

Garden Gate Installation Instructions

Including different Garden Gate Hinge Sets

Thank you for choosing Jacksons Fencing. Our high quality fencing products will last for years and give you trouble-free service if you follow the installation instructions below, which are offered as a general guide.

Please note that we do not recommend installing the posts prior to having the gates on site.

All timber posts installation requires proper drainage at the base of the post to avoid rotting. For details refer to the installation instruction "**JFW 28 Timber Fence Post**".

All Jackson's standard garden gates are supplied pre-fitted with the correct hinges & ring latch. If the garden gates are pre-fitted follow the **Installation Instructions for Pre-Fitted Gates** below. For gates which require hinges & ring latch installation as well, please proceed to the **Installation Instructions for Un-Fitted Gates**.

Installation Instructions for Pre-Fitted Gates:

1. Clear and level the site. The ground over which a gate will hang and swing must be reasonably level.
2. Pre-fitted garden gates are supplied with the following items fitted to the gate (**Figure 1 & 2**)
 - a. **Hinges** (may be of different types depending on the gate dimensions & type)
 - b. **Ring Latch** (standard)
 - c. **Shutting Strips** - These are temporarily nailed to the side of the gates. These need to be removed carefully and retained for later use.
 - d. **Closing strip** (For Gate Pairs only and attached to one of the leaf pairs depending on the handing and opening of the gate pair)
 - e. **Drop Bolt & Receiver** (For Gate Pairs only)

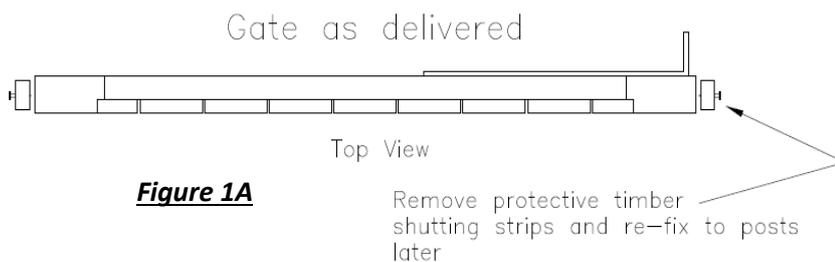


Figure 1A & 1B
Sample Single Leaf Gate Shown

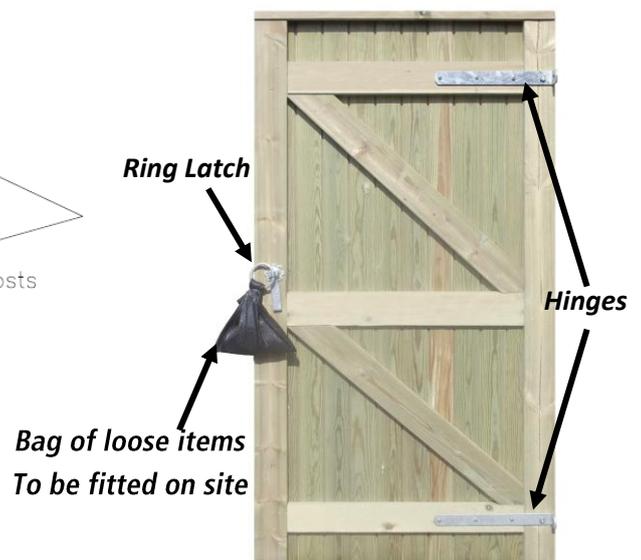


Figure 1B

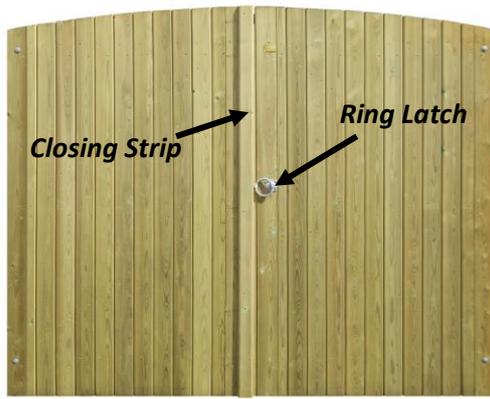


Figure 2A

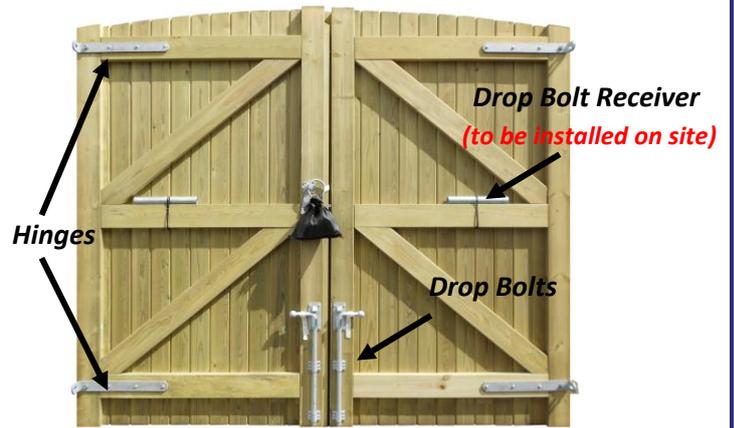


Figure 2B

Figure 2A & 2B- Sample Gate Pair Shown

& following items are supplied loose in the bag (**Figure3**).

| | <i>Description</i> | <i>Qty</i> |
|----|---|------------|
| f. | Ring Latch Receiver | 1 |
| g. | Ring Latch Keep | 1 |
| h. | 25mm Screws | 4 |
| i. | Eye bolts (M12 x 100mm or 150mm) | 2 |
| j. | M12 Nut & Washers | 4 |
| k. | M12 Thread Protectors | 2 |
| l. | Hook Plate | 2 |
| m. | M6 PAN Woodscrew 35mm | 8 |
| n. | Information Leaflet | 1 |



Figure 3 - Items supplied loose in a bag (to be fitted on-site)

- Before starting the installation, kindly check you have received all the required items and make sure gate(s) measurements are correct.
- Gate posts, wall plates or suitable fence posts need to be installed each side of the gate opening, allowing a 10mm gap beside each gate leaf. So for a single leaf gate, add 20mm to the actual gate width and for a pair of gates add 30mm to the combined width of both gates. (**Ref: Figure 4A & 4B**)

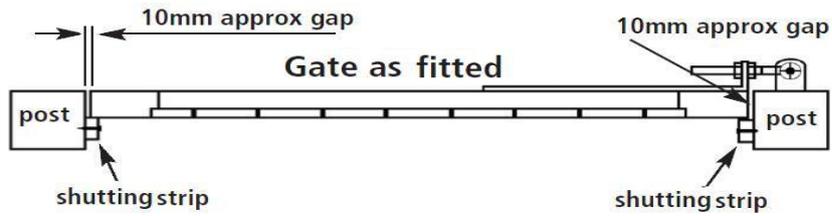


Figure 4A - Single Leaf Gate Lay Out

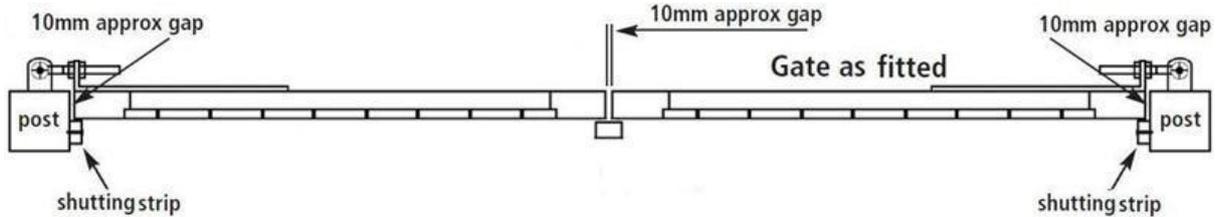


Figure 4B Gate Pair Layout

5. Position the gate centrally in the opening between the posts and raise it to the position using 50mm high wooden blocks for recommended ground clearance. (Ref: Figure 5)

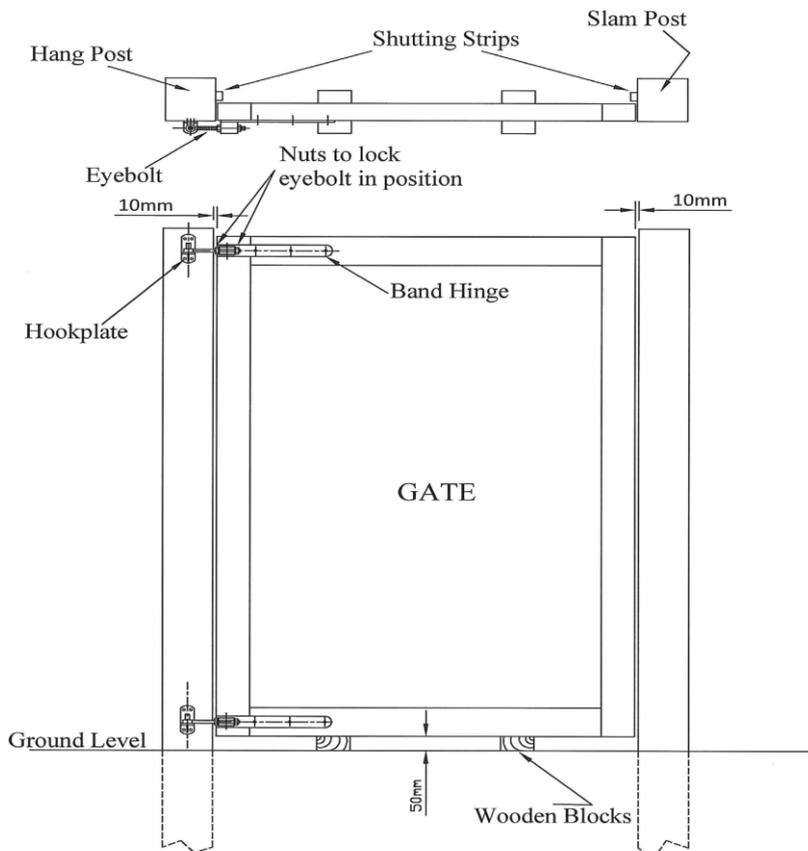


Figure 5

6. Fit the eyebolts in position as shown in **Figure 6A & 6B**, with one nut either side of the hinge. Adjust the position of the eye such that the centre of the eye is in line with the centre of the gate post. Fit the thread protectors to the ends of the eyebolts.



Figure 6A



Figure 6B

**Approx. 10mm
Gap between
Post and Gate**

7. Temporarily insert the hook plates through the eyebolts and mark the fixing holes positions onto the post. For added security the top hook plate can be inverted before fixing as shown in Figure 6A.
8. Remove the hook plates and the gate and then pre-drill 4mm pilot holes for the hook plates at the locations just marked.
9. Fit the hook plates to the post using 35mm Pan M6 Pan Screws and then hang the gate in position.
10. Make final adjustments by adjusting the location of the eyebolts relative to the hinge bands. It is important to note that the holes in the hinge bands are slotted to enable adjustments across the fence line (A) (Ref: Figure 7 & 9). The nuts on the eyebolts can be wound in or out to adjust the gate shutting gaps (Ref: Figure 8).

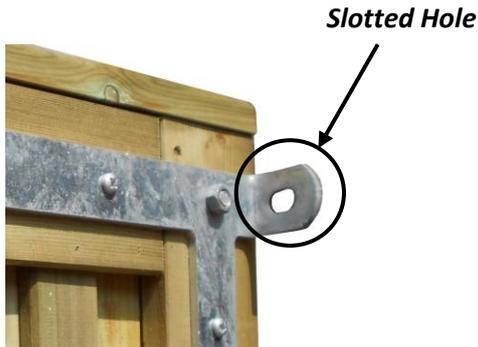


Figure 7



**Shutting Gaps Adjustment by winding
Nuts in or out as required**

Figure 8

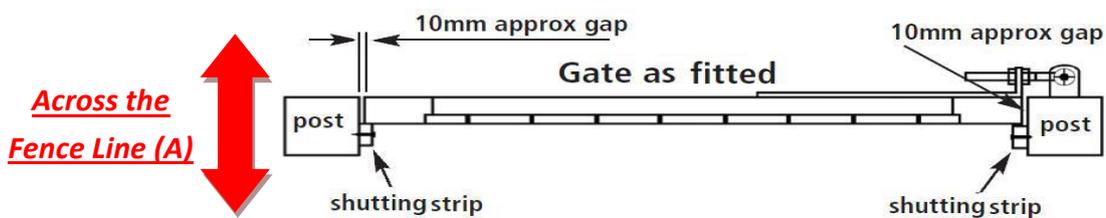


Figure 9

11. Once the gate has been adjusted as above, close the gate and position the latch receiver on the gate stile & catch on the post as shown in **Figure 10** and mark the fixing holes positions on the post. Fix the latch receiver to the post using 25mm screws provided.



Figure 10 – For Single Leaf Gates

12. Using the shutting strips removed from the gate earlier, nail them to the post as shown in **Figure 9** above (also shown in the information leaflet) to complete the installation. Shutting strips need to be tight to the gate when it is latched.

Note: Please note that shutting strips are essential to prevent the gate(s) from warping over time. It is also recommended to close the gates when not in use and not to leave gates open for longer period of time especially in warm weather to minimise any warp or twists in the gate due to changing weather conditions.

Installation Instructions for Un-Fitted Gates:

Depending on the type, height and width of gate(s), the following hinge set types can be supplied loose with an unfitted gate, if requested, along with other loose items which have stated in Step2 of installation instructions for pre-fitted gates above.

a. Cranked Hinge Sets

| Description | Qty |
|---|------|
| L-Shaped Hinges | 2 |
| 65 or 70mm M10 Coach Bolts Galv | 2 |
| M10 Nuts Galv | 2 |
| 35 or 50mm M6 PAN Woodscrews | 6-10 |
| <i>(Qty depending on the length of Hinge)</i> | |



Figure 11A - Components



Figure 11B - Installed

b. L Shape Hinge Sets

| Description | Qty |
|---|------|
| L-Shaped Hinges | 2 |
| 65 or 70mm M10 Coach Bolts Galv | 2 |
| M10 Nuts Galv | 2 |
| 65 or 70mm M8 Coach Bolts S/S | 4 |
| M8 Nyloc Nuts S/S | 4 |
| M8 Washers S/S | 4 |
| 35 or 50mm M6 PAN Woodscrews | 6-10 |
| <i>(Qty depending on the length of Hinge)</i> | |



Figure 12A - Components



Figure 12B - Installed

c. Hook & Band Hinge Sets 400mm-700mm Box hook & band hinge set

| Description | Qty |
|---|-------|
| Box Hook & Band Hinges | 2 |
| 65 or 70mm M10 Coach Bolts Galv | 2 |
| M10 Nuts Galv | 2 |
| 35 or 50mm M6 PAN Woodscrews | 6- 10 |
| <i>(Qty depending on the length of Hinge)</i> | |
| Plastic Inserts | 2 |



Figure 13A - Components



Figure 13B - Installed

1. Position one of the hinge bands on the centreline of the top rail of the gate, with the edge of the hinge band 10mm in from the edge of the gate. (Ref: Figure 14 shown for Box Hook & band Hinge).
2. Pre-drill 4mm dia. pilot holes, through the top hinge band fixing holes, then fix the top band in place using the M6 Pan Screws 35mm long.
3. 65mm or 70mm Coach Bolts are supplied, in order to accommodate the various types of gates this hinge set is supplied for. Before inserting the bolt, it must be cut to the correct size, using a hacksaw, such that when it is in position, it does not interfere with the eyebolt and prevent its adjustment during the alignment process. The correct length for the bolt (not counting the head), should be the gate frame thickness plus 15mm. Before cutting the bolt to length, it is advised that the nut is wound on to the thread between the bolt head and the cutting point. Once cut, removing the nut cleans the cut thread.
4. Pre-drill a 10mm diameter pilot hole for the coach bolt through the fixing hole, then insert the bolt as shown.
5. Fit the nut as shown, and tighten using a socket or box spanner.
6. Now repeat the steps 1-5 to fit the second hinge to the bottom of the gate.
7. Parts of Ring Latch set provided are shown in Figure 15. Install the ring latch next as shown in Figure 16. It is important to remember that the distance "X" mm is approximately 38–40mm for gates with 120mm wide stiles & 46-48mm for gates with 95mm wide stile to avoid Ring of the latch interfering with shutting strips when opening or closing the gate(s).

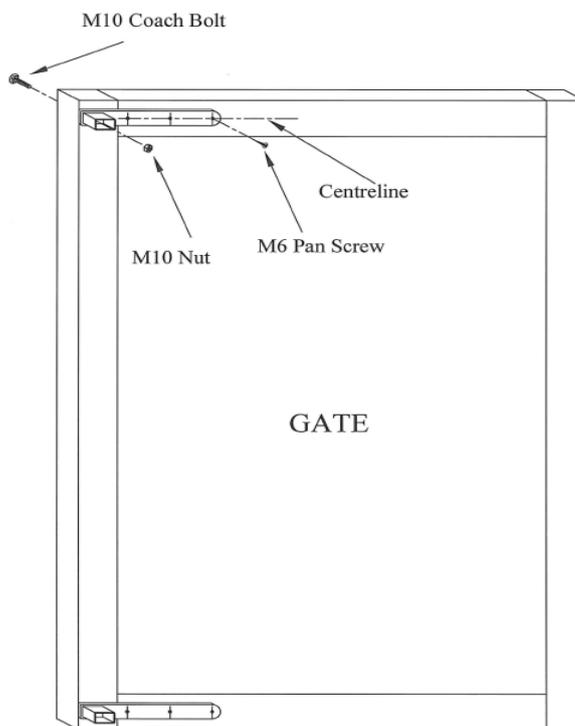


Figure 14
Box Hook & Band Hinge shown

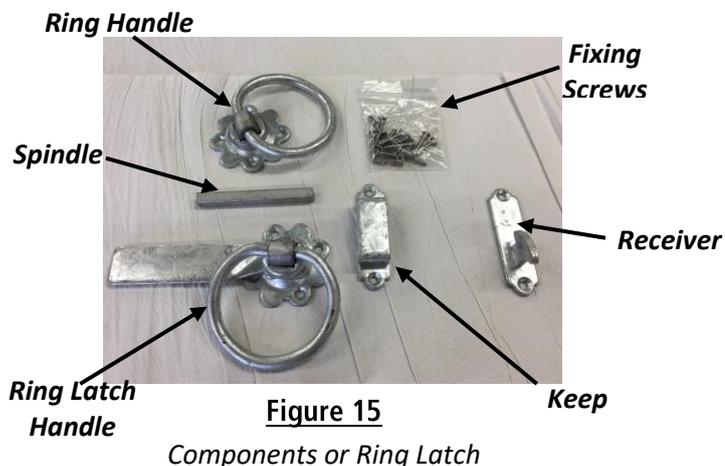


Figure 15
Components of Ring Latch

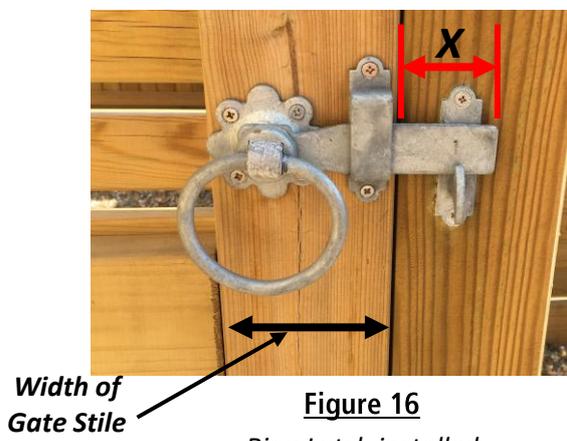


Figure 16
Ring Latch installed

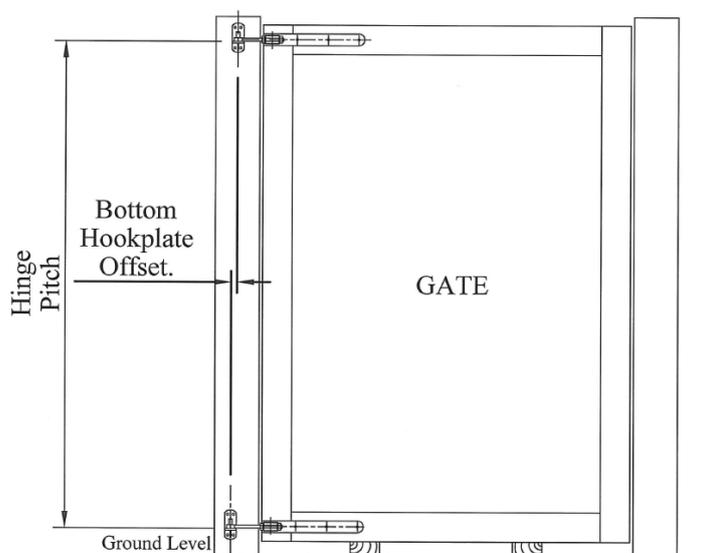
8. Once both hinges are fitted to the gate, follow the instructions for Pre-Fitted gates to complete the installation.

Rising Hinge Effect

In the event of a gate opening onto a sloping path, the gate can be made to rise as it opens by offsetting the position of the hook plates from the centreline of the post. Normally it is only necessary to offset the bottom hook plate, moving it away from the gate, whilst leaving the top hook plate on the centre line of the post. In extreme cases, the offset can be split, moving the top hook plate towards the gate and the bottom hook plate away from the gate.

This offset result in the effective length of the eyebolt to the hinge band being increased, thereby keeping the gate aligned when closed but causing a rising effect as it opens. It also has the benefit of generating a self-closing effect on the gate operation. Care should be taken when installing 'rising hinge effect' in a public place or where children have access to the gate, due to the finger trap risk caused by the self-closing effect.

Figure 17



Offset required to give desired lift when open can be calculated as:

$$\text{Bottom Hinge Offset} = (\text{Lift Required}) \times (\text{Gate Hinge Pitch}) / (\text{Gate Width})$$

Alternatively, the following table shows the lift per metre of the gate width.

| | | Hinge Pitch | | | | | | |
|---------------------|------|-------------|-------|------|-------|------|-------|------|
| | | 0.5m | 0.75m | 1.0m | 1.25m | 1.5m | 1.75m | 2.0m |
| Bottom Hinge Offset | 5mm | 10mm | 6mm | 5mm | 4mm | 3mm | 3mm | 3mm |
| | 10mm | 20mm | 13mm | 10mm | 8mm | 7mm | 6mm | 5mm |
| | 15mm | 30mm | 20mm | 15mm | 12mm | 10mm | 9mm | 8mm |
| | 20mm | 40mm | 27mm | 20mm | 16mm | 13mm | 11mm | 10mm |
| | 25mm | 50mm | 33mm | 25mm | 20mm | 17mm | 14mm | 13mm |
| | 30mm | 60mm | 40mm | 30mm | 24mm | 20mm | 17mm | 15mm |
| | 35mm | 70mm | 47mm | 35mm | 28mm | 23mm | 20mm | 18mm |
| | 40mm | 80mm | 53mm | 40mm | 32mm | 27mm | 23mm | 20mm |
| | 45mm | 90mm | 60mm | 45mm | 36mm | 30mm | 26mm | 23mm |
| | 50mm | 100mm | 67mm | 50mm | 40mm | 33mm | 29mm | 25mm |

Safety Notes:

Gates should always be operated by an adult.

Biocidal Products Regulation (EU528/2012):

Jakcured articles incorporate biocidal products to protect against wood destroying organisms.

Active ingredients include: Copper(II)Carbonate / Copper(II)Hydroxide (1:1) / Propiconazole / Tebuconazole / N, N-Didecyl-N, N-Dimethylammonium Carbonate / Bicarbonate

Wear gloves when handling treated timber. Avoid inhalation of sawdust. Do not use in contact with drinking water or for direct food contact. Do not use for animal bedding, in fish ponds or for sheet piling (canal banks). Dispose of treated wood / off-cuts responsibly – do not burn.