

Estes 7260

Estes PROTOSTAR 7260 Flying Model Rocket Instruction Manual

Model: 7260

INTRODUCTION

The Estes PROTOSTAR 7260 is a unique flying model rocket kit designed for enthusiasts seeking a challenging and rewarding building experience. This model features a distinctive design and is capable of reaching altitudes up to 1350 feet when powered by recommended Estes engines. This manual provides essential instructions for the assembly, preparation, operation, and maintenance of your PROTOSTAR 7260 model rocket.

SAFETY INFORMATION

Model rocket activities require adherence to safety guidelines to prevent injury and property damage. Always follow the National Association of Rocketry (NAR) or your local rocketry organization's safety codes. Adult supervision is required for all assembly and launch activities involving minors.

- **Launch Area:** Ensure a large, open launch area free from dry grass, power lines, and obstructions.
- **Weather Conditions:** Do not launch in high winds, dry conditions, or near flammable materials.
- **Recovery:** Always use recovery wadding and ensure the parachute deploys correctly.
- **Engines:** Use only Estes brand model rocket engines, starters, and recovery wadding.
- **Eye Protection:** Always wear eye protection during assembly and launch.

ASSEMBLY INSTRUCTIONS

The PROTOSTAR 7260 is an expert-level build. Carefully read all instructions before beginning assembly. Gather all necessary tools and supplies.

Required Tools and Supplies (Not Included):

- Scissors
- Pencil

- Ruler
- Fine sandpaper
- CA glue (Cyanoacrylate adhesive)
- Carpenter's glue
- Hobby knife
- Masking tape
- Primer (white)
- Paint (silver)
- Clear coat (optional)

General Assembly Steps:

1. **Part Identification:** Unpack all components and identify them using the parts list provided in the kit.
2. **Preparation:** Sand any rough edges on balsa or plastic parts.
3. **Fin Assembly:** Carefully attach the fins to the body tube, ensuring proper alignment and strong adhesive bonds.
4. **Nose Cone and Recovery System:** Assemble the nose cone and attach the parachute and shock cord.
5. **Motor Mount:** Construct and install the motor mount assembly.
6. **Finishing:** Apply primer, paint, and optional clear coat for protection and aesthetics. Allow adequate drying time between coats.



An image of the assembled Estes PROTOSTAR 7260 flying model rocket, showcasing its unique design and silver and white color scheme.

LAUNCH PREPARATION (SETUP)

Before each launch, ensure all components are in good condition and properly assembled. Gather the necessary launch equipment.

Required Launch Equipment (Sold Separately):

- Estes Porta-Pad II Launch Pad
- Estes E Launch Controller
- Estes model rocket engines (Recommended: C11-3, D12-5, E12-6)
- Estes starters
- Recovery wadding
- Four 1.5V high-quality AA alkaline batteries (for launch controller, not included)

Pre-Launch Checklist:

1. **Engine Installation:** Insert the recommended engine firmly into the motor mount.
2. **Recovery Wadding:** Loosely pack several sheets of recovery wadding into the body tube above the engine. This protects the parachute from hot ejection gases.
3. **Parachute Packing:** Carefully fold and pack the parachute into the body tube above the wadding. Ensure the shock cord is not tangled.
4. **Igniter Insertion:** Insert an Estes starter into the engine nozzle. Secure it with the igniter plug or tape as per engine instructions.
5. **Launch Pad Setup:** Set up the launch pad in a clear area. Ensure the launch rod is vertical and securely anchored.
6. **Rocket Placement:** Slide the rocket onto the launch rod, ensuring the launch lug slides freely.
7. **Controller Connection:** Connect the micro-clips from the launch controller to the igniter leads. Ensure the clips do not touch each other or the rocket body.

OPERATING INSTRUCTIONS (LAUNCH AND RECOVERY)

Once the rocket is prepared and the launch area is clear, you are ready to launch.

1. **Clear the Area:** Announce a countdown and ensure all spectators are at a safe distance (at least 15-20 feet away).
2. **Arm Controller:** Insert the safety key into the launch controller.
3. **Launch:** Press and hold the launch button. The engine will ignite, and the rocket will launch.
4. **Observe Flight:** Watch the rocket ascend. At apogee (highest point), the engine's ejection charge will deploy the parachute.
5. **Recovery:** Track the rocket's descent under parachute. Retrieve the rocket promptly to prevent loss or damage.
6. **Post-Flight Inspection:** After recovery, inspect the rocket for any damage before preparing for another flight.

MAINTENANCE

Proper maintenance ensures the longevity and safe operation of your PROTOSTAR 7260 model rocket.

- **Cleaning:** After each flight, gently wipe down the rocket body to remove any residue.
- **Inspection:** Regularly check fins, body tube, nose cone, and recovery system for cracks, tears, or loose parts. Repair any damage before the next flight.
- **Recovery System:** Inspect the parachute for tears and the shock cord for fraying. Replace if necessary.
- **Storage:** Store the rocket in a cool, dry place away from direct sunlight and extreme temperatures to prevent warping or material degradation.

TROUBLESHOOTING

Here are some common issues and potential solutions:

- **Misfire:** If the engine does not ignite, ensure the igniter is properly inserted and making good contact with the engine propellant. Check launch controller batteries and connections.
- **Unstable Flight:** Ensure fins are securely attached and properly aligned. Verify the nose cone is

firmly seated. Check for any damage to the rocket body.

- **No Parachute Deployment:** Ensure sufficient recovery wadding was used. Check that the parachute is not stuck or tangled. Verify the engine's ejection charge fired correctly.
- **Damaged During Landing:** Inspect for cracks or breaks. Minor damage can often be repaired with glue and sandpaper. For significant damage, replacement parts may be necessary.

SPECIFICATIONS

Model Number	7260
Brand	Estes
Overall Length	24 inches
Approximate Weight	5 ounces
Maximum Altitude	1350 feet
Recovery System	18-inch Parachute
Recommended Engines	C11-3, D12-5, E12-6
Skill Level	Challenging Expert Level Build
Color	Silver, White

WARRANTY AND SUPPORT

For specific warranty information or technical support regarding your Estes PROTOSTAR 7260 model rocket, please refer to the documentation included with your kit or visit the official Estes website. Contact their customer service for assistance with parts, assembly questions, or operational concerns.