

## TOMS SNOWMOBILE

### 3-D CLUTCH ARM TUNING DIRECTIONS

The anodized lever axle has a flat spot machined into either side. This is designed to line up with the bottom side of the bolt, holding the lever axle in.

To help identify tuning options, we have a hole numbering system for locating different weight options. The 5 holes located in the lower part of lever arm are designated as 1, 2,3,4,5 starting from the right hand side or close to the roller and pin location, and moving left towards the lever axle. #1 would be located under the roller and pin and # 5 would be closest to the lever axle. By relocating some of the normal pin weight down under the main axis between pin and lever axle, we end up with a much better and responsive lever arm that also offers much-improved backshift.

#6 is located on top nearest the axle and #7 is closer to the pin and roller

#1 position has the greatest effect on up-shift; too much weight in #1 will generate initial thrust or pull, but will likely vary rpm's on a steep hill

# 5 has the greatest effect on actual RPMs of the vehicle. It will generate a solid or consistent rpm, but will lack in any serious up-shift if the weight is too much.

Using #7 helps control final rpm on the top end or full throttle operation. Too much weight in this position will also not allow full shift out on top end.

The normal included weights in the kits are;

3-6 large brass = 6.7 grams per piece

3-6 med brass = 4.5 grams per piece

3-6 sm. brass = 2.6 grams per piece

Bolt and nut = 1.8 grams per piece

Optional pieces included in the turbo kit; 3 oversize large silver = 10.2 grams each, plus either 3 small 2.3 gram brass pieces or 3 small 0.4 gram plastic pieces Combined weight of 1 oversize silver, sm. brass and nut and bolt is 14.2 grams

Typically for a stock engine and or sled we would use a 6.7 gr. (large brass weight) weight in #1 and a 4.5gr. (med size brass weight). A nut and bolt (1.8 gr.) in #7 would be installed if we had a slight over rev on the top end at wide-open throttle. (This will vary on ramp and spring combination you end up with) This gives you a strong up-shift.

Remove the 4.5 gram weight and installing a 2.6 in #3 and 2.6 in #5 you will have a slightly more linear power curve.

For most applications the lever arms will be set up with the initial weight based on information given by you. Our goal is to have you with a plug and play set up to minimize your tuning time. There are additional weights that are included in your kit to allow you continued fine-tuning as well.