



COLD PRESS

JAMIE & JIMMY'S FRIDAY NIGHT FEAST SERIES 6

Overview

A super simple build you can make from items in your garage! Using the principle of gently crushing fruit using a super powerful car jack in a purpose built wooden press, wonderful juice concoctions can be easily squeezed out of this incredible build.

What you will need

- 100mm Screws
- 4 x large wooden Chopping boards
- 1x plastic chopping board
- Redwood Pine wood
- Car Jack
- Handrail End -Wall fitting
- Up-cycled plate from a castor
- Baking tray
- Water butt joint
- Copper Pipe
- Copper Corner point
- Various Screws

Tools & Safety equipment

Tools

- Workbench/Vice
- Miter Saw
- Cordless Drill
- 3mm / 8.5mm Drill Bit
- Tape Measure
- Marker Pen
- Centre Punch & Hammer
- Hacksaw
- G-clamp
- Square
- File
- Taper drill bit
- Impact driver
- Jigsaw
- Hammer
- Allen key

Safety

- Safety gloves
- Safety goggles
- Dusk mask
- Hearing protection
- Appropriate clothing/ footwear

How to build a car jack cold press

1. Two chopping boards will make the base of the structure, with a car jack placed on top. 4 wooden upright pieces will hold another chopping board which will act as the press at the top of the structure. The car jack should be extended to its maximum height to calculate the safe distance where the press just touches the baking tray base. This is where the crushing of the fruit/veg will occur. A car jack is incredibly powerful and can lift a whole car - so can easily break the wooden structure - so measuring this based on your car jack's full extension is very important.
2. To accurately measure the height the structure needs to be it's time for some maths. As your materials may differ - we are providing basic instructions. Measure the height of your four wooden chopping boards, plastic chopping board and car jack at full extension, and add together - this will roughly give you the height your structure needs to be

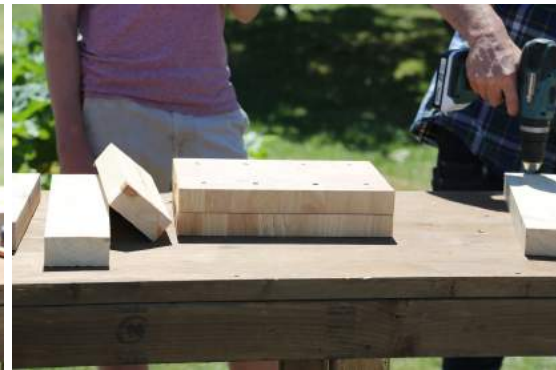


3. Cut 4 pieces of pinewood to the height calculated above with a miter saw/ hand saw.

Wear: Safety Glasses, appropriate clothing/footwear, mask, hearing protection



4. Fasten two chopping boards together with 8 screws to create the base of the press.



5. Use a drill to make holes in the top and bottom of the 4 upright pieces and attach one end to each of the four corners of the wooden chopping board base.

Wear Safety Glasses Appropriate clothing/footwear



6. To create the top of the press, adjoin two upright pieces of pinewood to either side of the base with two pieces of pinewood between the uprights, attach together with wood screws.

7. Cut down one of wooden chopping boards to fit inside the baking tray - this will become the press. File the corners of this wooden chopping board so it fits smoothly into the baking tray.
8. Attach this to the top of the structure (flip it upside down to make this easy to do!)



9. Cut the plastic chopping board so that it is the same size as the wooden press. File the sides.
10. Attach the plastic chopping board to the press. This plastic layer of the press will ensure that crushed fruit juice won't be pressed into the chopping board wood. Although chopping board wood is non-porous at high pressure - fruit juice seeps into it, so a plastic layer ensures that the juice will collect in the tray and not build up in the press and it will make it easier to clean. Use wood screws and attach the plastic board from above so that the plastic press side has no holes in it.



11. Drill a hole into the base of the baking tray at one edge and file off the burr. Attach the copper water butt joint with a rubber washer.



12. Attach some copper pipe to the baking tray - this will act as the spout for the juice to flow into.



13. Mark and cut a slot out the final chopping board - our floating platform. This will sit on top of the car jack - and provide a platform for the baking tray to sit in. The slot is needed to allow the baking tray drainage hole and spout to sit comfortably in. Use a file to tidy the edge.



14. Place the baking tray in the slot you just made and using a hammer and a block of wood, hammer the waterbut fitting so that it is flush to the level of the tray. This will help the juice drain from the tray down the pipe.
15. Attach the hand rail and metal plate to the center of the floating chopping board.

This will act as a mounting point for the car jack - so that when it pushes up - it will hold the floating platform and baking tray in place inside the cold press structure.



16. Put the jack into position and check that the floating board moves smoothly up and down the press and meets the baking tray at the top with enough pressure.



17. Now you can start juicing your fruits and vegetables. For some fruits and veg it may be advisable to use a piece of muslin to stop any pips from ending up in your juice.



Specific Safety Notes

The car jack has enough power to break the wooden structure - as it's built to lift a car! It's incredibly important to build this cold press so that the car jack pushes the fruit into the press at it's maximum height, so that you don't over-stress the wooden structure. The structure is highly likely to break if the car jack is over-cranked and the dimensions are not correct. Always clean the press, baking tray and the copper pipe after use. The instructions in this document are intended as a guide only, any building you do is at your own risk. You should regularly assess the safety of the Build during construction and afterwards.

End User Notice

The cold press is used at your own risk. Only use power tools in accordance with manufacturers instructions. Ensure all necessary safety equipment is worn at all times. If kept outside the wood will deteriorate over time due to weather.

General Safety Guidelines

Food Prep

Please clean all surfaces thoroughly before serving food and after use.

Tools

When using tools, please ensure that you have read the instructions carefully and that you have the correct Personal Protective Equipment to operate them safely. If you are not experienced at using them seek help or advice from those more experienced on how to use them safely.

Children

Make sure that children and others are kept at a safe distance throughout the making of the build and whilst you are using it.

Personal Protection Equipment (PPE) Safety Guidelines

TOOL	ADVICE
For any tasks that will generate dust / particles a dust mask is advised	
ANGLE GRINDER	<ul style="list-style-type: none"> ● Hearing Protection ● Safety goggles ● Dust mask ● NO GLOVES (spinning equipment) ● Long sleeve cotton clothing ● Safety boots
JIGSAW	<ul style="list-style-type: none"> ● Safety goggles ● Dust mask ● NO GLOVES (spinning equipment) ● Safety boots
MITRE or CHOP SAW	<ul style="list-style-type: none"> ● Safety goggles ● Dust mask ● NO GLOVES (spinning equipment) ● HEARING PROTECTION

	<ul style="list-style-type: none"> ● Safety Boots
MIG WELDER	<ul style="list-style-type: none"> ● Welding clothing ● UV welding mask ● UV eye protection for observers ● Welding gloves
IMPACT DRIVER (DRILL)	<ul style="list-style-type: none"> ● Safety goggles ● NO GLOVES (spinning equipment)
HAND SAW	<ul style="list-style-type: none"> ● Safety boots ● Safety Gloves to be worn for all non rotating saws
FILING	<ul style="list-style-type: none"> ● Gloves (especially for metal work)
HACK SAW	<ul style="list-style-type: none"> ● Safety boots ● Safety Gloves to be worn for all non rotating saws
BENCH DRILL	<ul style="list-style-type: none"> ● Safety goggles / Bench drill guard ● Safety boots
WIRE CLIPPERS/CUTTERS	<ul style="list-style-type: none"> ● Safety goggles
LIGHTING FIRES	<ul style="list-style-type: none"> ● Fire safety gloves (for putting coals onto a lit fire) ● Bucket of water ● Suitable Fire extinguisher ● Fire poking tools (metal)
CHISEL/HAMMER	<ul style="list-style-type: none"> ● Safety Goggles ● Safety Gloves
TAPER DRILL BIT	<ul style="list-style-type: none"> ● Safety goggles ● SAFETY rigger GLOVE for securing metal bowl.