

Owner's Manual



ABICOR BINZEL® Sales, Service and Technical Support

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ArcZone



@ArcZone

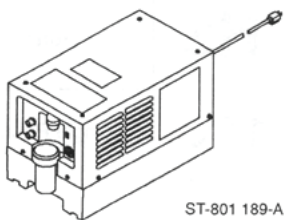


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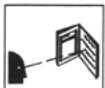






ArcZoneVideos

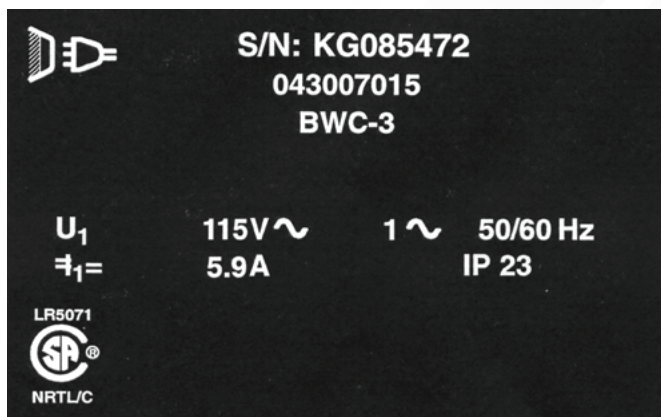
Specifications

 <p>ST-801 189-A</p>	Recirculating Coolant System For Water-Cooled GTAW Torches And GMAW Guns
	Use With Guns/Torches Rated Up To 600 Amperes
	IP Rating: 23
	3 gal (11.4 L) Coolant Tank Capacity; Maximum Cooling Capacity: 14,000 BTU/hr At 1.25 qVmin (1.2 Umin)
	Dimensions: 23 in (584 mm) Long, 12 in (305 mm) Wide, 13-1/4 in (337 mm) High Weight: 39 lb (18 kg)
	115 Volt Models Use 5.9 Amperes, 50/60 Hertz, Single-Phase Input Power 230 Volt Models Use 3 Amperes, 50/60 Hertz, Single-Phase Input Power








Safety Symbol Definitions

	<p>Means Warning! Watch Out! There are possible hazards with this procedure! The possible hazards are shown in the adjoining symbols.</p> <p>Symbole graphique d'avertissement! Attention! Cette procédure comporte des risques possibles! Les dangers éventuels sont représentés par les symboles graphiques joints.</p>		<p>Have only trained and qualified persons install, operate, or service this unit. Call your distributor if you do not understand the directions. For WELDING SAFETY and EMF information, read wire feeder and welding power source manuals.</p> <p>L'installation, l'exploitation et l'entretien de cet appareil doivent être confiés uniquement à des personnes qualifiées et convenablement formées. S'adresser à un distributeur si l'on ne comprend pas les directives. Pour des renseignements ayant trait à la SÉCURITÉ lors du soudage et aux champs électromagnétiques, consulter les manuels traitant les dévidoirs et les sources de courant pour le soudage.</p>
	<p>Beware of electric shock from wiring. Attention! Risque d'électrocution due au contact avec des fils.</p>		<p>Beware of moving parts. Attention! Pièces en mouvement.</p>
	<p>Wear safety glasses with side shields. Porter des lunettes de sécurité avec protections latérales.</p>		<p>Recycle or dispose of used coolant in an environmentally safe way. Recycler ou éliminer tout liquide de refroidissement utilisé conformément aux méthodes prescrites pour assurer la protection de l'environnement.</p>

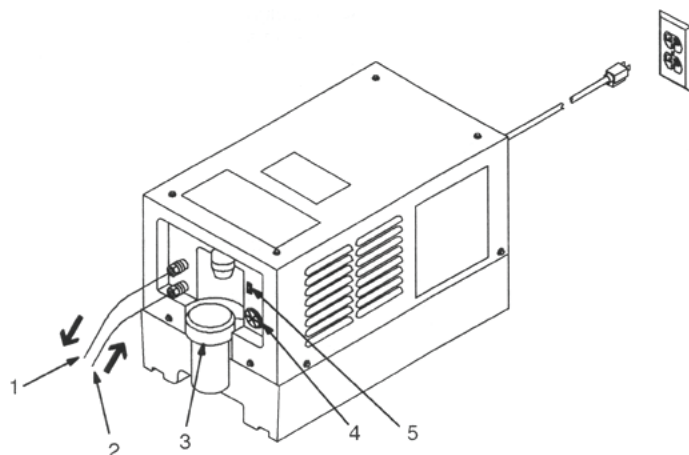
Rating Label



Symbols And Definitions

A	Amperes		Alternating Current		Voltage Input		Circulating Unit With Coolant Pump
V	Volts		Water (Coolant) Input		Water (Coolant) Output		Line Connection
	Protective Earth (Ground)	IP	Degree Of Protection	I₁	Primary Current	Hz	Hertz
I	On	O	Off	U₁	Primary Voltage	1 ~	Single Phase

Preparing Cooling Unit For Use



Tools Needed:

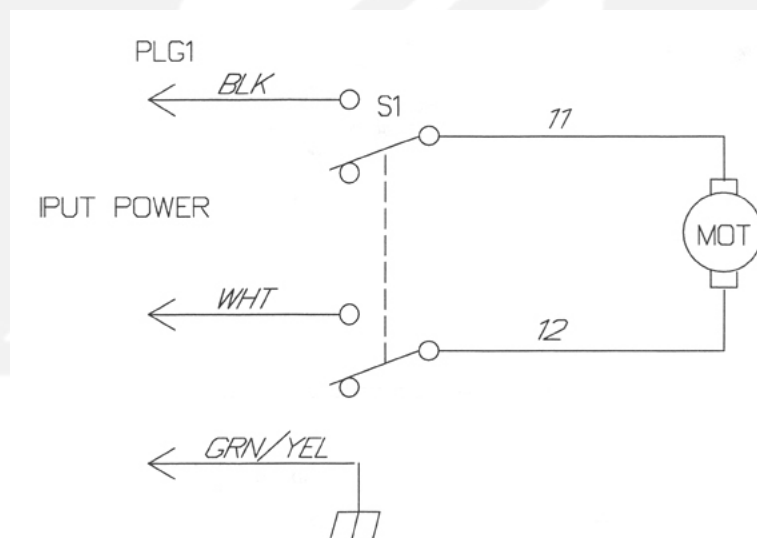
 5/8 in

1. Coolant Out Hose
2. Coolant In Hose
Fittings have 5/8-18 left-hand threads. Connect hoses with proper fittings as shown.
3. Coolant Tank Cap
Maintain coolant level at approximately 1 in (25 mm) below top of filler neck.
4. Flow Indicator
5. Power Switch

Troubleshooting







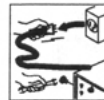

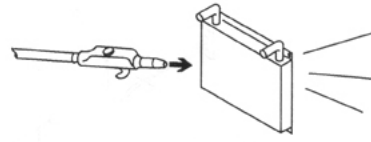

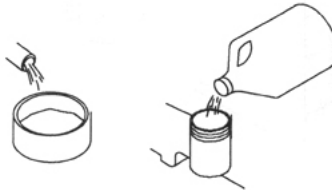

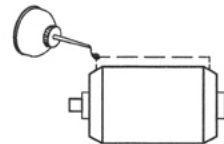
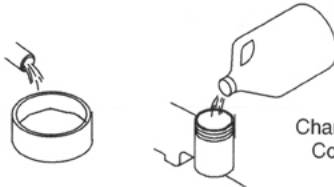


Trouble	Remedy
Coolant system does not work.	Be sure input power cord is plugged in to energized receptacle.
	Check line fuses or circuit breaker, and fuses F1, F2 if applicable, and replace or reset if necessary.
	Motor overheated. Unit starts running when motor has cooled.
	Have Factory Authorized Service Agent check Power switch S1 and motor Mot.
Decreased or no coolant flow.	Add coolant.
	Check for clogged hoses or coolant filter. Clean filter or clean / replace hoses if necessary.
	Disconnect pump, and check for sheared coupling. Replace coupling if necessary.

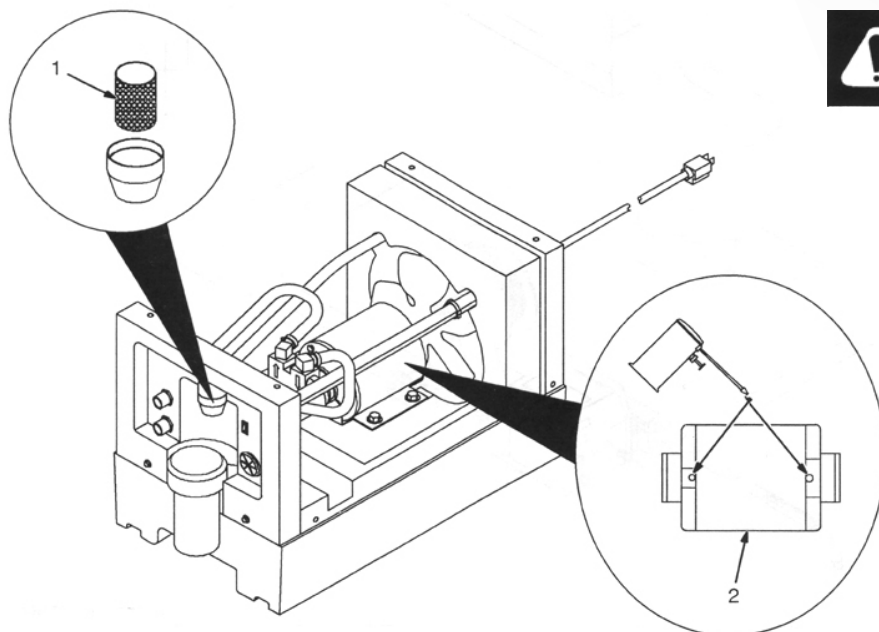


Circuit Diagram For 115 And 230 Volt

Routine Maintenance

       ▲ Disconnect power before maintaining.					
3 Months					
 ▲ Clean coolant strainer. Severe conditions may require more frequent cleaning (continuous use, high/low temperatures, dirty environment, etc.). Failure to properly clean coolant strainer voids pump warranty.			 Blow Out Heat Exchanger Fins		
6 Months					
 Replace Cracked Hoses	 Change Coolant (If Using Water)		 Replace Unreadable Labels		
12 Months					
 Oil Motor			 Change Coolant (If Using Commercial Coolant)		

Coolant Maintenance And Oiling Motor



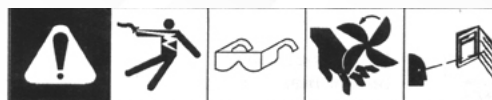
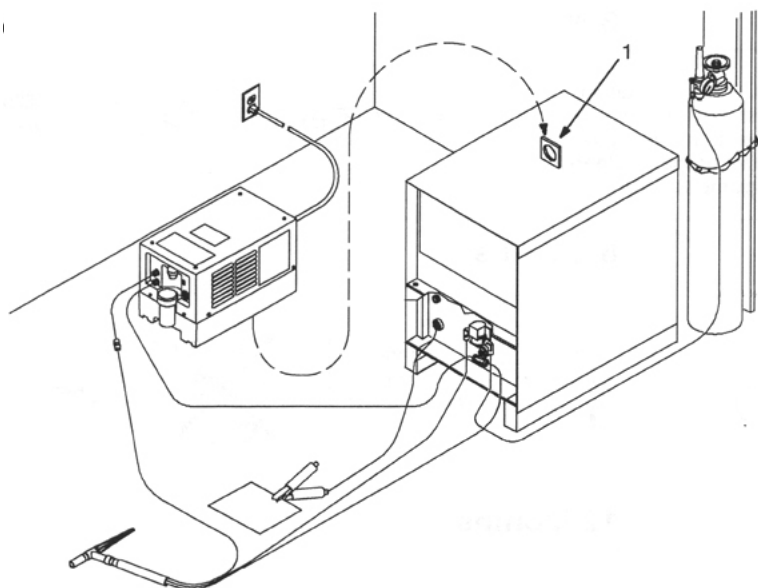
Tools Needed:



1. Coolant Filter
Unscrew housing to clean filter.
Changing coolant: Drain coolant by tipping unit forward. Fill with clean water and run for 10 minutes. Drain and refill.
2. Motor
Remove plugs and put about 15 drops of SAE 20 motor oil into each oil port. Replace plugs.

If replacing hoses, use hoses compatible with ethylene glycol, such as Buna-n, Neoprene, or Hypalon. NOTE: Oxy-acetylene hoses are not compatible with any product containing ethylene glycol.

Connections



GTAW Connections

1. Lift -Eye

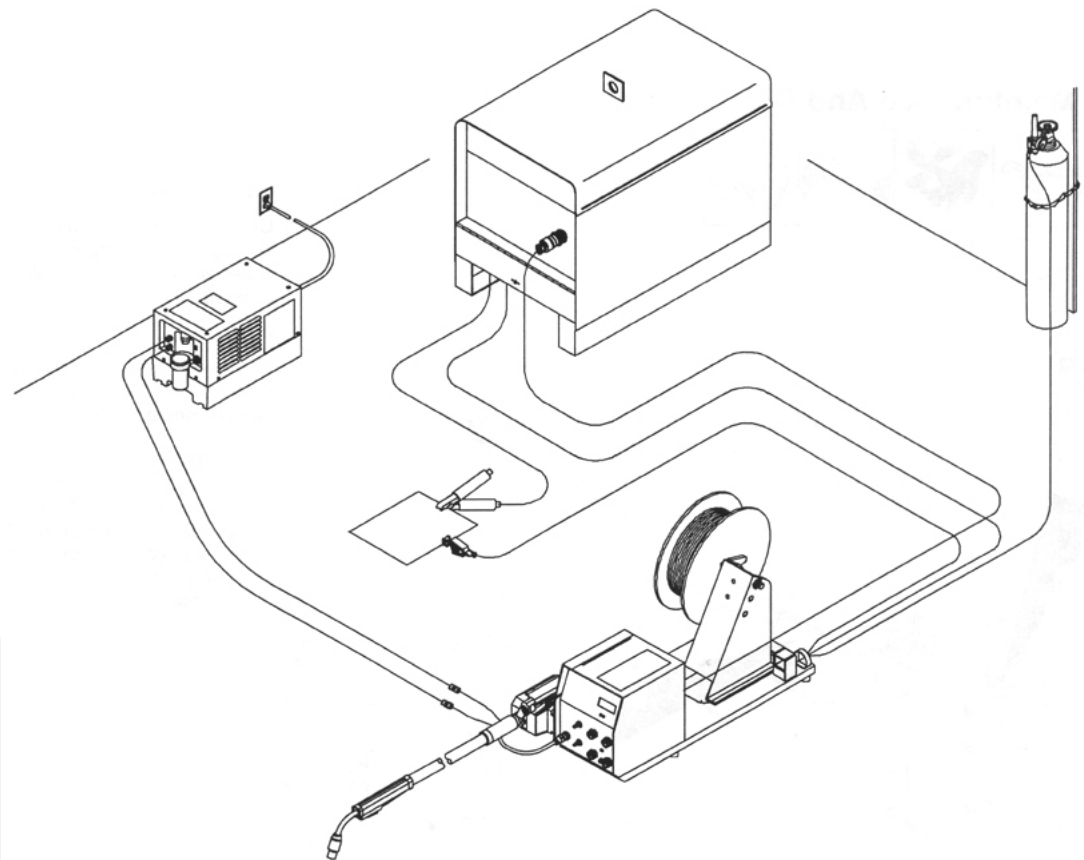
If placing cooling unit on welding power source, slots are provided in bottom of unit so it fits over lift-eye.

To prevent overheating, make sure cooling unit is positioned so airflow is not restricted.

If welding power source has a water valve, do not connect hoses to water valve. Connect hoses as shown.

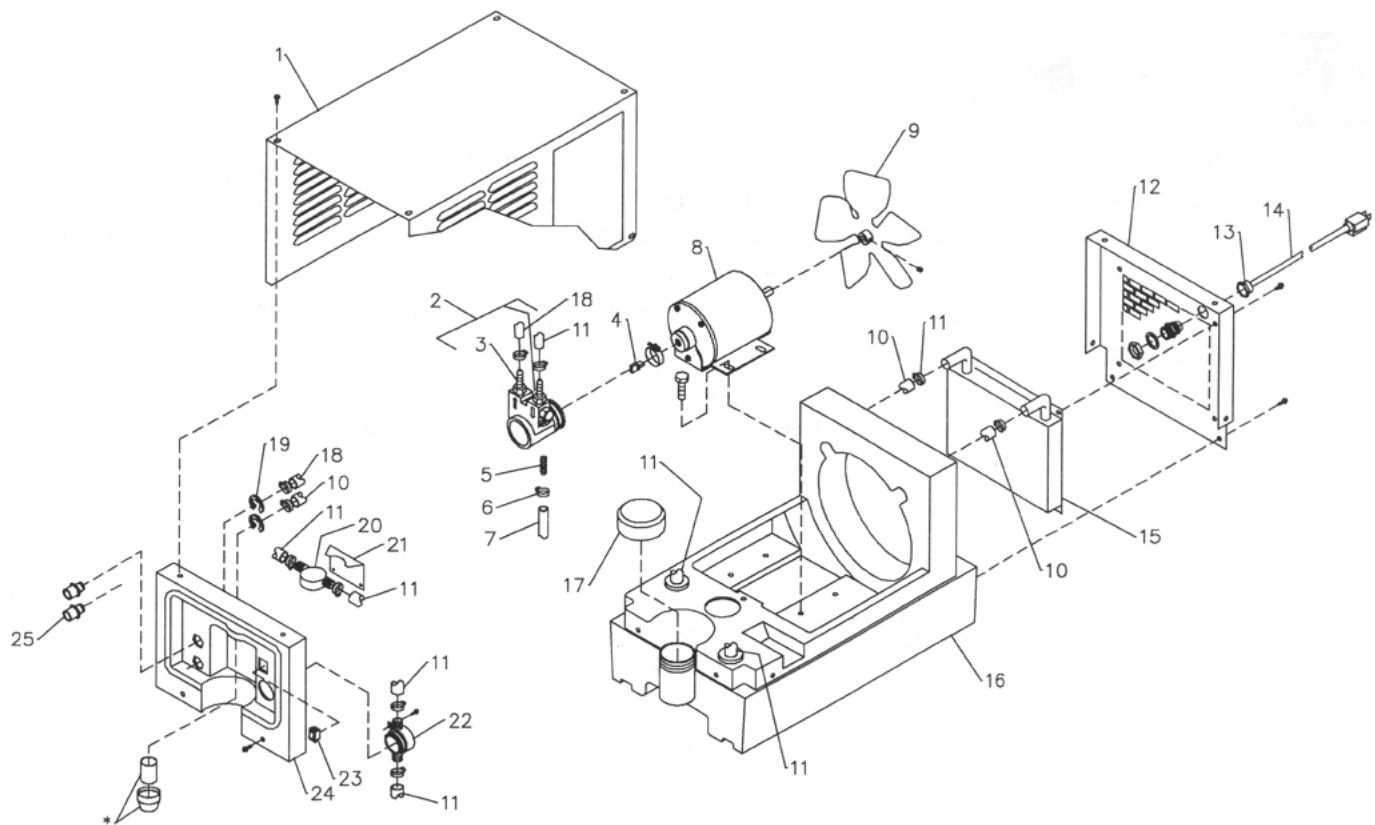
Operation:

Turn power switch On. Flow indicator spins to indicate that at least 0.53 qt/min (0.5 Umin) of coolant is flowing.



GMAW Connections

Parts List



Complete Assembly

* Included in Item 20

Item No	Dia Mkgs.	Part No.	Description	Quantity
1		BWC-001	Hood	1
2		BWC-002	Pump with Clamps, (consisting of)	1
3		BWC-003	- Hose Fitting, M 3/8 tbg x 3/8	2
4		BWC-004	- Drive Pump Coupler	1
5		BWC-005	- Hose Fitting	1
6		BWC-006	Hose Clamp, .375 - .450 clip	1
7		BWC-007	No. 1 Braided HOSE (1/4" ID)	1
8	MOT	BWC-008	MOTOR, 1/4hp 115VAC 50/60Hz (115V model)	1
8	MOT	BWC-026	MOTOR, 1/4hp 230VAC 50/60Hz (230V model)	1
9		BWC-009	Fan Blade, (setscrew included)	1
10		BWC-010	TUBING, 3/8" x 5/8" x 18"	2
11		BWC-011	CLAMP, .718 x .276 wide	10
12		BWC-012	Rear Panel	1
13		BWC-013	Strain Relief Bushing	1
14	PLG 1	BWC-014	10' Power Cable (115V model)	1
14	PLG 1	BWC-027	10' Power Cable, (230V model)	1
15		BWC-015	Radiator	1
16		BWC-016	Tank	1
17		BWC-017	Cap	1
18		BWC-018	No. 1 Hose, 3/8" ID x 10.50"	1
19		BWC-019	Ring Clip	2
20		BWC-020	In-line Filter	1
21		BWC-021	Filter Mounting Clip	1
22		BWC-022	Flow Indicator Assembly	1
23	S1	BWC-023	Rocker Switch	1
24		BWC-024	Front Panel	1
25		BWC-025	Fitting, 3/8tbg 5/8-18 Female	2

BE SURE TO PROVIDE MODEL AND SERIAL NUMBER WHEN ORDERING REPLACEMENT PARTS.