BNR32 RB26 DETT Engine Removal (Total time 6Hrs between two of us*)

(*The gearbox was already removed, approx two hours was wasted trying to remove o/s drive shaft which this guide will hopefully save others.)

Jack up car and put on axle stands. We put some wing covers over the front wings to protect the paintwork and some baby bed mats under the car to make clean up easier and anticipation of splashes from all the fluids that would be drained shortly. We then removed the battery completely from the car, it helps access and visibility later on.

Next up we removed the engine cover/drip tray and drained the water radiator, from the white drain tap on the bottom n/s of the rad. We placed a large container underneath it and allowed it to drain. We then removed the rad cap and it really poured out, I would recommend doing this towards the end. (Alternatively it may have been better had we done this first and then only unscrew the rad tap a small way out.)
While this drained we removed the bonnet to clear the way for the engine removal. We kept it on the bonnet stay and then undid the two bolts on each side, between the two of us so we could take the weight as we did it and then lifted it off the stay. Its extremely light.
With the radiator drained we set about removing the top and bottom radiator hoses. Please note the pick in the below picture, this was an invaluable tool throughout for removing old hoses/ pipes, electrical connectors etc. Simply insert it and follow the seal around breaking the
Do the same with the lower hose, but make sure you have a container underneath to catch the water which comes out of this.
With the radiator now drained and pipes detached, undo the bolts on the brackets that retain the radiator at the front slam panel. Next up, remove the 4 nuts that hold the fan on to the water pump pulley. These have washers so use a magnet pickup to catch the nut and washer as you undo these. With these undone the radiator simply lifts up and out along with the fan which needs to be pulled forward into the shroud so that it can all lift out together. There is a sensor attached to the radiator at the bottom left (looking at it from the front/green plug in pic below) as you lift it out and this must be disconnected. Take care not to forget this as you will pull the wires out. (Also in the above picture make a mental note about the power steering sensor harness which is just below the alternator. This needs to be disconnected before the engine comes out or this too will pull the wires out, now might be a good time to do this.)
While on the messy stuff, we also drained the front diff now. Just put a container underneath and undo the bottom bolt. (Ignore the fact that we’ve undone the outer bolts on the diff casing, more on that below- you wont need to undo these).
Next we move on to the intake side and remove the Induction kit, Air Flow Meters and intercooler inlet pipe. We put a glove over the intercooler entry pipe to prevent any muck from falling in.
Next up we removed the dump valve pipework. Spot the difference from the pic above.

Moving on, we disconnect the pipes off the power steering pump and then the air con condenser. Power steering fluid is horrible and stinks and makes a hell of a mess, so we have the container under the car and plenty of blue roll to hand to catch the initial fluid until we were able to position the pipes over the container. Note the black rubber pipe going to the power steering pump from the reservoir, we undid the jubilee clip on this too but didn’t drain it until the engine was already halfway out of the car opn the engine crane as it was easier.
then.

With this done and the power steering fluid draining into the container, we undid the air con pipes, this meant losing the gas so we walked out of the garage and gave it some time to disperse out of the atmosphere. It wasn’t too bad but it does come out under pressure. We undid the bolt but not fully so it escaped slower. The air con compressor is located under the power steering pump. There are two bolts on this, we just undid the one for now which is the one without the nut on it, the other one, a bolt, we undid as the engine came out as it was easier to
Next we undid the intercooler pipe that goes to the inlet plenum.
After this you need to be careful, it’s not particularly difficult but you need to be meticulous that you’ve removed all bits of loom that go to the engine. A good place to start is the battery side. Here you'll find there are earths etc than run from the engine block to the battery, these all need to be undone from the body and will lift off with the engine. There are also boost pipes etc to remove from the boost solenoid, make sure you remember which ones go where, mark them if you have to. You also need to release the fuel lines, two of them, the high pressure line will leak some fuel so a small container is useful and some blue roll. We also undid the fuel cap at this point to release any pressure. You can see the fuel lines in the picture below just above the oil filter.
The next loom we undid is the injector harness, this loom has two temp connectors at the front of the plenum, one sensor is in the plenum and one in the inlet manifold. Undo these plugs then undo the six injectors. You'll need to remove the three hex bolts on the injector loom cover too. The same loom then has two or three plugs at the rear, throttle position sensor and such which is up by the throttle cable and the plug out of the back of the ignition amplifier on the spark plug cover as well as the earth strap that goes to this. This whole loom then pulls out of the way, there are also two plugs to remove from the other side which are the two Lambda sensors on the turbos. You will also need to disconnect the sensor plug on the Power Steering rack on the drivers side of the car.
With this out of the way, there are two pipes that need disconnecting around the rear of the plenum, brake booster pipe and a vacuum pipe that goes to the canister to the left of the brake booster and the throttle cable needs to be disconnected too.

We realized at this point that there wasn't much space between the rear of the engine and the bulkhead and it was pretty tight to work in. Without the gearbox in and hence supported by the gearbox cross brace, the engine was dipping back. We undid the two engine mount bolts, one on each side on the subframe pics below (holes through the subframe where you reach in with a 14mm socket and bar and remove) and then put a jack under the rear of the engine. The picture above is taken after jacking the engine up a bit.
With the nuts removed from the subframe side of the engine mounting brackets, we jacked the engine up from underneath as there wasn’t much clearance between the rear of the engine and the bulkhead.
Next up was removal of the front drive shafts. The passenger side is easy, just 6 nuts and bolts. These were extremely tight but a ring spanner and ratchet spanner had it sorted. I actually had to push on the ring spanner with my foot to get enough force behind it to crack the nuts off they were that tight.

The drivers side took us ages. First you have to remove the top bolt on the upper wishbone link arm and slide it out so that the front wheel assembly has some give, basically its enough to allow the shaft to come out. I had previously removed this driveshaft from an engine before but this was on a subframe not in the car. There isn’t much access when its in the car and I couldn’t get the driveshaft out, the angle/leverage was wrong. I then tried to undo the front diff cover as many have removed this by driving a wedge between the front diff/driveshaft to pop it out. Unfortunately, the diff cover bolts were so tight that the very top one couldn’t be undone with a ring spanner and there wasn’t enough space to get a socket on it. Finally after almost giving up for the day, we used 2 lever bars, one on each end of the driveshaft and it popped out very easily. There are about three grooves on the front driveshaft, I placed a bar on each side (pic below shows one side but the bar is in the same place on the opposite side), on the groove closest to the wheel as in pic, and levered the shaft out on both sides by levering simultaneously against the subframe (not the anti roll bar even
though it looks a little like that in the pic below). The shaft popped out with ease. With this released we pulled back on the hub/brake disc enough to allow us to fully withdraw the driveshaft hub from the diff so that it was clear of the engine for when we craned it up.

Finally we undid the two water pipes at the rear of the engine that go into the passenger compartment. One of these (the lower one) will leak out a fair bit of water when you remove it from the engine so make sure you have a litre or so sized container (Chinese takeaway containers are perfect). Note this pic was taken after the engine was out so it could be seen clearer.
After this it remains to go around the whole engine ensuring all connectors/pipes etc that go from the body to the engine are removed. Check this very carefully now and then again as you crane the engine up, do it slowly and keep checking everything is clear. At this point we also put the rear wheels on the deck and the front of the car on a lower set of axle stands to bring the height down for engine removal.

We then used the two Nissan jacking points (I had to order the engine lifting brackets, there are two of them one on the top front left of the engine and rear right). We attached the engine crane and lifted the engine clear out of the car. Job done.
Old engine is on the left on the pallet and the displaced engine from the Nur is on the stand eagerly awaiting its ancillaries.