



**Parts List**

Part	Supplier	Part#	Description
Key Switch	JAMECO.COM	105381CJ	Round Keylock Switch
Push Button	Radio Shack	275-609	Momentary Switch, 2 in pkg.
Lamp	Radio Shack	272-1110	6.3 Volt Bayonet Incandescent
Lamp Holder	Radio Shack	272-325	Bayonet lamp holder
Launch Wire	Radio Shack	278-1116	16 gauge speaker wire, white
Other Wire	Radio Shack	278-1223	18 gauge hook-up wire
Project Box	Radio Shack	270-1805	6"x3"2" plastic box
Micro Clips	Radio Shack	270-373	Copper, micro-clips
Battery	Radio Shack	23-016	Lantern battery, 6 Volt
Alligator Clips	Radio Shack	270-375	2-1/4" alligator clip 2 red,2 black

**Project Notes**

- 1.) Use Alligator clips on battery wires to connect battery.
- 2.) Use micro clips (lighter weight) on launch wire to connect to rocket igniter.
- 3.) Recommended to solder switches and lamp holder wires.
- 4.) Mount switches and lamp holder on the cover of a project box (drill holes).
- 5.) Label switches SAFETY, READY, FIRE
- 5.) See Rocket Launcher pamphlet available at extension office for more details.

**Theory of Operation:** Key switch is designed to be a safety. Always disarm the launcher by removing the key when working on your rocket at the launch pad. Once the igniter is connected next connect the battery. Place key into switch and rotate ON, now press the READY push button and electricity will flow from the battery through the key switch, through the READY switch, through the lamp, and through the igniter back to the battery. Lamp and igniter are in series. The lamp should be lit indicating the igniter and your wiring is good (continuity). What happens next when you press the FIRE button the lamp will be short circuited and all the battery power is now at the igniter which burns and ignites your engine.

Model Rocket Launcher Design II