

# PANHEAD SUPERCHARGER CLONE

## 19L ALL GRAIN RECIPE KIT



### American Pale Ale

Est. OG: 1.055    Measured: \_\_\_\_\_

Est. FG: 1.012    Measured: \_\_\_\_\_

IBU: 71.7

Colour: 11.8EBC

Alcohol: 5.6%

Boil: 60min

Pre-boil Volume: 28.01L

Pre-boil Gravity: 1.050

Volume to Fermenter: 23L

Bottling Volume: 19L

### Equipment Requirements

1. A starter brewing kit with fermenting and bottling equipment
2. All-Grain Brewing Equipment or Grainfather
3. 30x 750mL bottles and caps or a corny keg and kegging system
4. Stainless Steel Spoon (recommended)

This kit assumes a basic understanding of home brewing procedures. If you have any questions feel free to get in touch with us.

### Recipe

4.92kg Ale

0.27kg Toffee

0.21kg Light Crystal

11g Pacific Jade @60min

33g Amarillo @10min

33g Simcoe @10min

22g Centennial @10min

33g Amarillo @0min

33g Simcoe @0min

22g Centennial @0min

61g Citra @Dry Hop

21g Simcoe @Dry Hop

### Brewing Procedure

The following instructions are for a Grainfather. You may need to adjust water volumes and temperatures to suit your system.

#### Preparation

1. Check you have all of your grains, hops, yeast and any extra consumables, such as irish moss.
2. Make sure your gear is clean and taps are closed.

#### The Mash

3. Heat 17.0L of water to 69°C.
4. Set the temperature to 67°C on your control unit and slowly pour the crushed grain into the basket. Stir well to break up any dry clumps of grain.
5. Put the lid on and let the mash rest for 60 minutes.
6. While you are mashing, heat 15.5L of water to to 76°C in your sparge water heater.
7. Optional - Mash out. After the 60 minute mash, set the temperature to 76°C and recirculate for 10 minutes.
8. Remove the grain basket and begin sparging with the water you heated earlier. Set the temperature on the control unit to 100°C.
9. When the grain basket and sparge water have fully drained you should have approximately 28L in your boil kettle. Wait for it to come to a boil.

#### The Boil

10. When the wort hits a boil set your count-down timer to 60 minutes and add your hops at the designated times, as shown on the hop packets. The times on each of the hop packets indicates how long they should be in the kettle for. E.g. an @60min addition will go in at the start of the boil and will be in for 60 minutes. An @0min addition is to be added at the very end of the boil. **During the boil is a good time to make sure your fermenter is clean and sanitized.**
11. Optional - with 15 minutes remaining in the boil, begin recirculating through the counter flow wort chiller to sanitise it (don't turn on the cold tap yet) and add any kettle fining agent and yeast nutrient.
12. At the end of the boil, turn off the heat and put the lid on your Grainfather.
13. Cool the wort using your counter flow wort chiller.
14. When you have collected all of the wort in your fermenter, take a gravity reading and aerate the wort. If you don't have an aeration kit, shake the fermenter vigorously for at least 60 seconds.
15. When your wort has cooled below 18°C, pitch your yeast.

#### Fermentation and Packaging

16. Fermentation temperature will depend on the yeast strain you choose to use. Check the back of the packet for recommended temperature ranges.
18. After 10 days in the fermenter, add the dry hops.
19. After 14 days in the fermenter, take a gravity reading. Continue testing it each day - when it stays the same for 3 days in a row it is ready to bottle.

Your beer will be carbonated and ready to drink within two weeks. This beer is best enjoyed fresh.