

TEKBILT POWER SUPPLIES Models 30820 & 30920 Repair Information

GENERAL INFORMATION

Tekbilt screw terminal switching regulator power supplies were sold in two versions. One had a simple “red only” LED power on indicator and the other version had a two color LED indicator. Model 30820 provides 12 amps @ 5 volts while model 30920 provides 15 amps @ 5 volts. Tekbilt power supplies were actually rebranded Mean Well (www.meanwell.com) brand power supplies. The Tekbilt models with a plain red LED are equivalent to Mean Well type # MWP-602 (stock # 21001). The Tekbilt models with a 2 color LED are equivalent to Mean Well type # MWP-602A (stock # 21002).

Tekbilt had nice shiny chrome cases on their power supplies while Mean Well paints their power supply cases flat black.

MOST TROUBLESOME PARTS

Here is a listing of the most troublesome parts you will encounter with these power supplies.

Resistors:

R4 and R8 (270 k, ½ watt) These cause intermittent or no operation. R1 & R2 (150 k, ½ watt) These cause the main filter capacitors to remain fully charged after power off!

Electrolytic capacitors:

C23 Radial Lead, 2200 uf @ 10 volts
C24 Radial Lead, 1000 uf @ 16 volts
C25 Radial Lead, 1000 uf @ 16 volts
C26 Radial Lead, 470 uf @ 16 volts
C5 Snap Mount, 220 uf @ 200 volts (main raw DC filter)
C6 Snap Mount, 220 uf @ 200 volts (main raw DC filter)
C11 Radial Lead, 4.7 uf @ 50 volts
C13 Radial Lead, 1 uf @ 50 volts
C17 Radial Lead, 2.2 uf @ 50 volts
C18 Radial Lead, 22 uf @ 50 volts
C9 Radial Lead, 4.7 uf @ 50 volts
C29 Radial Lead, 47 uf @ 50 volts
C22 Radial Lead, 1 uf @ 50 volts

Transistors:

Q1 and Q2 Type 2SC3039 or 2SC4106 or NTE 379

Diodes:

D19 Dual Diode Type CTB-34 or SBL1640PT or NTE 6090

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BD1 Bridge Rectifier, PB205M or 2W04, or NTE 5304
D21 and D22 Type FR302

Fuse:

Type 5mm x 20mm, 3 amp, 250 volts

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