## mort

Hi all

I am in the process of upgrading my turbo to a wastegated variety of the same as fitted to the 135Ti but modified to give a higher boost at this stage it is being built then I need to fit and test and make changes as or if needed. I will be in a position to get a few more built if anyone is interested in a brand new turbo either std wastegated or modifier however it is a one off offer and the price should be around \$600 + postage or you can pick up in Perth.

Let me know so I can tell my friend either via this post or PM

Martyn

# Paul Scherek

Hi Martyn, thank you, I definitely could be interested if I am not too late. But I am dumb on turbos - what are the benefits/handicaps of wastegate turbos? Will the new turbos be bolt-on replacements or will plumbing be needed? Thanks for making the offer, Cheers Paul

# Peter Davis

I too could be interested. Just need a little more info. Are they the same stud pattern, what size, model, water cooled, A/R ratio etc? Peter

# Supertramp

Sounds good mort would be interested, same as everyone else, alterations to existing inlet manifold and other plumbing? Thanks for the thread.

### mort

Hi All, The turbo will be direct bolt on same oil connections same exhaust. I have a friend who is a head mechanic for a racing team who is helping with sizing and testing so we might have to trial 2,3,4,combinations till we get one that is best not all boost at bottom and none at top or none at bottom and all at top but a reasonable spread and a max boost of around 16.

The reason for changing is I mounted an intercooler up front which meant 1.2mt piping to intercooler and same return however before I was getting max boost of 14 now max boost of 10 so the benifit of cooler denser air is lost by too much drop in boost and going to wastegate means you dont over boost as it can be set and in this

case set at 18.

Its not too late as we need to install test in operation and make changes as required etc and when we are happy get dyno then ready to place order. I am doing this for myself and it is no extra effort to order 1 or ten and if lucky it may bring the price down so why not pass the benefit on.

when I am ready to order which could be a few weeks I will let every one know so there is still time to confirm your orders

Mort

## Peter and Sandra OKA 374

374 has always pulled up around 17lb boost at full throttle, I have never done anything to it and I doubt the RAAF ever touched it either. Engine is totally stock, just the drivetrain that's been changed.

Being a longtime Landcruiser owner I was horrified at the boost and EGT levels when I first fitted the gauges but was reassured by a couple of Perkins engine specialists that my figures were fine, in the normal range and the engine could handle it.

## Ralley

!6psi is not that much for a factory turbo the 6bt in the dodge application is about 20psi, after a lot of research 35psi seems to be a safe limit for a daily driver with no internal mods, obviously with a different turbo. One would have to think the Perkins could take a bit. If it couldn't handle 17psi all day there would be a lot of dead OKA's out there. I know when i was still running the Perkins the foot was on the firewall most of the time.

When I upgraded the turbo in my Cruiser I spoke to a guy (who I ended up buying a turbo from) who was very quick to inform me that heat was a higher risk rather than boost and more boost in a well matched turbo means lower EGT's. With my new turbo with the same load my EGT's are about 100deg c lower than before with about double the boost so for example I went from about 6psi towing to about 13psi this combined with about 400rpm quicker spool up and 17psi max instead of 12psi what a weapon.

Rob

## bobrichards

Hi Mort, I am interested in one too.

# darren lilly

Hi, has there been any update on these mort

Hi Darren and everyone else I am onto the third prototype all going well just want to get the best I can.

If I was only doing for myself maybe I would stick with what I have so far but as so many have shown interest I want to get as best as possible. The issues are the 135TI turbo has a different size mounting to manifold, exhaust out to dump pipe and oil in and oil out so now we need to change the cartridge and turbine to suite the 110 existing fittings this will allow for a straight bolt on turbo with no adapters etc so now I wait till its ready then fit and test.

Martyn

## mort

OK just an update I have fitted the third turbo which took some time as I am aiming for not only performance but a straight bolt on I thought it would be easy with the huge number of Turbos out there but that is not the case.

The limitations were the exhaust in and out without the need for adapters or new dump pipe and that part was relatively easy but the hardest part was to fit without modifying the gear linkage so we had to design the wastegate and exhaust out housing send the design overseas to get it cast, machined and assembled so end result is its the only one in the world now its fine tuning which started today.

After all that effort I am not completely happy so its trying different turbine and compressor wheels till I get what makes me happy.

At least it will be much better than what is on there as it will de designed for the OKA and not a tractor or excavator.

Have patience

Martyn

# **Rick Whitworth**

### mort wrote:

The issues are the 135TI turbo has a different size mounting to manifold, exhaust out to dump pipe and oil in and oil

Martyn,

I have been looking at differences between 135TI and the 110 in the hope of an upgrade and came across this problem. Got too hard for me.

Are you considering intercooling?

Based on my experience with the 110 I think it would make a huge difference but the changes to the input volume and pressure need to be taken into account with the turbo specs and the injector pump settings.

You have put a lot of effort into developing a working solution. I would like to join the queue to purchase a unit when you have it sorted.

Rick

## fishing01

Martyn,

Add me to your list as well.

Regards, Geoff

### mort

Well I have some update re turbo with the last one the engineers asked me to do some tests for them which seemed easy enough all I had to do was drive and record the boost pressure, revs and what gear I was in and whether flat, hill, city or country also fuel usage well watching the road and gauges changing gear and writing down wasn't that easy I think surfing the net on my mobile phone is easier except its a big fine.

Anyway all sent to the engineers who got specs for the engine and original turbo and set up a test bench,6 weeks later they have all they need to design and build a whole new turbo production starts this week with completion due by the 20th then testing and ready for shipping by 27th so I should get it by early April.

On their report back to me they did comment that the problem with the original was the compression ratio as it was very low at 1.73

The reason for the road test was to see what is the rev range in normal use and design a turbo to suit

Its taken a bit of effort and cost but I will get there in the end.

#### Martyn

## Supertramp

Still very interested in this turbo up grade, let us know when you are going to order. Our mobile 0447 445622 not that up to speed with chatting to other OKA owners on this site one day will sit down and work it out. For now could you please call us. regards OKA 398

## Nobby

Hi Allabout,

I have been reading your post on turbos.. My 187 has a boost gauge, and at full noise gets to 10psi. The EGT gauge is still waiting for me to repair it.

It is also fitted with an intercooler, and the NP205 transfer case, and it can clip along at 110 kilos [GPS] effortlessly all day. My work vehicle [430] with a good engine and new turbo struggles to maintain 100 kilos, and would only do 110 kilos down a mine shaft with a tailwind..

Cheers, Nobby.

## OKABloke

Nobby Are you getting full Throttle travel in 430?

the two places to check are :

1/. At the pedal, over time the pedal bends and will bottom out on the floor, and an easy fix as it will bend back by hand

2/. Another common place is where the throttle cable attaches to the pump, the outer case can often slide, there is a locating ring on the cable to stop it from moving and is often not clamped in it's home position.

# Paul Scherek

Nobby, I have heard it said that the Rockwell transfer case fitted to the LT's sucks up a lot of power, and that might explain the difference in performance between your XT and the work LT.

# Outback Jack

The difference in speed can be several things.

Tyres Size Heat Getting full throttle Terrain Condition of engine etc.

My current OKA is good for running all day at 100 - 110 kph.

Other OKA's I have owned where flat out doing 80 or 90.

# Peter\_n\_Margaret

Half a turn on the fuel adjustment screw on the pump will give more fuel, more boost, more smoke, lots more power and higher EGT. What maximum EGT do people think reasonable?

#196 will cruise at 100kph with a max EGT under 500C and boost around 12+psi. I have run it with more fuel and max ECG 550C and boost up to 17psi. It produces lots more power at that.

Cheers,

## Dave and Pauline Gray

Peter

Below 500C shouldn't cause to many problems Peter I seem to recall that 612C was injector tip melt temp on a Mack engine I once owned and I would say that injector tip material would be much the same in all old type mechanical engines like the Perkins.

Fuel temperature also plays a big part so keep that below 60c, I would say its unlikely our Oka / Perkins would have a problem of that nature but a fuel cooler is quite easy to make and fit if required.

Cheers Dave

# Peter and Sandra OKA 374

374 runs about 17 psi boost at full whack, usually up around 15-16 since the auto was fitted as it swaps cogs much better than me ;-))

EGT's max out at 650 odd at about 100mm past the turbo if you make it lug too much, typical cruising temps are anywhere from mid 400's to mid 500's. On a recent long climb up Thunderbolts north of Gloucester on a high 30's day ad high humidity of

1st and 2nd gear for 11 k's it sat at around low 600's for most of the climb, I ended up turning the A/C off as the red temp warning light came on for the engine and the gauge kept getting up to the edge of the red as the fan cycled. Once the A/C was off it handled it easily engine temp wise.

The auto coolers are mounted in the front bashplate so while they would have put heat under the engine it wouldn't have effected it. Tranny temps cycled between 90 and 110 during the climb again as the cooling fans cut in and out.

I've done absolutely nothing to the engine so either the RAAF fiddled with it or it was that way from new. 374 has now clocked up around 140,000 kms, 70 in our ownership.

### mort

Hi Nobby and others who might be interested your power difference could be one or more causes firstly the T/case I wouldnt worry about and as a work vehicle I would prefer the rockwell so as a passenger vehicle it probably has a speed limiter do you need it well that is for you to answer.

worn or dirty injectors partially blocker fuel filter worn/maladjust accelerator cable air filter dirty exhaust blocked/restricted is there a considerable difference in weight between vehicles difference in tuning all are valid reasons for difference in power and or speed

Things I have done and all have given noticeable increase in power or performance

replaced baffled muffler with a free flow replaced air filter with larger replaced 70mm snorkle with 100mm replaced air intake cowl with larger matched ported intake and exhaust manifold installed large intercooler replaced water pump with electric replaced fan with electric

I am working on the turbo when turbo fitted will retune and have the injector pump pressure increased to 12 from 9

I hope this helps if you need more info just ring always happy to talk just dont like typing

#### Martyn 0414632270

### oztrax

Oka Pete, Are you referring to adjusting the max fuel screw ?

As per my other reply on "bolt on horsepower" other adjustments can be made to the boost compensator part of the VE fuel pump,

My research has shown EGTs should be kept below 600 degrees C, certainly for a sustained time.

Another option is to squirt water into inter cooler matrix with an old windshield washer pump and small garden spray jet, this will drop EGTs dramatically each time you spray water in,

Boost around 14 psi is what we aimed for on TDI 300 tuning, mine was 16 psi max, up from 10 or 11 psi was amazing performance increase.

Also remember Perkins turbo doesn't have a waste gate, this gives more boost ,power increase to lower/midrange than top end.

I believe that is why the Perkins has good low end torque. The top end boost peters out, and feels like the engine has run out of steam,

A compromise can be found on waste gate turbos by adjusting springs etc,

Regards OZ

### mort

### Hi Oz

I will assume you are referring to my post if not I was expecting someone to ask so... the factory setting for the pressure the fuel is delivered at is set at 9 which is ok but increasing the pressure not the amount has a result of a finer spray which means better mixture of fuel/air and a better detonation resulting in more efficient fuel economy and more power its a setting a lot of people dont consider.

Martyn

### oztrax

Thanks mort,

Exactly where is the adjustment you speak of ?

### On the side of injector pump?

### Oz

### mort

### Hi Oz

Personally I dont know a mate is going to do the adjustments as he is experienced thats why I have lots of people to call on so I dont have to do it (I hope they dont read this) but I did ask and it is in the front. After the turbo is done he will come over and set it up so I can find out exactly then Martyn

## catdav

Would be very interesting to know how this works to my understanding when you rebuild injectors you set them to crack at a certain pressure if you change the pressure delivered to the injectors without altering injectors I thought you would only alter the duration of injection could be good or bad depending on variables I could be wrong here though interesting

# Joseph Baz

### CATDAV wrote:

Would be very interesting to know how this works to my understanding when you rebuild injectors you set them to crack at a certain pressure if you change the pressure delivered to the injectors without altering injectors I thought you would only alter the duration of injection could be good or bad depending on variables I could be wrong here though interesting

You are right CatDav, mechanical injectors are built and rebuilt exactly like that. Cheers, Joe

# Peter and Sandra OKA 374

The other thing to think about is retaining the simplicity of the Oka, all the Perky or 6BT needs to operate is power to the stop solenoid to allow fuel into the engine, adding anything else to increase power can affect reliability and the ability to keep going in remote, rough country simply due to added things to go wrong. Must be why I fitted an auto ;-)))

### mort

An update on the turbo it has arrived a few days ago a bit latter than expected and as I am going out to the gold fields to find more cash to finance the OKA (maybe when I

paint I will go gold to reflect the true cost) anyway no time to install so it will have to wait till I get back.

It looks a good unit and all the work that went into it I am confident the performance will be what I am after, One figure the engineers sent is a compression ratio of original is 1.7 at 1100 rpm new 2 at 1100 rpm anyway I am away for 2 wks so not long now.

Martyn

### mort

Hi All

well I am back didnt find enough Gold to allow me to retire but had fun Latest Turbo fitted and Today went to get Dyno and injector pump adjusted so the result is

before Klm /hour 90 kilowatts 48 rpm 2500 boost 10 EGT 400 after Klm /hour 90 kilowatts 64 rpm 2500 boost 16 EGT 450 Not engine output but at the wheels No intercooler installed as I wanted as close to std

So my honest impression if the OKA performed like it does now when I got it I would have been thinking what is every one complaining about it is fast in all gears and in fact I was thinking on the way home I have to be careful as it could easily get me speeding tickets.

Speeding is not what I was after but just a more drivable vehicle on the road and boy have I achieved that.

Tomorrow I will take it on a long test drive and report back also try to scan the print out and post

If anyone thinks it cant be done your welcomed to take it for a drive especially if your thinking of spending big money on engine transplant you might want to think again.

Martyn

# Ralley

Is the before with the old turbo. Either way it would seam that it was really down of fuel based on the low EGT. Sounds like your really happy with results we'll done. I always thought if I wasn't towing a similar increase would have been good. It would be hard for me to go back now.

Peter and Sandra OKA 374

200+ at the rear wheels sounds much better, never mind Steve B's 360 odd, plus the sound, the sound, we could hear it climbing the hill at Nymboida for quite a while after he left camp;-))))

The Perky is fine outback in flat country but over here on the eastern seaboard we have to cross the range and climb hills every time we head in any direction and it becomes a tiring exercise rowing through the gears. Fitting the auto to the Perky made a massive difference to how it drove as it just got on boost and held it up through the gears but even highway running still saw us being overtaken by laden B doubles, chuck in a hill and everything passed us including the caravannner that sat on 85kph up hill and down dale.

So now the 6BT is in, just have to hook everything up!

# Peter Davis

#### Hi Martyn

So that is a jump from 64 Hp to 86 Hp, I assume in 4th gear. Be interested to hear what its like at 100kph in 5th, EGT that is.

## Frank

I took Martyn up on his offer and took his Oka for a run on Roe Hwy and up Kalamunda Hill today. The speed limit was the restricting factor for me (100 and 70 kph respectively). It accelerates and drives well (I had driven it previously a couple of weeks ago prior to the latest turbo and dyno tune).

He is still to reconnect his intercooler, so it will be interesting to see what difference that makes wrt hp.

Martyn's Oka is very quiet, the soundproofing of engine noise is impressive. It is a background noise and no more, even at 2500 RPM.

Wind the window down and you can hear the turbo whistle from the air intake. I also checked his tacho (it reads low but is within 50-100 RPM across the whole rev range), because I didn't believe an Oka could be that quiet at those RPMs.

A lot nicer vehicle to drive than mine, particularly in traffic, accelerates very well, feels like an automatic, just leave it in 3rd gear. Time to start working on air inlet, exhaust and soundproofing on mine i think.

cheers, Frank

darren lilly

Hi Mort when would you be looking into taking orders. Think this will make a lot of people happy, I couldnt justify spending \$40,000 on a conversion. Thanks heaps for your effort.

# Peter334

Mort I think when I had the perky in ours after tunning with new turbo I got I think in the 60 kw which was great it pulled better then the auto went on and there was a major difference went even better motor ran smother and a lot quieter , so your 48kw = 64.3690603 hp ,64kw =85.8254137 hp , is that at the rear wheels and 75 kw =100.576657 hp so 200 hp at the rear might be stretching it a bit for the perky.

# Rick Whitworth

### mort wrote:

I just spent an hour typing only to be told your session has timed out Martyn

doh!! I hate that!

.. but don't be discouraged, keep typing Martyn. I have a fully reconditioned stock standard Perk 110 (done only 60000 kms) runs reliably all day and climbs vertical walls when asked.

For some time have been looking at options to *upgrade* it to 135 status to improve highway driving.

Very, very interested in all details and willing to support your progress.

cheers

Rick

PS ignore the DARK SIDE ... no choice for me anyway unless I win the lottery ... but that's a different blog

## mort

Try again

After leaving frank in the morning I was going home but decided to keep driving as it was more fun than usual.

There doesn't appear to be any turbo lag I change gear and get a smooth acceleration.

Going up hills well more like bumps really but over in the west we do have hills maybe not as many as over in the east Kalamunda hill is a long hill that every thing slows and at the bottom is road works and speed of 40 a prime mover (not ladened B double) passed me but I did catch up and eventually passed him, by the time I got near the top changed into 3rd and accelerated away, I use that hill as a regular test and never have I been able to do more than hold my speed.

Ralley had stated that I appear happy with the result well....BIG YES The engine and turbo still have a lot more to give yet, I had contacted Perkins not long after getting the OKA and asked what would be the max boost be,as my computer had crashed and no back ups so from memory reply was 20 no problem and without knowing the condition of engine wont state any more.Since then I have a full Phaser manual and of all the 24 turbos fitted to the Phaser the lowest waste gate pressure is 13.9 highest is 21.8 so I picked 16 as as a low starting point.

The 135Ti is the same engine as 110 different turbo and intercooled water to air using engine coolant.

the phaser is a good strong engine however in my case I dont know how it was used or abused so start low and I can allways work up.

Rick in your case you have a good engine you know the history so you could put on this Turbo and set it for 18 or 20 and have no problems except how to wipe the smile off your face.

why go this route? well when I got the OKA some 3yrs ago driving home first thought what a gutless pig of a thing it needs a new engine but as the miles rolled on half the problem is it just isnt breathing well so first job was work on the air in then exhaust well all black smoke gone and it ran better.

I was now encouraged to see how far I could take this before engine transplant, the funny thing is the more I did the less I wanted to change engines and really the turbo was the last thing to do and if no good result I would give up and work towards a transplant.

My main sticking point to a transplant is the cost, I can afford it but I cant justify the cost and there is many others who are in the same position or want some thing better but cant afford or dont have the knowledge or contacts I do so when I started this topic 18 odd people put up there hands and said I will be interested if you can do it. I started with the Turbo from the 135Ti but it didnt fit without changing the exhaust manifold, dump pipe and gear linkage so we set to building one ourselves but the sticking point was gear linkage and giving an even boost so got engineers involved and the result after 6 attempts is what I have.

A Turbo that bolts straight on you dont have to be an engineer, fabricator or mechanic but I would strongly suggest upgrading your exhaust, filter and snorkel (simple job can do yourself) and most important get dyno and fuel pump set to suit its not as simple as adjusting fuel till you get smoke.

I dont know price yet because I havnt got a reply but it will be somewhere close to the what I quoted in the beginning (\$600) + a bit more as these are a one off Turbo not off the shelf and need to be made as a special order.... am I making money out of this Yes I wanted a Turbo United Diesel quoted \$1800 + with no guarantees and gear linkage needed moving I have funded this exercise and it wasnt cheap so if I get all

my money back I am happy if I get some back and it cost me \$1000 I am still way in front as I have a better Turbo and saved \$800.

From placing order to packed ready for shipping 20 days.

As soon as I hear back from factory I will let you know price and anyone interested can place order.

#### BAD NEWS

Frank wants a Turbo I have an LT he has an XT he asked if it will fit in his silly me said why not he said but its different so I had a look and took measurements no it wont.

All measurements are based on an LT and the space available so unless you have auto, cable shifter or willing to modify gear linkage if there are the numbers I will have to get the factory to modify this Turbo to suite so let me know if you want one and we will see what the numbers are.

Martyn

# 210greg

Have been following with great interest if it helps keep the DARK SIDE at bay all good. 210 has 440K on the clock still running well would I be pushing my luck to think of this upgrade.

## Greg

## darren lilly

any idea on shipping cost to east coast (newcastle)

## darren lilly

Mort do you know how it will go towing a car trailer with a cj jeep on it

# **Rick Whitworth**

#### Martyn

The XT version will incur extra cost, but if it is reasonable amount I am willing to join forces with Frank and others to reduce overhead. Your aim for direct bolt on is huge advantage.

In my own investigations, XT linkage space was issue with not enough room for suitable Garret waste gated turbos.

Of course the extra plumbing around the gear linkages for an intercooler (which is a must to compliment the waste gate) is also a consideration.

Given the work that you already have had done and the the \$\$ figures you mention seems to be well worth a try Rick

## mort

I have had a number of questions both on the open forum and P/Ms so I will try to answer here or if you are genuine and not just wanting info for curiosity sake I find it easier to talk direct so my mobile is 0414632270 I will welcome your call.

This isnt in the order that I received them or exactly how it was framed.

Will fitting new Turbo be better for towing...will I go faster...on my own OKA I got roughly 30% increase in power at wheels so yes your ability to tow is 30% greater. 30% can mean more power to get up to speed faster or hold the speed your doing longer but not more or greater speed in other words your top speed in whatever gear your in is your top speed.

Will I need to change gear as often...Frank took it for a drive the other day he said it drove like an auto well I haven't asked what he meant yet but he also said driving around the suburban streets he put it in 3rd and left it there. I found that it builds up speed quicker so gear changes going up could be closer together than before but say going up a hill where you had to change down now 5th will get you over.

I came back from Northern to Perth good road and hills and only changed into 4th twice until I came into built up areas.

I have an engine that has done 400,000 am I pushing my luck...The engine was built and came with a combination of Turbos up a boost of 21 so if you have the same Turbo I had which only gave me at best was 14 on my gauge then all this time the engine has been working well under powered the real question you need to ask is what condition is my engine in and I cant answer that. eg is it on its last legs and only have 10,000 klm left so put on Turbo thrash the shit out of it and destroy it in 1,000 klm do you blame the Turbo, if like Rick new engine serviced well driven like an old grandma would dont even think put it on and enjoy. only you know your engine is it in good condition is there a lot of life still but dont forget if OKA didnt want to pinch pennies or had the options your engine could have had a better Turbo producing a boost of 20 from day one and still done 500,000 klm.

What up grades do I need to do ...as stated in an earlier post get rid of baffled muffler, increase air filter and snorkel if you really want match port exhaust and inlet manifold and put on a suitable intercooler. whether you change Turbo or not do it.

### mort

#### Back to questions

If I put an auto in will it be suitable...not much to say except YES better than you have now.

How much will it cost for Turbo and intercooler, filter, and exhaust mods....if you do the work yourself and source all the parts on line (EBay etc) plus dyno between \$1,500 and \$2,000

Is it really worth the cost...well that is an answer only you can give but let me ask at a boost of 16 I got an increase of say 30% at say a boost of 18 say 35% or boost of 20 say 40% increase of power if that is not worth less than \$2,000 then you cannot be pleased.

For the XT owners we now have a Turbo that will all that is needed so no need to change the Turbo itself its the wastegate actuator and wastegate itself that doesnt clear the gear linkage. the actuator can be mounted on the bottom of the Turbo and the wastegate arm needs to be turned upside-down easy enough, the factory initially wants minimum order of 20 but they may agree to say 15 of one and 5 of the other I wont know till I place numbers in front of them.

Martyn

# dandjcr

Martyn you've done a lot of good work and I'm teetering on the brink as well. My engine is pretty solid (no oil or water use and overhauled injector pump) but the XT complication is a concern.

Of the goodies on your list, I have at least upgraded to a straight though muffler (available in Adelaide here or on line). Lots of use full stuff there too and not expensive.

I would be more enthused except the "jc" part of dandjcr is off to hospital for a serious operation in a couple of weeks so we've had to abandon any trips or major upgrades for this year.

Keep up the good work.

David

OKADOC

Hi all , FYI Google. "cost effective maintenance " and have a captain cook at what's on offer, anyone with an engine that's knocked up above 300.000 ks will be knocked out by the outcome of these products, we certainly have been over the last 3 years with our fleet and 90 % of other users also, if the engines shagged only a rebuild will revive it but if it's just crud build up its very cost effective. It will certainly reveal the state of your engine with little effort and cost and allow dicisions on turbo upgrades and the like. Cheers all

# Ewart and Vivian Halford

Hi Martyn sound good, were did you get it tuned and dyno'd Cheers

### mort

Ewart I used Fremantle Fuel Injection I had heard some bad reports about united and A1 weren't interested in an OKA so asked around and never got one bad report. When I rang they told me they were very familiar with OKAs when I picked it up the technician didnt want to give the keys back as he loves them.

Fremantle Fuel Injection 27 Strang Crt South Fremantle Ph 93354803

I have used "Cost Effective Maintenance" in particular the oil flush after about 3,000 Klm the oil is still clean

Martyn mort

I have heard back from the factory re prices and the factory manager is looking into the alterations to suit the XT

The price includes fabrication, balancing, testing, packaging and shipping to Perth. 100...\$600.00 each 50....\$650.00 each 30....\$700.00 each 20....\$775.00 each 10....\$900.00 each They will not consider an order less than 10

The only other cost is shipping out of Perth, I have been to the post office who has indicated a price of \$25-\$30 post Australia wide.

Payment is to be 50% on placing order and balance to be paid on delivery to DHL depot in Perth and before I can collect, so payment terms will be no less for anyone

who wants one than what I have to make.

You now all have the info so let me know if you want one and once I have the numbers I will contact re the final price and method of payment. My email address is simple martynswift@iinet.net.au or use P/M

## Martyn Rick Whitworth

#### Martyn,

If they come up with a workable XT version would hope that prices are extendable. Guess it depends on the production process and how diferent they are.

E.g would an order for 10 LTs plus 10 XTs still qualify for total 20 ie \$775 unit price :)

...Just optimistic thinkin ahead for interested XT and LT owners Rick

# Paul Scherek

I am thinking of going six cylinder Perkins and the gear shift mechanism of the XT gets in the way. I am planning to fabricate a cable shifter to solve that problem, and it should also solve the problem with the waste-gate turbo fitment to XT's.

I am hoping it will also result in a crisper gear change feel. Lloyd has one, and it is excellent, much better than stock.

### mort

Hi Paul

Its timely that you bring up this subject as there is a couple of guys here who are looking into cable shift as an alternativ

e and although I dont need one I would like one.

It might an idea to start a seperate post to canvas ideas and numbers I would certainly be interested.

### Martyn

### mort

### Hi Rick

I have heard back from the factory manager he doesn't think it is practical to alter this Turbo and will have to cast a new exhaust housing to suit so he wants me to take photos of the XT and LT top side and bottom so he can see what clearances the XT has and difference to LT I will do that tomorrow and wait for reply. The price is based on numbers not model 10 of each would qualify as 20 the funny thing is there are more XT owners wanting Turbos than LT (just having a laugh) maybe LT owners think they have a superior vehicle and dont need one.

Martyn

## Paul Scherek

#### mort wrote:

Hi Paul Its timely that you bring up this subject as there is a couple of guys here who are looking into cable shift as an alternative and although I dont need one I would like one. It might an idea to start a seperate post to canvas ideas and numbers I would certainly be interested.

Martyn

#### Hi Martyn,

I have looked at ready-made after-market units and they are all too big for the application. There may be a suitable mechanism from a truck at a wreckers, I will investigate. I will be away for the next two weeks, but as soon as I return I will begin the hunt or fabricate one myself. Cables can be made to order in Australia so it shouldn't be too difficult.

## **Rick Whitworth**

#### mort wrote:

I have heard back from the factory manager he doesn't think it is practical to alter this Turbo and will have to cast a new exhaust housing to suit so he wants me to take photos of the XT and LT top side and bottom so he can see what clearances the XT has and difference to LT

### Thanks Martyn,

that's good news, further supports your plan for bolt on turbo purpose built to suit the Perkins 110. This will extend to all OKAs.

(Cable shift would be great but adds another level of complexity. ..My standard gearshift has settled in and is working well. Would prefer it was a separate consideration)

## outyonda

refer to O what a feeling, gears

gate & cables available, g/box selector is problem

it was an OKA special & was binned in one of there hiccup's

# dandjcr

### mort wrote:

Hi Rick

I have heard back from the factory manager he doesn't think it is practical to alter this Turbo and will have to cast a new exhaust housing to suit so he wants me to take photos of the XT and LT top side and bottom so he can see what clearances the XT has and difference to LT I will do that tomorrow and wait for reply. Martyn

Martyn, count me in for an XT upgrade.

I'm sure our collective knowledge and competence will sort out whatever XT problems arise.

David

# 210greg

Yes I think I am willing to take a punt so count me in for XT Martyn

# **Rick Whitworth**

Martyn, I sent 3 emails with total of 16 photos of my XT turbo. Let me know if there are any problems or if you need more

Rick

# Peter Davis

Hi Martyn

Out of curiousity, are the turbos all the same or is the A/R ratio variable depending on the amount of boost required or is the maximum boost capped by the waste gate. Is it water cooled as well?

Peter

Dean and Kaye Howells

Well done Martyn. Hopefully you're about to get a return for your doggedness and perseverance in pursuing this goal. Time, effort and money aside should this all come together you will have done a great service for all us OKA owners.

On another note, I drove a cable shift LT OKA several years ago and its gear change

was silk smooth, I couldn't believe it was the same gearbox as in #413. Whilst I have heard some negative reports of this system I can only comment on what I found. I was very impressed and would gladly install one in #413 if there's one for sale somewhere :).

Deano & Kaye :)

### mort

Rick photos received and sending them off Martyn

## mort

Peter the Turbo was designed to achieved 20 +. The boost is not achieved by the Turbo alone it requires Turbo, injector pump, injectors, inter-cooler, air in and exhaust out all working together if one or more are not functioning correctly or not suitable then however you try you wont get the boost you want having said that the waste can be set to bleed off as you want so set it for 18 and boost of 18 achieved the waste-gate opens and exhaust starts to bypasses Turbo so you dont over boost.

All Turbos are the same however the A/R ratio can be changed if you require but as these were specificly designed for the OKA and the space available new moulds made cast and machined etc it would be a big job to change the ratio now. I hope this answers your question.

Martyn

## **Peter Davis**

Yes. Earlier posts were talking about turbo pressures and age of motor hence my query. I assume it isn't water cooled.

I have a LT with about 400k on the clock and are keen for one. How do we pay the 50% deposit? The cable gear change also interests me.

## Ralley

Even if the waste gate is set to 18psi you can put a bleed valve in the waste gate pressure hose and get more boost if you can get enough fuel.

### mort

Peter no it is not water cooled for a few reasons available space however get cable and it frees up a whole lot of space. Payment will be via bank deposit which I will pass details to each of you when I have final numbers as this will determine final price.

Martyn

## mort

Hi Dean The secret is to know when to give up and believe me I nearly did, if this one didnt give what I wanted I would have been so pissed off.

The cable shifter was not something I was looking at someone else is though. I will probably get involved but I have to ask myself is the cost,need or desire worth the effort.

As you know I have not done anything about body work its been about mechanical and drive-ability and comfort, get me there and get me home so next project is body. Who knows I have been toying with the idea of 6 speed G/box