


GETTING STARTED




Thank you for purchasing the Bishamon Hand Pallet Truck. Please read this manual carefully and make sure you understand its contents before using the product. Be sure to keep this manual in a safe place. If it is lost, contact your dealer immediately. Also contact your dealer should any of the warning labels on the product come off.

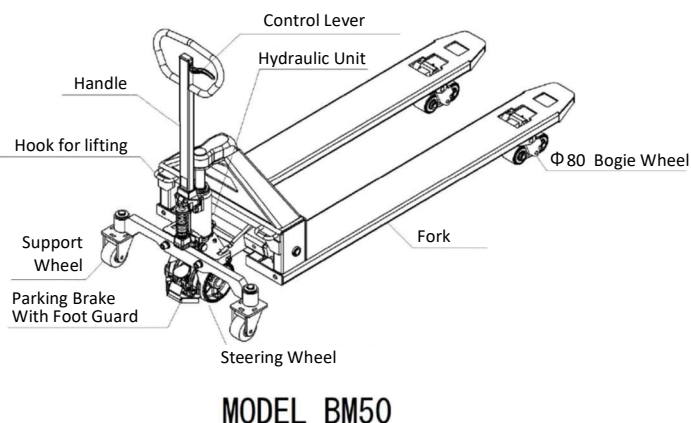
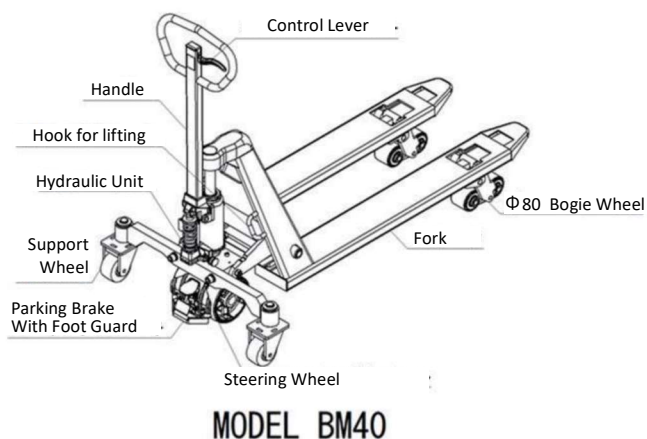
Safety Definitions

In this manual, Bishamon uses "Warning" to identify unsafe practices that can result in severe injury, and "Caution" to identify unsafe practices that can result in minor or moderate injury and property damage.

1 Warnings and Cautions

|  Warning | |
|--|---|
|  |  |
| Do not place arms or legs beneath loads or lifts. | Do not use on slopes. |
|  |  |
| Keep feet clear of rolling wheels when in motion. | Do not ride on the truck. The unit may overturn. |
|  |  |
| Make sure no personnel are in the area when unit is in use. | Be careful when moving the unit on multi-level surfaces. |

|  Caution | |
|---|--|
| <ol style="list-style-type: none">1. Read this manual completely before using and make sure you understand all instructions.2. Do not exceed the maximum capacity.3. Do not lower the forks rapidly. Do not stop suddenly. Sudden movements result in unbalanced loads that can result in property or unit damage.4. Do not load the unit on only one side of the fork or on the edges.5. Do not modify the truck.6. Be sure to inspect the unit according to the instructions in this manual.7. As the unit is not water-resistant, use in a dry location.8. Do not use on uneven surfaces when the unit is loaded.9. Use in an environment with a temperature between 0°C and 40°C. | |
|  |  |
| 10. Do not cause strong impacts with the fork, etc. The unit or its components may be damaged. | 11. Do not lift objects using only the edges or one side of the fork. The unit or its components may be damaged. |
| ※ If the above instructions are not followed, this may result in bending of the torsion tube or push rod, rusting, or damage to the unit or its components due to deterioration of the packing, so please exercise caution. (Damage resulting from improper use is not covered by the warranty) | |

2 Names of Components

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Pre-operation Inspection

Inspections are essential for operating the unit safely and discovering problems early. Inspect the following items before operating the unit.

⚠ Caution

If a suspected defect is discovered, do not operate the lift until it has been safely addressed. Continuing to operate the lift may result in damage or accidents.

Check for the following every day prior to operation:

1. Are there any visible signs of damage, bending, or scratching?
2. Is there any oil leaking from the hydraulic unit?
3. Does the fork lower naturally after being raised?
4. Do the wheels move smoothly?

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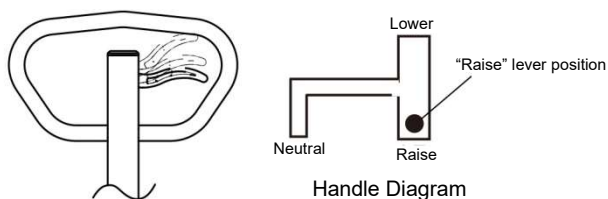
Operating Instructions

1. Raising the Forks

⚠ Caution

Do not exceed the maximum capacity.
Maximum capacity BM40 4000 kg
BM50 5000 kg

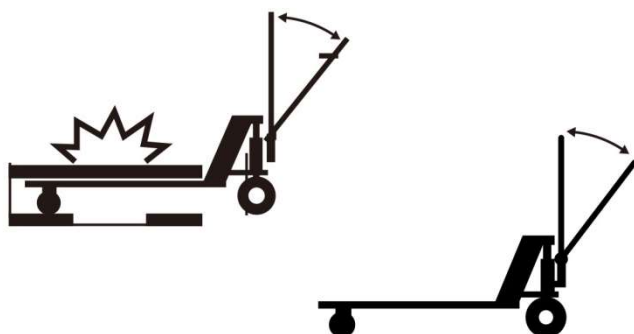
- ① Place the fork under the load.
- ② Make sure the control lever is in the Raise position.



- ③ Raising and lowering the handle will raise the fork. Repeat until the fork reaches the desired height.

⚠ Caution

- * Do not load the forks in an unbalanced manner. Doing so may damage the unit.
- * When using double-sided or plastic pallets, make sure the fork wheels do not come into contact with the pallet frame. Doing so may damage the unit.

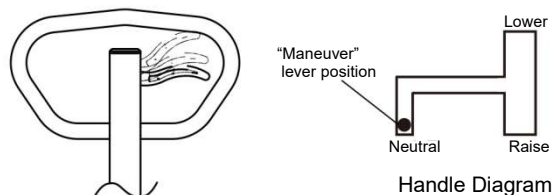


2. Maneuvering the Truck

⚠ Warning

Do not use on slopes.
You may not be able to stop the unit from moving.

- ① Raise the control lever slightly and make contact with the handle. This will make handling easier.
- ② Grab the handle and move.



⚠ Caution

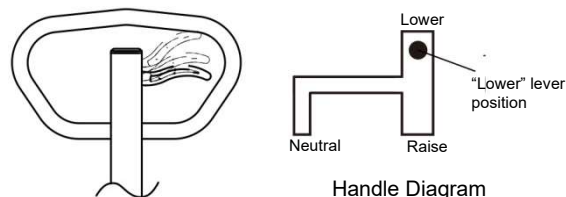
Do not use the lifting fork to pull objects.

3. Lowering the Forks

⚠ Warning

Do not place your feet beneath the loads or fork. They may get caught, resulting in injury.

Carefully pull the control lever to lower the fork. Make sure to lower at a safe speed.



Explanation

The hydraulic cylinder supports the fork. The hydraulic unit properties cause the fork to be lowered very gradually. Please be aware that the fork cannot be supported for long periods of time.

4. Parking Brake

The parking brake is used to park the hand pallet truck on a flat surface. And Foot Guard protect foot from wheels during moving for safe working condition.

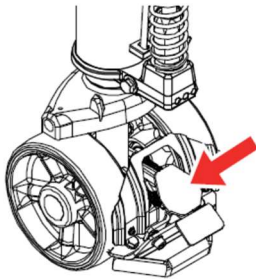
⚠ Warning

Do not use the parking brake to park the hand pallet truck on slopes or to slow it down or stop it while it is in motion. It may not function properly and may result in injury.

- ① Move the hand pallet truck to a flat, stable surface before parking it.
- ② Step on the Brake Pedal (Red color) and push it down to lock the wheels.
- ③ Step on the Release Pedal (Gray color) to unlock the brake and enable maneuvering.

Braking

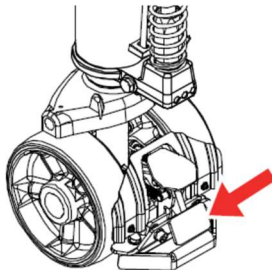
Pushing down Brake Pedal (Red Color) locks the wheel



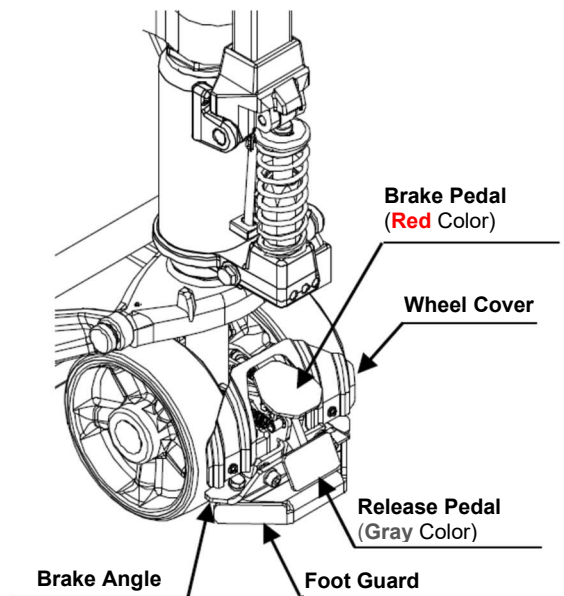
Brake Pedal and Release Pedal become even height level

Releasing Brake

Pushing down Release Pedal (Gray Color) unlock the brake and enable maneuvering



Release Pedal height level is lower than Brake Pedal



⚠ Caution

- Make sure pallet truck does not move after pushing down Brake Pedal.
- Wheel Cover is consumption parts and will not be covered under warranty.

5. Support Wheel

⚠ Caution

The support wheel is designed to prevent overturning while the unit is in motion, so make sure not to apply loads to the support wheel. Doing so may result in damage to the unit or accidents.

5 How to Make Adjustments

1. Adjusting the Parking Brake

Repeated use may result in poor brake function due to the wear of the wheels. If this occurs, follow the steps below to make adjustments. When replacing wheels, adjustment may be required also.

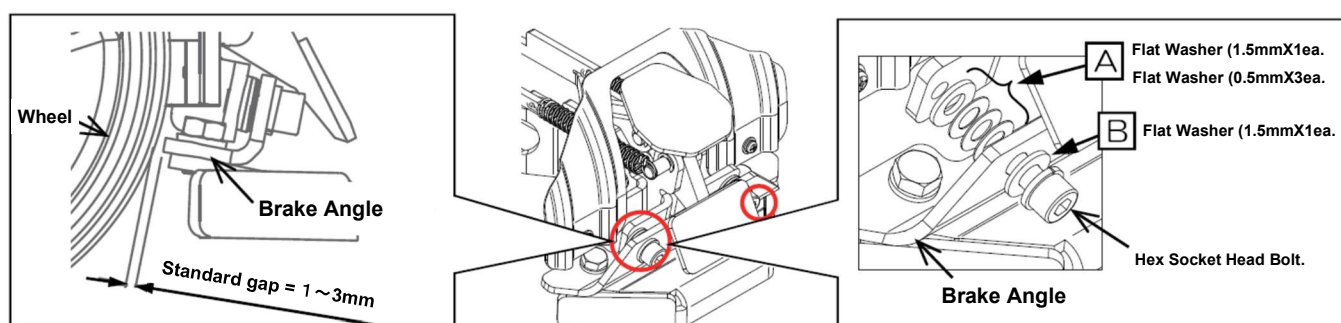
● Conditions that require Adjustment

- Pallet truck can move when pushing or pulling with Parking Brake locked → Brake is not working effectively
- Pallet truck makes friction rubbing noise in moving though Parking Brake is released
→ Parking Brake is working too much (strong)
- Braking operation is heavy → Parking Brake is working too much (strong)

● How to Check brake adjustment conditions

Check the gap between brake angle and wheel with brake released. (See below left illustration)

Standard gap should be 1~3mm. If the gap is wider, brake functions weak, and if the gap is narrower, brake functions too strong.



● How to Adjust brake

Brake can be adjusted by the Flat Washer installed at both Right and Left side of Brake Angle. As per above, at A section, 1ea. Flat Washer (1.5mm thickness) and 3ea. Flat Washer (0.5mm thickness) are installed, and at B section, 1ea. Flat Washer (1.5mm thickness) are installed at factory.

The gap between Wheel and Brake Angle can become wider by adding Flat Washer at A section, and can become narrower by reducing Flat Washer.

※ Flatwasher removed from A section can be kept at B section for future use and loss prevention.

● Procedure

Procedure ①



Prepare Hex Wrench (6mm)

Procedure ②

Move pallet truck to flat and stable floor

<Caution>

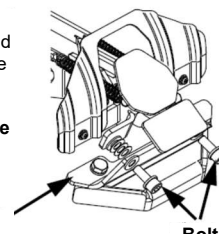
Pallet truck can be movable during servicing work.

Procedure ③

Unfasten Bolt of Right and Left side at Brake Angle counter-clockwise by Hex Wrench for about 2 rotation.

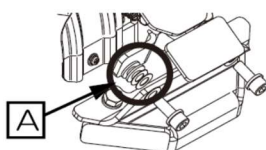
Unfasten both Bolts together by hands, and dismantle Brake Angle Assy

Be careful not to lose Flat Washer when dismantling.



Procedure ④

Install Brake Angle back after adjusting Flat Washer



Adjust brake by using same size and same qty Flat Washer at both Right and Left side. Grab Bolt head at both sides by fingers and mantle Brake Angle back to pallet truck. And then fasten tight by Hex Wrench. (Be careful not to lose Flat Washer).

Check braking function after installation.

One Point Hint

- Keep the brake in locked conditions make Release Pedal in Up position and makes servicing work easier.
- When dismantling Brake Angle and mantling back to pallet truck, keeping Flat Washer side inclined and towards Upper makes servicing work easier.

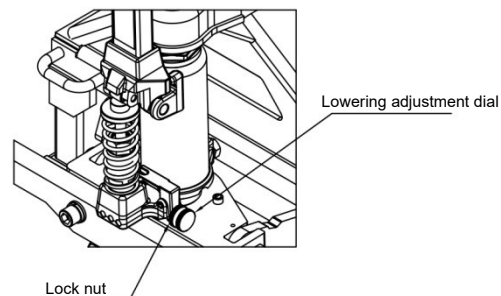
2. Adjusting the Lowering Speed

You can adjust the lowering speed by using the lowering adjustment dial. Follow the procedure below to adjust the lowering speed.

- ① Remove all loads from the hand pallet truck.
- ② Lower the hand pallet truck to its lowest position.
- ③ Loosen the lock nut.
- ④ Turn the lowering adjustment dial.

<Guidelines> To increase the lowering speed Turn about 45° to the right
 To decrease the lowering speed Turn about 45° to the left

- ⑤ Tighten the lock nut.
- ⑥ Try lowering with a test load to check the lowering speed.



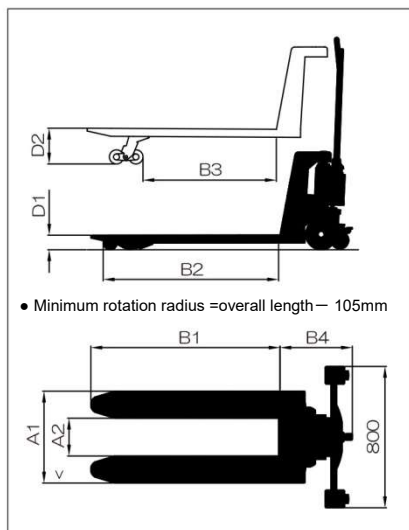
⚠ Caution

Turning the lowering adjustment dial disables the neutral function.
To use the neutral function, return the lowering adjustment dial to its original position.
Also, be aware that turning it too much may prevent the unit from raising/lowering correctly.

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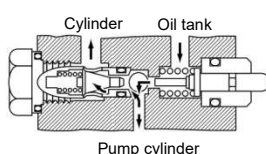
Unit Specifications and Dimensions

| Model | Maximum Capacity | A1 | B1 | D1 | D2 | A2 | B2 | B3 | B4 | Dead load |
|--------|------------------|----------------|-----------|--------------------|---------------------|----------------|-----------|-----------|-----------|------------|
| | kg | Outer Width mm | Length mm | Lowest Position mm | Highest Position mm | Inner Width mm | Length mm | Length mm | Length mm | Approx. kg |
| BM40M | 4000 | 520 | 1070 | 82.5 | 202.5 | 214 | 992 | 759 | 410 | 155 |
| MB40LL | 4000 | 685 | 1220 | 82.5 | 202.5 | 379 | 1139 | 906 | 414 | 175 |
| BM40L5 | 4000 | 685 | 1600 | 82.5 | 202.5 | 379 | 1519 | 1284 | 414 | 220 |
| BM50L4 | 5000 | 685 | 1500 | 85 | 205 | 285 | 1432 | 1197 | 416 | 260 |
| BM50L6 | 5000 | 685 | 1800 | 85 | 205 | 285 | 1732 | 1496 | 416 | 300 |
| BM50L7 | 5000 | 685 | 2000 | 85 | 205 | 285 | 1932 | 1695 | 416 | 320 |



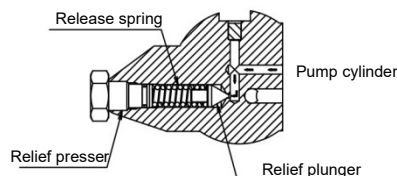
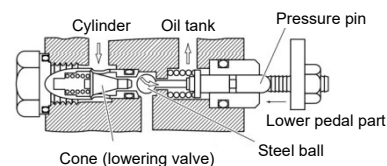
• Lifting Circuit

Pumping of the handle sends hydraulic oil from the oil tank to the cylinder, allowing lifting to occur. The cone prevents oil back flow, and prevented by a cone.



• Lowering Circuit

Operating the lowering level pushes the cone, causing the hydraulic oil to flow from the cylinder into the oil tank and allowing lowering to occur.



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Troubleshooting

| Problem | Cause | Action | Store Servicing |
|--|---|-------------------------------------|-----------------|
| Will not lift | Insufficient hydraulic oil | Replenish hydraulic oil supply | |
| | Pressure pin stuck | Overhaul or exchange pressure pin | ○ |
| | Valve spring damaged | Replace valve spring | ○ |
| | Faulty steel ball sheet | Remove foreign material | ○ |
| | | If cylinder base is damaged | ○ |
| Too much pumping required | U packing deterioration | Replace U packing | ○ |
| Raises light loads but not heavy loads | Rough steel ball sheet surface | Seating surface punching | ○ |
| | Damaged steel ball | Replace copper ball | ○ |
| Lifts when pumping, but lowers when turning handle | Foreign material caught between cone and cone sheet | Remove foreign material | ○ |
| | Damaged valve spring | Replace valve spring | ○ |
| | U packing deterioration | Replace U packing | ○ |
| Lowers on its own (Natural Lowering) | Faulty seal between cone and cone sheet | Seating surface punching or replace | ○ |
| | Faulty O ring seal in cone sheet | Replace O ring | ○ |
| Will not lower | Pressure pin stuck | Overhaul or exchange pressure pin | ○ |
| | Faulty adjustment of lowering pedal section | Adjust lowering adjustment dial | |

*Some repairs require a very high level of expertise, so be sure to contact your dealer in those cases.



Maintenance

1. Supplying Oil to Bearing Section

In general, the shafts use oilless bushing, so lubrication is not necessary, but it is necessary to periodically add grease to the grease fittings to maintain smooth operation of the hand pallet truck. If using in an environment with high levels of moisture or dust, the bushing may deteriorate more quickly than usual, so be sure to lubricate the shafts to prevent rusting and foreign material from entering.

⚠ Caution

- * The bushing will eventually need to be replaced, so be sure to check it periodically.
Using the unit without a bushing can result in a serious accident.
- * Some repairs require a very high level of expertise, so be sure to contact your dealer in those cases.

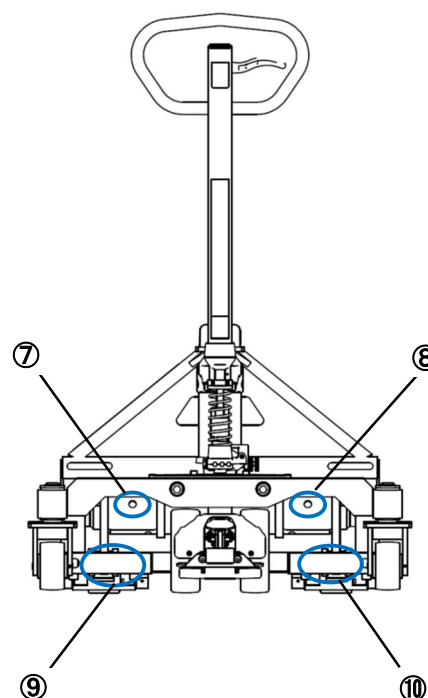
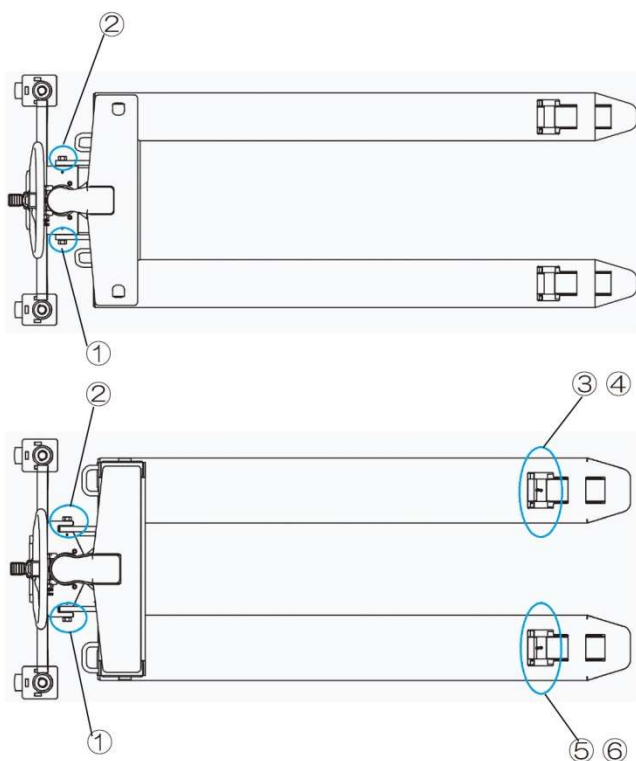
Be sure to perform routine maintenance to allow for safe operation.

- ① Lubrication of bearings (every six months)
- ② Replacing hydraulic oil (every 12 months)

Hydraulic oil types Viscosity class ISO VG32 anti-wear hydraulic oil (Amount: 0.5 liters)

| | |
|---------------------|-------------------------------------|
| Idemitsu | Super Hydronic Fluid 32 |
| Esso | Nuto H32, HP32, Unipower SQ32, XL32 |
| Showa Shell | Tellus Oil 32, K32 |
| JX Nippon Oil & Gas | Super Highland 32 |
| Mobil | Mobil DTE Oil 24 |

*Grease Fittings Position



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Disposal

When disposing of this product, dispose of the metal, non-metal, plastic, and hydraulic oil components separately. There are regulations for disposing of the hydraulic oil, so be sure to abide by them. If you have any questions regarding disposal, please confirm with the dealer before proceeding.

10

Product Guarantee Conditions

Warranty

Should the unit malfunction within the warranty period (within one (1) year of purchase) when it has been operated in accordance with the user manual and the warning labels on the unit, we will adjust the defective component, repair it, replace it, or send a replacement part free of charge. However, this does not apply in the case of secondary damage or any damage to which any of the following apply:

1. Damage or injury resulting from incorrect operation, improper inspection, improper storage, or any other type of negligence.
2. Damage or injuries resulting from changes (modifications) that negatively impact the product's operation mechanism.
3. Consumable parts that are damaged and need to be replaced.
4. Damage or injury resulting from fires, earthquakes, wind, floods, or other natural disasters or external factors.
5. Problems resulting from specified parts not being used.
6. Error in the warranty claim process (Ex: failure to indicate model or Serial No., etc.).
7. Damage or injury resulting from installation.

Furthermore, all rubber components and other naturally degradable products used in this product and its accessories, as well as all consumable products, fall outside the scope of this warranty.

How to File a Claim

If you decide to file a claim for this product based on the above, please contact your dealer.

The dealer will carry out the necessary procedures.

In addition, we cannot decide whether or not any particular situation falls within the scope of this warranty.

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After Sales Service

| | |
|--|--|
| Product does not work properly | Review the manual and try to find a solution. |
| Product still does not work properly | Contact your dealer and request repairs. |
| Repairs within the warranty period | The warranty is valid one year from the date of purchase. We will service your product in accordance with the product guarantee conditions. |
| Repairs outside the warranty period | Please consult with your dealer. If repairs are deemed sufficient to solve the issue, you can request repairs for a fee. |
| Performance repair component holding period | Performance repair components for this product will be held for a minimum of eight years after manufacturing discontinues. (Performance components are components necessary for maintaining the performance of the product) |
| For details about after sales service, or if you have any other questions, please inquire with your dealer. | |
| When making an inquiry, please have the following information handy: model, Serial number, purchase date, malfunction details (be as detailed as possible) | |

Fill out the fields below with the above information to make inquiries proceed more smoothly.

| | | | |
|----------------------------|------------------|----------|--|
| Model | | | |
| Serial No. | No. | | |
| Purchase Date | (Month/Day/Year) | | |
| Name of Purchasing Company | Company Name: | Contact: | |
| | Address: | TEL: | |
| Malfunction Date/Details | (Month/Day/Year) | Issue: | |
| | (Month/Day/Year) | Issue: | |
| | (Month/Day/Year) | Issue: | |

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