**✅ Land Rover Crossmember Restoration Guide**

You have:

* **Direct-to-rust satin black spray paint**
* **Car masking tape** and **masking paper**
* **Sandpaper** (180 up to 3000 grit, including finger sander attachments)
* **Wire brush**
* **Isopropyl alcohol + rags**

**🔧 Step 1: Prep and Masking**

1. **Clean the area**
   * Rinse or wipe down the crossmember if dusty or muddy.
   * Dry fully with a cloth or air dry.
2. **Mask carefully**
   * Use car masking tape + paper to protect:
     + Rear lights
     + Number plate
     + Silver panel above the crossmember
     + Tyres, mudflaps, bumper bolts, exhaust tip

✅ **Goal:** Only the crossmember is visible and spray-ready.

**🧼 Step 2: Remove Rust and Old Paint**

1. Start with a **wire brush** to knock off any loose rust or flaky paint.
2. Sand all surfaces using:
   * **180–240 grit** sandpaper (or finger sander attachments)
   * Focus on rust patches, bubbling paint, and sharp paint edges
   * Feather transitions between bare metal and existing paint

🎯 Don’t worry about shiny metal — just get a clean, stable surface.

**🧽 Step 3: Degrease With Isopropyl**

* Use **isopropyl alcohol** and a **clean rag** to wipe down the entire area after sanding.
* Remove dust, oils, and grime.
* Let it **dry completely**.

⚠️ Don’t touch the surface with bare hands after this point — it can affect paint adhesion.

**🔧 Step 4: Optional Surface Smoothing**

If you want a cleaner, smoother paint finish:

* Use **400–600 grit** sandpaper to gently smooth any rough areas
* You can go up to **800–1000 grit** if you're chasing a perfect finish
* Wipe again with isopropyl before painting

**🎨 Step 5: Spray Painting (Satin Black)**

1. **Shake the spray can** for 2+ minutes until the ball inside moves freely.
2. Hold the can 20–30 cm (8–12 inches) from the surface.
3. Spray in **side-to-side passes**, overlapping slightly.

**Apply multiple coats:**

| **Coat** | **What to do** | **Wait Time** |
| --- | --- | --- |
| 1️⃣ Mist Coat | Very light, just dust the surface | 10–15 mins |
| 2️⃣ Coverage Coat | Smooth, even coat for full coverage | 15–20 mins |
| 3️⃣ Final Coat | Fill in any patchy areas, blend edges | Optional |

⚠️ Don’t apply thick coats — thin and layered is stronger and neater.

**💤 Step 6: Cure and Finish**

* Let the final coat dry for **at least 4–6 hours** before handling
* **Best:** Leave it **overnight**
* **Peel masking tape** once paint is dry to the touch — this avoids tearing

**Optional (Perfectionist Mode)**

* After curing for a few hours:
  + Use **2000–3000 grit wet sandpaper** with water to very gently polish any rough texture
  + You can apply one last ultra-light black coat over this if needed
  + Optional: Add a clear satin top coat for added protection (not essential)

**✅ You’re Done!**

You’ve treated rust, sealed it, and painted a satin-tough crossmember that’ll look **factory fresh** and be protected from the elements.