

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