## PANTHER PROJECT

After completing the Tiger1 to a reasonable finish & with the lockdown continuing I decided to ordered the drive motors for the Panther. Whilst awaiting their arrival I started to make the equipment that was carried on most Panthers. A lot more kit is strapped & bolted onto the hull then on the Tiger so I was kept amused for a few weeks. This entailed a tool set shovel, hammer, pry-bar & crank handle. Fire Extinguisher, spare track links & jack were also made & fitted. All this from off cuts, but nothing remarkable from an engineering view.

Whilst scanning the net I found a company who could supply wire rope down to 2mm with fittings for very reasonable prices & in meter lengths. This enabled me to custom make 2 towing hawsers which are always prominent in photos, the same search also turned up 2 1/8 scale Jerry cans which when painted up as water carriers added a bit more interest. A further find was 6mm pitch chain from which I was able to produce a working barrel lock very prominent on Panthers.

Other work involved producing the missing periscope shields for the copular out of 10 X 10mm brass & inspection/filler hatches for the rear deck. I also found a company in near me to make stencils for the numbers as I failed to find any decals of the correct scale in the end they turned out far more realistic. All this was suitably weathered using model railway weathering powders.

The main motors & drive gears arrived in early January so now I could get to work powering the tracks up. This time I had all the components including the radio control equipment to complete the job. With the Tiger I ordered the equipment as I went, as I wasn't sure what would or wouldn't work.

Seen as the Tiger worked reasonably well, it made sense to copy the design so I won't bore you with a repeat description. The hull is narrower but longer than the tiger but the drive motors, my main concern fitted in by just giving them a small stagger and still kept the chain drive length at a minimum. The barrel drive was slightly modified by turning the operating crank 180 dreg to shorten the mechanism as the turret is smaller. The turret drive is a strait crib from the Tiger but 50mm angle iron mounted as I was out of thick brass. The drive gear ring is smaller but this gives a faster rotating speed so looks very realistic as a medium tank.

Remote control is the same 14 channel set up as the Tiger, way more than required but if you're buying one the difference in price is such that you might as well get the biggest you can. That's far cheaper than having to buy another if you run short of channels. The Turret & barrel are driven by RS components 12v geared motors. Turret is 11rpm & barrel 70 rpm both controlled by 20Amp power speed controllers protected by 10Amp fuses. The drive motors are 12-24v 240W motors controlled by 40Amp speed controllers protected by 30Amp fuses. Thus the speed controllers are way bigger capacity than require by design they aren't overworked & stall current is way below maximum capacity. A 12 Ahr sealed lead acid battery provides the power via a switch operated car relay. Remote charging points are provided hidden from view. If my calculations are correct the two motors give me 0.6 hp in old money so don't get your feet in the way!

A friend seeing the hull with the deck off was surprised at the complexity of the installation. At least till I pointed out that everything that moves on a model requires a least one motor with drive /coupling, each motor requires a Speed Controller (6wires) power & fuses & a receiver. He soon realised things can get very crowded very quickly. So now I'm a two cat family! If any one need's a 70Kg mobile door stop give me a ring.

















