

## INSTALLATION INSTRUCTIONS FOR YOUR CARDALE DOUBLE DOOR

Thank you for choosing a quality Cardale product. This garage door has been designed to be as easy as possible to use, service and automate when installed correctly. Please therefore take time to read these instructions fully before beginning any work. Note: This door has been designed to hang on a 70mm x 70mm timber goalpost frame (not supplied).



**CAUTION**

### IMPORTANT INFORMATION

- 1 This garage door is intended for domestic use only.
- 2 Garage doors are heavy and may have sharp edges. Wear protective gloves. Installation should not be undertaken alone. Care must be taken when handling.
- 3 Ensure the door is continuously supported before it is secured and avoid installing in windy conditions.
- 4 Do not attempt to install or adjust this door if you are unsure of any of the instructions below.

### BEFORE COMMENCING WORK

MASTER COPY

#### 1 Remove all wrapping

Before starting: remove all wrapping and check door has been supplied with correct lifting gear kit. Kit code is on identification label on reverse of door.

#### 2 Check opening size

Before fitting door, check opening size and squareness of timber frame. The door is made smaller to give correct clearance within the frame.

#### 3 Check headroom

There must be a minimum of 51mm headroom above lower face of top timber or lintel. This must reach back into the garage for at least 1892mm.

#### 4 Check the "goalpost" frame

The "goalpost" timber frame should be a minimum of 70mm x 70mm square (2 3/4" x 2 3/4"), in good condition and securely fixed to the surrounding structure.

#### 5 Tools

All the initial fitting work is done from inside the garage, so all tools and parts should be to hand there before door is placed in opening.

#### You will need:

- 6mm spade end screwdriver
- 10mm spade end screwdriver
- Drill and 2.5mm drill bit (for pilot holes)
- 13mm A/F socket/spanner
- 10mm A/F socket/spanner
- 7mm A/F socket/spanner
- Protective gloves
- Sharp knife
- Tape measure
- Hammer
- Grease
- Engineer's pliers
- 19mm x 19mm timber weatherbead to fit under the head of the door frame (for all doors except Heritage)
- 70mm x 70mm timber goal post frame
- Wedges (packing pieces)

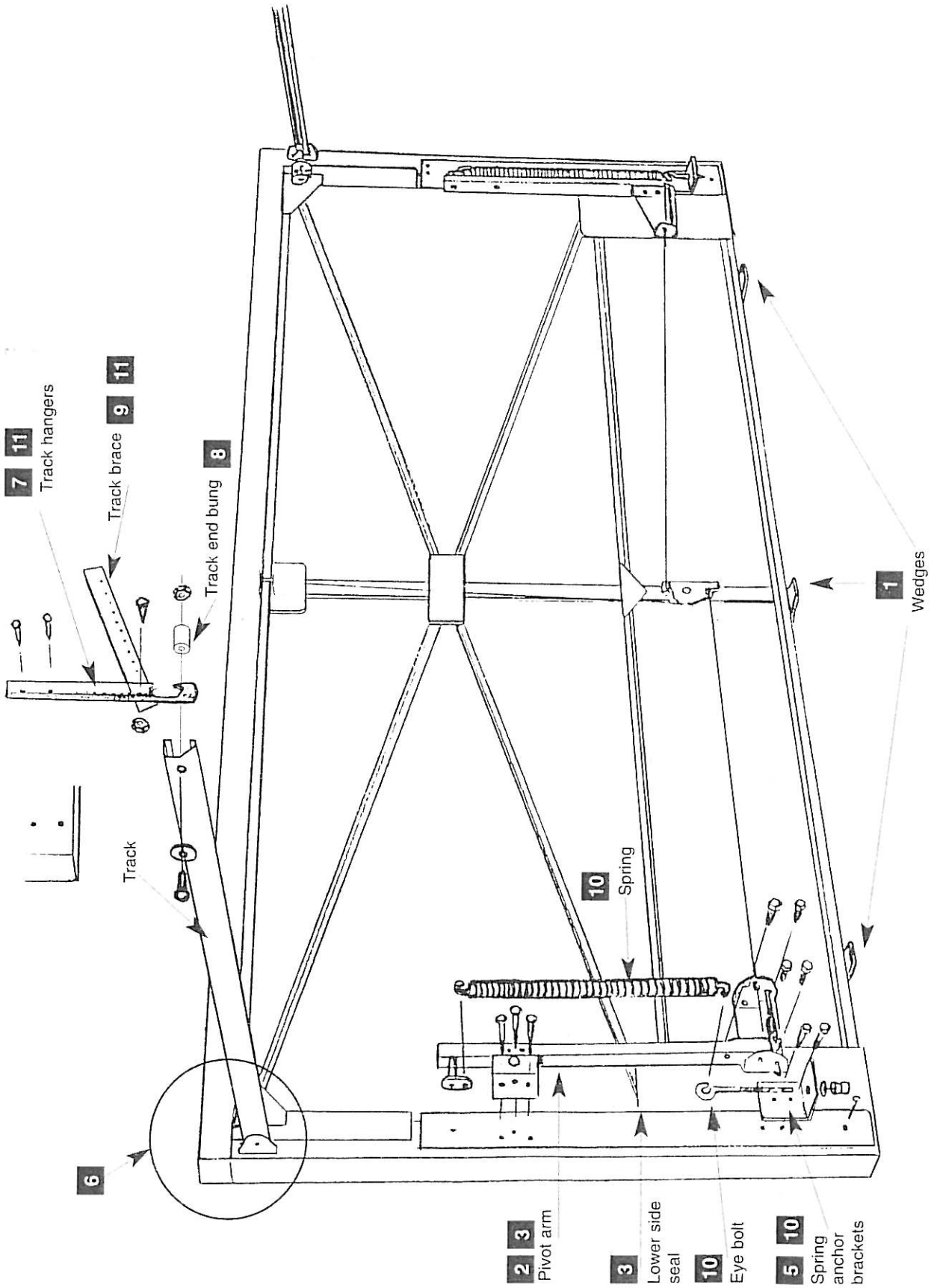
Note to installer: Please ensure that this instruction sheet remains with the door for the owner's future reference.

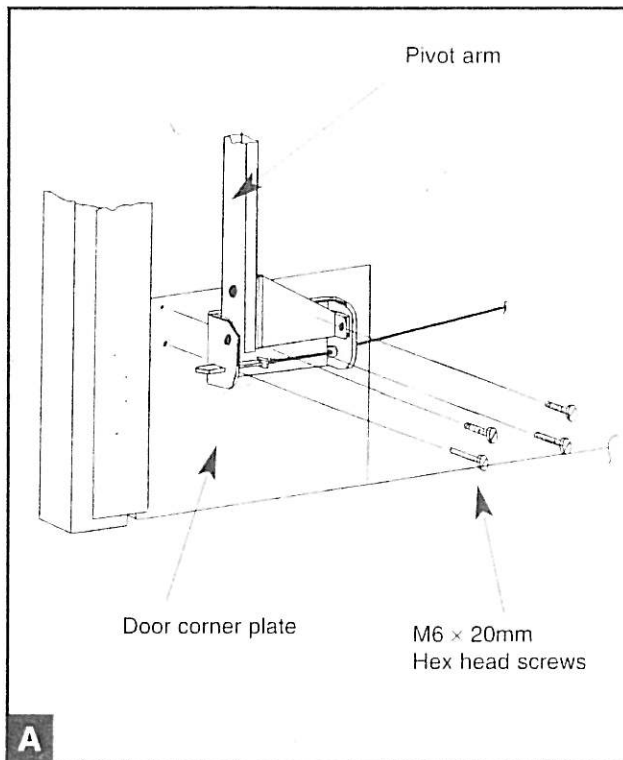
# 1

**CAUTION !** Please ensure all tools and parts are inside the garage before the door is placed in the opening.

## FITTING YOUR DOOR

Assembly diagram (numbers refer to installation notes)



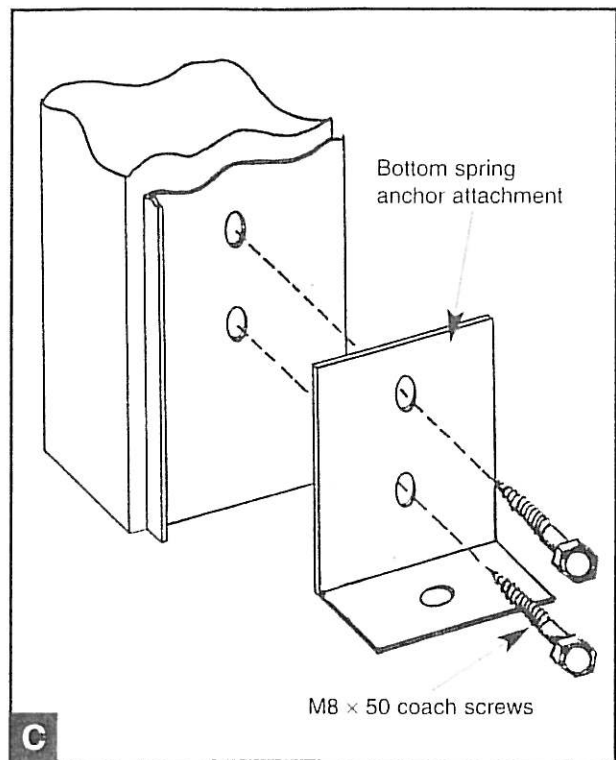
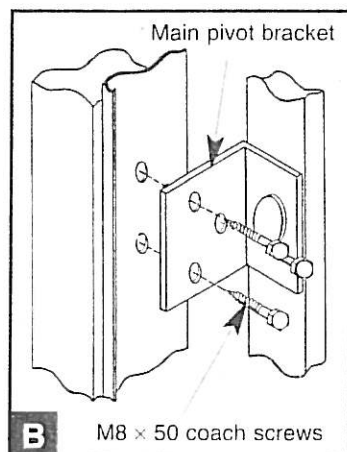


**1** Stand door, safely propped, centrally between side jambs on three pieces of 12mm. (1/2") packing. Ensure the gap between the top of the door and the underside of the lintel is even and not less than 12mm. (1/2").  
N.B. For Heritage style doors the gap is 19mm (3/4").

**2** Fit pivot arms to plates in bottom corners of door using four M6 x 20mm Hex head screws per side (See Figure A).

**3** Swing the pivot arms up, align three holes in each lower side seal with those in main pivot brackets and locate two lugs against side Jamb. Cut off any excess side seal from the bottom if required, to ensure correct alignment before securing the side seal in position using four N<sup>o</sup>8 x 1" self tapping screws per side (three only on 6'6" high doors).

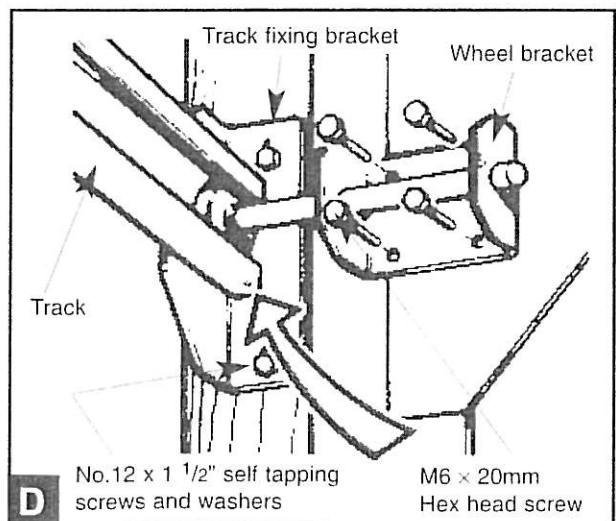
**4** Drill pilot holes and secure each main pivot bracket using three M8 x 50mm coach screws per side. (See fig B).

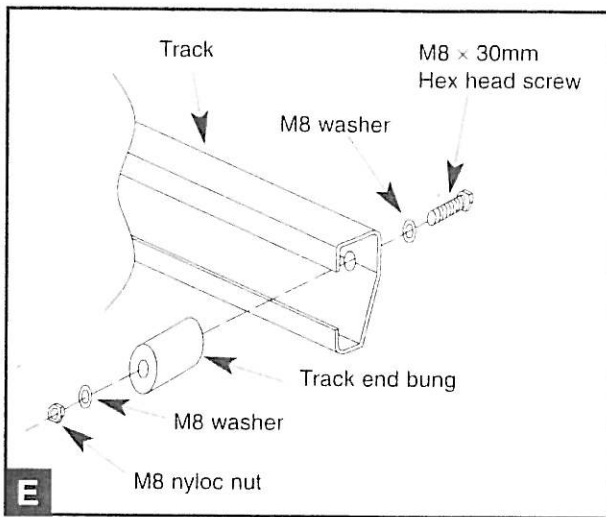


**5** Align bottom spring anchor bracket with holes in side seal. Drill pilot holes and secure bottom spring anchor brackets using two M8 x 50mm coach screws per side. (see fig C).

**6** **NOTE for doors less than 6'6" high, it may be necessary to fit the bottom spring anchor bracket upside down.**

Fit wheel spindle brackets to plates in top corners of door using four M6 x 20mm Hex head screws per side (see fig D). Slide tracks over wheels and press firmly up and out, in the direction of arrow, until tracks are horizontal. Drill pilot holes in side jambs and secure each track fixing bracket using two N<sup>o</sup>12 x 1 1/2" tapping screws and two M8 washers (see fig D).





**7** Slide track hangers over track ends as shown in main assembly diagram. Slide hangers to a convenient roof joist **within 200mm (8") from end of track** and fix hangers to joists using ONE N<sup>o</sup>12 x 1 1/2" self tapping screw only at this stage. For best results ensure tracks are horizontal, square to the frame and parallel to each other. At this stage the tracks should be able to swing sideways.

**8** Fit track end buffers into position in each track as shown in fig E using M8 x 30mm hex head bolt, M8 nyloc nut and washers provided.

**9** Fully open door and prop securely in position. With the door open, the tracks should be parallel. This can be checked by ensuring both roller wheels are in contact with the track end bungs. Bolt track braces to hangers using one M6 x 20mm hex head screw and one M6 nyloc nut per side. Fix each track brace to joist using ONE N<sup>o</sup>12 x 1 1/2" self tapping screw.

**10** With the door still securely propped in the open position. Hook one end of spring into hole in spring link bracket and other end through hole in eyebolt. Pass eyebolt shank through hole in bottom spring anchor bracket and retain using M10 washer and two nuts supplied (see fig F). Run the nuts up until the spring just starts to extend. Repeat for other side of door.

**11** Remove the prop, and close the door with caution and test the spring tension. The spring tension is correct when door exactly balances in the half open position. To increase spring tension, tighten the nuts on the eye bolt. When the correct tension is found, tighten the locking nut on both sides. Adjustment of tension must be carried out equally on both springs.

**NOTE** for doors less than 6'6" high, it may be necessary to shorten the eye bolt to prevent fouling with the floor.

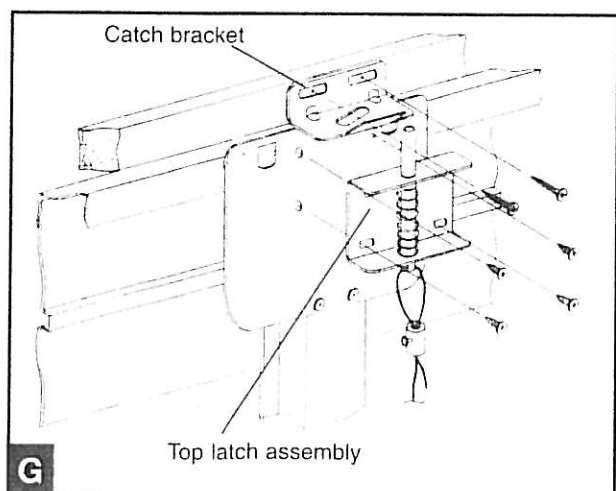
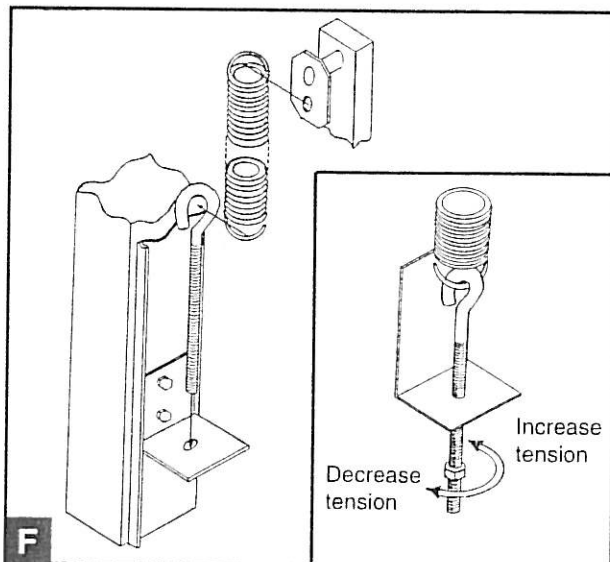
**12** Once door is well balanced and running smoothly, finally secure all track hangers with second N<sup>o</sup>12 x 1 1/2" self tapping screw supplied. **IMPORTANT** Track hanger must be within 200mm (8") from end of track.

**13** Open door half way and fit lock and lock cables following the instructions in section 2 of this instruction booklet.

**14** Fit the top latch assembly into the pre-drilled holes on the top centre door bracket using 4 off N<sup>o</sup>10 x 1/2" self-tapping screws supplied (Figure G).

**15** With the door closed, remove the park pin to release the latch pin (figure G). Align the catch bracket centrally over the latch pin with the lower face 3mm (1/8") above the top door bracket.

**16** Insert 2 off N<sup>o</sup>12 x 1 1/2" self tapping screws through screws slots into head timber, use adjustment on screw slots to ensure correct alignment.

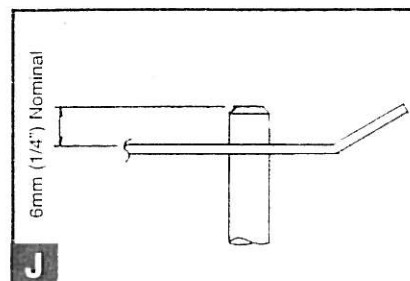
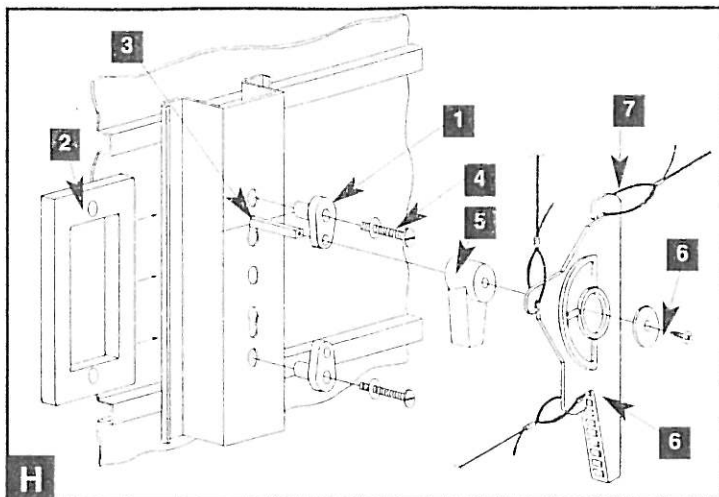


# 2

## FITTING THE LOCK TO YOUR DOOR

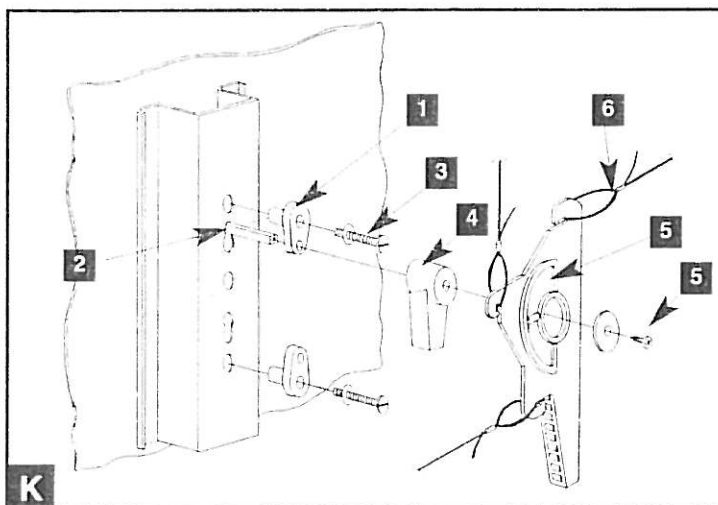
### Doors supplied with flat lock spacer:

- 1 Insert round lock spacers in outer holes in stiffener as shown.
- 2 Slide flat lock spacer between stiffener and panel as shown in Figure H, lining up holes in spacer with those in panel, ensuring flat face of spacer is against bottom of stiffener.
- 3 From outer face of door insert lock in pre-drilled holes locating the lugs on the lock through the holes in the flat spacer.
- 4 From inside garage insert pan head screws and washers as shown and secure firmly. **DO NOT OVERTIGHTEN.**
- 5 From front of door ensure that lock handle is turned fully anti-clockwise. From inside slide lock cam onto lock spindle in orientation shown.
- 6 Fit lock lever into lock cam as shown and secure to lock spindle using self tapping screw and washer.
- 7 Locate looped ends of all latch cables securely in lever slots and adjust for correct operation.
- 8 **ENGAGEMENT NOTE:** On adjustment of top latch, please ensure a nominal 6mm (1/4") pin engagement through catch bracket (Figure J).
- 9 Check operation from inside garage to avoid being locked out.



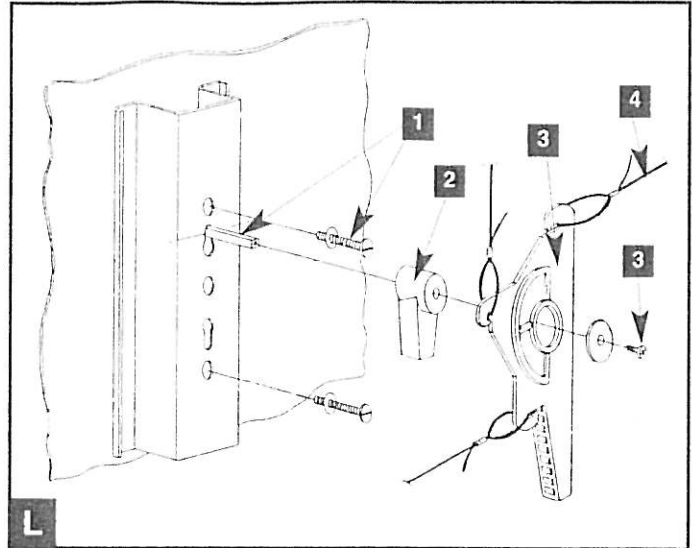
### Doors supplied with long round plastic lock spacers:

- 1 Insert spacers through outer pierced holes in stiffener from inside face of garage door as shown in Figure K.
- 2 From outer face of door insert lock into pre-drilled holes locating the lugs on the lock through the holes in the spacers.
- 3 From inside garage, insert pan head screws with washers and secure lock firmly but **DO NOT OVERTIGHTEN.**
- 4 From front of door ensure that lock handle is turned fully anticlockwise. From inside slide lock cam onto lock spindle in orientation shown.
- 5 Fit lock lever onto lock cam as shown and secure to lock spindle using self tapping screw and washer.
- 6 Locate looped ends of all latch cables securely in lever slots and adjust for correct operation.
- 7 **ENGAGEMENT NOTE:** On adjustment of top latch, please ensure a nominal 6mm (1/4") pin engagement through catch bracket (Figure J).
- 8 Check operation from inside garage to avoid being locked out.



## Doors supplied without plastic lock spacers:

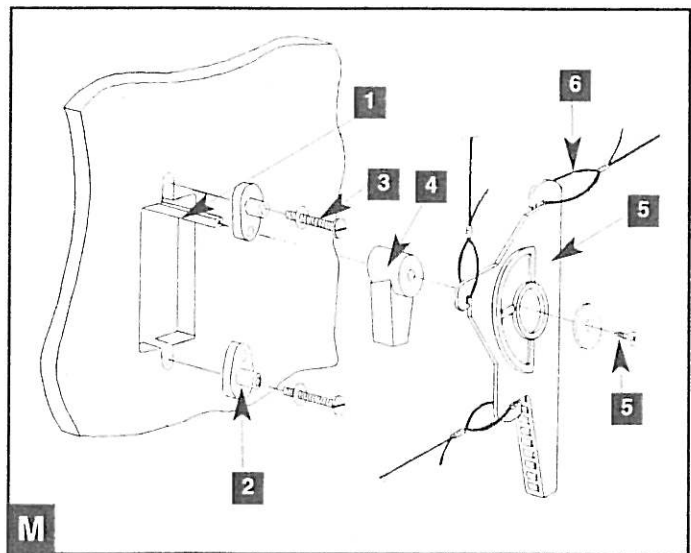
- 1** Insert lock from front of door through holes as shown in Figure L, and secure from inside garage using two pan head screws with washers. Secure firmly. But **DO NOT OVERTIGHTEN**.
- 2** From front of door ensure that lock handle is turned fully anti-clockwise. From inside slide lock cam onto spindle in orientation shown.
- 3** Fit lock lever onto lock cam as shown and secure to lock spindle using self tapping screw and washer.
- 4** Locate looped ends of all latch cable securely in lever slots and adjust for correct operation.



- 5** **ENGAGEMENT NOTE:** On adjustment of top latch, please ensure a nominal 6mm ( $\frac{1}{4}$ " ) pin engagement through catch bracket (figure J).
- 6** Check operation from inside garage to avoid being locked out.

## Milford and Berkeley doors:

- 1** From outer face of door insert lock into lock aperture as shown in Figure M.
- 2** Position lock spacers on lugs as shown.
- 3** From inside garage insert pan head screws with washers and secure lock firmly but **DO NOT OVERTIGHTEN**.
- 4** From front of door ensure that lock handle is turned fully anticlockwise. From inside slide lock cam onto lock spindle in orientation shown.
- 5** Fit lock lever onto lock cam as shown and secure to lock spindle using self tapping screw and washer.

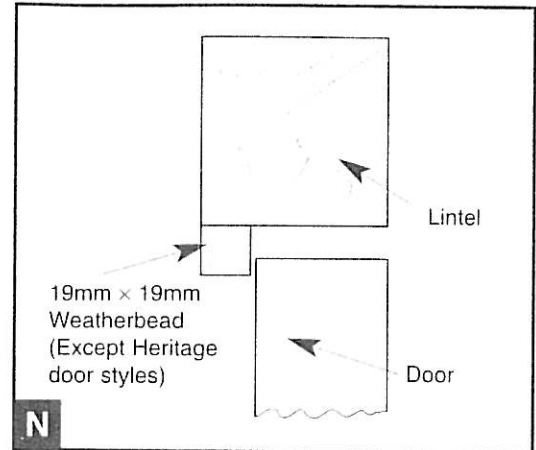


- 6** Locate looped ends of all latch cables securely in lever slots and adjust for correct operation.
- 7** **ENGAGEMENT NOTE:** On adjustment of top latch, please ensure a nominal 6mm ( $\frac{1}{4}$ " ) pin engagement through catch bracket (figure J).
- 8** Check operation from inside garage to avoid being locked out.
- 9** Repeat steps 1 to 3 only for second lock (for appearance only).

# 3

## UPON COMPLETION

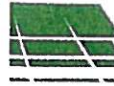
- 1** Lubricate all moving parts/pivot points using the sachet of oil provided.
- 2** Check door operation to ensure door opens and closes satisfactorily.
- 3** Check that lock and latches operate correctly.
- 4** Ensure all fixing are securely tightened
- 5** Fit 19mm x 19mm timber weatherbead to the underside of the top timber lintel (Fig N) except heritage doors.
- 6** Lubricate all moving parts regularly (refer to lubrication maintenance label on lower side seal).
- 7** Do not paint the spring or any moving parts.
- 8** Ask your professional Cardale Agent about remote controlled electric operators.



# 4

## TROUBLESHOOTING

- **DOOR IS HEAVY TO OPEN:**  
*Cause:* Spring tension set too low  
*Solution:* Re-set spring tension as detailed on the reverse of this instruction sheet.
- **DOOR OPENS TOO QUICKLY:**  
*Causes:* Spring tension set too high.  
*Solution:* Re-set spring tension as detailed on the reverse of this instruction sheet.
- **DOOR DOES NOT DELATCH:**  
*Cause:* Latch cables may have been set too long.  
*Solution:* If you are not locked out of the garage at the time, then the cables should be set to allow nominal 6mm latch engagement with the latch plates. If you are locked out of the garage, call your installer/supplier for assistance.
- **DOOR HANDLE FAILS TO TURN:**  
*Probable Cause:* A jammed lock barrel.  
*Solution:* Unfortunately this can only be remedied by a service call, however, this is not usually chargeable during the warranty period. Please contact your supplier for details.
- **KEY FAILS TO TURN IN LOCK:**  
*Probable Cause:* Door handle has not been turned to the fully closed position.  
*Solution:* Return the handle to the fully closed (horizontal) position and try again. If the problem still persists, contact your supplier.
- **LOST KEYS:**  
*Solution:* Contact your supplier. The lock barrel will need to be replaced, but the method for doing this will vary. If you can get into your garage, the problem can be easily solved by removing the handle assembly from the door and replacing the lock barrel with a new one. If you are locked out, contact your supplier.



## RETENSIONING INSTRUCTIONS FOR YOUR CARDALE DOUBLE DOOR



**CAUTION**

### IMPORTANT INFORMATION

1. Before proceeding oil all pivot points. This may prevent the need for re-tensioning.
2. **CAUTION:** THE SPRINGS ARE UNDER TENSION – FOLLOW THESE INSTRUCTIONS CAREFULLY TO AVOID PERSONAL INJURY.
3. Eye protection must be worn.
4. Do not attempt to adjust the spring tension if you are unsure of any of the points below
5. Keep children away from the door whilst spring adjustments are being made.

### THESE INSTRUCTIONS MUST BE RETAINED BY THE HOUSEHOLDER.

Occasional adjustment of spring tension may be required to maintain smooth door operation.

- 1 Open door fully and secure safely in the open position.
- 2 Using a suitable spanner loosen locking nuts from both eye bolts
- 3 To increase tension on the spring turn the tension nut to the right (winding up the eye bolt) and to decrease tension turn the nut to the left (winding down the eye bolt). (See Figure F).

#### **NOTE**

- NEVER CHANGE TENSION BY MORE THAN 1/2" (13MM), ON THE EYEBOLT, AT A TIME.
- ALWAYS ENSURE TO CHANGE TENSION EQUALLY ON BOTH SIDES OF THE DOOR.
- NEVER LEAVE SPRING SLACK WHILST DOOR IS IN OPEN POSITION

- 4 Release and test operation of door. Re-adjust if necessary. (steps 1–3)
- 5 Once correct tension is found, tighten the locking nuts on both eye bolts.

**In the event of difficulty please contact your local Cardale Agent.  
See Yellow Pages for details.**