

Re-con option	Comparison of engine options			
Existing CAT C7	1 CAT c7.1 – 450hp / 500hp (63 hpl / 70)	2 Cummins QSC8.3 – 500hp / 550hp (60 hpl / 66)	3. Cummins RECON QSC8.3 – 500hp / 550hp	4. CAT c9.3 - 476hp (50 hpl)
<ul style="list-style-type: none"><li>➤ Price for two: \$70,000.00</li><li>➤ Warranty: 1 year limited [Need to check this]</li></ul>	<ul style="list-style-type: none"><li>➤ Price for two: \$120K + GST</li><li>➤ Weight: 750kg</li><li>➤ Dimensions: 876h / 798w / 1394L</li><li>➤ Warranty: 2 years for all components</li><li>➤ Made in UK</li></ul>	<ul style="list-style-type: none"><li>➤ Price for two (550hp): \$130K + GST (<u>reduced price</u>)</li><li>➤ Weight: 896kg</li><li>➤ Dimensions: 981.6h / 977.5w / 1422L</li><li>➤ Warranty: 2 years for the rest</li><li>➤ Made in USA</li></ul>	<ul style="list-style-type: none"><li>➤ Price: \$ <b>NOT AVAILABLE</b></li><li>➤ Weight: 896kg</li><li>➤ Dimensions: 981.6h / 977.5w / 1422L</li><li>➤ Warranty: 2 years all up</li><li>➤ Made in Mexico</li></ul>	<ul style="list-style-type: none"><li>➤ Price for two: \$140K + GST (<u>list price</u>)</li><li>➤ Weight: 1122kg</li><li>➤ Dimensions: 1093h / 978w / 1452L</li><li>➤ Warranty: 5 years for all components, at expiry can buy a further 5 years for all components if properly serviced</li><li>➤ Made in USA</li></ul>
Main advantages	Main advantages			
<ul style="list-style-type: none"><li>• Cheapest option</li><li>• Price per engine: parts \$18K, machine shop materials + testing \$5k, labour \$12k</li></ul>	<ul style="list-style-type: none"><li>• Smallest and lightest motor, simplest fit / install, no engine bed modifications, will fit existing engine mounts</li><li>• Can reuse existing gearboxes</li><li>• Will work with existing CAT instruments</li><li>• The most modern design here (galvanically neutral so no sacrificial anodes, self adjusting valves, self priming, all gear driven water pumps)</li><li>• Significant capital value enhancement</li></ul>	<ul style="list-style-type: none"><li>• Proven track record and strong reputation, has been in service for a while now, the 500hp version already deployed successfully in GB47 and Fleming 55</li><li>• Can reuse existing gearboxes</li><li>• Can source cheaper spare parts from Seaboard Marine in USA for ongoing maintenance</li><li>• The newer 550hp version will offer a significant performance boost over current motors</li><li>• Significant capital value enhancement</li></ul>	<ul style="list-style-type: none"><li>• 2 year warranty from Cummins</li><li>• Some (limited) capital value enhancement (the engines are not ‘new’)</li><li>• Otherwise same advantages as new QSC8.3</li></ul>	<ul style="list-style-type: none"><li>• Largest displacement plus lowest RPM mean this engine will likely have the best longevity. Best hpl figure</li><li>• A commercial ‘D’ rated engine, heavy duty commercial grade components, so a big tough beast</li><li>• Highest torque output of the options, but also lowest horsepower</li><li>• Most significant capital value enhancement</li></ul>
Main disadvantages	Main disadvantages			
<ul style="list-style-type: none"><li>• Only 1 year warranty from the repair shop (not a manufacturer’s warranty), and limited to only the components worked on (which does not include <i>all</i> engine components)</li><li>• Zero capital value enhancement</li><li>• Potential capital value erosion</li><li>• Spend \$\$ but still end up with 16 year old motors</li></ul>	<ul style="list-style-type: none"><li>• It is a modified Perkins block (CAT has owned Perkins for a while, maybe this doesn’t matter?)</li><li>• It is made in the UK (again, maybe this doesn’t matter?)</li><li>• It is the newest design here (again, maybe this doesn’t matter?)</li><li>• 500hp version has least desirable hpl figure</li></ul>	<ul style="list-style-type: none"><li>• Higher installation costs than CAT c7.1 - engine bed modifications to fit Cummins, possibly new engine mounts (<u>mounts included in above pricing</u>)</li><li>• Will require new (non CAT) instrument display panels (<u>new displays included in above pricing</u>)</li><li>• At 3000 rpm, the 550hp version is the highest revving engine here.</li></ul>	<ul style="list-style-type: none"><li>• <b>Apparently only very slightly cheaper than new QSC8.3, so Cummins rarely imports them to Australia</b></li><li>• Not a new engine. It is a factory rebuilt (in Mexico) example of a used/worn engine that was traded in to Cummins</li><li>• Significantly shorter warranty period (66%) on ‘Major Components’</li><li>• Otherwise same disadvantages as new QSC8.3</li></ul>	<ul style="list-style-type: none"><li>• The most expensive unit to buy</li><li>• The most difficult and expensive to install due to its large size and need for engine bed modifications and new mounts</li><li>• Has an Sae1 sized flywheel, so will <u>definitely</u> require new transmissions</li><li>• Heavy (weight) may reduce performance gains?</li></ul>