

How to make a convertible Predator

(The Magneto-Pred!)

by Apnu

Have you ever played a mechanized army and a horde army in one day and thought: 'Dang I wish I had brought my Predator (destructor or annihilator)!' Or maybe you thought 'I'd love to have a selection of Space Marine vehicles but I can't afford to buy two Predator kits, a Rhino, a Razorback, and a Whirlwind!'

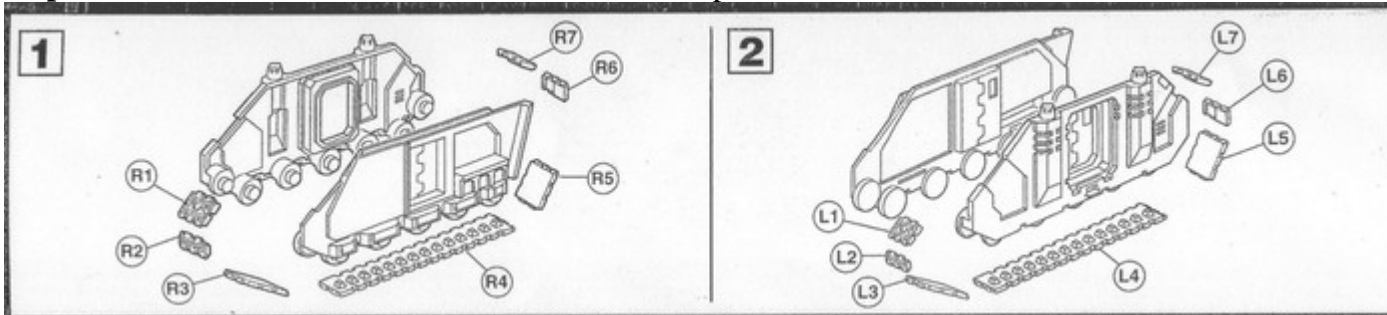
If you've ever had either of these thoughts, then this how-to is for you. I created a convertible Predator/Rhino and here is how I did it.

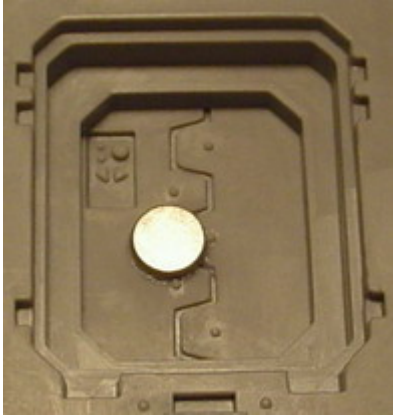
Materials List:

- 20 Neodymium Rare Earth Magnets 20 are 1/8" x 1/32" (called "small magnets")
- 20 Neodymium Rare Earth Magnets 20 are 6mm x 1.5mm (called "large magnets")
- 1 Predator kit from Games Workshop (part # 99120101016)
- 1 1/8 inch drill bit (and drill or Dremel if you want, I hand drilled where I needed it)
- Wire cutters, razor blades, files and the rest of your modeling tools.

Reminder: You're working with magnets, at all times you must be aware of the polarity of the magnets. I marked the sides of the magnets when I could and at other times, I would mount one magnet and then stick the another magnet to the mounted one and marked the polarity on the 'loose' magnet .

Step 1 - Assemble the tracks/sidewalls of the model as per the included instructions.





Step 2 - Glue one large magnet to the inner recess of the door on each side wall. The magnet should be placed in the middle. There are rivets molded on the door, you can either shave the rivets off or work around them. I chose to work around them.

The large magnet thickness is less than the height of the inner recess you see there, and the attachment for the predator sponson mount will fit just on top of it. It turns out that you can place two magnets together and still have the sponson mount flush with the main body. As we'll see in Step #3



Step 3 – Glue a magnet on the side sponson frame.

I placed another large magnet on top of the one mounted on the side wall and placed some glue on the exposed side. This way I knew I had the right polarity. Then I placed the sponson door on top of the magnet and let it set for a while.

After the sponson frame is dry, you can attach the top bit that mounts the weapon to the top of the frame. Remember that the two notches on the door are the top, which is where you want to attach the arm.

Rhino doors:

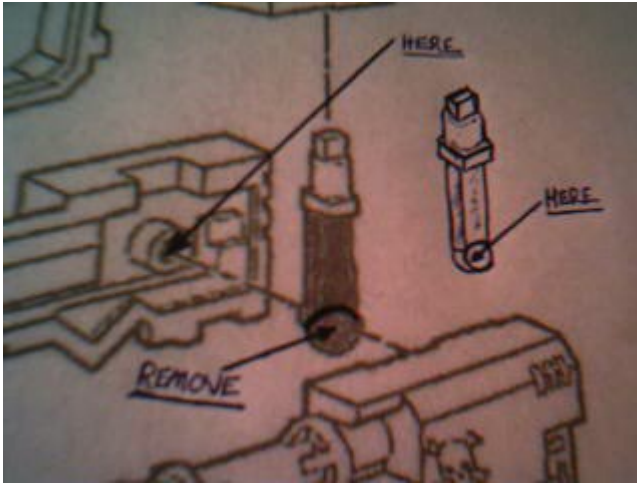
The Rhino doors present a different problem. There is a gap, approximately 4.5mm, between the door itself and the side wall. To remedy this, I took some excess sprue parts and cut two lengths of 4.5 mm sprue to make extenders for the doors. You'll have to play around with the lengths to get a nice fit. After I cut my initial lengths I had to shave them to get a nice, flush, arm. I then did the same basic thing as the Predator sponsons. I stuck a magnet to the side wall, put a spot of glue on it and placed the length of sprue I cut. Then I placed glue on the length of sprue and set the door on top of that.



Cutting the sprue.



Finished Rhino doors.



Step 4 – Mounting the weapons. This is one of the most tricky (but very important) parts of the conversion. You will need to trim the weapon arm at the bottom in a curve and attach a magnet at the end so it looks like a paddle. Remember to track the polarity of the magnet! Then you'll place a magnet on the inside of both the lascannon and the heavy bolter weapons. Then the 'paddle' will slide into the slot on each weapon of your choosing.

Listed in the picture (concept design by Mugdava of Relictors.com), where you see 'here' is where the magnets will be, and 'Remove' is where you will cut the weapon arm.

The following images show the process of cutting and shaping the concave of the arm.



Marking the cut. The weapon arm after shaping a curve. The weapon arm with magnet.

Now you mount the weapon arm onto the side sponson attachment as normal. Make sure the targeter on the top of the weapon arm faces the right way! It will look something like this:



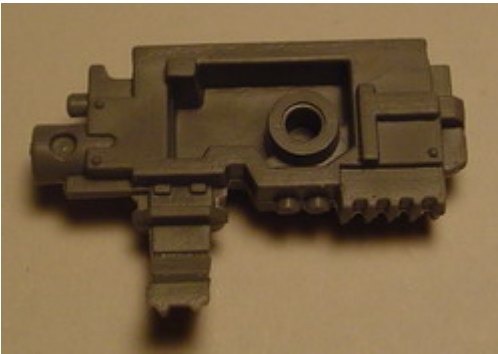
Front view



Side view

Step 5 – Adjusting the side weapons. Now we must magnetize the side weapons. You'll need to use 4 small magnets, one per weapon.

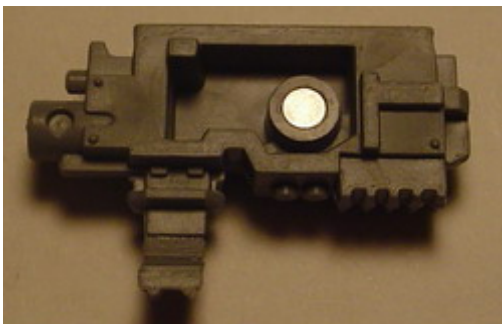
You will need to expand the socket where the weapon arm used to go to handle the 1/8 inch diameter small magnets. It turns out that you need only drill just a little bit, to expand the socket and only go 1/32 of an inch deep.



This is what the bolter looks like before, the lascannon is very similar. **IMPORTANT:** Notice that there is no notch at the top of the weapon. The other side of the weapon (the one that faces inward to the tank) has a slot. We are working with the non notched pieces right now. In the next step I'll show you what to do with the notch.



You need to drill the socket just a little so you can fit one of the small magnets in the now expanded socket.



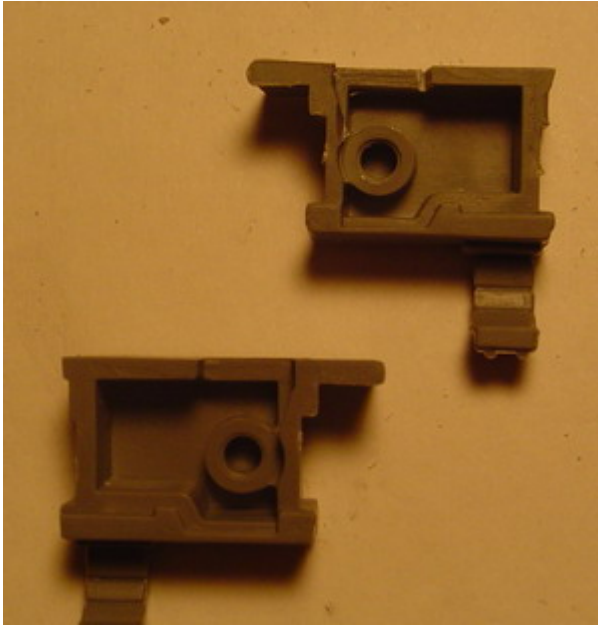
Here is the bolter with the magnet placed inside the expanded socket. Make sure you check the polarity of the magnet with the weapon arm before gluing down the magnet here. Also, remember that the magnet should be flush with the socket. This will be important later.

Step 6 – Adjusting the other side of the bolters and lascannons.



Here we see the other side of the bolter attachment. You can see how the weapon arm does not quite fit into the slot on this part. The slot itself, needs to be expanded about 1/8 of an inch, and there is a bit of extra material on the left side wall just above the socket hole. You need to trim both areas so the weapon arm can slide smoothly to the socket hole.

The Lascannons do not have this problem. You can glue them together at any time.



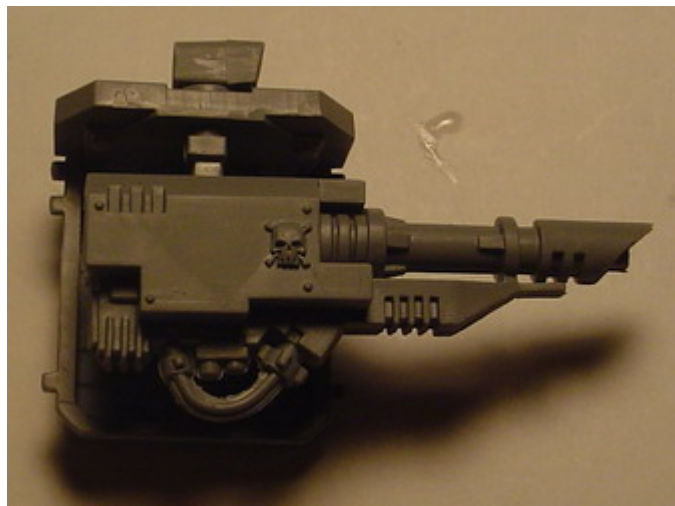
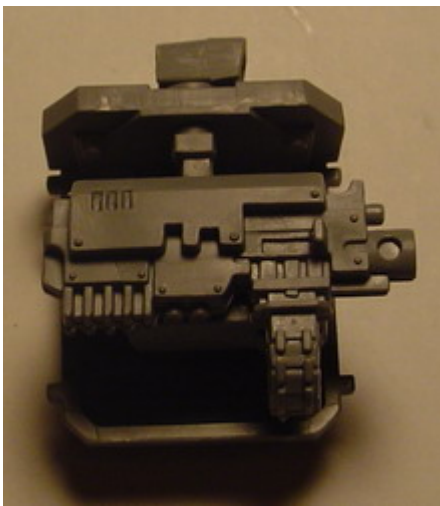
Here is the other side of the heavy bolter after being trimmed in the two places mentioned.

Below it is the second heavy bolter bit waiting to be trimmed. So you can see a combined before and after picture.

Now you need to just glue together the two pieces of the bolters and lascannons.

Double check the magnets polarity before you glue together the weapons.

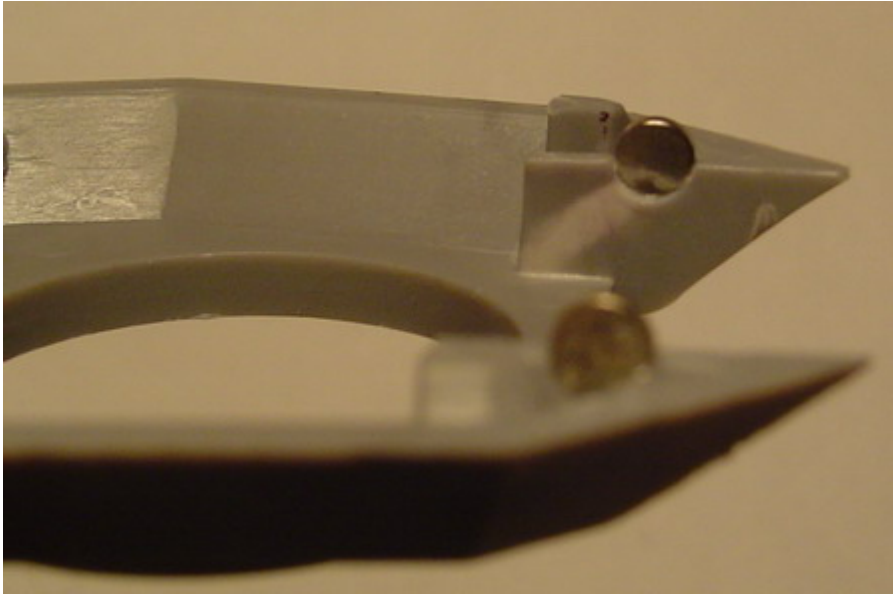
Here are the sponsons in action!



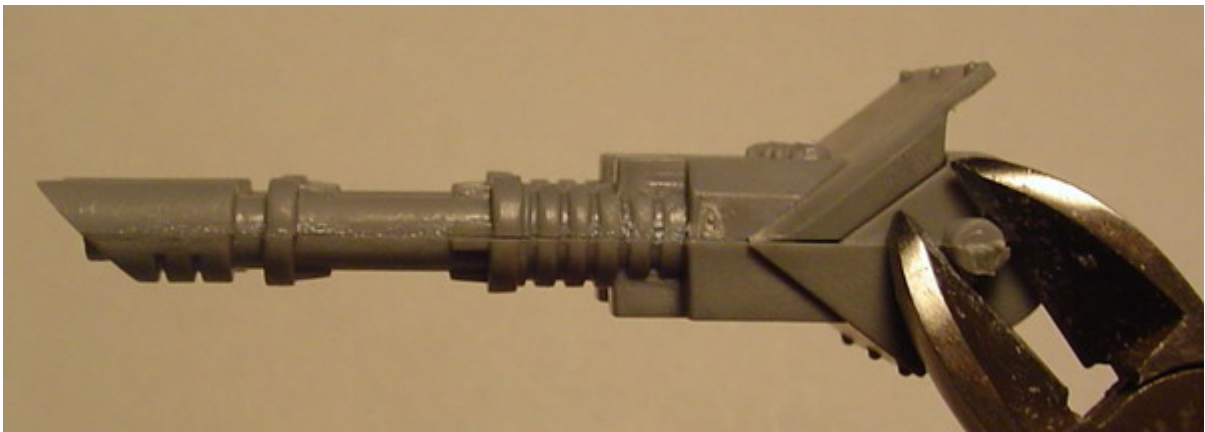
Step 7 – The turret

The turret will need two magnets on the inside, and the weapons will have their pegs removed and magnets placed where the pegs were, flush with the side of the weapon.

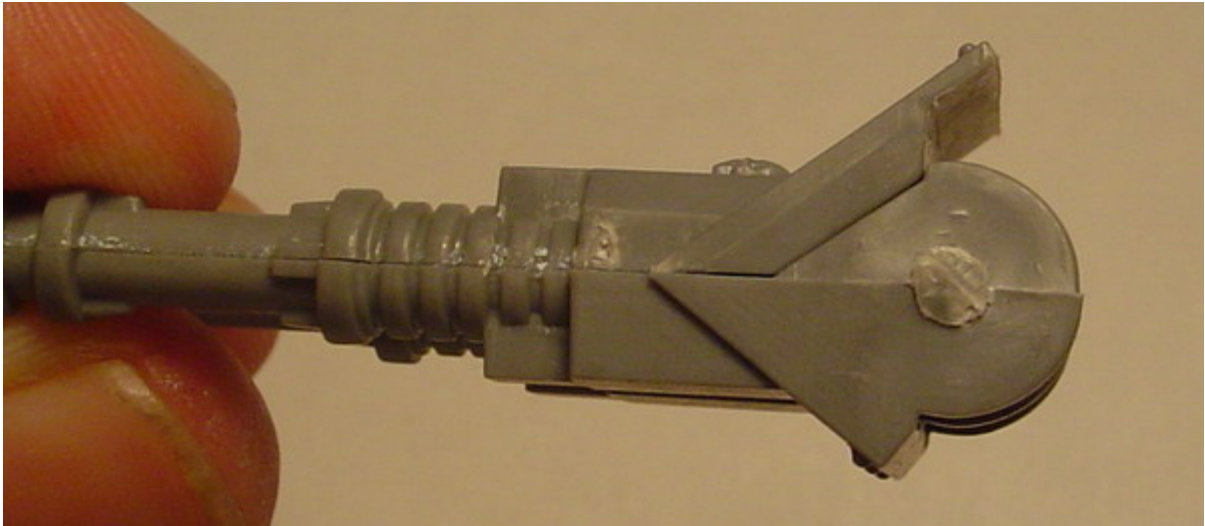
The pegs on the weapon are just about 1/8" diameter, so I chose to mount two small magnets on the lower portion of the turret in the socket for the weapon pegs. Note: The auto gun is a little long, and after all this was done, it tends to dip when mounted. If you want a more solid weapon you can use the large magnets, but you'll have to expand the sockets on the upper and lower portions of the turret. The rest of the instructions use the small magnets.



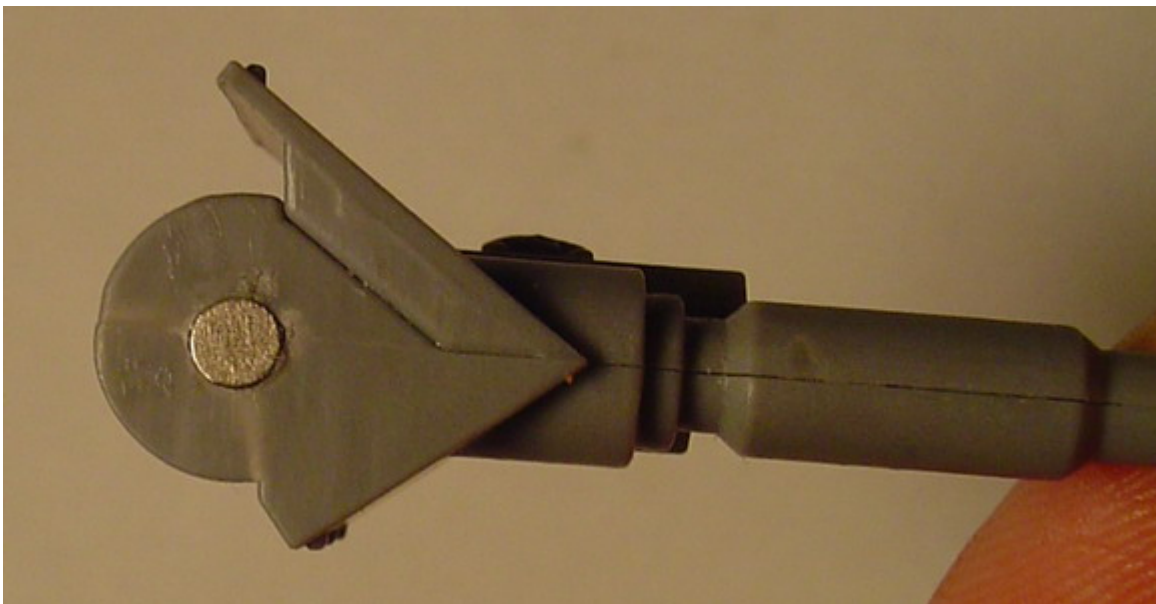
As for the weapons, you can clean and glue their two halves together without a problem. Then remove the pegs. Where the scar is on the pegs, you will take the 1/8" drill bit and make a 1/32" inch deep socket to mount a small magnet.



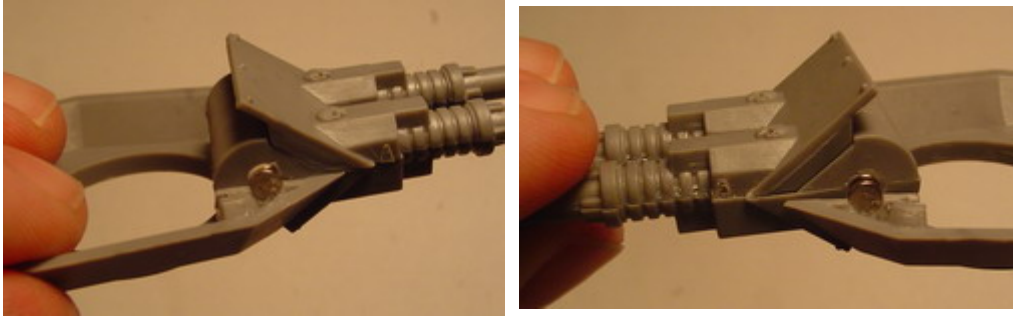
Trim the pegs off the main weapon. Do this for both the weapon options.



This is the weapon after it has been trimmed. Notice the scar where the peg used to be you will drill a socket for the small magnet here with the 1/8" drill bit.



This is the weapon after a magnet has been mounted inside the socket, **remember** that the socket needs to be deep enough that the magnet is flush with the side of the weapon.



There is the turret and gun joined together by the magnets, the magnetic bond it pretty strong!

My first mistake:

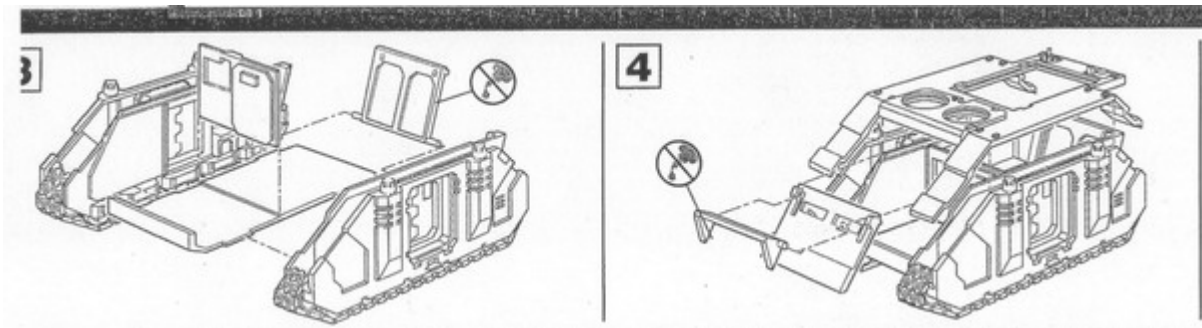
The back of the turret holds the ammo for the main weapons. In the case of the Predator Destructor, it's a solid trunk, for the Annihilator it is a set of batteries for the lascannon.

I mounted three small magnets in the back of the turret, and then three more per weapon box. This generated too weak of a magnetic join and I wasted 9 small magnets in the process. I didn't realize until it was too late. In retrospect I should have picked a spot on the back of the turret and drilled a couple of 1/8" holes for small magnets, and then again on the back of the weapons lockers for a stronger, direct contact bond. The way I did it works, but the compartment falls off pretty easily.

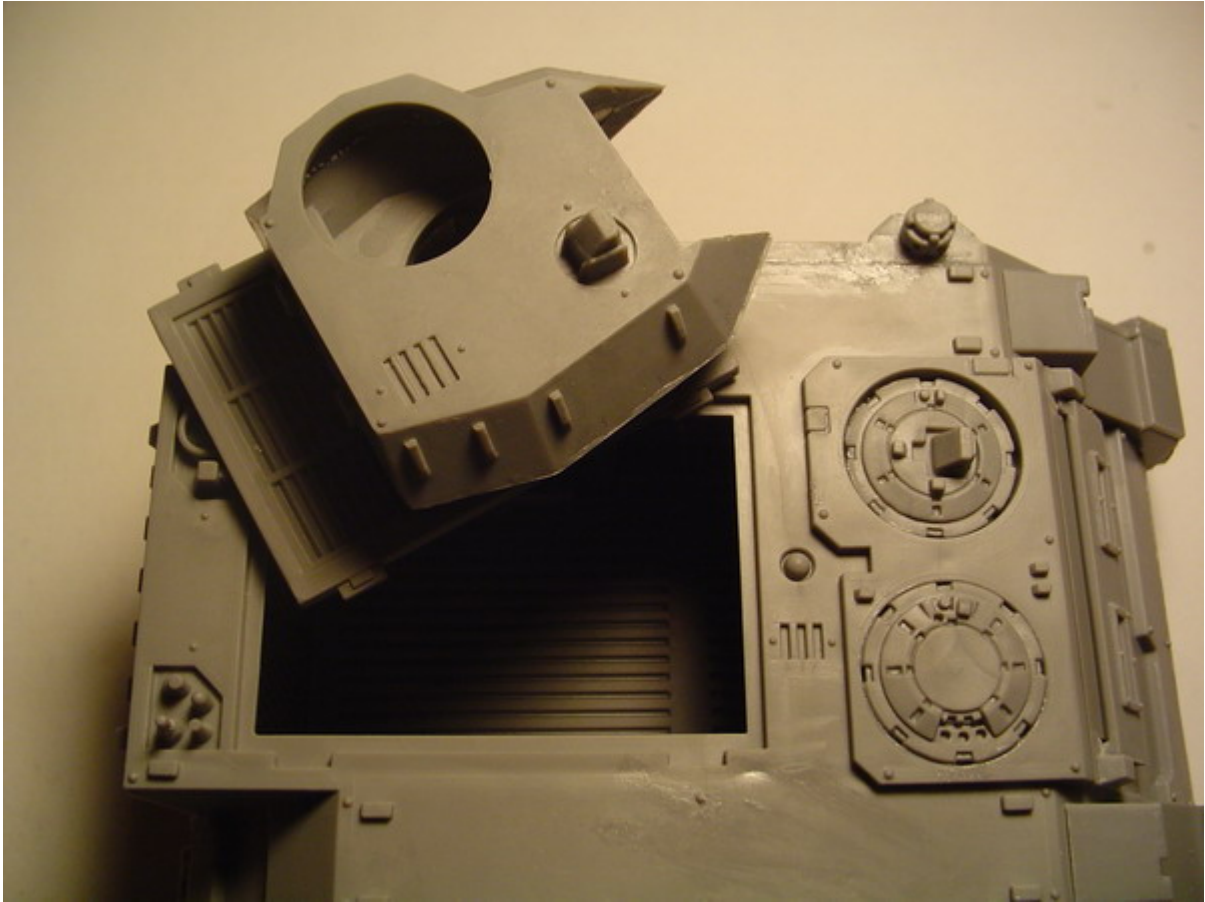
Now join the two halves of the turret together and you're finished with the turret. You can now mount it to its plate as normal.

Step 8 – The main body.

Assemble the main body as normal.



Some people like to paint up the inside of the Rhino – I'm not the best painter so I chose to glue down the rear hatch. Although it might be a nice option because you won't be gluing the top plate at all, so you can swap out the top doors of the Rhino for the turret plate of the Predator.



Here is the main body and turret together. As you can see I did not glue down the turret plate. I did glue the Rhino doors together to make one piece for easy swapping, which you will see later. You'll also notice my **second mistake** -- I mounted the stormbolter hatch covering upside down. I should have mounted it the other way so I could magnetize the stormbolter – no matter, some extra magnets and my trusty drill and I can fix that easily.

The hard part is making a socket on the bottom of the stormbolter assembly without damaging the assembly. It is a delicate part so be careful as you drill/trim the cross of the assembly.

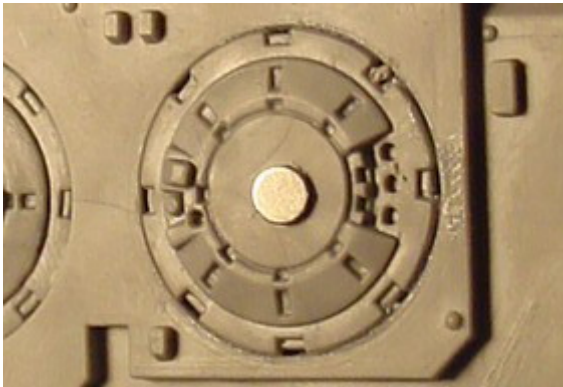


The stormbolter arm



Delicate drilling!

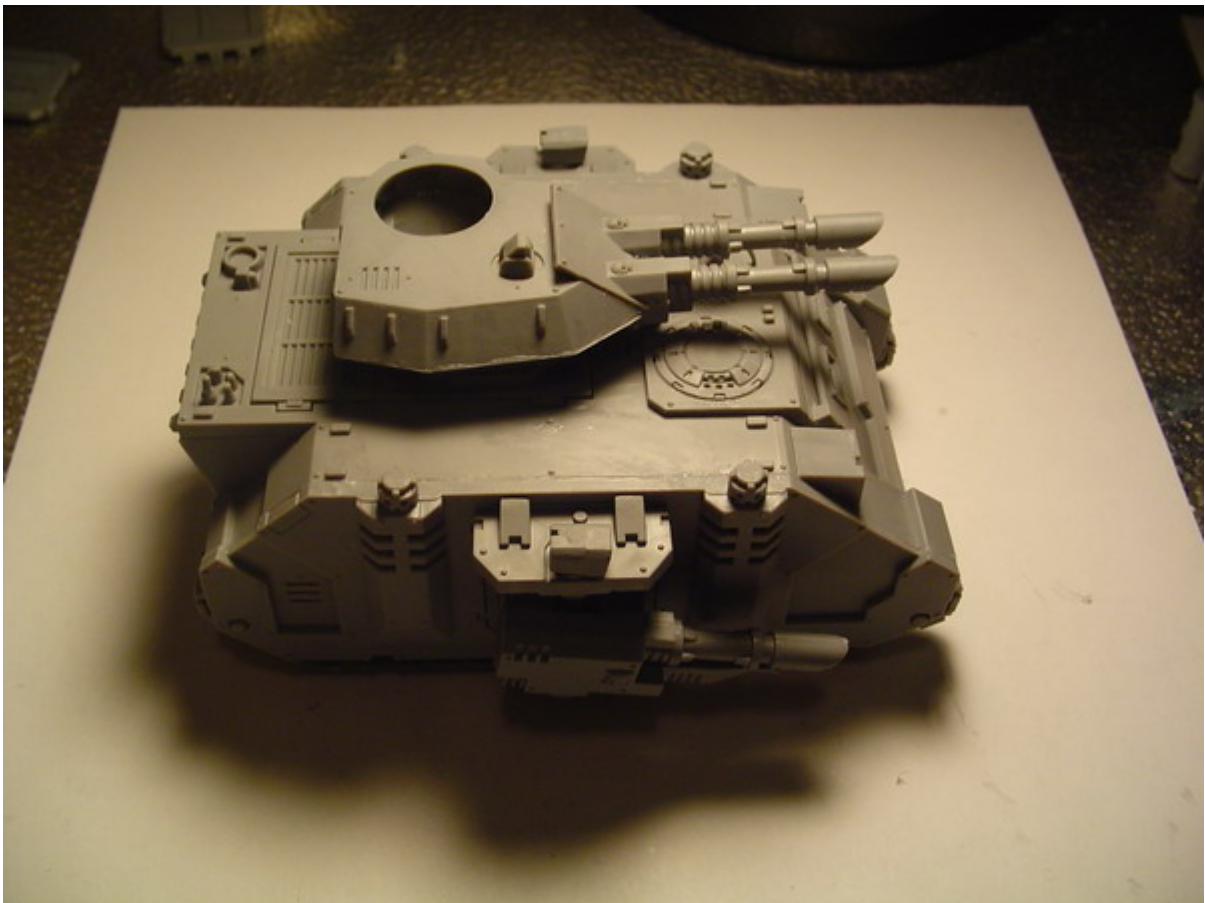
I then drilled a socket in the hatch on the main body and placed a magnet there.



That's it! You're finished making a magneto-pred!

Final note:

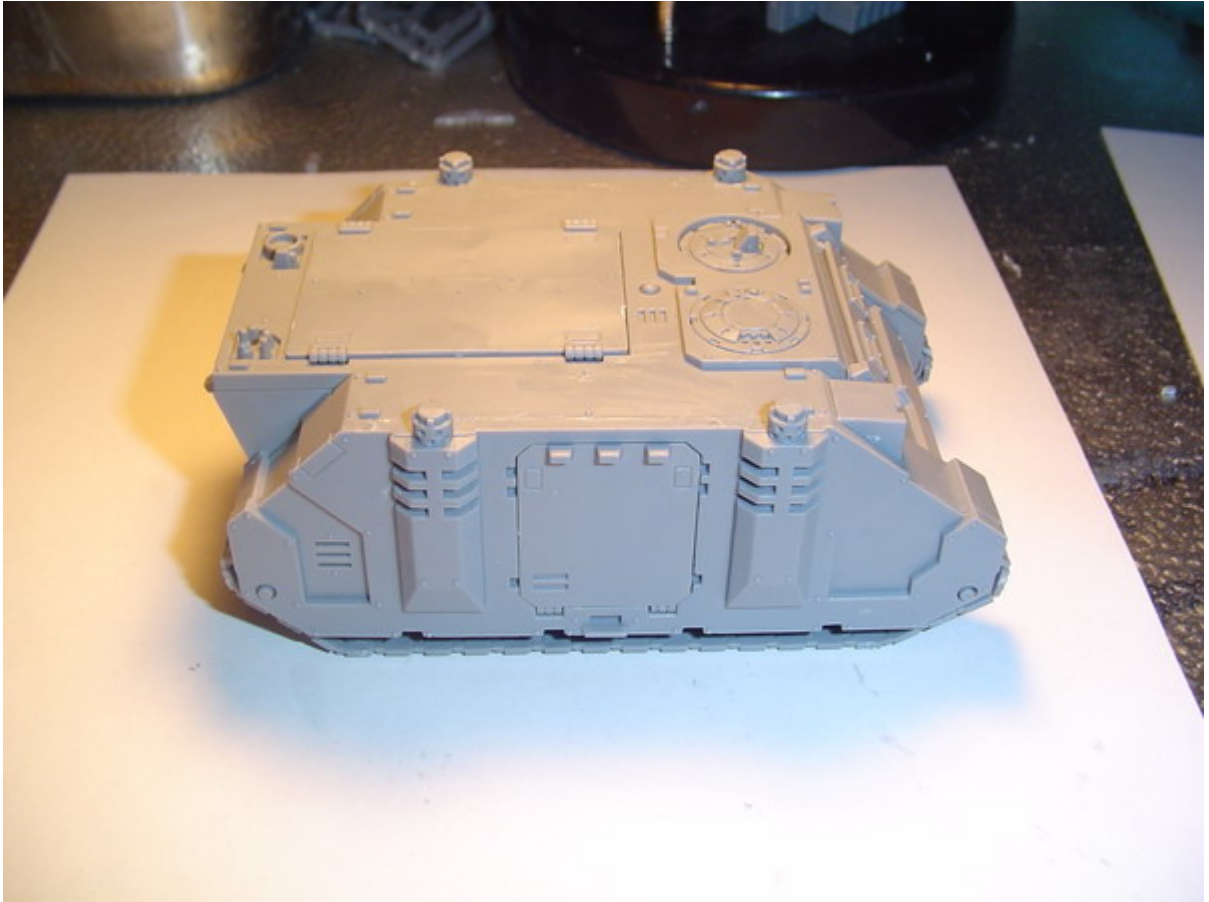
Since the top plate isn't glued down. You can get the Razorback turret sprue (GW# 99390199006) and do that up with your spare magnets as well as the Whirlwind sprue (GW# 99390199010). Shots of the Magneto-Pred



Predator Annihilator



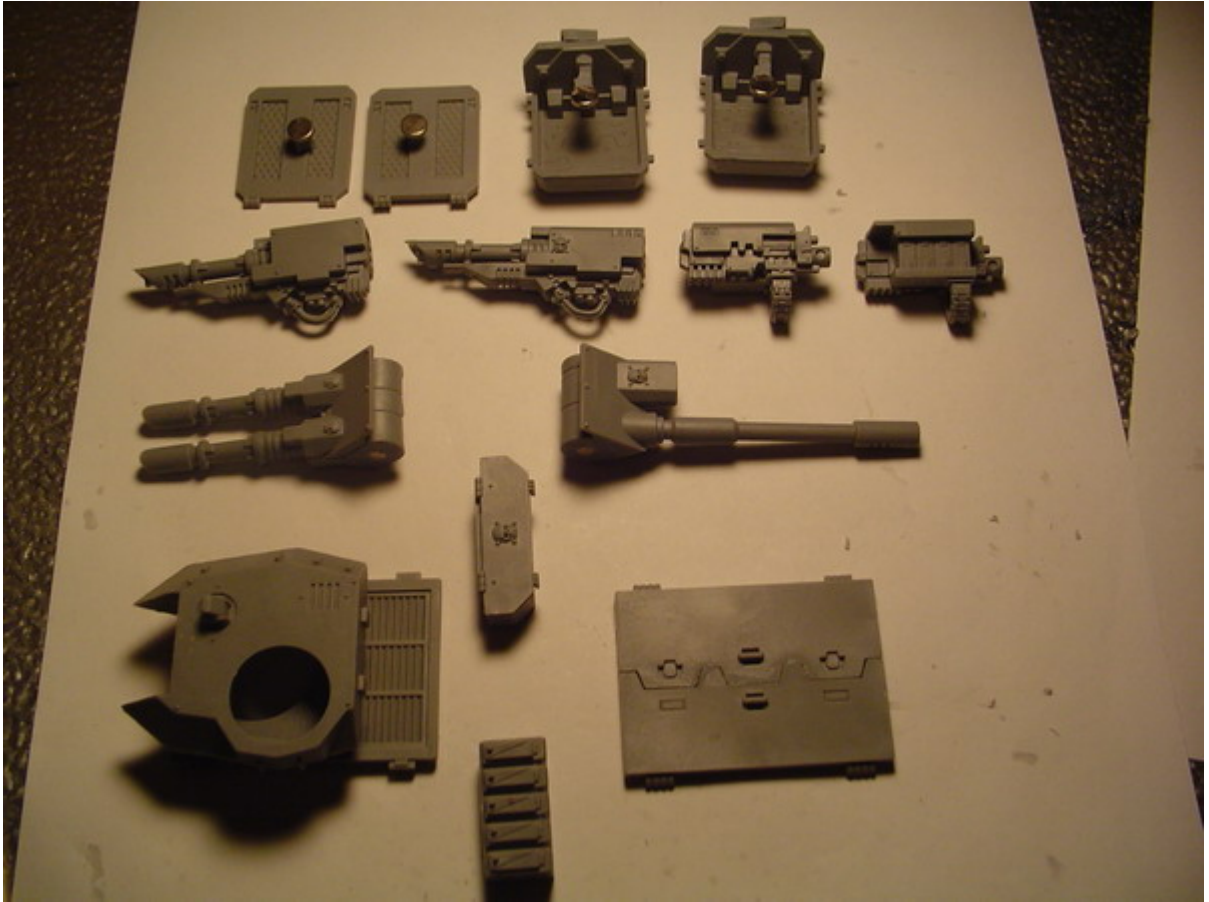
Predator Destructor



Rhino



Main Body alone



Parts