

Chargecoolers, Barrel type.

Posted by slipsliderg - 2010/10/24 23:13

I am looking at charge cooler setups at the moment (spured on by Frank's photo)

<http://i954.photobucket.com/albums/ae24/theblackmushroom/DSC00760.jpg>

What I am looking for is any experience people may have or not had with them.

I like the setup in the picture more than the GT4 setup as it is tidy and compact.

Is water the best fluid to use in them, can anything else be used. Not looking for ice buckets though.

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Re:Chargecoolers, Barrel type.

Posted by Spidey - 2010/10/25 09:51

Above setup looks great - only reason I went for st205 CC was because it was basically bolt-on.

Is that a custom one-off intake manifold in the pic ? Aside from that, the rest of the piping is straight forward.

On a Gen3, there is a fair bit to move if you want to position the core in the same location as in the pic.

Decent amount of work to get that setup - but well worth it. Less piping than a boot mount, not over the engine like the st205cc - looks to be an ideal location :yes:

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Re:Chargecoolers, Barrel type.

Posted by ricky2 - 2010/10/25 19:37

http://www.thor-racing.co.uk/Charge_Coolers-291.asp

I knew I seen then before Rogue do a setup as well

<http://www.roguemotorsport.com/forms/Product.aspx?ID=398>

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Re:Chargecoolers, Barrel type.

Posted by slipsliderg - 2010/10/25 22:44

I was looking at the Thor kits, but the Rogue one looks nice, wonder if anybody is using it and what it preforms like.

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Re:Chargecoolers, Barrel type.

Posted by Quandry - 2010/10/26 08:37

slipslidery wrote:

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It looks like the same one that MANDALAY is using. The core itself is made by PWR.

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Re:Chargecoolers, Barrel type.

Posted by Spidey - 2010/10/26 08:44

In the Thor kit, it says "The system requires no ambient airflow". So, no rad to cool the liquid ???

Unless you have someone to fab up the pipework, Rogue seems the best bet.

I got my chargecooler pump from www.chargecooler.co.uk - can't get into the site at the mo, but they had barrell chargecoolers as well. But I think they were just the cores and not kits for specific cars.

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Re:Chargecoolers, Barrel type.

Posted by ricky2 - 2010/10/26 10:13

Spidey wrote:

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I got my chargecooler pump from www.chargecooler.co.uk - can't get into the site at the mo, but they had barrell chargecoolers as well. But I think they were just the cores and not kits for specific cars. If you buy the kit you get a rad and pump with it

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Re:Chargecoolers, Barrel type.

Posted by Spidey - 2010/10/27 09:18

Are you set on a Gen3 head ? Because if not, there is a side-feed RMR for sale on IMOC. Would be perfect for that Barrell CC setup.

<http://www.imoc.co.uk/forums/viewtopic.php?t=141869&highlight=>

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Re:Chargecoolers, Barrel type.

Posted by slipslidge - 2010/10/28 04:33

Thanks for all the info lads. I am set on a Rev III head, it is next on my list to buy.

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Re:Chargecoolers, Barrel type.

Posted by Quandry - 2010/11/07 20:46

Here's the ST205cc look for interest..

http://mr2.ie/mr2/meets/nov2010/IMG_0840.JPG

http://mr2.ie/mr2/meets/nov2010/IMG_0841.JPG

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Re:Chargecoolers, Barrel type.

Posted by slipslidge - 2011/01/19 21:16

slipslidge wrote:

<http://i954.photobucket.com/albums/ae24/theblackmushroom/DSC00760.jpg>

I am still stuck on the idea of getting this arrangement on my 3SGTE build, however the chargecooler above is only rated to a certain horsepower.

So my thinking is; do this type of intake and chargecooler arrangement with some water injection to add to the cooling.

Question to those that know, is it possible to put a single injector into the inlet plenum or where is best to install this type of arrangement.

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Re:Chargecoolers, Barrel type.

Posted by Quandry - 2011/01/19 21:58

You need it upstream a bit so that the water/meth mix atomises better in to the intake charge. Some people inject it before the turbo, however that is apparently a controversial topic and so there's supporters on both sides of the fence. If you inject it before the intercooler, I think it makes the intercooler work more efficiently, however there's a possibility of pooling at the end of boost (or I could be just imagining that :)) I think Mark239 is using water injection so maybe he'll chime in with some real world experience.

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Re:Chargecoolers, Barrel type.

Posted by slipsliderg - 2011/01/19 22:05

I was thinking of tapping into the inlet plenum with maybe two injectors, I think putting it near the turbo or pre chargecooler would expose the mist to temp changes which may effect the droplet size and the function of the mist.

I do think it would be a neat solution instead of the big booth mount type or ST205 type, more research needed B)

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Re:Chargecoolers, Barrel type.

Posted by Spidey - 2011/01/20 08:57

Would you not just go with a bigger core ?

the 6" x 6" is rated to flow 920cfm and 525hp.

How are you going to go about the piping ? If you stick with the rev3 throttle body position, it looks like it will be tight to fit the piping.

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Re:Chargecoolers, Barrel type.

Posted by slipsliderg - 2011/01/20 09:34

I think with the finished engine bay I am looking for the larger core doesn't work for me. That is why I am looking to supplement a midsize barrell cooler with the WI.

It is my intention to get a left handed intake manifold mated to the Rev III head, like in the photo but with a custom intake, so that will allow the space for the WI nozzles I think.

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Re:Chargecoolers, Barrel type.

Posted by Spidey - 2011/01/20 10:50

slipsliderg wrote:

I think with the finished engine bay I am looking for the larger core doesn't work for me. That is why I am looking to supplement a midsize barrell cooler with the WI.

It is my intention to get a left handed intake manifold mated to the Rev III head, like in the photo but with

a custom intake, so that will allow the space for the WI nozzles I think.

Good bit of custom work ! I think RMR planned to do a gen3 intake manifold but it was canned :(

You might be surprised at the size of the CC core.

The pic you posted looks like it is the 10" x 5" (if it is the PWR core) ? If so, that core is rated to 720cfm and 450hp.

The one rated to 920cfm and 525hp is only 6" x 6". So, you're looking for a core smaller than that ?

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Re:Chargecoolers, Barrel type.

Posted by Spidey - 2011/01/21 13:01

Some good W2A products on this site - has WI kits as well

Link to FrozenBoost

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Re:Chargecoolers, Barrel type.

Posted by Spidey - 2011/05/29 09:10

slipsliderg wrote:

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I just found out that the ST215/Caldina intake manifold is a side-feed and bolts up to the stock gen3 head :)

http://emspowered.com/images/forsale/mr2/IMG_2920.JPG

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Re:Chargecoolers, Barrel type.

Posted by dan_ep82 - 2011/05/29 11:21

Sorry for a bit off topic, but do you not have an N/A slip?

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Re:Chargecoolers, Barrel type.

Posted by slipsliderg - 2011/05/29 12:08

dan_ep82 wrote:

Sorry for a bit off topic, but do you not have an N/A slip?

I currently have a Rev III N/A engine in my N/A, (Staying as is)

A V6 engine in my Mrk I, (To be completely sorted out for 2013)

A complete V6 engine & gearbox, (must get around to selling this)

A RevII turbo engine and rev III tubby gearbox. (which is a project engine, may need to find a car for this?)

I have a problem me thinks :woohoo: :woohoo:

No seriously I do!

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Re:Chargecoolers, Barrel type.

Posted by dan_ep82 - 2011/05/29 12:52

Haha, very nice

Care to lend me the ct20b :D

Any pictures of your collection?

And I'll back out of the thread now lol

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Re:Chargecoolers, Barrel type.

Posted by slipsliderg - 2011/05/29 13:37

dan_ep82 wrote:

Care to lend me the ct20b :D

Don't have one yet, but probably getting something slightly bigger than the CT20B.

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Re: Chargecoolers, Barrel type.

Posted by dan - 2011/05/29 16:14

Interesting thread. Greeny over on IMOC had a pretty large core up for sale recently. Was able to mount over by the air intake and looked very neat.

<http://i62.photobucket.com/albums/h82/randerson8/Cars/HondaswithheartandCorvetteShows033.jpg>

I'm thinking myself of reversing the inlet and going boot mount. I won't be needing my boot really so I don't mind butchering it. Seems to be the best option for large power as well so I'll have an element of future proofing on the cooling side.

Was looking in to water/meth injection as well. Haven't really read into it much yet but it's definitely something I'd be interested in.

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Re: Chargecoolers, Barrel type.

Posted by Quandry - 2011/05/29 16:28

If I was going bigger turbo again, that's the setup I would put in with the CC in the top left corner. Really liking that look a lot!

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Re: Chargecoolers, Barrel type.

Posted by dan - 2011/05/29 16:30

Actually the more I read about it the more I'm thinking the same thing Geoff! Could be a much simpler option than cutting through the bulkhead and floorpan in my boot!

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Re: Chargecoolers, Barrel type.

Posted by dan - 2011/05/29 16:46

I'm wondering if this is the size that would fit. I'm at work now until late tonight so won't be able to measure it but looks like it could fit.

Link

It's 12" wide, 12.25" deep and 4.5" thick. The one for sale over on IMOC was 10.5"x9"x4.75" not including the endtanks.

It's good for about 600hp/700CFM and is only \$149 for the core. Pipework seems cheap on that site, delivery would be about \$100 or so but I can imagine getting a very good package for not much money. Will definitely have to look into this more!

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Re: Chargecoolers, Barrel type.

Posted by Quandry - 2011/05/29 16:47

You need more parts to make it work, pump, heat exchanger, hoses etc etc, however it's certainly a valid choice in the intercooling options for MR2's.

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Re: Chargecoolers, Barrel type.

Posted by dan - 2011/05/29 16:52

Yea I know, I was including those in my thoughts but didn't post them up as I was being a bit lazy :laugh:

Heat exchangers can be bought from that site as well or else from a local scrap yard if oyu want to use on of the Fiat Cinq rads. The pumps can be bought on there also or you could use an ST205, Craig Davis, etc.

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Re: Chargecoolers, Barrel type.

Posted by Spidey - 2011/05/29 17:53

dan wrote:

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I'm thinking myself of reversing the inlet and going boot mount. I won't be needing my boot really so I don't mind butchering it. Seems to be the best option for large power as well so I'll have an element of future proofing on the cooling side.

Was looking in to water/meth injection as well. Haven't really read into it much yet but it's definitely something I'd be interested in.

Wow - how did the air intake fit under it ?? Suppose he used a few bends to lower the height of the intake ?

the good thing about some of the pipework for these is that you can buy a lot of the angles and connectors and keep fab work/welding/cost to a minimum :)

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Re: Chargecoolers, Barrel type.

Posted by dan - 2011/05/29 21:58

Was looking at a thread over on the US site and noticed what I think is Franks MR2? Could be wrong but he's the guy doing the wire tuck anyway.

From this picture you can see there's a lot of free space where the fuse box, etc used to be. I was thinking it might be possible to mount some sort of charge cooler over there? Would be a good location if you got your hands on a side feed inlet manifold.

<http://i954.photobucket.com/albums/ae24/theblackmushroom/DSC01984.jpg>

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Re: Chargecoolers, Barrel type.

Posted by Spidey - 2011/05/30 08:47

@Dan - are you doing a wire-tuck anyway ?

@slipslide - sorry for hijacking your thread ! Hopefully some of our waffle might come in useful B)

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Re: Chargecoolers, Barrel type.

Posted by dan - 2011/05/30 11:04

I was thinking about it. Might as well when I'll have the engine out anyway. Should make it that bit easier!

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Re: Chargecoolers, Barrel type.

Posted by dan - 2011/06/18 22:25

Here's another pic I nabbed from IMOC. Was thinking this would be a good place to mount it.

<http://i74.photobucket.com/albums/i268/team3s/dan3.jpg>

Obviously it would be depending on turbo location - top mount, etc. But does look good!

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Re: Chargecoolers, Barrel type.

Posted by slipsliderg - 2011/06/19 10:43

It is certainly the looks the shortest run for a charge cooler, bar the ST205 version.

Bit of a bugger to change or clean the air filter though.

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Re: Chargecoolers, Barrel type.

Posted by dan - 2011/06/19 16:36

Get a Blitz metal type one! Doesn't have to come off to clean.

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Re: Chargecoolers, Barrel type.

Posted by Spidey - 2011/11/15 11:24

Just came across this from MR2oc. I am really getting to like this Caldina intake :)

http://i186.photobucket.com/albums/x251/jaxmr2s/IMG_1493.jpg

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