The Harbour Freight 62204 plasma cutter uses an iPT40 plasma torch that can be replaced. This guide shows how to upgrade or replace your plasma torch to a PlasmaDyn iPT60 Plasma Torch.

This Upgrade allows for the same consumables yet provides a torch with a higher current capacity that can restore your machine to factory performance yet with higher reliability.
Be sure to remove power from the unit, and allow it to sit for 30 minutes.

Dangerous voltages exist that can injure or even kill.

1. Remove retaining screws on shroud and plastic nut on air regulator knob, then remove cover.
2. Loosen torch strain relief on both the inside and outside of the torch, do not remove the torch.
3. Unhook the 3 control wires from side of board, be mindful of the wire size – the two smaller wires are Trigger On/Off, the other thicker wire is Pilot Arc Wire. DO NOT switch these wires as you will damage your machine. Note: wire color may vary.

4. Cut retaining zip tie from leads and carefully unscrew power lead from board. Note that board connection bolt goes through board and may fall out.
5. Clip the zip tie behind the strain relief, remove strain relief nut and unhook air connection. Install the strain relief on the new torch
6. Reinstall in reverse order. Leave plenty of length of wire and hose and zip tie extra length

7. Be sure you install the strain relief nut before connecting the wires to the PCB

8. You may need to trim some off air hose and crimp a ring terminal onto main power wire (Thickest Wire). Do not over tighten PCB screws to board it may crack.

9. Its suggested to tuck wires into housing and securing leads with zip ties.

10. All original consumables fit the new head which is awesome. A top notch upgrade.