Issued Aug. 2024 • Index No. GE/11.0



Medium-Duty Outfits

Quick Specs

Typical Applications Shipbuilding Railroad Salvage Pipeline

Metal fabrication

Construction and demolition

Medium-duty oxy-fuel system for your cutting,

Oxy-Fuel Processes Cutting Heating Welding Brazing Fuel Gases Acetylene Propane Propylene (heating) Natural gas Cutting Capacity
Up to 5/8 in. (16 mm) with included tip Up to 6 in. (153 mm) with optional tips
Heating Capacity
Up to 40,125 Btu with included tip Up to 280,000 Btu with optional tips
Welding Capacity
Up to 1/8 in. (3 mm) with included tip Up to 3/8 in. (10 mm) with optional tips





Medium-duty outfit MBA-30510 shown.

Medium-duty outfits include MC509 cutting attachment, WH100 handle, cutting tip(s), heating tip, welding tip (except MBA-30510LP), oxy and fuel regulators, 20 ft. (6.1 m) hose, flashback arrestors (except MBA-30510LP which has check valves), single-flint lighter, shade 5 safety glasses, and tip cleaner.

Designed for Safety

Three-tube construction keeps gases separate in the cutting attachment until mixed at the tip for safety.

In-tip gas mixing ensures lowest amount of mixed gas in the system. Sustained backfire can be isolated in the tip, helping protect the operator and the torch.

Concave-shaped tip end reduces backfire and resists flameout during accidental contact with the base metal while cutting.

FIo-Trol[™] **valve** prevents seat burnout due to reverse flow of mixed gases, helping to reduce maintenance costs.

External relief valve protects regulator from damage due to inadvertent high-pressure surge. Relief valve will release excessive pressure and automatically reset.

Dual filters including Sure Seat[™] protect regulator high-pressure seat from debris for reliable operation and long service life.

High Performance

Silver-brazed torch joints provide strength, leak resistance and heat protection.

Nickel-plated torch assembly provides heat protection.

Stainless steel ball-style valves provide smooth adjustment and positive seating to eliminate leaks.

Internal threads on handle protect threads from damage if torch is dropped.

O-ring seals on cutting attachment and welding tip allow for easy 360-degree rotation to reduce operator fatigue.

Hand-tighten only to seat the tip and attachments, saving time and tools when changing tips.

Graf-Tite[™] soft seats on tips compress and conform to the shape of the torch head for positive seating, eliminating leaks even when tips are nicked. Soft seat withstands extremely high temperature for longer tip life. **Easy-to-read two-inch gauges** with shatter-resistant polycarbonate lens covers.



Regulators are warrantied for three years and cutting attachment and torch handle are warrantied for five years, parts and labor.



Underwriters Laboratories (UL) Listed for gas pressure regulators.

Electrical Testing Laboratories (ETL) Listed for oxy-fuel torches and tips.



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MC509 Medium-Duty Cutting Attachment



Handles everyday cutting needs.

Cuts up to 6-inch (153 mm) thick steel. For use with WH100 medium-duty torch handle.

Materials of construction

- Handle, lever and butt: nickel-plated brass
- Tubes: nickel-plated cupronickel
- Valve stem: stainless steel
- Valve packing: PTFE
- Flo-Trol[™] diaphragm: Buna-N
- Springs: stainless steel
- Silver-brazed assembly
- Stem: stainless steel
- Cutting seat: Buna-N
- Seat retainer: brass
- Gasket: polyester
- Spring retainer: nickel-plated brass
- Backend: nickel-plated brass
- Backend nut: nickel-plated brass
- O-rings: Buna-N

Specifications

Length: 11.25 in. (318 mm) Weight: 1.1 lb. (0.5 kg) Head angle: 90 degrees

Repair kit MC101

Warranty Five years

	Torch Handle		Cutting and Gouging Tips	
Gas Service	Stock No.	Length	Stock No.	Description
Acetylene	WH100	7 in. (178 mm)	MC12-00 to MC12-5 MC13-3	General cutting tips Gouging tip
Propane/natural gas			MC40-0 to MC40-4	General cutting tips

WH100 Medium-Duty Handle



Handles everyday cutting, heating and welding needs.

Cuts up to 6-inch (153 mm) thick steel with MC500 series and Toughcut[™] CC509P cutting attachments.

Materials of construction

- Handle, head, tube and butt: brass
- Valve ball: stainless steel
- Valve stem: bronze
- Valve packing: PTFE
- Valve nut: nickel-plated brass
- Valve knob: nickel-plated zinc
- Silver-brazed assembly

Specifications

Length: 7 in. (178 mm) Weight: 0.86 lb. (0.39 kg) Handle diameter: 15/16 in. (24 mm)

Inlet connection

"B" size, 9/16"-18 RH and LH

Valve assembly replacement LW17

Warranty Five years

Gas	Cutting Attachment		Heating Tips		Welding Tips		
Service	Stock No.	Head Angle Stock No.		Btu per Hour Stock No.		Metal Thickness	
Acetylene	MC505 MC509 CC509P (Toughcut)	75° 90° 90°	MT603 MT605 MT610*	40,125 73,085 128,970	MW201 MW203 MW205 MW207 MW209	1/32 in. (0.7 mm) 5/64 in. (1.9 mm) 1/8 in. (3 mm) 3/16 in. (5 mm) 3/8 in. (10 mm)	
Propane/ natural gas			MT805 MT615	208,000 269,000	MW411 (Brazing)	5/8 in. (16 mm)	
Propylene			MT805 MT615	280,000 280,000	_	_	

*Two 350 cubic foot acetylene cylinders need to be manifolded together to use this tip.



Medium-Duty Cutting and Gouging Tips

	Tip	Metal Thickness	Pressure (psig)		Gas Consumption (scfh)	
	Number	Inch (mm)	Oxygen	Acetylene	Oxygen	Acetylene
MC12-0 and MC12-1 included in MBA-30510 and MBA-30300 outfits)	MC12-00	1/8-3/16 (3-5)	20	10	37	6
included in MDA-30310 and MDA-30300 outlits)	MC12-0	1/4-3/8 (6-10)	35-40	10	47-53	6
Materials of construction	MC12-1	1/2-5/8 (13-16)	45-50	10	84-90	7
 Body: tellurium copper Seats: graphite 	MC12-2	3/4-1 (19-25)	50-55	10	118-129	9
Seat collars: brass	MC12-3	1-1/2-2 (38-51)	55-60	10	182-193	10
	MC12-4	2-1/2-4 (64-102)	65-70	10	263-335	12-13
	MC12-5	5-6 (127-152)	80-90	10	435-500	13
and the second division of the second divisio	MC13-3*	3/8 x 1/4 (10 x 6)	20	10	115	24**
MC40-1			Oxygen	Propane	Oxygen	Propane
(included in MBA-30510LP outfit)	MC40-0	1/4-3/8 (6-10)	35-40	10	40-46	7
Materials of construction	MC40-1	1/2-5/8 (13-16)	45-50	10	75-81	7
Insert and sleeve: brass	MC40-2	3/4-1-1/4 (19-32)	50-60	10	107–133	7
 Shell: tellurium copper Seats: graphite 	MC40-3	1-1/2-2 (38-51)	55-60	10	170-181	7
Seat collars: brass	MC40-4	2-1/2-4 (64-102)	65-75	10	249-320	7

*MC13-3 is a gouging tip. **Minimum of one 350 cubic foot cylinder required.

Pressure (psig)

15

15

15

Propane

10-25

Nat. Gas

Propylene

10-25

20-25

Oxygen

15

15

15

Oxygen

20-60

Oxygen

15 - 50

Oxygen

50-60

Acetylene

Gas Consumption (scfh)

28

51

90

Acetylene

Propane

70-160

Nat. Gas

96-267

Propylene

120-135

Oxygen

31

57

100

Oxygen

225-535

Oxygen

Oxygen

242-270

175-450

Length

Inch (mm)

10 (254)

16 (406)

18 (457)

14 (356)

14 (356)

Fuel Cylinders

1 (350 cu. ft.)

1 (350 cu. ft.)

2 (350 cu. ft.)

1-2 (100 lb.)

1 (100 lb.)

Required

Medium-Duty Heating Tips

-----Tip Average MT-603 Number Btu/Hour (included in MBA-30510 and MBA-30300 outfits) MT603 40.125 Materials of construction MT605 73.085 · Head and tube: copper MT610 128,970 • Nut: nickel-plated brass · Mixing section: nickel-plated brass O-rings: Buna-N MT615 269,000 182,000 MT-805 (included in MBA-30510LP outfit) Materials of construction MT805 280,000 · Head shell: copper · Head insert: brass · Head nut: nickel-plated brass · Tube: stainless steel • Nut: nickel-plated brass · Mixing section: nickel-plated brass

• O-rings: Buna-N

Medium-Duty Welding and Brazing Tips

MW205 (included in MBA-30510 and MBA-30300 outfits)

Materials of construction

- Tube: copper
- Nut: nickel-plated brass
- · Mixing section: nickel-plated brass
- O-rings: Buna-N

Tip	Welding Capacity Inch (mm)	Pressure (psig)		Gas Consumption (scfh)		Drill	Length	
Number		Oxygen	Acetylene	Oxygen	Acetylene	Size	Inch (mm)	
MW201	1/32 (0.7)	10	10	2.3	2.3	71	7 (178)	
MW203	5/64 (1.9)	10	10	3.2	3.2	67	7 (178)	
MW205	1/8 (3)	10	10	6	6	57	7 (178)	
MW207	3/16 (5)	10	10	12	12	54	8.5 (216)	
MW209	3/8 (10)	10	10	23	23	49	8.5 (216)	
		Oxygen	Propane/ Nat. Gas	Oxygen	Propane/ Nat. Gas			
MW411*	5/8 (16)	11	11	51.9	13	40	8.5 (216)	

*MW411 is a brazing tip.



Series 30[®] Medium-Duty Single-Stage Regulators

30-100-540 (included with all outfits)		30-15-510 (included with MBA-30510 outfit)		30-15-300 (included with MBA-30300 outfit)		30-50-510 (included with MBA-30510LP outfit)		
		Gauges (2 inc	ch /51 mm)					
Stock Number	Gas	Inlet	Outlet	Max. Delivery Pressure	Max. Inlet Pressure	Outlet Connection	Inlet Connection	
30-100-540	Oxygen	4,000 psig (276 bar)	150 psig (10 bar)	100 psig (7 bar)	3,000 psig (207 bar)	9/16"-18 RH "B"	CGA 540	
30-20-540	Oxygen	4,000 psig (276 bar)	30 psig (2 bar)	20 psig (1.4 bar)	3,000 psig (207 bar)	9/16"-18 RH "B"	CGA 540	
30-15-510	Acetylene	400 psig (28 bar)	30 psig (2 bar)	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH "B"	CGA 510	
30-15-300	Acetylene	400 psig (28 bar)	30 psig (2 bar)	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH "B"	CGA 300	
30-15-520	Acetylene	400 psig (28 bar)	30 psig (2 bar)	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH "B"	CGA 520	
30-15-200	Acetylene	400 psig (28 bar)	30 psig (2 bar)	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH "B"	CGA 200	
30-50-510	LP gas*	400 psig (28 bar)	60 psig (4 bar)	50 psig (3 bar)	400 psig (28 bar)	9/16"-18 LH "B"	CGA 510	
30-150-580	Argon/nitrogen	4,000 psig (276 bar)	200 psig (14 bar)	150 psig (10 bar)	3,000 psig (207 bar)	5/8"-18 RH internal	CGA 580	
30-150-320	Carbon dioxide	4,000 psig (276 bar)	200 psig (14 bar)	150 psig (10 bar)	3,000 psig (207 bar)	5/8"-18 RH internal	CGA 320	
30-100-350	Hydrogen/methane	4,000 psig (276 bar)	150 psig (10 bar)	100 psig (7 bar)	3,000 psig (207 bar)	9/16"-18 LH "B"	CGA 350	

*Propane, propylene or natural gas.

Note: Regulators are also sold in Twin Pack options. HTP2 includes 30-100-540 and 30-15-510. HTP5 includes 30-100-540 and 30-15-300.

Ordering Information

Outfits	Stock No.	Description	Qty.	Price
Medium-Duty Outfit	MBA-30510	With MC509 cutting attachment, WH100 handle, MC12-0 and MC12-1 cutting tips,		
Acetylene		MT603 heating tip, MW205 welding tip, 30-100-540 oxy regulator, 30-15-510 fuel regulator,		
		20 ft. (6.1 m) 3/16 in. (5 mm) "R"-grade hose, H743 torch-mount flashback arrestors, single-flint lighter, shade 5 safety glasses, and tip cleaner		
	MBA-30300	Same as MB55A-510, but with 30-15-300 fuel regulator		
Medium-Duty Outfit	MBA-30510LP	With MC509 cutting attachment, WH100 handle, MC40-1 cutting tip, MT805 heating tip.		
Propane		30-100-540 oxy regulator, 30-50-510 fuel regulator, 20 ft. (6.1 m) 1/4 in. (6 mm) "T"-grade hose,		
		H698 regulator-mount check valves, single-flint lighter, shade 5 safety glasses, and tip cleaner		
Replacement Parts				
O-ring Replacements	MW15	For MC500 series cutting attachments, MW welding tips and MT heating tips (25 per package)		
Torch Head Nut	G690-8	For MC500 series cutting attachments		
Cutting Assembly	MC101	For MC500 series cutting attachments. Seat assembly with o-rings, pin, packing, gasket and diaphragm		
Valve Assembly	LW17	For WH100. Valve assembly (pair)		
Accessories				
Flashback Arrestors	H743	Torch-mount flashback arrestors (pair)		
Check Valves	H697	Torch-mount reverse-flow check valves (pair)		
Twin-Hose	RL935	For acetylene. 20 ft. (6.1 m) "R"-grade twin-hose, 3/16 in. ID, "B" fittings		
	TRL1131	For propane/natural gas. 20 ft. (6.1 m) "R"-grade twin-hose, 1/4 in. ID, "B" fittings		
Cylinder Wrench	N230			
Adjustable Circle Cutting Guide	16229	Cuts from 5/8 to 12 in. diameter holes — works with all MC- and SC-style cutting tips		

Date:

Distributed by:

Total Quoted Price:

