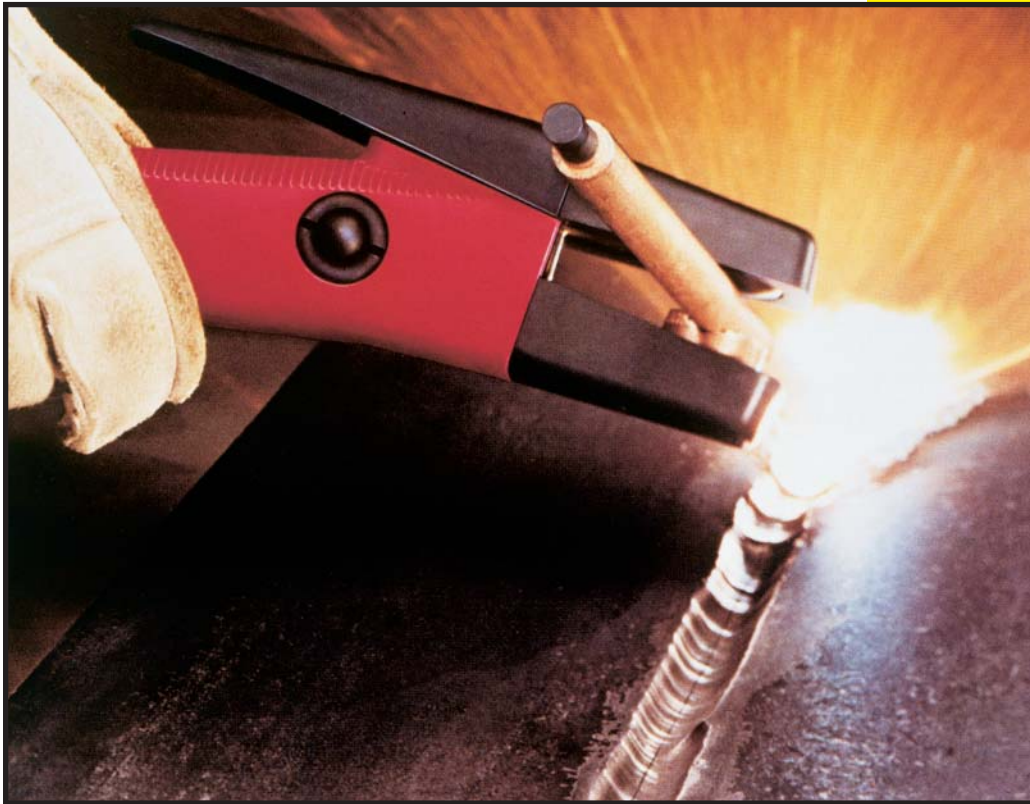




# **Air Carbon Arc Gouging Torches & Equipment; Slice Exothermic Cutting Systems**





# EXTREME™ Air Carbon Arc Gouging Torches

## Angle-Arc® Manual Gouging Torches



Only Arcair® – the inventor of the original air carbon arc process and the industry leader for 50 years – could bring you the superb marriage of proven technology and improved design. Only Angle-Arc Torches work efficiently with the natural angles and movements of the arm and wrist. This major advance in gouging and cutting equipment delivers rugged reliability. The addition of superb support and complete technical backup makes Arcair the number one name in air carbon arc manual torches.

Arcair Angle-Arc Torches are highly efficient metal removal tools for fabrication jobs in steel fabrication plants, shipyards, railroads, farms . . . anywhere people want to save time and money. They speed up weld removal, backgouging, edge preparation, defect repair and many other metal removal jobs. They are ideal for almost all metals – with little or no deformation – because the heat input is so low.

Now a complete family of Angle-Arc Torches to meet your everyday needs. Just pick the best torch to fit your gouging applications.



K2000	K3000	K4000	K5000
Light Duty	Medium Duty	Heavy Duty	Extra Heavy Duty
Accepts: Pointed Carbons: 1/8" (3mm) to 1/4" (6mm) Flat Carbons: 3/8" (10mm)	Accepts: Pointed Carbons: 1/8" (3mm) to 3/8" (10mm) Flat Carbons: 3/8" (10mm) & 5/8" (16mm)	Accepts: Pointed Carbons: 5/32" (4mm) to 1/2" (13mm) Flat Carbons: 3/8" (10mm) & 5/8" (16mm)	Accepts: Pointed Carbons: 5/32" (4mm) to 5/8" (16mm) Flat Carbons: 3/8" (10mm) & 5/8" (16mm)
Maximum 450 Amps	Maximum 600 Amps	Maximum 1000 Amps	Maximum 1250 Amps
Compressed air: Pressure: 40 psi (2.8kg/cm <sup>2</sup> ) Flow Rate: 8 cfm (0.23m <sup>3</sup> /min)	Compressed air: Pressure: 80 psi (5.6kg/cm <sup>2</sup> ) Flow Rate: 21 cfm (0.60m <sup>3</sup> /min)	Compressed air: Pressure: 80 psi (5.6kg/cm <sup>2</sup> ) Flow Rate: 28 cfm (0.79m <sup>3</sup> /min)	Compressed air: Pressure: 80 psi (5.6kg/cm <sup>2</sup> ) Flow Rate: 30 cfm (0.85m <sup>3</sup> /min)
Torch & Cable Weight: 3.6 lbs. (1.6kg)	Torch & Cable Weight: 4.0 lbs. (1.8kg)	Torch & Cable Weight: 5.4 lbs. (2.4kg)	Torch & Cable Weight: 6.8 lbs. (3.1kg)

## Ordering Information

	(PART NO.)				
	Torch Only	Torch w/ 7ft. Cable	Torch w/ 7ft. Cable & Insulated Hook-Up Kit	Torch w/ 10ft. Cable	Torch w/ 10ft. Cable & Insulated Hook-Up Kit
K2000	01-046-001	61-046-006	61-046-002	61-046-007	61-046-003
K3000	01-065-001	61-065-006	61-065-002	61-065-007	61-065-003
K4000	01-082-002	61-082-008	61-082-006	61-082-009	61-082-007
K5000	01-105-001	61-105-002	N/A	61-105-003	N/A

## Features & Benefits

<b>Natural 15° Torch Angle</b>	Greater operator comfort	<b>Reduced Weight</b>	Optimum cable and torch weight to minimize fatigue
<b>360° Swivel Cable</b>	Less cable twist Less strain on operator	<b>High Quality Cable Hose</b>	Best quality cable hose offers high heat and abrasion resistance
<b>Positive Grip Handle</b>	Greater operator feel and ease in positioning the torch	<b>Rugged Construction</b>	Overall rugged construction for the harsh environment

## Straight Handle Manual Gouging Torches



Only Arcair® – the inventor of the original air carbon arc process and the industry leader for 50 years – could bring you the superb marriage of proven technology and improved design. The K-3 and K-5 are just two torches in a line of gouging and cutting equipment that delivers rugged reliability. The addition of superb support and complete technical backup makes Arcair the number one name in air carbon arc manual torches.

The K-Model Manual Torches are an essential part of the money-saving air carbon arc metal removal process, which melts metal with an electric arc, then blows it away with a jet of ordinary shop compressed air.

These torches are highly efficient metal removal tools for fabrication jobs in steel fabrication plants, shipyards, railroads, farms . . . anywhere people want to save time and money. They speed up weld removal, backgouging, edge preparation, defect repair and many other metal removal jobs. They are ideal for almost all metals – with little or no deformation – because the heat input is so low.

The K-Model Torches offer the reliable and rugged design users expect from Arcair Torches, just pick the best torch to fit your gouging applications.



### K-3

Medium Duty

Accepts:  
Pointed Carbons:  
1/8" (3mm) to 3/8" (10mm)  
Flat Carbons:  
3/8" (10mm) & 5/8" (16mm)  
Maximum 600 Amps  
Compressed air:  
Pressure:  
80 psi (5.6kg/cm<sup>2</sup>)  
Flow Rate:  
21 cfm (0.60m<sup>3</sup>/min)  
Torch & Cable Weight:  
4.0 lbs. (1.8kg)

### K-5

Extra Heavy Duty

Accepts:  
Pointed Carbons:  
5/32" (4mm) to 5/8" (16mm)  
Flat Carbons:  
3/8" (10mm) & 5/8" (16mm)  
Maximum 1250 Amps  
Compressed air:  
Pressure:  
80 psi (5.6kg/cm<sup>2</sup>)  
Flow Rate:  
30 cfm (0.85m<sup>3</sup>/min)  
Torch & Cable Weight:  
6.8 lbs. (3.1kg)

## Ordering Information

	(PART NO.)				
	Torch Only	Torch w/ 7ft. Cable	Torch w/ 7ft. Cable & Insulated Hook-Up Kit	Torch w/ 10ft. Cable	Torch w/ 10ft. Cable & Insulated Hook-Up Kit
K-3	01-064-003	61-064-016	61-064-012	61-064-017	61-064-013
K-5	01-104-003	61-104-007	N/A	61-104-008	N/A

## Features & Benefits

<b>Reliable Torch Design</b>	Greater operator comfort	<b>Reduced Weight</b>	Optimum cable and torch weight to minimize fatigue
<b>Swivel Cable</b>	Less cable twist Less strain on operator	<b>High Quality Cable Hose</b>	Best quality cable hose offers high heat and abrasion resistance
<b>Positive Grip Handle</b>	Greater operator feel and ease in positioning the torch	<b>Rugged Construction</b>	Overall rugged construction for the harsh environment



# Automated Metal-Removal System

## ARCAIR-MATIC® N6000

### Automated Metal-Removal System

- Gouging that is five times faster than hand held torches.
- Gouges more accurate and consistent.
- Automatic grooves that require less grinding than manually made grooves.
- Economical J-groove and U-groove edge preparations.

The Arcair-Matic® N6000 Metal-Removal System was designed to provide the best levels of control, uniformity and productivity in automated gouging of steels and other metals with the air carbon arc process. Usage of the N6000 System has expanded to a wide variety of new and unique jobs. The N6000 system measures minute variations in the arc voltage or amperage, compares them with preset standards, and takes immediate action through its feedback control maintaining the precise arc gap for optimum gouging.



Groove depth is maintained within a tolerance  $\pm 0.025"$  (0,635mm). The N6000 System is ideally suited for metal fabrication, particularly in weld joint preparation, where it is used to prepare uniform "U" or "J" grooves. The System is also used extensively for backgouging of seams and for removing defective welds and cracks.

### ARCAIR-MATIC® N6000 METAL-REMOVAL SYSTEMS

	(PART NO.)
Description	Arcair
120 VAC 60 Hz	65-991-013
220 VAC 50 Hz	65-991-014

## TITAN® MACHINE CARRIAGE

### N6000 Grooving Kits

#### Packages listed below include:

- Titan Machine Carriage
- Lifting bracket
- One 10' Track Assembly
- Three Magnet & Support Bars
- Cable & Hose Clamp Assembly
- Horizontal Rack Assembly
- Vertical Adjustment Assembly
- Automatic Controller
- 1600 amp Contactor
- Torch Head
- Air Regulator
- 2 each 4' (1,2M) Power Cables
- 14" (356mm) Interconnect Cable
- 10' (3M) Remote Pendant Assembly
- 3' (1M) Motor Cable Assembly
- 4' (1,2M) Air Hose Assembly
- Pertinent Fasteners
- Clamps and Hardware Package

**Catalog No. 71-022-701** comes with the Outrigger Kit instead of the Track Assembly and Magnet Support Bar Assemblies.

**The Grooving Kit** is designed for flat work only such as deck plates. It is completely self-contained and easily moved as a single unit with a forklift or crane from workpiece to workpiece.

**The Outrigger Kit** is specifically designed to travel along the web plate on fabricated bridge girders used for railroad and highway bridges.

### TITAN CARRIAGE / N6000 KITS

	(PART NO.)
Description	Arcair
Grooving Kit 120 VAC, 60 Hz	71-022-700
Outrigger Kit 120 VAC, 60 Hz	71-022-701

## SUPPORT CABLES FOR N6000 KITS

	Remote Pendant Assembly (PART NO.)
Description	Arcair
10' (3M) Length	96-620-001
25' (8M) Length	96-620-003
50' (15M) Length	96-620-002

	Interconnect Assembly (PART NO.)
Description	Arcair
14" (356mm) Length	96-170-049
30" (762mm) Length	96-170-055
7' (2M) Length	96-170-057
15' (5M) Length	96-170-051
25' (8M) Length	96-170-052
50' (15M) Length	96-170-053

	Power Cable Assembly (2 required) (PART NO.)
Description	Arcair
4' (1.2M) Length	96-130-254
15' (5M) Length	96-130-256
25' (8M) Length	96-130-300
50' (15M) Length	96-130-301

	Motor Cable Assembly (PART NO.)
Description	Arcair
3' (1M) Length	96-130-257
12' (4M) Length	96-130-253
15' (5M) Length	96-130-303
25' (8M) Length	96-130-282
50' (15M) Length	96-130-274

	Air Hose Assembly (PART NO.)
Description	Arcair
4' (1.2M) Length	94-396-051
15' (5M) Length	94-396-049
25' (8M) Length	94-396-048

	Mounting Plate and Hold Down Clamps (PART NO.)
Description	Arcair
Mounting Plate	94-639-649
Hold Down Clamps	94-166-072

## HORIZONTAL AND VERTICAL RACK BAR POSITIONERS

	(PART NO.)
Description	Arcair
Horizontal Rack Bar Positioner	71-099-073
Vertical Rack Bar Positioner	71-099-074

# Arcair® Automated Metal-Removal System Accessories

## CLIMBER® V-A TRACTOR

- Positive-locking gear engagement lever.
- Hardened drive gear to reduce maintenance.
- Solid state circuitry.
- Manual or Automatic Control. (Automatic control synchronizes the process and tractor motion.)
- Powered by a permanent magnet DC parallel shaft gear-motor, lubricated for life.

### Climber® V-A Tractor

**Packages includes:** Climber V-A Tractor, Track Assembly (10ft./3M Long), Magnet Assemblies (5), Horizontal Rack Assembly, Vertical Adjustment Assembly, Cable Hose Clamp Assembly, and Mounting Plate Assembly.

A complete assembly for mounting on ferrous materials. This package gives portability and flexibility for out-of-position work.



## CLIMBER® V-A TRACTOR PACKAGE

Description	(PART NO.)	
	Tractor Only	Tractor Package
120 VAC, 60 Hz 0-100 ipm (0-254 cm/min)	71-023-136	71-023-138
220 VAC, 50 Hz 0-100 ipm (0-254 cm/min)	71-023-137	71-023-139
Aluminum Track Section (3'/1M Length)	71-099-003	71-099-003
Aluminum Track Section (6'/2M Length)	71-099-002	71-099-002
Aluminum Track Section (10'/3M Length)	71-099-001	71-099-001
Magnet and Support Bar Assembly	71-099-004	71-099-004

**NOTE:** When using the travel system in the vertical, horizontal, and overhead positions, use of safety attachments is recommended to prevent operator injury or equipment damage.

**NOTE:** The Climber® V-A Package will carry the N6000 Torch Head and Automatic Controller. When mounting the Automatic Controller on the Climber V-A, choose the 3 ft. Motor Cable Assembly (Catalog No. 96-130-257).

## TITAN® MACHINE CARRIAGE

The Arcair® Titan® Machine Carriage is designed for low maintenance and high performance in straight line operation, such as automated air carbon arc gouging, cutting or welding operations. Its three wheel design ensures maximum stability even on warped plates. The machine carriage is available in a speed range from 6-80 IPM (15,2-203,2 cm/min.). A manually operated clutch allows the drive to be disengaged for free wheeling to the start of the next operation.



## TITAN® MACHINE CARRIAGE

Description	(PART NO.)
	Arcair
120 VAC, 60 Hz 6-80 ipm (15,2-203,2 cm/min)	71-022-501
Track Assembly (10'/3M Length)	71-022-502
Magnet and Support Bar Assembly (3 Required/Track Assembly)	71-022-504

## ARCAIR® GOUGING ELECTRODES

- Excellent arc stability.
- Superior metal removal rate.
- Cool operation.
- Uniform diameter.
- Clean machine-like grooves or cuts.



### ELECTRODE TYPES

#### DC Jetrod® Copperclad Jointed Electrodes

Eliminates stub loss and provides continuous electrode feed especially for semi-automatic and automatic torches. Machined at each end to provide male and female fittings.

(PART NO.)	
Electrode Size	Arcair
5/16" x 14" (7,9mm x 356mm)	24-052-003
3/8" x 14" (9,5mm x 356mm)	24-062-003
1/2" x 14" (12,7mm x 356mm)	24-082-003
5/8" x 14" (15,9mm x 356mm)	24-102-003
3/4" x 14" (19,1mm x 356mm)	24-122-003
3/8" x 17" (9,5mm x 432mm)	24-064-003
1/2" x 17" (12,7mm x 432mm)	24-084-003
5/8" x 17" (15,9mm x 432mm)	24-104-003
3/4" x 17" (19,1mm x 432mm)	24-124-003
1" x 17" (25,4mm x 432mm)	24-164-003

#### AC Copperclad Pointed Electrodes

Designed for use with AC power supplies. Rare earth material is added to stabilize the arc, improving the operating characteristics.

(PART NO.)	
Electrode Size	Arcair
3/16" x 12" (4,8mm x 305mm)	20-033-003
1/4" x 12" (6,4mm x 305mm)	20-043-003
3/8" x 12" (9,5mm x 305mm)	20-063-003

#### DC Copperclad Flat Electrodes

Specially designed for close tolerance metal removal. Excellent for removing weld crowns, repairing or making dies, removing welded dogs and scarfing billets.

(PART NO.)	
Electrode Size	Arcair
3/8" x 5/32" x 12" (9,5mm x 4,0mm x 305mm)	35-099-003
5/8" x 3/16" x 12" (15,9mm x 4,8mm x 305mm)	35-033-003

#### DC Copperclad Pointed Electrodes

A standard all purpose gouging electrode. Controlled copper coating improves conductivity providing more efficient, cooler, operation and helps maintain electrode diameter at the point of the arc.

(PART NO.)	
Electrode Size	Arcair
1/8" x 12" (3,2mm x 305mm)	22-023-003
5/32" x 12" (4,0mm x 305mm)	22-983-003
3/16" x 12" (4,8mm x 305mm)	22-033-003
1/4" x 12" (6,4mm x 305mm)	22-043-003
5/16" x 12" (7,9mm x 305mm)	22-053-003
3/8" x 12" (9,5mm x 305mm)	22-063-003
1/2" x 14" (12,7mm x 356mm)	22-082-003

#### DC Plain Pointed Electrodes

General purpose electrodes without the copper coating. Used on applications where copper is considered detrimental.

(PART NO.)	
Electrode Size	Arcair
5/32" x 12" (4,0mm x 305mm)	21-983-003
3/16" x 12" (4,8mm x 305mm)	21-033-003
1/4" x 12" (6,4mm x 305mm)	21-043-003
5/16" x 12" (7,9mm x 305mm)	21-053-003
3/8" x 12" (9,5mm x 305mm)	21-063-003
1/2" x 12" (12,7mm x 305mm)	21-083-003
5/8" x 12" (15,9mm x 305mm)	21-103-003

# Arcair® EXTREME™ Air Carbon Arc Gouging Torches

## Tri-Arc® Foundry Gouging Torches



Only Arcair® – the inventor of the original air carbon arc process and the industry leader for 50 years – could bring you the superb marriage of proven technology and improved design. The Tri-Arc Foundry Torch delivers the rugged reliability. The addition of superb support and complete technical backup makes Arcair the number one name in air carbon arc manual torches.

The original triple purpose torch is an essential part of the money-saving air carbon arc metal removal process, which melts metal with an electric arc, then blows it away with a jet of ordinary shop compressed air.

This torch is a highly efficient metal removal tool for all the heavy foundry applications . . . anywhere people want to save time and money. It speeds up padwashing, removes defects in castings and generally cleans castings of fins, nails and other unnecessary metal. This process is ideal for almost all metals – with little or no deformation – because the heat input is so low.

The Tri-Arc Torch offers one torch body that accepts three types of heads that can be tailored to fit your application best. Need several torch types for different applications? No problem the Tri-Arc offers different heads to fit in the same torch body to fit all your needs. No need for maintenance shops and distributors to stock several torches and confuse parts. Again the Tri-Arc gives you the reliable and rugged design users expect from Arcair Torches, just pick the best torch/head combination to fit your gouging applications.



Tri-Arc	Tri-Arc	Tri-Arc
Defect Removal Heads	Padwashing Heads	General Purpose Cleaning Heads
Accepts: Pointed or Jointed Carbons: 5/16" (6mm) to 3/4" (20mm) Maximum 2200 Amps Compressed air: Pressure: 80 psi (5.6kg/cm <sup>2</sup> ) Flow Rate: 36 cfm (1.0m <sup>3</sup> /min) Torch Weight: 2.4 lbs. (1.1kg)	Accepts: Pointed or Jointed Carbons: 1/2" (13mm) to 1" (25mm) Maximum 2200 Amps Compressed air: Pressure: 80 psi (5.6kg/cm <sup>2</sup> ) Flow Rate: 37 cfm (1.0m <sup>3</sup> /min) Torch Weight: 2.4 lbs. (1.1kg)	Accepts: Pointed or Jointed Carbons: 5/16" (6mm) to 3/4" (20mm) Maximum 2200 Amps Compressed air: Pressure: 80 psi (5.6kg/cm <sup>2</sup> ) Flow Rate: 40 cfm (1.1m <sup>3</sup> /min) Torch Weight: 2.4 lbs. (1.1kg)

## Ordering Information

	(PART NO.)		(PART NO.)		(PART NO.)
<b>No Heads in Torch</b>		<b>1/2" (13mm) Electrodes</b>		<b>1/2" (13mm) Electrodes</b>	
Torch Only	02-991-411	Torch Only	02-991-413	Torch Only	02-991-416
Torch & 7' (2.1m) Cable	62-991-417	Torch & 7' (2.1m) Cable	62-991-419	Torch & 7' (2.1m) Cable	62-991-422
		Replacement Heads	94-378-286	Replacement Heads	94-378-267
		<b>5/8" (16mm) Electrodes</b>		<b>5/8" (16mm) Electrodes</b>	
		Torch Only	02-991-414	Torch Only	02-991-417
		Torch & 7' (2.1m) Cable	62-991-420	Torch & 7' (2.1m) Cable	62-991-423
		Replacement Heads	94-378-289	Replacement Heads	94-378-270
<b>5/16" (6mm) to 3/4" (19mm)</b>		<b>3/4" (19mm) Electrodes</b>		<b>3/4" (19mm) Electrodes</b>	
Torch Only	02-991-425	Torch Only	02-991-415	Torch Only	02-991-418
Torch & 7' (2.1m) Cable	62-991-435	Torch & 7' (2.1m) Cable	62-991-421	Torch & 7' (2.1m) Cable	62-991-424
Replacement Heads	94-378-370	Replacement Heads	94-378-283	Replacement Heads	94-378-273
				<b>1" (25mm) Electrodes</b>	
				Torch Only	02-991-424
				Replacement Heads	94-378-344

# SLICE® Exothermic Cutting Systems

*Arcair®*

Unlike any other cutting process used today, the Arcair® SLICE® systems can cut, burn or pierce virtually any metallic, non-metallic or composite material. Our SLICE® exothermic torch cuts right through hard-to-cut materials such as mild, stainless and alloy steels, cast iron, aluminum, magnesium and other non-ferrous metals, slag and refractory materials, and concrete or brick. Even if it's caked with rust, mud or other corrosion, SLICE® will cut through anything. There's never been a more versatile cutting tool!

## SLICE® UTILITY PACK

**Part No. 63-991-026**

The SLICE® Utility Pack permits you to use the exothermic cutting process to cut virtually any metallic, non-metallic or composite material. The package has the basic items needed to do a cutting job packed in a rugged tool box. Just supply oxygen and an ignition source and you are ready to cut.



## SLICE® INDUSTRIAL PACK

**Part No. 63-991-021**

The Industrial SLICE® Pack provides the versatility of exothermic cutting and accommodates a larger oxygen cylinder to extend your cutting time. The industrial cart is capable of carrying a 9" (229mm) diameter cylinder. The Industrial SLICE® Pack includes SLICE® torch and striker assemblies with 10 ft./3M oxygen hose and power cables.



## SLICE® BATTERY PACK

**Part No. 63-991-003**

The SLICE® Battery Pack comes in a rugged tool box. As with the Utility Pack, you get all the basic items needed to do a cutting job such as torch, striker and rods. Also included in the Battery Pack is a 12-Volt rechargeable SLICE® Battery Box Assembly.



# Arcair<sup>®</sup> SLICE<sup>™</sup> Exothermic Cutting Systems



## SLICE<sup>®</sup> CORDLESS STRIKER PACK

**Part No. 63-991-032**

The SLICE Cordless Striker Pack uses two small lead-acid batteries to supply a current surge sufficient enough to ignite both the 1/4" (6,4mm) and 3/8" (9,5mm) bare SLICE Cutting Rods. It includes one ignitor and charger. Available in 120 volt, AC only.



## SLICE<sup>®</sup> COMPLETE PACK

**Part No. 63-991-002**

The SLICE Complete Pack comes in an aluminum carrying case with everything needed to quickly complete an exothermic cutting job. This model is well suited to the emergency type cutting situations where seconds count. With this unit you get the torch, rods, striker, 12-volt battery with charger, 6" (152mm) collet extension and shield, regulator and an empty 55 cubic foot oxygen bottle.



## SLICE EXOTHERMIC CUTTING RODS

SLICE exothermic cutting rods are designed specifically for use with SLICE cutting systems.

Size	(PART NO.)	
	Flux Coated	Uncoated
1/4" x 22" (7 x 559mm) 25 pieces	<b>42-049-002</b>	<b>43-049-002</b>
1/4" x 22" (7 x 559mm) 100 pieces	<b>42-049-003</b>	<b>43-049-003</b>
1/4" x 44" (7 x 1118mm) 25 pieces	N/A	<b>43-049-005</b>
3/8" x 18" (10 x 457mm) 50 pieces	<b>42-049-005</b>	<b>43-049-007</b>
3/8" x 36" (10 x 914mm) 25 pieces	N/A	<b>43-049-009</b>