



Type H Overdoor Gear Erection Details

Retractable Type with Horizontal Side Tracks

For metal, timber and glass fibre doors from 27 kg (60 lb) to 91 kg (200 lb)

Part of the Wessex Mouldings Group

First of all, take a seat!

Having done that, read these instructions all the way through – it'll make things easier when you begin work.

Next – check the parts list

- (1) Start by carefully laying out all of the contents supplied in the carton. (**DON'T** throw away any packaging until you have completed fitting the door.)
- (2) Check off each item against the parts list and the diagrams overleaf to make sure you have the correct quantity of everything.
- (3) If any of the parts are missing, do check carefully through the packing materials as items are sometimes missed first time around.
- (4) We at Wessex are proud of our quality control system. Each carton is carefully packed and checked. However, even with the best quality control system in the world, problems can arise. Should you have such a problem, please contact us on (0202) 825451 and we will do our best to solve it quickly.

The Parts List:

- | | |
|---|---|
| 2 1900 mm (6' 3") top track complete with front brackets | 1 External handle pre-pack (comprising 1 lock, 3 keys, 2 M6 countersunk screws, 1 foam gasket) |
| 2 Rear track brackets with buffer stops | 1 Strap handle and clamp plate (already fitted on metal doors) |
| 2 Door roller brackets (already fitted on metal doors) | 38 25 mm (1") x No. 8 Round head woodscrews (12 only in metal door pack) |
| 2 Door rollers | 12 38 mm (1½") x No. 10 Round head woodscrews (4 only in metal door pack) |
| 2 Pivot Arms (can be used left or right handed) | 4 38 mm (1½") x No. 10 Countersunk head wood screws |
| 2 Tension springs | 10 38 mm (1½") x No. 14 Round head woodscrews |
| 2 Spring anchor brackets | 4 M8 x 40 Hex head coach screws (for timber/glass fibre doors) or M8 x 20 Hex head set screws (for metal doors) |
| 2 Hook adjuster bolts and nuts | 4 M10 x 90 Carriage bolts, with nuts and washers |
| 2 Door (short) weather strips (already fitted on metal doors) | 2 Bottom jamb weatherstrips, 300 mm (12") (included on doors over 2134 mm (7' 0") high) |
| 2 Jamb (long) weather strips | |
| 2 Locking bar cam keeps (not required on metal doors) | |
| 2 Locking bar saddles (already fitted on metal doors) | |
| 2 Locking bar staples (already fitted on metal doors) | |
| 1 Internal release handle (locking bars fitted) | |

Tools required:

- | | |
|---|--|
| Superdrive No. 2 Screwdriver | 11 mm (7/16") Drill Bit (not required for metal doors) |
| Slotted Screwdriver, medium size | 22 mm (7/8") Drill Bit (not required for metal doors) |
| Slotted Screwdriver, large size | Bradawl – useful but not essential |
| Hand or Electric Drill | Pliers |
| 1.95 mm (1/16") Drill Bit (Pilot hole for No. 8 screws) | Hacksaw |
| 2.25 mm (3/32") Drill Bit (Pilot hole for No. 10 screws) | Hand File |
| 2.75 mm (1/8") Drill Bit (Pilot hole for No. 14 screws) | Oil Can and Grease |
| 4.80 mm (3/16") Drill Bit (Pilot hole for M8 coachscrews) | Builders Level |
| 9.5 mm (3/8") Drill Bit | |

Please note . . . All dimensions are shown in millimetres (inches)

For ease of fixing side tracks to walls, fully adjustable reveal brackets are available as an extra (4 sizes covering 0–600 mm (0"–24") deep reveals). Alternatively timber packers or supports will have to be made on site. It is important that the correct size pilot holes are drilled for all wood and coach screws. In soft timber frames a bradawl can be used for the No. 8 screws. Coach bolts and nuts for standard 75 mm (3") jambs and all fixing screws are provided. Ensure that lubrication instructions are carried out.

Let's start!

1. Ensure that timber opening size is true and square and that door is 19 mm ($\frac{3}{4}$ ") less in width and height, i.e. with a 10 mm ($\frac{3}{8}$ ") working clearance at top, bottom and both sides. The side jamb members must be securely fixed.

2. Fix top roller brackets (roller spindle hole at top) with 38 mm ($1\frac{1}{2}$ ") \times No. 10 Round head screws (pilot with 2.25 mm ($\frac{3}{32}$ ") drill) so that the top edge of bracket is flush with the top of door and outer edge of bracket projects 22 mm ($\frac{7}{8}$ ") over side of door to form weatherseal (already fitted on metal doors). Fit door short weatherstrips to door with 25 mm (1") \times No. 8 Round head screws (pilot with 1.95 mm ($\frac{1}{16}$ ") drill or bradawl) butting top strips to underside of door roller brackets and projecting 22 mm ($\frac{7}{8}$ ") over sides of door. Push positioning lugs against door side (door weatherstrips already fitted on metal doors). See Fig. 1.

3. Strap handle for pulling door from raised position should be fitted inside centrally on the width with bottom of strap within 25 mm (1") of door bottom edge.

Fix with 25 mm (1") \times No. 8 Round head screws (pilot with 1.95 mm ($\frac{1}{16}$ ") drill or bradawl). Strap handle already fitted on metal doors. See Fig. 2.

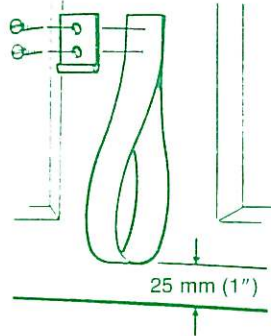


Fig. 2

4. Check that all parts, fittings, tracks etc., and tools are inside the garage before proceeding to stage 5.

5. Lightly grease axles of door rollers and fit into Top Door Roller Brackets. Stand door centrally between jambs on 10 mm ($\frac{3}{8}$ ") packers, checking clearance all round is as equal as possible. See Fig. 3.

If opening is not square, it is important to maintain the side clearances.

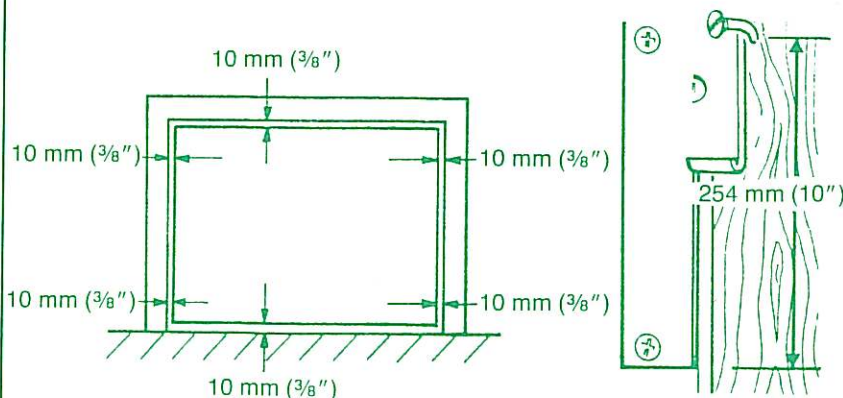


Fig. 3

Fig. 4

TRADE TIP: When satisfied door is central in opening, knock in a 50 mm (2") nail each side, adjacent to the door weather strips to hold the door in position 250 mm (10") from bottom of weather strip. See Fig. 4.

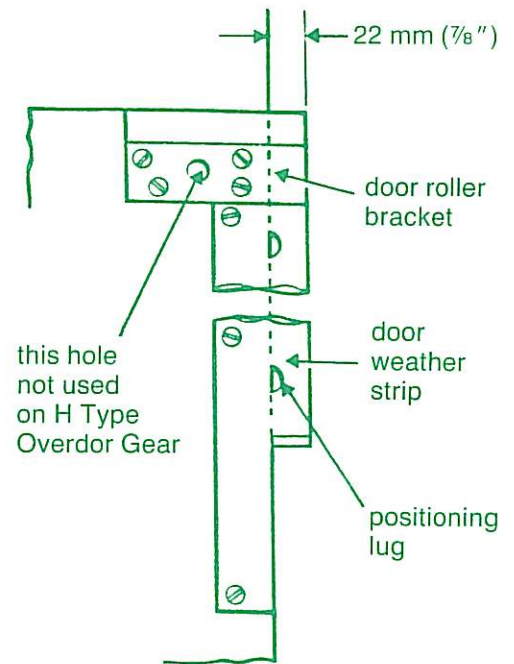


Fig. 1

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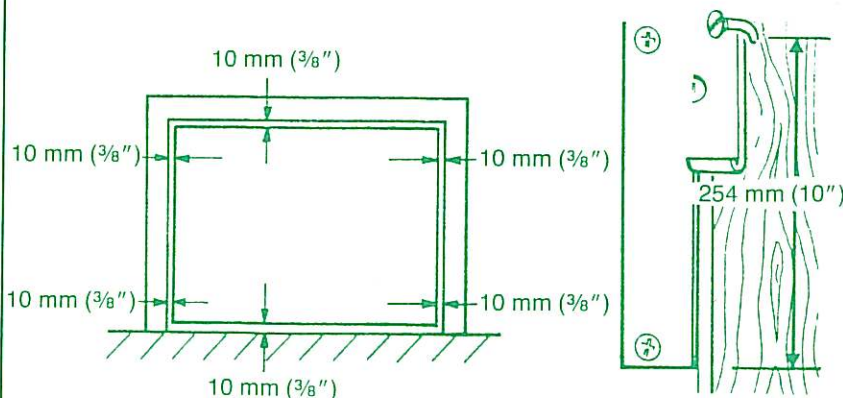


Fig. 3

Fig. 4

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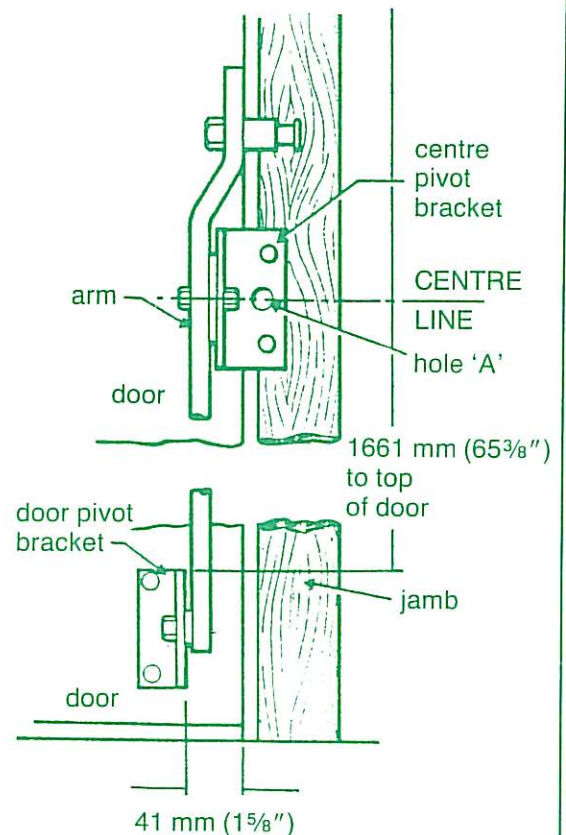


Fig. 5

- 6.** Fit door brackets of pivot arms 1661 mm (65³/₈"") from top of door to top of bracket and 41 mm (1⁵/₈"") from side of door to bracket face with M8 × 40 coach screws (pilot with 4.8 mm (3/16"") drill).
M8 × 20 setscrews and fixing plates provided on metal doors. See Fig. 5.

IMPORTANT: The 1661 mm (65³/₈"") dimension is critical to the correct and smooth operation of the gear.

- 8.** Position jamb weatherstrips so that hole 'A' is central on the line just marked and positioning lugs are against the edge of timber jambs. (Cut the bottom of weatherstrips at floor level if necessary.) Fix weatherstrips with 25 mm (1"") × No. 8 Round head screws (pilot with 1.95 mm (1/16"") drill or bradawl).

Additional weatherstrips for doors 2134 mm (7'0"") high and over can be fitted at this stage after cutting to length. See Fig. 6.

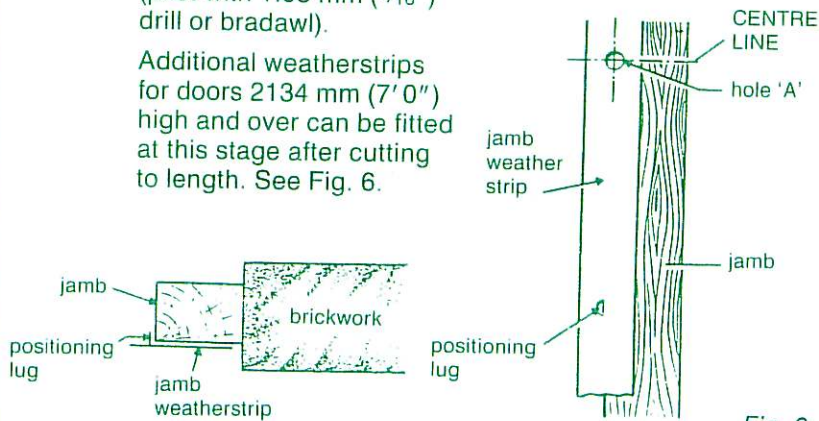


Fig. 6

SECTION THROUGH JAMB

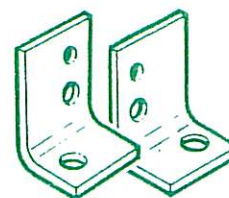
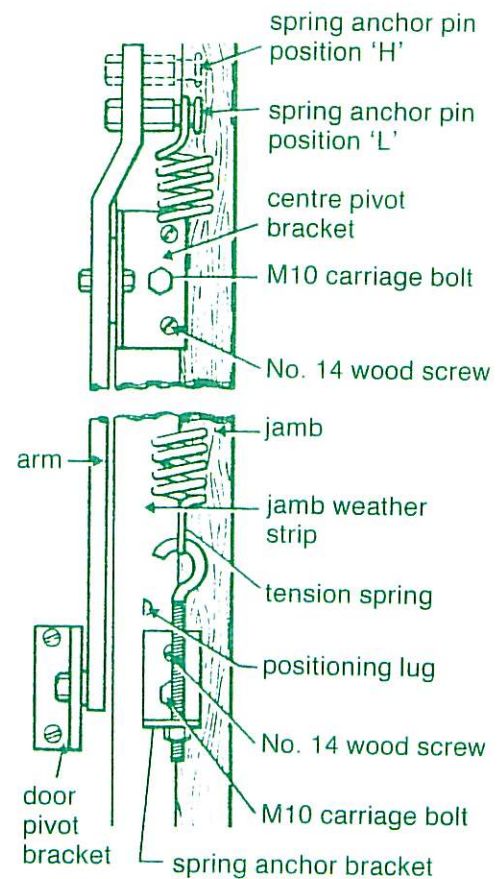
- 7.** BEFORE COMMENCING STAGE 7 CHECK DOOR IS STILL POSITIONED CORRECTLY.

Lift up arms to contact door jambs and transfer centre line of hole 'A' to jamb. See Fig. 5.

DO NOT drill at this stage.

- 9.** Drill four 10 mm (3/8"") diameter holes through jambs for carriage bolts using pre-punched holes in jamb weatherstrips as template. (For jambs fitted behind reveals, the jamb should be removed and the carriage bolts inserted from the back. The jambs then refitted securely.) Fit centre pivot brackets and arms with M10 × 90 carriage bolts, washers and nuts and 38 mm (1¹/₂"") × No. 14 Round head screws (pilot with 2.75 mm (1/8"") drill). Repeat to fit spring anchor brackets. See Fig. 7.

NOTE: If there is no other access to garage the carriage bolts are to be fitted after Step 12. For height opening of 1772 mm (5'9³/₄"") minimum to 1829 mm (6'0"") reverse the spring anchor brackets and cut down hook adjuster bolts if necessary.



left, right hand spring anchor brackets as viewed from inside

Fig. 7

- 10.** Check that side clearances around door are still equal. Slide tracks over door rollers ensuring that shoulder of spindle is in contact with door roller bracket. Fix front track brackets with 38 mm (1¹/₂"") × No. 14 Round head screws (pilot with 2.75 mm (1/8"") drill) so that the wheels are just bearing in the tracks without lifting the door. See Fig. 8.

With tracks held horizontally mark position on wall at rear end and a further mark 50 mm (2"") lower. The second mark is the fixing position for the Rear Track Bracket.

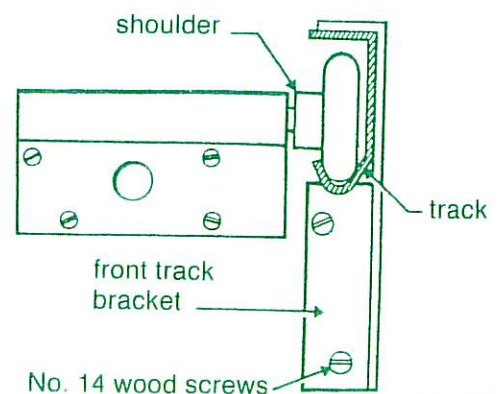


Fig. 8

Keys

Additional or lost keys can be swiftly obtained. Telephone (0202) 825451 with number taken from lock barrel. See Fig. 13.

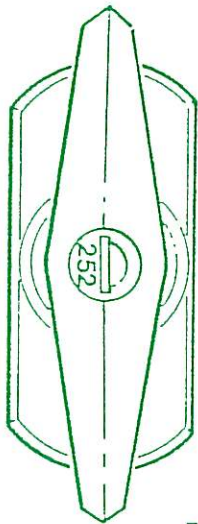


Fig. 13

Spares

The following spares are available:

- External Lock Kit
- Internal Release Handle
- Door Rollers
- Door Roller Brackets
- Tension Springs
- Pivot Arms
- Spring Anchor Brackets complete with Hook Adjuster Bolts
- Door Weatherstrips
- Jamb Weatherstrips

Complete list with prices available on request

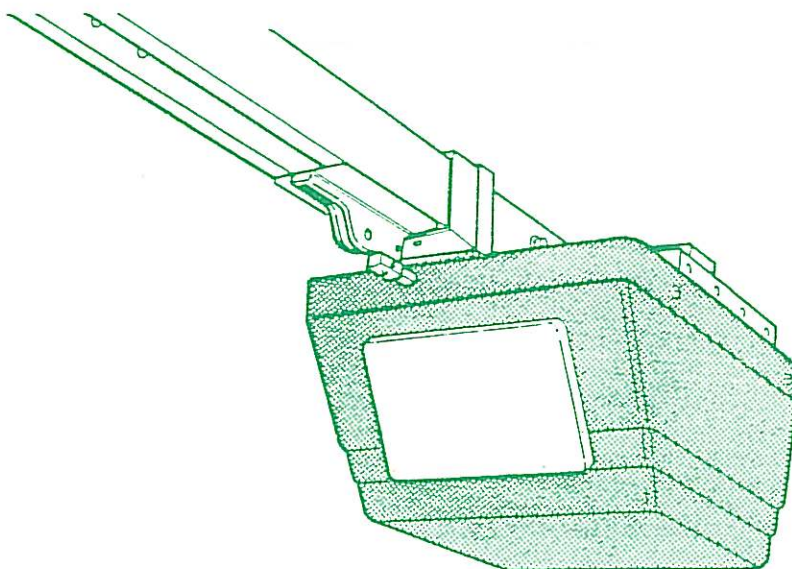
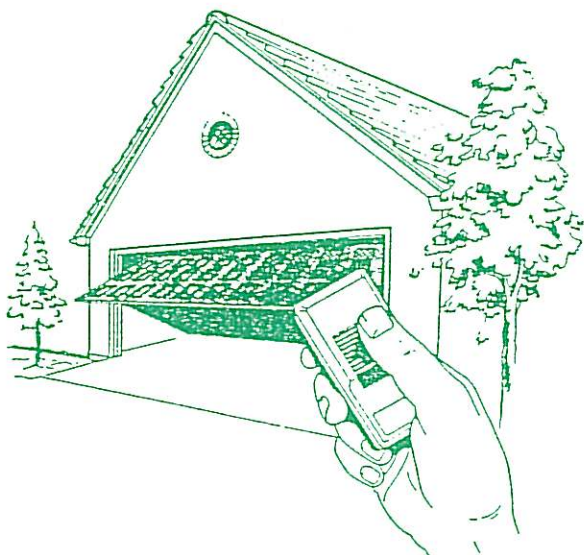
Installer

Please leave these instructions with the householder.

Automatic Operation

The Wessex 'Ariel' Overdoor Gear, retractable type with horizontal side tracks is the ideal operating gear for automatic door opening.

The Wessex Lift Boy, Model G.B.1. screw drive operator is recommended for both large and small garage doors and is operated from inside the car for maximum comfort, convenience and security with a positive, smooth action.



Full details, prices, fitting charges etc. available on request, without obligation.

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CODE
10/94
GREEN

- 15.** The clearance at the top of the door can be weathered with a 13 mm (1/2") maximum thickness timber batten (19 mm (3/4") maximum on metal doors). The bottom clearance can be weathered with No. 198 weatherseal (metal and timber doors only – NOT glass fibre doors). See Fig. 12.

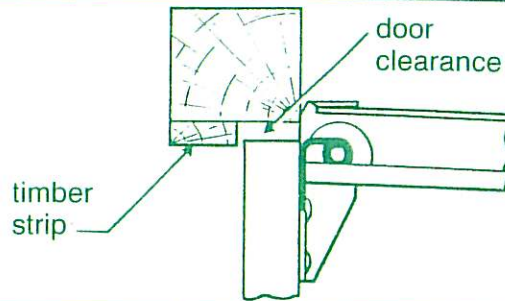


Fig. 12

- 16. IMPORTANT.** Finally – carry out lubrication. Oil all pivot points, rollers and bearings and grease spring attachment points. To ensure continued smooth operation of your door carry out lubrication on a regular basis. Two or three times a year should be sufficient.

Locking Arrangements

To secure external handle, drill one 22 mm (7/8") diameter and two 11 mm (7/16") diameter holes (using template provided) in the centre of door and not more than 1372 mm (4' 6") from top of door (already prepared on metal doors).

Doors 2362 mm (7' 9") and over in height can have the external handle positioned as above or below 2134 mm (7' 0") from top of door.

IMPORTANT: Check which position is most suitable for your own application before drilling.

The handle MUST NOT be fitted at any point between 1372 (4' 6") and 2134 mm (7' 0") from top of door. Fit as near as possible to 1372 mm (4' 6"), subject to door style.

If no solid door member is available in the lock position it will be necessary to fit a block to the inside of the door in order that the handle can be correctly fitted.

Fit locking bar staples on centre line of lock with 25 mm (1") x No. 8 Round head screws (pilot with 1.95 mm (1/16") drill or bradawl) (already fitted on metal doors). See drawing.

Prepare locking bars by cutting each bar to length (half door width plus 13 mm (1/2")). Cut square and remove all burrs and round off corners with file. Doors over 2590 mm (8' 6") wide have each locking bar in two pieces. Assemble as instructions attached to locking bar set before cutting to size.

The external lock spindle and fixing screws should be cut to suit the door thickness. Lock spindle to be flush with inner face of door. Remove burrs and round off lock spindle corners (already prepared for metal doors).

Fit external and internal handles with locking bars to door with M6 countersunk screws. Lubricate lock spindle before inserting into internal release handle. Check operation.

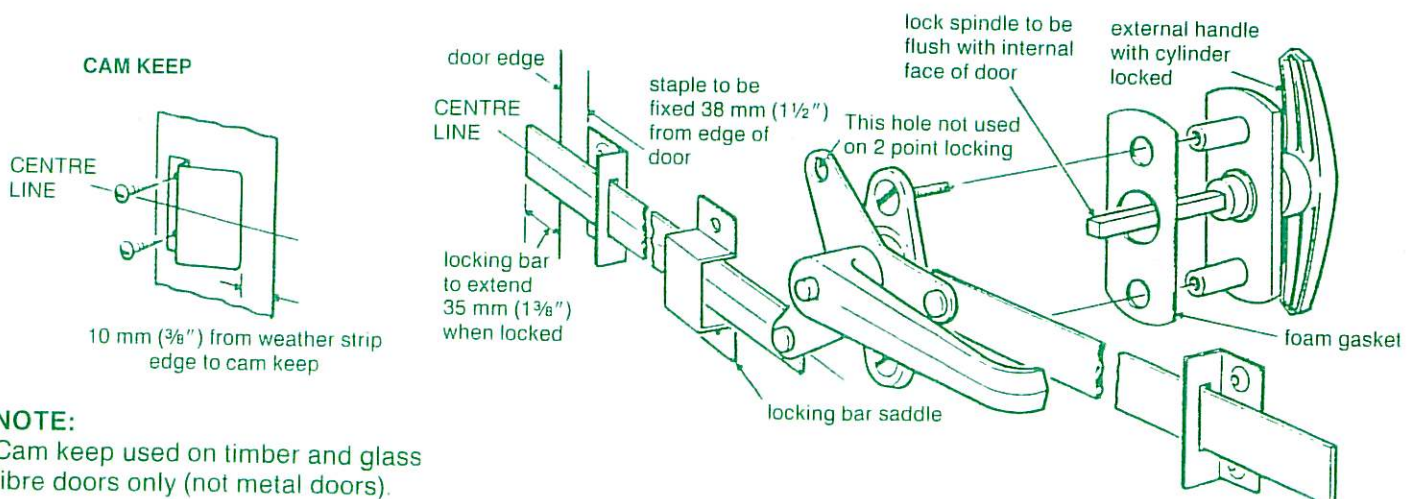
For doors over 2590 mm (8' 6") wide, fit locking bar saddles centrally over each bar with 25 mm (1") x No. 8 Round head screws (pilot with 1.95 mm (1/16") drill or bradawl) (already fitted on metal doors). See drawing.

Finally locate and fit locking bar cam keeps on centre line of locking bars 10 mm (3/8") from edge of jamb weatherstrip to leading edge of cam keep. See drawing. Using holes in cam keeps as template drill through weatherstrip only with 4.80 mm (3/16") drill and fit cam keeps with 25 mm (1") x No. 8 Round head screws (pilot with 1.95 mm (1/16") drill or bradawl) (not required on metal doors).

External and internal handles and locking bar positions are most important. They MUST be assembled and fitted exactly as illustrated.

The button on the internal handle disengages locking bars from the external handle. When securing door from inside, the external handle **MUST** be locked in the vertical position by the key.

Locking arrangements shown in locked position and with external handle locked



NOTE:
Cam keep used on timber and glass fibre doors only (not metal doors).

- 11.** Assemble deep reveal brackets (instructions in pack) or prepare suitable timber packers for fixing rear track brackets to side walls or roof joists – the tracks must be parallel with each other and square with the door opening. It is important that tracks are firmly fixed and free from sideways movement.

TRACKS MUST SLOPE DOWN 50 mm (2") FRONT TO BACK.

Rear track brackets and buffer stops are fixed with 38 mm (1½") × No. 10 Countersunk screws (pilot with 2.25 mm (3/32") drill) through holes in track and two bottom holes of bracket into timber packers. Finish off with 38 mm (1½") × No. 10 Round head screws in two top holes (deep reveal brackets use metal thread screws as pack instructions). See Fig. 9.

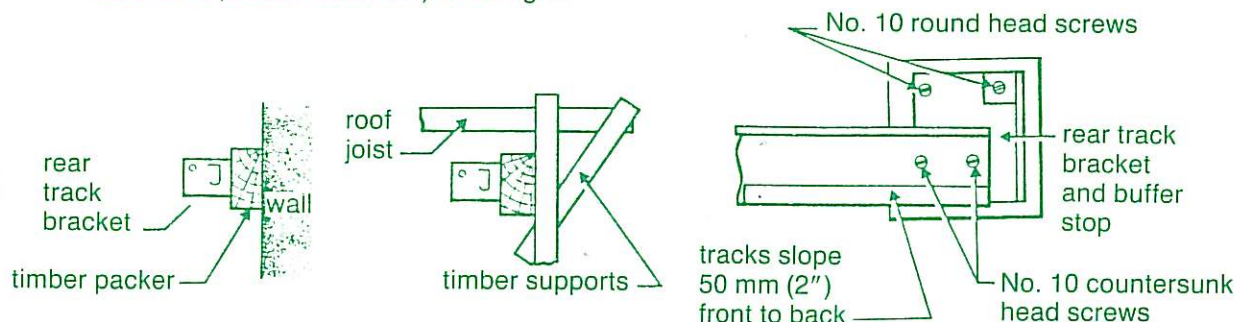


Fig. 9

- 12.** Remove all packing blocks, nails etc. and lift door carefully into open position. Fix M10 × 90 carriage bolts, washers and nuts to centre pivot brackets and spring anchor brackets if not already fitted. See Step 9.

- 13.** Check that door in open position is touching both rear buffers. If touching only one buffer the side tracks are not square and parallel with each other and adjustment is necessary. Deep reveal brackets are fully adjustable to allow for squaring up.

If door is as shown in Fig. 10, move tracks an equal amount to the right until door is in contact with both buffers – if opposite, reverse this procedure.

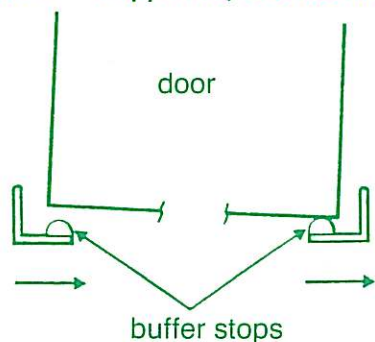


Fig. 10

- 14.** With door still in open position, place hook adjuster bolt in spring anchor bracket and adjust hexagon nut so that the hook bolt is fully extended. Place loop of tension spring in hook adjuster bolt and top loop over spring anchor pin of pivot arm. Make sure top loop fits firmly in the groove. See Fig. 11.

For lighter doors within the weight range of Type 'H' gear the spring anchor pin should be positioned in hole 'L'. Heavier doors will need the spring anchor pin in hole 'H', the furthest from the centre pivot. Retighten securely.

Adjust tension of springs by screwing up the nuts on the hook adjuster bolts until the desired degree of door balance is obtained. (Generally in the half open position.)

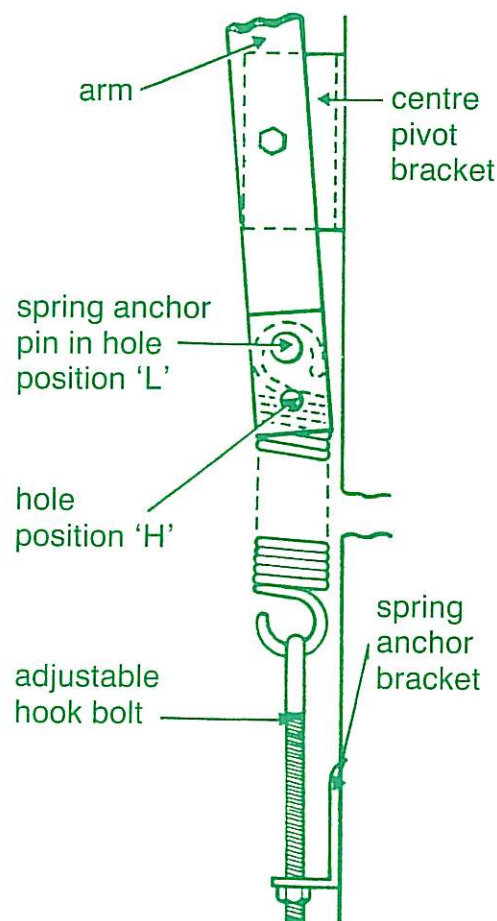


Fig. 11