

Cranked Arm Gear

Installation Instructions

Important Information

Installation should not be undertaken alone, care must be taken when handling door and appropriate protective equipment used

Please read these instructions right through before attempting installation

When fitting or adjusting springs always ensure the door is fully propped in the open position

All instructions are given from inside the garage so make sure all tools & components are available inside the garage before placing door in opening.

Although a confident DIY person should be able to carry out this work we recommend you engage the services of a specialist installer.

Components List

The following parts are supplied in your AP130 pack :-

○ Cranked Lifting Arm L/H	1
○ Cranked Lifting Arm R/H	1
○ Lower Weather Seal L/H	1
○ Lower Weather Seal R/H	1
○ Spring	8
○ Track	2
○ Track Support	2
○ Track Stabiliser	2
○ Roller Pack Containing :-	
▪ Spring Anchor Bracket	2
▪ Top Roller Spindle	2
▪ M10 Spring Anchor bolt c/w Nuts & Washers	2
○ Track End Stops Pack (Inside Jiffy Bag) Containing :-	
▪ Track End Stop c/w Fitting screws/Washers	2
○ Fixings Pack Containing :-	
▪ M8x60mm Hex Head Coach Screw	12
▪ No.12 x 1.5" Self-Tapping Screw – Pozit	12
▪ 20mm Galvanised Clout Nail	12
▪ M6x20mm Hex Head Screw	4
▪ M6 Nyloc Nut	4
▪ M6 Shakeproof Washer	4
▪ M8x20mm Hex Head Screw	6

▪ M8 Nut	6
▪ Plastic Bungs for Lifting Arms	4
▪ Rubbing Block	2
▪ Triangular Spring Carrier	4
▪ Gear Clamp Plate	2
▪ Holed Plate	2

Fitting Instructions

1. Pre-Installation Checks

- Before beginning installation of your door check the following :-
- All parts are correctly supplied in the packs as described on this instruction sheet
- Timber frame is a minimum of 70mm x 70mm and is square

It is important to check squareness of opening initially & to continue re-checking squareness of frame/opening & door with frame throughout the fitting process.

2. Fit Rollers

Roller brackets & Top Weather Seals are pre-fitted to you door.

- Fit Rollers into Brackets using circles supplied as shown.

3. Position Door in Opening

- Prop door in opening allowing 10mm clearance each side and 12mm clearance at top of door. Ensure door is perfectly square in opening and that back face of door is flush with back face of timber frame.

4. Install Tracks

- Locate Track over Roller, support rear of track allowing between 25mm & 40mm fall along length of track (it is important that the fall is set the same on both tracks).
- With Track Just Touching the BOTTOM of the roller drill pilot holes into timber frame through vertical slots at top and bottom of brackets
- Fix tracks using M8 x 60mm Coach Screws.
- Slide track support over end of track, drill pilot holes and fasten to a suitable joist or support using one No.12x1.1/2" Self Tapping screw only per support at this stage. Ensure tracks are fitted square and that fall is set as described above.

5. Fit Track Stops

- Fit plastic track stops using M8 screw, nut & washer supplied
Important – Do not attempt to open the door until these track stops have been fitted

6. Final Fix Tracks

- Bolt track stabilisers to track supports using M6x20mm screws & M6 nyloc nuts provided.
- Fit track stabiliser top support using one No.12x1.1/2" Self Tapping screw.

- c. Lock Track Support to Joist/Support using one No.12x1.1/2" Self Tapping screw.

7. Install Lower weather Strips

- Fit Lower weather strips & rubbing blocks as shown leaving a 3mm gap between the top weather seal & the bottom of the top weather seal. Fix rubbing blocks using No.12x1.1/2" Self Tapping screws and Lower Seals using 20mm clout nails

8. Install Lifting Arms

- a. Identify the two lifting arm holes in the lower weather strip, drill pilot holes in each hole & fit lifting arm to timber frame as shown using M8 x 60mm Coach Screws. – Be careful not to drill through frame with pilot holes –
- b. Fix Bottom door brackets to door, for solid timber doors use 6x40mm Spax type screws provided in separate pack, for all other doors fit to door using M8 x 20mm Screws, M8 Nuts & shakeproof washers provided. Use clamp plates as shown.

9. Install Springs

- a. Locate triangular Spring Carrier on Top Spring Anchor as shown
- b. Fit 4 springs to triangular Spring Carrier as shown
- c. Attach second triangular spring carrier to bottom of springs as shown
- d. Hook Spring Anchor Bolt over triangular spring carrier
- e. Fit spring anchor bolts to spring anchor brackets using M10 nuts & washers as shown
- f. Fit spring anchor bracket to timber frame using M8 x 60mm Coach Screws as shown. Position spring anchor bracket in nearest set of holes to keep springs taut but not stretched

10. Test operation

- a. Ensure all fixings are securely tightened
- b. Open door and carefully test operation

11. Balance Door

Door should easily open to around waist height and should stay balanced when moved to any position up to chest height. Use the following methods to adjust spring tension :-

- a. Fine adjustment – Wind down spring anchor bolts to increase spring tension
- b. Medium adjustment – Change Position of spring anchor bracket, move down for increased tension and up for reduced tension.
- c. Coarse adjustment – Change position of spring anchor pin in lifting arm, move down to increase tension and up to reduce tension.

12. Door Adjustment

The door should now be working in a satisfactory manner, however after installation door can drop slightly, check for the following :-

- a. Are top rollers just touching the bottom of the tracks ? If not adjust front track brackets and re-tighten.
- b. Is the door clear of the frame during opening and closing ? If not check first that tracks and frame are square

13. Completion

On completion of adjustment the following steps should be taken :-

- *Fit plastic bungs into open holes in lifting arms*
- *Check all screws & fixings are secured correctly*
- *Check all packing pieces, transit strips & other packaging has been removed from door.*
- *Retain fitting instructions in a safe place for future reference.*

14. Maintenance

For smooth operation it is important that moving parts are oiled on installation and regularly thereafter

- a. The four pivots on the Lifting Arms
- b. The roller wheels
- c. The spring carrier fitting positions to the Top spring anchor and the spring anchor bolt

Check List For AP130 Cranked Arm Gear

Standard Track & End Stops

Warning Instruction For Track Stops

Bottom Weather Strips Rubber L/H, R/H

Arms

Cranked Arm Instruction

8 x Multi Springs

Screw Pack Special

2 x Track Support

2 x Stabilisers

Top Brackets

Roller Pack – 2 x M10 Hooks 2 x Spindles 2 x M12 Anchor Brackets

Check List For AP130 Cranked Arm Gear

Standard Track & End Stops

Warning Instruction For Track Stops

Bottom Weather Strips Rubber L/H, R/H

Arms

Cranked Arm Instruction

8 x Multi Springs

Screw Pack Special

2 x Track Support

2 x Stabilisers

Top Brackets

Roller Pack – 2 x M10 Hooks 2 x Spindles 2 x M12 Anchor Brackets

**WARNING: TRACK END STOPS
MUST BE FITTED BEFORE
OPENING THE DOOR.**

**PLEASE NOTE WHEN FITTING
AP130/160/230 SHORT ARM
GEAR, YOU MAY NEED TO CUT
AND RE-DRILL THE TRACK SO
THE SPINDLE FITS THE END
STOP WHEN THE DOOR IS
OPEN.**