# Hypertherm®

# ArcWriter® Roller Ball/Lifter Assembly

Field Installation Bulletin (P/N 802880)

Revision 3

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Hypertherm, Inc. Hanover, NH USA www.hypertherm.com

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### PURPOSE

This field bulletin provides the necessary information to install the roller ball/lifter assembly for use with the ArcWriter Plasma Marking System.

# **ROLLER BALL/LIFTER INSTALLATION KIT (128184)**

Part No.	<b>Description</b>	<u>Quantity</u>
129196	Assembly, Roller Ball/Lifter	1
027539	Slide, 4-inch Travel	1
027538	Roller Balls, Steel 15 mm Type 0	4
015310	Adapter, Flow Control 10-32 X 10-32	1
015308	Adapter, 10-32 X 5/32-inch Elbow	1
010586	Label, Protective Earth IEC 417-501	1
006105	Valve, Solenoid 120 VAC, 60 Hz	1
015309	Adapter, 1/8 NPT X 5/32-inch Hose	1
046111	Tubing, 5/32-inch O.D. Natural Nylon	2 ft.
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# **INSTALLATION PROCEDURE**

Install the roller ball/lifter assembly, by referring to Fig. 1 and proceeding as follows:



1. Mount the roller ball/lifter assembly at the lifter station using 1/4-inch mounting hardware. The six mounting holes are 0.281 inch (7 mm) in diameter.

- 2. Ensure the lifter assembly is grounded. (Good metal-to-metal contact with cutting table.)
- 3. Mount the solenoid valve at the lifter station or on the gantry. Wiring the valve should be done by a licensed electrician and according to national and local codes. Ensure good metal-to-metal contact exists between the valve and the mounting surface for a proper ground.
- 4. Attach the two feet of nylon tubing between the 1/8 NPT X 5/32-inch adapter CYL port on the solenoid valve and the elbow fitting on top of the roller ball/lifter assembly.
- 5. Supply regulated, compressed air at approximately 50 psig to the IN port on the solenoid valve. The maximum allowable air pressure is 100 psig. An air regulator (# 011023) and mounting bracket (# 001160) can be ordered from Hypertherm.

- 6. Energize the solenoid valve and the lifter will retract to the up position. De-energize the valve and the lifter will lower to the plate.
  - The speed of retract can be adjusted by raising (speed up) or lowering (slow down) the air pressure.
  - The speed of the lifter lowering to the plate is adjusted by the slotted screw on top of the rollerball/lifter assembly.

### TORCH MOUNTING PROCEDURE

Mount the torch by referring to Fig. 1 and proceeding as follows:

- 1. Loosen the knob, so that the bracket can swing open.
- 2. Place the torch into the bracket and tighten knob, so that the torch can still be positioned in the bracket.
- 3. Refer to the ArcWriter Instruction Manual IM-252, Section 4, *Operating Data Charts* to set the Torch-to-Work distance.
- 4. After setting the Torch-to-Work distance, tighten the knob to keep the torch in place.

#### **CHANGING ROLLER BALLS**

Change the roller balls by referring to Fig. 1 and proceeding as follows:

- 1. Punch out roller ball with punch and hammer.
- 2. Place new roller ball in hole. Using a 3/4-inch socket and rubber mallet, seat the roller ball until it is securely in place.



Figure 1 Roller Ball/Lifter Assembly