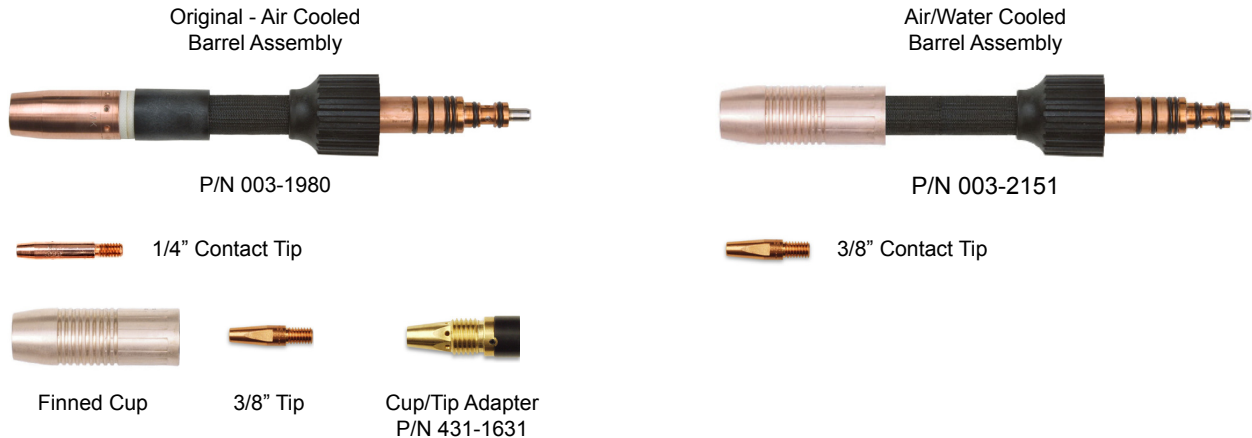




Product Information Bulletin

No. 0046 July 2002

Prince® XL Air Cooled Barrel Replacement



The Air- Cooled Prince® XL and the Prince® XL Spool Gun, Models 213-XXX & Models 216-XXX are being upgraded and will be assigned new Model Numbers, 313-XXX and 316-XXX.

The original straight Air-Cooled Barrel Assembly (P/N 003-1980) using 1/4" contact tips, which was standard on both torch Models, is being replaced with the higher rated Air/ Water Barrel Assembly, P/N 003-2151. The original Air-Cooled barrel had a rating of only 150 Amps at 100% Duty Cycle.

Major Benefits of the Air/Water Barrel:

- **200 Amp Rating** - 100% Duty Cycle Air Cooled using Argon.
- **3/8" Diameter Contact Tip Reduces Tip Changes** - A larger diameter tip with longer threads promotes better conductivity between tip and barrel, improving and prolonging tip life.
- **Finned Copper Gas Cups** - Designed to withstand higher temperatures while maintaining proper gas coverage. Greater wall thickness and machined fins improve cup life by dissipating heat faster.
- **With or Without Coolant** - When used on the Water-Cooled Prince® XL (Model 212-XXX), amperage rating of the Air/Water Barrel increases to 225 Amps at 100% Duty Cycle.
- **O-Rings, Insulators & Changing Tips** - The Air/Water Barrel and Finned Copper Cup combination eliminate the need for o-rings and insulators, while allowing contact tip changes without turning off the coolant re-circulator.

As the list of benefits for the Air/Water Barrel increases, some questions of compatibility arise with existing Prince® XL torches in the field. The 1/4" tips and the light duty cups will continue to be available as consumable items for the original Air-Cooled barrels. When existing stock of Air-Cooled barrels is depleted, only the Air/Water barrels will be available.

- **Original Barrel Parts Compatibility** - Use the Cup/Tip Adapter, P/N 431-1631 to use the 3/8" tips and the Finned Copper Cups on the original air-cooled barrel. A longer Teflon liner is required (P/N 931-0137).
- **Air/Water Barrel Parts** - Requires 3/8" diameter contact tips, Finned Copper Cups and a longer Teflon Liner (P/N 931-0137).



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Below is the list of 3/8" diameter Contact Tips, replacement Finned Cups and Teflon Barrel Liners as required for the A/W Barrels. Tips will continue to be packaged in quantities of 25, cups are sold individually and the liners are sold in a package of 5 pieces.

Contact Tips - 3/8" Diameter

For all Air/Water Barrels, CobraMAX™ and Water Cooled Python®,
Original Prince® XL Air Cooled and Cobra® Gold Torches using the Cup/Tip Adapter

<u>P/N</u>	<u>Wire Size</u>	<u>Tip ID</u>	<u>Arc Type</u>	<u>Tip Length</u>
621-0390	.030"(0.8mm)	.040"(1.0mm)	Spray	1-5/8"(41.3mm)
621-0396	.030"(0.8mm)	.040"(1.0mm)	Short	1-7/8"(47.6mm)
621-0391	.035"(0.9mm)	.044"(1.1mm)	Spray	1-5/8"(41.3mm)
621-0397	.035"(0.9mm)	.044"(1.1mm)	Short	1-7/8"(47.6mm)
621-0392	.045"(1.2mm)	.053"(1.35mm)	Spray	1-5/8"(41.3mm)
621-0398	.045"(1.2mm)	.053"(1.35mm)	Short	1-7/8"(47.6mm)
621-0393	.045" or .052"	.060"(1.5mm)	Spray	1-5/8"(41.3mm)
621-0399.	.045" or .052"	.060"(1.5mm)	Short	1-7/8"(47.6mm)
621-0394	1/16"(1.6mm)	.075"(1.9mm)	Spray	1-5/8"(41.3mm)
621-0400	1/16"(1.6mm)	.075"(1.9mm)	Short	1-7/8"(47.6mm)
621-0395	1/16"(1.6mm)	.085"(2.16mm)	Spray	1-5/8"(41.3mm)

Finned Copper Gas Cups for Air/Water Barrel

<u>P/N</u>	<u>Orifice Size</u>	<u>Heat Range†</u>
621-0248	#6, 3/8" (6.4mm)	Medium Heat
621-0249	#8, 1/2" (12.7mm)	Medium Heat
621-0250	#10, 5/8" (15.8mm)	Medium Heat
621-0251	#10 HD, 5/8" (15.8mm)	High Heat
621-0252	#12 HD, 3/4" (19.05mm)	High Heat

Torch Liners

<u>P/N</u>	<u>Description</u>	<u>Used On</u>
931-0137	Liner Pkg, 5 pcs.	Prince® XL, Python®, CobraMAX™

† Finned Copper Gas Cup Heat Rating Chart

Torch Front End Heat Rating Cobra® Gold, Prince® XL and Python®		
Low Heat Up To 150 Amps Contact Tips - 1/4" OD Standard Gas Cups	Medium Heat Up To 200 Amps Contact Tips - 3/8" OD Finned Cups	High Heat Up To 225 Amps Contact Tips - 3/8" OD Heavy Duty Finned Cups

Original Air-Cooled Prince® XL Barrels require Cup/Tip Adapter (P/N 431-1631) to use 3/8" Tips.
All ratings at 25VDC using argon gas.