

# Operation Manual

## Status Lift

### Model ESC32UF

**Dear Users,**

**Thank you for purchasing our Bishamon Status lift. 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

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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.

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# 1. Intended Use

This product is a lift to be used for oil and parts replacement, general maintenance, motor vehicles inspection and maintenance etc. of mini-to ordinary sized passenger cars, small sized trucks, and the like.

## 2. Danger, Warning, Caution

### Caution for Safety

As there are very important to protect operators from accidents which may result in injury and death, and damage to cars and properties, make sure to understand fully 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, prohibit 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 Caution 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.

 <b>Danger</b>	
	When lift is operating, <b>DO NOT</b> get under the vehicle. <b>DO NOT</b> allow others to get under vehicle Or it may result in death or serious injury.
	If the Vehicle <b>STARTS TO FALL FROM LIFT</b> , Move away quickly <b>DO NOT</b> attempt to support vehicle. Or it may result in death or serious injury.

 **Warning**



**Read** the Operation Manual thoroughly before using the lift.  
Important Warnings are described.  
\*Incorrect operation may result in an accident.



**DO NOT** lower the lift while any stand, jack or support is in position under vehicle.  
**DO NOT** use "Down" motion of lift to push parts into position.



**Drive** in vehicle straight and parallel to the lift. Vehicle **MUST BE** positioned evenly. And set the CG of vehicle within the range specified with Yellow Color arrow on the lift.



Set the supporters on a flat spot with sufficient strength. Use only **genuine** Side Sill Block supporters to avoid any accident.



**DO NOT** lift vehicles by one end only. Or it may result in fall of the vehicle and damage lift.



**DO NOT** modify any Safety Device of the lift under any circumstances.



**KEEP FEET CLEAR**  
When lowering lift, make sure to keep feet clear of hoist and vehicle.



**DO NOT** swing, shake or push the raised vehicle. Or it may result in fall of the vehicle.



Vehicle **MUST BE** positioned evenly. **DO NOT** lift up offset vehicle. Or it may result in fall of vehicle



**DO NOT** use lift unless you have been trained in it's operation.  
\*Incorrect operation may result in an accident.



**KEEP HANDS** and **FEET CLEAR** when raising and lowering lift, **MAKE SURE** to keep hands and feet clear of any scissor mechanism.



**ELECTRICAL HAZARD!**  
**DO NOT** open control box or remove cover plates without isolating electrical supply.



## 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. Drive in and out vehicle slowly, and **DO NOT** start and stop suddenly.
4. Pay attention in driving in and out vehicle when tires and drive-on plate are wet to avoid slipping.
5. Adjust the height of supportors to evenly distribute the load among the 4 supportors when using the Swing Arm.
6. Set the supportors securely at lifting points, and do not raise a vehicle when there are not clear lifting points on the vehicle. Refer to the maintenance manual of the vehicle for information of correct lifting points.

### <Lift-Up/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. If there are other lifts installed in the same site, **Pay attention** not to operate the control switch of other lifts.
3. **DO NOT** lift any vehicle exceeding the maximum capacity of the lift.
4. **DO NOT** lift vehicles with passengers, baggage or cargo etc. inside (on board).
5. Make sure there is no oil or dirt on supporter when lifting vehicle.
6. Stop lifting after supporter have made firm contact with vehicle, and check locations of supporter for correct lifting points before reraising the vehicle.
7. The lift height of both sides may become unbalanced during lifting and lowering operations. In such case, follow the instructions of Operation Manual and balance the height of both sides. If not correcting the unbalance situation, it may result in the fall of the vehicle.
8. If the lift would not lower, raise the lift and then relower.
9. If lower the lift with Sliding Supporter being used (extended), retract Sliding Supporter back when vehicle tyre hit the floor, and then lower the lift to lowest position. Or Supportors and floor could be damaged.
10. Before lowering the lift, ensure that no person or objects is around vehicle or lift.
11. **DO NOT** operate the lift with anything such as tools or parts left in the pit or under the lift. Failure to comply may result in failure of the lift or falling of the vehicle.

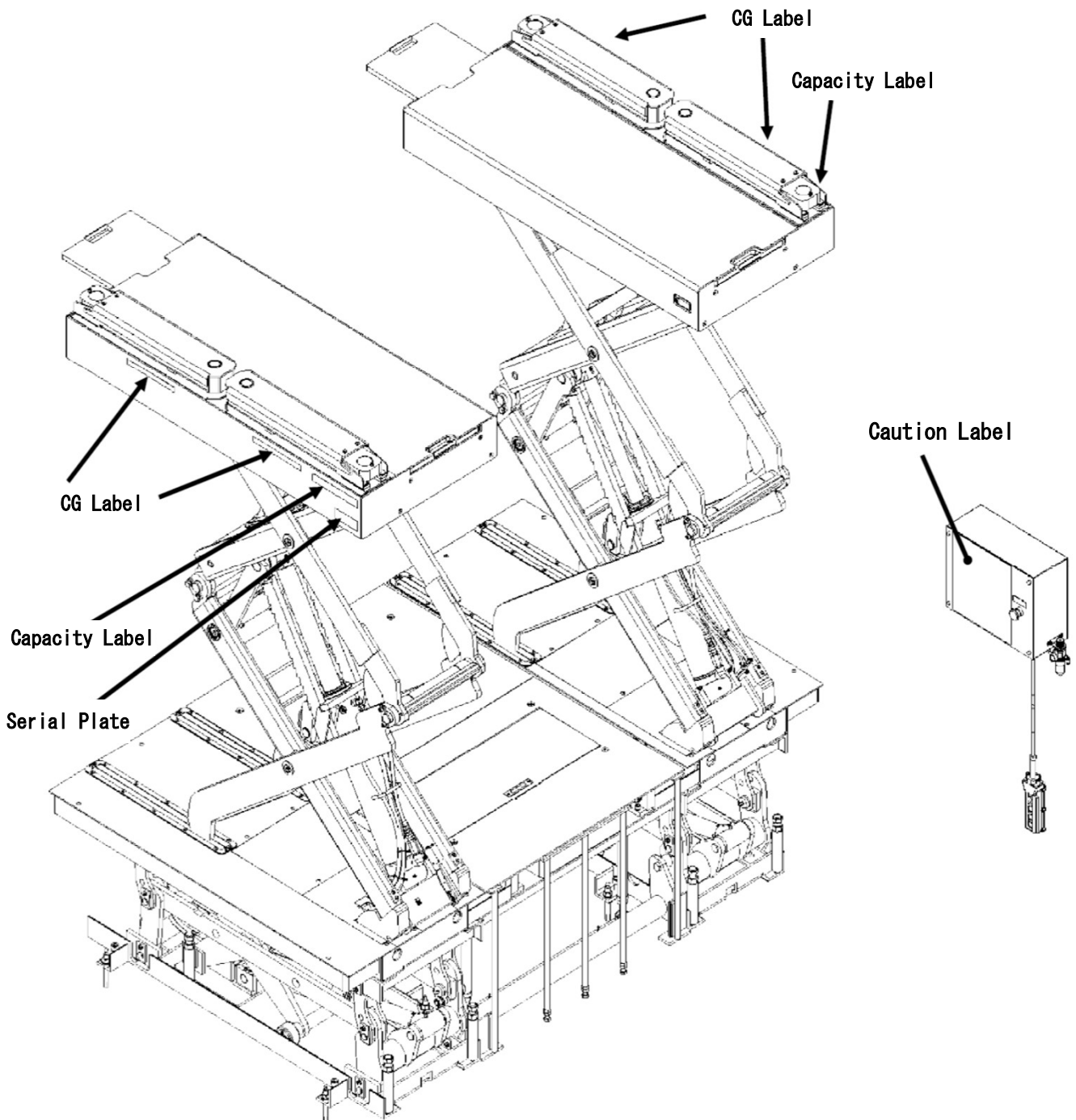
### <During Work>

1. Make sure Safety Hooks are engaged before getting under vehicle.
2. Keep anyone but the operator out from around the lift.
4. **DO NOT** leave a vehicle on the lift for long time.
5. When not in use, the lift must be lowered to the lowest position. Even when not in use, raise and lower the lift all the way through the range at least once a day to maximize the lift life.
6. When lowering the lift of Alignment Model (MUL30H), make sure to set all 8 legs are folded or set(fixed) firmly. If the legs are not set firmly, or floor conditions are not flat, the legs might get out of place, and dangerous.
7. After vehicle servicing work, lower the lift to bottom and turn off the power.

### <Others>

1. **DO NOT** modify the lift without permission from the manufacturer. Failure to comply may result in insufficient performance and lead to serious accident.
2. When an abnormality is detected during use or inspection, stop the use of the lift immediately and repair. **DO NOT** use lift until the repair is completed.
3. Use only genuine Side Sill Block supporter.
4. This lift is not weatherproof and is not to be used outdoors or for vehicle washing.
5. Do not supply air with air pressure exceeding 1.0 MPa to the air filter regulator. Or it may damage the air filter regulator.
6. The air filter regulator must be set to 0.7 Mpa. If it is set to over 0.7 Mpa, it may damage Air Switching Valve.
7. Drive the vehicle in and out only after the supportors and Flat Kit have been lowered completely. Drive the vehicle in and out only after the swing arms have been opened completely. Failure to do so can cause damage of the vehicle or the lift.

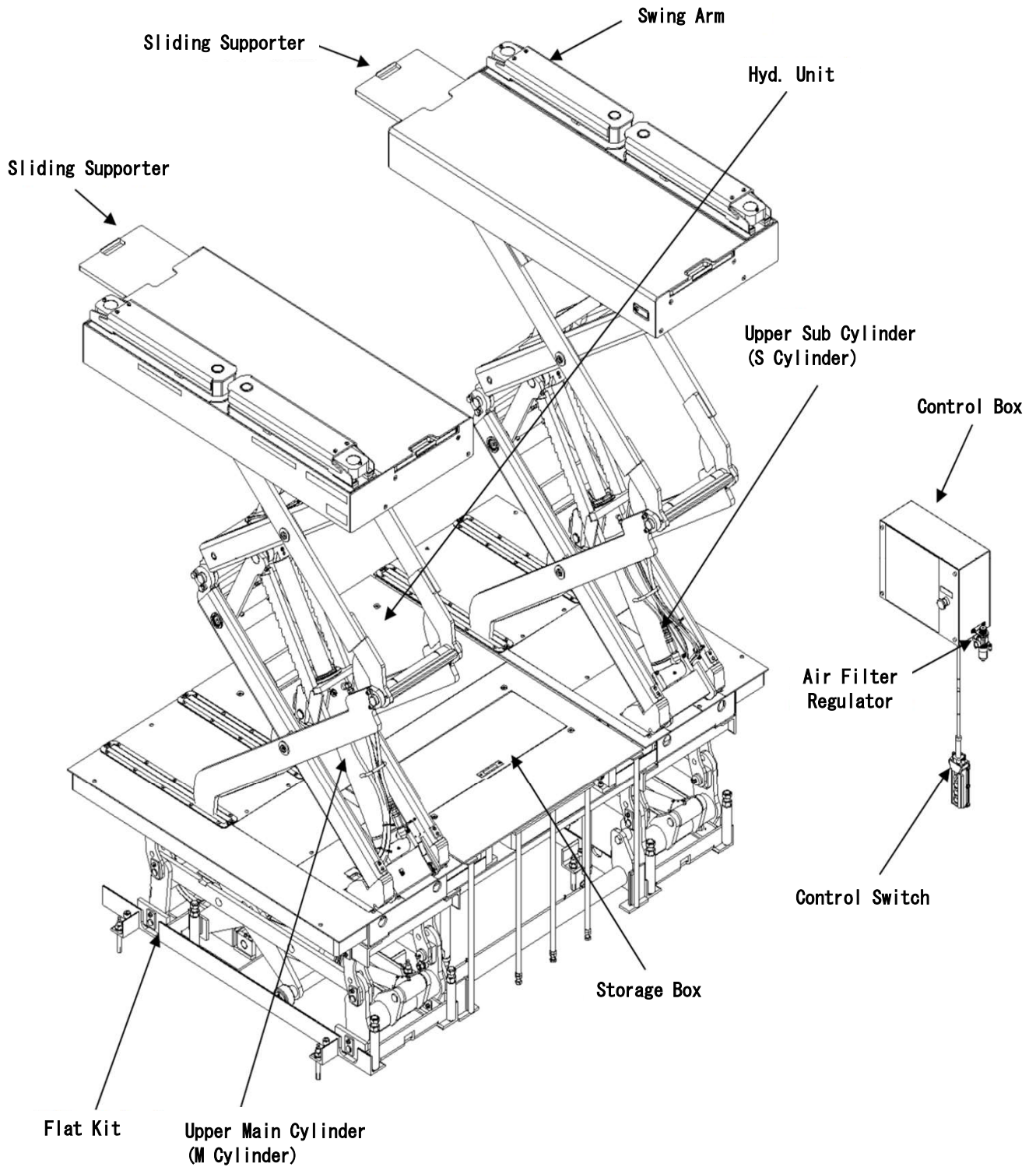
### 3. Location of Warning, Caution etc. Labels



#### Caution

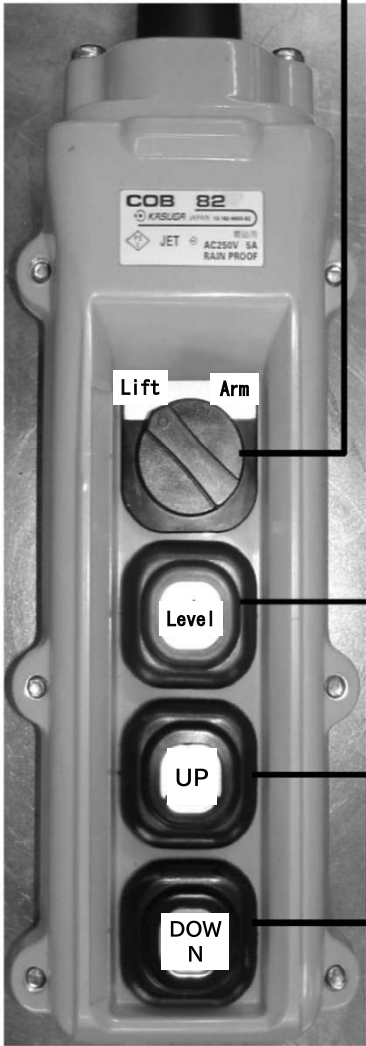
Labels feature descriptions on important matters for preventing accidents and property damages, as well as capacity of the lift. Purchase and apply these labels promptly when they become worn, damaged or peeled off while the lift is used.

# 4. Name and Functions of the components





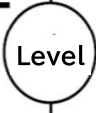
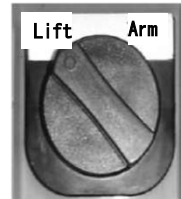
# 4-1. Control Switch



## 『 Lift/Arm 』 Select Switch

Select the operation of Lift, or Arm.

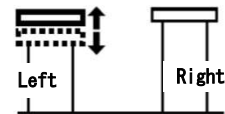
- When **Lift** side is selected (shown as picture),  
→ Lift can be operated
- When **Arm** side is selected,  
→ Arm can be operated



## 『 Level 』 Switch

If unbalance between RIGHT and LEFT supporter occurred, it can be rectified by pushing this Level Switch together with "UP" or "DOWN" button together.

Refer to Page 20 "How to Rectify Unbalanced Supporter"



Seeing from car entrance direction, Left side supporter rise up and lowers down.



## 『 UP/DOWN 』 Switch

### ● When Lift side is selected,

When pushing "UP" button, lift rise, and lift would stop rising when releasing the button

When pushing "DOWN" button, lift lowers, and lift would stop lowering when releasing the

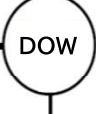
Note - "UP" button and "DOWN" button can not be pushed together at same time.

### ● When Arm side is selected,

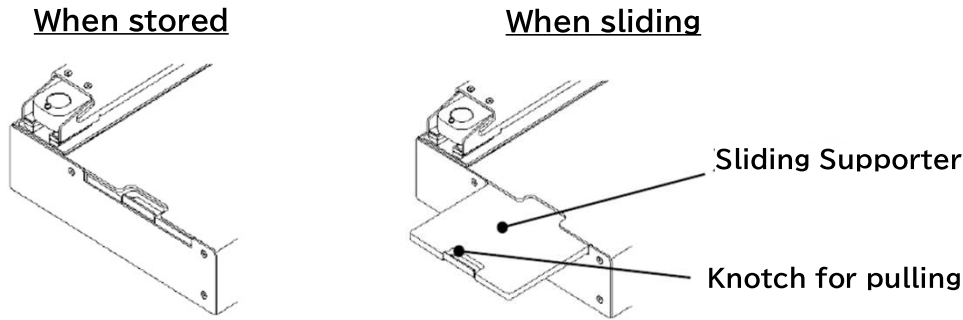
When pushing "UP" button, Swing Arms rise up to the height Swing Arms can be rotated.

When pushing "DOWN" button, Swing Arms lower down into the Arm Storage Box.

Note - "UP" button and "DOWN" button can not be pushed together at same time.



## 4-2. Sliding Supporter

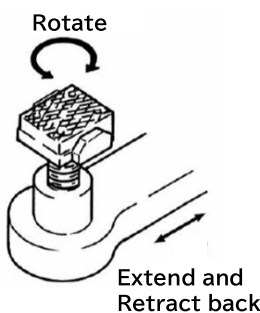


The length of sliding supporters can be adjusted in variable range of 1,350~1,850mm, depending on the lifting points of the vehicle to be lifted. There is a knotch for pulling on the upper surface of the sliding supporter. Slide the Sliding Supporter using the knotch for pulling.

### ⚠ Caution

Make sure that Sliding Supporter is completely stored when storing Sliding Supporter.

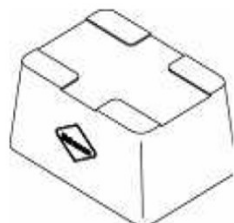
## 4-3. Swing Arm



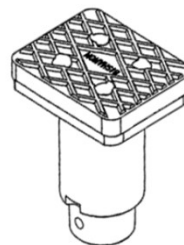
Swing Arms can be freely rotated, extended and retracted back within the range of about 90° to match Supporter Pad to lifting point of the vehicle. Swing Arm is more suitable to lift up one box type car and SUV (RV) which can not be lifted up by plate type supporter. Adjustment of length is possible within the range of 539~975mm. Height of Supporter Pad can be adjusted by rotating them.

Entire arms can be stored inside the pit by retracting the Swing Arms back to minimum length position.

## 4-4. Attachment



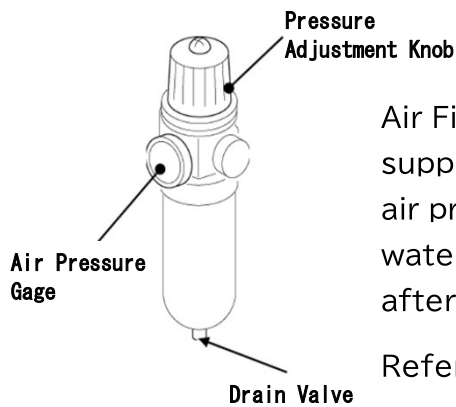
Side Sill Block  
(100X70X140)



Adjustable Supporter MB  
(Min.89.5~Max.154.5)

There are standard attachment and optional attachment. Refer to Page 29~30 for the information of optional attachment.

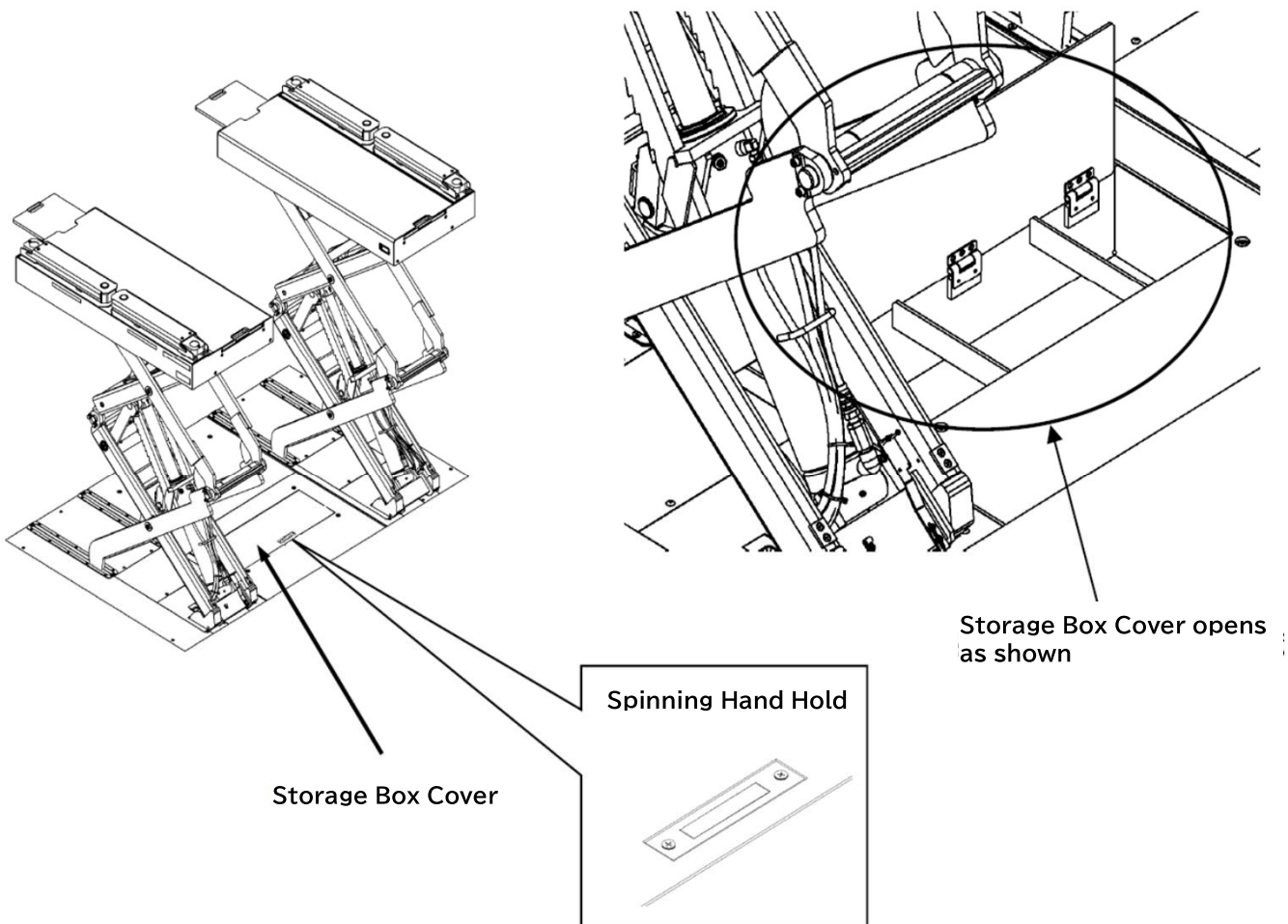
## 4-5. Air Filter Regulator



Air Filter Regulator has function to reduce air pressure supplied to Air Filter Regulator down to appropriate air pressure levels (0.7 to 1.0 Mpa) and function to drain water in the air. Air pressure gauge shows the air pressure after depressurization.

Refer to Page 14 "Inspection of Air Filter Regulator"

## 4-6. Storage Box

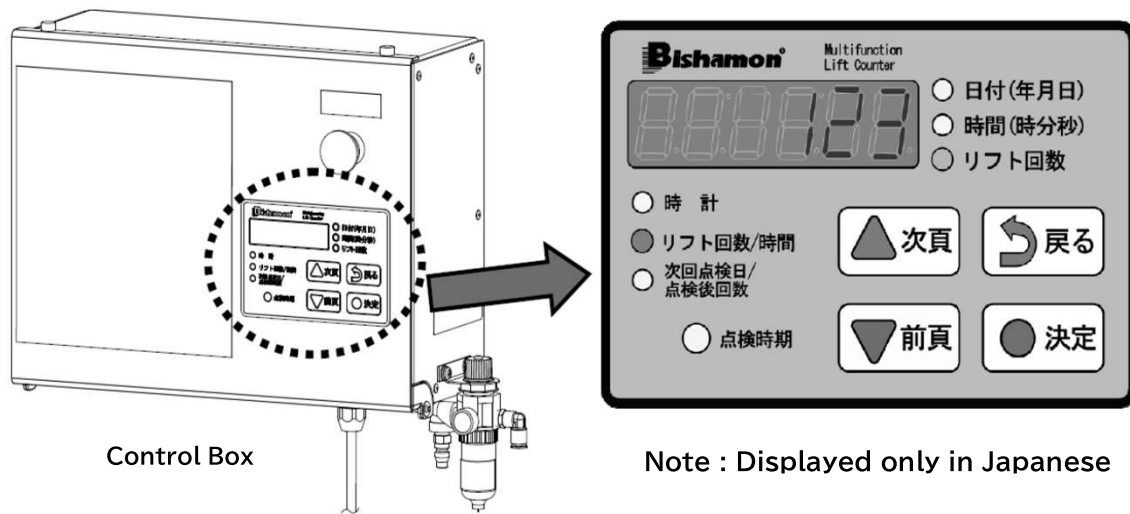


There is Storage Box in the center of the lift for storing of Attachment etc. Be aware that it would be difficult to open Storage Box Cover once vehicle drives in. It is suggested to take out necessary attachment etc. before vehicle drives in. Use Spinning Hand Hold (Knob) to open the cover.

### **! Caution**

**Return Spinning Hand Hold to flat after closing cover. Or it could result in damage to Spinning Hand Hold.**

## 4-7. Display Device



Control Box

Note : Displayed only in Japanese

**Note : Display Device is designed for the use inside Japan only, and not available in English.**

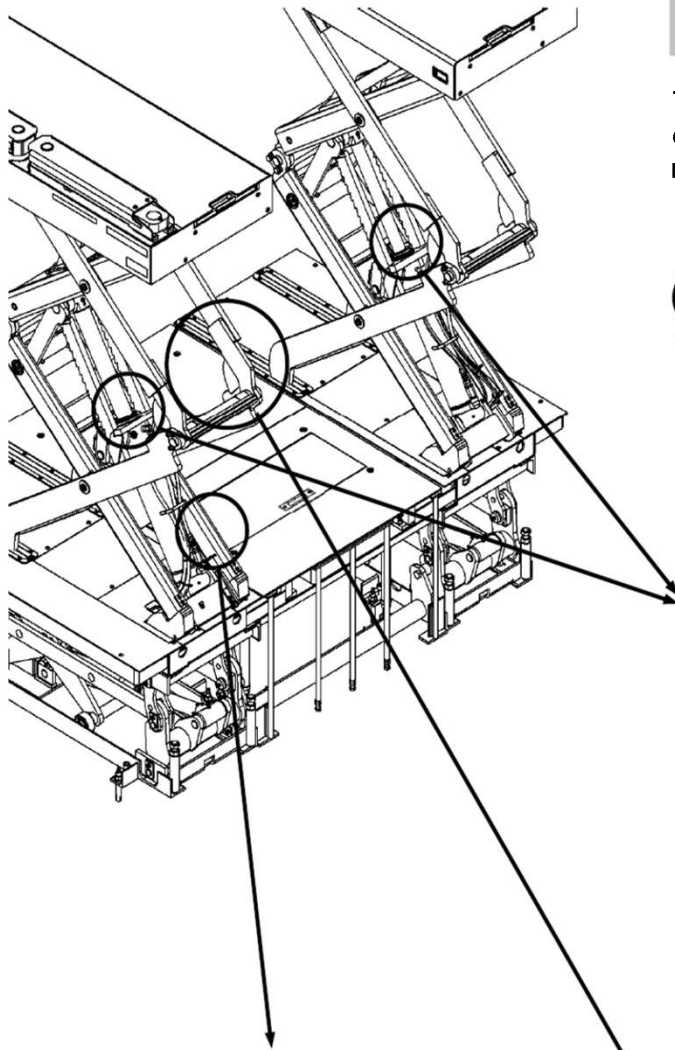
**Function :** Display device shows the below data.

- Date and Time
- Total numbers of times of use
- Total numbers of hours of use
- History of times of use
- Next maintenance inspection date
- Numbers of times of use after maintenance inspection

**Specification :**

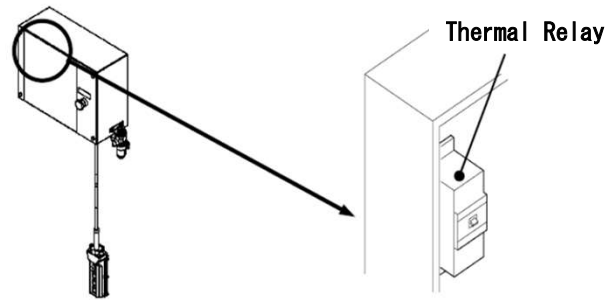
History of times of use can be stored for last 12 months

# 5. Safety Device



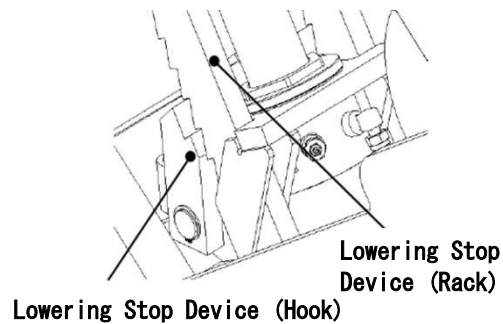
## Thermal Relay

Thermal Relay sense the excessive electric current and shut off the circuit and protect motor from burning. Thermal Relay is installed at magnet contactor.



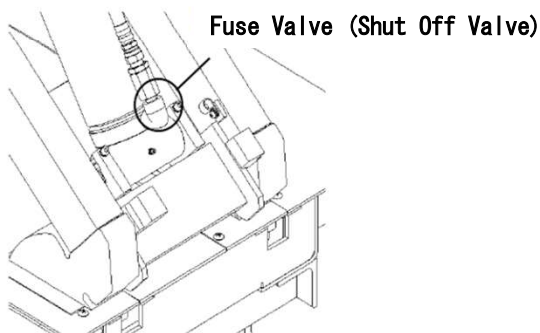
## Lowering Stop Device

Lowering Stop Device are installed at each cylinder to prevent lift from lowering in case of oil leaking and breakage of hydraulic hoses etc.



## Fuse Valve (Shut Off Valve)

Fuse Valve is installed at each cylinder, and shut off the oil flow in case sudden flow of oil from cylinder due to the breakage of hydraulic circuit etc., and prevent vehicle from falling.

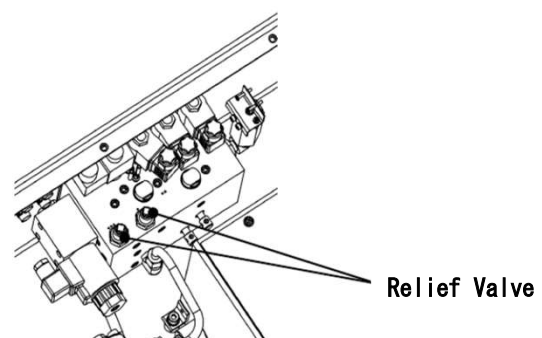


## Relief Valve

Relief Valve would release hydraulic pressure to protect lift from breakage in case below.

- 1) Lifting heavier load than lift capacity
- 2) Lift is reaching the max height

※ It is installed at manifold in the hydraulic unit of lift center.



# 6. Pre-Operation Checks

## 6-1. Items for Pre-Operation Checks

This is very important for preventing falling accident involving vehicle and personal injury, and for making daily vehicle servicing of using lift safe. Perform Pre-Operation checks before operation everyday. If any abnormality is discovered, immediately stop using the lift and make sure to repair and safety is verified before using the lift.

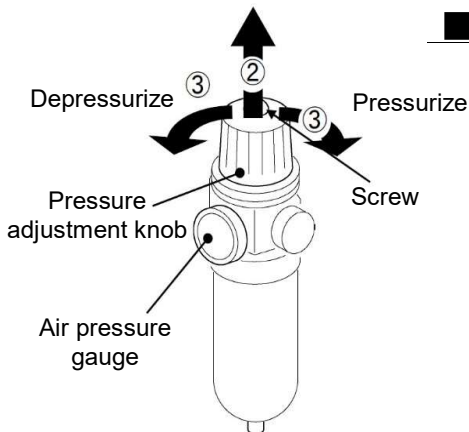
Contact lift supplier if any parts required for repair and replacement.

Inspection Item	Inspection Method	Action/Reference Page
Make sure the air is being supplied at specified pressure (0.7MPa)	Check the air pressure on the Air Filter Regulator	Adjust the air pressure to specified pressure. Refer to Page 14
Check the drain of Air Filter Regulator	Check if there is no water inside Air Filter Regulator	Drain water. Refer to Page 14
Check if the lift rises and lowers smoothly	Lift up and lowers the lift full stroke without vehicle loaded, and check any abnormality visually and by hearing	Contact lift supplier if any abnormality is discovered
Check if there is any oil leak	Check visually	
Check any abnormality of external appearance of lift such as damage, scratch and deformation etc.	Check visually	
Check if there is any air leak	Check visually and by hearing	
Check if there is any abnormality of electrical circuit and function	Check visually and by hearing	
Check if there is any abnormal noise at lift unit, motor and pump	Check visually and by hearing	
Check the function of lowering stop device	Check if the lowering stop hook is engaged all the time except during lift lowering.	
Check the damage of remote control switch and cable	Check if the lift operates as displayed on remote control switch, and check any damage on switch visually	

## 6-2. Inspection of Air Filter Regulator

Air Filter Regulator reduce the air pressure of the air supplied to the Air Filter Regulator to appropriate pressure levels (0.7~1.0 Mpa), and drain water in the air. Air pressure gauge shows the air pressure after depressurization.

### Air Filter Regulator

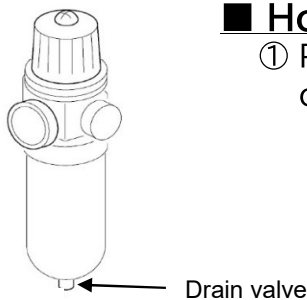


#### ■ How to reduce Air Pressure (Depressurizing)

- ① Verify that the air pressure supplied to the Air Filter Regulator is more than 0.7 MPa
- ② Loosen the screw on top of the Air Filter Regulator.
- ③ Look at and check the air pressure gauge while turning the pressure adjustment knob to set the air pressure to 0.7 MPa.
- ④ Tighten the screw on the top of Air Filter Regulator.

#### ⚠ Caution

- \* The appropriate value of the pressure of air (primary side pressure) supplied to the air filter regulator is 0.7 ~ 1.0 MPa. The air filter regulator may be damaged if the pressure is greater than 1.0 MPa.
- \* Always make sure that the air pressure gauge is pointing 0.7 MPa before operating lift. The lift may malfunction if the pressure is under 0.7 MPa. Furthermore, the Selex Valve may be damaged if the pressure is over 0.7 MPa. Always set the pressure to 0.7 MPa.



#### ■ How to drain water from air

- ① Push up the drain valve at the bottom. Water sprays out with air.

#### ⚠ Caution

Drain water must be drained from the air filter regulator every day. Accumulation of water can cause malfunction.

# 7. Operation Instructions

## 7-1 Preparation before Driving-In Vehicle

### ⚠ Caution

Lower the lift to lower limit, and store the Swing Arms into Swing Arm Case. If Swing Arms are not stored in the case, vehicle may hit the Supporter and Swing Arms and could result in damage to the lift and vehicle.

If the lift does not lower to lower limit by pushing Lowering button, it is possible Upper Lift is not lowered to lowest. In that case, refer to Page 18 " 7-6 Lowering Operation " and raise Upper Lift 100mm and then lower again.

Lower the lift to lower limit, and store Swing Arms into Swing Arm Case. And remove everything such as tools and parts etc. if they are on the drive way. When Arms are stored, Frame Attachment is still over the floor level. If they are obstructing, remove them and put in the Storage Box. Make sure not to drive over Frame Attachment or Arms with vehicle tyers.

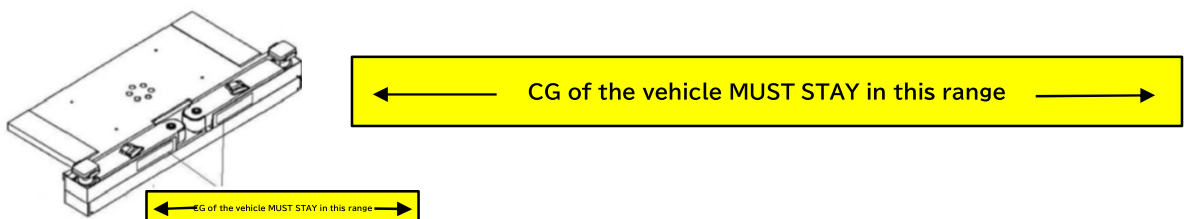
## 7-2 Vehicle Entry

Drive in vehicle slowly and park the vehicle at the spot where CG of the vehicle is within the designated parking spot range shown at the side of Supporter.

There is Storage Box in the center of the lift for storing of Attachment etc. Be aware that it would be difficult to open Storage Box Cover once vehicle drives in. It is suggested to take out necessary attachment etc. before vehicle drives in. (Refer Page 10 "Storage Box" )

### ⚠ Caution

- Make sure to park the vehicle so that CG of the vehicle stay within the range shown in Yellow Color Arrow on the side of the Supporter. If not, vehicle may fall due to the vibration during lift operation and vehicle servicing.
- When driving in vehicle, pay close attention lest vehicle tyre should hit Frame Attachment and Swing Arms.





## 7-3 Set Up Lifting Point

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### Warning

- Make sure to use Lifting Point car manufacturer designated, and do not use other spot of the vehicle for lifting up. Using other spot may result in unbalance of the vehicle and damage vehicle. Do not lift up if the Lifting Point is not clear.
- DO NOT lift up only one side end in front, rear, or right and left.
- Set the Supporter to support the correct Lifting Point firm. If not, Supporter may come off and vehicle may fall.

### ■ Lifting by Plate Type Supporter (Sliding Supporter)

- ① Locate and set the Side Sill Block on the Supporter so that Side Sill Block fit (match) the vehicle lifting point. If vehicle lifting point and Supporter location does not match, move the vehicle depending on necessity.
- ② Lift up Plate Supporter until Slide Supporter can be pulled out.
- ③ Slide out Slide Supporter. And set Side Sill Block on the Plate supporter to match to vehicle lifting point.

※ If Supporter location can not match lifting point through above procedure, use Swing Arms.

### ■ Lifting by Swing Arms

#### Caution

Make sure to perform operation of Lifting Up Swing Arm only when lift unit is lowered at its lowest position.

- ① Select 『 Arm 』 position of 『 Lift/Arm 』 Select Switch
- ② Push "UP" button
- ③ Swing Arm are raised and are retained at stopped position.

#### Warning

- Make sure to set Support Pad to flat and stable lifting point of the vehicle. If set to unstable lifting point, vehicle may lose balance and could fall.
- Adjust the height of Support Pad so that vehicle load can be distributed evenly on 4ea. Support Pads. If not, Support Pads may come off and vehicle could fall.

#### Caution

When lifting by Swing Arms, try to spread (open) arms as wide as possible.

- ① Rotate and extend Swing Arms to fit to Lifting Point of the vehicle. And then adjust the height of Support Pad so that vehicle load can be distributed on 4ea. Support Pads evenly.

## 7-4 Lifting Operation

### ⚠ Danger

**NEVER** go and stand under the vehicle during lift operation.

### ⚠ Warning

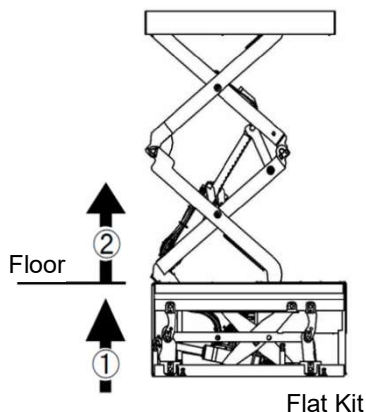
- DO NOT lift vehicles with passengers, baggage or cargo etc. inside (on board).
- When operating the lift, NEVER look aside, and pay constant attention to the area around the vehicle and the lift, or it could result in serious accident.

### ⚠ Caution

DO NOT lift any vehicle exceeding the max lift capacity. Or it may damage the lift.

Supporters would rise when pushing 『UP』 button of control switch. Raise the supporters and stop the lift once the Supporter Pads, or Side Sill Blocks come into contact with the vehicle. Make sure that Supporter Pads are securely contacting correct lifting points. If Supporter Pads are not set on correct position, make adjustments.

If Supporter Pads are set on correct position, then raise the lift so that the tires are lifted about 20mm off the floor, and then shake lifted vehicle gently up and down to verify the balance. If the balance is not good, move the vehicle so that CG of the vehicle become as close as possible to the CG of the Supporter, and recheck the balance. Do not lift up vehicle if the balance can not be improved. If the vehicle is balanced well, then raise the vehicle to the vehicle servicing height. If the vehicle reach to the max height position, stop lifting immediately.



- ① When pushing 『UP』 button, Flat Kit comes up. Flat Kit would stop automatically when Flat Kit reach to max height which is equal to floor level.
- ② Release push button once, and repush 『UP』 button. While pushing, lift unit (upper lift) goes up. Release push button if the lift reach to requied height, and lift would stop.

### ⚠ Caution

- DO NOT stop and leave Flat Kit in the halfway.
- As Flat Kit does not have Lowering Stop Device installed like upper Lift Unit, stop Flat Kit either at max height, or at lowest position if servicing work is suspended.

## 7-5 During Vehicle Servicing Work

### ⚠ Warning

- DO NOT shake the raised vehicle hard. The Supporter Pads could come off and vehicle could fall.
- Pay close attention when removing or installing heavy parts to prevent the vehicle from falling. Balance could be lost and vehicle could fall.

## 7-6 Lowering Operation

### ⚠ Danger

**NEVER** go and stand under the vehicle during lift operation.

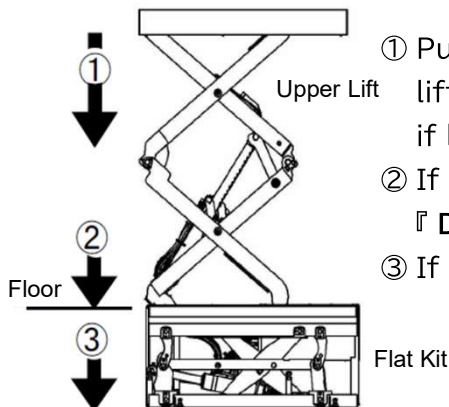
### ⚠ Warning

- DO NOT lower the lift while any stand, jack or support is in position under vehicle. DO NOT use 『DOWN』 motion of lift to push parts into position. Vehicle could fall.
- DO NOT put foot under Supporter. Or foot could be pinched and serious injury could result.

### ⚠ Caution

If lift does not lower when pushing 『DOWN』 button, lift up once, and then lower the lift again.

Check and verify the horizontal level and stability of the vehicle always during lowering operation of the lift. If the vehicle tilts due to the tilts of lift, STOP lowering the lift. In such case, stop lowering and raise the lift very carefully until lift becomes horizontal. And then lower the lift again. If such incident occurs frequently, there is possibility of lift malfunction. Contact lift supplier.



- ① Push 『DOWN』 button. While pushing 『Down』 button, lift unit (upper lift) goes down. Release 『Down』 button if lift reach to the required height. Lift would stop.
- ② If lowering the Sliding Supporter to floor level, push 『DOWN』 button until upper lift reach lowest floor level.
- ③ If pushing 『DOWN』 button again, Flat Kit start going down.

### ⚠ Caution

- DO NOT stop and leave Flat Kit in the halfway. As Flat Kit does not have Lowering Stop Device installed like upper Lift Unit, stop Flat Kit either at max height, or at lowest position if servicing work is suspended.
- DO NOT leave the lift with a vehicle lowered halfway unattended for a long time. A vehicle left on the lift at a low position without engaging Lowering Stop Hook could cause the vehicle to be lowered and damaged.
- When the upper lift (M. side) was lowered to lowest floor level and lift stopped, release 『DOWN』 button. Flat Kit does not start lowering until upper lift is lowered to lowest. But if releasing 『DOWN』 button at around lowest position, Flat Kit start lowering with upper lift still not folded completely.

## 7-7 Vehicle Exit (Driving Vehicle Out)

Exit the vehicle slowly only after Supporter was lowered to the lowest position.

### 【 When Sliding Supporter was used 】

When the Supporter come off the vehicle's lifting point, stop lowering once. Then push Sliding Supporter back (retract) , and lower the lift again to the lowest position.

#### ⚠ Caution

- Check and make sure the lift is lowered to the lowest. If the lift is left at midway, it could result in damage to the lift and vehicle.
- If the Sliding Supporter is not retracted (stored back), it could result in the damage to the lift and vehicle.

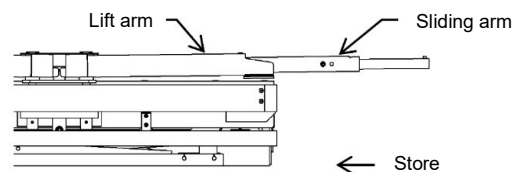
### 【 When Swing Arm was used 】

Drive vehicle out after Swing Arms were retracted back into Supporter.

#### ⚠ Caution

- After vehicle servicing work, push Slide Arm back into Swing Arm completely (retract), and lower the lift to lowest position. If lift is lowered with Slide Arm not being retracted completely, Slide Arm could be stranded on the floor and could damage Arm Pin.

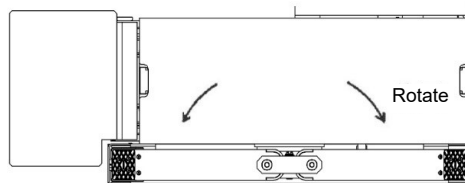
① After vehicle servicing work, push Slide Arm back into Lift Arm completely.



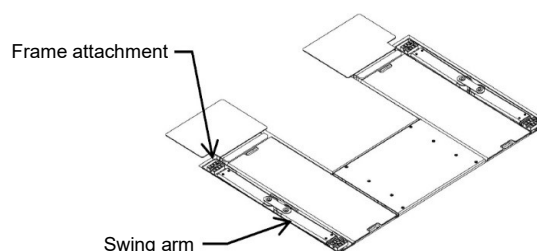
② Lower the lift to lowest position.

③ Rotate Swing Arm until it hit Stopper to match the Arm support storage case. Select the 『 Arm 』 switch of 『 Lift /Arm 』 Select Switch. And push 『 DOWN 』 button so that Swing Arm to be lowered and stored back to Arm support storage case.

If Swing Arms are interfering with Arm supporter case etc. and Arms can not be stored back, raise the lift and adjust the position so that Swing Arms can be stored back to Arm support storage case.



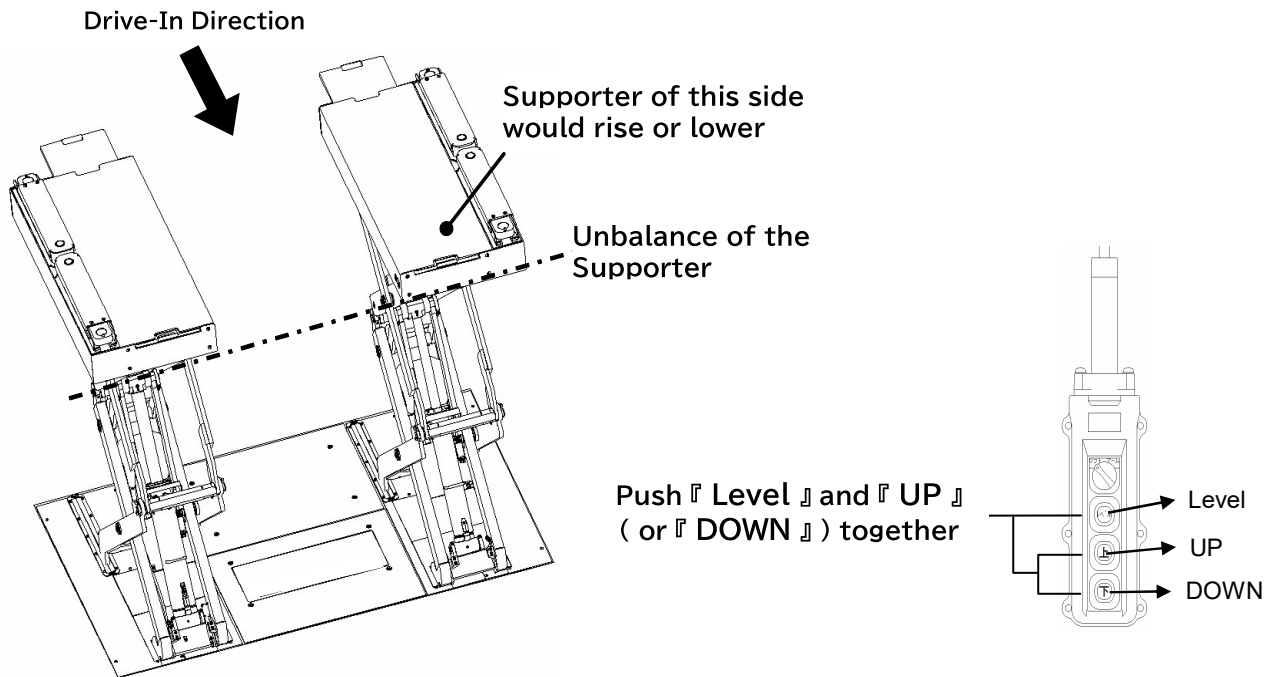
④ Frame Attachment is over the floor level. If it would be obstructing, remove and put in the storage box.



⑤ Be careful not to step over Swing Arms and Frame Attachment.

## 7-8 How to Rectify the Unbalance between both sides Supporter

When the both sides Supporters became unbalanced, push 『 Level 』 Switch button and 『 UP 』 (or 『 DOWN 』) button together.



### Rectifying Procedure :

If pushing 『 Level 』 and 『 UP 』 (or 『 DOWN 』) button together, left side Supporter seeing from car entrance direction would rise (or lower) for rectifying unbalance.

#### **⚠ Caution**

When performing rectifying operation, only Left side Supporter seeing from car entrance direction would rise or lower. Pay close attention to the movement of both sides supporters to avoid increasing the unbalance by pushing wrong side button of 『 UP 』 or 『 DOWN 』

## 7-9 Cleaning after Completion of Vehicle Servicing Work

Once the vehicle servicing work has been completed, wipe off oil and grease attached on supporter and inside the lift area to clean. In the event any abnormality is found in the cleaning work, consult lift supplier immediately. Lower the lift to the lowest position and shut off the power supply (circuit breaker) for safety.

## 8. Regular Inspection

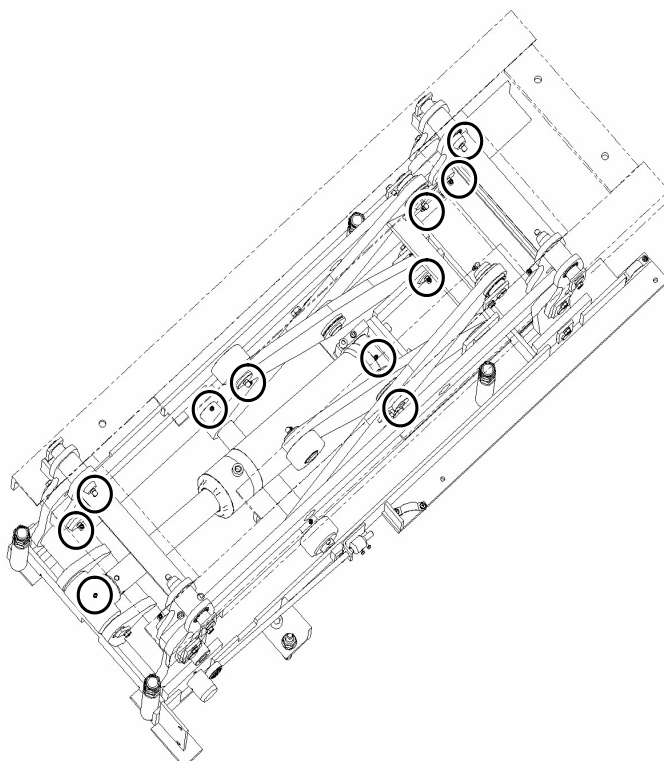
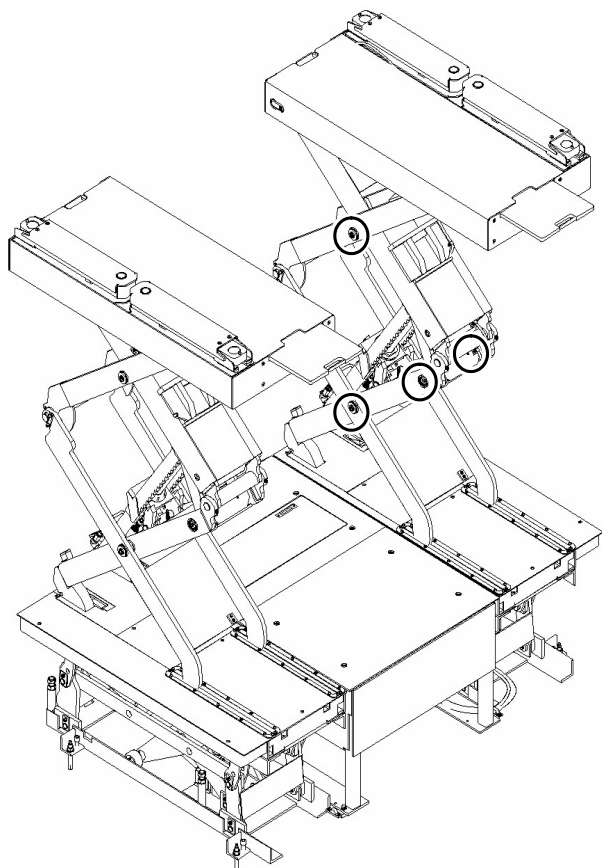
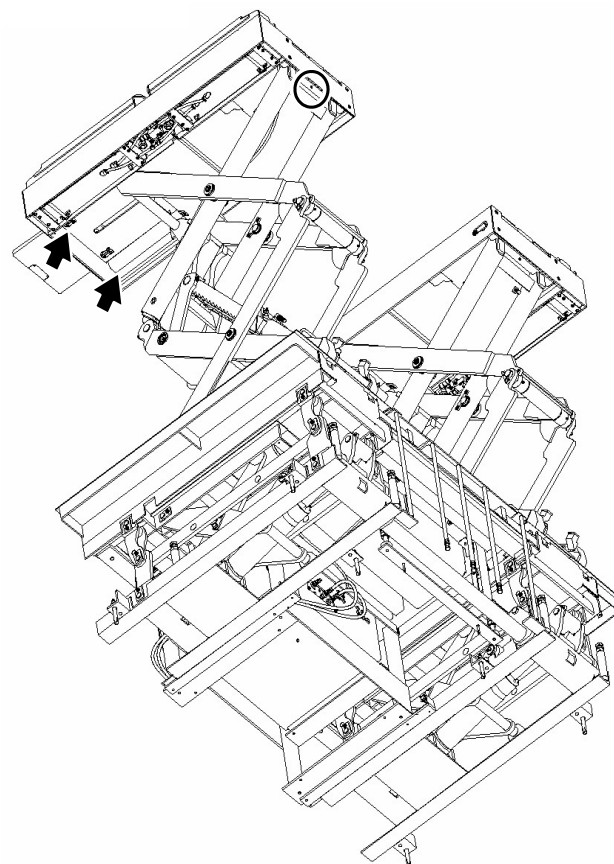
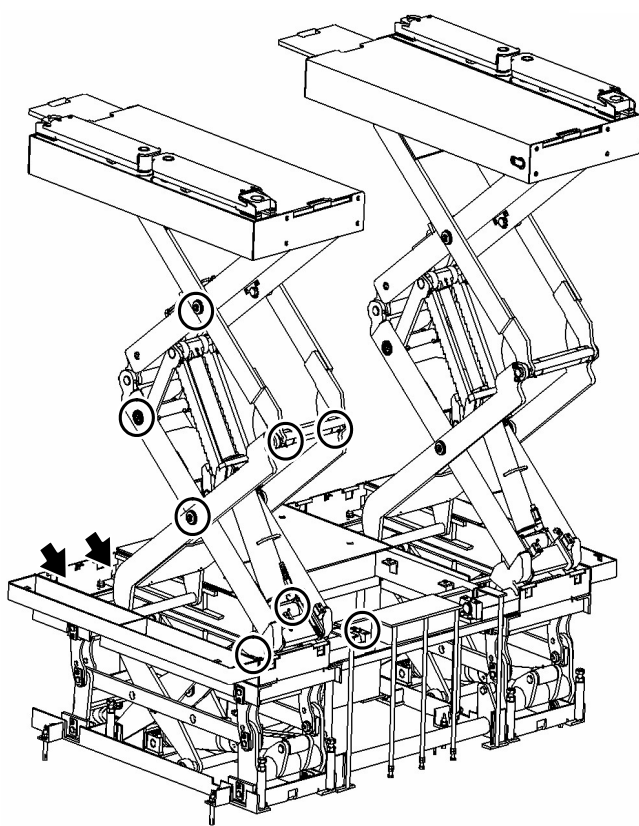
Regular inspection is essential inspection procedures to secure safety (preventing vehicle falling accidents) and to ensure the lift can be used for a long time. Regular inspection is to be performed along with Pre-Operation Check.

Be sure to perform the regular inspection at least once a month, in addition to the pre-operation check that is to be performed everyday in order to ensure that lift is 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 it is repaired properly and verify safety before using lift. Ask lift supplier for repairs on abnormality.

Inspection Spot	Inspection Items	Inspection Points	Refer to
Lubricating Spot	Grease Fittings	Lubricate grease	8-1
Inside Pit	Drain and foreign articles inside Pit	Open the Flat Kit Cover and check water drain and any foreign articles inside pit	8-2
Lowering Stop Device	Sound of Lowering Stop Hook	Clicking Sound during lifting operation	8-3
Air Circuit	Air Joint & tubes	Any crack or air leak ?	
Control Panel	Electric Components (Magnet Contactor, Relay etc.)	Check function and any damage, loose terminal ?	
Bolts & Nuts	Loosening	Any loosening ?	
Lift Unit	Rust condition	Any rust ?	
Arms	•Operation of Arm Stopper	→ Does Stopper work when Slide Arm is fully pulled out ?	
	•Arm Thickness	→ Arm thickness is within standard range ?	
Adjustable Supporter	•Operation of Stoppers	→ Does Stopper work certainly when Pads are rotated and reached to top ?	
	•Loosening	→ Is looseness within 2mm when moving the Pad by hand up and down ?	
Side Sill Block	Conditions of Side Sill Block	Any excessive crack, or deformation ?	

# 8-1. Lubrication Points

○ : Grease Fitting  
➔ : Sliding Portion



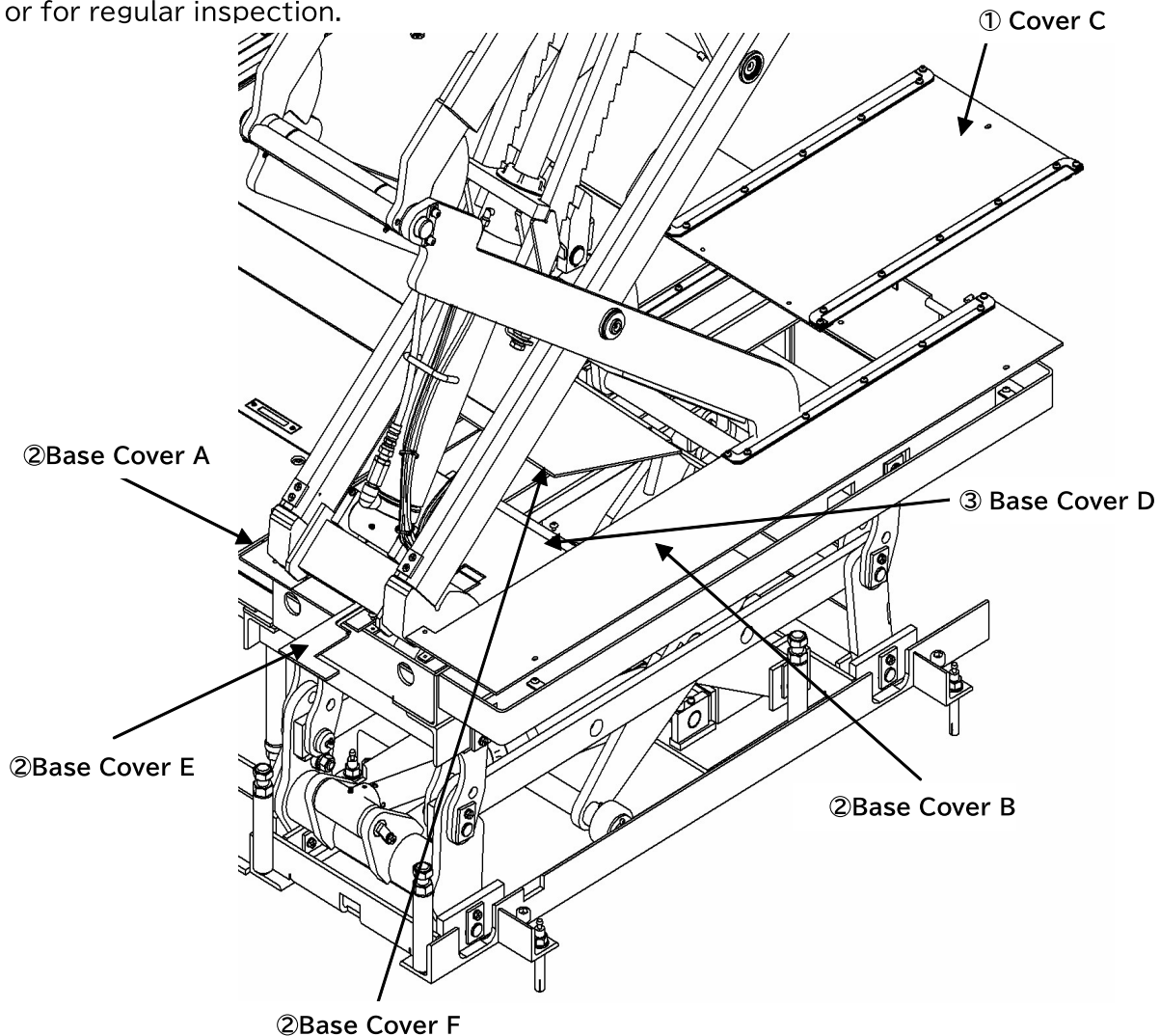
## 8-2. Inspection of Pit Inside

---

Open the Flat Kit Cover, and check water drain of inside Pit and any foreign articles inside Pit.

### How to Open Flat Kit Cover :

Flat Kit Cover need to be opened when tools etc. was dropped throught opening of cover, or for regular inspection.

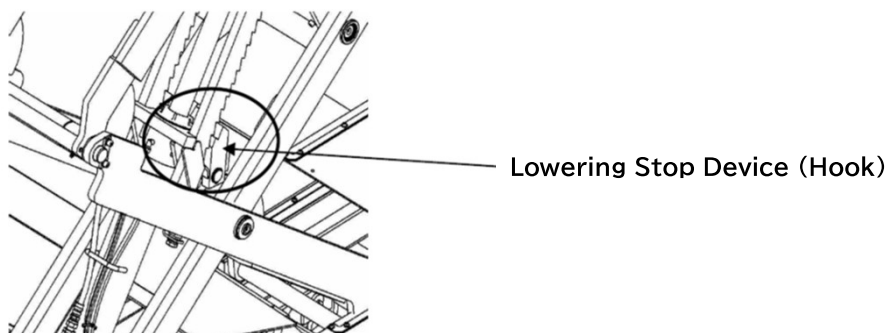


- ① Remove screws out of each cover.
- ② Screws can be unfastened in the ascending order of numbering from small number.

## 8-3. Inspection of Lowering Stop Device

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Check if the below Lowering Stop Hook is making clicking noise during lifting operation





## 9. Trouble Shooting

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

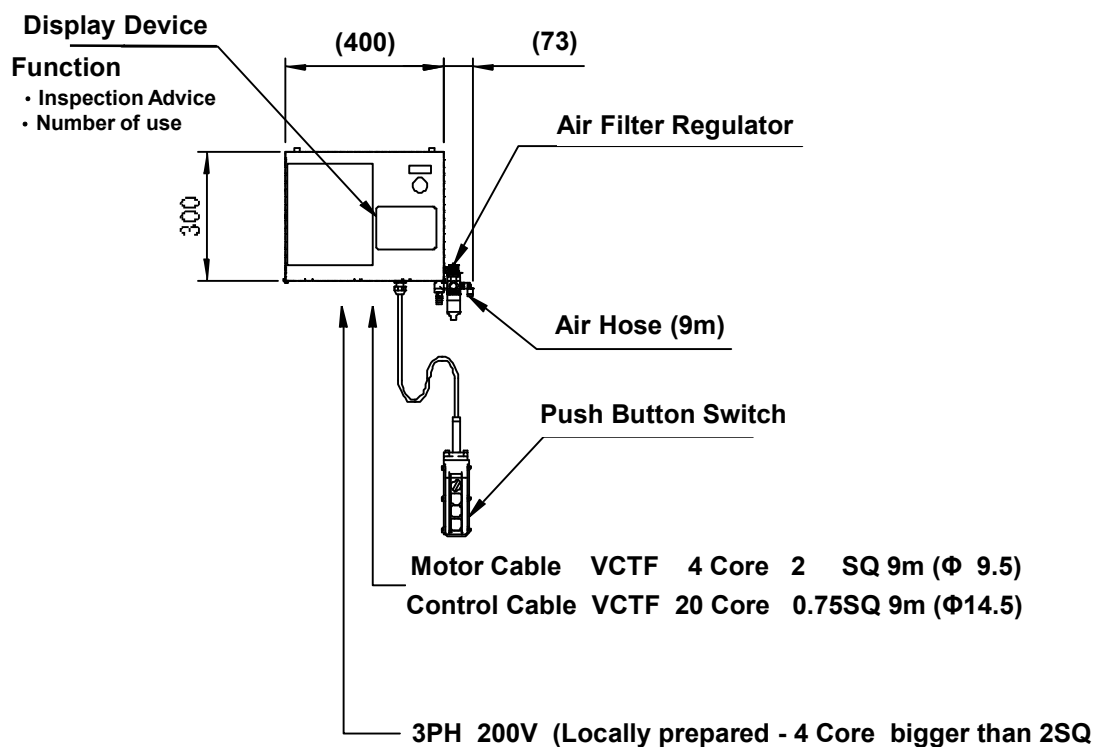
Symptom	Possible Cause	Action
Lift does not rise and Lift does not lower	[[ Motor does NOT run ]]	
	• Power cable improperly connected or broken	→ Check the cable for connection and the breakage of the wire
	• Magnet contactor thermal relay activated	→ Identify the cause and reset
	• Primary-side circuit breaker tripped	→ Reset primary-side circuit breaker
	• Pressure of air supplied to lift is too low (Less than 0.7MPa)	→ Adjust the air pressure to specified
	• Breakage of motor cable • Burnt Motor	→ Identify the cause and replace motor
	• Contact defect of Push Button Switch	→ Replace Push Button Switch
	[[ Motor does RUN ]]	
	• Motor runs in the wrong direction	→ Replace R, and T phases of cable
	• Foreign Articles are obstructing the roller at lower portion of scissors	→ Remove foreign articles
• Lowering Stop Hook is engaged with rack	→ Raise the lift once and then lower	
• Foreign Articles are obstructing the shoe at lower portion of scissors	→ Remove foreign articles	
• Lack of oil	→ Fill the oil	
• Overload	→ Normal. Vehicle exceeding the lift capacity can not be lifted up	
Lift rise slowly and Lift lowers slowly	• Oil filter in oil tank is clogged	→ Clean up oil filter, or replace oil
	• Overload	→ Normal. DO NOT lift up vehicle exceeding lift capacity
Lift rise but lowers gradually	• Oil leak from hyd. Hose or piping	→ Tighten
Supporter height of both sides unbalanced	• Oil is not circulated in lowering	→ Keep pushing "Down" button at bottom to circulate oil
Noise	• Lack of oil	→ Fill the oil
	• Lack of lubrication at scissors bearing	→ Lubricate
	• Lack of lubrication at shoe sliding portion	→ Greasing to sliding portion
	• Piping not secured properly	→ Tighten the piping
Noise at top	• Noise from Relief Valve	→ Normal.
Lift does not rise neither lower	• Fuse is blown	→ Replace fuse
	• No primary power	→ Turn on primary power

### Warning

Before performing any electrical work, be sure to turn off the power supply.

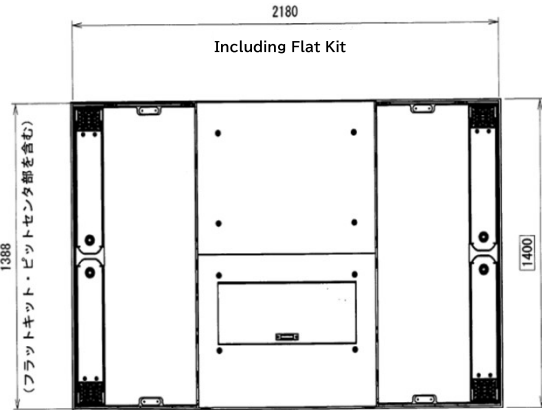
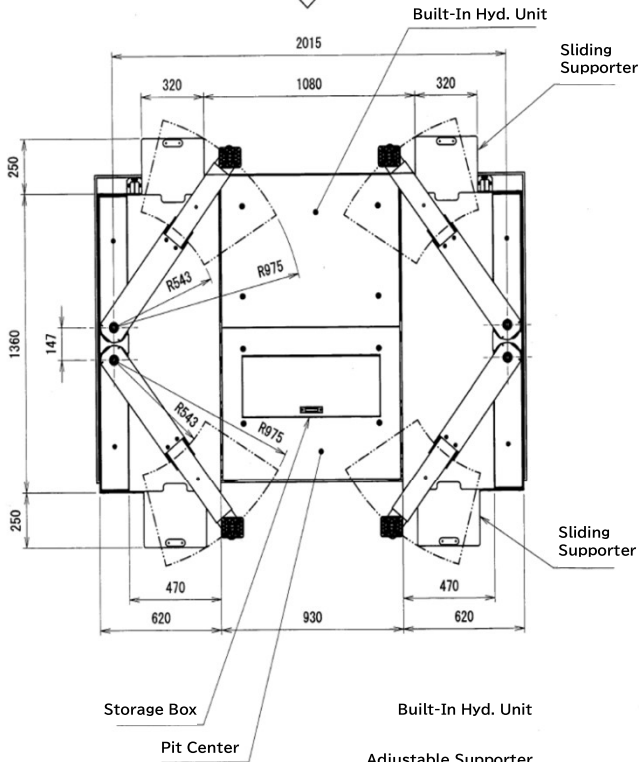
# 10. Specifications

Model No.	ESC32UF	
Capacity	3,200 Kgs.	
Vertical Travel	1,800 mm	
Lifting Time (With 3200kg. Loaded)	Upper Lift	Approx. 45 Sec. (60Hz)
		Approx. 54 Sec. (50Hz)
	Flat Kit	Approx. 27 Sec. (60Hz)
		Approx. 32 Sec. (50Hz)
Lowering Time (With 3200kg. Loaded)	Upper Lift	Approx. 40 Sec.
	Flat Kit	Approx. 16 Sec.
Arm Rise & Lower Drive	Pneumatic	
Primary Power	<b>3PH/200V</b>	
Motor	2.2 KW 4P·5 Minutes Rating	
Drive	Electro. Hydraulic	
Control	Cable Remote Control Switch (Push Button)	
Control Voltage	DC24V	
Oil Volume	18L (ISO VG32)	
Air Pressure	0.7~1.0 MPa	
Machine Weight	2,150 Kgs.	

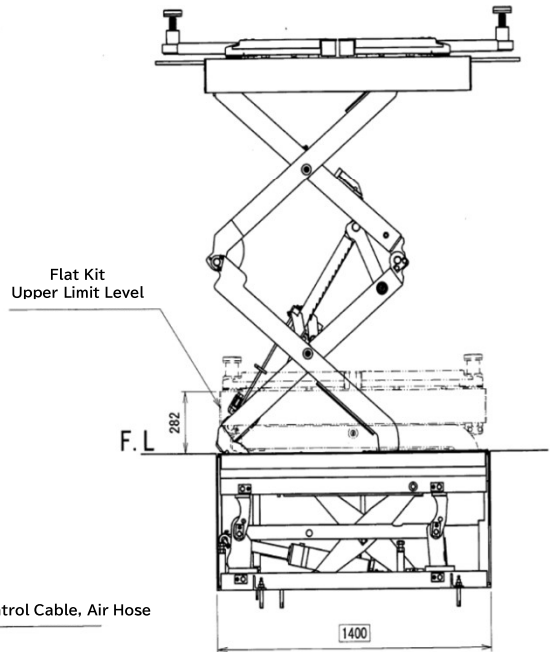
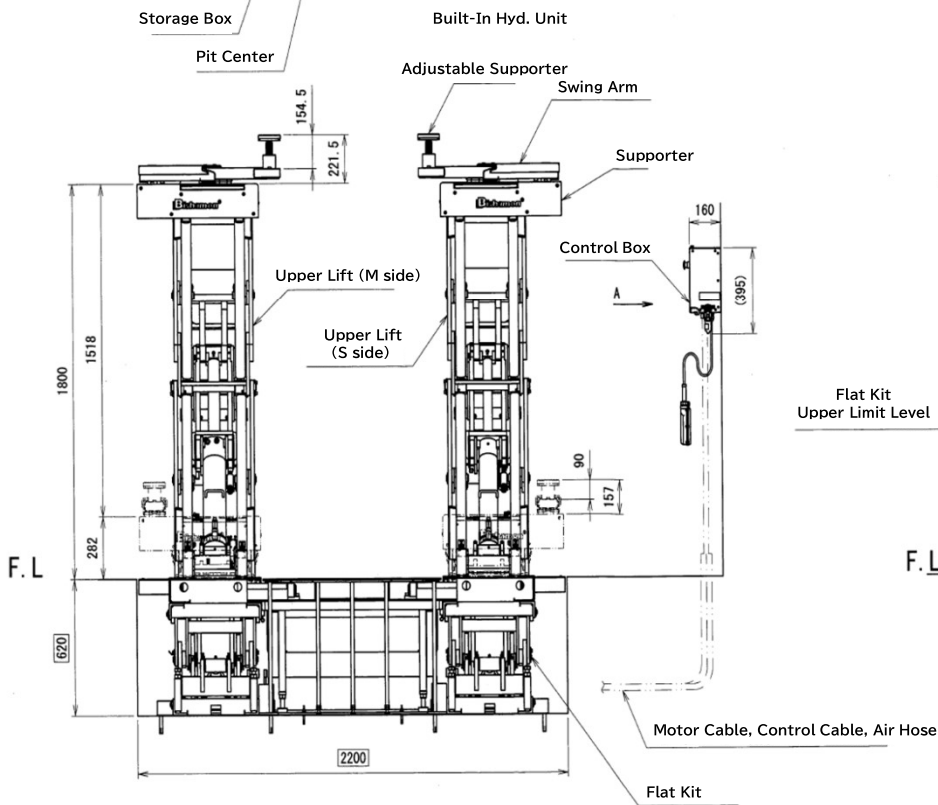


# Specifications

Drive-In Direction ↓



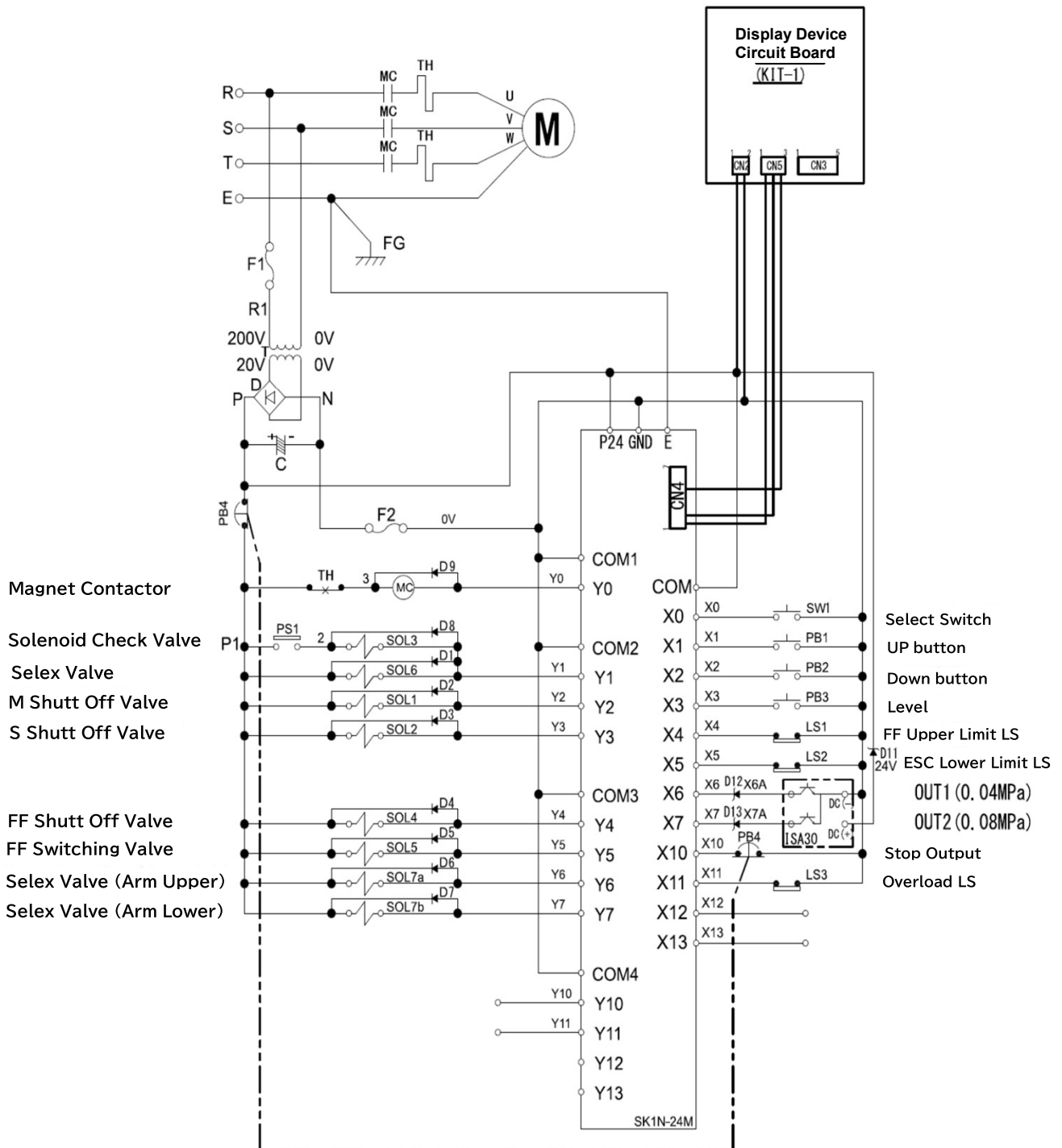
At Lowest Position



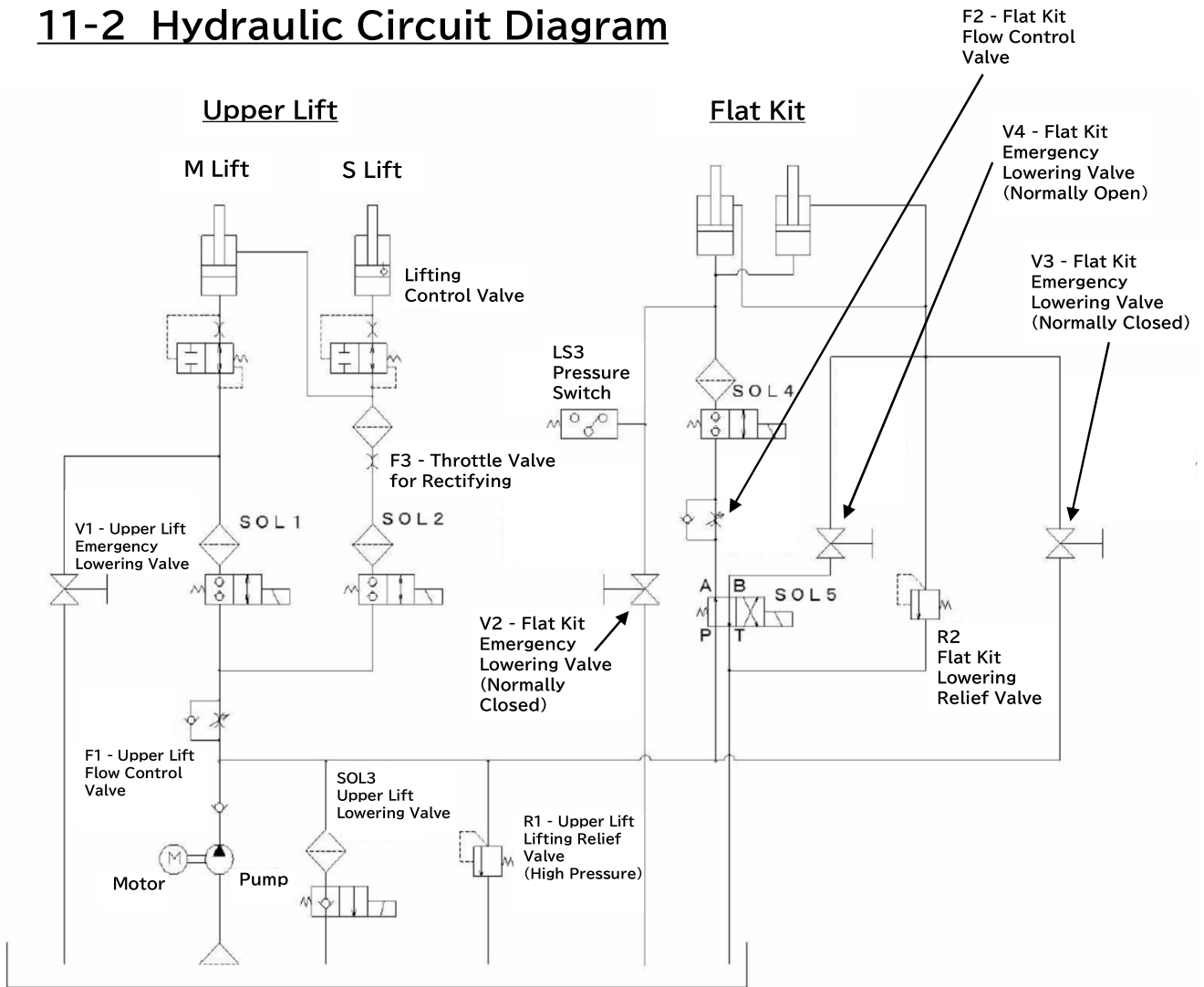
# 11. Circuit Diagram

Note : Circuit Diagram for the modified unit could not be same circuit.

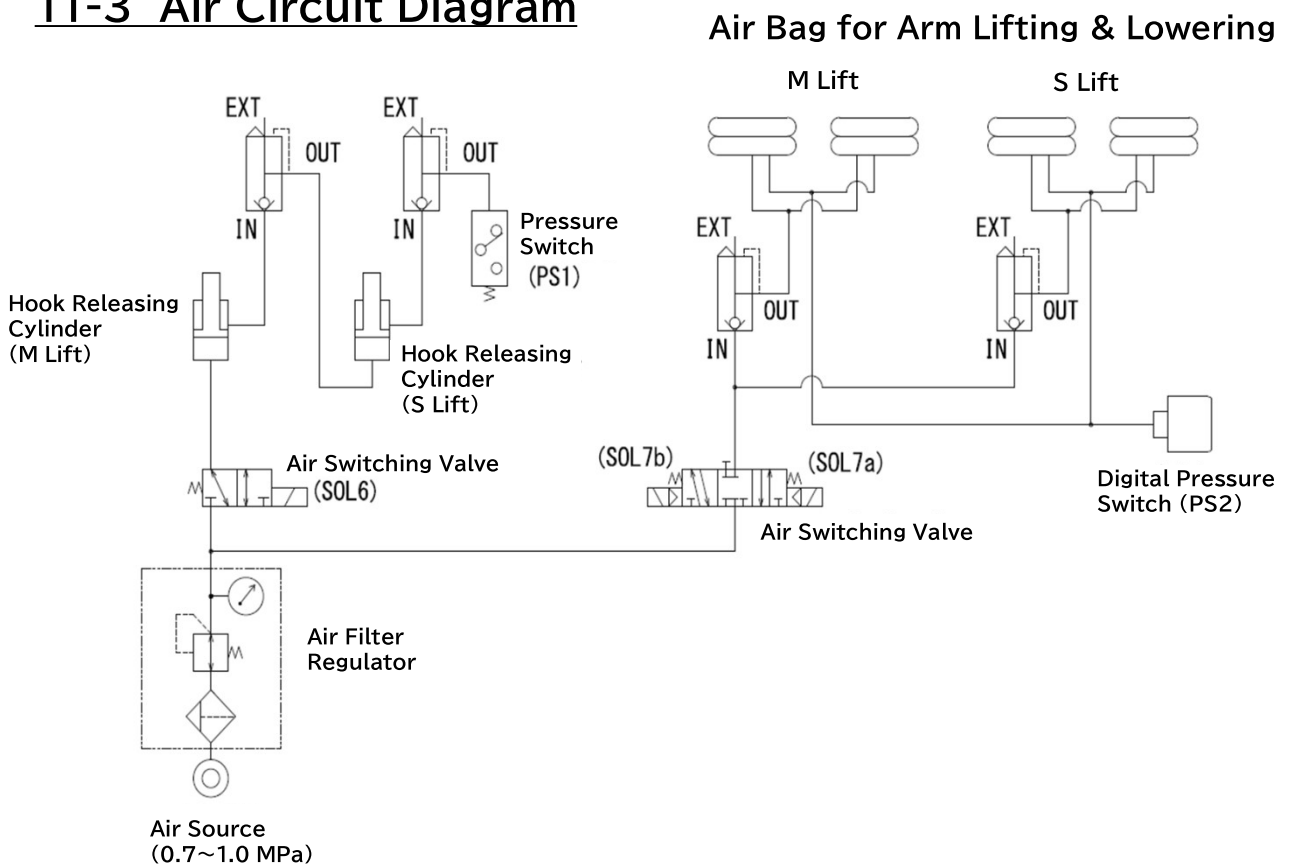
## 11-1 Electric Circuit Diagram



# 11-2 Hydraulic Circuit Diagram



# 11-3 Air Circuit Diagram



## 12. Attachment (Option)

There are optional attachments available depending on the vehicle to be lifted. Inquire of lift supplier or Bishamon about applicable attachment information.

### ■ Frame Attachment LA/LB/HA/HB

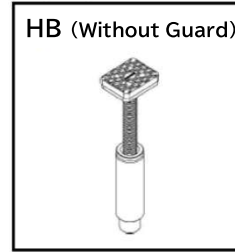
- For lifting vehicle by **Frame**
- Can be used for USV (RV) and One Box Car which has lifting point at Frame



Height - Min. 112.5~ Max.177.5mm

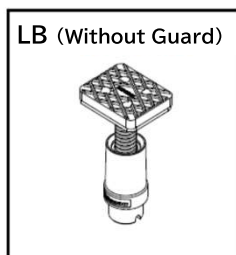


Height - Min. 199.5~ Max.349.5mm



### ■ Light (Weight) Frame Attachment LA/LB

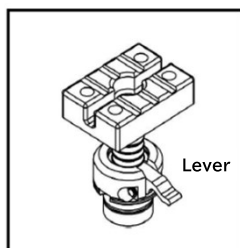
- For lifting vehicle by **Frame**
- Weight is about 1/2 of the above standard attachment as special resin is used.  
(Note : Can not be used for water washing applications)



Height - Min. 112.5~ Max.177.5mm

### ■ Easy Attachment FA (Height can be adjusted easily)

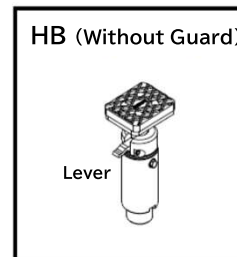
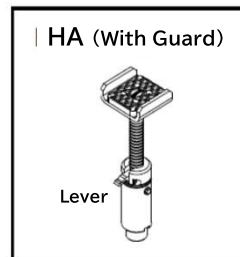
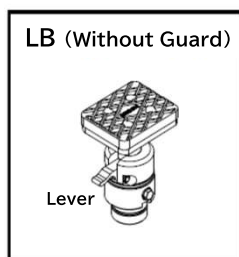
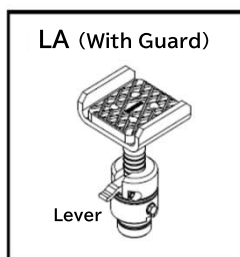
- For lifting vehicle by **Side Sill**
- Just pull up supporter for raising, and just push down Lever for lowering supporter  
(Note : Can not be used for water washing applications)



Height - Min. 56~ Max.103.7mm

### ■ Easy Attachment LA/LB/HA/HB

- For lifting vehicle by **Frame**
- Easy height adjusting function is used for Frame Attachment  
(Note : Can not be used for water washing applications)



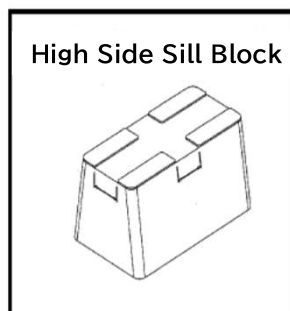
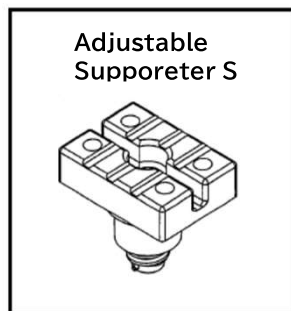
Height - Min. 126~ Max.177.5mm

Height - Min. 212~ Max.349.5mm

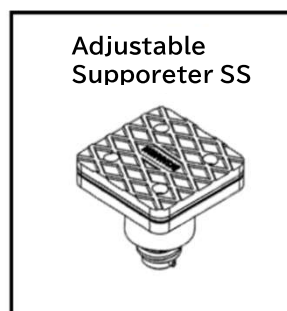
Note : Minimum height for Easy Attachment LA/LB/HA/HB is about 15mm higher than above standard attachment.

## ■ Adjustable Supporter

【 For Lifting by Side Sill 】



【 For Lifting by Frame 】



## 13. 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.

## 14. 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.

## 15. 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

# 16. 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 : .....
	Date : .....



# **Bishamon**



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