# **CAR-O-LINER®**

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# CTR<sup>®</sup> 9 BODY SHOP EFFICIENCY TAKEN SERIOUSLY

ON

# **C-TONG UNIQUE DOUBLE ROTATING HANDLE FUNCTION\***

# **PERFORM SAFELY**

CTR<sup>®</sup> 9 IS CERTIFIED BY THE EOS METHOD (ERGONOMIC OBSERVATION SYSTEM)

# **FREEDOM TO PERFORM**

THE HANDLE SWIVELS 355° ON TWO AXES. JUST PRESS THE QUICK-RELEASE BUTTON AND TURN THE HANDLE TO AN OPTIMAL WORKING POSITION FOR SUPERIOR HANDLING.

The CTR 9 fully automatic welder comes with a new, revolutionized light-weight transformer gun. With its 355° swivel handle and ergo-grip, it enables perfect working positions for anyone, for any job. The gun is supported by a telescopic arm in a durable and lightweight extruded aluminum that can be easily adjusted both vertically and horizontally. A compact power unit gives mobility and stability, a 16,000-amp transformer and CANBUS communication ensure a perfect weld every time.

# **VERTICAL UP POSITION**

# **VERTICAL DOWN POSITION**

# **HIGH HORIZONTAL POSITION**

# **EXCLUSIVE LED STATUS DISPLAY**

# **STATUS**

Green LED — indicates that the welding machine is ready. It will flash during the weld process and return to steady when the spot weld was well executed.



# WELD QUALITY/OUT OF LIMIT

Red LED - indicates a faulty spot weld. Welding could not be performed because of measured parameters outside limits.

SERVICE Yellow LED - indicates that

electrode cap service is required.



The CTR<sup>®</sup> 9 C-Tong also has a built-in pneumatic feature that presses the welding tips together automatically when triggered. The electrode force is an important ingredient in a good resistance weld. The pressure setting is visible in the control panel display and can be set automatically or manually.

**MIDDLE HORIZONTAL POSITION** 







# CTR<sup>®</sup>9 **BODY SHOP EFFICIENCY TAKEN SERIOUSLY**

# **REACHING THE OUT-OF-REACH DESIGNED FOR GREATER WORKING RANGE**

The **CTR® 9** fully automatic welder comes with a new, revolutionized light-weight transformer gun. With its 355° swivel handle and ergo-grip, it enables perfect working positions for anyone, for any job. The gun is supported by a telescopic arm in a durable and lightweight extruded

aluminum that can be easily adjusted both vertically and horizontally. A compact power unit with a low center of gravity gives mobility and stability, a 16,000-amp transformer and CANBUS communication ensure a perfect weld every time.

# **TECHNOLOGY FOR GREATER WORKING RANGE**

# **TELESCOPIC SUPPORT ARM**

The support arm is designed to ensure maximum freedom of movement (from 1.9 to 2.4m). It's made of robust yet lightweight extruded aluminum, and is easy to adjust both vertically and horizontally for an optimum working position.

# LIGHTWEIGHT TRANSFORMER GUN

The transformer gun made of reinforced fiberglass is designed for fast-paced activity, while at the same time reducing the strain on your body. It's robust, yet among the lightest on the market, allowing you to work efficiently without getting tired. Again and again.

# **ERGO-GRIP**

The fully-closed handle fastened at both ends enhances maneuverability and allows you to hold the gun in a relaxed way in every working position. Day in, day out.

# **BETTER ACCESSABILITY**

With the 6m (236.22in) cable you can reach more parts/ sections of the vehicle without moving the machine.

# POWER UNIT WITH EASY-TO-USE CONTROL UNIT

The robust and compact power unit with its solid, high strength steel bottom plate features a low center of gravity for superior stability and increased mobility. The control unit is easy and intuitive to use, ensuring fast paced accuracy with every welding spot.



**HIGHEST HEIGHT** 2,4M (94.5 in) MAXIMUM ARM REACH 1,5M (59.1 in)



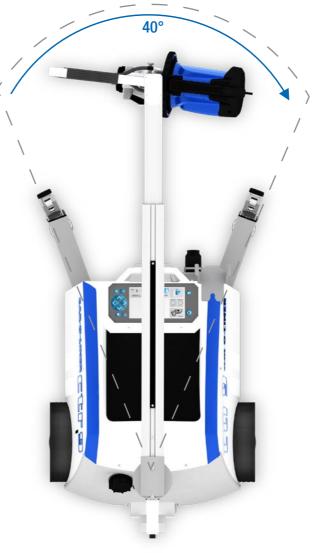
1,2M (47.2 in)

LOWEST HEIGHT

1,9M (74.8 in)

MINIMUM ARM REACH

**REACHABLE ARM AREA** 



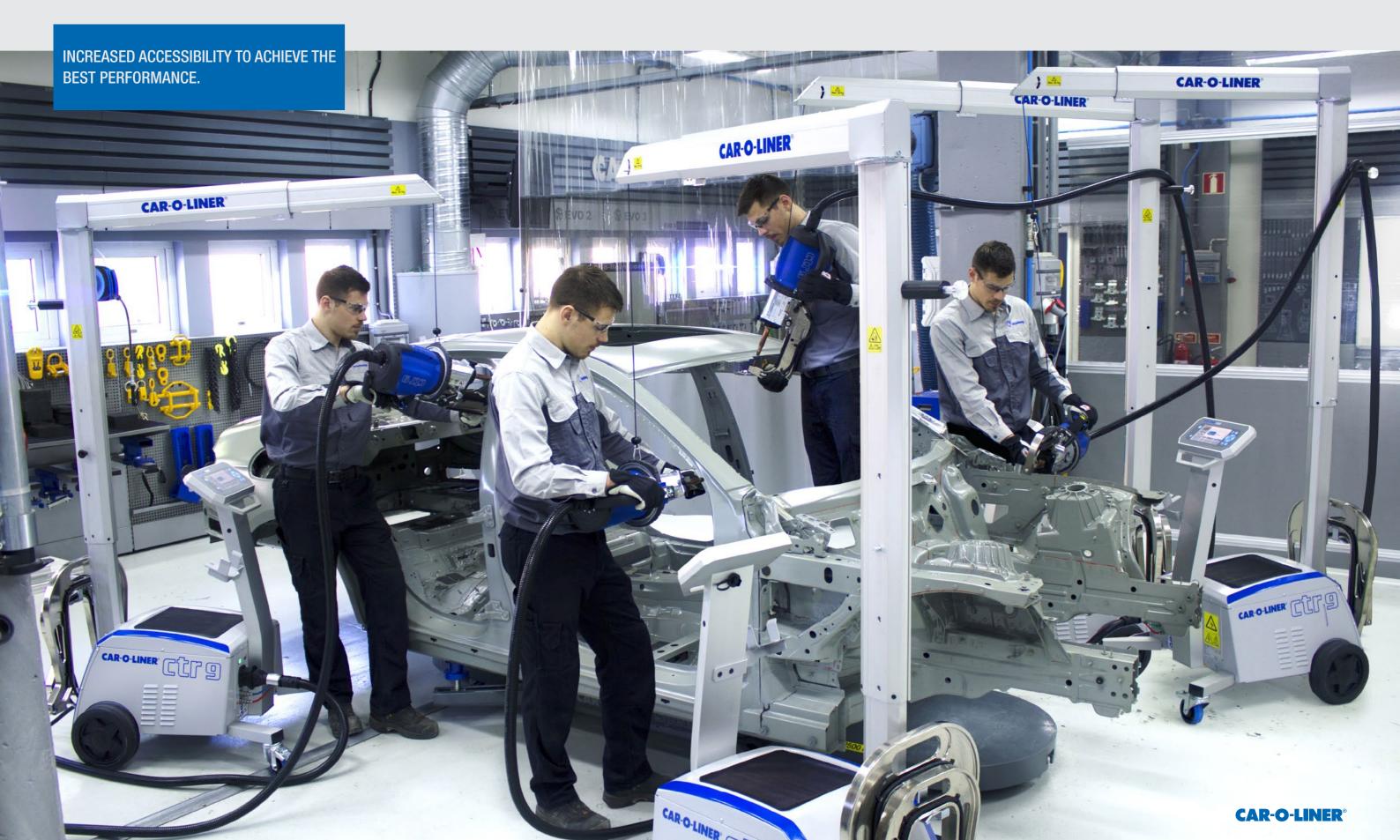


\* Fully auton Datent penc

**CAR-O-LINER** 

# **DESIGNED TO PERFORM**

THE OEM WELDING PROCEDURE INSIDE YOUR BODY SHOP



# EASY TO USE READY TO PERFORM

# **SMART AND SAFE**

INTELLIGENT PERFORMANCE

WITH THE BEST MEASURING TECHNOLOGY AVAILABLE, THE CTR<sup>®</sup> 9 IS THE FIRST SPOT WELDER DESIGNED TO NOT ONLY MAKE HIGH-QUALITY WELDS BUT TO ALSO TRULY GET THE MOST OUT OF YOUR BODY SHOP.

IT INSTANTLY MEASURES THE METAL PANELS AND CALCULATES THE EXACT AMOUNT OF TIME, CURRENT AND CLAMPING FORCE NEEDED FOR A 100% QUALITY-WELD EVERY TIME.

# FEATURES AND BENEFITS

- 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
- UPGRADEABLE SOFTWARE using the USB port you can easily upgrade your equipment
- THE STORAGE TRAY allows you to keep all the tools and accessories you need at hand
- WITH THE WELDLOGGER<sup>1</sup> you can create work orders and document them in log files that can be printed if needed

<sup>1</sup> WeldLogger software for PC is available as an option.

THE INTEGRATED QUALITY ASSURANCE MANAGEMENT SYSTEM MONITORS THE JOINING PROCESS FROM START TO FINISH. THE AUTO CHECK SHOWS YOU ANY DIVERSION ON THE WELDING PROCESS TO ENSURE BOTH SAFETY AND QUALITY.

### UNCOMPROMISED ACCURACY

Advanced processors, integrated sensors and digital **CANBUS** communication ensure fast and correct data transmission for absolute accuracy.

## FUTURE-PROOF CONNECTIVITY

Wi-fi and Bluetooth<sup>™</sup> enable future monitoring, instant documentation and traceability of the entire welding process.

# WELDING DATA DOCUMENTATION



FULLY AUTOMATIC	AUTO 1	AUTO 2	MANUAL
Default mode. All values are automatically set.	Semi automatic mode. Most of the values are automatically set.	Semi automatic mode. Some values are automatically set.	Welding time, current and electrode mode are settings that should be set manually.
	Except:	Except: % Number of metal sheets % Type of material % Total material thickness	

**CHOOSE BETWEEN 4 WELDING MODES** 

## TURN THE WELDLOGGER INTO YOUR BEST SUPPORT

The **CTR® 9** records weld data and generates reports during the repair process.

Print the report to testify to the quality of the welding and increase the trust in your body shop.

The new **Car-O-Liner CTR® 9** resistance spot welder provides quality spot welds in all the new high-strength steels using cutting edge inverter technology. It features a wide range of accessories, the state of the art **C-Tong** handle and a sophisticated software with four welding modes that go from manual to fully automatic. Keep the fully automatic mode on to ensure perfect welding results.

## PERFORM PER OEM REQUIREMENTS

Ready to perform in your body shop per OEM requirements, the **CTR®9** replicates the welding procedure as performed by the car manufacturers.

## **OVERHEAT PROTECTION**

The protection system monitors the welder when the **C-Tong** is used. The thermal and break sensors protect the welder in the event of overheating.

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998	701	EV.	Delete >		
7900	701	v			A .
798	700	V			
799	280	V			
998	281	V			
999	280	v			X
15	2	x			
53	1	x			
979	281	V			
498	280	V			
500	160	V			
			_	Menu	Aut
S	crol				Ma

- PC and machine software for documentation and registration of welding data
- Records welding current, time, date, program and result
- Creates work orders
- Saves welding data with print out possibilities via USB



# **PRODUCT INFORMATION** AND TECHNICAL DATA

# STANDARD COMPONENTS

# **BODY SHOP EFFICIENCY TAKEN** SERIOUSLY



C-YOKE 40MM THROAT DEPTH, WATER COOLED

C-YOKE 80MM THROAT DEPTH, WATER COOLED

PART NO. 49318



C-YOKE 350MM THROAT DEPTH, WATER COOLED

PART NO. 49319



C-YOKE 500MM THROAT DEPTH, WATER COOLED PART NO. 49320



# STANDARD ACCESSORIES

# SUPPORT ARM WITH INTEGRATED BALANCER BLOCK

- Telescopic horizontally and vertically
- Adjustable arm height, from the floor, 1.9 2.4m
- Adjustable arm length, from 1.2 1.55m

PART NO. 44962

# **OPTIONAL ACCESSORIES**

# **COMPLETE MULTI FUNCTIONAL GUN**

- MF gun
- Workpiece cable with connector
- Ground cable
- Delivery plate
- Pulling hammer
- Accessories box kit

PART NO. 41888

# MULTIFUNCTIONAL GUN KIT

- MF gun
- Workpiece cable with connector
- Ground cable
- Pulling hammer

PART NO. 41889

# MULTIFUNCTIONAL ADAPTER FOR CTR9

PART NO. 49108

# COMPLETE MULTIFUNCTIONAL GUN KIT

## PART NO. 41894

ITEM	PART. NO.
Pulling hook for slide hammer	41895
Washer welding electrode	41897
Electrode for set screw	41898

# **CAR-O-LINER**

# **PRODUCT INFORMATION**

AND TECHNICAL DATA

# **OPTIONAL ACCESSORIES**

## Complete multifunctional gun kit (Contd.)

ITEM	PART. NO.
Electrode for set screw	41899
Electrode for trim strip nipple	41900
Electrode for sheet pulling	41901
Spot welding electrode	41902
Electrode cap for spot welding electrode 13 mm	41903
Washers 8x16x1,5 mm coppered	41904
Trim strip nipple 3x3,2 mm	41905
Trim strip nipple 3x4,5 mm	41906
Holding nipple 5x8,2 mm	41907
Set screw M4x12 mm	41908
Set screw M5x18 mm	41909
Set screw with coarse-pitch thread 5x12 mm	41910
Set screw with coarse-pitch thread 5x18 mm	41911
Set screw with coarse-pitch thread 5x25 mm	41912
Special triangular pulling eye	41913
Carbon electrode for sheet pulling	41914
Seam welding electrode	41915
Flat wrench	41916
Pulling hammer	41892
Delivery plate	41893
Grab handle left	44421
Connecting nut	44423
Retainer nut II	44423
Thermo switch	44425
Retaining clip	44426
Control push button	44427
Clip	44428
Hose package	44430
Micro switch	44069
Current adapter	44431
Connector 3-pole	44432
Work piece	44433
Ground cable	44434

# **OPTIONAL ACCESSORIES**

# SPOT DRILL KIT

The depth can be easily regulated by means of the red positioning ring and checked by moving the counter-stay backwards.

With the yoke fitted, the drill moves automatically towards the spot welds when the trigger is depressed to the halfway position.

## PART NO. 32686

SPOT DRILL 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 I/min		
Weight	2,3 kg		

ITEM	PART. NO.
Adapter Kit Spot Drill	32948
Bushing	32885
Drill support	32886
Drill $45 \times 8 \text{ mm}$ (5 units)	32863
Drill $45 \times 10 \text{ mm}$	33276
Drill bits B.O.R 3/package (3 units)	33939
Drill bits HSS 5/package (5 units)	33940
Oil B.O.R	33941

## **TIP DRESSER**

ITEM	PART. NO.
Tip dresser for electrode tips standard, 13mm cap (incl. dresser blade)	41919
Dresser blade 13mm cap	41921

CIFICATION	208V (PART
	3 x 208V -5% +1
E	60A slow blow o Typ
	IP2

SPECIFICATION	208V (PART NO. 48570)	400V (PART NO. 48574)	460V (PART NO. 48572)
MAX. VOLTAGE	3 x 208V -5% +10%, 50 Hz-60 Hz	3 x 400V -5% +10%, 50 Hz-60 Hz	3 x 460V -5% +10%, 50 Hz-60Hz
POWER SUPPLY FUSE	60A slow blow or circuit breaker Type K	32A slow blow or circuit breaker Type D	30A slow blow or circuit breaker Type K
PROTECTION TYPE	IP21	IP21	IP21
INSULATION CLASS	F	F	F
COOLING TYPE	Liquid cooled	Liquid cooled	Liquid cooled
COMPRESSED AIR SUPPLY, P1MIN-P1MAX	5.0-10 bar (72-145 psi)	5.0-10 bar (72-145 psi)	5.0-10 bar (72-145 psi)
DUTY FACTOR, X	10%	10%	10%
MAXIMUM SHORT CIRCUIT INPUT CURRENT, ILCC	317A	136 A	109 A
PERMANENT POWER (100 % DUTY FACTOR), SP	116 kVA	130 kVA	128 kVA
PERMANENT INPUT CURRENT, ILP	324 A	190 A	161 A
WELDING OUTPUT			
MAXIMUM SHORT CIRCUIT OUTPUT CURRENT, I2CC	16.0 kA	16.0 KA	16.0 kA
PERMANENT OUTPUT CURRENT (100 % DUTY FACTOR), I2P	14.1 kA	15.8 kA	15.8 kA
NO-LOAD VOLTAGE, U2D	12.0 V	13.0 V	14.5 V
LIQUID COOLING			
COOLING POWER	1000W	1000W	1000W
TANK CAPACITY	20 I (5.3 gal)	20 I (5.3 gal)	20 I (5.3 gal)
RATED COOLING LIQUID FLOW, Q	3 l/min (0.79 gal/min)	3 l/min (0.79 gal/min)	3 l/min (0.79 gal/min)
COOLING LIQUID PRESSURE DROP, $\Delta P$	1.79 bar (26.0 psi)	1.79 bar (26.0 psi)	1.79 bar (26.0 psi)
MECHANICAL DATA			
ELECTRODE FORCE, FMIN-FMAX	350-640 daN (787-1439 lbf)	350-640 daN (787-1439 lbf)	350-640 daN (787-1439 lbf)
DIMENSIONS (HXWXD) APPROX. (WITHOUT SUPPORT ARM)	1130 x 650 x 930 mm (44.5 x 25.5 x 36.5 in)	1130 x 650 x 930 mm (44.5 x 25.5 x 36.5 in)	1130 x 650 x 930 mm (44.5 x 25.5 x 36.5 in)
WEIGHT APPROX. (WITH SUPPORT ARM + 20L WATER AND 80MM YOKE)	135 kg (298 lbs)	135 kg (298 lbs)	135 kg (298 lbs)
WEIGHT, C-TONG, WITH 80 MM YOKE, APPROX	11,4 kg (25.2 lbs)	11,4 kg (25.2 lbs)	11,4 kg (25.2 lbs)
CABLE LENGTH	6 m (19.7 ft)	6 m (19.7 ft)	6 m (19.7 ft)

# WELDLOGGER

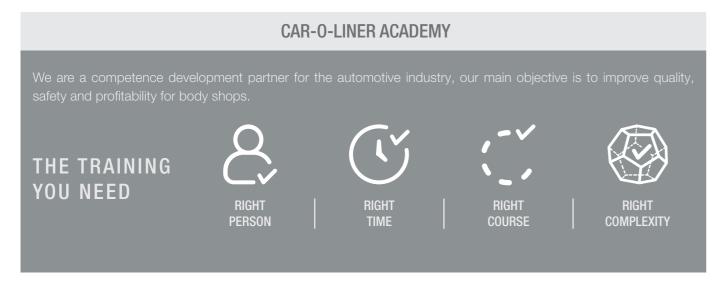
PART NO. 36590

# **TECHNICAL DATA**



# WE CARE ABOUT BODY SHOPS

EXCELLENCE. INNOVATION. PASSION.



We enhance our customer's abilities by identifying the real competence and development needed and by offering solutions to meet these needs and accelarate the business growth.

WE OFFER THE SOLUTION



# **CUSTOMER SUPPORT**

The Car-O-Liner Group headquarters is located in Gothenburg, Sweden, with subsidiaries located in Norway, Germany, France, United Kingdon, Italy, China, India, United States, Thailand and the Middle East.

Wherever you are, Car-O-Liner can provide customers with product information, training, support or data subscription/renewal.

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