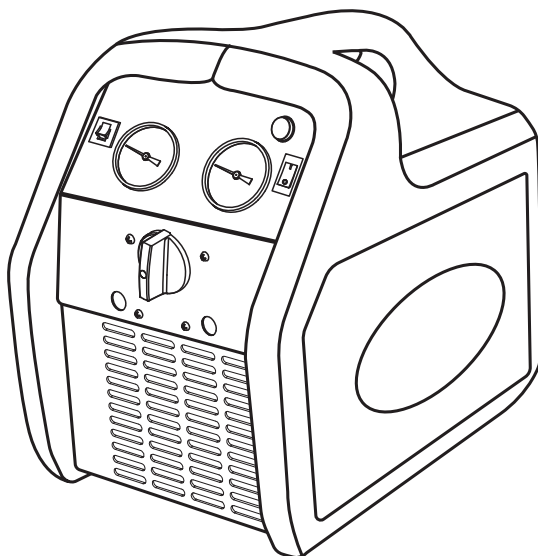


TURBRO

Refrigerant Recovery Machine

Model: R750

USER MANUAL



Please read the manual carefully before use and keep it for future reference

Contents

Safety Precautions	01
Refrigerant	02
Specification	03
Parts Description	03
Operation Guide	04
Maintenance	08
Troubleshooting	09
Warranty Information	10

Safety Precautions

General Safety

1. **DO NOT use this appliance until you have read the safety warnings and operating instructions.** Risk of fire, malfunction, property damage, electric shock, serious injury, or even death may result if warnings and instructions are not adhered to.
2. The manufacturer declines all responsibility for personal injury or damage to animals or objects caused by inappropriate use of the appliance according to the warnings for installation, use, and maintenance described in this instruction manual.
3. This appliance is not to be used or have maintenance performed by persons with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge unless they have been given strict supervision or instruction concerning the use of the appliance by a person responsible for their safety.
4. DO NOT use it for any purpose other than that for which it was designed.
5. This product is not intended for commercial use.
6. Keep the appliance out of reach of children and pets.
7. DO NOT alter or modify this appliance in any manner.
8. NEVER attempt to operate this appliance if it is damaged, malfunctioning, disassembled, or has missing or broken parts.
9. If the product is damaged or is not functioning properly, stop using it and contact Customer Support immediately.
10. **Only a qualified technician** can operate this recovery unit. Always wear safety goggles and protective gloves while working with refrigerants to protect your skin and eye from hurting by refrigerant gases or liquid.
11. Before starting the equipment, make sure that it is well grounded.
12. Be sure the power is off before examining or repairing the recovery unit.
13. If needed to replace the damaged power cord, it must be AWG 12+ and 24 feet maximum length.
14. This unit is required to be used with recovery tanks with a minimum working pressure of 45 bar (652.6 psi). Tanks should be filled to a maximum of 80% of capacity to make sure there is enough space for liquid expansion. Never overfill the recovery tank. Use a scale to prevent overfilling. An overfilled tank can explode causing serious injury or death.
15. Do not use this equipment near flammable liquid or gasoline.
16. Be sure to use this equipment in a well-ventilated place. The unit must be placed horizontally.

17. The input pressure of the unit should not exceed 26 bar (377.1 psi).
18. The ventilation opening of the unit must not be blocked.
19. Do not reuse the recovered refrigerant.

Electrical Safety

1. Installation must be carried out by a certified electrician in line with all applicable local, state, and national codes.
2. Check the power cord and plug carefully before use to ensure that they are not damaged.
3. The power cord should not be scratched, damaged, knotted, pressed against heavy objects, clamped, or processed. Otherwise, it may increase the risk of electric shock, short circuit, or fire.
4. Make sure the operating voltage is the same as the parametric label.
5. Ensure that the plug fits into a proper socket.
6. Push the power plug all the way into the wall outlet so that it will not loosen.
7. This unit should be plugged directly into a power outlet. Power outlets should be properly rated, protected, and sized to avoid electrical overload.
8. DO NOT cut or remove the third (ground) prong from the power cord.
9. DO NOT use an extension cord or power strip with this product, as using those may increase the risk of fire.
10. DO NOT handle the power cord, plug or unplug with wet hands. Keep the plug and power cord away from liquids.
11. If the power cord is damaged, it must be replaced by the manufacturer, its certified service agent, or similarly qualified persons to avoid a hazard.
12. To disconnect the appliance, turn the unit off, then remove the plug from the outlet. Always grip the plug firmly and pull it straight out from the outlet when taking it out. DO NOT unplug by pulling on the cord.

Refrigerant

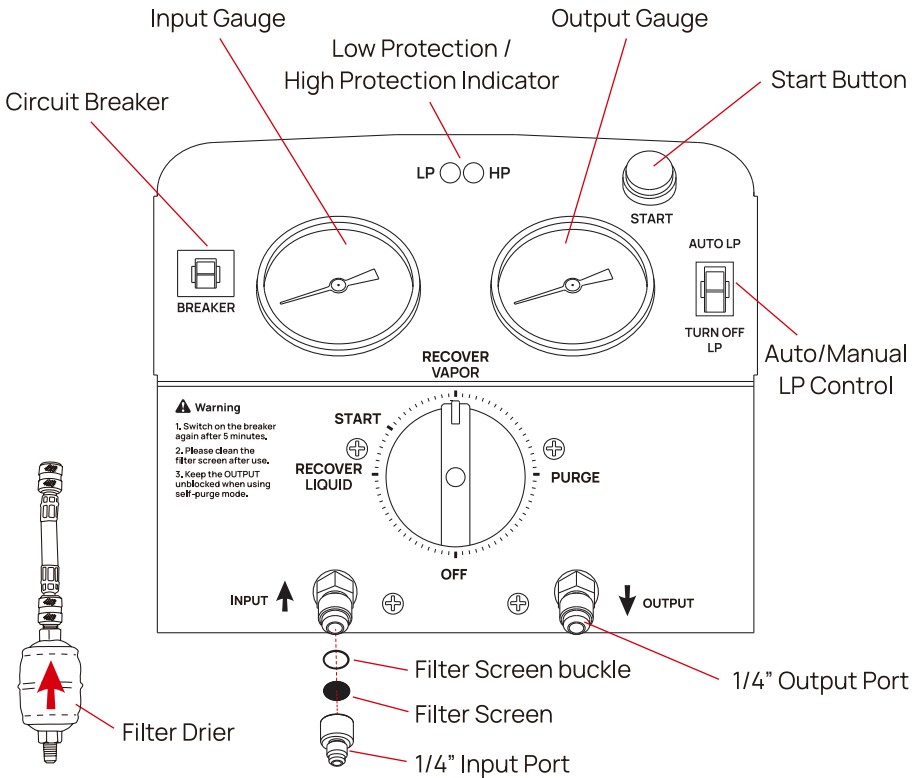
The unit is approved for use with the following category III, IV, V, and A2L refrigerants:

R-12, R-134a, R-401C, R-406A, R500, R-407D, R-408A, R-409A, R-411A, R-411B, R-412A, R-502, R-509, R22, R410A, R401B, R402B, R407C, R-402A, R-404A, R-407A, R-407B, R507, R32, R-454B, R-1234yf

Specification

Model	R750
Voltage	AC 120 V / 60 Hz
Motor Power	3/4 HP
Current	6 A
High-Pressure Protection	560 PSI (38.6 bar)
Low-Pressure Protection	-5 inHg ~ -14 inHg (-12.7 cmHg ~ -35.5 cmHg)
Operating Temperature	32-104°F (0-40°C)
Intake/Outlet Port Size	1/4" SAE

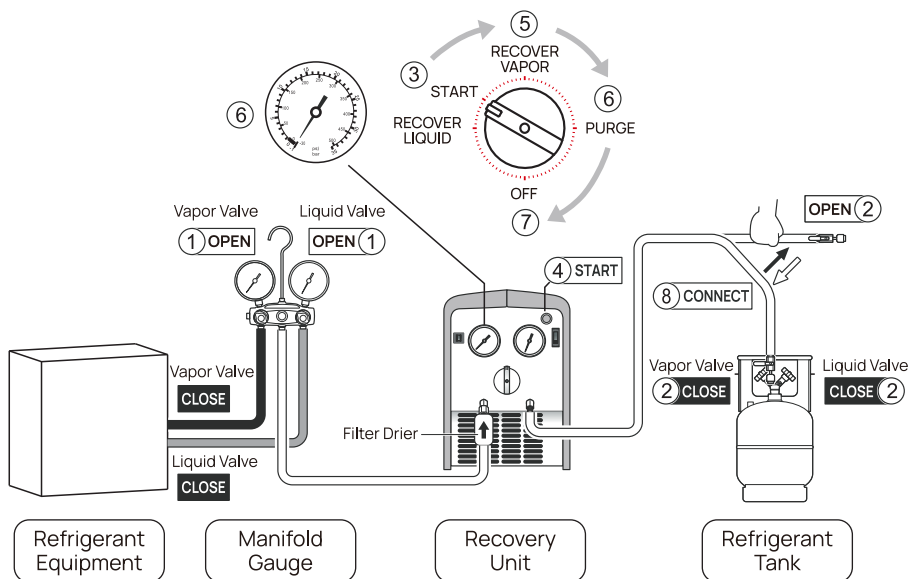
Parts Description



Operation Guide

- This product is used to pull liquid or vapor refrigerant directly out of the equipment and transfer it into a refrigerant tank.
- Connect all pipes and filter drier correctly and firmly. Refer to the diagram below.
- There's no need to connect the hose to the liquid valve of the manifold gauge if recovers refrigerant from AC units.
- Ensure the filter screen is installed firmly and all valves are closed before recovery.
- Install the filter drier according to the arrow direction.

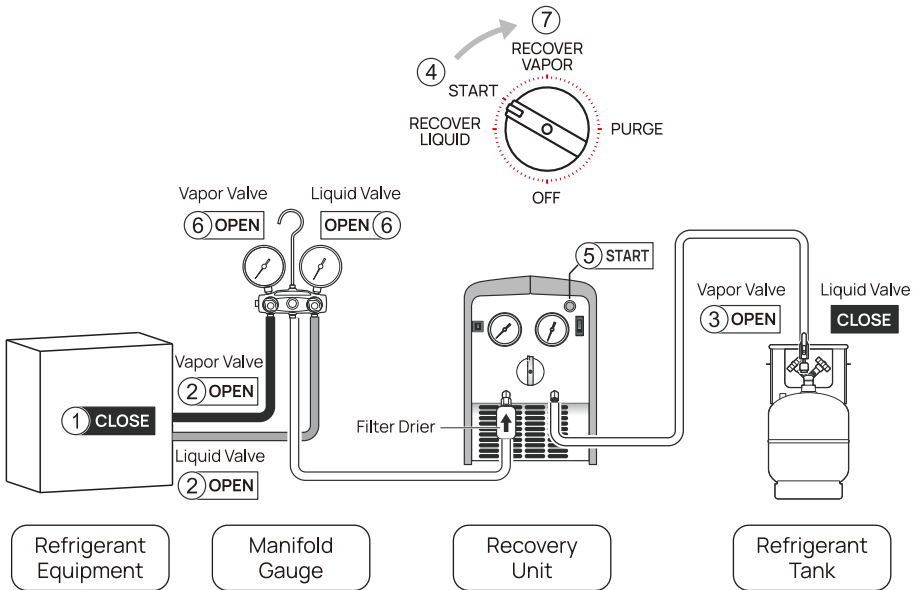
Refrigerant Pipe Exhaust



1. Open the vapor and liquid valves of the manifold gauge.
2. Close the vapor and liquid valves of the refrigerant tank. Open the check valve of the connecting pipes of the refrigerant tank.
3. Turn the switch to position "START".
4. Press the start button.
5. Turn the switch to position "RECOVER VAPOR" and start exhausting the air inside the pipes.
6. When the input gauge gets to -29 in.Hg, turn the switch to position "PURGE" to start self-purge.

7. When the input gauge gets to -29 in.Hg again after self-purge, turn the switch to position "OFF" to finish the exhaust.
8. Connect the pipe to the refrigerant tank.

Recovery Mode



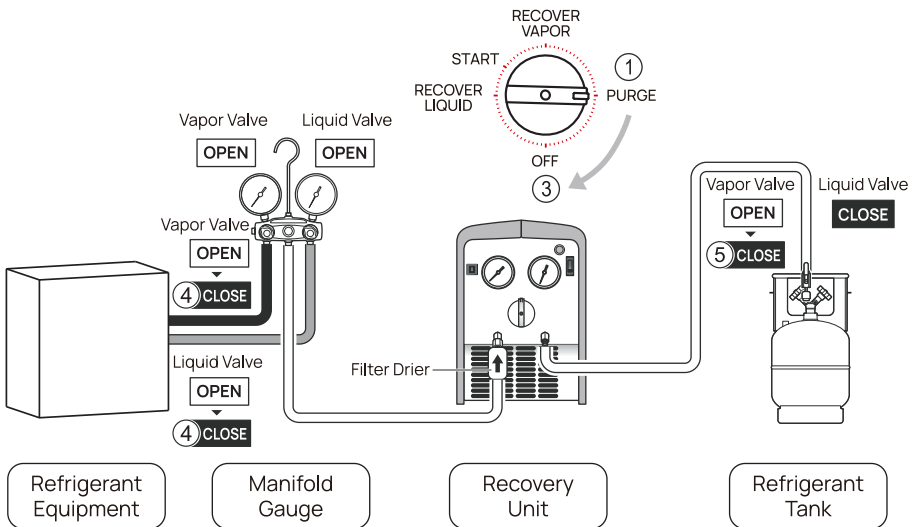
1. Turn off the power supply of the refrigerant equipment.
2. Open the vapor and liquid valves of the refrigerant equipment.
3. Open the vapor valve of the refrigerant tank.
4. Turn the switch to position "START".
5. Press the start button.
6. Open the liquid and vapor valves of the manifold gauge. It is faster to recover liquid refrigerant than gas refrigerant.
7. Turn the switch slowly to position "RECOVER LIQUID". The refrigerant tank should not be charged to more than 80% of its capacity with the refrigerant.
8. Turn the switch to "RECOVER VAPOR" to recover gas refrigerant when
 - a. If no liquid appears in the manifold gauge sight glass,
 - b. After the manifold window reads below 0,
 - c. The low-pressure protection stops the unit, and the LP indicator will illuminate, indicating that the recovery is complete.

NOTICE:

1. Turn the switch to position "RECOVER LIQUID" to get a stable recovery of liquid refrigerant with a low speed of 2.2lb/min.
2. If liquid slugging occurs at position "RECOVER LIQUID", turn the switch slowly towards position "START" until the impact stops. Ensure the pressure is not at 0, because the unit doesn't work at 0.
3. If liquid slugging occurs at position "RECOVER VAPOR", turn the switch towards position "START" until the impact stops.
4. If the recovery restarts after interruption of power or is difficult to start:
Turn the switch to position "START" and press the start button, then turn the switch to the previous operating position.

Self-purge Mode

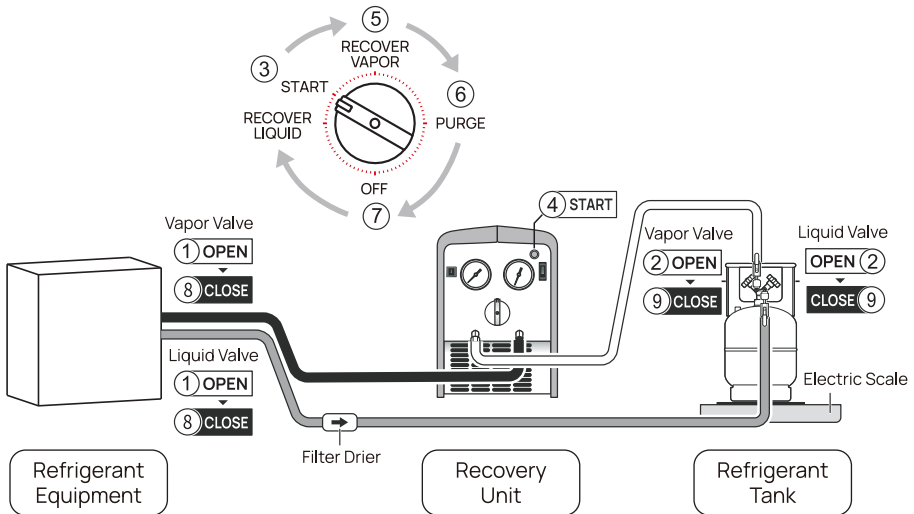
- The unit must be purged after each use.
- Keep the OUTPUT unblocked when using self-purge mode, otherwise the high pressure gauge will be damaged.



1. Turn the switch to position "PURGE" to start the self-purge.
2. When the manifold gauge reads below 0, or the low-pressure protection stops the unit, the purge is complete, and the unit gets vacuumed.
3. Turn the switch to position "OFF".
4. Close the valve of the refrigerant equipment.
5. Turn off the vapor valve of the refrigerant tank.

Liquid Push/Pull Mode

- This mode works on systems with large volumes of more than 22 lbs (10 kgs) of liquid refrigerant.
- An electric scale is needed to monitor the recovery process to prevent overfilling.



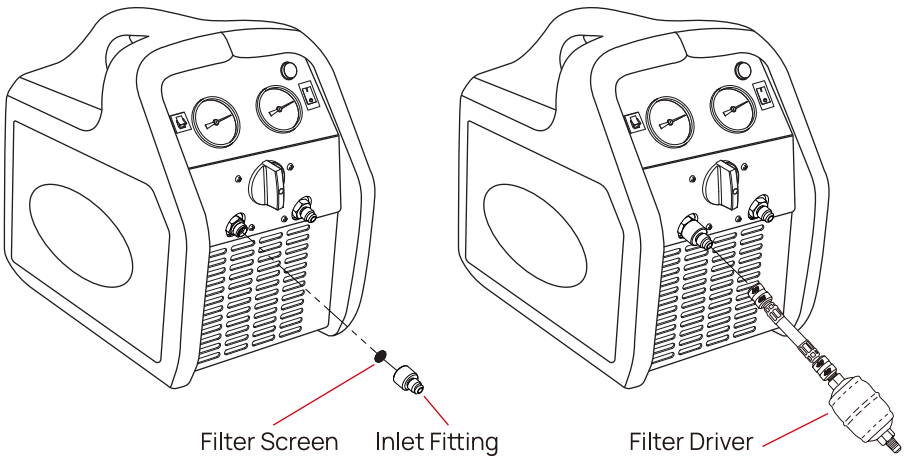
1. Open the vapor and liquid valves of refrigerant equipment.
2. Open the vapor and liquid valves of the refrigerant tank.
3. Turn the switch to position "START".
4. Press the start button.
5. Turn the switch to position "RECOVER VAPOR" to start the push/pull mode. When the display of the electric scale remains unchanged or changes very slowly, it means the liquid recovery is finished.
6. Then recover the gas refrigerant. Turn the switch to position "PURGE" and follow self-purge mode to purge the gas refrigerant.
7. Turn the switch to position "OFF".
8. Close the vapor and liquid valves of refrigerant equipment.
9. Close the vapor and liquid valves of the refrigerant tank.
10. Connect the pipes again and recover the vapor of refrigerant equipment according to recovery mode for further refrigerant recovery.

Maintenance

Cleaning and user maintenance should not be made by persons with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge unless they have been given strict supervision or instruction concerning the use of the appliance by a person responsible for their safety.

Ensure the machine is powered off and the power supply is shut off for at least 5 minutes before performing cleaning and maintenance of the appliance, and prevent it from being reconnected by accident.

- To prevent personal injury, disconnect the unit from the power supply before maintenance.
- Before refrigerant recovery, inspect and clean the filter screen in the input port on the unit. Replace the filter screen if necessary. Failure to do this can cause the strainer to become too clogged, reducing the performance of refrigerant recovery. Before replacing, check the condition of the buckle and replace it if necessary.
- The filter drier is recommended to be replaced every year.



- Keep all connections to the refrigeration system dry and clean. Damage will occur if moisture is allowed to enter the system.
- Purge the unit after each use. Failure to purge the remaining refrigerant from the unit will cause premature failure.

Troubleshooting

Troubleshoot your problem by using the chart below. If the unit still does not work properly, please contact the TURBRO customer team via support@turbro.com.

Issue	Possible Cause	Solution
The fan doesn't work.	The fan is damaged.	Contact the TURBRO customer service team.
The compressor doesn't work.	<ol style="list-style-type: none"> 1. External pressure is too high. 2. Motor failure or other components damaged. 	<ol style="list-style-type: none"> 1. When recovering the liquid refrigerant, turn the knob to the "START" position then restart. When recovering the vapor refrigerant, turn the knob to the "PURGE" position then restart. 2. Contact the TURBRO customer service team.
Press the "START" button but the compressor doesn't respond.	<ol style="list-style-type: none"> 1. The unit is shut off by high-pressure protection. 2. Internal wiring fault. 	<ol style="list-style-type: none"> 1. Lower the pressure of the unit and check if the hoses are well connected. 2. Contact the TURBRO customer service team.
The compressor works but stops within a few minutes.	<ol style="list-style-type: none"> 1. High pressure shut off due to the wrong operation, such as not opening the outlet valve and the refrigerant tank valve not opening. 2. The motor thermal protector shut off. 3. The circuit breaker shut off. 	<ol style="list-style-type: none"> 1. Read carefully and follow the operation guide. 2. The compressor will restart automatically after a few minutes. 3. Cool the circuit breaker down and press "circuit breaker" to restart after 5 minutes.
Low recovery speed.	<ol style="list-style-type: none"> 1. The pressure of the refrigerant tank is too high. 2. The compressor is damaged. 	<ol style="list-style-type: none"> 1. Cooling down the tank can help bring down the pressure. 2. Contact the TURBRO customer service team.
The unit doesn't pull out a vacuum.	<ol style="list-style-type: none"> 1. The connecting hoses are loose. 2. Leakage in the unit. 	<ol style="list-style-type: none"> 1. Tighten the hose connections. 2. Contact the TURBRO customer service team.

Warranty Information

This 1-year limited warranty is extended to the original purchaser of this product and warrants against any defect in materials and workmanship under normal use and conditions, for a period of one year from the date of the original purchase, subject to the conditions and limitations outlined below.

This warranty is non-transferable to any subsequent owner of the product regardless of whether the product is transferred during the specified term of the warranty.

THIS LIMITED WARRANTY IS GIVEN TO THE PURCHASER IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE.

What is covered?

- TURBRO's warranty extends only to products purchased from authorized sellers that are subject to TURBRO's quality controls and have agreed to follow its quality controls.
- This warranty is limited to the repair or replacement of part(s) proved to be defective in material or workmanship after said defect is confirmed by the manufacturer's inspection.
- The manufacturer may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of the defective part(s).

UPON THE EXPIRATION OF THIS WARRANTY, ALL SUCH LIABILITY WILL TERMINATE. NO OTHER WARRANTIES ARE EXPRESSED OR IMPLIED ANYMORE.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

What is not covered?

- Damage or losses caused by any alterations or unauthorized repair made to the product by the owner.
- Damage or losses caused by accident, neglectful operation, misuse, abuse, or use contrary to the user manual and safety guidelines.
- Damage or losses occurring during commercial use, rental use, or any use for which the product is not intended.
- Damage or losses caused by improper or inadequate maintenance.

- Failure to perform general maintenance (including cleaning).
- Use of non-standard parts or accessories.
- Natural depreciation and normal wear and tear.

TURBRO SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW.

Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

How to request warranty services?

To obtain the benefit of this warranty please leave a message online (www.turbro.com/contact), or send an email to support@turbro.com.

To express our gratitude to you for choosing us, we are giving you a 1-year warranty extension to the original 1-year manufacturer's limited warranty, extending the coverage period to two years in total.

- Complete the registration of your new product at <https://www.turbro.com/warranty> within 90 days from the date of package delivery (inclusive of the 90th day).
- Any registration beyond this stipulated period will be deemed invalid.
- The ultimate interpretation of the terms and conditions related to the extended warranty service rests solely with TURBRO.

If you discover that your product is defective within the specified warranty period, please contact our Customer Support via support@turbro.com.

- Order ID and invoice, or bill of sale should be provided. Such payment records must be kept to verify the purchase date and establish a warranty period.
- Model and issue description should be provided in detail, preferably with pictures and videos.
- DO NOT dispose of your product before contacting us.
- DO NOT return the product unless instructed by our customer service.
- The original carton should be kept in case of warranty return of the unit.

What will TURBRO do?

- Replace certain parts.
- Replace the item.
- Refund the item under certain circumstances.

In no event shall liability exceed the purchase price paid by the original purchaser of the product.

Any instructions or warranty included in this manual may be subject to change without notice. For the most up-to-date instructions and warranty information, please contact us via support@turbro.com.

TURBRO

support@turbro.com

www.turbro.com

(323)438-3334



© Katmai Technology Limited