



## INSTALLATION INSTRUCTIONS

These instructions are meant to be used as a basic guide only. You should double check all your measurements on site before proceeding with any cutting or mounting of hardware.

Smart Garage Door Ltd is not responsible for personal injury and/or property damage caused from using these instructions.

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## 1.0 BEFORE YOU START

### 1.1 SAFETY CHECKLIST

The following hazards and hazard controls have been identified for installers during the installation of this door.

#### Hazard Control

Hazard	Control
<ul style="list-style-type: none"> <li>• Housekeeping - risk of slip trip or fall</li> <li>• Housekeeping - risk of injury to other people or animals in the installers work area</li> </ul>	<ul style="list-style-type: none"> <li>• Tidy up site prior to start work as a minimum area should be at least the area of the installation back into the garage and 2 metres in front</li> <li>• If the Site housekeeping is deemed to be unsafe do not install the door</li> <li>• Keep all people well clear of installers work area with appropriate signage and discussion with owner</li> </ul>
<ul style="list-style-type: none"> <li>• Manual handling when moving the door from the Trailer or vehicle to the installation area - risk of musculoskeletal injury</li> <li>• Manual handling when installing Doors &amp; Openers particularly above head height - risk of musculoskeletal injury or twisting</li> <li>• Manual handling when installing tracks and torsion bars - risk of musculoskeletal injury</li> <li>• Manual Handling when installing the door opener - risk of musculoskeletal injury or twisting</li> </ul>	<ul style="list-style-type: none"> <li>• Correct lifting technique for Roller Door</li> <li>• Use of 2 person lifts</li> <li>• Use of mechanical aids such as lifting stands, forklift, cranes, manual material lift</li> <li>• Avoid twisting (Practice correct lifting techniques)</li> <li>• Correct use of ladders while installing tracks</li> <li>• Use of correct technique of knotted rope installation aids</li> </ul>
<ul style="list-style-type: none"> <li>• Working at heights and working with ladders, scissor lifts, scaffold - risk of fall from height</li> </ul>	<ul style="list-style-type: none"> <li>• Ladder check</li> <li>• Ladder placement</li> <li>• Do not work off the top rung</li> </ul>
<ul style="list-style-type: none"> <li>• Sharp edges on Door, tracks or related jewelry - risk of laceration</li> </ul>	<ul style="list-style-type: none"> <li>• Wear appropriate PPE</li> <li>• Follow instruction explicitly particularly for the installation of some parts of the doors as the unrolled cut out edges presents a very sharp edge</li> </ul>
<ul style="list-style-type: none"> <li>• Pinch points - risk of cut, puncture or crush injury</li> </ul>	<ul style="list-style-type: none"> <li>• Wear appropriate PPE and keep hands well clear of pinch points</li> <li>• Ensure hands well clear of the panels</li> </ul>
<ul style="list-style-type: none"> <li>• Use of hand tools - risk of eye injury, laceration cut stab or puncture injuries (Tools checklist)</li> <li>• Use of Electric/ Battery or pneumatic tools - noise hazard</li> <li>• Use of cutting tools creating sparks - risk of fire</li> </ul>	<ul style="list-style-type: none"> <li>• Wear appropriate PPE and use operator’s manual</li> <li>• Use appropriate noise/hearing protection in the form of ear plugs or ear muffs</li> <li>• Ensure appropriate fire protection available and housekeeping to ensure that flammable liquids or materials are removed from the area of work</li> <li>* Eye protection</li> </ul>
<ul style="list-style-type: none"> <li>• Tension spring - risk of release of stored energy (various door parts, tools, jewelry striking installer on the head or body)</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure door is correctly secured • Ensure that pipe wrench is fitted correctly to the axle and if it is gripped onto the axle do not underestimate the tension in the spring when undoing the clamps</li> <li>• Ensure the correct length pipe wrench is used</li> <li>• Ensure correct bolts are tightened or loosened to ensure there is no release or controlled release of energy from the spring through the pipe wrench</li> <li>• Keep hands clear of the pipe wrench at all times</li> <li>• Keep head clear of the pipe wrench at all times</li> </ul>
<ul style="list-style-type: none"> <li>• Position the door on the brackets, there is a risk of the door falling from the brackets striking a person</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure the door is immediately fastened to the bracket with the “U” Bolt</li> <li>• Ensure no-one ever walks under a door sitting on a bracket</li> </ul>

## 1.2 PREPARATION

# DO NOT CUT THE PACKAGING THAT HOLDS THE DOOR IN A ROLL

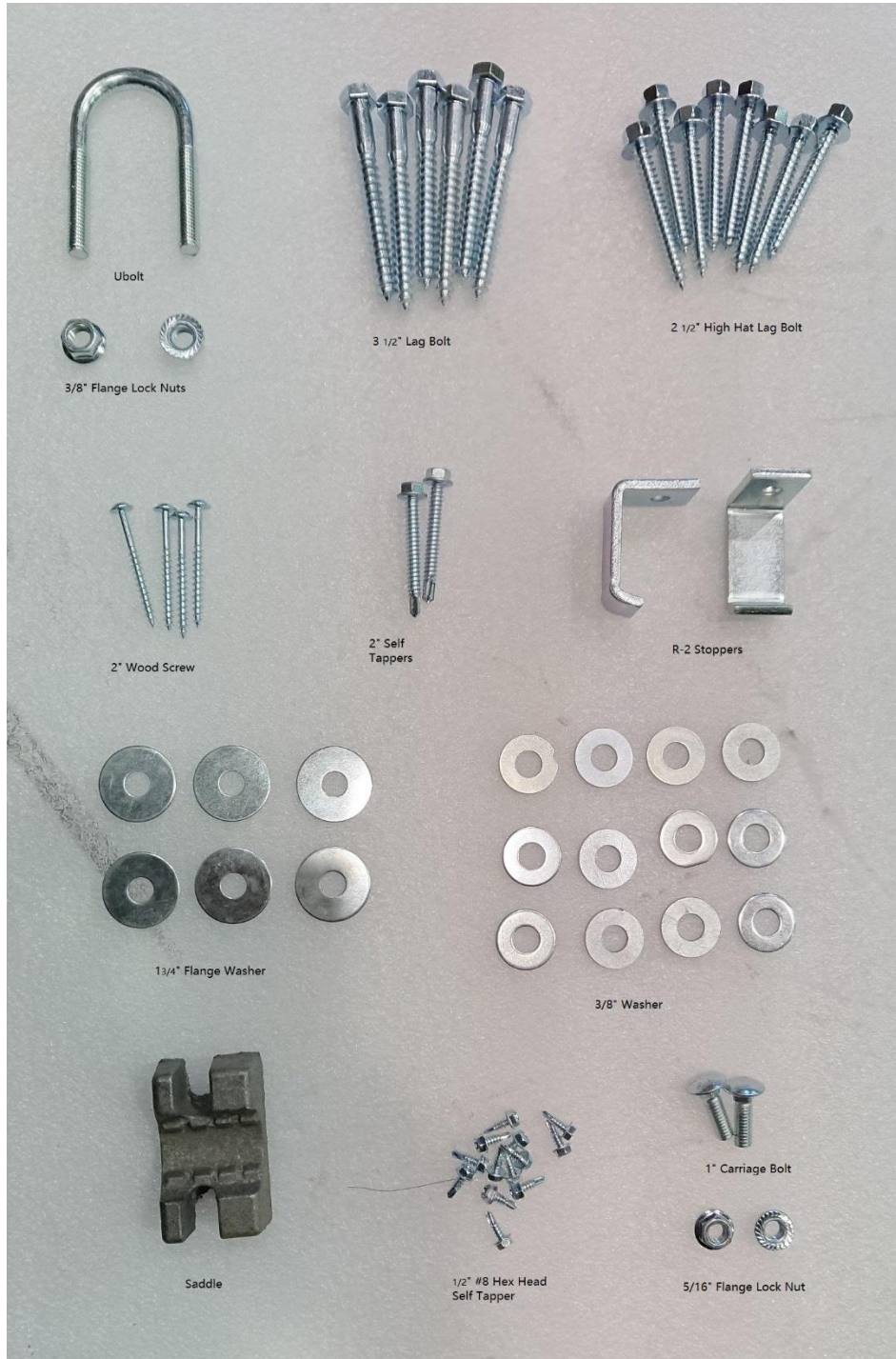
At a later stage during the installation you will be told just when to cut the packaging.

Start by removing brackets, guides and bag of small parts from each end of the door roll. Because Smart Garage Roll-A-Doors overlap the opening on each side, the door and opening widths should be measured to determine the amount of door overlap to enable correct positioning of the brackets.



**1.3 FASTENER PACKAGE (INCLUDED)**

This package is for wood construction only



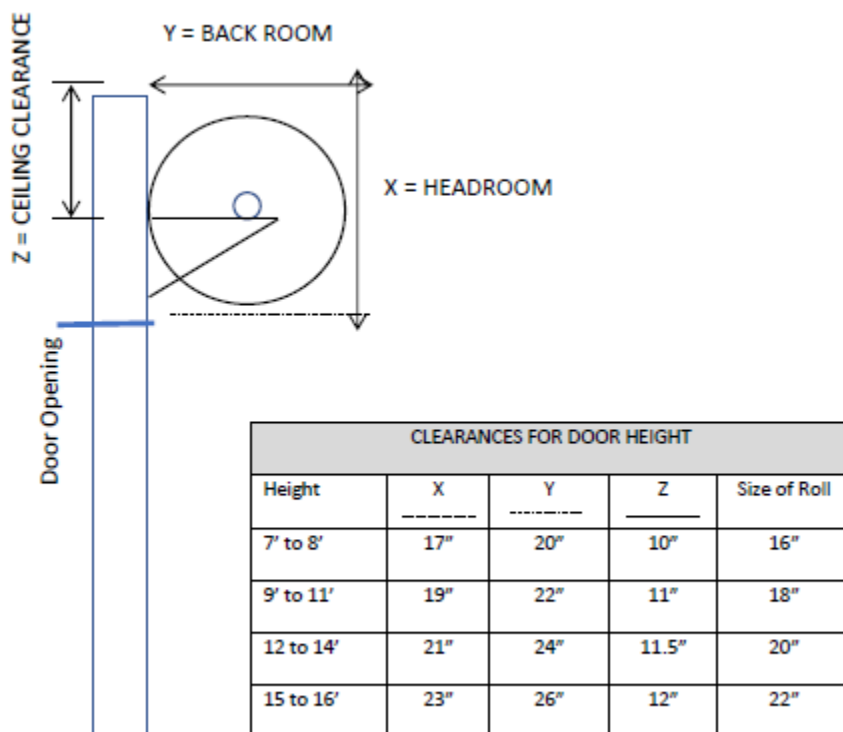
\* Motorized Doors include one U-bolt assembly and saddle

\*\* Manual Doors include two U-bolt assemblies and two saddles

### 1.4 REQUIREMENTS BEFORE INSTALLATION

SMART GARAGE Roll-A-Doors are normally installed to operate behind the opening, overlapping as described in the dimension sketch. Openings should therefore have sufficient return on both sides to accommodate the support brackets and door guides, with necessary working clearances.

The door is supported on brackets above the opening at each end and requires headroom for the door to roll up in. Door must be mounted on a flush surface.



**DOOR SIZE – Width:** The door curtain should be 4 inches wider than the opening. However, a wider than normal door can be fitted by allowing the door to overlap further on each side, providing the additional side room is available.

**Height:** A door cannot be installed higher than its maximum size; however, it can be installed in a lower position (providing the door guides are cut to suit – as shown later). If the opening is too high, the door should be installed at the maximum door height position and the opening reduced or treated as shown in Step 2.3 under the heading “Bracket Attaching”.

**WARNING!** No guarantee will be given or responsibility accepted by the manufacturers if the door is not installed as instructed. For satisfactory door operation please follow the instruction carefully.

## 2.0 INSTALLATION

### 2.1 QUICK REFERENCE GUIDE

<b>DO NOT UNWRAP YOUR ROLL UP DOOR!</b>	Check √
Ensure that your roll up door came with all the parts, brackets, guides, top seal and parts bag.	
Measure the opening and make sure the door curtain has the correct overlap. R2RC doors should be 4" wider than the opening	
Mark your curtain lines with 2" overlap on each side of the opening.	
Then mark your bracket positions (minimum ½ inch on non-motor side. <b>Refer to the motor manual for position of bracket on motor side, motor is to be mounted on top of the bracket.</b>	
Run your photoelectric beam cable along the header. Make sure to leave enough slack for positioning of the photoelectric beams.	
Make sure your axle is centered by spinning the axle by hand and install the anti-coning collar on the opposite side of the motor. <b>Refer to the motor manual.</b>	
Install Motor. Straddle the drum spokes.	
Lift the door onto brackets with bottom rail facing 3 o'clock position.	
Tighten down your U-Bolt(s).	
Tension the door by turning the bottom rail upward and towards the header. 1 to 2 turns.	
Lock the motor and carefully remove the wrapping by cutting on the bottom rail with a blade.	
Unlock the motor and completely remove the wrapping by carefully lowering the door.	
Install your stoppers, guides and counter weight.	
Check that the door has proper tension. The door should stop in any position. If not, adjust the tension. The door should roll up for the last 12" showing and fall for the last 12". <b>Refer to the door manual.</b>	
Secure the curtain to the drums by screwing in 2 self-tapping screws. <b>Refer to the motor manual.</b>	
Make the final connections for the motor and photoelectric beams. <b>Refer to the motor manual wiring diagram.</b>	
Program remote to the motor then use it to program the door.	
Program the motor . <b>Refer to the motor manual.</b>	

### 2.2 FITTING REQUIREMENTS

For attachments to good timber work, Hex Lag Screw 3/8" X 2" are the standard hardware supplied with SMART GARAGE Roll-A-Doors. When installing onto brick or concrete proper anchors will be required. The following items are recommended and can be obtained from most hardware stores. It is the installers' responsibility to ensure that the mounting method is sound. When deciding the mounting method, dynamic loads on door brackets as well as the door weight must be considered.

#### ALTERNATE METHODS OF ATTACHING BRACKETS AND GUIDES

**For Brackets:** Use six 3/8" bolt size masonry anchors; (Hilti or similar).

**For Guides:** Use the 3/8" x 1 7/8" anchors.

**NOTE TO BUILDERS:** Masonry blockwork should be properly filled and reinforced if brackets are to be mounted directly to blockwork with masonry anchors. Where the blockwork is not solidly filled but structurally sound, long bolts should be passed through the blockwork using suitable steel plates under bolt heads. Special consideration should be given to brick type and construction of wall, to ensure satisfactory mounting e.g. welding detail if fixed to steel.

### 2.3 BRACKET ATTACHING

Check the opening dimensions to ensure you have the correct door size.

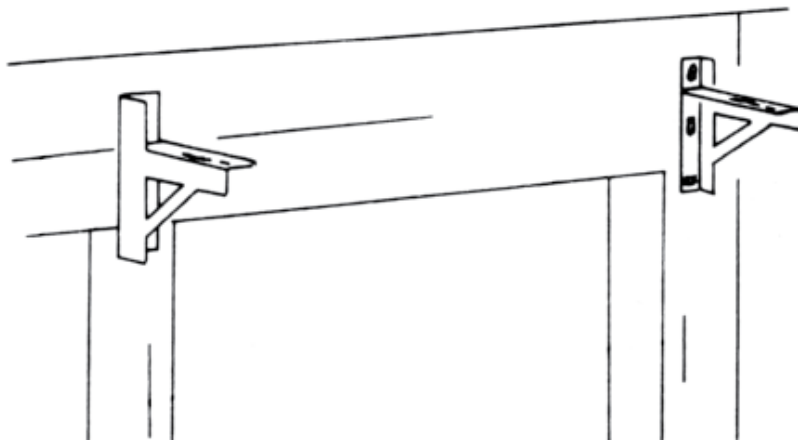
Check floor and opening height and work from the lowest side or from the side with the least headroom.

If sufficient headroom, measure down from ceiling or obstruction and mark a new line.

Mark out one bracket, drill and fix after allowing enough side clearance for door curtain.

Using a level, transfer position of top of first bracket arm to opposite side of opening, then mark, drill and fix second bracket.

**NOTE:** The brackets must be perfectly level for correct door operation.



The curtain is made 4 inches wider than the opening – to overlap opening on each side by 2 inches

Mark each side lintel at 2 inches

Mark the motor side (if motorized) 1.5 inches away from the 2-inch mark – mount on outside or 3.5”.

The bracket goes left or right of this mark depending motor location (left or right)

For non-motorized doors – go at least a half inch past the 2-inch mark for clearance (1.5” is better for possible servicing).



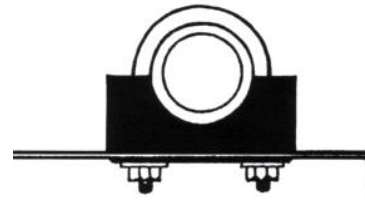
**NOTE:**

1. Where possible, and for best performance, doors should be installed in the normal headroom position. The restricted headroom installation should only be used where headroom is restricted and is not recommended for electrically driven doors.
2. The bottom rail of doors will hang below lintel and reduce walk in height.
3. Where insufficient headroom exists, and brackets are placed above a marked lintel line it may be necessary to fit a valance to improve appearance of the installation and to improve cover and seal.

**2.4 POSITION DOOR ON BRACKETS**

With the door the correct way facing (the curtain rolls down the rear of the opening) carefully lift door onto the brackets using block and tackles attached to the door axles, or other suitable lifting equipment – avoid curtain damage.

Rest axle on cast iron saddle. Immediately loosely secure Ubolt(s), nuts and washers through the slots on bracket arm. This will eliminate the door falling from the brackets.



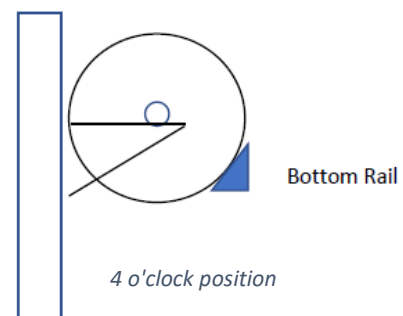
Before tightening “U” bolts, position the door so that it overlaps the opening evenly both sides so that the axle is positioned on the bracket arm slots as far forward as possible, while still allowing the bottom rail to pass the lintel when the door roll is rotated. Rotate both the door and the axle so that the bottom rail is level with the bracket arm. Now tighten the “U” bolts, using washers under nuts, to a torque of 40 newton meters or 30 ft.lb. **WARNING:** Axle must be securely clamped otherwise door will lose spring tension.

Once the roll is installed on brackets the guides can be cut to length.

The bottom of the head stop should end no more than a half inch above the bottom of the roll.

When the roll is high enough the bottom of the head stop should be about 1 inch above the top of the door frame. This will allow full drive through height.

Before installing guides add tension to the door.



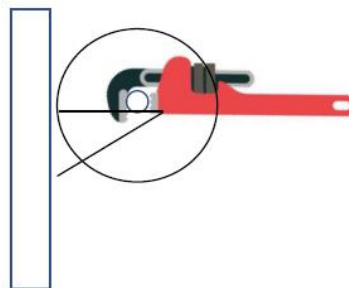
If the door is motorized:

Lock the motor in position with bottom rail at 4 o'clock position.

Mark a horizontal line on the Axle.

With U-bolts finger tightened and a socket or impact with socket adapter ready (within reach).

Take two pipe wrenches and keeping tracking of the horizontal line, put 2 full turns on the axle. Once done, tighten U-bolts while holding tension.



Once tensioned, plastic wrap can be carefully cut away.

Grasping bottom rail, release the motor by pulling red rope, taking care not to rub opening (?)

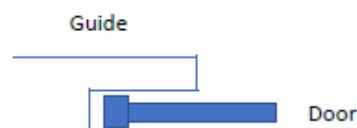
Bring door down removing all the packaging.

Carefully bring door up as straight as possible making sure not to run on the door frame.

Once bottom rail is about one foot from top of door opening pull red rope again to lock the motor.

Attach "stoppers" to bolt rail.

Take guides that have been cut to size and put on either side of door, leaving about 3/16" to 1/4" between door size and outside of channel.



## 2.5 INSTALL GUIDES

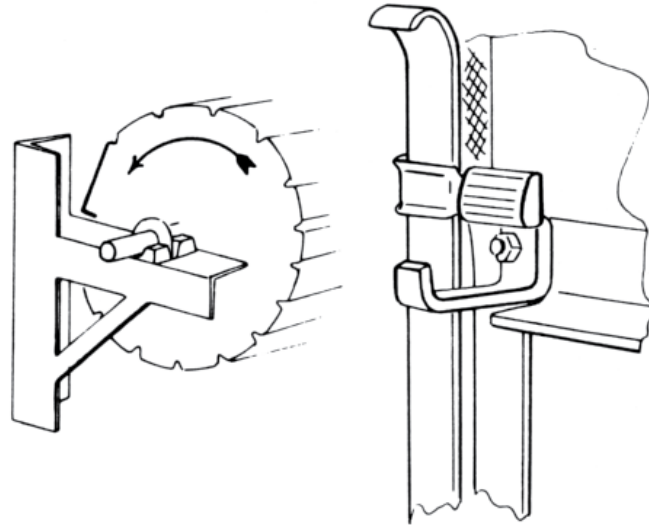
Guides must be the correct length. The guide top is to be level with the top of bracket arm for preferred "normal headroom" fitting or above the bracket for "restricted headroom" fitting.

If guides need to be shortened cut from bottom of guide.

Position guides true and plumb at each side of the opening. Allowing 3-4mm of working clearance between the door and the inside of each guide, mark, drill and fix both guides. Use the 10mm (5/16") coach screws and washers supplied (with suitable plastic plugs for masonry application or other fitting to ensure satisfactory attachment. (Note: Welding of guides to steelwork is usually not recommended).

## 2.6 SPRING TENSIONING BOTTOM RAIL STOPS

Check top of guide lead in to ensure that the door does not make contact when rotated. Damage to Nylofelt could result. The curtain must feed in smoothly without bumping – adjust lead in as required. Apply tension to the springs by rotating door approximately two (2) complete turns in a forward direction (image A) after ensuring axle is securely clamped. The amount of tension required for satisfactory operation may vary with individual doors, depending on size. Final adjustment should be made later before the use of the motor.

**WARNING**

Once the packaging containing the door roll is cut, the door will have a strong tendency to rise and revolve. If uncontrolled, the rapidly unrolling door could cause damage or injury. Therefore, it must be securely held until bottom rail stops are fitted. Chain wheel doors can be held in position by locking the chain in the chain clip attached to the left hand guide.

Hold door firmly and cut the packaging. Feed door down into guides below head stop.

Fit bottom rail stops using self-locking nuts provided. Allow door to rise and to rest against head stops.

**FINAL ADJUSTMENT**

Operate door up and down several times to check operation. If operation is uneven or not smooth, rectify as below:

**Faults**

1. Door hard to operate in one direction.
2. Door hard to operate in both directions.
3. Door is stiff to work and rattles over lead in on top of guides.
4. Door is scraping in the guides.

**WARNING**

Do not grease the guides. Grease will damage the Nylofelt running strips and make doors heavier to operate.

**Remedies**

1. Adjust spring tension.
2. Check guide clearances (see that door is not jamming). Also check that the inside surfaces of the guides are clean and free of any oil film. Use a spirit cleaner if necessary. Polishing the inside surfaces of the guides improves operation.
3. i) Check that guides are not too long. Move the door closer to the lintel.  
ii) With the door up and chain secured, loosen one "U" bolt/saddle bolt and push that side of the door

towards opening as far as possible without scraping lintel. Tighten the “U” bolt and repeat operation with the other side, ensuring that the axle is still parallel with opening.

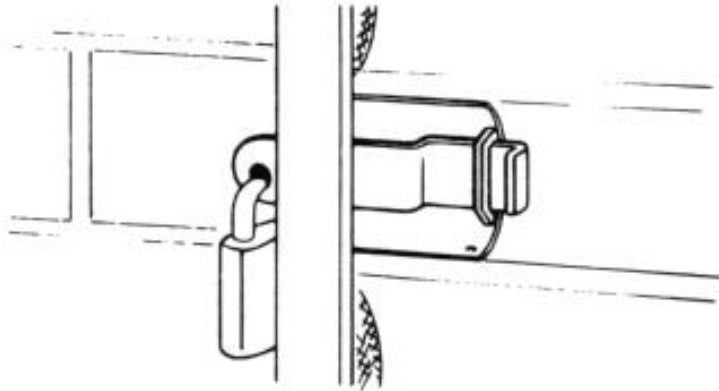
iii) Pack out top lug of guide.

4. Check that the guides are plumb, the clearances are correct, and the door is correctly centered with the opening. Also check that the brackets are level.

## 2.7 LOCKING

### INTERNAL WAIST HIGH SLIDE BOLT

(Left hand side shown – viewed from inside.)

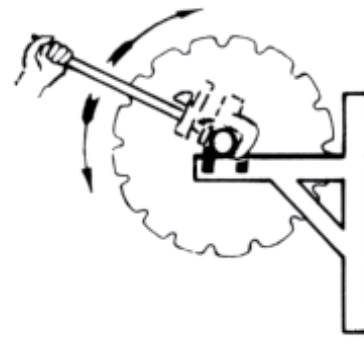


### ADJUSTING SPRING TENSION IF NECESSARY

\*\* Adjust spring after guides and stoppers are installed for safety.

#### Hand Operated and Direct Drive Doors Only

With door in open position (rolled up), tie two ropes right around door approximately 12” from each end. With a person at each end secure a firm hold on axle with pipe wrench and loosen axle clamp with socket spanner. Axle can then be rotated in required direction until approximate tension is gained. It is recommended that alteration to spring adjustment be only by small degrees till the best position is found. Axle clamp must then be retightened very tightly to a tension of 40 Newton metres or 30 ft. lbs. Before releasing hold on pipe wrench. Repeat process if spring still requires further tension.



**WARNING:** Hold Axle before loosening “U” bolts.

**IMPORTANT:** Do not attempt to loosen “U” bolts before securing firm hold on Axle with Pipe Wrench. Do not use files or similar brittle steel tools such as Tommy Bars.

## 3.0 AFTER INSTALLATION CARE

### GENERAL CARE OF YOUR SERIES 3 DOOR

#### CLEANING STEEL FINISH

Your SMART GARAGE Series 3 Door has been pre-painted with a silicone modified polyester formulation, which is one of the best paint films commercially available today. However, all exposed surfaces require some attention to guard against the premature onset of corrosion and any other harmful atmospheric effects. In our atmosphere there are harmful deposits that gather on the door surface and if not removed regularly, will seriously affect the appearance and life of the door.

Washing of the door with clean water and a cloth every 14 days is recommended – particular care should be taken to clean areas of the door not normally washed by rain.

#### LOCK

Your lock does not require special maintenance, however, if the keyway becomes stiff, the application of powdered graphite is recommended – do not grease or oil the lock.

**WARNING!** Do not disassemble the lock mechanism and do not allow paint to enter the lock keyway.

#### REGULAR MAINTENANCE REQUIRED

SMART GARAGE recommends that you check the operation of your Series 3 Door at least every six months (more regularly in extreme environments or frequent use). The effort required to manually open and to manually close the door should be about the same (if door has an automatic opener, put into manual mode before testing door).

**NOTE:** do not grease or oil the guides on doors fitted with Nylofelt.

If the door is difficult to operate in either direction (up or down) then check that the inside surfaces of the guides are clean and free of obstructions.

If the door is still difficult to operate, then your door will need a service to adjust the spring tension and possibly other operational parts of the door.

This service should only be carried out by an experienced door technician, using the correct tools.

If you have an automatic opener fitted to your door, it is particularly important that you ensure the optimum operation of the door, otherwise you may reduce the effective life of the opener.

To keep your door running well, it is recommended that your door be serviced, by an experienced door technician, every 12 months (more regularly in extreme environments or frequent use), or earlier if required.

## **SPRING TENSION**

It is natural for springs to lose tension over time. When spring tension is adjusted or when your door is first installed it is usual to apply a little more tension than is required for balanced operation, to allow for the normal “settling in” of the springs.

## **WARRANTY**

The SMART GARAGE Series 3 Door in residential use is covered by a 12-month warranty for complete door and parts, surface (excludes salt corrosion).

Warranty conditional on proper care as recommended above.