



NEW PRODUCT

Turn to the
THERMITE TORCH SYSTEM **Pros**



A LINCOLN ELECTRIC COMPANY

HARRIS THERMITE HEATING AND CUTTING SYSTEMS.

The New Harris Products Group Thermite Heating and Cutting Torch Systems are purposely designed for one of railroads most special and critical applications. Product designs and materials of construction were selected to maximize operator safety, performance and service life. They promise to reduce costs associated with repair and or replacement even in extremely hostile work environments like those found in the railroad industry.

TWO SEPARATE SYSTEMS:

Thermite Heating Systems:

1. Thermite rail preheating system

Includes tip/tube assembly, mixer, hand and gauge set.

- Specifically designed for the application
- Maximizes performance
- Maximizes gas efficiency
- Maximizes service life
- Maximizes safety



2. Rail Cutting System With Guide Wheels

Includes handle, gauge set, cutting attachment, guide wheels and tip.

- Specifically designed and selected
- Maximizes performance
- Maximizes gas efficiency
- Maximizes service life
- Maximizes safety



THA

MODEL



THERMITE TUBE AND MIXER HEATING ASSEMBLY

MODEL SHOWN:
QC2SCT7777

DESCRIPTION

Harris Thermite Heating Tip Assembly includes tip, tube and mixer and is manufactured using stainless and brass assuring long service life, safety and the most efficient gas usage. Specifically designed for preheating rail prior to thermite welding. Harris recommends propane as a operating fuel. **Not for use with acetylene.**

DETAILS

- Duty:** Heavy
- Length:** 18.25"/463.55mm
- Weight:** 2.90 lbs./1.32 kg.
- Where Used:** Fabrication, Rail Roads, shipbuilding, etc.
- Related Equipment:** 43-2 Handle, QC2GAU7700 Gauge and 88-5 FBHFR - FBA SET



THERMITE SETTINGS AND PERFORMANCE

PART #	MODEL #	HEAD ANGLE	COMPATIBLE HANDLES	FUEL PSIG	OXYGEN PSIG	PROPANE SCFH	PROPANE BTU
1800242	QC2SCT7777	90°	43-2	15	65	275 - 300	175,000 - 200,000

43-2

MODEL



HIGH-CAPACITY COMBINATION HANDLE

MODEL SHOWN:
43-2

DESCRIPTION

The Model 43-2 high-capacity combination handle with the capacity to maximize the performance of the largest Harris tips including the Harris thermite heating system. The model 43 torch handle features a high volume tube within a tube design and a stainless steel head to minimize damage in even the most abusive conditions. The Model 43 is the handle specifically chosen for the Harris Thermite Tip System.*

DETAILS

- Capacity:** Welds to 1"/25.4mm; cuts to 5"/127mm
- Length:** 9½"/241.3mm
- Weight:** 1.4 lbs./ 0.64 kg.
- Certification:** UL® listed
- Equipped with:** FlashGuard® check valves
- Related Equipment:** Thermite Tip: (1800242), Gauge Set: (4300995), 49-3 Cutting Attachment (1300440)



PART #	MODEL #	THERMITE TIP AND MIXER	GAUGE SET
1401150	43-2	THA - QC2SCT777	QC2GAU7700



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49-3F

MODEL

1YR
WARRANTY

CUTTING ATTACHMENT – FOR USE WITH ALTERNATE* FUELS

MODEL SHOWN:
49-3F

DESCRIPTION

The Model 49-3F is a classic design Harris cutting attachment with brazed triangular stainless steel tubes, making it light in weight while still providing exceptional strength and rigidity. The captive union nut protects the seats and "O" rings from damage. It features a fold forward cutting lever allowing easier connection, even with gloves on. The ease-on cutting valve provides smoother controlled starts. The forged solid brass head provides years of safe, dependable service, even under the most abusive conditions. This model also features a unique low pressure injector mixing system for the hottest preheat flame and the most efficient use of alternate fuels.

DETAILS

Capacity: 6"/152.4mm

Duty: Heavy

Length: 10 ¼"/260.3mm

Weight: 1.5 lbs./0.68 kg.

Mixer Type: Low pressure injector

Certification: UL® listed

Where Used: Railroad, fabrication, construction, shipbuilding, etc.

Related Equipment:

Harris 43-2 handle - P/N: 1401150

GWA-Guide wheels assembly P/N: 4300995



TIP STYLES

PART #	MODEL #	HEAD ANGLE	COMPATIBLE HANDLES	ALTERNATE* FUEL
1300440	49-3F	90°	43-2	6290-NX, 6290-NXP, NFF

*Propylene or propane-based fuels and natural gas. NOT FOR USE WITH ACETYLENE.

6290 NFF

MODEL

1YR
WARRANTY

HEAVY PREHEAT TWO PIECE HAND CUTTING TIPS

MODEL SHOWN:
6290-NFF

DESCRIPTION

Propane/natural gas cutting tips with a heavy preheat for hand cutting steel with rusted, painted or heavily scaled surfaces.

DETAILS

Construction: Two-piece

Preheat Type: Heavy

Where Used: Railroads, Demolition, maintenance, etc.

Compatible Equipment:

E-9 Tip cleaner P/N: 9000160



PART #	MODEL #	DEPTH OF CUT	OXYGEN		FUEL PSIG*		FUEL SCFH	DRILL SIZE
			O ₂ PSIG	O ₂ FLOW SCFH	EQUAL PRESSURE	INJECTOR		
1501020	1NFF	TO 5/8"	20 - 35	115 - 140	5 - 15	4 oz. - 2 lbs.	17.5	# 56
1501030	2NFF	5/8" - 2"	30 - 55	170 - 230	5 - 15	4 oz. - 2 lbs.	17.5	# 53
1501040	3NFF	2" - 4"	45 - 65	355 - 420	5 - 15	4 oz. - 2 lbs.	17.5	# 47
1501050	4NFF	4" - 7"	55 - 75	520 - 645	5 - 15	4 oz. - 2 lbs.	17.5	# 42

NOTE: Other size 6290 NFF tips also available.

GAUGE SET

MODEL



GAUGE SET

MODEL SHOWN:
QC2GAU770

DESCRIPTION

HARRIS in-line gauges designed specifically to give torch entry gas pressure readings for Harris Thermite Heating Tip. Inlets/Outlets are 9/16" - 18 "B" connections. Designed to be weather resistant under normal conditions. Gauges are critical for the proper operation of the Harris thermite tip system.

DETAILS

Duty: Heavy

Length: 3.75" each

Width: 1.875" each

Weight: .65 lbs./28 kg. each

Where Used: Fabrication, Railroad, Construction, Shipbuilding, etc.

Related Equipment: Oxygen replacement gauge - QCGAU100

Propane replacement gauge - QCGAU030



PART #	MODEL #	FACE DIAMETER	COMPATIBLE HANDLES	MAX PSIG	
				FUEL GAS	OXYGEN
QC2GAU770	QC2GAU7700	1.875"	43-2	30	100

GWA

MODEL



GUIDE WHEELS ASSEMBLY

MODEL SHOWN:
QC2SCA7700

DESCRIPTION

The Harris Guide Wheel Assembly is specially designed to withstand the harsh environment of rail road maintenance. The Guide Wheel Assembly is of all stainless steel and brass construction and is adjustable for bevel cutting. The Model QC2SCA770 fits classic Harris cutting attachments and classic straight cutting torches only. The Model QC2SCA770 includes the tip nut to fit classic Harris torches and 6200 style tips.

DETAILS

Duty: Heavy

Width: 4"/101.6 cm

Weight: .90 lbs./40 kg

Where Used: Fabrication, construction, shipbuilding, etc.

Related Equipment: Spare tip nuts P/N: 9SCA7762, Classic Harris model 49-3F cutting attachment, 6290 Cutting tips and 43-2 handle



PART #	MODEL #	CUTTING ATTACHMENT	COMPATIBLE HANDLES	TIP STYLES	
				ALTERNATE* FUEL	
4300995	QC2SCA7700	49-3F	43-2	6290-NX, 6290-NFF	



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REGULATOR AND TORCH SAFETY ACCESSORIES

TORCH FLASHBACK ARRESTORS

FEATURES

- Prevents reverse flow of gases with built-in check valves
- Extinguishes flashback fire with stainless steel sintered element
- 9/16"-18 connections CGA "B" size
- 100 Micron inlet filter helps keep dust and dirt out
- Flow Capacity: Models 88-5FBT (R&L) and 88-5FBR (R&L) arrestors should not be used with tip sizes larger than those noted below:
 - Hand Cutting Tips: NO.5 (except for NFF Tips -NO.4)
 - Machine Cutting Tips: NO.5 1/2
 - Acetylene Heating Tips: NO.4
 - Alternate Fuel Heating Tips: NO.2
 - Cleaning Heads: NO.2 RBP (no limitation with RBA)



MODEL SHOWN:
Regulator Type - Model 88-5FBR (R&L)
P/N: 4301651 - (Sold in pairs only)

TORCH CHECK VALVES

TORCH INLET TYPE

PART #	MODEL #	PACK	FUEL/OXYGEN
4300390	88-6CVT (R&L)	Pair	Fuel and Oxygen
4300161	88-6CVTL	Individual	Fuel
4300162	88-6CVTR	Individual	Oxygen



MODEL SHOWN:
88-6CVTL
P/N: 4300161

MODEL SHOWN:
88-6CVTR
P/N: 4300162

9200

MODEL



HEAVY DUTY

MODEL SHOWN:
9200-50-510

DESCRIPTION

The Model 9200 is a standard for general purpose laboratory, industrial and welding applications. It is designed for applications where a constant delivery pressure is required over a wide range of inlet pressures.

DETAILS

Capacity: Heavy duty

C: 0.53 for LP fuel models;
0.37 for other models

Gauges: 2.5" brass

Seat: One-piece encapsulated seat design with internal filter and PTFE Teflon® or neoprene seats (NC)

Pressure Regulation:
0.05 PSIG/100 PSIG LP models
and 0.03 PSIG/100 PSIG other models

Where Used: Fabrication,
Railroads, Ship Building

Certifications: CGA E-4

Weight: 6.8 lbs./3.08 kg.



PART #	MODEL #	GAS	MAX. INLET PSIG	DELIVERY PRESSURE RANGE PSIG	DELIVERY PRESSURE GAUGE PSIG	SUPPLY PRESSURE GAUGE PSIG	INLET CONNECTION	OUTLET CONNECTION
3302212	9200-50-510P	LPG**	500	0 - 50	100	400	CGA 510P	3/16" - 18 LH
3302214	9200-125-540	OXYGEN	3000	0 - 125	200	4000	CGA 540	3/16" - 18 RH

*Regulators designed specifically for propane service can be used with any of the other welding grade liquid petroleum gases. NOT FOR USE WITH ACETYLENE.

LIQUID CYLINDER GASEOUS WITHDRAWAL

MODEL SHOWN:
330-125-580

330

MODEL



DESCRIPTION

The Model 330 regulator allows for gaseous withdrawal from oxygen, carbon dioxide, argon and/or nitrogen liquid cylinders. It has a stainless steel diaphragm and a tamper-proof, self-reseating internal HP safety valve. Its unique design permits inlet pressures of up to 3000 PSIG for use on high pressure cylinders. The model 330 has an auxiliary plugged low pressure port.

DETAILS

Capacity: Heavy duty

C_v: 0.37

Gauges: 2" Brass

Pressure Regulation:
0.2 PSIG/100 PSIG

Seat: One-piece encapsulated seat design with internal filter and PTFE Teflon® seat

Certifications: CGA E-4

Where Used: Cryogenic cylinders for vapor withdrawal

Weight: 4.3 lbs./1.95 kg.



Additional Technical Information: PG. 175

PART NO.	MODEL NO.	GAS	MAX. INLET PSIG	DELIVERY PRESSURE RANGE PSIG	DELIVERY PRESSURE GAUGE PSIG	SUPPLY PRESSURE GAUGE PSIG	INLET CONNECTION	OUTLET CONNECTION
3001090	330-125-540	OXYGEN	3000	0 - 125	200	-	CGA 540	3/16" - 18



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