

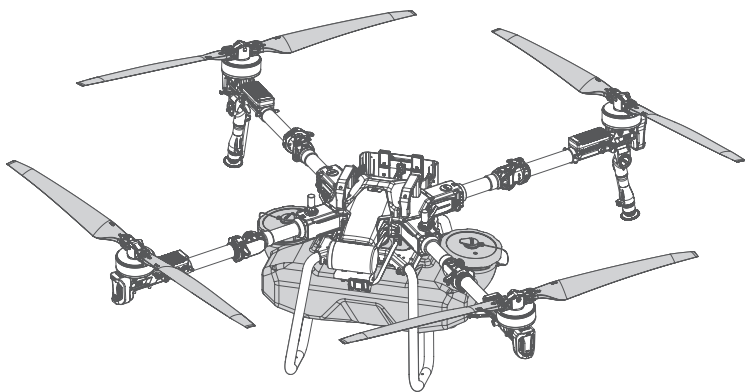
极飞 P100 Pro 药箱升级套件

XAG P100 Pro Liquid Tank Upgrade Kit

使用说明

User Manual

Version 1.0



致用户 To User

尊敬的用户，感谢您使用极飞科技产品。

为了确保您安全及顺利地使用极飞 P100 Pro 药箱升级套件，我们强烈建议您仔细阅读此使用说明，并遵守此使用说明中提到的规则。

Dear user, thank you for choosing XAG's products.

For safety purposes and better user experience, it is highly recommended that you read this manual carefully and strictly follow the instructions hereof.

如何联系我们 Contact Us

制造商：广州极飞科技股份有限公司

Manufacturer: Guangzhou Xaircraft Technology Co., Ltd.

地址：广东省广州市天河区高普路 115 号 C 座

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技术支持邮箱：support@xa.com

Technical Support Team: support@xa.com

使用须知

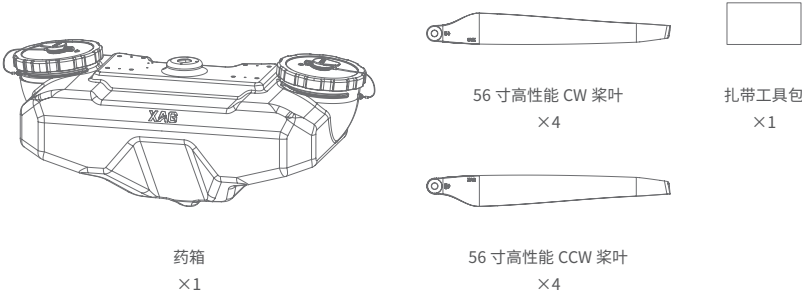
- 极飞 P100 Pro 药箱升级套件仅适用于 P100 Pro 2023 款农业无人飞机，请勿在其他产品上使用或用于农业植保以外的用途。
- 本产品应在风力不超过 3 级的晴朗 / 多云 / 阴天天气下操作使用，禁止在雨雪、霜雾、雷霆、冰雹、沙尘或强风等恶劣天气或周围有强磁等干扰环境下使用。
- 为满足药箱容量升级后农业无人飞机的载重作业需求，用户需同时配套使用本升级套装内的高性能桨叶，以免影响作业效率或引发安全事故。请用户严格按照本《使用说明》安装和使用产品。
- 请使用干净、无杂质的清水进行配药，并将配好的药水经过滤后再加入药箱，以防因水中杂质造成输液管堵塞。
- 配药及喷洒作业时建议搭配使用防护用具，操作过程中应小心谨慎，严禁人体、机身直接接触药水，以防因药水溅洒对机身及人体造成伤害。
- 喷洒作业前，请确保睿喷系统特别是喷头、输液管等部件无堵塞、无漏液并且各项功能指标检测正常。
- 喷洒作业前，请确保起飞地点及航线附近开阔且远离人群，避免因喷洒农药或其他液体溅射导致人员（或动物）受到损害。
- 配药及喷洒作业过程中，应注意保护环境，对农药的使用应当符合环保等相关法律法规的要求，严禁污染河流和饮用水源。
- 请勿在本产品处于通电状态时，对本产品进行拆装模块或插拔路线的操作。
- 本产品闲置时，请对产品进行系统的清洁和检查，确保产品无堵塞或其他异常情况后，将产品放置于干爽、阴凉及安全的地方。
- 请勿将非极飞原厂配件用于极飞科技产品的维修和使用，使用非原厂配件有可能对极飞科技产品的安全使用及使用寿命造成严重影响，对于因使用非极飞原厂配件造成的产品损坏不属于产品保修范围。

产品概述

极飞 P100 Pro 药箱升级套件（简称“升级套件”）搭配极飞 P100 Pro 2023 款农业无人机使用，通过升级高性能桨叶和药箱，可将 P100 Pro 的药箱载重量由 50L 升级到 60L，进一步满足大流量喷洒作业需求，为每一位用户提供智能、精准、高效、灵活的生产解决方案。

物品清单

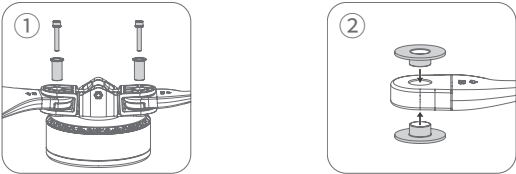
打开包装时，请核对是否包含该清单所罗列的所有物品。如有缺失，请及时联系您的销售者。



产品组装

更换桨叶

- ① 拆除桨夹内的螺栓，取出螺旋桨柱，并分离桨夹和旧 CW 桨叶（以 1 号机臂 CW 桨叶更换为例）；
- ② 取下旧桨叶和旧垫片，将新的高性能桨叶和新垫片组合后与桨夹的孔位对接，并使用螺旋桨柱和螺丝螺母原路装回各零部件；
- ③ 重复上述步骤完成其余机臂的桨叶更换。

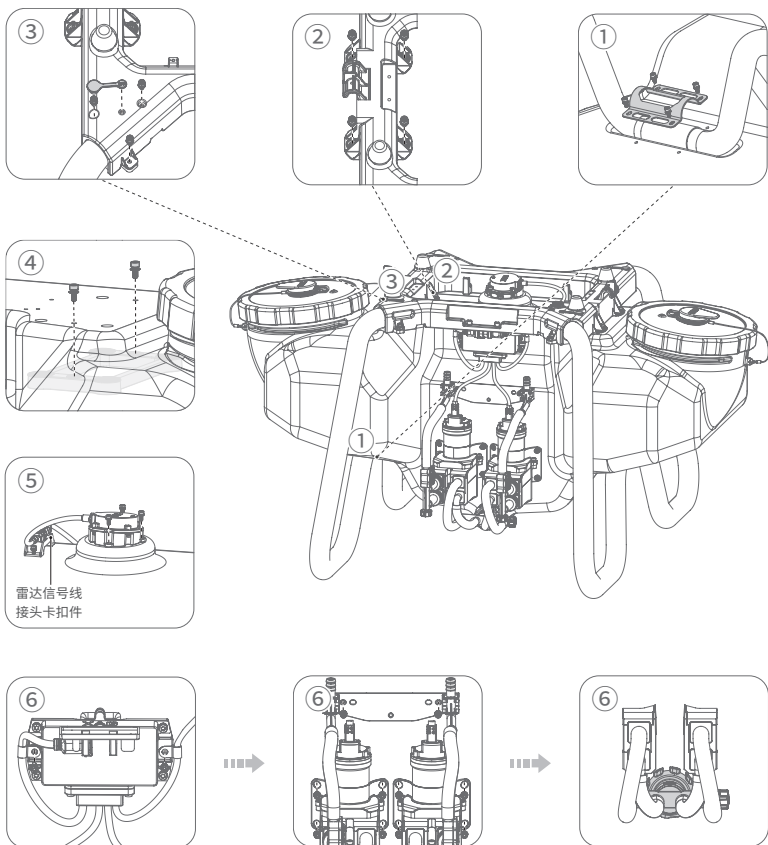


⚠ 注意

- △ CW 桨叶对应安装在 1、3 号机臂，CCW 桨叶对应安装在 2、4 号机臂。请按包装内默认配对状态成对使用桨叶。
- △ 禁止将 CW 桨叶与 CCW 桨叶调换安装，错误安装桨叶型号会导致飞行事故。
- △ 本升级套件内的高性能桨叶需按照成套更换，禁止与其他桨叶混用，桨叶混用会导致飞行事故。

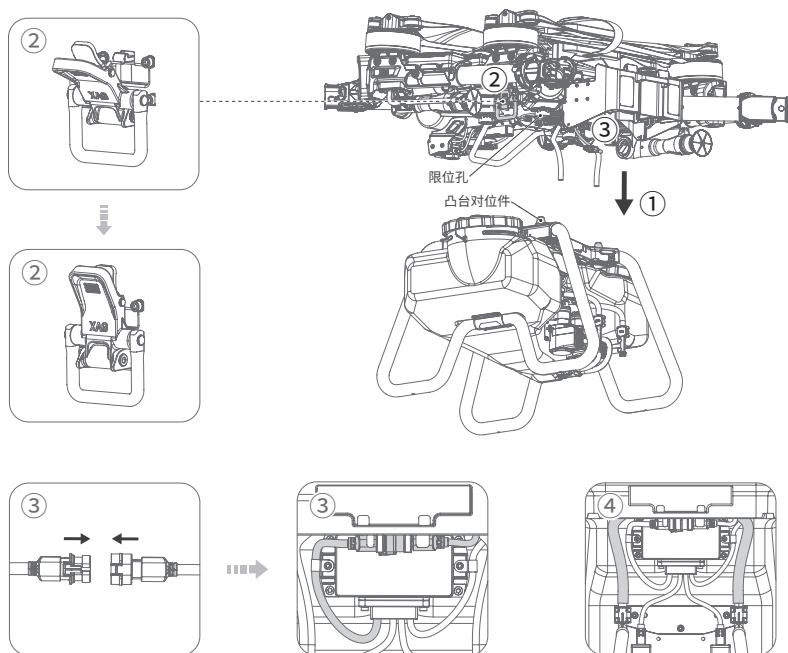
更换睿喷药箱

- ① 拆除药箱底部两侧脚架的固定螺丝，取下固定钣金件；
- ② 拆除负载框与药箱连接处的 8 颗固定螺丝，分离负载框与药箱；
- ③ 拆除负载框与脚架连接处的 12 颗固定螺丝，取下负载框和脚架；
- ④ 拆除药箱顶部的 4 颗固定螺丝，取出药箱内的 2 个药箱内嵌件；
- ⑤ 依次拆除液位传感器、雷达信号线接头卡扣件与药箱连接处的螺丝，取下液位传感器和卡扣件；
- ⑥ 拆除蠕动泵组件与药箱连接处的螺丝，取下蠕动泵组件；
- ⑦ 使用新药箱与脚架对接，并按照分离步骤原路逐步装回所有零件，完成药箱的更换。



安装睿喷

- ① 将 P100 Pro 机体的限位孔与睿喷的凸台对位件对接，使机体固定在睿喷上；
- ② 打开机身固定扣（左右各 1 个），然后扣紧机身与睿喷；
- ③ 连接机体执行系统线与睿喷执行系统线，并将连接好的机体与睿喷执行系统线固定在线路固定架上；
- ④ 连接睿喷水泵的两根输液管，并使用扎带绑紧管道连接处。



⚠ 注意

⚠ 使用设备前，请确保“极飞农服”App 以及设备当前固件版本已升级为最新版本。

药箱容量设置

首次使用睿喷前，需要设置药箱容量，用户可按照以下步骤进行设置。

1. 打开“极飞农服”App，点击“我的”-“设备”-选择无人机进入无人机的设备详情；
2. 点击“”进入喷洒系统界面-点击“药箱容量”，选择“60L”，完成药箱容量的设置。

注意

 药箱容量设置为 60L 前，请确保无人机当前使用的桨叶为本升级套件内所含的高性能桨叶。

手动喷洒测试

无人机喷洒作业前，可对睿喷系统进行“手动喷洒测试”，确保喷头正常喷洒。

1. 打开“极飞农服”App，点击“我的”-“设备”-选择无人机进入无人机的设备详情；
2. 点击“”进入喷洒系统界面-选择“手动喷洒测试”；
3. 点击“单水泵流量”和“喷头转速”可设置测试时的单水泵流量、喷头转速；点击“P1”可对 P1 水泵、S1 喷头、S3 喷头进行手动喷洒测试，点击“P2”可对 P2 水泵、S2 喷头、S4 喷头进行手动喷洒测试。

喷洒校准

首次使用睿喷、更换新的蠕动泵或双喷头与四喷头模式切换后，均需要进行喷洒校准，用户可按照以下步骤进行喷洒校准。

1. 打开“极飞农服”App，点击“我的”-“设备”-选择无人机进入无人机的设备详情；
2. 点击“”进入喷洒系统界面-选择“喷洒校准”-选择“P1 水泵”，点击“下一步”；
3. 根据 App 界面提示往药箱中加入适量清水；
4. 准备空容器，根据 App 界面提示将空容器放在相应的喷头下方后，点击“开始校准”；
5. 待 P1 水泵校准完成后，点击“继续校准”-点击“下一步”，并重复第 3、4 项步骤，可进行 P2 水泵的校准；
6. 待校准完成后，点击“完成”，完成喷洒校准。

维护保养

请于设备作业完成后对设备及时进行清洗，避免在维护保养过程中人体接触农药残留产生危害。具体清洗步骤如下：

清洁剂：肥皂水或洗衣粉水

- ① 药箱装肥皂水或洗衣粉水，手动开启喷洒，清洗喷洒系统里的残留农药。
- ② 药箱更换清水，手动开启喷洒，清洗喷洒系统里的残留肥皂水或洗衣粉水。
- ③ 手动开启喷洒，直到药管里的水全部排干净。
- ④ 拧干沾了肥皂水或洗衣粉水的抹布，擦拭机身、药箱、喷杆组件及输液管表面，除去药渍及附着的泥土。
- ⑤ 用干净的干抹布擦拭机身、药箱、喷杆组件及输液管，完成清洗。

免责声明

1. 使用本产品之前，请仔细阅读本文档。本声明对安全使用本产品以及您的合法权益有着重要影响。一旦使用本产品，即视为您已经充分阅读、了解、理解、认可和接受本文档全部条款和内容。
2. 本产品并非玩具，使用此产品具有一定的安全风险，本产品不适合未满 16 周岁的人士、法律规定的限制民事行为能力人、无民事行为能力人或行动能力存在明显困难、障碍的人士使用。如本规定的产品使用年限与产品操作所在地法律法规存在不一致时，请以实际操作产品所在地的法律法规为准。
3. 操作本产品时应取得产品使用所在地法律法规要求的无人机操作许可证书。请勿让未依法取得前述操作员证书的人士接触、使用本产品，在有儿童、人群、动物出现的场景操作时请务必远离并确保安全。
4. 本产品是属于极飞 P100 Pro 2023 款农业无人飞机的升级套件，此配件仅适用于农业领域。请务必在使用产品之前仔细阅读本《使用说明》，了解您的合法权益、责任和安全说明；否则可能带来财产损失、安全事故以及人身安全隐患。
5. 您承诺仅出于正当目的并在法律允许范围内使用本产品，并且同意本条款及极飞科技可能制定的任何相关政策或者准则。您了解并接受本产品在使用过程中将保存相关飞行记录和数据至极飞科技服务器。若因为使用者的原因导致飞行记录和数据无法保存，导致无法对飞行记录和数据进行分析时，极飞科技将不承担责任。
6. 在法律允许的最大范围内，在任何情况下极飞科技不对本产品提供任何明示或暗示的保证，包括但不限于可销性，特定用途的适合性或不侵权的暗示保证。
7. 请您在《使用说明》的操作指引下安装和使用、运输、保养本产品，请勿擅自对产品进行改造、改装或拆解等，因用户使用不当，擅自改造、改装或拆解本产品所出现的故障或损坏将不适用产品质保维修服务，且由此导致的一切经济 and 法律责任由用户自行承担。
8. 在法律允许的最大程度下，极飞科技不承担因用户未按照本《使用说明》使用产品所引发的一切损失；并不对任何间接性、后果性、惩罚性、偶然性、特殊性或刑罚性的损害承担责任，包括因您购买、使用或不能使用本产品而遭受的损失（即使该等损失的可能性已被告知亦然）。
9. 在法律允许的最大程度下，在任何情况下，极飞科技因所有损害、损失及引致诉讼而对您所负的法律責任或金額均不会超过您因购买产品而向极飞科技支付的金额。
10. 您理解，任何产品在使用过程中都可能因为操作不当、周边环境、网络通讯等单一或综合性因素导致发生意外事件，您理解前述意外事件系产品使用过程中合理且可被接受之情形，极飞科技不对此类意外事件承担任何责任。
11. 在任何情况下，购买者或使用者均应遵守产品使用地国家及区域的相关法律法规，极飞科技不承担因购买者或使用者违反相关法律法规而产生的任何责任。
12. 特别提示，本产品及其配套设备提供的服务可能会涉及到农田地理信息数据的采集、存储和处理。使用本产品前，请务必遵照产品使用所在地与地理信息数据采集、存储和处理相关的法律法规，确保符合法律规定。对于任何违反相关法律法规的行为所导致的一切经济和法律責任，由产品操作者自行承担。
13. 某些法律法规可能会禁止免除责任类条款，因此您的相关权利可能会有所不同，但这并不意味着本声明中的内容部分或全部必然无效，若部分条款因任何原因而被认定无效，此种无效条款并不影响其他条款的有效性。
14. 在法律允许范围内，极飞科技享有对以上条款的最终解释权和修改权。极飞科技有权在不再事先通知的情况下，通过极飞科技官方网站、《使用说明》、线上 App 等途径对本条款进行更新、改版或终止。

警告

用户在使用无人机及周边产品前应仔细阅读完整的《使用说明》，应当取得产品使用所在国家或区域的法律法规的无人机操作许可证资质。不当操作无人机及周边产品可能会对自身或他人造成严重伤害，或者导致产品损坏和财产损失。操作本产品需具备强烈的安全意识，请务必严格遵守极飞科技的《使用说明》指引安装和使用本产品，切勿使用非极飞科技提供或建议的部件进行产品的维修和使用。

Safety Guidelines

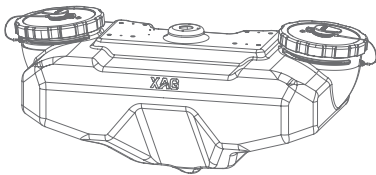
- **XAG P100 Pro Liquid Tank Upgrade Kit** is only compatible with the XAG P100 Pro 2023 Agricultural Drone. Do NOT use it on other products or for purposes other than plant protection.
- It is advisable to use the product on sunny, cloudy, or overcast days with winds of force 3 or below. NEVER use it in adverse weather conditions including rain, snow, frost, fog, thunder, hail, dust storms, and gale, or in an area with strong electromagnetic interference.
- To meet the payload requirements for agricultural drones following the upgrade of the liquid tank capacity, users must use the high-performance propeller blades provided in this upgrade kit to ensure efficiency and prevent accidents. Users are required to strictly follow the instructions in this User Manual to install and use the product.
- To prevent impurities from clogging the tubes, please mix pesticide with clean and purified water and filter it before adding it to the tank.
- Be cautious when preparing and spraying pesticides. Using personal protective equipment is highly advisable. Refrain from direct contact with the pesticide. Avoid splashes that may result in damage to the drone and bodily injury.
- Before spraying, make sure that the Revospray system, especially the nozzles, tubes, and other parts are free of clogging and leakage, and that all the functional indicators are normal.
- Before spraying, make sure the area around the takeoff point and along the route is clear and far from people. This is to prevent harm to humans or animals from the spray or splashes.
- Exercise environmental awareness when preparing and applying pesticides. The use of pesticides must comply with environmental protection laws and regulations. Polluting rivers and drinking water sources is strictly prohibited.
- NEVER install/remove any module or insert/extract any circuit while the power is on.
- When the product sits idle, please clean and inspect it thoroughly, ensure it is free of clogging or other abnormalities, and store it in a dry, cool, and safe place.
- Do not use non-XAG components for the maintenance and operation of XAG products, as this may seriously compromise the safety and lifespan of the products. Any damage to the products arising therefrom will not be covered by the product warranty.

Introduction

The XAG P100 Pro Liquid Tank Upgrade Kit (the "upgrade kit") is compatible with the XAG P100 Pro 2023 Agricultural Drone. By using high-performance blades and upgrading the liquid tank, the P100 Pro's tank capacity can be increased from 50L to 60L. This enhancement meets the demands for high-flow-rate applications, providing smart, precise, efficient, and flexible production solutions for every user.

List of Items

Please see that all of the following items are present when unpacking the boxes. Should there be any item missing, please contact your seller immediately.



Liquid Tank
×1



56" High-Performance CW Blade
×4



56" High-Performance CCW Blade
×4

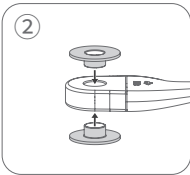
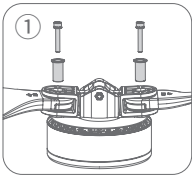


Cable Tie Tool Kit
×1

Installation

Replace Blades

- ① Remove the bolts inside the clamp, take out the spacers, and detach the old CW blade from the clamp (using the CW blade on arm #1 as an example).
- ② Remove the old blades and washers, assemble the new high-performance blades and washers, and align them with the holes in the clamp, then fit back the spacers as well as screws and nuts to all parts.
- ③ Repeat the above steps to replace the blades on the remaining arms.



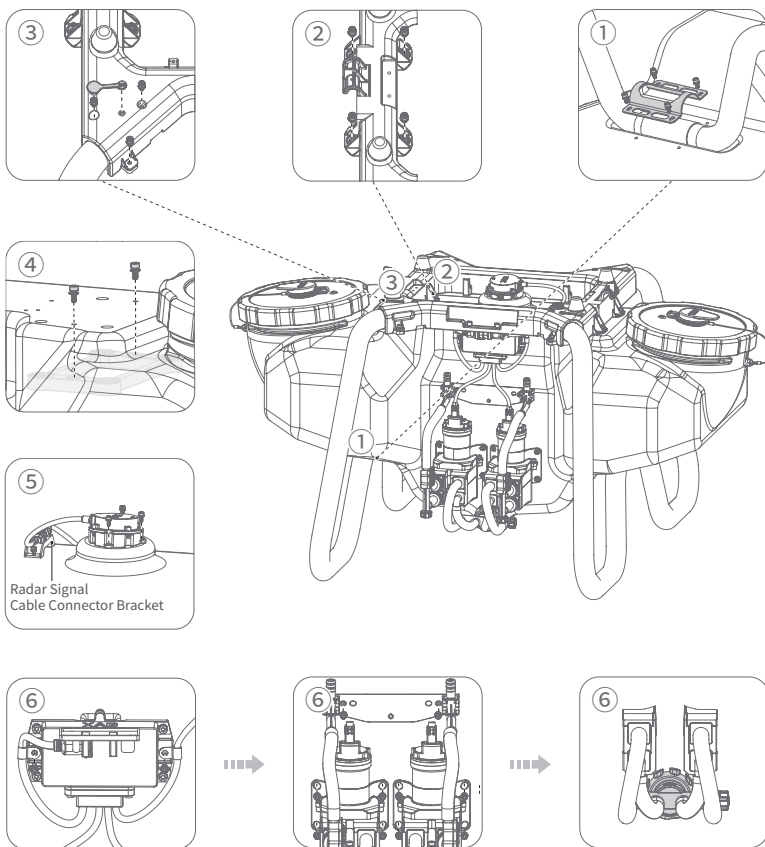
Note

△ CW propellers should be installed on arms #1 and #3. CCW propellers should be installed on arms #2 and #4. Please use the blades in pairs as they were originally packaged.

- ⚠ Do not interchange CW and CCW propellers, as this may lead to an accident.
- ⚠ It is essential to replace the entire set of blades as per the instructions. Mixing these blades with others is prohibited, as it may lead to flight accidents.

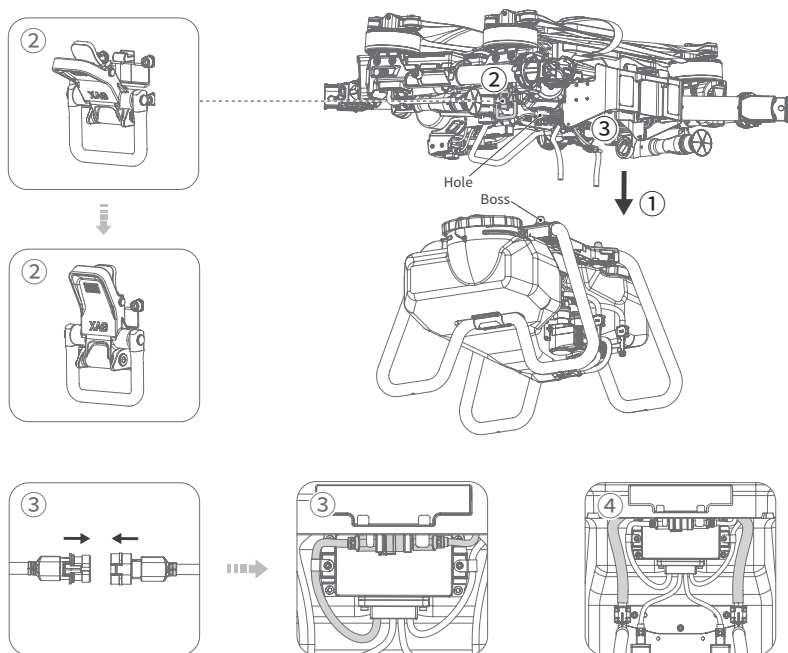
Replace Liquid Tank

- ① Unscrew the U-brackets on both sides that secure the landing gear and the bottom of the liquid tank.
- ② Detach the liquid tank from the payload frame by removing the 8 screws connecting them.
- ③ Detach the payload frame from the landing gear by removing the 12 screws connecting them.
- ④ Take out the 2 internal parts by removing the 4 screws on the top of the liquid tank.
- ⑤ Unscrew the level sensor and radar signal cable connector bracket from the liquid tank.
- ⑥ Unscrew the peristaltic pump component from the liquid tank.
- ⑦ Attach the new liquid tank to the landing gear, and reinstall the removed parts in reverse order of the above steps to complete the replacement.



Install RevoSpray

- ① Secure the airframe onto the RevoSpray by aligning the holes of the airframe with the bosses on the RevoSpray.
- ② Open the hasp on each side of the airframe and fasten the airframe to the RevoSpray.
- ③ Connect the application system cable of the airframe to that of the RevoSpray, then affix them to the cable holder.
- ④ Connect the two liquid tubes of RevoSpray's pump, and tighten the joints using cable ties.



Note

 Before using the device, please ensure that the "XAG One" and the firmware version are updated to the latest version.

Liquid Tank Capacity Settings

Before using RevoSpray for the first time, setting tank capacity is required. Users can follow the steps to set:

1. Open "XAG One" and tap "Me" and then "Device" to select the drone and enter Device Details.
2. Tap "⚙️" to enter Spraying System screen and then "Liquid Tank Capacity" to select "60L".

Note

⚠ Before setting the liquid tank's capacity to 60L, please ensure that the drone is equipped with the high-performance blades included in this upgrade kit.

Manual Spraying Test

Before spraying, please start "Manual Spraying Test" to make sure that the nozzles work properly.

1. Open "XAG One" and tap "Me" and then "Device" to select the drone and enter Device Details.
2. Tap "⚙" to enter Spraying System screen and select "Manual Spraying Test".
3. Tap "Single Pump Flowrate" and "Nozzle Rotational Speed" to set single pump flowrate and nozzle rotational speed during the test. Tap "P1" to start manual spraying test for P1 pump, S1 nozzle, S3 nozzle. Tap "P2" to start manual spraying test for P2 pump, S2 nozzle, S4 nozzle.

Spraying Calibration

When using RevoSpray for the first time, after replacing the peristaltic pump, or switching between dual-nozzle and four-nozzle modes, spraying calibration is required. Users can follow these steps for spraying calibration:

1. Open "XAG One" and tap "Me" and then "Device" to select the drone and enter Device Details.
2. Tap "⚙" to enter the Spraying System screen - select "Spraying Calibration" - select "Pump P1", and tap "Next".
3. Follow the instructions on the screen to add an appropriate amount of clean water to the tank.
4. Prepare empty containers, place them under the correct nozzles following the app's instructions, and tap "Start Calibration".
5. Once pump P1 is calibrated, tap "Continue Calibration" - tap "Next Step", and repeat steps 3 and 4 to calibrate pump P2.
6. After the calibration is done, tap "Finish" to complete spraying calibration.

Maintenance

Promptly clean the device after operation to avoid the hazards of contact with pesticide residues during maintenance. The cleaning steps are as follows:

Detergent: soapy water or laundry powder/water mixture

- ① Fill the tank with soapy water or laundry powder/water mixture. Manually start spraying to clean pesticide residues in the spraying system.
- ② Fill the tank with clean water and manually start spraying to wash off residual soapy water or the laundry powder/water mixture in the spraying system.
- ③ Manually start spraying until all tubes are drained.
- ④ Wring out a cloth with soapy water or laundry powder/water mixture, and wipe the surface of the fuselage, tank, spraying components and tubes to remove pesticide stains and mud.
- ⑤ Use a clean, dry cloth to wipe the fuselage, tank, spraying components and tubes.

Disclaimer

1. Please read this Disclaimer carefully before using this product, as it has much to do with both operational safety and your legitimate rights and interests. You shall be deemed to have read, known, understood, agreed to and accepted all the terms and conditions as well as information stated herein upon the use of this product.
2. Not being a toy and with certain safety risks, this product is not suitable for those who are under 16 years old, those who have limited or no capacity for civil conduct, or those with significant mobility difficulties or impairments. If there is any discrepancy between the specified age for using this product and the local laws and regulations of the jurisdiction where the product is used, the local laws and regulations shall prevail.
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4. This product is the upgrade kit of the XAG P100 Pro 2023 Agricultural Drone solely designed for agricultural use. Be sure to read the User Manual carefully before using this product to understand your legitimate rights and interests, responsibilities as well as safety guidelines. Otherwise, property damage and accidents could be caused; personal safety could be at risk.
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Warning

Before using a drone and its peripherals, user is required to read through the User Manual and obtain a drone operator certificate under the laws and regulations of the country/region where the product is used. Improper operation of the drone and its peripherals may cause serious injury to user or others, or cause damage to the product and property loss. Safety awareness is of great importance during operation. Please install and use the product by strictly following XAG's instructions in the User Manual. Do NOT use any components that are not provided or suggested by XAG for the repair and use of the product.



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