ESTES INDUSTRIES
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E2X SERIES

ALMOST READY TO FLY

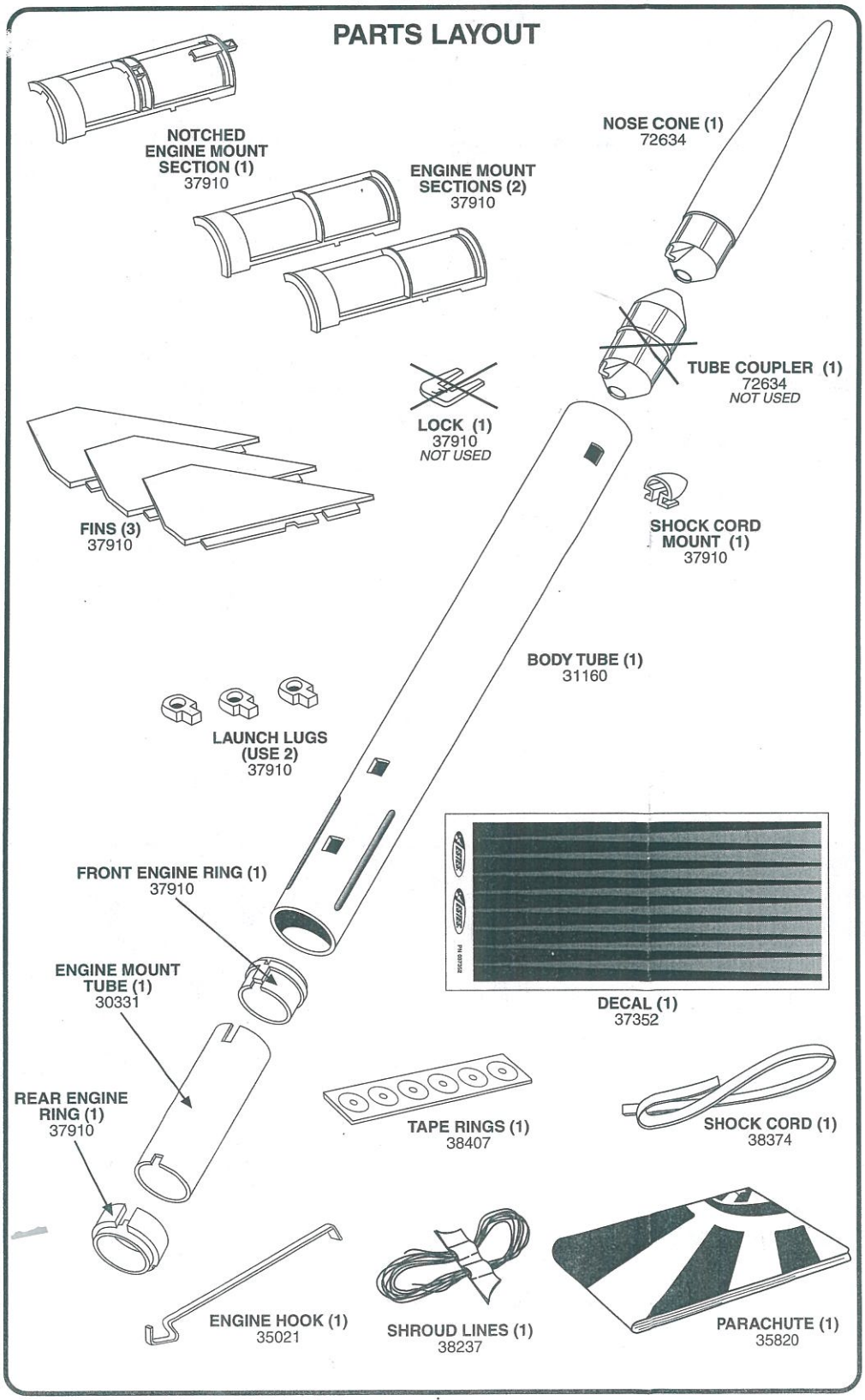
# SUPER SHOT™

## FLYING MODEL ROCKET KIT INSTRUCTIONS

**TOOLS REQUIRED:** SCISSORS, PENCIL, HOBBY KNIFE, TUBE-TYPE PLASTIC CEMENT

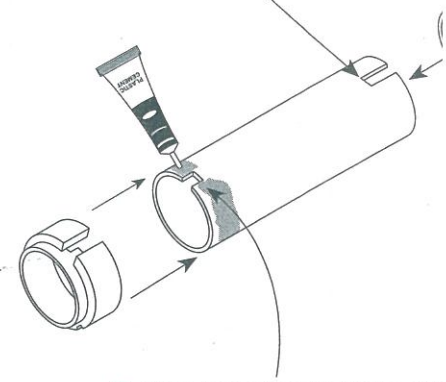
**ALL GLUED AREAS ARE SHADED IN GRAY**

### PARTS LAYOUT




## 1.

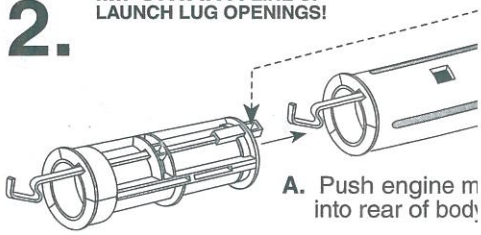
**A.** Apply plastic cement as shown a slide front ring inside tube. Line with **long** notch.



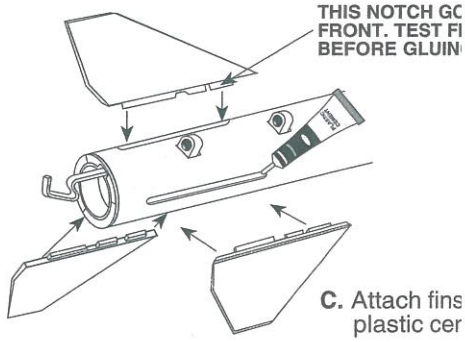
**B.** Slide back ring over tube. Lin up with **short** notch.

## 2.

**IMPORTANT!** LINE UP LAUNCH LUG OPENINGS!

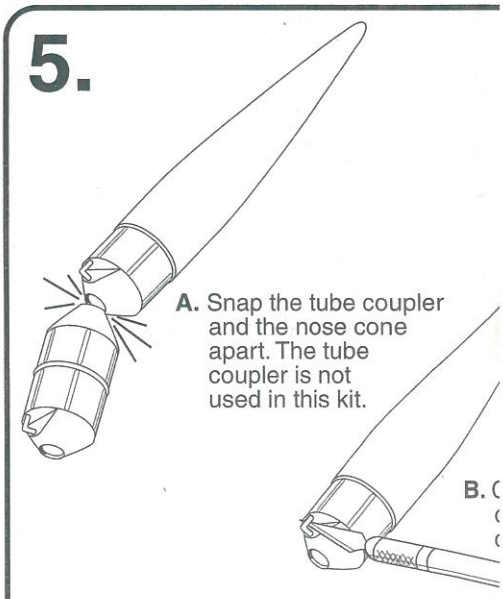


**A.** Push engine m into rear of body



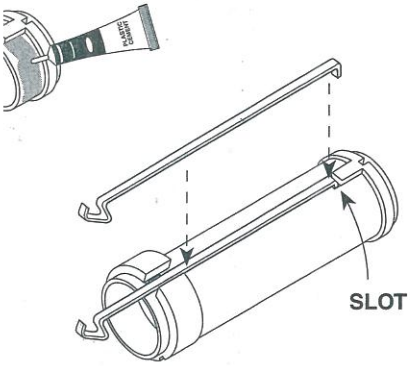

**C.** Attach fins plastic cer

## 5.

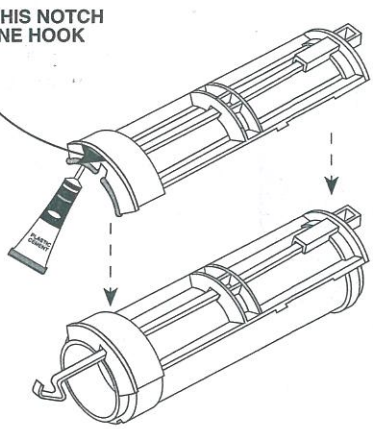


**A.** Snap the tube coupler and the nose cone apart. The tube coupler is not used in this kit.

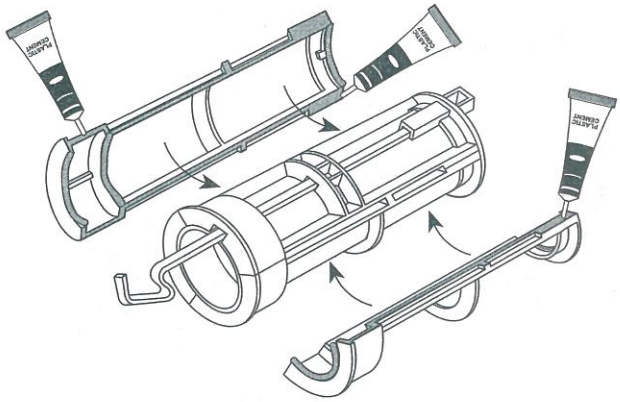
**B.** (



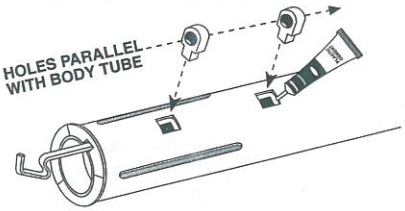

C. Attach engine hook. Push front tab through slot in tube.



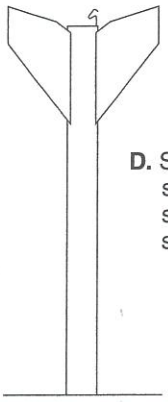

D. Apply cement to underside of **notched** engine mount section and attach.



E. Now attach the remaining sections with cement as shown.




B. Attach launch lugs with plastic cement.



D. Set rocket on table as shown so fins will stay straight while cement sets.

## 3.

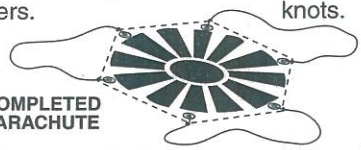
A. Cut out parachute on dotted line.

B. Find shroud line material. Remove tape. Using all the string, fold and cut into three equal lengths.

C. Press tape rings on marks on corners.

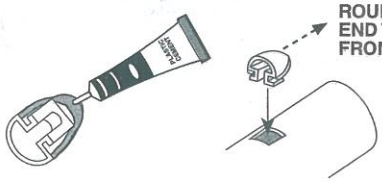
D. Punch holes with sharp pencil.

E. Tie lines off with double knots.

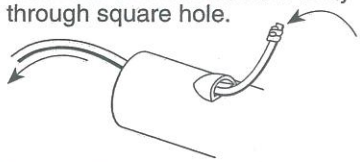



## 4.

A. Locate elastic shock cord and shock cord mount.



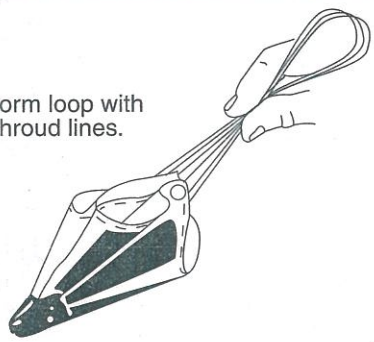

B. Apply plastic cement to shock cord mount as shown. Attach to body tube through square hole.



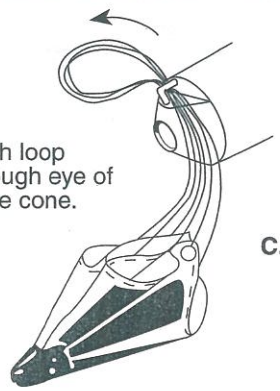
C. Tie double knot in end of shock cord. Push other end through until knot is tight against shock cord mount.

## 6.

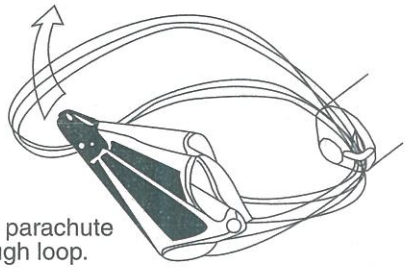
A. Form loop with shroud lines.

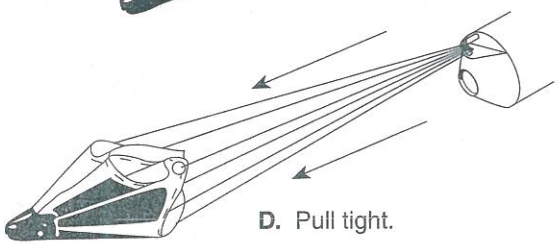


B. Push loop through eye of nose cone.

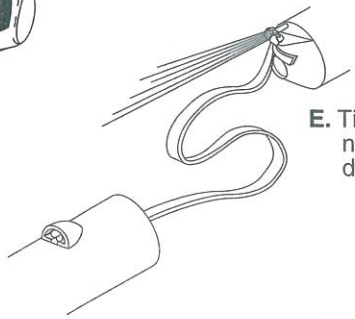


C. Pass parachute through loop.



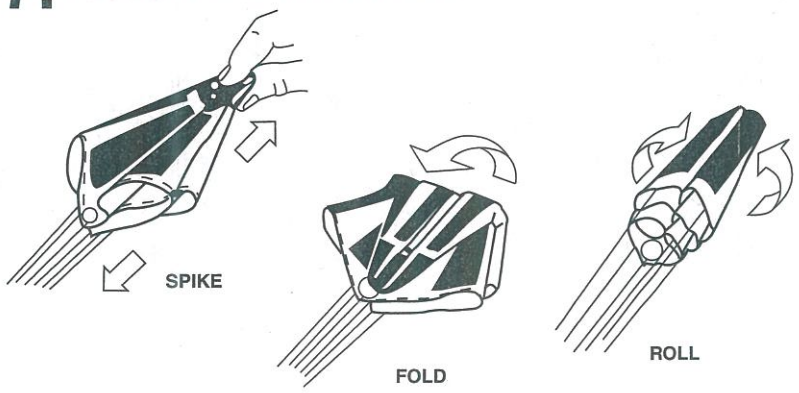


D. Pull tight.

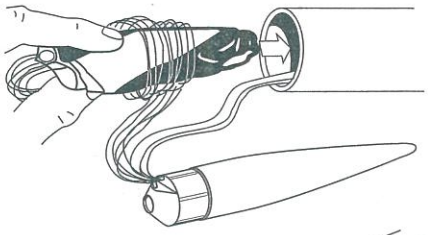


E. Tie shock cord to nose cone with a double knot.

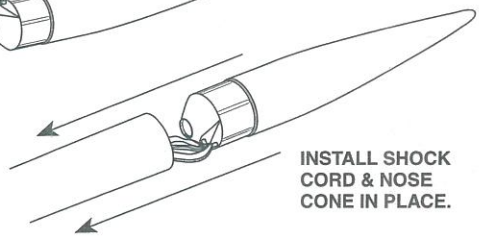
# 7. PACKING PARACHUTE




Wrap lines loosely around 'chute. Insert parachute into rocket.



Recovery device should slide easily into body tube. If too tight, unfold and repack again.

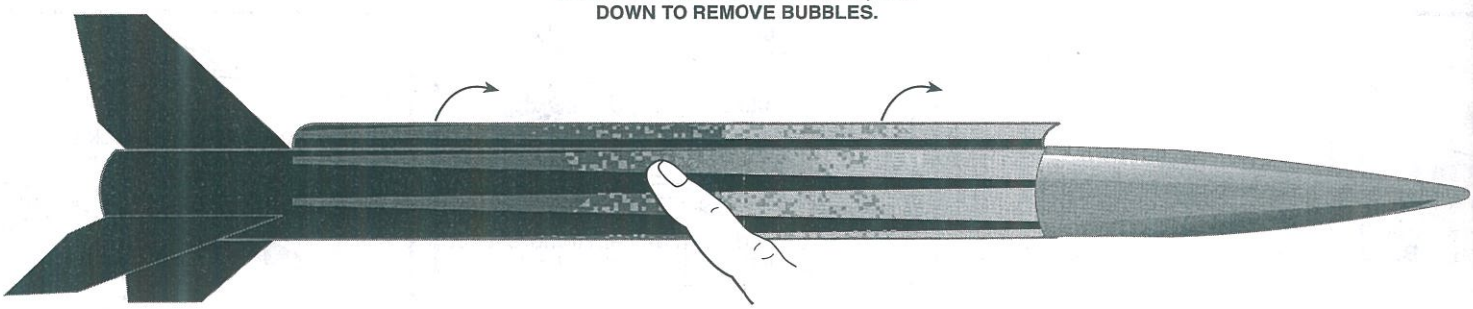


INSTALL SHOCK CORD & NOSE CONE IN PLACE.

DO NOT FORGET TO PACK RECOVERY WADDING IN THE ROCKET BEFORE FLYING - SEE STEP 9

# 8. APPLYING DECALS

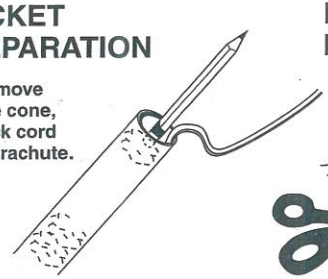
APPLY DECAL AS SHOWN ON BOX ART. WHEN POSITIONED CORRECTLY, RUB DOWN TO REMOVE BUBBLES.



# 9. FLYING YOUR ROCKET

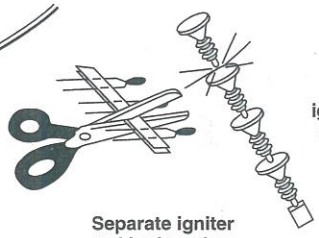
## ROCKET PREPARATION

Remove nose cone, shock cord and parachute.

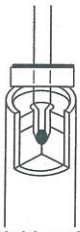


Crumple and insert three squares of recovery wadding. Repack and insert parachute, shock cord and nose cone.

## ENGINE PREPARATION

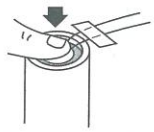


Separate igniter and igniter plug.



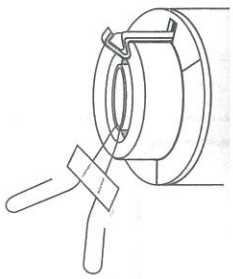
Hold engine upright, drop in igniter. Igniter must touch propellant.

Insert igniter plug.



Firmly push all the way in.

Bend igniter wires back.



Insert engine into rocket.

## LAUNCH SUPPLIES

To launch your rocket, you will need the following:

- Launch Pad (Estes Porta-Pad® II)
- Launch Controller (Estes Electron Beam®)
- Recommended Estes Engines: A8-3, B4-4, B6-4, B6-6, C6-5 or C6-7. For your first flight, use an A8-3 engine.
- Recovery Wadding (EST 302274)
- Igniters and Igniter Plugs (included with Estes engines)

Use only Estes products to launch this rocket.

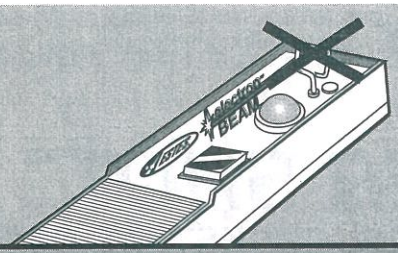
| ENGINE | PROJECTED ALTITUDE | |
|---|---|---|
| | Feet | Meters |
| A8-3 | 190 | 58 |
| B4-4 | 460 | 140 |
| B6-4/B6-6 | 490 | 150 |
| C6-5/C6-7 | 1000 | 305 |

## TIPS FOR FLYING YOUR ROCKET

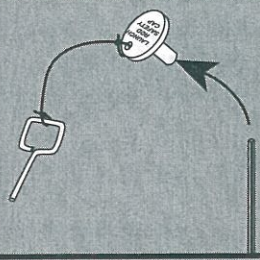
- Choose a large field away from power lines, buildings, tall trees, ar low flying aircraft. Try to find a field at least 250 feet (76 meters) square. The larger the launch area, the better your chance of recovering your rocket.
- Launch area must be free of dry weeds and brown grass.
- Launch only during calm weather with little or no wind and good visibility.
- Don't leave parachute packed more than a minute or so before launch during cold weather (colder than 40° Fahrenheit [4° Celsius Parachute may be dusted with talcum or baby powder to avoid sticking.
- Always follow the National Association of Rocketry (NAR) MODE ROCKETRY SAFETY CODE while participating in any model rocket activities. The safety code is enclosed with this kit.

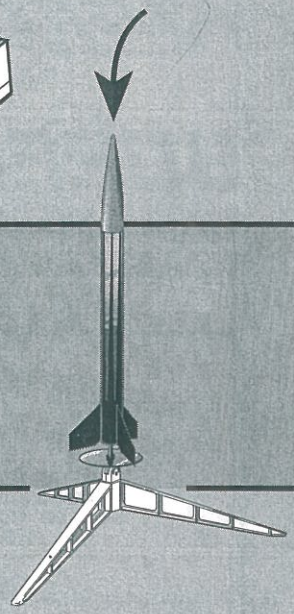
## COUNTDOWN AND LAUNCH

**10...** **Safety key must not be in launch controller.**
The safety cap with safety key attached should already be on the launch rod.

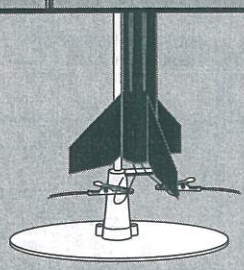



**9...** Remove safety cap from launch rod, slide launch lugs over rod. Make sure rocket slides freely and micro-clips are clean for good electrical contact.

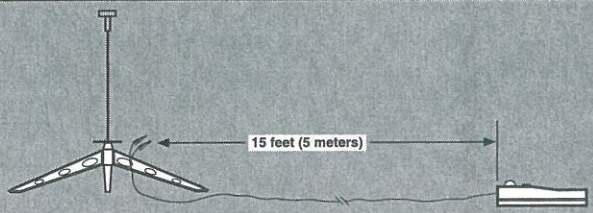




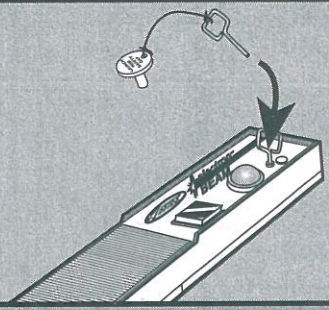
**8...** Attach micro-clips to the igniter wires. Arrange the micro-clips so they do not touch each other or the metal blast deflector. Attach micro-clips as close to protective tape on igniter as possible.



**7...** Move everyone back from your rocket as far as launch wire will permit (at least 15 feet - 5 meters).

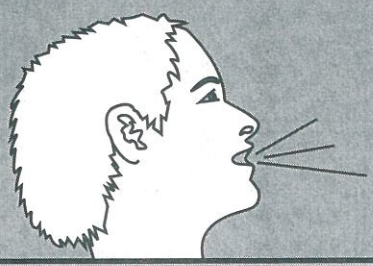



**6...** Insert safety key to arm the launch controller.




**5...** Start audible countdown.

**4...3...2...1...**



# LAUNCH!

Push and hold button until engine ignites.

**For safety, immediately remove safety key from launch controller and replace safety cap on launch rod.**

## MISFIRES

When an ignition failure occurs, **remove the safety key** from the launch control system and **wait one minute before approaching the rocket**. Remove the expended igniter from the engine and install a new one. Be certain the coated tip is in direct contact with the engine propellant. Broken or chipped coating will not affect the performance of the igniter. Reinstall the igniter plug as illustrated previously. Repeat the countdown and launch procedure.