Push Button Motor Control

Bill of Materials

Item	Part	Description	Value
1	R01	¼ W Resistor	10 kΩ
2	R02	¼ W Resistor	330 Ω
3	R03	¼ W Resistor	330 Ω
4	C01	Mylar Capacitor	10 nF
5	SW01	SPST Push Button	Normally Open (NO)
6	IC01	SN74ACT!4	Hex Schmidt Trigger
7	IC02	SN74LS112	Dual JK Flip Flop
8	IC03	SN7406	Hex Inverter Buffer
9	D01	LED	
10	D02	LED	

Sources

Supplier	Location	Web	Comment	Shipping
Sayal Electronics	Greater Toronto Area	https://secure.sayal.com/STORE4/index.php	Good source for small quantities. Limited stock	Free on orders over $50
DigiKey	On-Line	https://www.digikey.ca/	Massive Inventory	Free on orders over $100
Component Electronics	Mississauga	https://www.componentonline.com/	Excellent Inventory	Free on orders over $100

Notes

1. The protoboard was ordered on Amazon
2. Princess Auto Electric may or may not have suitable motors, but these are available on Amazon, or through the suppliers listed in the sources
3. TTL IC's are usually numbered SNXXYYYY####. XX is either 54 or 74. 54 refers to military grade IC's 74 is commercial grade, and is normally what is available at electronics store. YYYY refers to the internal design of the IC. You may see LS, AC, ACT, AHCT, ALS, AS, or F. The different designs influence the performance of the IC, including power consumption. For hobbyists, it is not a concern. #### is the IC's function. All chips with the same #### have the same functional description and pin connections.