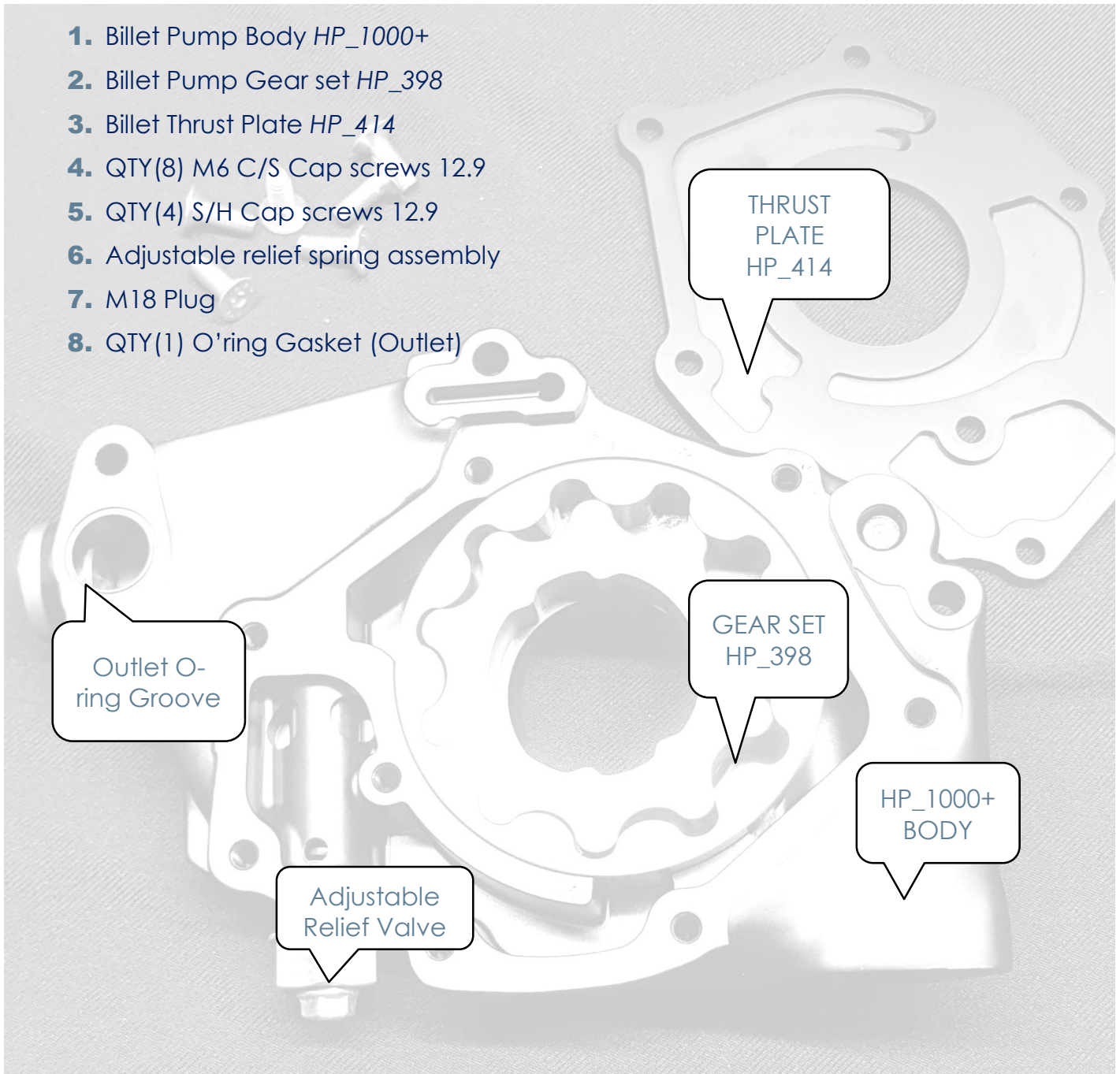


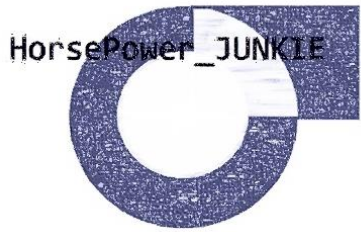
Installation Manual

HP_1000+ Billet Pump Set BA / BF FG 4lt Turbo

KIT ASSEMBLY CONTENTS

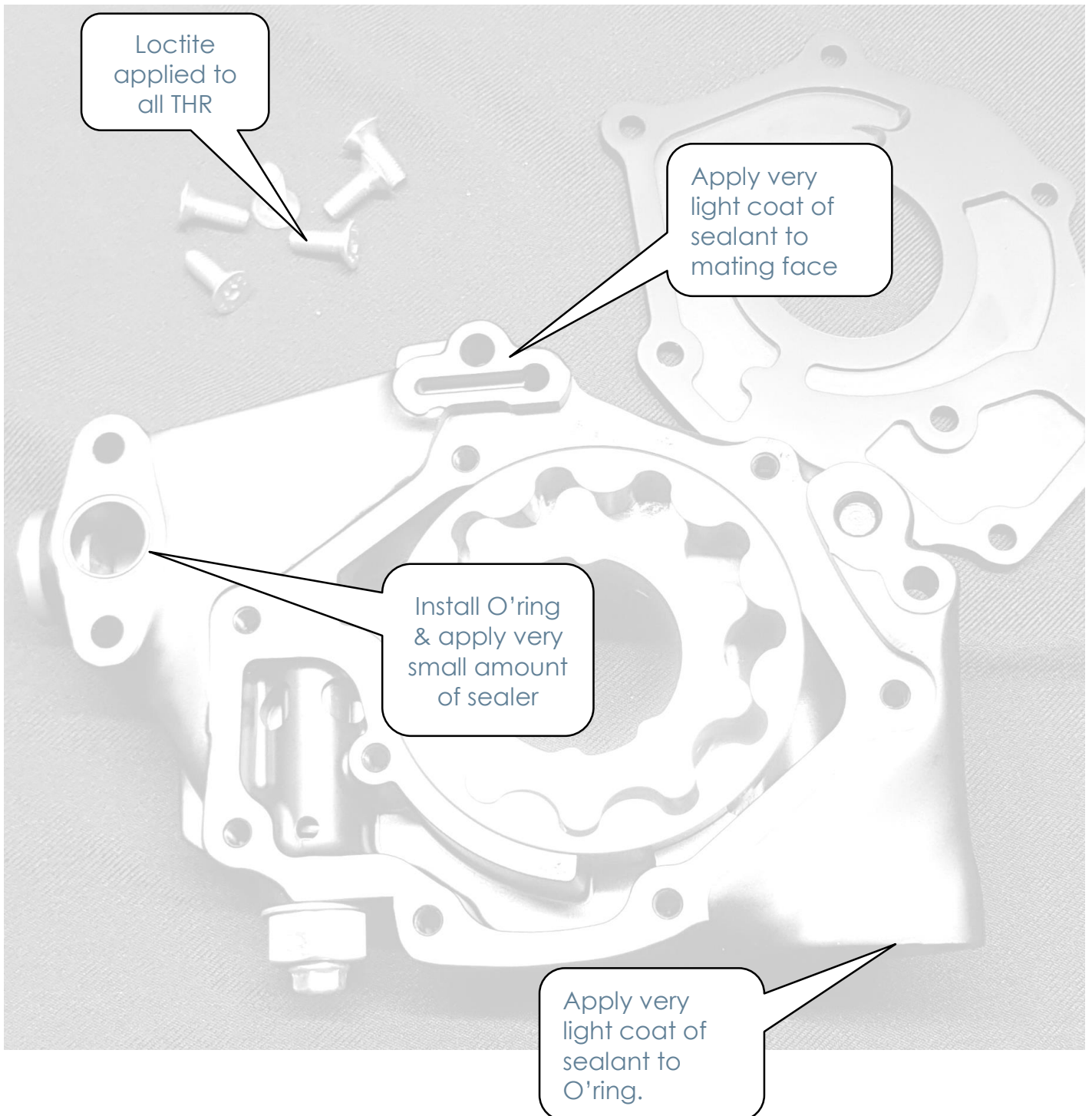
1. Billet Pump Body HP_1000+
2. Billet Pump Gear set HP_398
3. Billet Thrust Plate HP_414
4. QTY(8) M6 C/S Cap screws 12.9
5. QTY(4) S/H Cap screws 12.9
6. Adjustable relief spring assembly
7. M18 Plug
8. QTY(1) O'ring Gasket (Outlet)





INSTALLATION NOTES

“Note these are RACE ONLY parts and should only be used as such”



HP_1000+ Billet Pump

Congratulations,

You have just purchased the original and the very best high flow / high volume pump available for your "Barra" engine. HPJ highly recommends installation to be completed by a qualified "Engine Builder".

Each pump set is pre-assembled, blue printed ready to install...

Once the pump is removed from the packaging, you will find a set of four (4) M6 cap screws these are used to retain the pump to the block, an o'ring and an instruction card. If any of these are missing please contact us immediately.

1. Block preparation the mating interface between the block and oil pump must be clean and flat! All nicks/ burrs or any other damage must be repaired prior to installation.
2. Run a tap through the threads to clean and clear all debris, hand screw one of the M6 fasteners in there should be no resistance till the fastener bottoms out.
3. Crankshaft preparation the crankshaft nose should be free of damage any nicks/ burrs removed. Allowing the pump gear a locational clearance fit.
4. The pump gears are manufactured to extremely accurate tolerances; there is a small amount of clearance. Between the inner gear and the drive flats of the crankshaft.

Care must be taken to align flats, due to the slight variations in OEM crankshafts. Note this is the actual design of the gears the snug fit will prolong gear and crankshaft life. DO NOT ATTEMPT TO MODIFY CLEARANCE YOURSELF!

5. Install the o'ring into the groove on the outlet of the pump a small amount of sealant can be used to "coat" the o'ring HPJ recommends Loctite Master Flange sealant 518.

Care should be taken to prevent o'ring falling out this is why we recommend a very light film of sealant, if this also migrates on to the face it's ok

6. Coat pick up tube o'ring and chain lube port face with a very light film of Sealant.
7. Apply a small amount of Loctite 222 or equivalent to the threads and a small amount of anti-seize under the head of the cap screw to prevent galling.
8. Each M6 cap screw should be torqued to 14Nm, note the two bolts holding the pump outlet (o'ring side should be torqued first)
9. Pivot chain guide may require some relief between guide and housing. Should you require any assistance please contact HPJ directly.



10. All care should be taken while installing your pump the HP_1000+ is a race application pump **only**. HPJ accepts no responsibility for incorrect installation including damaged parts and components related as such.

11. All responsibility resulted in not following this installation resides with the individual / installer.