

### MECH307 Kit Components

Component Description	Value	Qty in Kit	Key on Device
<b>RESISTOR</b> , CARBON FILM, <b>10 OHM</b> , 1/4 WATT, 5%	10 OHM	1	brown, black, black, gold
<b>RESISTOR</b> , CARBON FILM, <b>100 OHM</b> , 1/4 WATT, 5%	100 OHM	2	brown, black, brown, gold
<b>RESISTOR</b> , CARBON FILM, <b>330 OHM</b> , 1/4 WATT, 5%	330 OHM	1	orange, orange, brown, gold
<b>RESISTOR NET</b> , 16PIN, <b>330 OHM</b> , 250mW, ISOLATED	330 OHM	1	MDP1603 331G
<b>RESISTOR</b> , CARBON FILM, <b>1K OHM</b> , 1/4 WATT, 5%	1K OHM	4	brown, black, red, gold
<b>RESISTOR</b> , CARBON FILM, <b>2K OHM</b> , 1/4 WATT, 5%	2K OHM	1	red, black, red, gold
<b>RESISTOR</b> , CARBON FILM, <b>3K OHM</b> , 1/4 WATT, 5%	3K OHM	1	orange, black, red, gold
<b>RESISTOR</b> , CARBON FILM, <b>10K OHM</b> , 1/4 WATT, 5%	10K OHM	4	brown, black, orange, gold
<b>RESISTOR</b> , CARBON FILM, <b>100K OHM</b> , 1/4 WATT, 5%	100K OHM	1	brown, black, yellow, gold
<b>RESISTOR</b> , CARBON FILM, <b>1.0M OHM</b> , 1/4 WATT, 5%	1M OHM	2	brown, black, green, gold
<b>RESISTOR</b> , CARBON FILM, <b>4.7M OHM</b> , 1/4 WATT, 5%	4.7M OHM	2	yellow, violet, green, gold
<b>RESISTOR</b> , CARBON FILM, <b>10M OHM</b> , 1/4 WATT, 5%	10M OHM	1	brown, black, blue, gold
<b>CAPACITOR</b> , CERAMIC DISC, <b>0.022uF</b> , 50 VOLT, 20%	0.022uF	1	223z
<b>CAPACITOR</b> , CERAMIC DISC, <b>0.1uF</b> , 25 VOLT, 20%	0.1 uF	3	104z
<b>CAPACITOR</b> , MONOLITHIC, <b>1uF</b> , 50 VOLT, 20%	1.0uF	1	105 c5m, 001 rdv
<b>DIODE</b> , SWITCHING, <b>IN914</b> , 100 VOLT, 2 PIN, DO-35		1	
<b>LED</b> , UNI-COLOR, <b>RED 697 nm</b> , 2-PIN, T-1 3/4		3	
<b>LED</b> , UNI-COLOR, <b>GREEN 565 nm</b> , 2-PIN, T-1 3/4		1	
<b>TRANSISTOR</b> , <b>2N3904</b> , NPN, GP(10), TO-92		1	2N 3904 M023
<b>TRANSISTOR</b> , <b>TIP31C</b> , BJT, NPN, 100 VOLT, 3A, 3-PIN (3+Tab), TO-220		1	TIP31C
<b>TRANSISTOR</b> , <b>PN2222BU</b> , BJT, NPN, 30 VOLT, 0.6A, 3-PIN, TO-92		1	715 PN 2222A
<b>DIODE</b> , SILICON RECTIFIER, <b>IN4001</b> , 50 VOLT, 1 AMP		1	
<b>PHOTOINTERRUPTER</b> , TRANSMISSIVE, 3.3mm, PHOTOTRANSISTOR, 4-PIN RAIL		1	I203, H21A
<b>OP AMP</b> , <b>SINGLE 741</b> , GENERAL PURPOSE, ±18V, 8-Pin, MDIP RAIL		1	LM741CN or UA741CP
<b>QUAD 2-INPUT POSITIVE AND GATE DIP-14</b> , <b>74LS08</b>		1	74LS08
<b>DUAL D-TYPE FLIP-FLOP DIP-14</b> , <b>74LS74</b>		1	74LS74
<b>4-BIT BISTABLE LATCH DIP-16</b> , <b>74LS75</b>		1	74LS75
<b>SWITCH</b> , PUSH BUTTON, OFF (ON), SINGLE POLE, SINGLE THROW, ROUND PLUNGER, 0.5A, 125VAC, MOMENTARY CONTACT, PC PINS, PANEL MOUNT/THROUGH HOLE		3	
<b>STANDARD TIMER</b> , SINGLE 8-PIN, MDIP RAIL		1	EA27 LM 555CN
<b>ASYNCHRONOUS DECADE COUNTER</b> , <b>74LS90</b> , DIP-14		1	74LS90
<b>BCD-TO-7 SEGMENT. DECODER/DRIVER</b> , <b>74LS47</b> , DIP-16		1	74LS47A
<b>DISPLAY</b> , 7-SEGMENT, COMMON ANODE, RED, 2 DIGITS, 697nm, RIGHT HAND DECIMAL POINT (RHDP), 2.1Vof20mA, 0.8mcd, 20mA		1	24715
<b>MCU 8-BIT PIC16 RISC</b> , <b>PIC16F88-I/P</b> , 7KB FLASH, 5 VOLT, 18-PIN, PLASTIC DIP TUBE		1	PIC-16F88
<b>TRANSISTOR</b> , <b>IRF620 MOSFET</b> , N-CHANNEL, 200V, TO-220		1	IRF620
<b>BREADBOARD</b> , 6.5 x2.125 ,830pnts		1	
<b>WIRE STRIPPER</b> , 20-30AWG, CUTTER CLAMP, WIRE LOOP		1	
<b>IC EXTRACTOR</b> , DIP		1	