Subject: Projectiles that "push"
Posted by htmlgod on Fri, 23 Jan 2004 10:37:27 GMT
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I'm fairly certain that I understand now how it works, and for a "pull" effect, a different weapon would have to be used. Thiima was right about one thing, it involves the massive rate of fire. I'm not 100% sure that I understand how it works completely, but let me tell you what I believe to be a factor:
1. A huge projectile (about the size of the medium tank, looking at it from the top) with curved edges, and physical collision options.
2. A somewhat ridiculous rate of fire (45.0, + crazy burst settings that make this pretty much a fully-automatic shotgun firing massive projectiles).
3. A relatively high SoftPierceLimit on the projectile, which causes it to pass through its target and only minutely displace it.

General Explanation:
Let me try to explain each part.
Projectile - the huge projectile with curved edges served 2 purposes:
1. it ensured that enough of the target was hit by the projectile (IE it wasnt a "glancing" hit) for the target to be displaced.
2. By having curved edges and a rather low velocity, the projectile was made able to "plow" up underneath targets
3. Also, help prevent the target object from kind of warping around when under a barrage of projectiles, they smooth out its trip through the air.

High rate of fire(45), and high spray angle(spray angle = 6.9, spray count = 8) -
This produced an effect somewhat like that of the shotgun, because the spray angle caused a huge amount of variety in where the projectiles flew, but at the same time, the high rate of fire allows for a "flow" effect, which is what really keeps the target vehicle in the air, because the target is continually being pushed up by hundreds of curved boxes. Without the high rate of fire the target will probably experience an effect somewhat like being pushed around by tanks, because individual projectiles produce a choppy displacement effect at best.

SoftPierceLimit -
This is one of the settings in level edit for the Ammo of the weapon. I'm still not 100% sure what it does, but I think I've got a pretty good idea. I know for certain that it allows the projectile to pass through targets, and the part that I'm partially sure about is this: I believe it causes an effect involving the trajectory of the target.... This part is kind of hard to explain. Let me make an analogy:
Pretend the target is a piece of paper suspended in the air, with its broad side facing the person firing at it. If the person firing at it is throwing beany-bags (or anything that will not easily pass through the paper) at the piece of paper, when the beany-bag hits the paper, it will kind of drag the piece of paper, causing both to continue in the direction of the projectile. However, if the projectile is something like a bullet or a dart, the projectile makes contact with the piece of paper, and the piece of paper is briefly affected by the inertia of the dart, but the dart quickly passes through the paper, after which the paper resumes its previous course.

What I'm trying to say here is that each individual projectile seemingly only has a very minute

affect on the course of the target, which is caused by their higher pierce limit, which allows them to pass through the target and affect its trajectory, but only minutely. The reason this is done is to ensure a "smooth ride."

Well I hope this gives you some degree of understanding about how the weapon allows the pushing of vehicles. Now I will attempt to explain how pull could be done, and what it would entail: I've been thinking about this for a while, and the way I see it, there is only way that it could be done, but it is still feasible. It would have to be on a different weapon, but it would function the same way as the one I described above.

This is why it would require a different weapon:
In order to push, you would want to create the same effect, except pushing the vehicle towards yourself, you would have to have the projectiles moving towards you, no? The new weapon would have to have bones that were like 50 feet away from the weapon, pointing in the direction of the person, thus firing the projectiles towards the person.
