400V	43000	1
220/230V	43466	1
208V	43465	1
460V	43467	1
400V BMW	43801	1
220/230V BMW	43803	1
208V BMW	43802	1
460V BMW	43804	1

* Special voltage versions available: 220/230V, 208V, 460V

** Recommendation 32A (delayed action)

CTR12000 Resistance Spot Welder

Technical data

Spot Welder CTR12000	
Max voltage	3 × 400V 50 Hz*
Max power	75 kVA
Fuse (delayed action) 16-32 A **	16-32A
Protection class	IP 21
Insulation class	F
Compressed air supply	8 bar
Power unit for transformer gun	(10 KHZ)
Output current	0-200A
Output voltage	560V
Cooling	
Cooling power	1000 W
Tank capacity	20 l
Flow rate	6 l/minute
Configuration	
Dimensions(H × W × D) approx.	1220 × 680 × 800 mm
Weight approx.	95 kg
Technical data transformer C-Gun Connection data	
Primary voltage / frequency	560V/10 kHz
Primary power (100% duty cycle)	20 kVA
Protection class	IP 21
Insulation class	F
Cooling	Water
Welding circuit	
Welding current	12 kA
No-load voltage	12,5V DC
Mechanical data	
Electrode force	0-5 kN
Weight (dep. upon fitting) approx.	11 kg
Cable length	6 m

* Weight varies with yoke sizes

Optional Equipment

Multifunction Gun Kit



The Multifunction Spot Welding Gun connects quickly and easily to the CTR12000 C-Gun. This allows for all the options of a multifunction gun, single-side welding, dent pulling, heat shrinking, etc., with the mobility of the C-Gun. The kit includes the MF Gun and Ground Cable, Accessory Box, Slide Hammer, and MF Gun Holder.

CTR12000 includes the following:*



C-Tong 40 mm,
air-cooled



C-Tong 80 mm,
air-cooled



C-Tong 350 mm,
water-cooled



C-Tong 500 mm,
water-cooled



X-Tong,
(optional)



Electrode Set

Optional Accessories



Support Arm with Tool Balancer



Dust Cover

*More spare parts and accessories shown on pages 25-28

Welding Data Documentation



WinSpotQS is a documentation software program that records weld data and generates reports on the repair process. Users can create multiple repair orders at one time, record data, store the information and add additional repair order information if desired. The QS Traffic Light icons also appear on the report for quick reference. Orders are easily transferred to a computer via USB flash drive.

Resistance Spot Welder CR500 DA

Unequaled in power and intelligence!

The CR500 DA Resistance Spot Welder with double action on the C-tong provides quality spot welds on all of today's high and ultra-high strength steels. It has a compact rugged design featuring powerful cutting edge inverter technology. The sophisticated software, with unique automatic control system, guarantees perfect welding results. The wide range of accessories makes the CR500 DA extremely versatile.



"Double Action" trigger function moves the electrode backwards automatically, enabling quick and easy movement between welding positions

- "Double Action" function
- Versatile "Multi-function" gun
- Two sided spot welding
- Single sided welding
- Spot hammer welding
- Nut and bolt welding
- Carbon shrinking
- Contact shrinking
- Mould clip rivet welding
- Stitch welding
- Smart control panel
- Personal profiles
- Pre-programmed for best performance

Technical data

Input voltage	400V 50-60 Hz 32A, 460V 60 Hz 3 ph AC 230V 50-60 Hz 63A (60A US) 3 ph AC
Protection class	IP21
Inverter frequency	2 000 Hz
Welding amperage	11 500A, current control max
Cable length to electrodes	2,5 m incl. tong
Electrode Pressure	At 7,5 bar (109 PSI)-300 daN (616 Lb)
Cooling System	Air, 2 fans (with overheat warning)
Welding cable cooling	Air cooling (with overheat warning)
Extension yoke system	Up to 30 mm reach (600 mm optional)
Microprocessor program	No. av operating modes, 11, No. av welding programs, 40
Consumable supplies	Box containing electrodes, bolts, clip rivets
Total weight (without accessories)	135 kg

Resistance Spot Welders

CR500 DA



Electrode, length 40 120°

Electrode, length 80 120°

80-yoke



330-yoke



Basic kit*



Support arm



Tool panel



Fender edge kit

Airpuller AP95
The professional panel
dent removal tool



600-yoke kit

Electrode tip dresser,
sphericalElectrode tip dresser
120°

Item				Part No.	Qty.
CR500 DA	400V 50-60 Hz	3-ph		34809	
CR500 DA	230V 50-60 Hz	3-ph		34810	
CR500 DA	460V 50-60 Hz	3-ph		34811	

Consisting of

C-tong DA complete, 240 mm ²				34704	1
C-tong DA holder				34702	1
80 yoke				31980	1
330 yoke				31981	1
Electrode, length 40 120°				33517	2
Electrode, length 80 120°				33519	1
Multi-function gun, 2,5 m 120 mm ² air cooled				33671	1
Multi-function holder				32962	1
Ground cable, 2,0 m 120 mm ² air cooled				33672	1
Ground device				31074	1
Carbon rod holder				32873	1
Electrode stitch weld				32503	1
Dent puller				32557	1
Basic Kit*				32315	1

Accessories (optional)

Tool panel with rubber mat				32253	
Support arm				32254	
600-yoke kit				32266	
Fender edge kit				32228	
Electrode tip dresser, 120°				33635	
Electrode tip dresser, spherical				33634	
Airpuller AP95				32835	

* See page 26

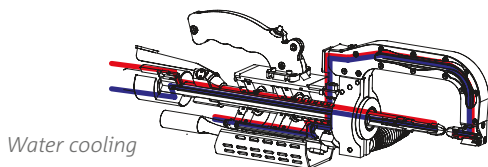
CR510 Resistance Spot Welder

Water-Cooled Electrodes and a 360° Degree Swiveling Connection Maximize the Welding Process

The CR510 provides quality spot welds on all of today's high and ultra-high strength steels. It has a compact rugged design featuring powerful cutting edge inverter technology. The sophisticated software, with unique automatic control system, guarantees perfect welding results. The wide range of accessories makes the CR510 extremely versatile.



Water cooled electrodes with exchangeable electrode tips. Simple and quick to change between the different arms, 80-300 mm, that can be rotated 360°



Water cooling

- Water cooling on both electrodes
- Rotation of yoke 360°
- Automatic adhesive detection and adjustment ensuring weld quality
- High Pressure C-tong, 7 bar=550 daN
- Versatile "Multi-function" gun
- Two sided spot welding
- Spot hammer welding
- Nut and bold welding
- Mould clip rivet welding
- Stitch welding
- Carbon & contact shrinking
- Intuitive user interface
- Personal profiles
- Pre-programmed parameters for best performance

Technical data

Input voltage	400V 50-60 Hz 32A, 460V 60 Hz 3 ph AC 230V 50-60 Hz 63A (60A US) 3 ph AC
Protection class	IP21
Inverter frequency	2 000 Hz
Welding amperage	11 500A, current control max
Cable length to electrodes	2,5 m incl. tong
Electrode pressure	At 7 bar - 550 daN with 80 mm yoke
Cooling system	Air, 2 fans (with overheat warning)
Electrode cooling	Water cooling of both electrodes (with overheat warning)
Extension yoke cooling	Air cooling (with overheat warning)
Extension yoke system	Up to 30 mm reach (600 mm optional)
Micro processor program	No. of operating modes, 11 , No. of welding programs, 40
Consumable supplies	Box containing electrodes, bolts, clip rivets
Total weight (without accessories)	145 kg

Resistance Spot Welders



CR510

80-yoke



330W LP yoke



Basic Kit*

Cap

Cap holder
40 mmCap holder
80 mm

Water cooling

Item		Article No.	Qty.
CR510	230V 50-60 Hz 3-ph	34859	
CR510	400V 50-60 Hz 3-ph	34858	
CR510	460V 50-60 Hz 3-ph	34860	

Consisting of

C-tong W/HP complete with cable, 40 mm ²		34832	1
C-tong DA holder		34702	1
80 W HP yoke		34432	1
330 W LP yoke		42117	1
Caps		34873	1
Cap holder 40		34885	2
Cap holder 80		34886	1
Multi-function pistol, 2,5 m 120 mm ² air-cooled		33671	1
Multi-function holder		32962	1
Bi-pass coupling		34889	1
Ground cable, 2,0 m 120 mm ² air-cooled		33672	1
Ground device		31074	1
Carbon rod holder		32873	1
Electrode stitch weld		32503	1
Dent puller		32557	1
Basic Kit*		32315	1

Accessories (optional)

Tool panel with rubber mat		32253	
Support arm		32254	
600-yoke kit		32266	
Fender edge kit		32228	
Caps 10 pcs.		34921	
Airpuller AP95		32835	
High-tech fluid 5 liter, ready to use		36671	

* See page 26

Airpuller AP95
The professional panel
dent removal tool



High-tech fluid 5 l



Support arm



600-yoke kit

Fender edge kit



Tool panel

CR530c Resistance Spot Welder

13 000 A Inverter Welder

C-tong with high electrode pressure and water-cooled electrodes. The CR510 Inverter Spot welder is designed so that today's and tomorrow's quality conscious bodyshops can produce high quality welds with a pre-programmed welding process for new steel materials such as high tensile steels and Boron steel.

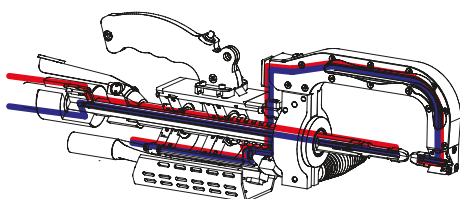


- High pressure C-tong, 7 bar-550 daN
- Water cooling of both electrodes
- Water-cooled transformer
- Versatile "multi-function" gun
- Two sided spot welding
- Single sided spot welding
- Spot hammer welding
- Nut and bold welding
- Carbon shrinking
- Contact shrinking
- Mould clip rivet welding
- Stitch welding
- Smart control panel
- Personal profiles
- Pre-programmed for best performance

Technical data

Input voltage	400V 50-60 Hz 32A, 3 ph AC , 460V 60 Hz, 3 ph AC
Protection class	IP21
Inverter frequency	2 000 Hz
Welding amperage	13 000A, currency control
Cable length to electrodes	2,5 m incl. tong
Electrode pressure	At 7 bar - 550 daN with 80 mm arm
Cooling system	Water-cooled transformer (with overheat warning)
Electrode cooling	Water cooling of both electrodes (with overheat warning)
Cooling of welding cables	Air-cooled (with overheat warning)
Extension yokes	Up to 30 mm reach (600 mm optional)
Micro processor program	No. operating modes, 11, No. welding programs, 40
Consumable supplies	Box containing electrodes, bolts, clips rivets
Total weight (without accessories)	145 kg

Water cooled electrodes with exchangeable electrode tips. Quick and easy to change between the different yokes, 80-300 mm, that can rotate 360°



Water cooling

Resistance Spot Welders



80 W HP yoke



330 W LP yoke

Basic Kit*



Caps



Cap Holder 40

Cap Holder 80

Item		Article No.	Qty.
CR530c W/HP	400V 50-60 Hz 3-ph	34861	
CR530c W/HP	460V 50-60 Hz 3-ph	34863	

Consisting of

C-tong W/HP complete with cable, 240 mm ²		34832	1
C-tong DA holder		34702	1
80 W yoke		34432	1
330 W yoke		42117	1
Caps		34873	1
Cap holder 40		34885	1
Cap holder 80		34886	1
Multi-function gun, 2,5 m 120 mm ² air cooled		33671	1
Multi-function holder		32962	1
Bi-pass coupling		34889	1
Ground cable, 2,0 m 120 mm ² air cooled		33672	1
Ground device		31074	1
Carbon rod holder		32873	1
Electrode stitch weld		32503	1
Dent puller		32557	1
Basic Kit *		32315	1

Accessories (optional)

Tool panel with rubber mat		32253	
Support arm		32254	
600-yoke kit		32266	
Fender edge kit		32228	
Caps 10 pcs		34921	
Airpuller AP95		32835	
High-tech fluid, 5 liter, ready to use		36671	

* See page 26

Airpuller AP95
The professional panel
dent removal tool



High-tech fluid 5 l



Support arm



Tool panel



Water cooling



600-yoke kit



Fender edge kit

CR530X Resistance Spot Welder

13 000 Amperage Inverter Resistance Spot Welder

The CR530 has a water-cooled, high pressure x-tong and is designed in order for professionally-minded body shops to provide quality spot welds with all new high-strength steels and welding processes.



- High pressure, water cooled X-tong, 7 bar-50 daN (120mm arm)
- Water-cooled transformer
- Water-cooled electrodes
- Two sided spot welding
- Single sided spot welding
- Spot hammer welding
- Nut and bolt welding
- Carbon shrinking
- Contact shrinking
- Mold clip rivet welding
- Stitch welding
- Smart control panel
- Personal profiles
- Pre-programmed for best performance



Water cooled high pressure X-tong

Technical data

Input voltage	400V 50-60 Hz 32A, 3-ph AC 460V 50-60 Hz 32A, 3 ph AC
Protection class	IP21
Inverter frequency	2 000Hz
Welding amperage	13 000A, current control
Cable length to electrodes	2,5 m incl. tong
Electrode pressure	At 7 bar - 500 daN with 120 mm arm
Cooling system	Water-cooled transformer (with overheat warning)
Electrode cooling	Water
Cooling of welding cables	Water-cooled
Extension yokes	From 120 mm to 400 mm reach
Micro processor program	No. operating modes, 11 , No. welding programs, 40
Consumable supplies	Box containing electrodes, bolts, clip rivets
Total weight (without accessories)	145 kg

Resistance Spot Welders

CR530X



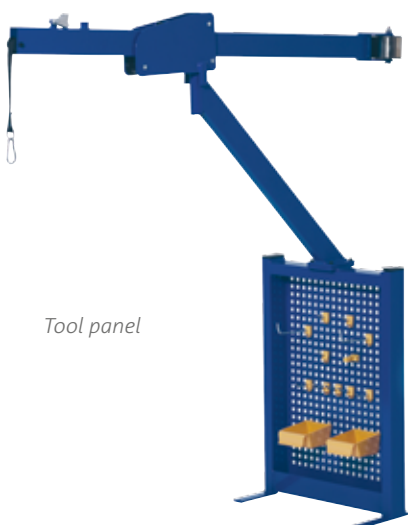
Basic Kit*



Item		Article No.	Qty.
CR530x W/HP	400V 50-60 Hz 3-ph	34862	
CR530x W/HP	460V 50-60 Hz 3-ph	34864	
Consisting of			
X-tong		34918	1
X-arm 120 mm, Ø 25		34920	2
Caps for X-arm		34919	2
Multi-function gun, 2,5 m 120 mm ² , air-cooled		33671	1
Multi-function holder		32962	1
Ground cable, 2,0 m 120 mm ² , air-cooled		33672	1
Ground device		31074	1
Carbon rod holder		32873	1
Electrode stitch weld		32503	1
Dent puller		32557	1
Basic Kit *		32315	1
Accessories (optional)			
Tool panel with rubber mat		32253	1
Support arm		32254	1
X-arm 200 mm, Ø 25		35238	2
X-arm 300 mm, Ø 25		35239	2
X-arm 400 mm, Ø 25		35240	2
Support ring for X-tong		35245	1

* See page 26

Support arm



Tool panel



Water cooling

Induction Heater CH37

Your Torchless Heating Solution

The advantage of using induction technology is that there is no open flame. The high power CH37 can be used in the same way as a gas torch, but without destroying nearby parts. There are 5 power levels together with a unique regulation and control system to avoid overheating.



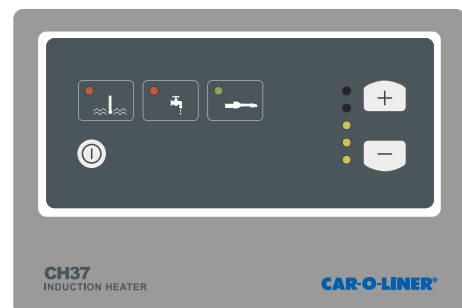
Powerful heating tool with flexible on-off switch



Angled induction head (standard)



Straight induction head (optional)



User-friendly front panel with five power control levels

- No open flame
- Will not damage nearby heat sensitive parts
- Total power control due to the unique regulation and control system.
- Will heat through rubber or plastic

Item	Part No.	Qty
CH37 Induction Heater 208-240V 50-60 Hz 1-ph	36563	
Accessories		
High-tech fluid 3 l	33944	1
Straight induction head	39591	1

Technical data

Input voltage	208-240V 50-60 Hz, single phase, 16A (USA 20A)
Protection class	IP21
Working frequency	18 - 40 kHz
In effect - main supply power	4 kW
Induction power	3.7 kW
Induction cable	3 m long
Cooling system	Water (decalcified)
Weight	34 kg
Water tank	20 liter

Aluminum Spotter CR55

The CR55 aluminum power source allows welding of stud bolts and miscellaneous accessories on all types of sheet metal, including aluminum.



The power source is supplied complete with gun and a 2-clamp grounded cable. Standard supplies also include a set of threaded rivets specifically intended for aluminum application and threaded washers

Item	Article No.	Qty.
Aluminum Spotter CR55 115V/230V 50-60 Hz 1-ph	33891	
Consisting of		
Power source with 2.5 m power cable (without plug), spot gun with 4 m cable, 3.5 m double grounded cable with clamps, bag of 100 threaded rivets M4x15		1
Accessories		
Maxilift dent puller with 3 hooks	33942	1
Spare parts		
ALU M4x15 threaded rivets ALS12 alloy	34019	100



Maxilift dent puller

Technical data

Input voltage	115V / 230V, 50-60 Hz 1-ph
Max installed power	1,6 Kw
Fuse rating (slow blow)	10A / 16A
Energy adjustment range	50 ÷ 1500 J
Number of welds per hour	1200/h
Protection class IP	23 c
Authorized for use in areas with increased hazard of electric shock	Ja
Weight	15 kg
Dimensions	176 × 370 × 401

Plasma Cutter PC30

The PC30 is the necessary cutting tool for the new high strength steel qualities, giving excellent cutting performance on thin sheet metal.



Item	Article No.	Qty.
Plasma Cutter PC30 230V 50-60 Hz 1-ph	35105	
Consisting of		
Power source with 2.5 m (8.2 ft) power cable Torch EL-60 complete 4 m (13.1) and grounded cable		
Spare parts for PC30		
Electrode for torch EL-60	35241	5
Cool Air Diffuser	35242	1
Cutting Air Tip	35243	5
Protection Nozzle	35244	1

Technical data

Input voltage	230V 50 - 60 Hz 1-ph
Duty cycle 20%	25A
Duty cycle 100%	10A
Fuse rating (slow blow)	16A
Current/Voltage range	5A/82V
Performance steel and aluminum, cutting/separation	4 mm / 5 mm
Protection Class	IP 22
Air pressure	4 bar
Weight	9 kg

Spotter CR35

The CR35 is a sophisticated micro-process controlled spotter for welding and traction of all studs, nails, washers, rivets and bolts.



Start Kit



Item	Article No.	Qty.
Spotter CR35 230V 50-60 Hz 1-ph	33434	
Consisting of		
Power source with 2.5 m (8.2 ft) power cable, multi-function torch, ground cable, dent puller and Start Kit		

Technical data

Input voltage	230 V, 50 - 60 Hz 1-ph
Rated power at 50%	2 kVA
Max power	16 kVA
Fuse rating (slow blow)	16A
Secondary no-load voltage	7V
Secondary short circuit current	2,8 KA
Duty cycle	5%
Dimensions W × L × H	130 × 300 × 150 mm
Weight	14 kg

A-Tong

Patented accessory for increasing accessibility with the C-tong on CR100, CR300, CR500, CR510, CR530 and CR500DA



Item	Article No.	Qty.
A-tong	34826	1
Consisting of		
A-tong with 100 mm 33° angle arms and electrode adapters for CR100, CR300, CR500, CR510, CR530 and CR500DA		
Spare parts for A-tong		
Electrode holder arm 100 mm	34917	2
Electrode L=40-120°	33517	2



Technical data

Max electrode pressure (depending upon the arm's length)	450 daN
Open gap (tip to tip)	100 mm
Weight	3,8 kg

Item	Article No.	Qty.
Angle Sander 2"	32687	

Technical data	
Speed	25 000 rpm
Working pressure	6,0 bar
Max working pressure	6,2 bar
Weight	0,7 kg
Disc diameter	2"
Sound level	84 dBA
Sound level effect	90,8 dBA
Vibration level	3,1 m/sec ² (ISO 8662 - 1)

Air Tools

Angle Sander

25 000 rpm, provides a very high cutting rate. Perfect for final smoothing before welding and for grinding spot welds.



Item	Article No.	Qty.
Spot Drill Kit	32686	
Adapter Kit Spot Drill	32948	1
>Bushing	32885	1
>Drill support	32886	1
Drill 45 × 8 mm	32863	5
Drill 45 × 10 mm	33276	1
Drill bits B.O.R 3/paket	33939	3
Drill bits HSS 5/paket	33940	5
Oil B.O.R	33941	1

Technical data	
Speed	1800 rpm
Drill diameter	8 mm
Air intake	1/4"
Working pressure	6,2 bar
Vibration level	0,27 m/sec (ISO 8862 - 1)
Air consumption	230 liter/min
Weight	2,3 kg

Spot Drill Kit

Easy drilling with an automatic system.



The depth can be easily regulated by means of the red positioning ring and checked by moving the counterstay backwards. With the yoke fitted, the drill moves automatically towards the spot welds when the trigger is depressed to the half-way position



Drill bits B.O.R



Drill bits HSS



Oil B.O.R

Item	Article No.	Qty.
Airpuller AP95	32835	
Powerlift for Airpuller	32839	1

Technical data	
Dimensions L × H × W	190 × 170 × 80 mm
Weight	1,8 kg
Operating pressure	6-8 bar
Acceleration	< 2,5 m/s
Sound level pressure	66 dBA

Airpuller AP95

The professional panel dent removal tool.



Powerlift



Service Equipment

Weld Test Kit

Multi function measuring instrument for resistance welders.



Item	Article No.	Qty.
Weld Test Kit	34204	

Technical data

Current measuring	AC and DC up to 200 kA
Drill bit pressure	up to 1200 daN

Multi-function Installation Tester

Measure your main supply system.
Verify the safety of your electrical installation.

Item	Article No.	Qty.
Fluke	34208	

Technical data

Voltage measurement. Continuity testing.
Resistance and Impedance measurement.

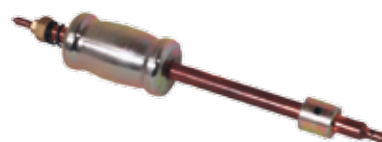


Accessories

Dent Puller

Hand-operated dent puller kit.

Item	Article No.	Qty.
Dent Puller	39638	



Mechanic Glove with perfect fit

The glove is made of soft, lithe and durable material.
Washable in 40°C. Extra reinforced at thumb for longer lifetime.

Item	Article No.
Mechanic Glove, medium	34031
Mechanic Glove, large	34032
Mechanic Glove, X-large	34033



MIG/MAG Welder CMI3000

The CMI3000 is a versatile, upgradable MIG/MAG welding machine using flash-card and inverter technology. The CMI3000 has been developed for use in light industrial applications and for modern car body work where heavy demands are placed on the shop to continually adjust their processes to ensure high quality welding operations.



Technical data

Input voltage	400V +/- 15%
Fuse	16A
Current range DC	15 - 300A
Duty cycle 60% at 20	300A
Open circuit consumption	40 Watt
Mains voltage max	15,5A
Efficiency	0,85
Power factor	0,90
Open circuit voltage	15 - 68V
Dimensions L x W x H	69 x 27 x 63 cm
Weight (incl. supply cable)	32 kg
Wire feed rate	0,5 - 24 m/min

Item

Article No.

CMI3000 3 x 400V Programmable for GM/PSA	34556
CMI3000 2wf 3 x 400V Programmable for GM/PSA, two wire feeders	34557
Feed rolls 1,0 mm ALU Wire.	
Torch PL 150F 3 m	
Feed rolls 0,8 mm Steel Wire.	
Torch PL 150F 3 m	
CMI3000 3 x 230V	34558
Programmable for GM/PSA	
CMI3000U 2wf 3 x 230V	34559
Programmable for GM/PSA, two wire feeders	

Accessories

Article No.

Aluminium wire	
AlMg 5 1,0 mm 2 kg	35178
AlMg 5 1,0 mm 6 kg	34344
Galvanized wire	
SG1 0,8 mm 5 kg	34345
SG1 0,8 mm 15 kg	34346

MIG-brazing wire PSA

CuAl 8 1,0 mm 5 kg	34049
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MIG-brazing wire GM

CuSi 3 1,0 mm 5 kg	34202
Gas regulator 30 l	34203
Adapter for 5 kg reel	33509

MIG/MAG-Welder CM220 Automotive

Car-O-Liner's MIG/MAG-welder CM220 Automotive has been specially developed for the repair and construction of galvanized and primed high tensile steels in the automotive industry. In addition, it permits both MIG and MAG welding of aluminum and high tensile steels.



Item	Article No.
CM220 Automotive 3 × 400V	34541
Feed rolls 1,0 mm ALU wire Torch PL 150F 3 m	
CM220 Automotive Twin 2-wire feeders 3 × 400V	35177
Feed rolls 1,0 mm ALU wire Torch PL 50F m	
Feed rolls 0,8 mm steel wire Torch PL 50F m	

Accessories

Aluminum wire	
ALMg 5 1,0 mm 2 kg	35178
ALMg 5 1,0 mm 6 kg	34344
Galvanized wire	
SG 0,8 mm 5 kg	34345
SG 0,8 mm 15 kg	34346
MIG brazing wire PSA	
CuAl 8 1,0 mm 5 kg	34049
MIG brazing wire GM	
CuSi 3 1,0 mm 5 kg	34202
Gas regulator 30 l	35166

Technical data

Input current	3 × 400V
Current range	20- 200A
Voltage steps	20
Duty cycle 35 %	150A
Open circuit voltage	14- 30V
Fuse	10A
Wire dimension	0,6 - 1,0 mm
Wire reel	5- 15 kg
Wire feed speed	2 - 15 m/min

CM181, CM193, CM253

Quality MIG/MAG Welders for the Automotive Industry



Technical data	CM181	CM193	CM253
Input voltage	230V 50-60 Hz 1-ph	400V 50-60 Hz 3-ph	400V 50-60 Hz 3-ph
		230V/400V 50-60 Hz 3-ph	230V/400V 50-60 Hz 3-ph
Fuse	10A	10A	10A
Current range	30-160A	20-180A	20-250A
Open circuit voltage	19-33V	14-30V	15-34V
Duty cycle			
60 %	50A	85A	165A
35 %	60A	110A	200A
Voltage steps	4	7	10
Wire dimensions	0,6-0,8 mm	0,6-0,8 mm	0,8-1,2 mm 1,0 mm ALU
Wire reel dimension	5-15 kg	5-15 kg	5-15 kg
Wire reel speed	2-12 m/min	2-12 m/min	2-15 m/min
Dimensions L x W x H	72 x 38 x 70 cm	72 x 38 x 70 cm	72 x 38 x 70 cm
Weight	52 kg	57 kg	66 kg
Torch with remote control	PL150F 3 m, 0,8 mm	PL150F 3 m, 0,8 mm	PL250F 3 m, 0,8 mm

MPS System:

Spot weld time	0,15-2,5 sec	0,15-2,5 sec	0,15-2,5 sec
Stitch time	0,15-2,5 sec	0,15-2,5 sec	0,15-2,5 sec
Burn back time	0,05-0,5 sec	0,05-0,5 sec	0,05-0,5 sec

Functions

MPS (spot/stitch)	x	x	x
Tool tray with rubber mat	x	x	x
Remote control for the torch	x	x	x
Torch holder	x	x	x

MIG/MAG Welders CM181, CM193, CM253



MPS automatic spot and stitch welding



Torch holder



Protective rubber mat for tools



Remote control for the torch

Item			Article No.	Qty.
CM181	230V	1-ph 160Amp	33074	
CM193	400V	3-ph 180Amp	36828	
CM193	230V/400V	3-ph 180Amp	33275	
CM253	400V	3-ph 250Amp	36829	
CM253	230V/400V	3-ph 250Amp	33638	

Consisting of

Power Source CM181, 193 or 253 on wheels				1
MPS automatic spot and stitch welding				
Feel rolls 0,8-1,0 mm steel wire				
Torch holder				1
Tool mat in rubber, on top of machine				1
CM181 and 193				
Torch with remote control PL150F				1
CM253				
Torch with remote control PL250F				1

Accessories

ALU-kit for CM			33495	
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Consisting of

Feed roll ALU 1,0 mm				1
Teflon wire guide liner 1,0 mm				1
Contact tip 1,0 mm				1
Gas Nozzel				1

To CM181-253

Tube packet with remote PL150F 3 m 0,8 mm			33070	1
Tube packet with remote PL250F 3 m 0,8 mm			33072	1
Tube packet with remote PL250F 3 m 1,0 mm ALU			33073	1
Gas regulator 15 l			34203	1
Gas regulator 30 l to Argon gas			35166	1

Aluminum wire

AlMg 5 1,0 mm 2 kg			35178	1
AlMg 5 1,0 mm 6 kg			34344	

Galvanized wire

SG1 0,8 mm 5 kg			34345	1
SG1 0,8 mm 15 kg			34346	1
Adapter for 5 kg			33509	1
Feed rolls 0,6-0,8 mm steel wire			35262	1

Torch

Wire guide liner steel for 0,8-1,2 mm wire			33128	1
Wire guide liner teflon for 1,0 -1,6 mm ALU wire			33129	1
Cone-shaped welding gas nozzle PL150			33126	1
Cone-shaped welding gas nozzle PL250			33127	1
Locking spring for gas nozzle			39736	1
Contact tip Ø 1,2 × 28 mm M6 ECU			33131	1
Contact tip 1,0 × 28 mm M6 ECU			35260	1
Contact tip 0,8 × 28 mm M6 ECU			33130	1
Contact tip 0,6 × 28 mm M6 ECU			33258	1

Spare Parts and Accessories



Support arm

Tool panel



600-yoke



80-yoke

330-yoke



330W LP-yoke



80W HP-yoke



C-tong holder CR500 DA + HP/W



Bypass device



X-tong, complete

Item	Article No.	Qty.
Accessories for:		
CR300, CR500, CR500 DA, CR510, CR530		
Cable support complete	32254	1
> Cable holder	32379	1
> Band	32255	1
> Plastic roller	32239	1
Tool panel with rubber mat	32253	1
CR100, CR300, CR500, CR500 DA, CR510, CR530		
600-yoke kit	32266	1
>Yoke 600	32187	1
>Electrode 50, domed	31065	1
>Electrode 170, domed	32951	1
CR100, CR300, CR500, CR500 DA		
80-yoke	31980	1
330-yoke	31981	1
CR510, CR530c		
80W HP-yoke	34432	1
330W LP-yoke	42117	1
C-tong parts for:		
CR100, CR300, CR500,		
C-tong holder	33184	1
Yoke locking handle	33086	1
CR500 DA, CR510, CR530		
C-tong holder DA + HP/W	34702	1
CR100		
C-tong incl. cables 185 mm ²	33189	1
C-tong cable 185 mm ²	33190	1
CR300, CR500		
C-tong inc. cables 240 mm ²	33096	1
C-tong cable 240 mm ²	33098	1
C-tong without cable	35563	1
CR500 DA		
C-tong DA incl. cables 240 mm ²	34704	1
C-tong cable DA 240 mm ²	34762	1
CR510, CR530c		
C-tong HP/W incl. cables 240 mm ²	34832	1
C-tong cable HP/W 240 mm ²	34476	1
C-tong HP/W without cables	35562	1
By-pass connection	34889	1
CR530x		
X-tong, complete	34918	1

Spare Parts and Accessories



Fender Edge Kit

Electrode tip dresser
(manual)Electrode tip dresser spherical
and 120°Electrodes, lengths:
40 60 80 100 120 140> Electrode
inside 30°> Electrode
outside 30°Electrodes, lengths: 120°
140 120 100 80 60 40

Item	Article No.	Qty.
Fender edge kit	32228	
CR100, CR300, CR500, CR500DA, CR510, CR530c		
Consisting of		
1. Fender edge yoke	32189	1
2. Electrode holder, length 80 mm/ 45°	32191	1
3. Electrode holder, length 80 mm	32190	1
4. Electrode holder, length 80 mm/ 45°	32194	1
5. Electrode, length 20 mm	31066	1
6. Electrode, length 80 mm Ø 13	32193	1
7. Electrode, length 80 mm Ø 13 / 45°	32195	1
8. Electrode washer	32192	1
9. Electrode S	31061	1

Tip Dresser

CR100, CR300, CR500, CR500DA		
Electrode tip dresser (manual)	32410	1
Electrode tip dresser spherical for drill tools	33634	1
Blade, spherical for drill tools	33636	1
Electrode tip dresser complete 120° for drill tools	33635	1
Blade, 120° for drill tools	33637	1

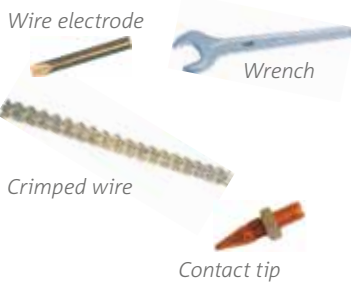
Spare parts for C-tong, C-tong DA; Electrode parts für CR100, CR300

Electrode, length 40 mm spherical	31060	1
Electrode, length 60 mm spherical	31059	1
Electrode, length 80 mm spherical	31058	1
Electrode, length 100 mm spherical	34623	1
Electrode, length 120 mm spherical	34624	1
Electrode, length 140 mm spherical	34625	1
Electrode kit 30° (inner and outer)	32715	1
> Electrode inner 30°	32672	1
> Electrode outer 30°	32673	1

CR300, CR500, CR500 DA

Electrode, length 40 mm 120°	33517	1
Electrode, length 60 mm 120°	33518	1
Electrode, length 80 mm 120°	33519	1
Electrode, length 100 mm 120°	33520	1
Electrode, length 120 mm 120°	33521	1
Electrode, length 140 mm 120°	33522	1
Electrode insulation nozzle	34018	1

Spare Parts and Accessories



Item	Article No.	Qty.
Electrode Parts		
CR510, CR530c		
Cap holder 20 mm	35161	1
Cap holder 40 mm	34885	1
Cap holder 60 mm	34888	1
Cap holder 80 mm	34886	1
Cap holder 100 mm	34887	1
Cap holder 120 mm	34897	1
Caps 10 pcs.	34921	10
CR530x		
Arm 120 mm	34920	2
Arm 200 mm	35238	2
Arm 300 mm	35239	2
Arm 400 mm	35240	2
Cap	34919	1
A-tong		
Electrode holder 120 mm	34917	2
Electrode L 40 mm 120°	33517	2
Socket	34827	2
Insulation cap CR500 DA	34824	1
Insulation cap CR100, CR300, CR500	34823	1
Current cable kit	35113	1
Bearing Kit	35114	1
CR35 Start Kit		
Electrode holder	35139	1
Carbon rod, 10 mm diameter	34634	1
Stud holder, 5 and 6 mm diameter	32322	2
Rivet holder, 3 och 5 mm diameter	32318	1
Stud, M6 × 20 (grounded)	32319	1
Stud, M5 × 18, coarse thread	31068	50
Clip rivets 3 × 4,5 mm	31067	100
Clip rivets 3 × 3,2 mm	32506	100
Crimped wire	31070	100
Contact tip	32223	50
Plastic box	35474	1
Wrench	35476	1
Wire electrode	35475	1
	35473	1

Spare Parts and Accessories



Multi function gun



Ground cable 2,0

Ground device



Ground knob



Electrode holder

Stud holder
diameter 5-6 mm

Rivet holder



Carbon rod holder



Contact tip for dent puller



Stamp electrode

Rivet 3,2
Rivet 4,2

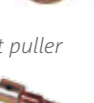
Stud, M5x18



Stud, M6x20



Stitch weld electrode



Dent puller



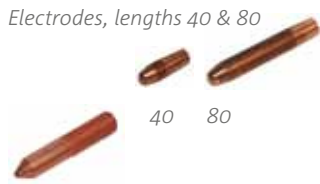
Crimped wire

Item	Article No.	Qty.
Spare parts to multi-function gun		
CR100, CR300, CR500, CR500 DA		
Multi-function gun, 2,5 m 120 mm ²	33185	1
Ground cable, 2,0 m 120 mm ²	33186	1
CR510, CR530		
Multi-function gun, 2,5 m 120 mm ² Air	33671	1
Ground cable, 2,0 m 120 mm ² Air	33672	1
All:		
Holder for multi-function gun	32962	1
Ground device	31074	1
Ground knob	31053	1
Electrode holder	34634	1
Stud holder, diameter 5 - 6 mm	32318	1
Rivet holder, diameter 3- 5 mm	32319	1
Carbon rod holder	32873	1
Carbon rod diameter 10 mm	32322	1
Contact tip for dent puller	32504	1
Stamp electrode	32320	1
Clip rivets 3 × 3,2 mm	31070	100
Clip rivets 3 × 4,5 mm	32506	100
Stud, M5 × 18, coarse thread	31067	100
Stud, M6 × 20 (ground)	31068	50
Beaded nut 6 mm	34351	20
Stitch weld electrode	32503	1
Dent puller		
Hand-operated Dent puller kit	33037	1
Dent puller (COL)	32557	1
Puller head for washers (hook)	32580	1
Puller head for nails	32581	1
Stud holder for nails	33628	1
Stud holder for washers	32578	1
Nails 2 mm	32576	100
Washer for dent puller 8 x 16	32575	100
Puller head for washer (old, Itay)	32316	1
Washer (old, Itay)	32321	20
Washer (old, France)	31071	50
Slide hammer	32224	1
Pulling handle finger	32220	1
Crimped wire	32223	50

Spare Parts and Accessories



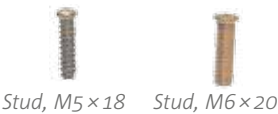
Basic Kit*



Electrode holder



Electrodes, lengths 40 & 80



Carbon rod, 10 mm



Stud, M5 × 18

Stud, M6 × 20

Item	Article No.	Qty.
Basic Kit*	32315	
Electrode holder	34634	1
Electrode, length 40	31060	2
Electrode, length 80	31058	1
Contact tip for puller	32504	2
Carbon rod, 10 mm diameter	32322	2
Stud holder, 5 och 6 mm diameter	32322	1
Rivet holder, 3 och 5 mm diameter	32319	1
Stamp electrode	32320	1
Electrode, length 50 mm, domed	31065	1
Stud, M6 × 20 (ground)	31068	50
Stud, M5 × 18, coarse thread	31067	100
Clip rivets 3 × 4,5 mm	32506	100
Clip rivets 3 × 3,2 mm	31070	100
Ground knob	31053	1
Allen wrench T 5 mm	31076	1
Plastic box	35476	1



CH37 Spare Parts and Accessories

Item	Article No.	Qty.
Angled inductor head (std)	39595	1
Straight inductor head	39591	1
Field amplifier angled ind.	39498	1
Field amplifier straight ind.	39947	1
High-Tech Protection Fluid, 3L (concentrated)	33944	1



Straight inductor head



High Tech protection fluid, 3 l



Angled inductor head (std)



Field amplifier

Spare Parts and Accessories for CTR12000

Angle cutter



Cleaner, standard



Cutter knife



Spot weld drill



Three cutter
8 mm (3)



Coupling,
Plug nipple



Cooling unit



Cover



Welding Apron



Welding Gloves



Wave wire



Support Arm with
Balancer



Electrode arm



Electrode arm



Electrode arm/
welding yoke



Electrode arm/
welding yoke



Item

Article No.

Angle cutter sharpening machine for electrode tips,
incl. Electrode cap cutter with cutter-knife

41917

Cleaner for electrode tips standard, incl. cutter knife

41919

Cutter knife

41921

Spot weld drill

41925

Spot weld drill, three cutter 8 mm (3)

41926

Air connection to angle cutter sharpening machine, consisting of:

Coupling

41923

Plug nipple

41924

Cooling unit

3 L plastic canister

41928

10 L plastic canister

41929

60 L plastic canister

41930

Cover

41931

Welding Apron

41932

Welding Gloves

41933

Wave wire (50 pcs/pkg.)

41934

Support arm with balancer

43578

Electrode arm, inclined, 40 mm throat depth, air-cooled
without electrode holder and electrodes

41944

Electrode arm, straight, 80 mm, water-cooled
without electrode holder and electrodes

41945

Electrode arm, straight, 350 mm, water-cooled
without electrode holder and electrodes

41646

Electrode arm, straight, 500 mm, water-cooled
without electrode holder and electrodes

41947

Spare Parts and Accessories for CTR12000

Multi-function gun



Holder



Accessories box



Pulling hook



Special chuck



Washer welding electrode



Electrode for set screw



Electrode for set screw



Spot welding electrode



Electrode cap



Washer



Trim strip nipple



Set screw



Coarse thread pin



Special triangular pulling eye



Carbon electrode for crimping



Sickle electrode for stitch welding



Flat panner



Item

Article No.

Multi-function gun for CR600 , 2,5 m cable	41890
Ground cable 2,5 m, highly flexible with connector	41891
Pulling hammer for CR600	41892
Holder	41893
Accessories box	41894

Accessories box with electrodes and consumables






















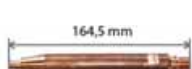

Consisting of:

1× Pulling hook for slide hammer	1× Special chuck for triangular pulling eye
1× Washer welding electrode	1× Electrode for set screw
1× Electrode for set screw M4 + nails	1× Electrode for trim strip nipple
1× Electrode for sheet pulling	1× Spot welding electrode 16 mm Ø
1× Electrode cap for spot welding electrode, 13 mm	1× Trim strip nipple, 3 × 3,2 mm, 100 pcs.
1× Copperized washers, 8 × 16 × 1,5 mm, 50 pcs.	1× Trim strip nipple, 5 × 8,2 mm, 100 pcs.
1× Trim strip nipple, 3 × 4,5 mm, 100 pcs.	1× Set screw M4 × 12, 100 pcs..
1× Coarse set screw 5 × 12 mm, VE, 100 pcs.	1× Set screw M5 × 18, 100 pcs.
1× Coarse set screw 5 × 25 mm, VE, 100 pcs.	1× Coarse set screw 5 × 18 mm, VE, 100 pcs.
1× Carbon electrode	1× Special triangular pulling eye, 20 pcs.

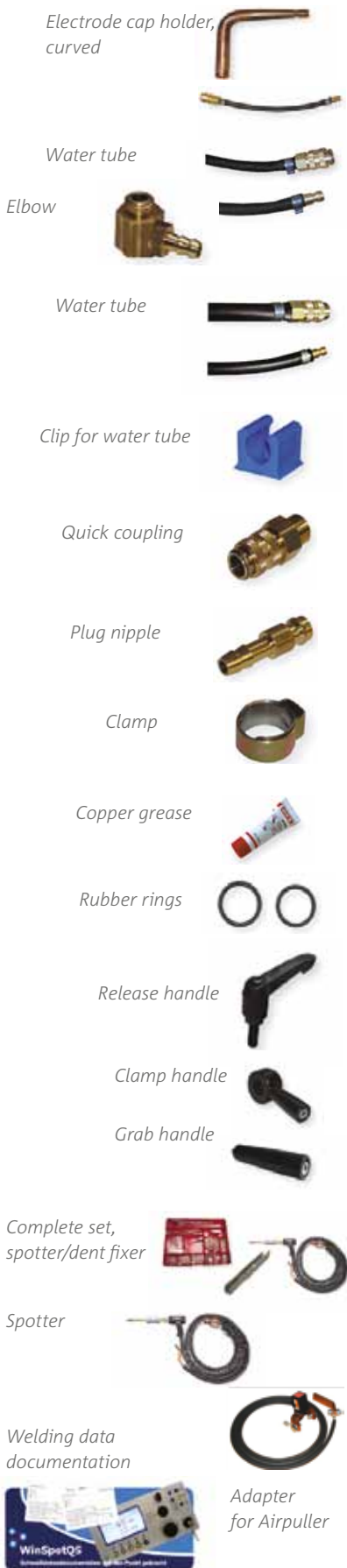
Single parts Accessories Box Spotter:

Pulling hood for slide hammer	41895
Special chuck for triangle electrode	41896
Washer welding electrode	41897
Electrode for set screw	41898
Electrode for set screw M4 + nails	41899
Electrode for sheet pulling	41901
Electrode for spot welding 16 mm Ø	41902
Electrode cap for spot selding electrode, 13 mm	41903
Washer 8 × 16 × 1,5 mm, 50 pcs.	41904
Trim strip nipple, 3 × 3,2 mm, 50 pcs.	41905
Trim strip nipple, 3 × 4,5 mm, 100 pcs.	41906
Holding nipple 5 × 8,2 mm, 100 pcs.	41907
Set screw M4 × 15 mm, 100 pcs.	41908
Set screw M5 × 18 mm, 100 pcs.	41909
Coarse thread pin 5 × 18 mm, VE 100 pcs.	41911
Coarse thread pin 5 × 25 mm, VE 100 pcs.	41912
Special triangle pulling eye, 20 pcs.	41913
Carbon electrode for crimping	41914
Sickle electrode	41915
Flat panner, size 27	41916

Spare Parts and Accessories for CTR12000

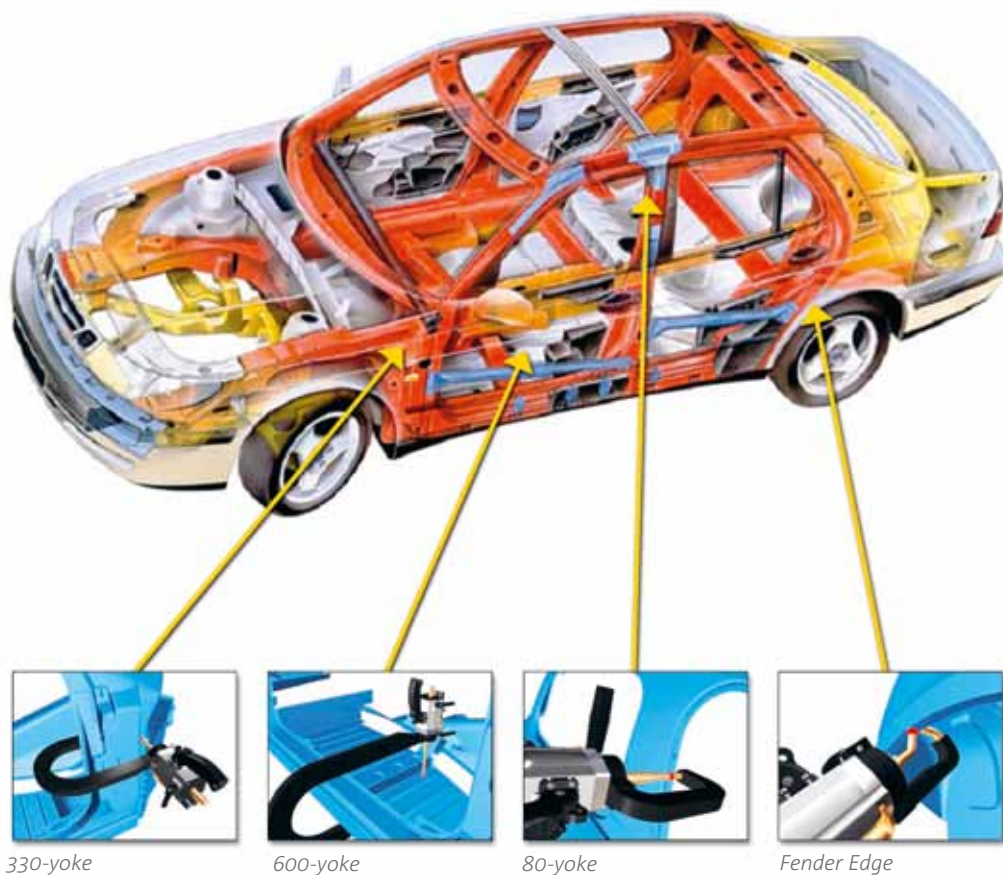
	Item	Article No.
<i>Electrode arm 40 mm</i>		41948
<i>Electrode cap holder</i>		41949
<i>Adapter</i>		41950
<i>Electrode cap holder</i>		41951
<i>Water cooling tube</i>		41952
<i>Electrode cap holder</i>		41953
<i>Special electrode</i>		41954
<i>Water tube</i>		41955
<i>Electrode cap holder</i>		41956
<i>Electrode cap holder</i>		41957
<i>Water tube</i>		41958
<i>ELMA-Tech electrode caps</i>		41959
		41960
		41961
<i>Key for electrode caps</i>		41962
<i>Electrode cap holder, curved</i>		41963
		41966
<i>Electrode cap holder, 74 mm</i>		41965
<i>Water tube</i>		41966
<i>Electrode cap holder, 111,5 mm</i>		41967
<i>Water tube</i>		41968
<i>Electrode cap holder, 164,5 mm</i>		
<i>Water tube</i>		

Spare Parts and Accessories for CTR12000

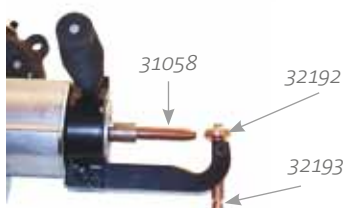
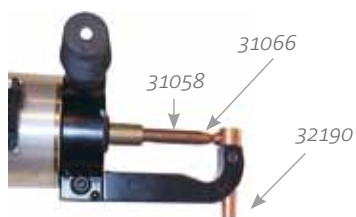
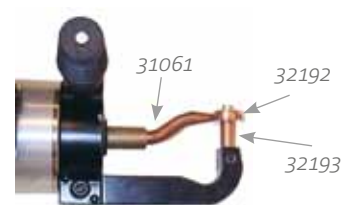
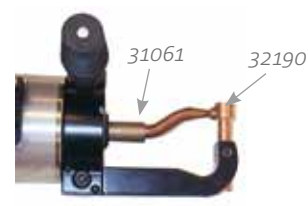


Item	Article No.
Electrode cap holder, curved, water-cooled, incl. water cooling tube and electrode cap	41967
For electrode arms 40 mm	
Tube strap with quick coupling, plug nipple and 2 clamps for inclined arm	41970
For electrode arms 500 mm	
Fabric tube 0,13 with quick coupling and 2 clamps (10,5 mm)	41971
Fabric tube, 0,13 with plug nipple	41972
Elbow coupling	41973
For electrode arms 500 mm	
Water tube 1,19 m with quick coupling and one clamp (13,8 mm)	41976
Water tube 1,19 m with plug nipple and one clamp (13,8 mm)	41977
For electrode arms 350 mm, 500 mm	
Clip for water tube	41978
For electrode arms 40 mm, 80 mm, 350 mm, 500 mm	
Quick coupling	41979
Plug nipple	41980
Clamp 10,5 mm	41981
Clamp 13,8 mm	41982
Copper grease	41983
Rubber rings	
Rubber ring 14-2, inner	41984
Rubber ring 12-2, outer	41985
Release handle incl. screws	41986
Clamp handle incl. screw 8 × 60 DIN 912	41987
Grab handle, long, incl. screw 8 × 80 DIN 91	41988
Complete Set Spotter/Dent fixer Consisting of: spot gun with pulling hammer, workpiece cable with connector, ground cable 2500 mm, accessories box and delivery plate	41888
Spotter/Dent fixer Consisting of: spot gun with pulling hammer, workpiece cable with connector, ground cable 2500 mm	41889
Adapter for Airpuller	41991
Welding data documentation WinSpot-QS	41943

Yoke and Electrode Applications



Fender edge configurations





The Power of Knowledge

Training and Information solutions



Practical - Conveniently Located

- Over 50 training centers around the world
- International training headquarters located in Gothenburg, Sweden

Proven - Industry Approved

- ASE Certified
- CASE Approved
- I-CAR Industry Training Alliance Member

Powerful - Certified Instructors

Increase your understanding of:

- Electronic Measuring
- Damage Analysis
- Vehicle Clamping
- Welding
- And More!

Sustainable Solutions That Add Value

Creating an integrated system that contributes to an effective, high-quality work process from diagnosis to repair, final check and documentation results in sustainable and long-term value for our customers. By working together with car manufacturers, bodyshops and insurance companies worldwide, we continually improve our products and develop solutions that keep pace with ever-changing technological advances.

Products that add value today, as well as in the future — that's sustainable business for Car-O-Liner . . . as well as for our customers.



Platforms that increase productivity



Assured quality control in real time with Car-O-Tronic Measuring Systems



EVO System for holding, anchoring and fixturing offers low operating costs



24 hour access to Vehicle Information



Highly efficient welding systems



WorkShop Solutions that facilitate lean production



Knowledge is power, supplied by the Academy training programs



Customer Service Worldwide



Car-O-Liner™, a brand of the Alignment Systems Group, is a global provider of high-quality, technologically-advanced collision repair equipment to the automotive aftermarket. For more than thirty five years, we have supplied the industry with innovative solutions, technical development, training and customer support. Over 45,000 Car-O-Liner collision repair systems are in use worldwide.

According to our customers, Car-O-Liner's collision repair equipment is the best made, the easiest to learn and use, and includes everything needed to reduce cycle times and increase profits. With Car-O-Liner equipment in your shop, your customers - the vehicle owners and insurance companies - will experience safety and complete satisfaction from your work.

Alignment Systems Group and Car-O-Liner headquarters are located in Gothenburg, Sweden, with manufacturing operations in Kungsör, Sweden. Subsidiaries are located in Sweden, Norway, the USA, the UK, France, Germany and China and distributors can be found in more than 70 countries worldwide.



Integrity



Innovation



Willingness to Change



Winning Spirit

Car-O-Liner is recognized for its leadership in the marketplace by continuously delivering high quality products and exceptional customer service.

CAR-O-LINER®
Your safety - our mission

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