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[FoFH Day](#)

[Newark 07](#)

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[Local History](#)

[Tractors](#)

[FE35](#)

[TEF-20](#)

[Implements](#)

[Plough](#)

[Cordwood Saw](#)

[Mower](#)

[Crane](#)

[Accessories](#)

[Lighting](#)

[Spanner](#)

[Pulley](#)

[Dual Wheels](#)

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...and from somewhere I'd got it into my head the crazy notion I wanted to buy a tractor.
claire said "why don't you buy one of those little grey fergies?" and the rest is history.

Any comments or feedback on the site then please get in touch

tim@ploughmyfield.co.uk



Keep up to date with [Roy's TE-D20 restoration HERE](#)

Diary

More Parts Arrive

(01/11/2008]

Now with only 2 months to go until the end of the year and the unofficial deadline I have set myself to have the tractor back assembled.

On Friday I picked up the head from The engine remanufacturing centre in Leeds. They have done a fantastic job.

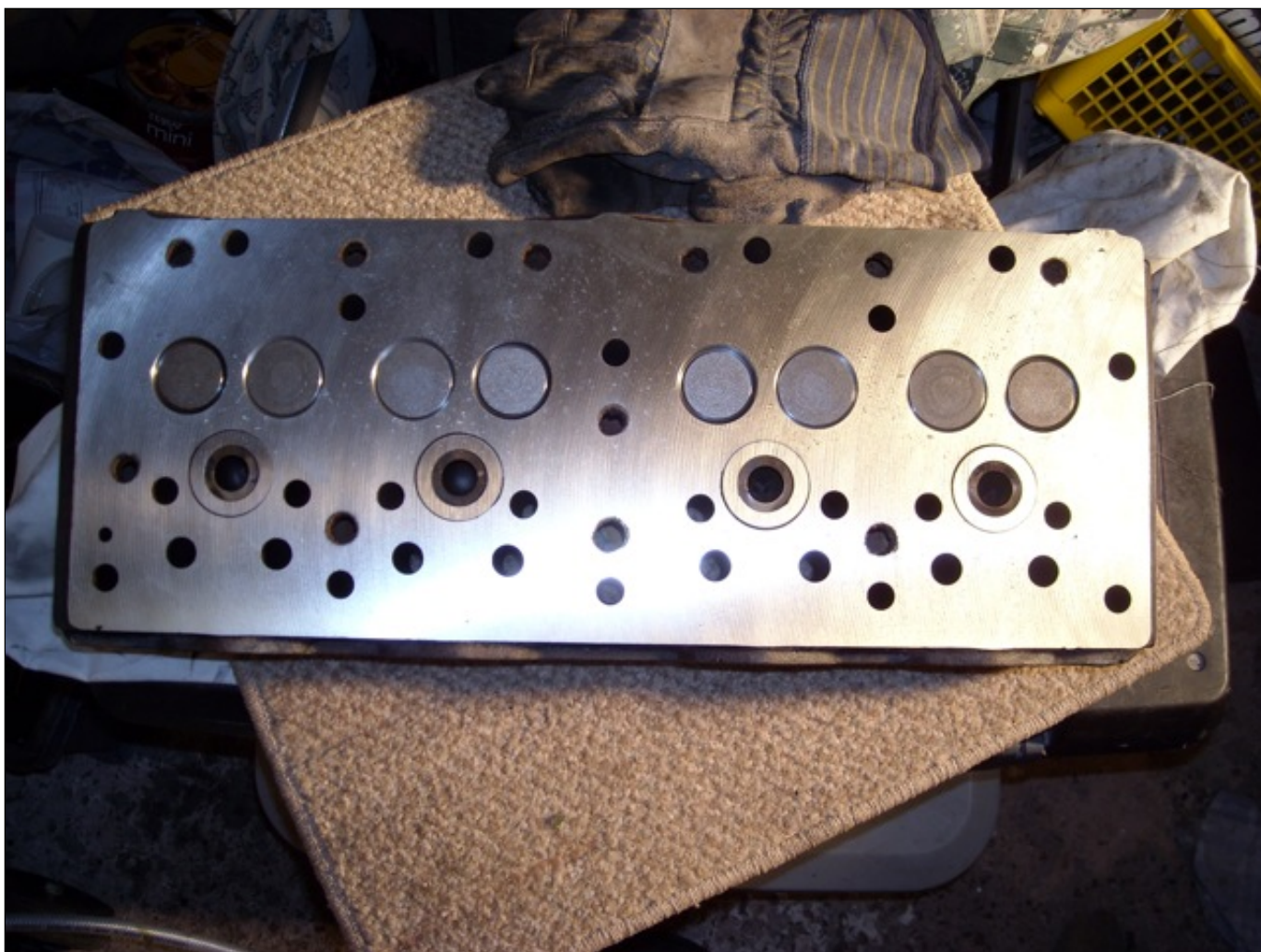
Skimming the head and seating the valves.



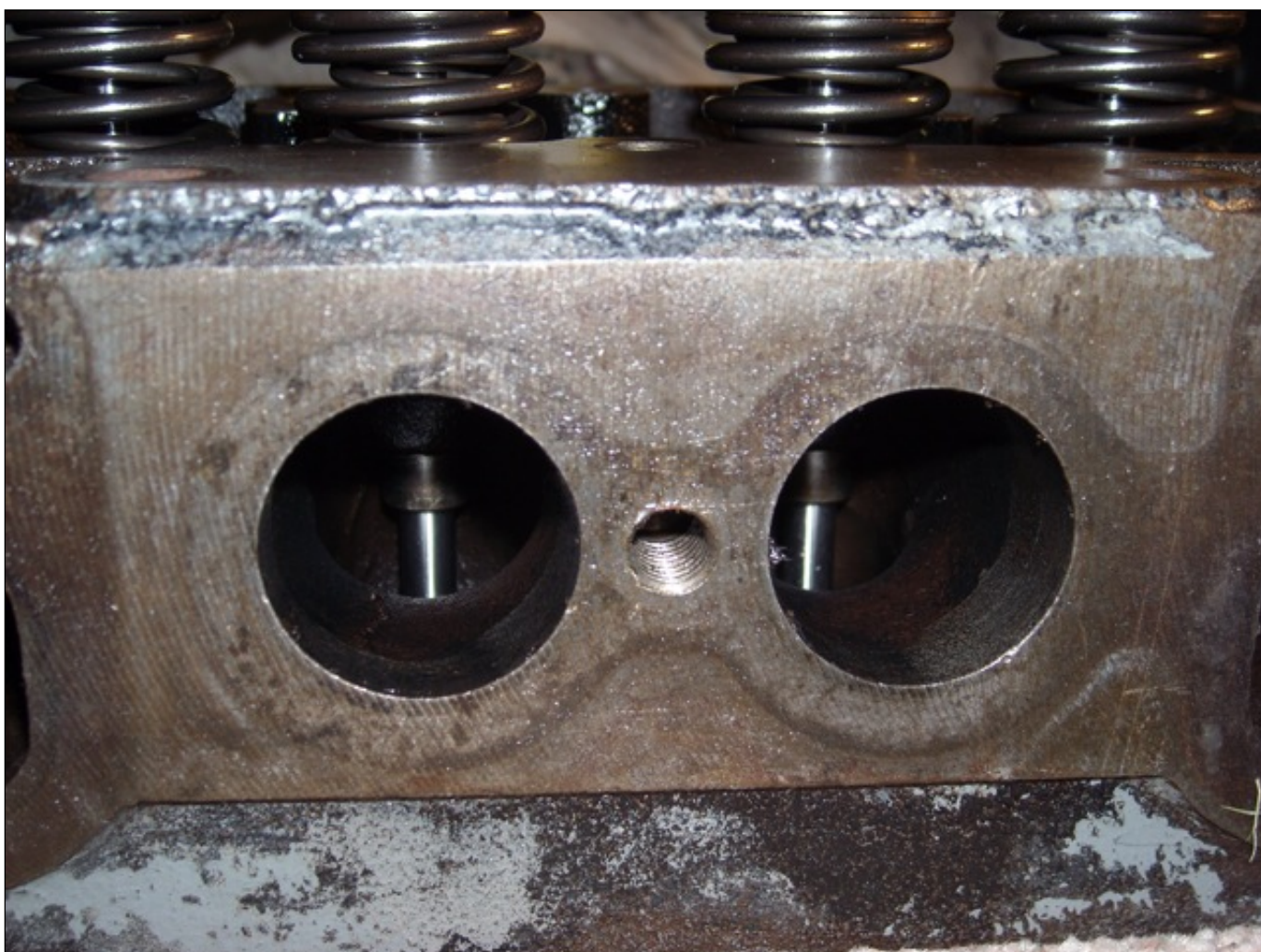
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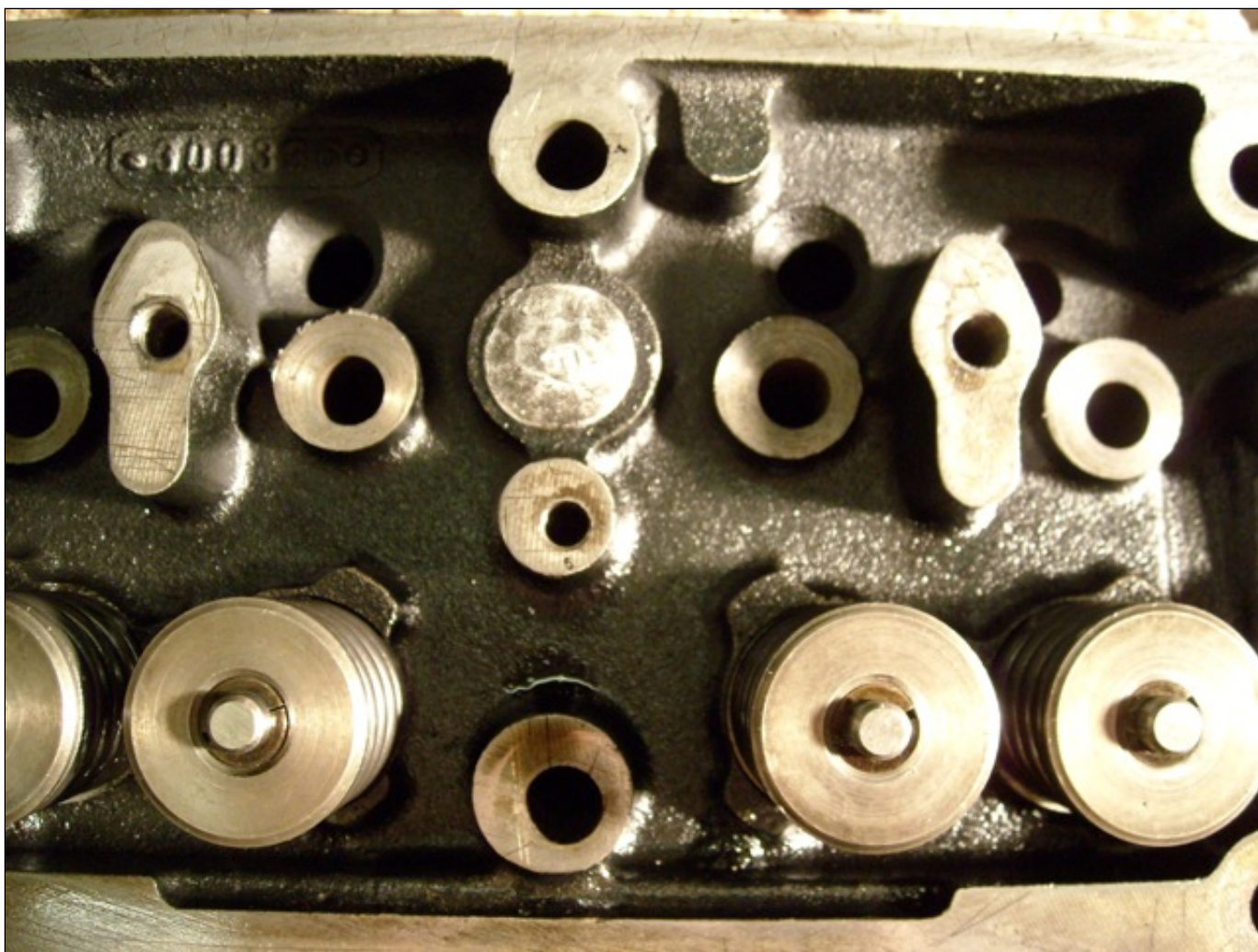




They have removed Carbon mostly from the exhaust chambers.



Cleaned the head to remove all the old oil. For this they had a giant dishwasher for engines.



Which all resulted in a fabulous rebuilt head. now all I have to do is fit it once the bottom half of the engine is ready, tighten the bolts and install the rocker shaft.



This weekend the cylinder ring compressor tool arrived in the post so I will be getting on with inserting the pistons tomorrow and then the crank shaft.

Waiting [28/10/2008]

I'm waiting for parts so no rebuilding today. I've been looking through the ferguson manual again to make sure I know what I'm doing when I get the parts. I have an original manual and I have to say it's so much better than a CD copy of the manual. Just look at the quality of the images which you find in the Original manual.

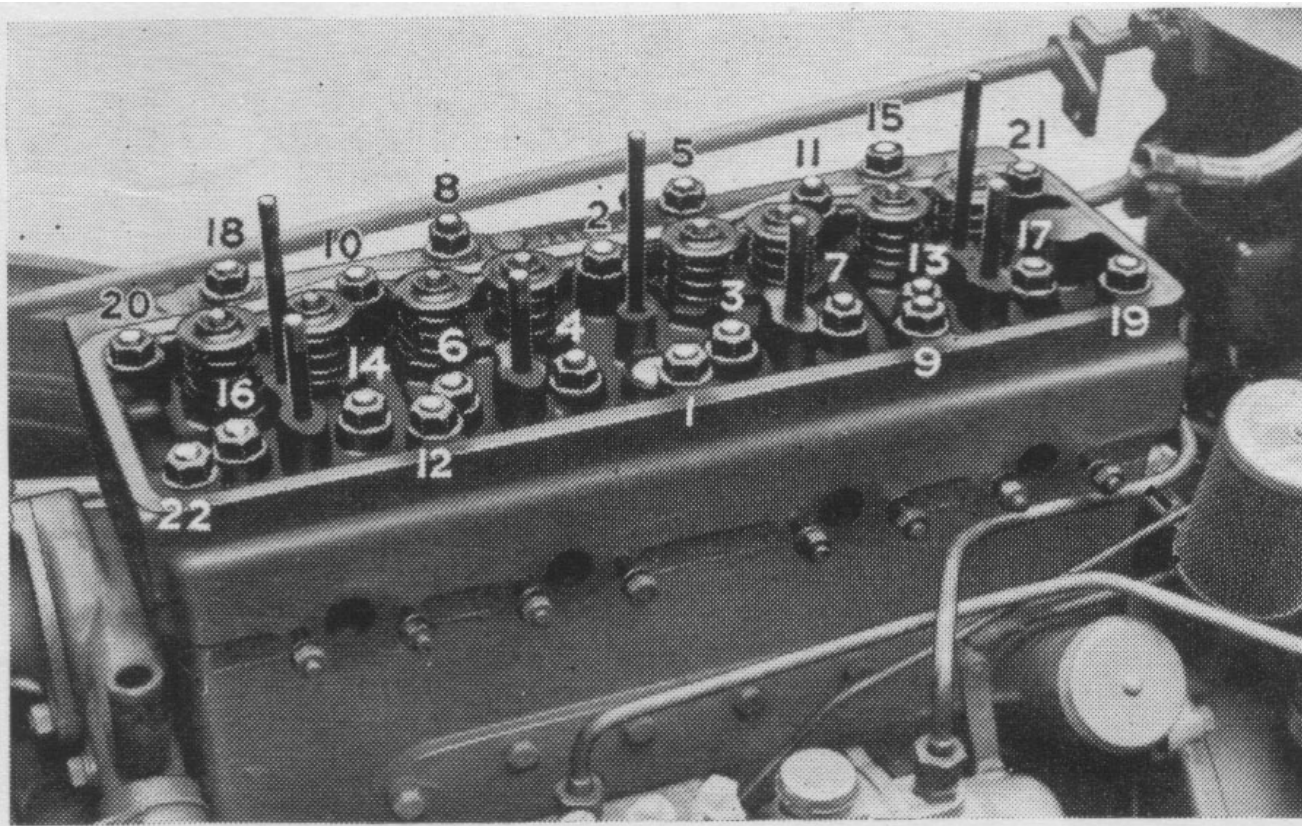


FIG. 110.
ORDER OF TIGHTENING CYLINDER HEAD NUTS.

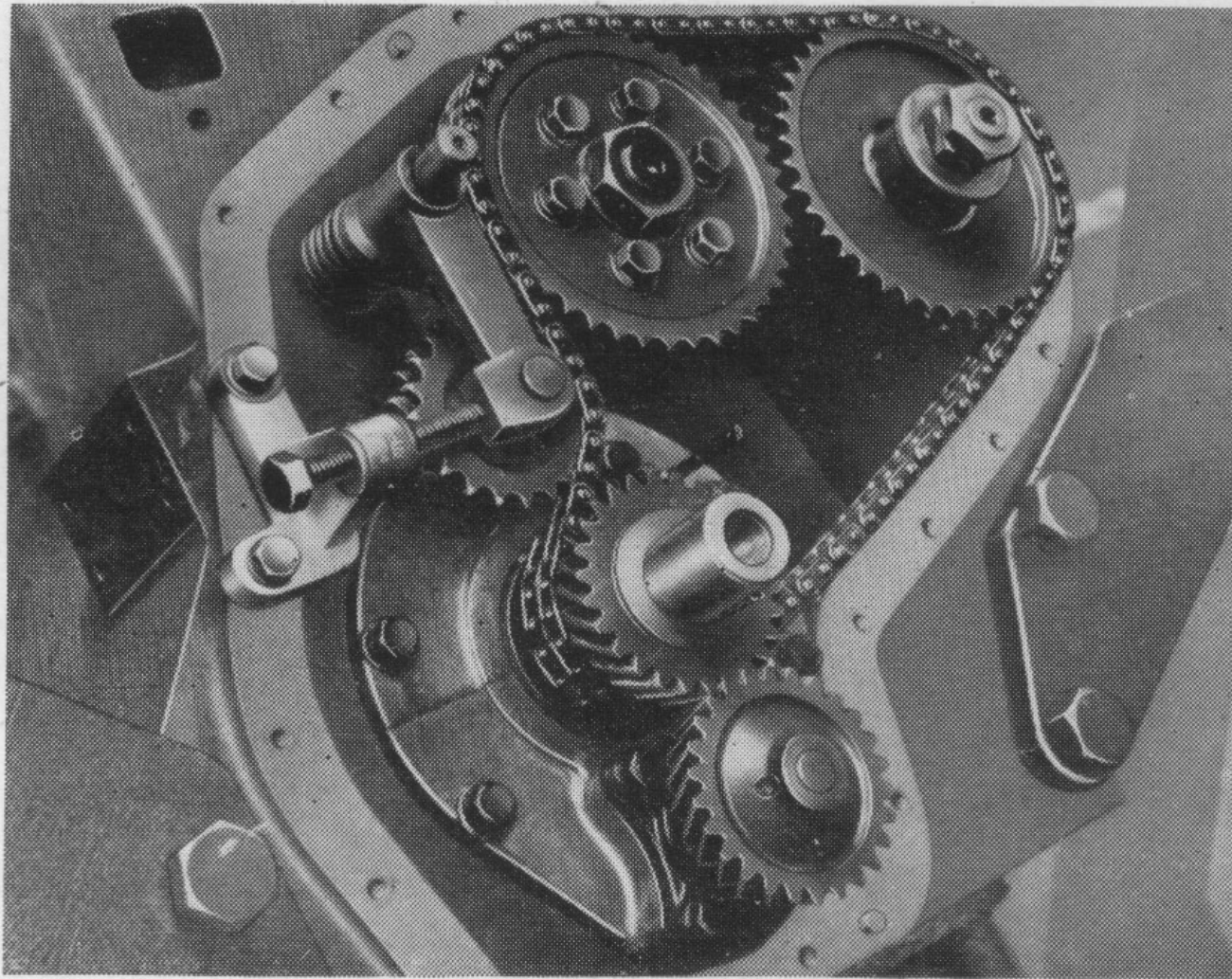
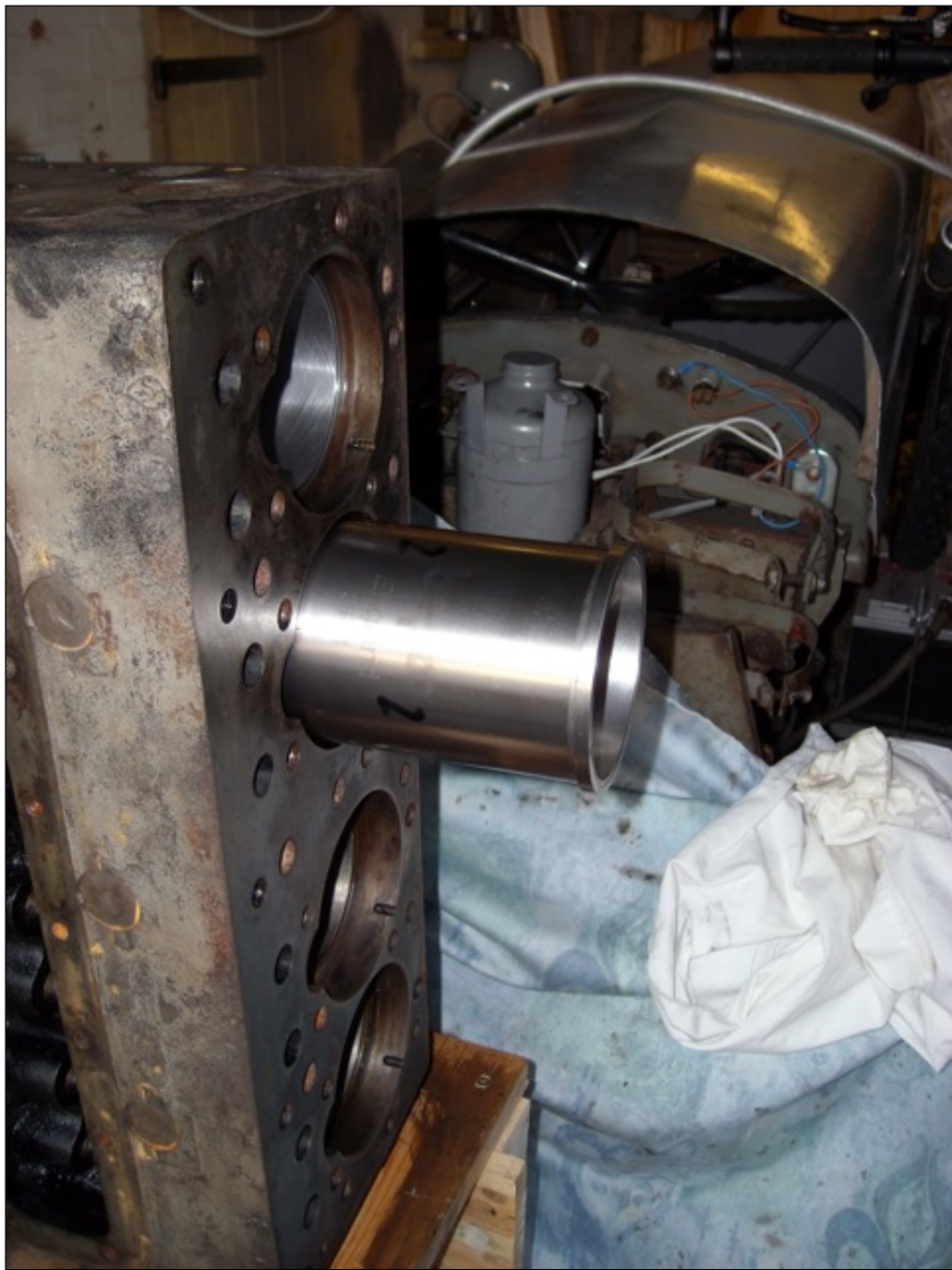


FIG. 133.
TIMING CHAIN TENSIONER FT. 84A.

More Rebuilding

[26/10/2008]

More rebuilding today a couple of hours in the garage. Although no cam followers yet, I can however install the 4 liners and get the pistons ready.



Here is number 2 liner going in. remember the copper ring first before inserting the liner.

I then heated up the 4 pistons in boiling water to allow them to expand. That way it is easy to push the gudgeon pin through and insert the circlips.



I then had 20 cylinder rings to fit of varying sizes and shapes. This cylinder has 5 rings. The original had only 4 rings. I presume progress means 5 is better.



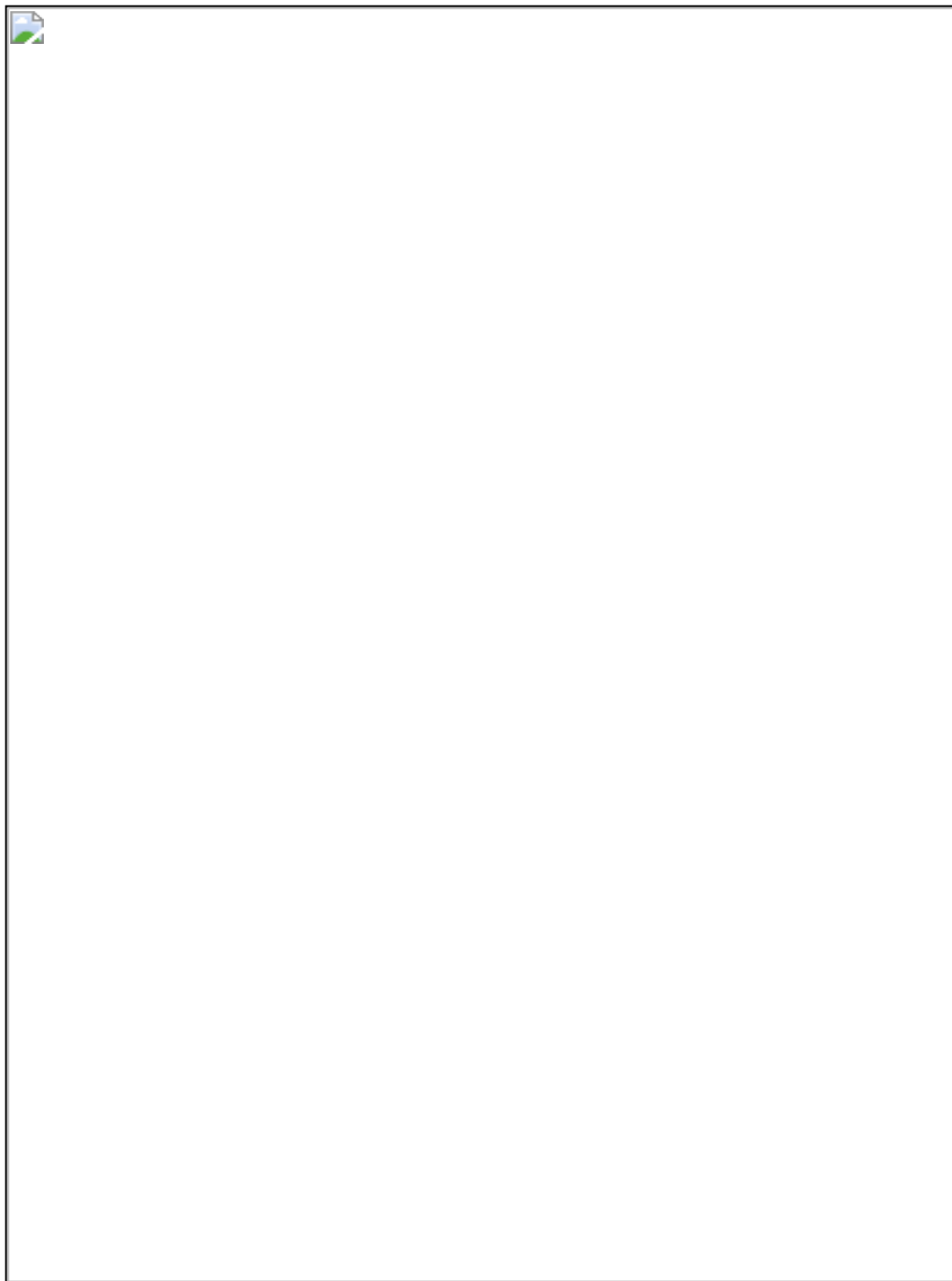
I don't own a piston ring compress tool. I don't have any friends who have one I can borrow one from, so I've bought one from eBay. Should be delivered in the next couple of days so I can fit the pistons.



Let the Rebuild Commence

[25/10/2008]

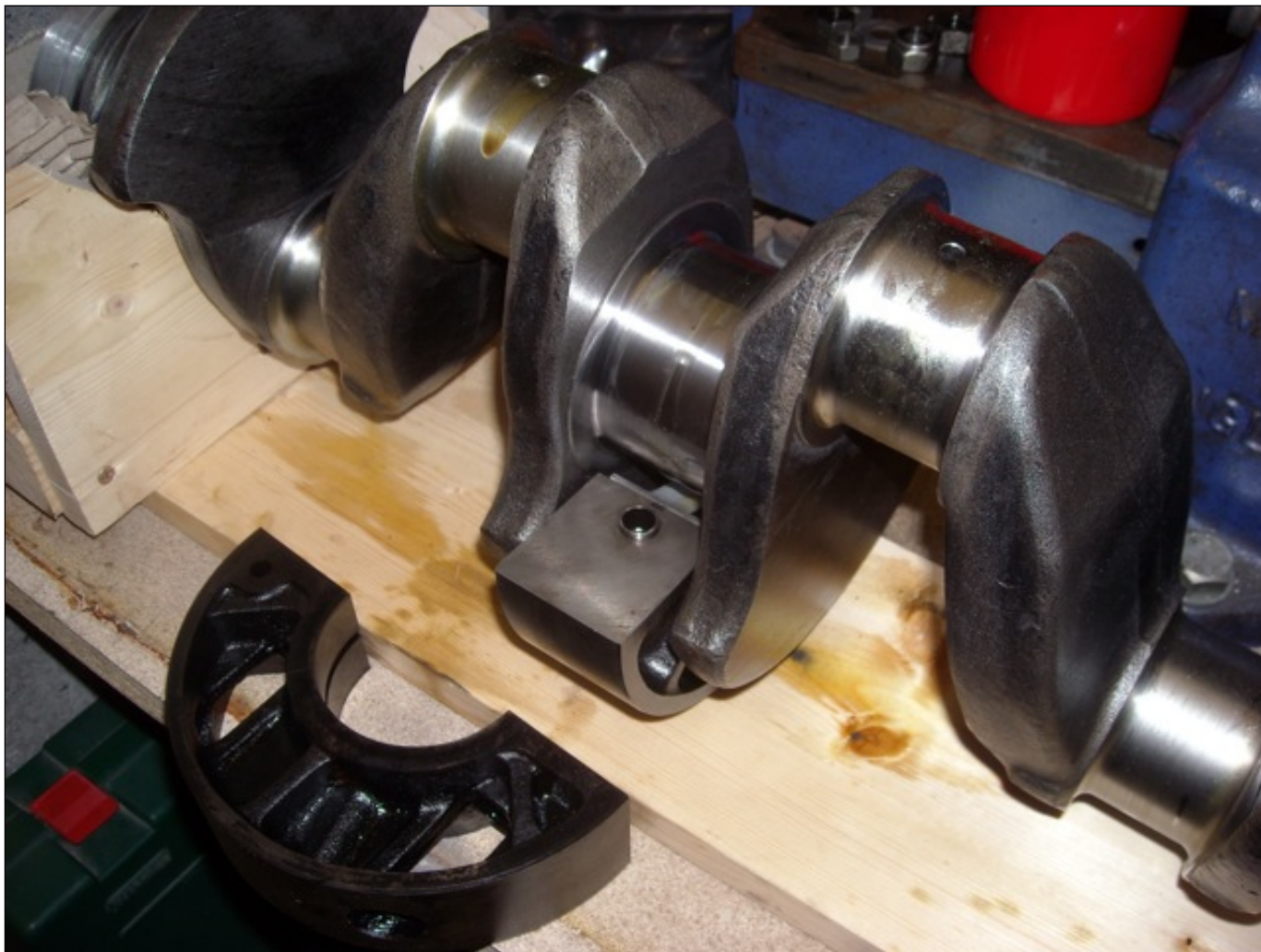
I've had a couple of hours in the garage today so I've started rebuilding the engine. First to do was use compressed air to remove any debris and water in holes before adding any clean parts. Remember to remove the bolts the the chambers where the engine oil runs on its way so the bearings etc. I wound a lot of water behind them.



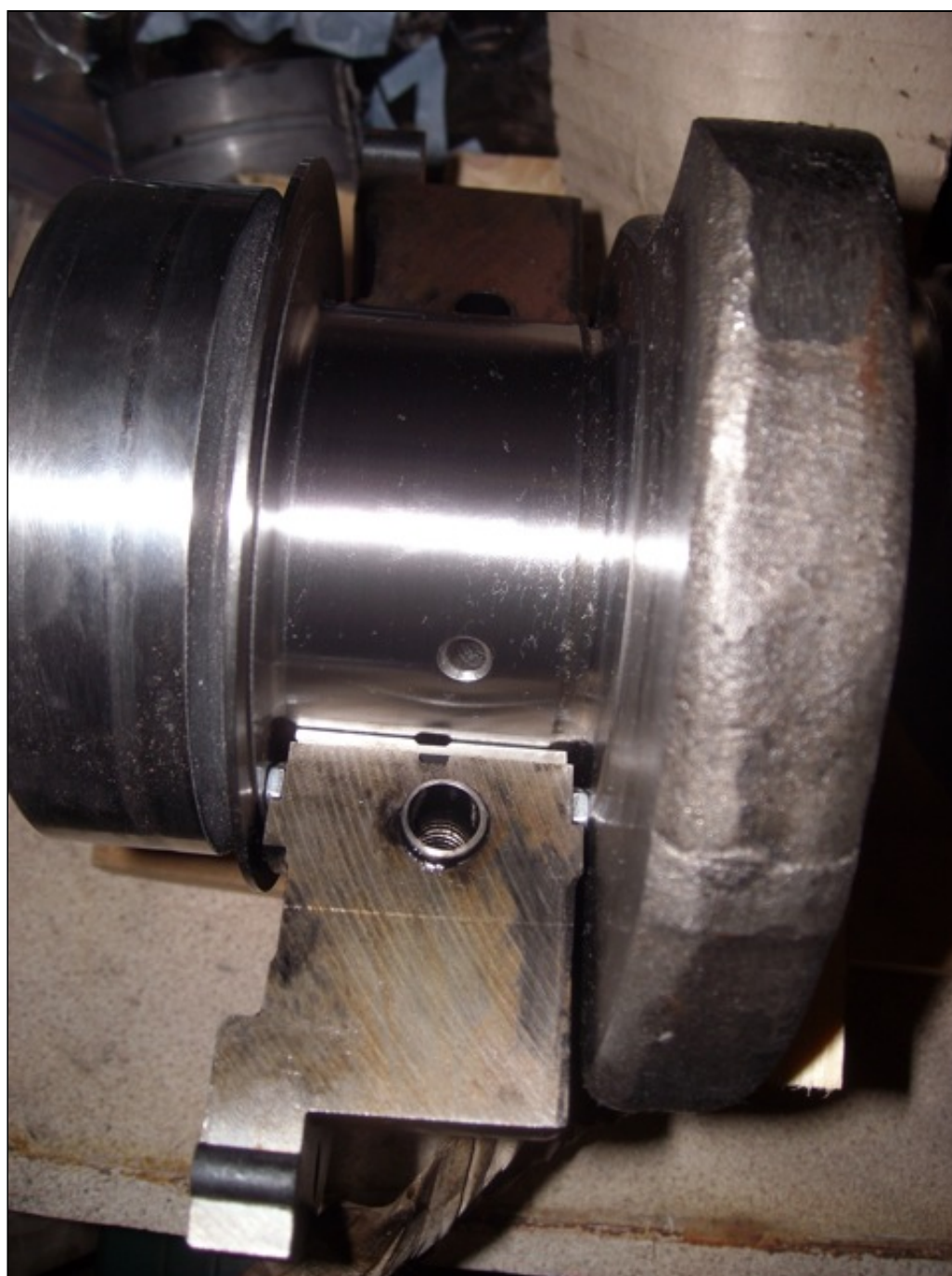
First to be added was the clutch and drive cog for the C.A.V. diesel compressor. Remember to align the dots on the side of the cog and the housing.



I have also added the centre and back end main bearings and housings for the crank shaft. Once assembled there was no play between bearings and crank just rotation.



One side of the Centre bearing in place. the other on the bench



One side of the back bearing in place. showing the shell and the thrust washer either side.



The back and centre bearing housings assembled. the front is fitted once the shaft is in place.

I'm still waiting for the 8 cam followers to arrive before I can start the real assembly on the lower part of the engine as they must go in before the cam shaft and the crankshaft.

Remember what it's all about

[23/10/2008]

I have been sent these pictures from my sister-in-law. It's the TE-A20 at Beamish museum. Here they are using it on the pulley to drive a threshing machine. Beautiful. I'm afraid I don't know much more than that. I don't know when it was threshing or for how long or for why or how much they did.





So what is this?



Well its a wooden clutch aligning tool sent in by Mark Seymour (The same Mark who helped me strip down the engine a couple of months ago). This was the tool he used to fit a new clutch to his tractor. I never thought about using wood. I thought it would be to soft. Can't wait to give it a try.

Proud to be British

I came across the film in this link last week on a local bbc news program. I think its a wonderful clip. I wonder if it will ever get the same about tractors. I liked the comment the owner said "Don't think you can sell it for more than it's cost to restore it" And I don't think that is the point with a lot of these old things. It's the having them and maintaining them.

<http://news.bbc.co.uk/1/hi/england/7675010.stm>

Ready for a rebuild, well almost

[22/10/2008]

Well apart from blowing the block all over with an airline the engine is ready to start rebuilding.

This picture shows the engine block on its back in its ready to start assembling position. From the bottom of the engine I need to add camshaft after the cam followers, Pistons oil pump pickup pipe and sump. From the back of the engine (the underside as we look at it) I need to add in the Crank shaft + centre and back bearings followed by the back oil seal. Then I can secure the pistons onto the crank shaft. From the top or back as we look at it I need to add the piston liners.



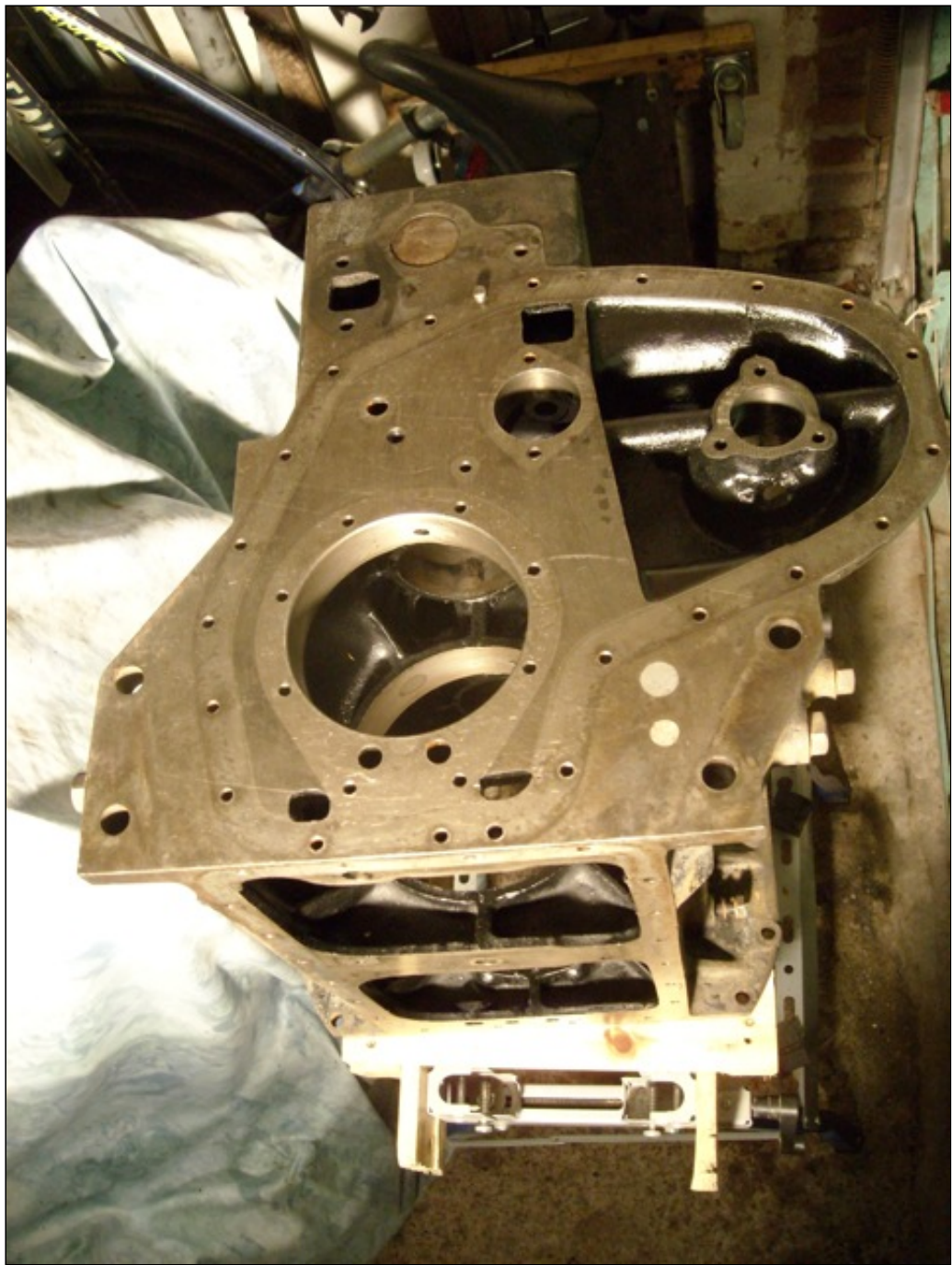
Frame

The frame the block is sitting on is a workmate with modified top. It gives the block height and makes it easy to work on without putting my back out. Light lots of light. I have a 150 watt light shining onto this side of the block to give as much light as possible. As the winter is upon us most of the work in the garage now will be when it is dark outside .I have also left an area all round the block to get in



Top of the block

I have the front of the engine at eye level. There is a lot to be added to this side of the engine so the fact I can see it is a bonus.



Cam followers

I say the engine is almost ready to assemble because when I was cleaning the cam followers (the first item to go back onto the engine) I discovered that a lot of them were very pitted. I'm sure I

could have fitted them ok but there would have been a nagging doubt in my mind that they would fail. and I don't want to have to take the engine apart once it has been built up.



Cam followers all

This picture shows all 8 followers in various conditions.

So I've ordered 8 new ones and the oil pump rotor and spindle for the front of the engine.



eBay

I was very pleased with this eBay purchase its an 11/16" spanner for tightening the nuts on the head whilst the rocker is in place. It is a Britool part and saw originally available as part of the Ferguson/Britool toolkit you could purchase as an optional extra. I have talked about this toolkit before on previous posts

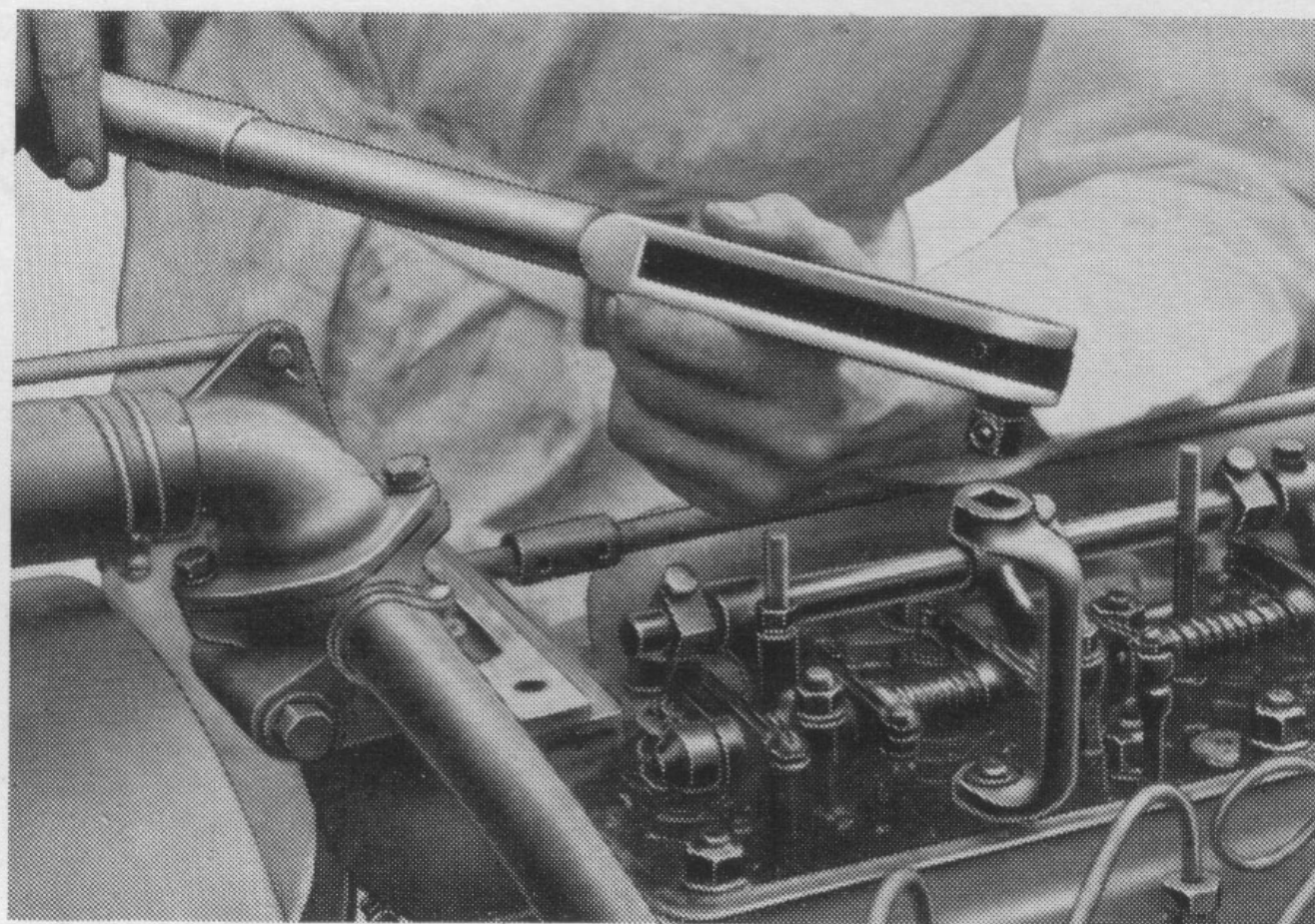


FIG. 114.
TIGHTENING CYLINDER HEAD NUTS WITH ROCKER SHAFT
ASSEMBLY IN SITU. SERVICE TOOL FTB.30 WITH TORQUE WRENCH.

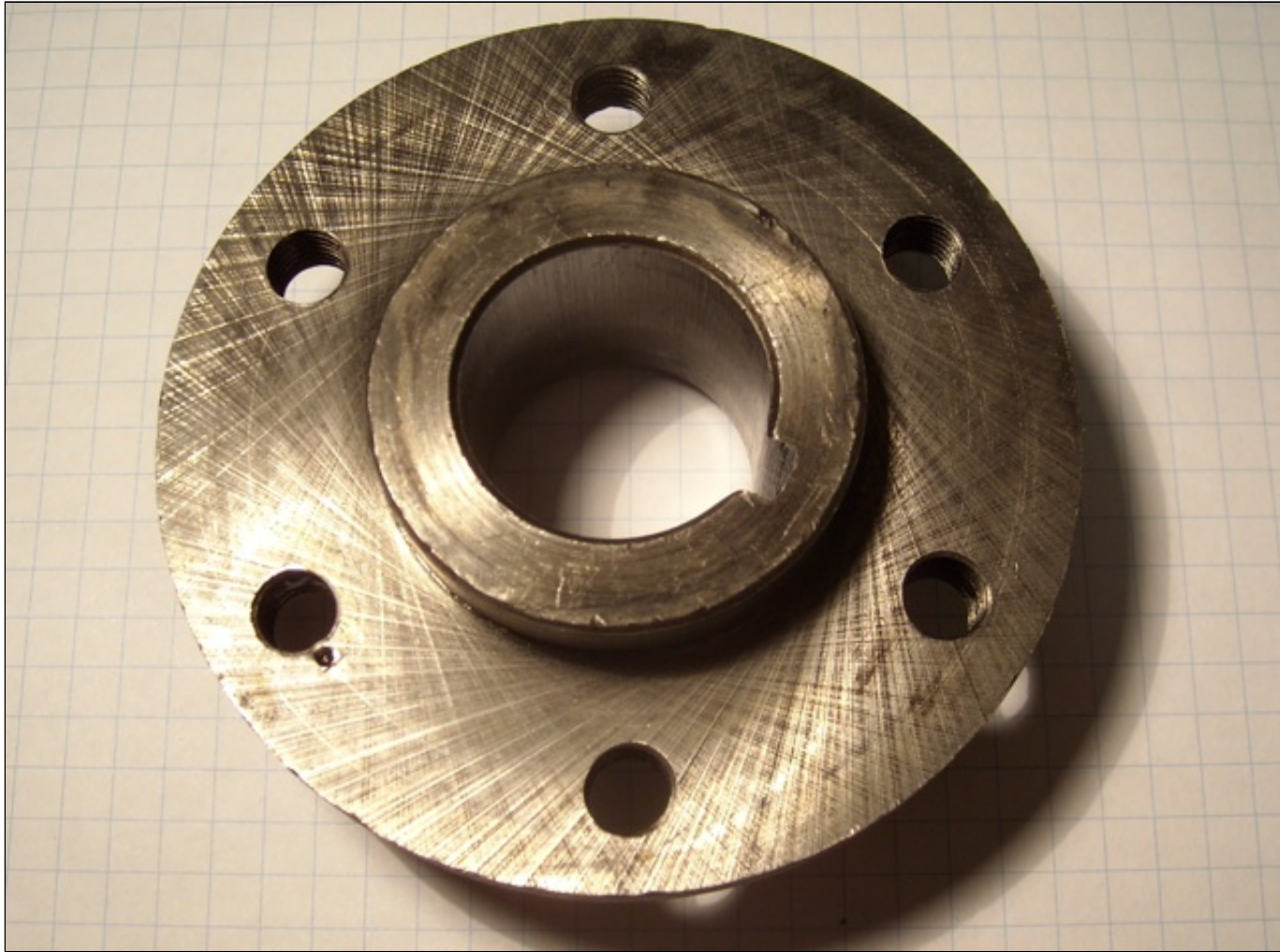
Rowcrop wheels

I have purchased again (again because I did have a set but sold them to a friend) 2 rowcrop outer wheels to fit a Ferguson centre. The plan is to replace the current wheels on the tractor so I can get them sand blasted cleaned and painted. The row crop wheels are also much thinner and should allow more walk around space in the garage once fitted.



Cam shaft cog.

This section is for my reference more than anything else. This cog that goes on the front end of the cam shaft can only go on one way as there is a key way in the bore. There is a mark just next to the bottom left hole. This cog was covered in oil when I removed the cog this bolts to. So I have no idea if it lines up or not. Time to check the ferguson manual.



The Beginning

[15/10/2008]

Hi All I helped Jim move his TE-D20 round to Roy's house last night. The drive was really steep. But we managed it in the end. I am trialling a new way of adding information to this site using some "Blogging" software. Roy is going to be the guinea pig. We've started the site off

<http://www.s115730952.websitehome.co.uk/>

See what you think. If you register on the site you can add feedback, questions or comments to the site. we will see how it goes. The idea is to move the whole of ploughmyfield to the site.

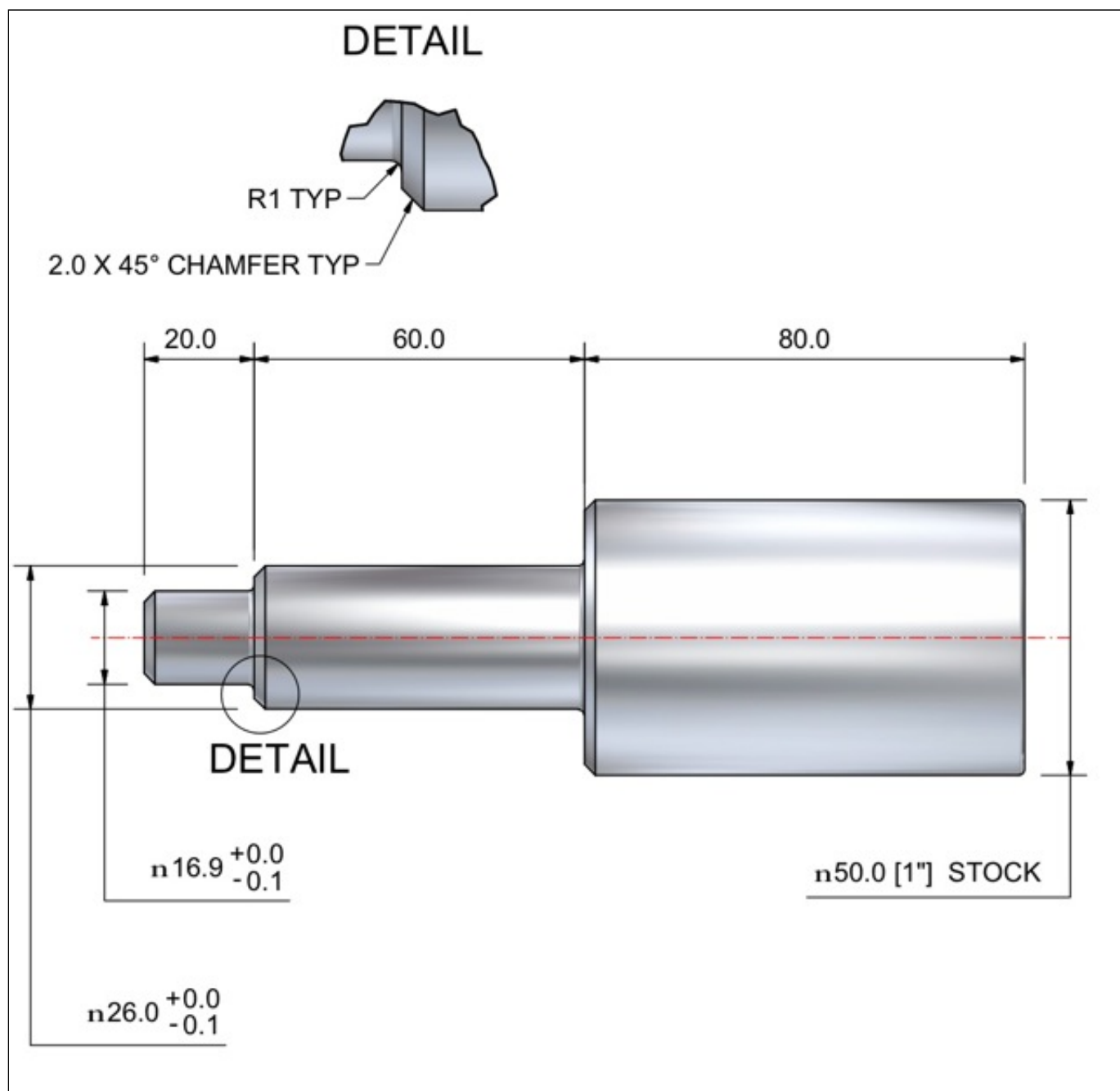
Roy take a look and drop me an email with what you think.

Ready

[13/10/2008]

Not much happening on the restoration front this weekend as I've been away running in the Lake District. Didn't spot many tractors though.

I put together a drawing of what I think a clutch aligning tool would look like. I know that's a bit early but Was visiting a company on Friday and thought there might be a chance of getting one made. I was wrong. I still have the drawing now for when I need it.



[Download a copy here](#)

I've created the drawing as a PDF so you can download a copy and have a go at making one yourself. This is for the diesel engined tractor. I don't know if the clutch is the same for other TE's (I can't see why it should be any different? please let me know)

www.youtractor.com

www.youtractor.com everyone knows about www.youtube.com well this is by the same people but just for tractors. I can't find any film of ferguson's yet though.

Wordpress

The www.ploughmyfield.co.uk website will be changing soon. Hopefully by using a new piece of software called Wordpress I can more easily create articles, you can add comments, and I can get other people involved in writing articles, such as the progress of Jim's tractor by Roy.

[02/10/2008]

Christmas has come early

I collected the crank shaft from the grinders last week. They have done a fantastic job. Take a look for yourself. and only .010" undersize.



Today all the parts I ordered from Southern Counties arrived. I am a little disappointed as when asked on the phone the seller said the parts would all be Sparex. But on arrival the majority are Bepco. I don't really know how good the make Bepco is. If anyone has any experience on the brand Bepco then please let me know. After looking at the gasket sets I am only sure of where half the gaskets go. I don't remember removing the other half.

I still have the engine block to clean inside and out before I can start to reassemble the liners, pistons and crank.





[29/09/2008]

Parts Ordered

I took the plunge today and ordered the first lot of parts for the tractor engine rebuild. I'm concentrating on assembling the bottom half of the engine this includes crank, cam, pistons, liners and sump.

TOP GASKET SET
 BOTTOM GASKET SET
 TEF PISTON & LINER KIT
 CON ROD BEARING SET (0.010 oversize)
 MAIN BEARING SET (0.010 oversize)
 CRANK THRUST WASHER KIT - STD
 REAR CRANKSHAFT OIL SEAL
 TIMING COVER OIL SEAL
 Valves
 Valve Springs
 TIMING CHAIN
 OIL FILTER

I ordered the above parts from Southern County tractors, for a total of £364.

I just have to check the clearances on the oil pump as they want £38 for a new one. I was going to replace it without checking but at this price if the old one is serviceable I'm going to use it.

[26/09/2008]

Jim's Tractor

I've known Jim for about 8 years. It was only after about 4 years of knowing him that he admitted to me he owned a Ferguson Tractor after I had shown interest in the grey wonders. I can now see why. He has had it in his garage for about the last 10 years in a nearly finished (3/4 of the way there) state. It's taken 4 years of badgering for him to finally do something about it. The tractor in question is a 1950 TE-D20.

From the pictures below you can see how little work needs doing to finish the project. In comes Roy to the rescue. Roy who helped me take apart my TE-F 20 earlier this month has agreed to take on the job of making this tractor work again.

I know Roy is keen to start the project and hope he will be emailing in with his report and photographs of his initial findings and the work he thinks he needs to undertake in order get the tractor working. I hope he will also be updating www.ploughmyfield.co.uk as to his progress along the way.





Southern County Tractors.

I finally have an internet address for Southern Counties Tractor Spares LTD. On

Engine Kits They seen the cheapest by miles.

www.southerntractorspares.co.uk

[Previous Page 6](#) [08/07/08] to [26/09/2008]

[Previous Page 5](#) [23/04/2008] to [08/07/08]

[Previous Page 4](#) [17/03/08] to [23/04/07]

[Previous Page 3](#) [23/04/07] to [16/10/07]

[Previous Page 2](#) [15/11/05] to [23/04/07]

[Previous Page 1](#) [14/10/04] to [15/11/05]

Visitors to this site from [19/11/05]

