Chapter 12: H.O.T getting shorted after replacement

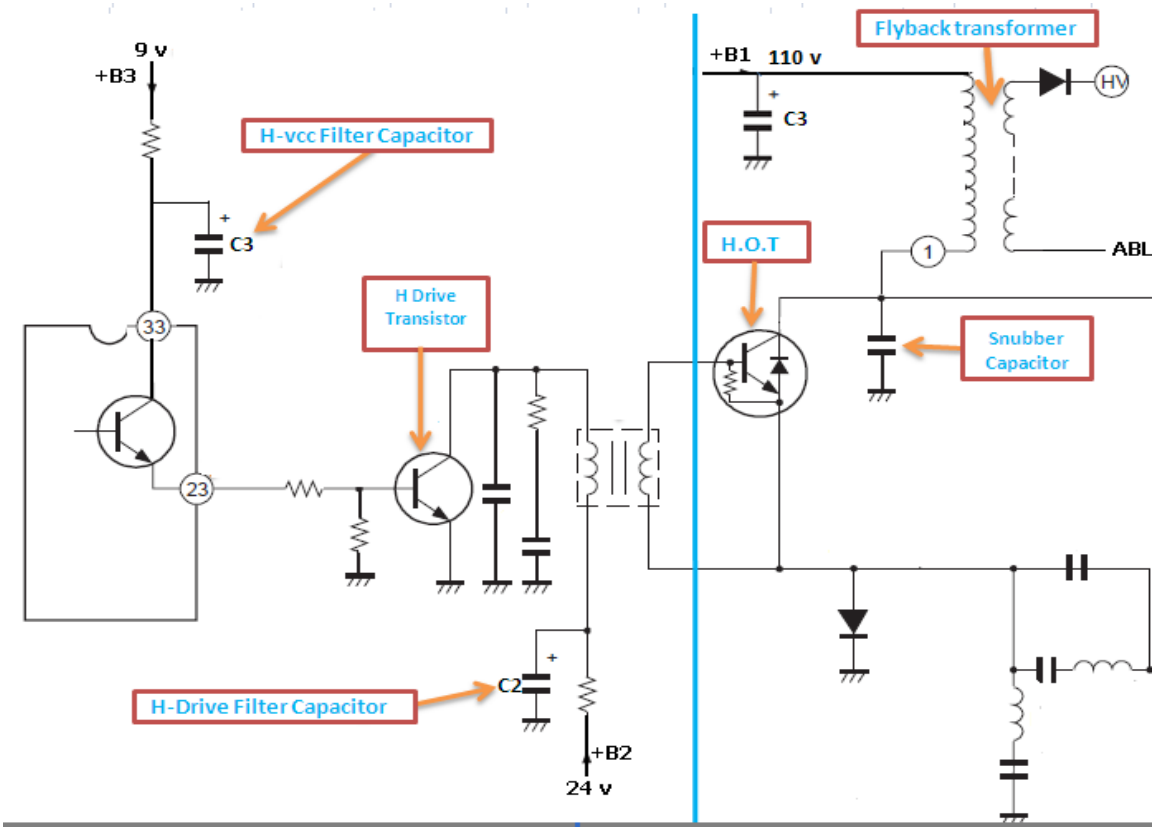
This is a common phenomenon with HOT whereby a customer brings in a Television and after checking it find out the Horizontal output transistor (H.O.T) is shorted.

Naturally you replace the shorted transistor with a new one and you power on the Television and it come up beautifully and before you begin to celebrate the television goes down again(stop working)

You open the set and after checking the health of the same component (H.O.T) you find alas it is shorted again.

This problem of H.O.T getting shorted immediately or after some times of replacement has given many technician sleepless nights trying to figure out what is happening here!!

In the lesson I am going to give you some tips on what to do to prevent the H.O.T getting shorted after replacement.



To minimize the chances of the HOT getting shorted please make it an practice to change the following components directly every time you do H.O.T replacement.

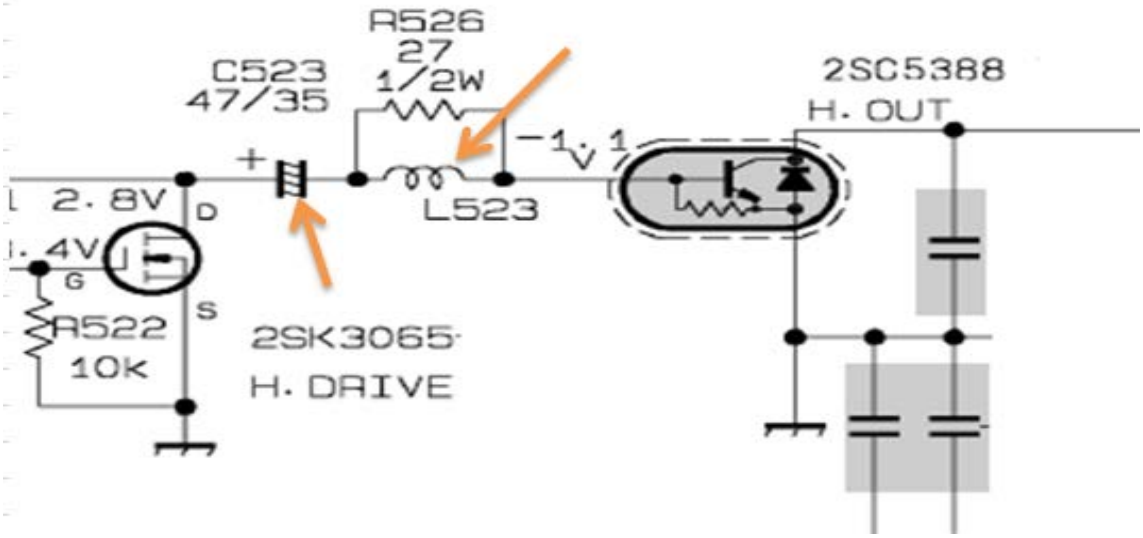
High on the list is the snubber capacitor, this is also called the safety capacitor and sometime it may of open, short or change its capacitance value and this always have effect on the H.O.T.

Next are the dry joints around the horizontal drive and output components, please make it a practice to do re soldering around these components including the fly back pins every time you find the HOT shorted.

The drive transistor should be replaced directly without even measuring it, sometimes it develop some leakage and hence cause the H.O.T to short after a period of time.

Also be sure to check the esr of the filter capacitors involved in filtering the horizontal circuits and if you suspect any just directly replace that capacitor.

In some television like the JVC they incorporate some component path to the base to the HOT (Capacitor and choke) please be sure to replace them directly….see diagram below.



If still the H.O.T is getting shorted then finally you may have to change the fly back transformer or the horizontal oscillator is messed up and need replacement.