

Apijunedada Cranes

**SINCE
1990**

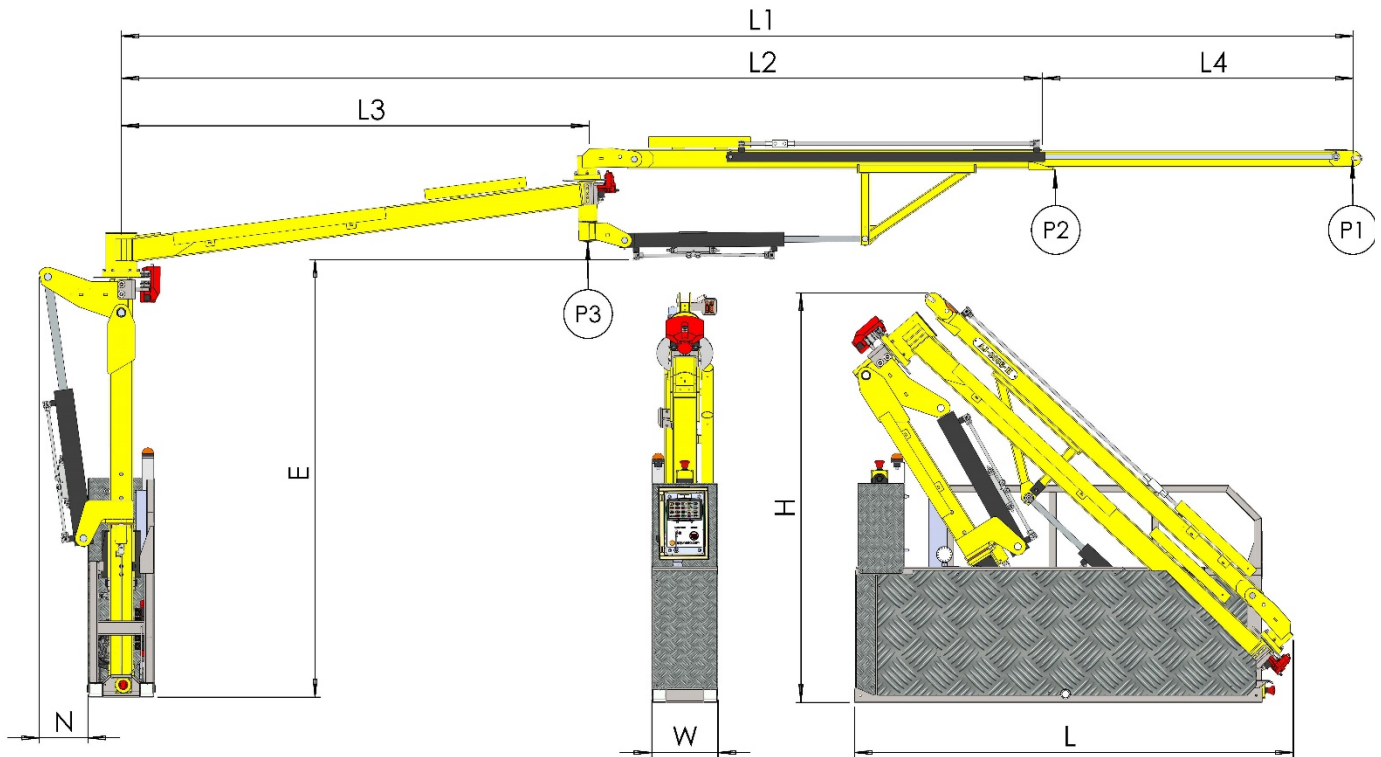


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1. Models and dimensions



| Models | AJ-MINI | AJ100H | AJ2006H | AJ2006HR | AJ2008TK |
|----------------------|------------|------------|------------|------------|------------|
| L1 (mm) | 3600 | 4500 | 5200 | 5200 | 6000 |
| L2 (mm) | 3000 | 3600 | 4000 | 4000 | 4800 |
| L3 (mm) | 1500 | 1800 | 2000 | 2000 | 2500 |
| L4 (mm) | 600 | 900 | 1200 | 1200 | 1200 |
| L4 Extension | Manual | Manual | Hydraulics | Hydraulics | Hydraulics |
| Load weight: P1 (kg) | 80 kg | 120 kg | 140 kg | 180 kg | 180 kg |
| Load weight: P2 (kg) | 90 kg | 140 kg | 180 kg | 300 kg | 210 kg |
| Load weight: P3 (kg) | 200 kg | 310 kg | 400 kg | 500 kg | 480 kg |
| P (kg) | 180 kg | 250 kg | 350 kg | 440 kg | 600 kg |
| E (mm) | 1375 | 1672 | 1841 | 1867 | 2351 |
| L (mm) | 1500 | 1700 | 1851 | 1846 | 2308 |
| H(mm) | 1273 | 1559 | 1731 | 1770 | 2046 |
| W (mm) | 250 | 250 | 275 | 300 | 340 |
| N (mm) | 110 | 174 | 207 | 207 | 267 |
| Minimum consumption | 40 ah | 55 ah | 65 ah | 65 ah | 65 ah |
| Maximum consumption | 70 ah | 100 ah | 120 ah | 120 ah | 120 ah |
| Starting Peak | 600A | 700A | 800A | 800A | 800A |
| Voltage | 12 or 24 V | 12 or 24 V | 12 or 24 V | 12 or 24 V | 12 or 24 V |

**Measurements with a 3% error tolerance.

2. Tips for choosing the most suitable crane model

- 2.1. **Platform measurements:** The folded crane must fit within the width of the platform where it will be installed, for this it is important to verify the measurement (**L**).
- 2.2. **Crane length (L1):** The crane must be long enough to cover the entire extension of the platform. The ideal location is usually in the back of the vehicle or at the front of the trailer.
- 2.3. **Load capacity (P1/P2):** It is essential to choose a crane with a load capacity suitable for the specific needs of the job.
- 2.4. **Avoid oversizing:** It is not recommended to opt for an excessively large crane, as its higher weight reduces the payload capacity of the platform.
- 2.5. **Hives per pallet:** The most advisable and balanced option is to use pallets with **2 hives**. It is also possible to load pallets from **3 hives**, although the use of pallets with **4 hives is not recommended**.

When the volume of load per pallet is increased, the movement becomes more difficult and it is necessary to use stabilizing feet, which increases the loading time. On the other hand, the configuration of 2 hives per pallet allows for more agile and efficient loading.

3. Why choose Apijuneda?

3.1. Quality and reliability

At **Apijuneda** we are committed to the highest quality in all our components to guarantee reliability and full satisfaction of our customers. Since 1990, we have maintained a standard of excellence that distinguishes us in the sector.

Reliability is proven over time, our current crane models, in continuous production since 2005 have proven consistent reliability. In addition, the metal structure is designed with a **very high safety factor** to ensure maximum safety and reliability.

At Apijuneda, we combine quality, reliability, technical service and specialized engineering to offer the best solutions.

3.2. Ease of repair

Although our cranes are made with high-quality components, like any machine they may require maintenance or repairs. That's why we designed them with simplicity in mind for repair:

- **Hydraulic or electrical components:** Replacements of tubes, valves, cables, connectors or relays can be easily carried out by the user himself or by a nearby professional.
- **Electronic components:** All the electronics are compacted into an electronic board that has five quick connectors and allows it to be disassembled in less than two minutes to send it to Apijuneda for review.

In short, Apijuneda cranes are designed so that their maintenance and repair can be solved locally, quickly and easily, always with the direct support of the manufacturer.

3.3. After-sales technical service

Through WhatsApp we offer an immediate, efficient technical service **available every day of the year from 8:00 a.m. to 11:00 p.m. (UTC+1)**. This service stands out for its **speed of response** and for guaranteeing that the user **will always be attended directly by a qualified technician**, without intermediaries.

You can easily resolve issues:

- **On your own**, supported by manuals, videos, and direct technical support.
- **Through a local workshop**, and with the manufacturer's guided assistance to carry out the repair.

This **remote assistance system**, in operation since 1990, has established itself as the most effective solution, even in the face of slower or more expensive local services. In addition, it represents a great advantage for

customers who purchase our cranes through distributors, since the **support is always direct from the manufacturer**.

We export our cranes globally, which forces us to meet the highest standards of quality and reliability.

3.4. Engineering & Compliance

All our cranes have been designed, reviewed and validated by engineering experts, thus guaranteeing the highest standards of safety, performance, reliability and durability.

Apijuneda cranes comply with the most demanding European regulations in terms of safety and performance:

- **UNE-EN 12999:202** → Specifies the requirements for the design, calculation, testing and controls of hydraulic loader cranes.
- **Directive 2006/42/EC** → Requires manufacturers to carry out and document a risk assessment of machinery and installations.
- **Directive 2004/108/EC** → Ensures protection against electromagnetic disturbances in equipment.
- **UNE-EN ISO 2409** → Establishes the requirements for paint coatings, guaranteeing durability and resistance.

3.5. 5-year warranty, except for components subject to wear and tear, such as hydraulic, electrical and electronic elements, which have a **2-year warranty**.

4. Videos and photos

- **YouTube channel:** Discover our videos on the channel: youtube.com/Apijuneda
- **Instagram:** Find more photos and videos of our cranes in action at: instagram.com/Apijuneda
- **Full load:** In this video you can see the **real loading speed** of the Apijuneda cranes. With a configuration of **2 hives per pallet, 80 hives** are loaded **in just 30 minutes**. The **unloading** is even faster: **80 hives are unloaded in just 20 minutes**. [WATCH VIDEO](#)

5. Characteristics

5.1. Loading speed: Apijuneda cranes allow 40 loads to be carried out **in just 30 minutes**, and **40 unloads in just 20 minutes**.

If 2-hive **pallets are used**, 80 hives can be loaded **in 30 minutes**.

5.2. Double download speed: The download function can have **two speeds**:

- The **standard speed** works at **30 cm/s**, ideal for smooth and fast handling.
- **Optionally**, an additional adjustable speed **can be installed**, which allows the speed to be regulated between **0 and 30 cm/s** (factory preset to **12 cm/s**), specially designed for tasks that require greater **precision and control**.

5.3. Double leveling system.

Even if the terrain is sloping, the crane incorporates an **electronic leveling system** that allows it to remain completely level. This significantly reduces the operator's effort, even when the loads are very heavy.

At Apijuneda we have the **most precise and accurate leveling system on the market**, designed to offer maximum stability and ease of use.

5.3.1. Semi-automatic system:

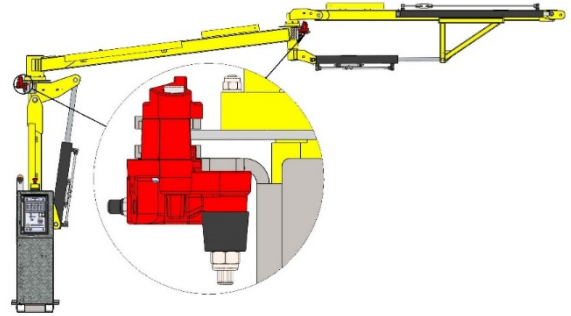
Levelling is controlled by the user via a **control bar integrated into the grippers**. When pressed, the crane levels automatically. This bar runs from the bottom to the top of the gripper, allowing leveling to be activated **even when the load is in an elevated position**.

5.3.2. Automatic leveling system:

Available since **2018**, this system allows the crane to manage the leveling on its own. When it detects an unevenness, **it adjusts automatically**, without the need for operator intervention. This system provides greater comfort and improves efficiency in demanding working conditions.

5.4. Locking with hydraulic brakes:

The crane can **be locked quickly and safely** thanks to its **hydraulic disc brake** system, regardless of the position it is in. The lock is easily activated by pressing the **control bar located on the grippers**, allowing the crane to be fixed in the desired location effortlessly. This is especially useful for performing tasks such as **moving the vehicle forward, applying smoke to the hives** or carrying out any other action, keeping the crane **completely stable and safe** during operation.



5.5. Wireless remote control.

The **wireless remote-control system** allows the crane to be operated without the need for cables, thus avoiding tangling with the charging cable and improving comfort and safety during use.

As an additional safety measure, in case of radio interference or any other signal problem, the crane incorporates an **auxiliary control cable at the tip**, which allows the crane to be operated manually and safely via cable connection.



5.6. Electronic safety:

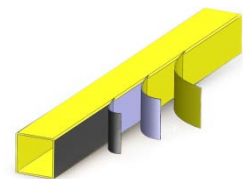
The crane's electronic system incorporates **intelligent monitoring software** that constantly monitors its operation. If it detects any **irregularities or potentially dangerous situations**, it automatically activates **safety measures** to protect the operator and the equipment.

For example, if the crane becomes **excessively uneven** due to operator error, **the brake is** automatically activated to **lock it and prevent accidents**. Once the operator levels the crane by pressing a button, the system allows **work to be resumed normally**.

5.7. Painting:

Since **2024**, all our cranes have a paint system that complies with the **C5.04 protection degree** according to **the UNE-EN ISO 2409** standard, which guarantees an **estimated durability of between 15 and 25 years**, even in demanding environments and adverse weather conditions.

Each machine receives a complete treatment that includes: **2 layers of anti-rust primer**, which protect the structure against corrosion and **3 layers of polyurethane finish**, which provide resistance, aesthetics and long-lasting protection.



5.8. Hydraulic length extension: The Apijuneda crane allows **its length to be increased or reduced**, adapting to different work needs with total comfort and precision.

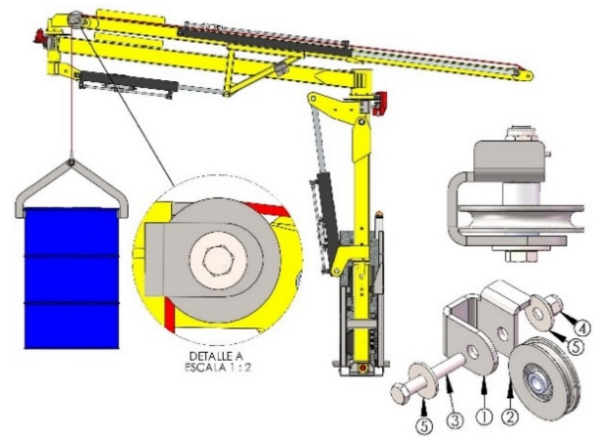
5.9. Pulley for loading honey drums.

On models with **hydraulic extension** (AJ2006H, AJ2006HR and AJ2008TK), a pulley can be installed **at point P3** to facilitate the loading of honey drums weighing up to **320 kg**.

[WATCH VIDEO](#)

The operation is very simple, when **hydraulically extending** the crane, the drum **ascends** through the pulley, when **the hydraulic extension is retracted**, the drum **descends** smoothly to its position.

This system is ideal for loading drums safely, without the need for additional equipment.



5.10. Quick and compact folding.

All Apijuneda crane models share an **optimized structure** that allows fast, **easy and extremely compact folding**. This design makes our cranes the **most compact on the market**, facilitating transport and reducing the space occupied during travel.

5.11. Efficient charging system.

Thanks to an **upward-inclined lifting piston**, the system allows the load to be lifted **above its central axis**, providing a **higher lifting height** compared to other cranes on the market. With this unique design, the **P1 point** (highest load position) is located **above the P3 point**, significantly improving the vertical lifting capacity.

5.12. LED lighting: All cranes are equipped with **amber LED lights located at the tip, right where the load is lifted**. These lights have been selected for their **wavelength imperceptible to bees**.

Thanks to this, it is possible to work **at night or in low light conditions** without altering the behavior of the hives, which guarantees **greater safety and peace of mind** for both the operator and the bees.

5.13. Acoustic buzzer.

All Apijuneda cranes incorporate an **acoustic buzzer** that emits different **warning beeps** to inform the operator about important situations during the use of the machine.

Common warnings include **Low Battery, New Leveling Log, and Safety or Operation Alerts**.

This audible warning system improves **safety and operational control**, allowing the user to react quickly to any incident.

5.14. Stabilizing feet

Stabilizing feet increases safety and stability during the use of the crane.

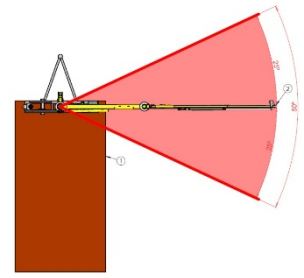
Its installation is not mandatory, it is an optional accessory, the need for which does not depend on the model of crane, but on the type of vehicle or trailer on which the crane is installed.

In vehicles: They are generally not necessary, but they can be very useful if the vehicle has a soft suspension or if the installed crane has the capacity to lift loads over 200 kg.

On trailers: Its use is highly recommended, since the weight of the empty trailer is usually insufficient to act as a counterweight.

If stabilizer feet are not used on a trailer, it is recommended to follow these guidelines:

- Do not extend the crane to the maximum or work in the area marked in red.
- Start loading as close to the base of the crane as possible.
- As the platform is loaded and the counterweight increases, the loading radius can be expanded.



Final recommendation:

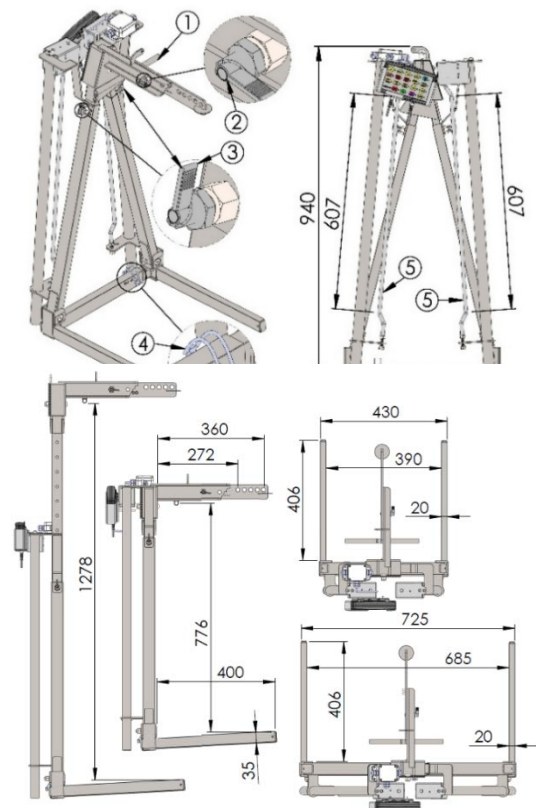
Consult with the installer to assess the need for stabilizers. Working with stabilizer feet may be slightly slower, but if the client is in doubt about whether they need them, they can always purchase them later.

6. FLEXI forks

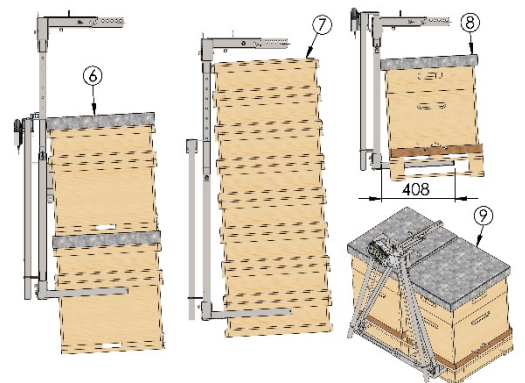
Designed to maximise versatility and comfort in everyday work, the new **FLEXI 2024 forks** allow for **quick adjustment in width (#3) and height (#4) without the need for tools**, easily adapting to different types of load.

Key features:

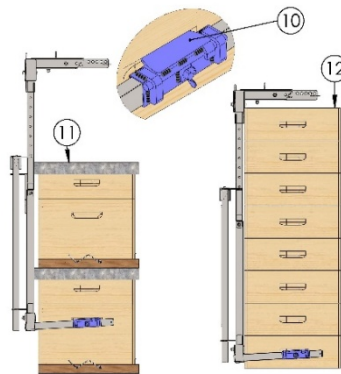
- **Integrated safety press (#1)** – Ensures a **firm grip** on the load while moving. It can be deactivated by pin (**#2**).
- **Ergonomic control rods (607 mm length, #5)** – Run from the bottom to the top of the forks, allowing **comfortable and efficient handling** of all functions, even with high loads.
- **Lightweight and robust design** – Total weight: **18 kg** | Load capacity: **300 kg**.
- **Adjustable height: Min. 776 mm – Max. 1278 mm**
- **Adjustable width: Min. 390 mm – Max. 725 mm**



The **STANDARD** fork is used to load hives that have a wooden batten on the sides (**#6 and #7**) or to load pallets (**#9**).

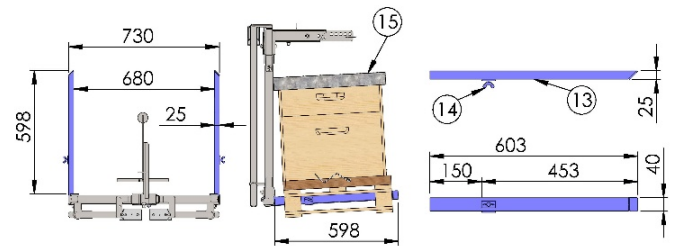


FLAT accessory: #10. Optional accessory to load the hives through the holes sunk in the wood.



Attachment FORK EXTENSION 600 MM:

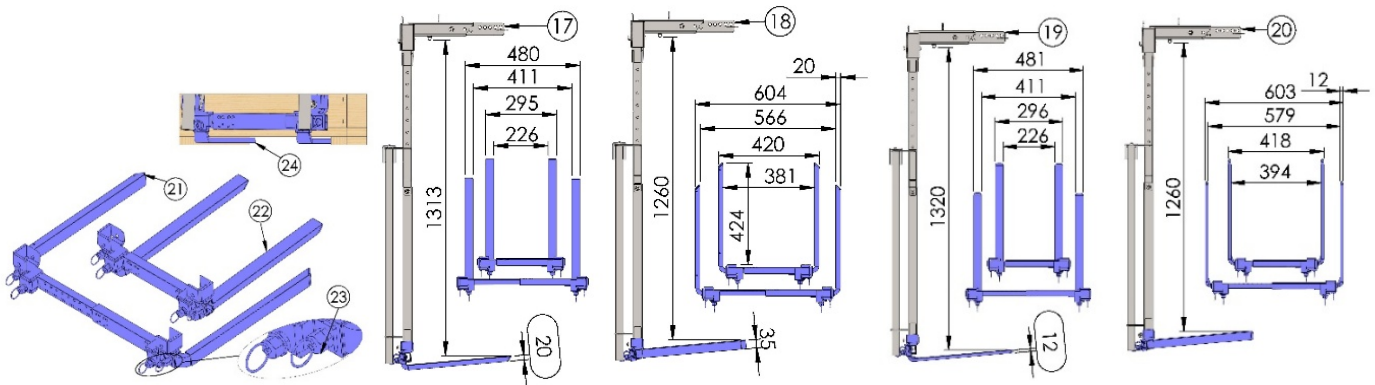
#13. The fork extension is used for more stability when loading on pallets. The original length is 600mm, if a shorter length is desired the tube can be cut to 450mm.



FHV20 & FHV12 Accessory

Whenever possible, it is best to carry the **STANDARD accessory** or the FLAT accessory. The FHV attachment is used only when it is necessary **to load the hive from the bottom or if the pallet is low in height**, allowing the fork to be set in **horizontal (No. 22) or vertical (No. 21) position** by means of a tool-free quick-adjust pin. The horizontal position is used to load the hive from below. It is available in two fork heights:

- **FHV20:** 20mm tube (views #17 and #18) increases the weight of the clamp by 0.5kg.
- **FHV12:** solid and 12 mm (views #19 and #20), the weight of the caliper is increased by 2kg.



7. Platform installation

Installing the crane on the platform is simple and economical and can be carried out by any qualified professional. It consists of simply fixing the crane chassis to the two main beams of the platform, using the material supplied by the manufacturer: fixing plates (fp), threaded bars (b) and hex nuts (s).

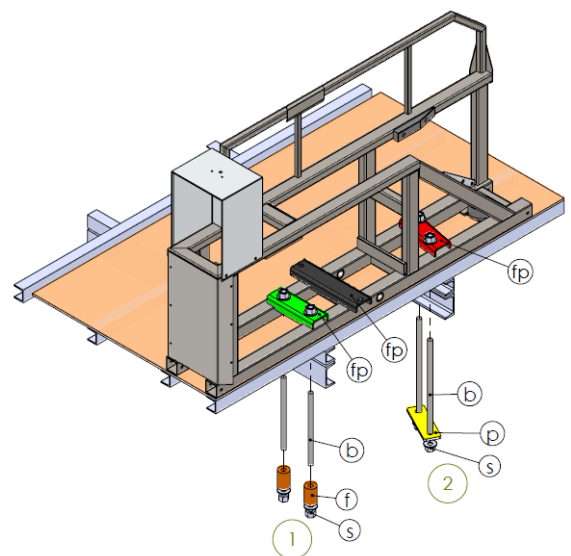
7.1. Approvals

According to European legislation, any permanent structural modifications **made** to a vehicle or trailer (such as the installation of a crane) must be approved by a qualified bodybuilder. This procedure is simple and low-cost.

Subsequently, the set must be approved by the ITV (Technical Inspection of Vehicles).

When is permanent modification considered?

- **It is permanent:** If the crane is fixed by welding or a system that requires tools for its disassembly. In this case, approval is mandatory.



- **Not permanent:** If the crane is installed with a system that allows it to be dismantled quickly **without tools** (e.g. by means of a quick-release mechanism). In these situations, it is not considered a structural alteration and does not require approval.

Crane case studies

In the case of Apijuneda cranes, they are usually fixed with screws, and this is usually considered a permanent modification, but in some cases, it can be argued that it is not, as they can be easily dismantled in less than 10 minutes.

Ultimately, it is up to the end user to decide whether they want to be strictly compliant with the regulations or to take on possible more flexible interpretations.

8. Wiring

8.1. Battery Type

Generally, original vehicle batteries are not designed to start the tow truck engine multiple times, and they are usually small (less than 100 Ah). If the vehicle battery is used, it is advisable to always work with the engine running to extend the life of the battery. When it reaches the end of its useful life, it is recommended to change it for a dual battery AGM. Si you want to work with the vehicle's engine off, it is recommended to use a dual battery (starting and supply), resistant to deep discharges, ideally of AGM technology and larger than 150 Ah (or 100 Ah if there are space limitations, as long as it supports peaks of 800 A).

Apijuneda offers dual AGM batteries suitable for this type of use.

| Capacity Ah | AJ-MINI | AJ100H | AJ2006H | AJ2006HR | AJ2008TK |
|-------------|---------|--------|---------|----------|----------|
| 100 ah | 75 | 47 | 39 | 39 | 39 |
| 190 ah | 143 | 89 | 75 | 75 | 75 |
| 260 ah | 195 | 122 | 103 | 103 | 103 |

8.2. Additional battery installation

When installing an auxiliary battery, it is important to use a battery separator to protect both batteries, ensure proper charging, and avoid mixing different types of batteries. Apijuneda's professional separator minimizes voltage loss, unlike low-quality separators, which can compromise the correct loading of the system.

8.3. Electrical diagrams

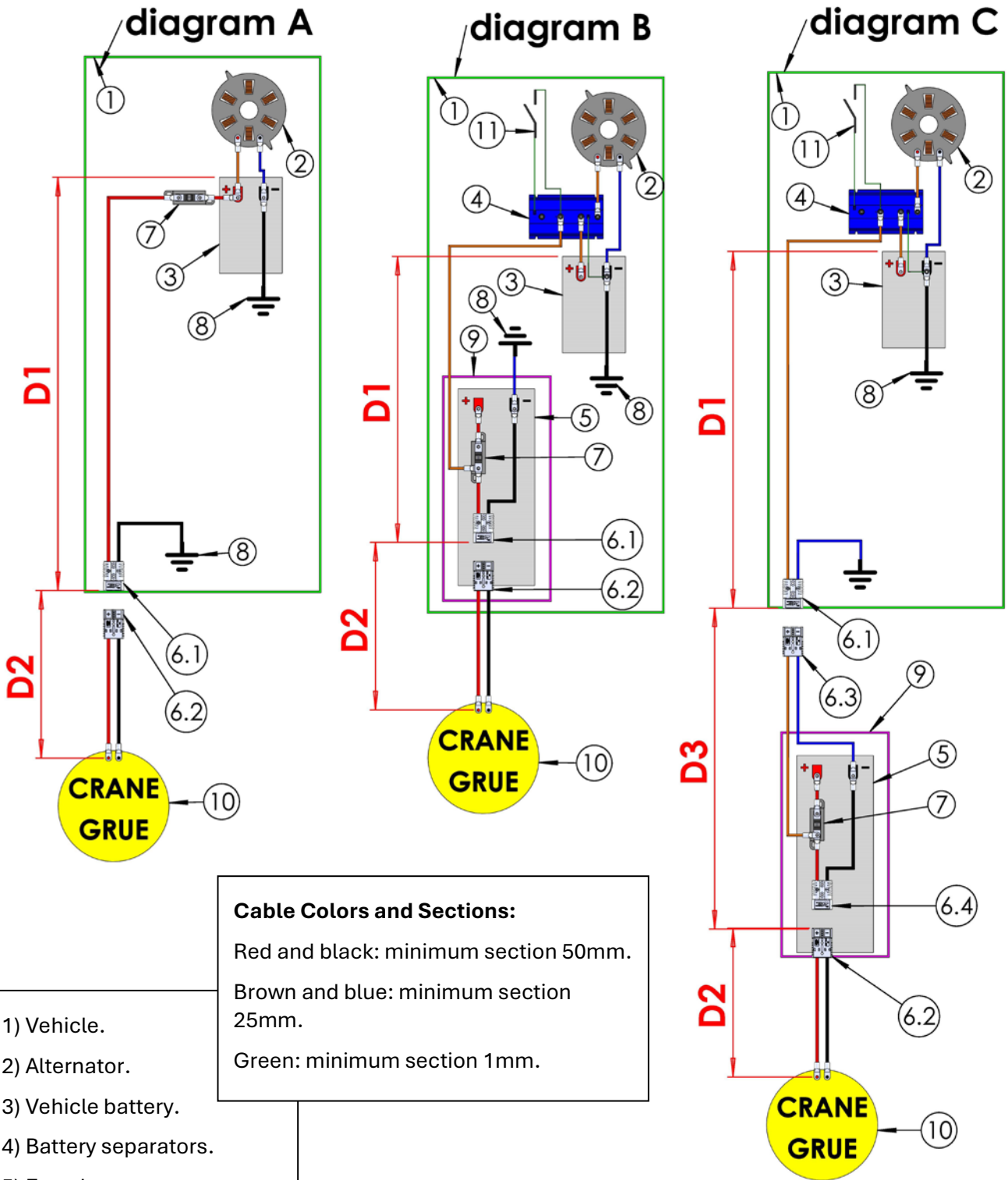
- **Diagram A:** The crane is powered by the **vehicle's original battery**. It is recommended **to keep the engine running**.
- **Diagram B:** An additional battery is installed **in the vehicle**.
- **Diagram C:** An additional battery is installed **in the trailer**.

8.4. Distances for wiring

D1) Distance from the vehicle's main battery to the connector 6.1. 6 meters are supplied from the factory.

D2) Distance from connector 6.1 to crane. 1.5 meters are supplied ex works for installation on a vehicle and 3 meters for installation on a trailer with diagram A and B and 1.5 meters with diagram C.

D3) Distance from the vehicle's connector 6.3 to connector 6.4. If the battery is installed at the front of the trailer, 3 meters should be enough.



Cable Colors and Sections:
 Red and black: minimum section 50mm.
 Brown and blue: minimum section 25mm.
 Green: minimum section 1mm.

- 1) Vehicle.
- 2) Alternator.
- 3) Vehicle battery.
- 4) Battery separators.
- 5) Extra battery.
- 6) Gray connector.
- 7) Fuse box.
- 8) Connection to chassis.
- 9) PVC box for battery.
- 10) Apijuneda Crane.
- 11) Vehicle key.

| Crane | Starting Peak | Maximum consumption | Minimum consumption |
|----------|---------------|---------------------|---------------------|
| AJ-MINI | 600A | 70 ah | 40 ah |
| AJ100H | 700A | 100 ah | 55 ah |
| AJ2006H | 800A | 120 ah | 65 ah |
| AJ2006HR | 800A | 120 ah | 65 ah |
| AJ2008TK | 800A | 120 ah | 65 ah |