

3B Scientific A290

3B Scientific Skull Kit A290 Instruction Manual

Model: A290

[Introduction](#)

[Features](#)

[Package Contents](#)

[Setup & Assembly](#)

[Usage](#)

[Maintenance](#)

[Troubleshooting](#)

[Specifications](#)

[Warranty & Support](#)

1. INTRODUCTION

This manual provides instructions for the 3B Scientific Skull Kit, Model A290. This Beauchene adult human skull model is designed for detailed anatomical study, featuring separated bones for comprehensive examination of cranial structures. The model is made from durable plastic and disassembles into 22 individual parts for in-depth learning.

2. PRODUCT FEATURES

- Beauchene adult human skull model with separated bones.
- Natural color for accurate anatomical representation.
- Disassembles into 22 individual parts for detailed study.
- Stable connectors facilitate simple reassembly.
- Constructed from durable plastic.
- Dimensions: 21 x 14 x 16 cm (H x W x D).
- Weight: 0.7 kg (1.54 lb).

3. PACKAGE CONTENTS

The 3B Scientific Skull Kit A290 includes:

- One (1) Beauchene adult human skull model, disassembled into 22 individual bone components.
- Instruction manual (this document).



Figure 3.1: All 22 individual bone components of the A290 skull model.

4. SETUP & ASSEMBLY

The 3B Scientific Skull Kit A290 arrives disassembled into 22 individual bone components. Reassembly requires careful attention to the anatomical connections. It is recommended to refer to anatomical charts or diagrams of the human skull during assembly.

1. **Identify Major Components:** Begin by identifying the larger cranial bones such as the frontal, parietal (2), temporal (2), and occipital bones. Also, locate the mandible (jawbone) and maxilla (upper jaw).
2. **Cranial Vault Assembly:** Carefully connect the parietal bones to the frontal and occipital bones, observing the natural suture lines. The model features stable connectors designed to fit precisely.
3. **Facial Bone Integration:** Attach the temporal bones, followed by the nasal, zygomatic (cheekbones), and lacrimal bones. Ensure all connections are secure.
4. **Mandible Attachment:** Connect the mandible to the temporal bones at the temporomandibular joints.
5. **Final Adjustments:** Once all 22 components are connected, gently inspect the entire skull to ensure all parts are correctly seated and stable. Avoid forcing connections.



Figure 4.1: Assembled skull model, left lateral view.

5. USAGE

This anatomical skull model is intended for educational purposes, allowing for detailed study of human cranial anatomy. Its Beauchene design permits individual examination of each bone and their articulation.

- **Individual Bone Study:** Disassemble the skull to study the morphology, features, and articulations of each of the 22 individual bones.
- **Suture Line Examination:** Observe the intricate suture lines where cranial bones articulate.
- **Cranial Cavity Exploration:** The disassembled nature allows for a clear view of the internal structures of the cranial cavity and facial sinuses.
- **Demonstration:** Use the assembled or disassembled model for demonstrations in educational settings.



Figure 5.1: Assembled skull model, superior view.

6. MAINTENANCE

Proper care and maintenance will ensure the longevity and integrity of your 3B Scientific Skull Kit A290.

- **Cleaning:** Wipe the model gently with a soft, damp cloth. Avoid using abrasive cleaners, solvents, or harsh chemicals, as these may damage the plastic material or painted surfaces.
- **Storage:** Store the model in a cool, dry place, away from direct sunlight and extreme temperatures. If storing disassembled, keep all 22 components together in a protective container to prevent loss or damage.
- **Handling:** Handle the model with care, especially when disassembling or reassembling, to avoid stressing the connectors or breaking delicate parts.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your skull model.

Issue: Difficulty Reassembling the Skull

Solution:

- **Refer to Anatomical References:** Use anatomical diagrams or textbooks to understand the correct orientation and articulation points of each bone.
- **Start with Major Bones:** Begin by connecting the largest and most easily identifiable bones (e.g., frontal, parietal, occipital) to form the basic cranial vault.
- **Gentle Pressure:** Apply gentle, even pressure when connecting parts. Avoid forcing components, as this can damage the connectors or the plastic.
- **Systematic Approach:** Work systematically from one section of the skull to another (e.g., cranial vault, then facial bones, then mandible).
- **Inspect Connectors:** Ensure that the connectors on each bone are clean and free from debris, which could hinder proper fitting.

Issue: Loose or Unstable Connections

Solution:

- **Re-seat Components:** Carefully detach and re-seat the affected components, ensuring they are fully engaged with their respective connectors.
- **Check for Misalignment:** Verify that no other bones are misaligned, which could prevent a secure fit in one area.

8. SPECIFICATIONS

Model Number	A290
Brand	3B Scientific
Material	Plastic
Dimensions (H x W x D)	21 x 14 x 16 cm (8.27 x 5.51 x 6.3 inches)
Weight	0.55 kg (1.21 lb)
Number of Parts	22 (disassembled)
Age Range	Adult
UPC	098787398540

9. WARRANTY & SUPPORT

Warranty Information

The 3B Scientific Skull Kit A290 comes with a standard warranty. For models registered with 3B Smart Anatomy, the warranty is extended from 3 to 5 years. Please refer to the official 3B Scientific website for detailed warranty terms and conditions.

Customer Support

For technical assistance, replacement parts, or further inquiries regarding your 3B Scientific Skull Kit A290, please contact 3B Scientific customer support. Contact information can typically be found on the official 3B Scientific website or on the product packaging.

Online Resources: www.3bscientific.com

