

MOTOR SPEED CONTROL PARTS LIST

Ref	PART NO.	DESCRIPTION	Manufacturer	QTY
MAIN PCB				
SEMI-CONDUCTORS				
BRG1	RS402LDI-ND	Bridge rectifier, 100V / 4A		1
D1	1N4004DICT-ND	1N4004, Rectifier Diode, 1A, 400V		1
D2	1N4936	Diode, Fast Recovery, 1A, 400V, DO-41		1
IC1	497-1382-5-ND	IC, L200C, Volt & Cur. Regulator		1
IC2,4	OPA2277PA-ND	IC DUAL PRECISION OPAMP		2
IC3	296-12732-5-ND	IC REF02, +5V VOLTAGE REFERENCE		1
Q1,6,7	512-BC557	Trans. BC557, PNP, -45V, 100ma		3
Q2	511-BD140	Trans. BD140, PNP, -80V, 1.5A		1
Q3,4	512-BC337	Trans. BC337, NPN, 45V, 0.8A		2
Q5	512-BC547	Trans. BC547, NPN, -45V, 100ma		1
Q8	511-BD139	Trans. BD139, NPN, 80V, 1.5A		1
CAPACITORS				
C1	P5555-ND	Cap. 1000uF, 35V, Panasonic NHG		1
C5,6	P11253-ND	Cap. 1000uF, 16V, Panasonic FC		2
C2,3	505mkp20.22/250/5	Cap. 220nF, Wima MKP 250V		1
C4	505mkp20.33/250/5	Cap. 330nF, Wima MKP 250V		1
C7-10	P10274-ND	Cap. 470uF, 16V, Panasonic FC		4
C11-13,15	505mkp20.1/100/5	Cap. 100nF, Wima MKP 100V		4
C14	5982-15500V100	Cap. 100pF, CDE Mica x15		1
C16	P5556-ND	Cap. 1000uF, 35V, Panasonic NHG		1
RESISTORS - 1/4W, 1% (Otherwise Noted)				
R1	P750CACT-ND	Res. 750R	Panasonic	1
R2		Res. 3K01	Panasonic	1
R3	71-RS1A-0.75	Res. 0R75, 1W, 1%, RS1A1 Wirewound	Dale	1
R4	71-RS01A4R000FE12	Res. 4R0, 1W, 1%, RS1A1 Wirewound	Dale	1
R5,10,12,14		Res. 4K75	Panasonic	4
R6		Res. 4R99, (2 X 10R)	Panasonic	1
R7		Res. 49R9	Panasonic	1
R8,9		Res. 100R	Panasonic	2
R11,13,19,21,22		Res. 1K	Panasonic	5
R15		Res. 475R	Panasonic	1
R16		Res. 681R, RN60D, 1/8W, 1%	Dale	1
R17,18,20		Res. 10K	Panasonic	3
R23		Res. 475K	Panasonic	1
R24	Not Used	Res. Select, Depends on Motor Current	Panasonic	1
R25,32		Res. 2K49	Panasonic	2
R26,31		Res. 4K75	Panasonic	2
R27,30		Res. 10K	Panasonic	2
R28,29		Res. 20K	Panasonic	2
R33,34		Res. Select, Install socket pins	Panasonic	2
POTENTIOMETERS & SWITCHES				
VR1	M64W503KB40	Pot. 50K, 3.8", Vertical, Linear, 25T	Spectrol	1
VR2,3	3006P-502LF-ND	Pot. 5K, 3/4" Horizontal, 25T	Bourns	2
VR4,5	91A1A-B24-B13-ND	Pot. 5K, 12mm,1T, 500mW, Cond Plastic	Bourns	2
SW1	7205MD9AV2BE	Switch, DPDT, On-On Vert-Right Angle	C&K	1
SW2,3	7101SD9AV2BE	Switch, SPDT, On-On Vert-Right Angle	C&K	2
SW4,5	CT2068-ND	8 DIP sw.,206 series,top slide	CTS	1
SW & Led Battery Status Indicator				
R51,54,55		Res. 1K, MF, 1%	Panasonic	3
R52		Res. 330, MF, 1%	Panasonic	1
R53		Res. 2K21, MF, 1%	Panasonic	1
R56		Res. 47K5, MF, 1%	Panasonic	1
D51		1N5237B, Zener Diode, 8.2V, 1/2W		1
D52,58	1N4148-TP	1N4148, Small Signal Diode		2
D53,57	Not Used	1N4148, Small Signal Diode		2
D54		Led, Green		1
D55		1N4731B, Zener Diode, 4.3V, 1W		1
D56		1N4741B, Zener Diode, 11V, 1W		1
D59		Led, Yellow		1
D60		1N5245B, Zener Diode, 15V, 1/2W		1
D61		Led, Red		1
D62	67-1748-ND	LED - Blue T1(3MM) POWER Indicator		1
X51	A19433-ND	Conn. 8 pins, 0.100,MTA, polarized, Male	AMP	1
Mating Conn.	A30998-ND	Conn. 8 pins, 0.100,MTA, Receptacle Fem.	AMP	1
HARDWARE & MISC				
TRANSFORMERS				
T1	TE70033-ND	Transformer, Output: 15VAC Serie @ 0.466A		1
CONNECTORS				
J2	25-732-0	Conn. Mike 2 pins connector, Panel Mount	Mode	1
J2a	25-722-0	Conn. Mike 2 pins Male (For cable)	Mode	1
J3	Q210-ND	AC Input Conn.		1
X1L,N		Stack-On, PCB mount connector		2
X2,3	281-1421-ND	Conn. 2 pins, Screw Terminal, 5MM	Weidmuller	2
FUSES & etc.				
Fuse Socket	520101	5x20mm PCB mount fuseholder	Digikey	2
F1,2	F2416-ND	0.5A, 250V IEC SLO 5X20MM (GDC 500ma)		3
HARDWARE & MISC				
BATT, Choice 1	LC-R122R2P	Battery, Sealed, Lead-Acid, 12V 2.2AH	Panasonic	0
BATT, Choice 2	LC-R123R4P	Battery, Sealed, Lead-Acid, 12V 3.4AH	Panasonic	0
JP2		Header, 3 pins, plus jumper		1
	BER110-ND	HEATPAD TO-220 .009" SP600		2
	BER120-ND	HEATPAD TO-247 .009" SP600		1
	ED58083-ND	IC Socket, DIP8, gold plated		3
Case	1455T2201	Hammond Alu. (L8.66" X W6.50" X H2.03")		0