



Operation Manual

Jacking Beam

Model NRJ20

Dear Users,

Thank you for purchasing our Bishamon Jacking Beam. Before using the lift, read through and be familiar with this manual. Fully understand the precautions, directions, and other information contained in this manual to ensure correct use. Failure to do so may result not only in insufficient performance of the lift but also in falling of the vehicle, serious injury and death, and damage to properties.

Keep this manual in a safe place for future reference. In case of loss, immediately request a new copy.

If the product is supplied with a wrong manual, contact your lift supplier for a correct copy.

About Maintenance Inspection :

Perform periodic maintenance inspection of the lift to ensure safe work with the lift and keep the lift fully functional.

Preface

Thank you for purchasing our Bishamon Jacking Beam. Before using the lift, read through and be familiar with this manual. Fully understand the precautions, directions, and other information contained in this manual to ensure correct use. Failure to do so may result not only in insufficient performance of the lift but also in falling of the vehicle, serious injury and death, and damage to properties.


The contents of the manual may differ when the purchased lift is modified. For any question about the product or this manual, feel free to contact your lift supplier.


Keep this manual in a safe place for future reference. In case of loss, contact your lift supplier and request for a new copy immediately.

Explanation of Terms and Symbols

In this manual, 「**Danger**」, 「**Warning**」, 「**Caution**」 are defined and specified as below. Notice of Warnings are very important for safe operations. As these are very Important to protect operators from accidents resulting in personal injury and death, and damage to property, so make sure to read thoroughly and understand fully before operation.

 **Danger** Incorrect operation may imminently result in serious injury or death of the operator.

 **Warning** Incorrect operation may result in serious injury or death of the operator.

 **Caution** Incorrect operation may result in injury and damage to the property. The occurrence of the danger is lower than "Warning" articles.

Contents

	(Page)
Preface	1)
Contents	2)
1 Intended Use (Objects of the lift)	3)
2 Danger, Warning, Caution	3) ~ 5)
3 Name and Functions of the components	6)
4 Hydraulic Circuit	7)
5 Pre-Operation Check	7)
6 Operation Instructions	8) ~ 9)
6-1 Vehicle Entry	8)
6-2 Lifting Operation	8)
6-3 During Servicing Vehicle	9)
6.4 Lowering Operation	9)
6.5 Driving out (Exiting) the vehicle	9)
7 Regular Inspection and Maintenance	10)
7-1 Hydraulic Oil To Be Used	10)
7-2 Lubrication Spots	10)
8 Trouble Shooting	11)
9 Specifications	11)
10 Installation and Relocation	12)
11 Disposal	12)
12 Warranty	12)
13 After Service	13)

1. Intended Use

This product is a optional lift to be installed and used for Bishamon MUS Series, MUL Series, FP Series etc. for oil and parts replacement, general maintenance, motor vehicles inspection and maintenance etc.

2. Danger, Warning, Caution

Caution for Safety

As there are very important shown to protect operators from accidents which may result in injury and death, and damage to vehicles and properties, make sure to fully understand before operating lift.

2.1 General Safety Rules to be observed

1. Read and be familiar with the operation manual before operating.
2. Only trained operators are allowed to use the lift.
3. Make sure to perform daily and periodic inspections in accordance with the instructions of Operation Manual.
4. If any abnormal conditions, such as noise, occur during operation, STOP the use of the lift and contact lift supplier for an inspection.
5. This lift is designed for motor vehicle servicing. DO NOT use for any other purposes.
6. Do not remove any labels and do not modify the lift anyway.

2.2 Cautions in Operation

The meaning of the mark (symbol) used behind pictures are as below.






The specified act that **should not** be conducted.



The specified act that **should** be conducted.











Warnings and cautions that are possible to occur due to incorrect operation.

 Warning	
	<p>Read the Operation Manual thoroughly and be familiar with Operaton Manual before starting operation.</p> <p>※ Important Warnings are described. Serious accidents may occur if Not Following these warnings.</p>
	<p>When operating Lifting and Lowering, DO NOT lift or lower only one side Jacking Beam.</p> <p>※ Vehicle could be tilted and lose balance.</p>



Warning

	<p>Because vehicle overhead comes down in lift lowering, Pay close attention overhead ! (Watch your head !)</p>
	<p>DO NOT put hands in the Scissors (Link) ※ Hands could be pinched and result in serious injury.</p>
	<p>Check and make sure wheels of Jacking Beam is positioned inside rail correctly. ※ If NOT, Jacking Beam could fall</p>
	<p>DO NOT lower the lift suddenly ※ Supporters could come off and may damage the lift.</p>
	<p>Make sure to lift up by center of Supporter (Rubber Pad) ※ If lift up by Supporter end, Supporters could come off and vehicle could fall.</p>
	<p>DO NOT lift up by Supporter of only one side. ※ Vehicle could fall and lift could be deformed.</p>
	<p>Make sure to put Attachment on the center of Rubber Pad ※ If NOT, Attachment could come off and vehicle may fall</p>
	<p>Retract Supporter back before reaching the lowest in lowering operation. ※ If NOT, Jacking Beam Supporter may hit Drive On Plate of the main lift.</p>

Caution

Carefully read and fully understand this manual before using the lift.

<Pre-Operation Check>

1. This lift is designed for motor vehicle servicing. **DO NOT** Use for other purpose.
2. If any of safety device does not work properly, **DO NOT** use lift.
3. **ONLY** trained personel is allowed to operate the lift.
4. The maximum loading capacity is 2 ton. Do not overload the lift.
5. This lift is not weatherproof and is not to be used outdoors or for vehicle washing.
6. Adjust the air pressure between 0.69~0.97MPa. If air pressure is too high, it may damage Air Pump.
7. Check if Hex Socket Head Plug of Oil Filling Hole was replaced to Plug Silensor (White Color).

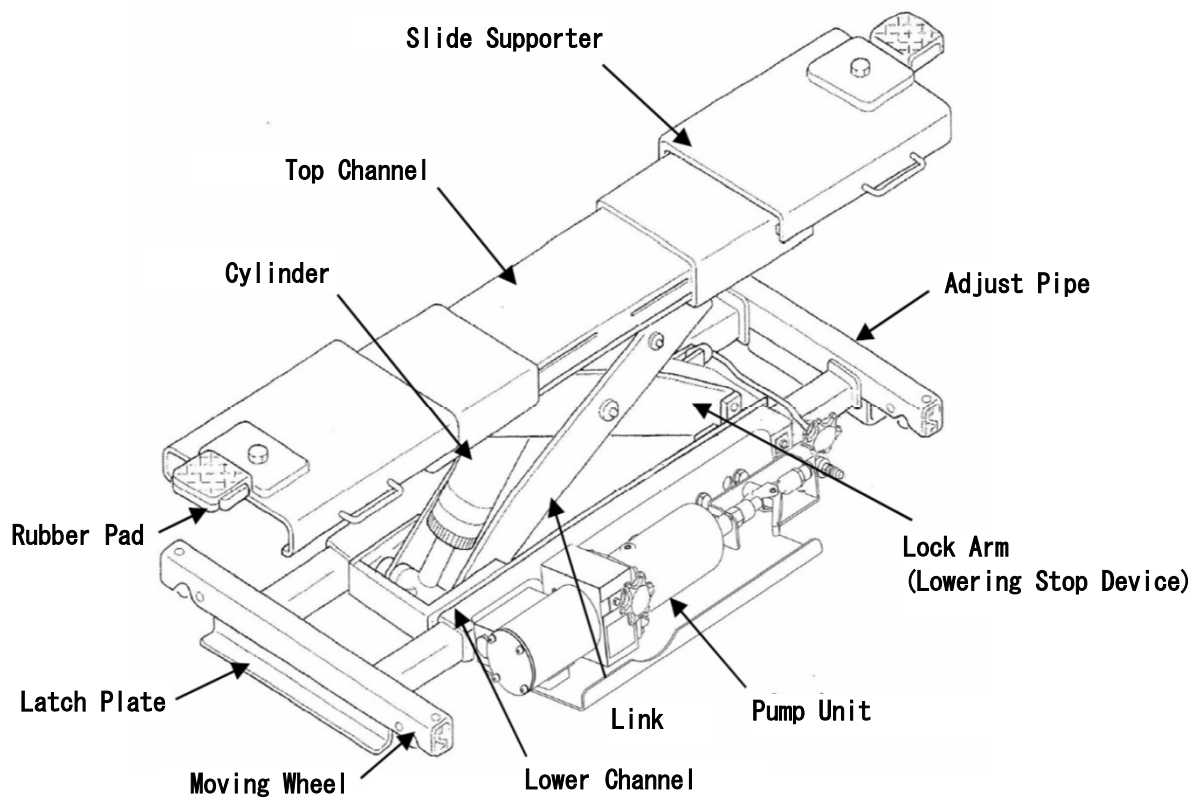
<Lift-Up/Lowering Down Operation>

1. When operating the lift, pay constant attention to the area around the vehicle and the lift. **NEVER** look aside during operation.
2. **DO NOT** lift up any vehicle exceeding the maximum capacity of the lift.
3. **DO NOT** lift vehicles with passengers, baggage or cargo etc. inside.
4. Use only genuine Attachment Supporter between Supporter Pad and vehicle lifting point . Make sure to fix Attachment on Supporter Rubber Pad firmly.
5. **DO NOT** use Jacking Beam if Lowering Stop Hook does not work properly.
6. **DO NOT** swing vehicle excessively when trying to remove parts etc.
7. When not in use, retract Supporter back and lower the Jacking Beam to the lowest position.
8. Keep anyone but the operator out from around the lift.
9. If Safety Hook is caught with Rack and can not be released, raise thte lift once to release the Safety Hook, and then lower the lift.
10. When lowering the lift, turn the Lowering Knob counterclockwise slowly. **DO NOT** turn Knob in a rush. Supporter may lower intensely and dangerous.
11. **DO NOT** close (turn clockwise) the Knob with all might. It could result in Natural Lowering.
12. When servicing transmission, differential gear, **DO NOT** operate lift with transmission jack supporting underneath of the vehicle.
13. Make sure to perform Pre-Operation Check and Periodic Inspection, and lubricte the specified spot. (Refer to 『 Lubrication Points 』)
14. If Rubber Pad is worn, damaged, or deformed, replace with new ones immediately.
15. Check and make sure Tyre Stops are set before lifing up vehicle.
16. Before lifting up, check if the Latch Plate is bolted and fastened at correct position, and also check if the Moving Wheels of Jacking Beam are on the center of Rail.

<During Vehicle Servicing Work>

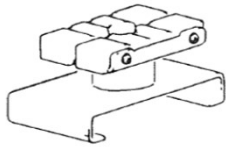
1. Make sure Lowering Stop Safety Hooks are engaged before getting under vehicle, and during servicing vehicle.
2. **DO NOT** leave a vehicle on the lift for long time.
3. When not in use, the lift must be lowered to the lowest position.

3. Name and Functions of the components

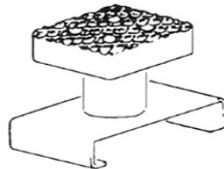


■ Attachment

Standard Attachment

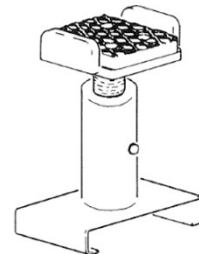


Passenger Attachment
60mm Up



Truck Attachment
90mm Up

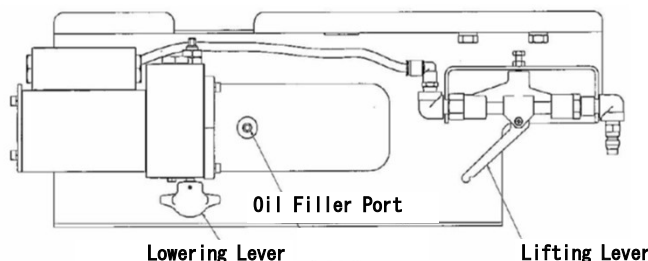
Optional Attachment



Adjustable Truck Attachment
168~233mm Up

Note : Rail width can be adjusted between Min 812mm ~ Max 1258mm

■ Pump Unit



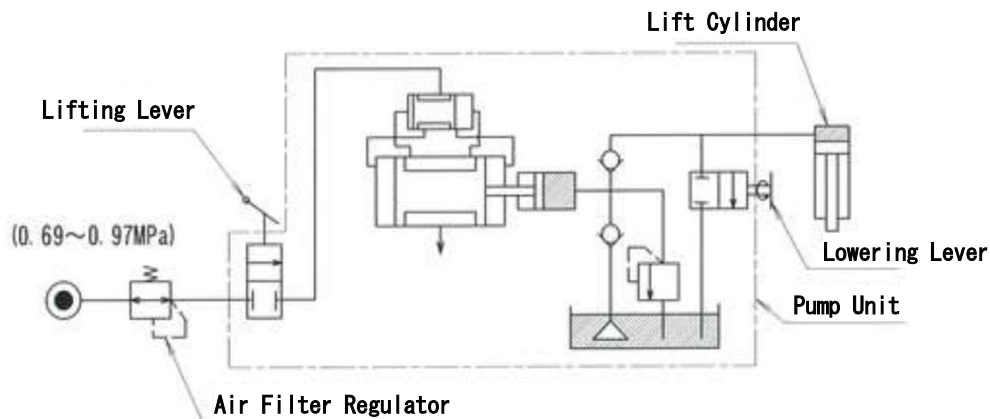
Lifting Lever : When pushing, Supporter rise, and stop when releasing.

Lowering Lever : When turning counterclockwise, Supporter lower, and stop when turning fully clockwise.

■ Lowering Stop Device (Lowering Stop Rack and Hook)

Bishamon Jacking Beam has Lowering Stop Device against vehicle lowering due to oil leak etc. Lowering Stop Device can be released by Lock Arm.

4. Hydraulic Circuit



5. Pre-Operation Check

Make sure to perform the Pre-Operation Checks before operating lift everyday. Perform the Pre-Operation Checks without load.

! Caution

If any possible abnormality is detected, prohibit the use of the lift until abnormality is fully repaired. Then contact your lift supplier immediately. If the lift is used with abnormality left unsolved, damage to the lift or serious accident may occur.

1. Check if the air supplied to lift is appropriate. (0.69~0.97MPa)

! Caution

Supply the clean air of 0.69~0.97MPa. If the supplied air contains moisture, it may lead to lift malfunction. Make sure to supply the dry and clean air.

2. Lift and lower without load, and check the operation of each function, and check if there is any abnormality in Safety Device.
3. Check external appearance of Jacking Beam for any abnormality such as broken, bent, distortion, damage etc.
4. Check if there is any oil leak from Hyd. Hose, Cylinder, Pump Unit.
5. Check if there is any abnormal noise from Jacking Beam, Pump etc.
6. Check if there is wear, worn, damage on Rubber Pad.
7. Check if Plug Silensor (white color) at Oil Filler Port is not clogged.

※ If any abnormality is found, DO NOT use lift until lift is fully repaired.

6. Operation Instructions

6-1 Vehicle Entry

⚠ Warning

- Drive in vehicle parallel to the Drive-On Plate of the lift and evenly in its width direction.
- Drive in and out vehicle slowly, and DO NOT start and stop suddenly.

6-2 Lifting Operation

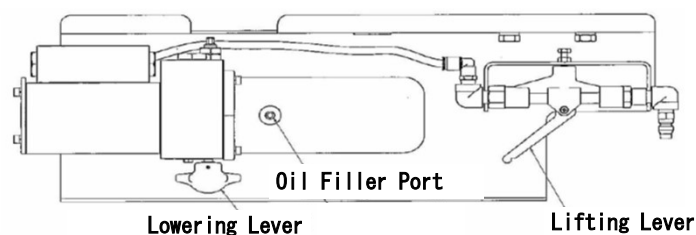
⚠ Warning

- DO NOT lift up or lower only one side lift all at once.
- Make sure to support the lifting point by the center of Rubber Pad.
- DO NOT lift up by only one side Supporter.
- Make sure to set (put) Attachment in the center of Rubber Pad.
- When lifting and lowering the lift, shorten (push back) the Supporter at lowest position

⚠ Caution

- When operating lift, pay constant attention to the area around vehicle and the lift. NEVER look aside during the operation.
- DO NOT lift up vehicle with passengers or baggage inside.
- Use only genuine Side Sill Block supporter between Supporter and vehicle lifting point
- Before lifting up, check if the Latch Plate is bolted and fastened at correct position, and also check if the Moving Wheels of Jacking Beam are on the center of Rail.

1. Move Jacking Beam to the lifting point position.
2. Push Lifting Lever of Pump Unit to lift upto the height where Slide Supporter can be pulled and extended
3. Pull and extend out the Slide Supporter of Jacking Beam , and adjust so that vehicle lifting point can be supported by (in) the center of Rubber Pad firmly. (If Supporter may hit underneath of the vehicle, use passenger attachment or truck attachment)
4. Lift up again until Rubber Pad (or Attachment) touch and support vehicle lifting point, and check if vehicle is lifted and supported stable. If vehicle is stable, then lift up to desired height for vehicle servicing.



⚠ Warning

If supplied air is less than 0.5MPa, pump may not function by pushing Lifting Lever.

6-3 During Servicing Vehicle

⚠ Caution

- When stop the lifting operation, make sure to check if Lowering Stop Hook is engaged with Rack, and then start servicing vehicle. Never drain hydraulic pressure by engage Hook and open the Lowering Knob before servicing vehicle.
- Keep anyone but the operator out from around the lift.
- When servicing transmission, differential gear, DO NOT operate lift with transmission jack supporting underneath of the vehicle.

6-4 Lowering Operation

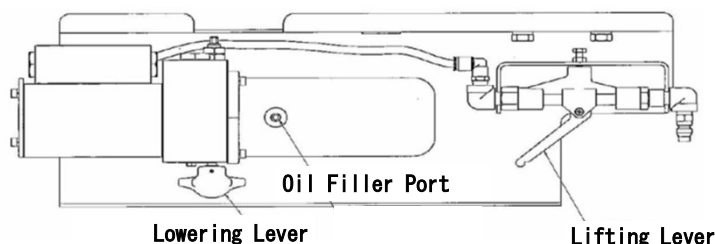
⚠ Warning

- Pay biggest attention to the vehicle lowering from overhead.
- DO NOT lower the lift in a rush.
- Retract Supporter back before reaching the lowest in lowering operation.

⚠ Caution

- If you service the vehicles after lowering the lift and stopped midway, make sure to engage Lowering Stop Device "IN" position.

1. Release Hook of Lowering Stop Device by operating Lock Arm.
(If Hook can not be released, raise the lift once and then lower again.)
2. Look around lift and also look up the vehicle overhead, and then turn the Lowering Knob slowly to lower the Supporter.
3. Lower the lift until Supporter Rubber Pads come off vehicle and Slide Supporter can be stored back, and stop lowering.
4. Check if Slide Supporter can be stored back between beams. And then open the Lowering Knob and lower the Supporter to the lowest position.



6-5 Driving Out (Exiting) the vehicle

Make sure the lift is lowered down completely and Slide Supporter is stored .
And then driving out vehicle.

⚠ Caution

- If Slide Supporter is not stored back completely when driving out vehicle, it may damage the vehicle and could lead to malfunction of the lift.

7. Regular Inspection and Maintenance

Regular inspections are essential inspection procedures to secure safety (preventing vehicle falling accidents and personal accidents) and to ensure that lift can be used for a long time, which are performed along with the Pre-Operation Check. Be sure to perform Regular Inspection at least once a month in addition to Pre-Operation Check that is performed everyday in order to ensure that lift can be used safely. In the event when even slightly abnormal condition arises during routine use of the lift, immediately suspend the use of the lift and make sure lift to be repaired properly and verify safety before using the lift. Request the lift supplier where the lift was purchased for repairs on abnormality.

Inspection Spot		Inspection Points
Bolts & Nuts		Check the loosening
Lubricating Spot		Check if lubricated properly (greased up)
Pump Unit	Hydraulic	Check the loosening of hose, damage, oil leak
	Air	Check the operation and air leak
Lowering Stop Device		Check if works without fail
Each shaft and roller		Check the wear condition
Plug Silensor		Check if clogged

Notes for Using Lift Safely

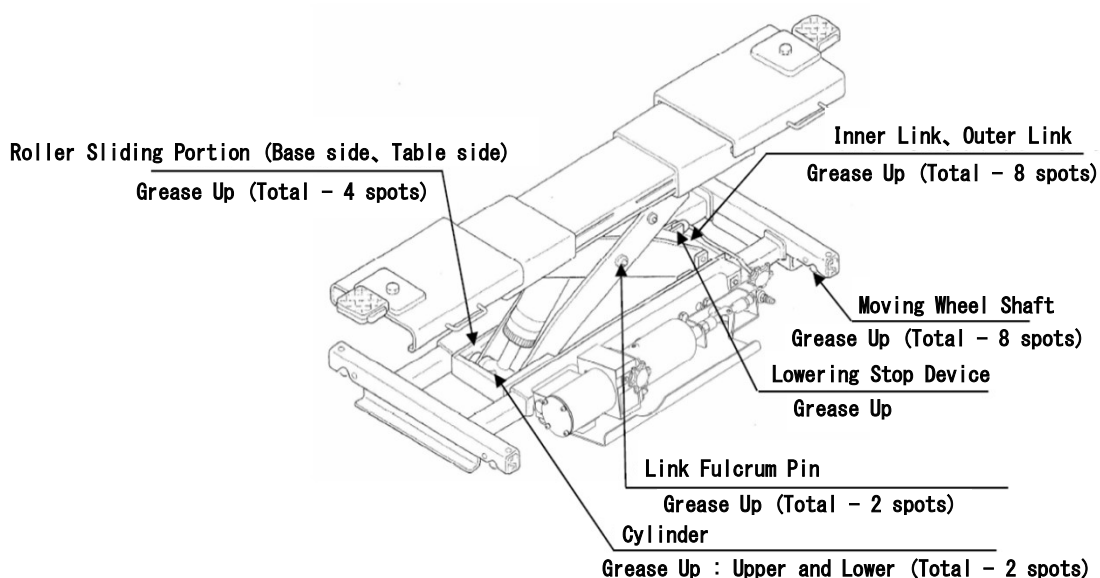
Have a qualified service personnel perform a periodical inspection once a year in addition to the regular inspection described above. Request the lift supplier where lift was purchased for periodical inspection performed.

7-1 Hydraulic Oil To Be Used

This lift use Air Pump and the function and performance depends on the oil used. If add, or replace oil, use the below grade oil. Oil need to be replaced one year after installation, and then every 3 years.

ISO VG32 (680cc)

7-2 Lubrication Spots



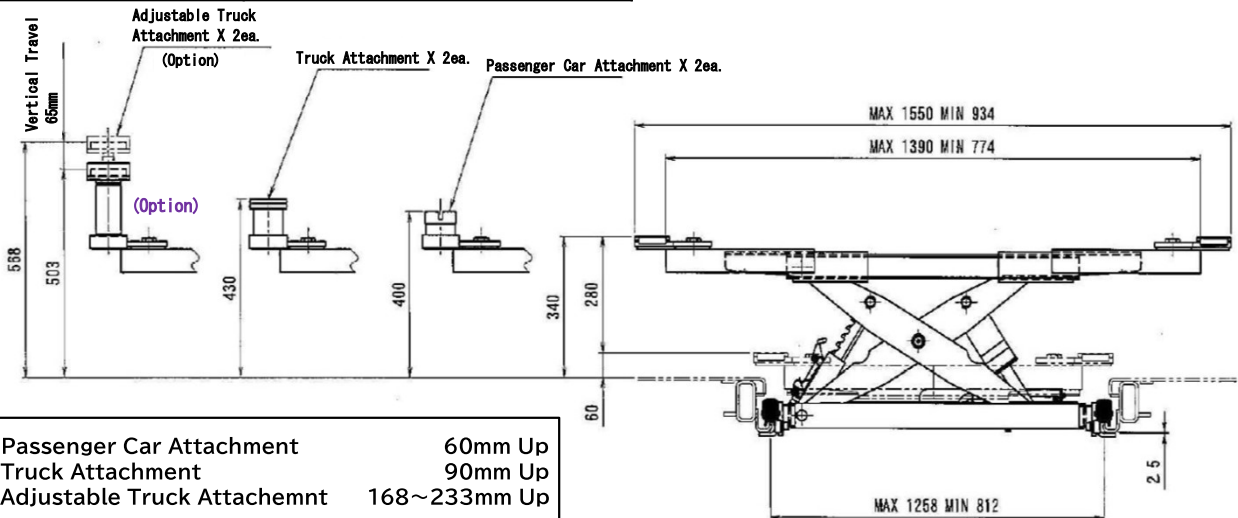
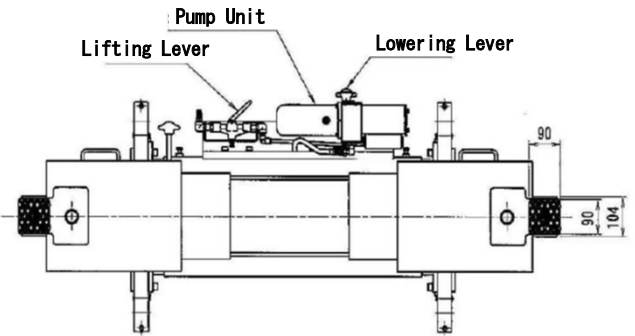
8. Trouble Shooting

If any abnormality found, carefully read this manual and make the following checks and actions. If abnormality can not be eliminated, contact your lift supplier for advice

Symptom	Possible Cause	Action
Lift Does Not Rise	• Lowering Knob is loose (open)	→ Tighten (close) Lowering Knob
	• Lack of oil	→ Fill the oil
	• Low air pressure	→ Adjust the pressure to 0.69~0.97MPa
	• Overload, or excessive biased load	→ Do not lift up overcapacity vehicle → Lift up vehicle equally in Right and Left
	• Oil leak from Cylinder Piston seals	→ Replace seals
	• Pump failure due to excessive high air pressure	→ Replace pump
Lift Does Not Lower	• Lowering Stop Device is engaged	→ Release Lowering Stop Device
	• Foreign obstacles are caught at Roller, Link etc.	→ Remove foreign obstacles
Natural Lowering (Lift goes up but gradually lowers)	• Lowering Knob is not fastened (closed) firm	→ Close knob firm
	• Oil leak from Cylinder Piston seals	→ Replace seals
	• Oil leak from joints	→ Tighten
	• Oil leak from hyd. hose	→ Replace hyd. hose
Abnormal Noise	• Lack of lubrications on link bearing	→ Lubricate
	• Wear of link rollers	→ Replace

9. Specification

Model No.	NRJ20
Capacity	2,000 kg (after 50mm rise)
Vertical Travel	280mm
Lifting System	Air driven oil pump
Lowering System	manually valve opening
Air Source	≤ 0.97MPa (9.9kgf/cm ²)
Rising Speed (0.97MPa)	30 sec. without load 50 sec. with 2000kg load
Oil Volume	0.68L
Oil	ISO VG32
Machine Weight	153 kgs



10. Installation and Relocation

Contact your lift supplier for the installation and relocation of the lift. Have your lift inspected by your lift supplier before relocation.

11. Disposal

When disposing of this lift, break it down into scrap and separate the scrap into steel, non-ferrous metals, plastics, hydraulic oil, etc. Dispose of these materials as industrial waste. Hydraulic oil, in particular, must be disposed of as per applicable statutory and regulatory requirements. Ensure proper disposal in accordance with applicable laws and regulations.

12. Warranty

We warrant the lift manufactured by Sugiyasu Corporation to be free from defects in workmanship and material for **1 year**. Our obligation under this warranty is limited to option, of any parts or material which, within this warranty period, are found to our satisfaction to be defective.

The belows are not to be covered by the warranty.

- 1 The damage or trouble caused by false operation, negligence of maintenance and storage required.
- 2 The damage or trouble caused by the modification that affects the original designed functions.
- 3 Any consumable parts that need to be replaced.
- 4 The damage or trouble caused by natural disaster such as fire, earthquake, flood etc.
- 5 The damage or trouble caused by not using the original manufacturer's genuine parts
- 6 The required information such as serial No. etc. would not be provided.
- 7 The damage or trouble caused by improper installation.

* Any consumable parts such as rubber parts etc. are not covered under this warranty.

* As this lift is not weatherproof, trouble caused by corrosion, rust, short circuit from water are not covered under warranty.

Caution

As this lift is not weatherproof, or washing model, the defects caused by rust, corrosion, short circuit from water would not be covered under warranty.

How To Claim

Contact your lift supplier

13. After Service

Something is wrong	Check in accordance with this manual
Something is still wrong	Contact your lift supplier
Repair under Warranty period	will be repaired in accordance with Warranty rules
Repair after Warranty period	Contact your lift supplier
Availability of spare parts	The spare parts are available for 8 years after discontinuing manufacturing

Contact your lift supplier for any information regarding after service. When contacting your lift supplier, provide following information.

- Model No.
- Serial No.
- Purchase Date
- Conditions of trouble

Record the above information in the table below for future inquiries.

Type	
Serial No.	
Purchase Date	
Lift Supplier	
Installer	
Trouble Date and conditions	Date :

	Date :

	Date :
