

2.007 Cookbook: Motor Mounts

MOTOR MOUNTS

Used to attach motors to the body of a machine.

Materials:

2 - 2" by 4" Aluminum sheets.

An IBM motor template. (The top of an old motor of the same type.)

6 - 4-40 screws 3/8" long (Longer ones will break your gears!)

Procedure:

1. Use template to figure out what direction the motor should be placed. Factors such as room for power leads, bolt clearance, wheel diameter and motor position in relation to the body ground and wheels should be taken into account.
2. Mark the position of large hole. Drill a 1/2" hole through both aluminum sheets simultaneously.
3. Using the template again mark the position of the three screw holes. (There are two sets be sure to mark the non-indented set. If you are unclear on the set look at a complete motor.) Do not move the template while marking! Your holes will be off by too much.
4. Use a 33 Clearance drill to make the three holes, again drilling both sets simultaneously. Check to see that the template fits in the holes because if it doesn't fit neither will your motor.
5. Draw a bending line in the same place on both sheets considering the same factors as step 1.
6. Drill 4 screw holes BEFORE bending.
7. If possible, bend mounts together in a bending machine. Otherwise, be sure you bend both in the same place.

