

**Hypertherm®**

**PAC121TS**

**Torch Lead  
Replacement**

**Field Service Bulletin**

**IM-266**

**(P/N 802660)**

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# Replacing the PAC121TS Lead

P/N: 129001 or 129002



## WARNING



**SHOCK HAZARD: Disconnect the old torch lead from the power supply before replacing with the new torch lead.**

1. Remove the 5 screws that secure the handle halves together and remove handles from the torch main body, torch switch and safety trigger.

The following drawings represent 4 variations of torches called PAC121T and PAC121TS with their distinguishing features. If your torch looks like Torch #1, you need replacement lead 129063 (15 ft/4.5 m), or 029549 (25 ft/7.5 m), or 029550 (50 ft/15 m). This instruction bulletin applies to torches 2, 3 and 4.

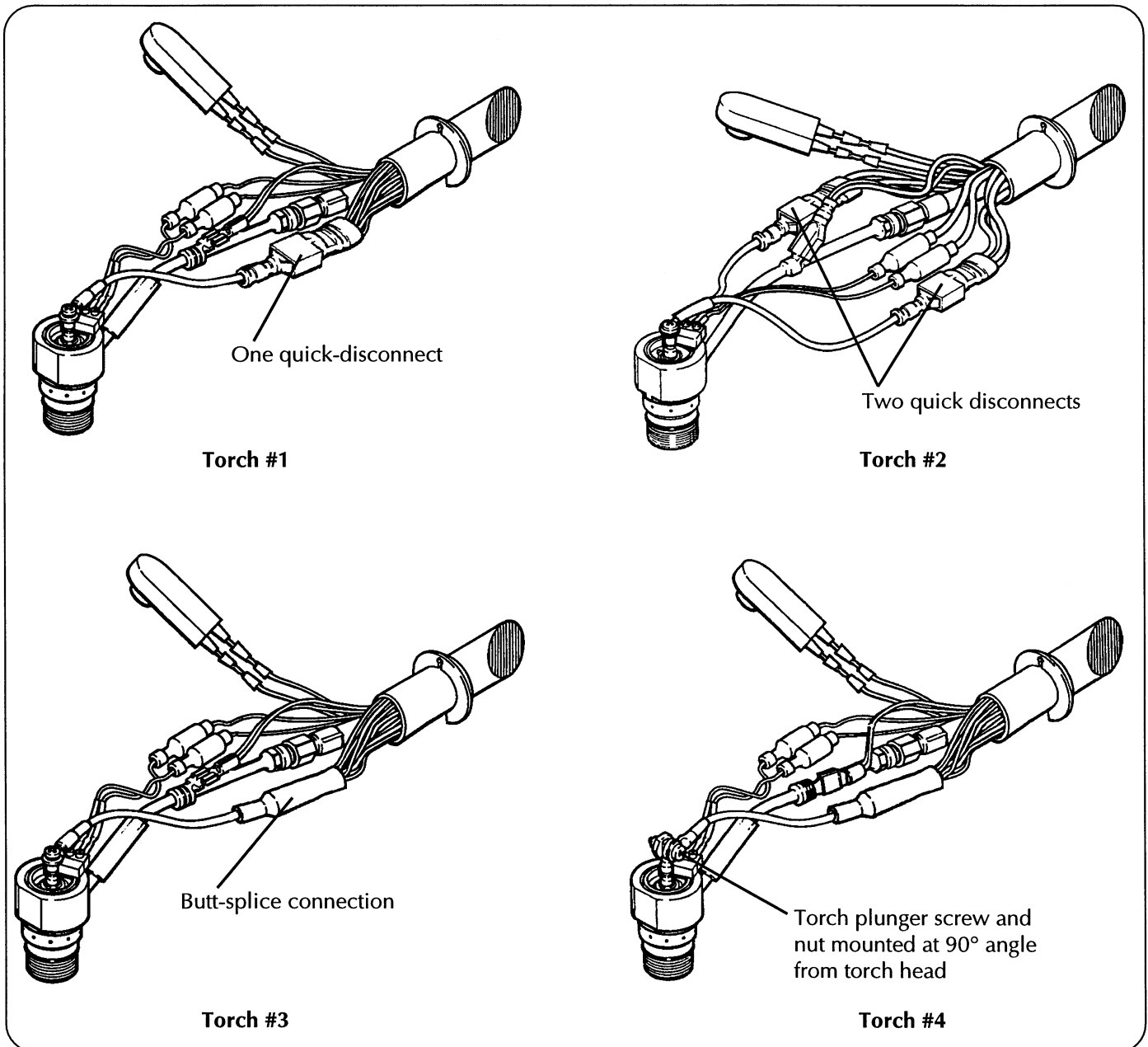


Figure 1 PAC121T and PAC121TS Torch Variations

## TORCH #2

### Torch Lead Removal and Replacement

Note: Disconnect wires by pulling on mating terminals. Do **not** pull on the wires.

#### Removal - Fig.2

1. Disconnect the red wires (2) attached to the pilot arc tab.
2. Disconnect the blue wires (2) from the cap sensor microswitch white wires (2).
3. Remove plunger screw from the torch main body and disconnect the black plunger wires (2). Note: Hold the plunger wire terminal with your fingers to keep the terminal and plunger from spinning as you turn the plunger screw.
4. Disconnect the torch main body and torch lead gas fittings using 5/16" (8mm) and 7/16" (11 mm) open-end wrenches.

#### Replacement - Fig.3

5. Connect the torch main body to the torch lead gas fitting using 5/16" (8mm) and 7/16" (11 mm) open-end wrenches.
6. Attach the red wire lead terminals to the pilot arc tab.
7. Connect the blue wires to the cap sensor microswitch white wires.
8. Remove the screw and nut from the replacement lead plunger wire. Screw the plunger wire lead into the torch main body using the screw that came with the replacement leads. Note: Hold the plunger wire terminal with your fingers to keep the terminal and plunger from spinning as you turn the plunger screw.
9. Install the torch main body and the torch switch back into the handle. Be certain that the torch switch slides into position above the safety trigger, and that trigger movement activates the switch pushbutton and then releases. While positioning the handle halves together, be careful not to pinch any wires.
10. Replace the 5 screws to secure the handle halves together.

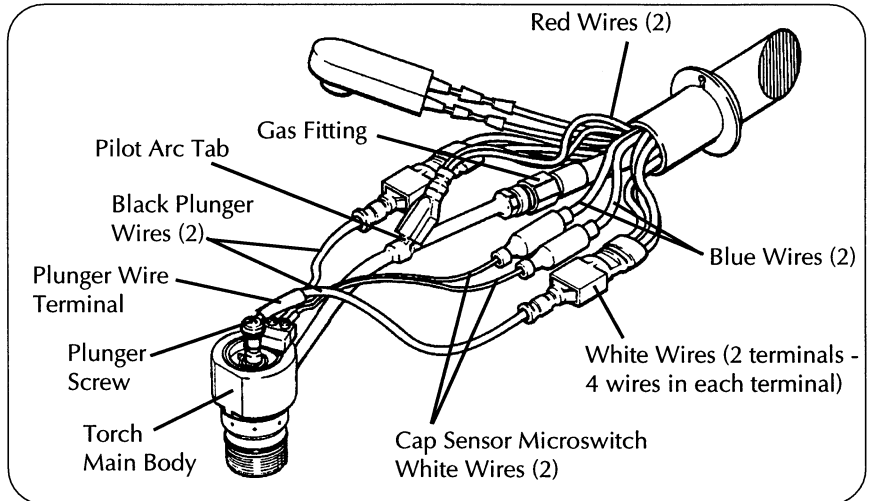


Figure 2 Torch #2 Torch Lead Removal

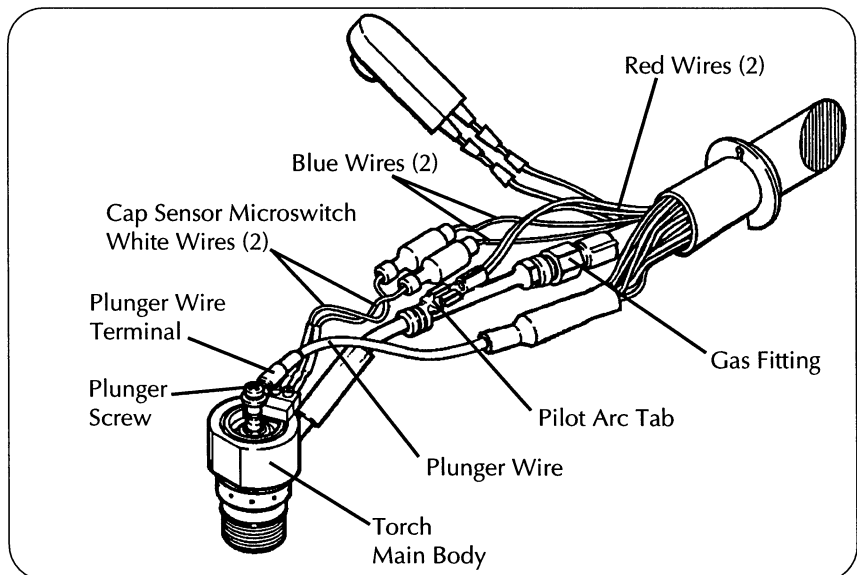


Figure 3 Torch #2 Torch Lead Replacement

## TORCH #3

### Torch Lead Removal and Replacement - Fig. 4

1. Disconnect the red wires (2) attached to the pilot arc tab.
2. Disconnect the blue wires (2) from the cap sensor microswitch white wires (2).
3. Disconnect the plunger wire from the torch main body by removing the plunger screw. Note: Hold the plunger wire terminal with your fingers to keep the terminal and plunger from spinning as you turn the plunger screw.
4. Disconnect the torch main body and torch lead gas fittings using 5/16" (8mm) and 7/16" (11 mm) open-end wrenches.
5. Replace the new torch leads by reversing instructions 1-4. Note: Screw the plunger wire lead into the torch main body using the screw that came with the replacement leads.
6. Install the torch main body and the torch switch back into the handle. Be certain that the torch switch slides into position above the safety trigger, and that trigger movement activates the switch pushbutton and then releases. While positioning the handle halves together, be careful not to pinch any wires.
7. Replace the 5 screws to secure the handle halves together.

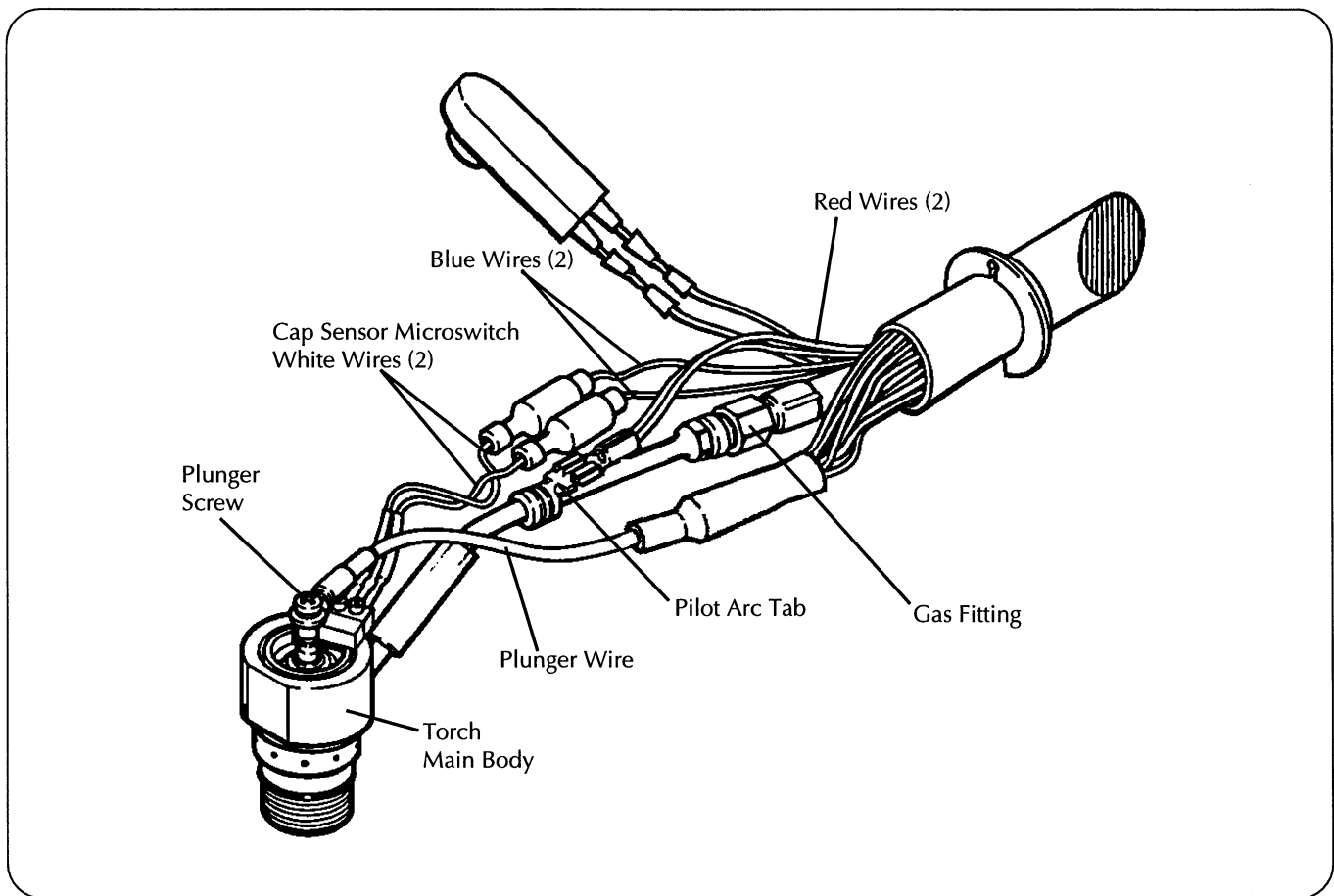


Figure 4 Torch #3 Lead Removal and Replacement

## TORCH #4

### Torch Lead Removal and Replacement - Fig. 5

1. Disconnect the red wires (2) attached to the pilot arc tab.
2. Disconnect the blue wires (2) from the cap sensor microswitch white wires (2).
3. Disconnect the plunger wire from the torch main body by removing the plunger screw. Note: Hold the plunger nut with a 1/4" nut driver or wrench when removing the screw.
4. Disconnect the torch main body and torch lead gas fittings using 5/16" (8mm) and 7/16" (11 mm) open-end wrenches.
5. Replace the new torch leads by reversing instructions 1-4.
6. Install the torch main body and the torch switch back into the handle. Be certain that the torch switch slides into position above the safety trigger, and that trigger movement activates the switch pushbutton and then releases. While positioning the handle halves together, be careful not to pinch any wires.
7. Replace the 5 screws to secure the handle halves together.

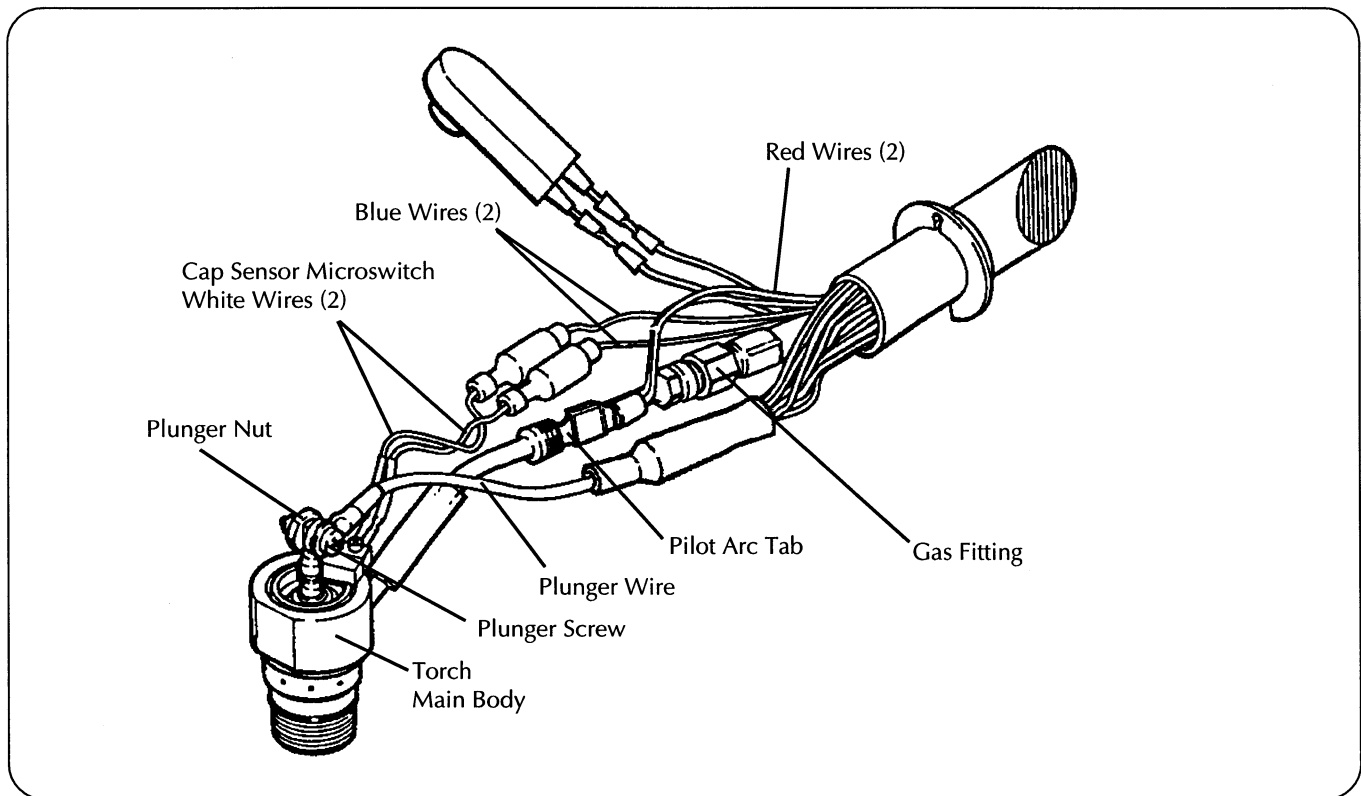


Figure 5 Torch #4 Lead Removal and Replacement

