**DURACLUTCH WEIGHT CHART G2 - KIT** SVI, LLC

GEN2 DURACLUTCHES PRIMARY PN TARGET VEHICLE MODEL STOCK WEIGHT LEVEL 1 WT LEVEL 2 WT UPSHIFT RPM PRIMARY PN 10-124 PN 25-114 PN 25-137 PN 25-136 RANGER 700 21-74<sup>1</sup> 21-70<sup>1</sup> 21-68<sup>1</sup> 6000-6400 RANGER 800 MID & FULLSIZE \$46.99 \$47.99 \$47.99 PRIMARY PN 10-125 PN 25-136 PN 25-114 PN 25-137 MY13, 14 RANGER 900 XP 21-74<sup>1</sup> 21-68<sup>1</sup> 6200-6600 21-70<sup>1</sup> \$47.99 \$46.99 \$47.99 PN 25-114 PN 25-136 PN 25-151 6200-6600 21-6412 MY14. 15 RANGER 900 CREW 21-74<sup>1</sup> 21-68<sup>1</sup> See note 1 \$46.99 \$47.99 \$54.99 for MY15 PRIMARY PN 10-126 MY11-14 RZR 900 XP. XP4. 4 PN 25-128 PN 25-135 PN 25-152 8050-8450 23-48<sup>2</sup> 23-45<sup>2</sup> 23-42<sup>2</sup> 7300-7700 MY15 RZR 900 & RZR 900 4 \$46.99 \$45.99 \$46.99 See note 1 PRIMARY PN 10-127 PN 10-099 PN 25-128 PN 25-135 6800-7200 RZR 570 & RANGER 570 23-48<sup>2</sup> 23-45<sup>2</sup> See note 1 for 23-51 \$35.99 \$46.99 \$45.99 MY15 & newer PRIMARY PN 10-128 PN 10-099 PN 25-128 PN 25-135 7600-8000 MY16-18 RZR 900 23-51 23-48<sup>2</sup> 23-45<sup>2</sup> See note 1 \$35.99 \$46.99 \$45.99 PRIMARY PN 10-129 PN 10-081 PN 10-099 PN 25-128 MY15-18 RANGER 900 XP 6800-7200 23-51 23-54 23-48<sup>2</sup> MY16-18 RANGER CREW See note 1 \$35.99 \$46.99 \$41 99 PRIMARY PN 10-131 MY14-18 RZR 1000 XP, XP4 PN 10-100 PN 10-081 PN 10-099 7800-8200 MY16-18 RZR1000 S 23-54 23-51 7700-8100 23-58 MY16-18 GENERAL \$41.99 \$41.99 \$35.99 See note 1 PRIMARY PN 10-143 PN 10-149<sup>3</sup> PN 10-050<sup>4</sup> MY17 RANGER 1000 XP 6800-7200 RG-108 RG-95 Not Available MY18 RANGER 1000 CREW See note 1 \$99.99 \$99.99 <sup>1</sup>Trimmed tip and heel

REV9

**ELEVATIONS FOR WEIGHT CHANGE** STOCK WEIGHT: Below 6000 ft. LEVEL 1 WEIGHT: 6,000 to 12,000 ft. LEVEL 2 WEIGHT: Above 12,000 ft.

These are guidelines. Individual setups and conditions vary. Adjustment may be needed. See note 1 below.

## TIRE SIZE

Installing tires with a diameter greater than O.E.M. tire diameter will void the warranty unless a compensating gear reduction is installed in the drivetrain to offset the gear-up due to the increased tire diameter. This can be done with outboard portal gear reductions at the wheel or changing internal transmission gearing or both.

Customers can, and many do, install DURACLUTCHES on vehicles with tire diameters larger than the O.E.M. diameter. It is impossible for any CVT to compensate for the resultant gear-up without a corresponding drivetrain gear reduction. However an individual can adjust their driving technique to compensate for this gear-up. There are many DURACLUTCH customers who are satisified with the performance and durability. However since this is driver dependant requiring reasonable care and vehicle understanding, it is impossible for SVI, LLC to warranty the DURACLUTCH as such. See notes 2 and 3 below.

## NOTES

1. TARGET UPSHIFT RPM: For some noted models maximum vehicle speed (mph) is limited by throttle (drive-by-wire). The throttle will close/open to match the load and limit speed to the programmed maximum. RPM will decrease/increase accordingly. For example if the vehicle has a windshield and cab and is loaded the throttle may remain fully open and the vehicle not reach the programmed maximum speed. If the vehicle has no windshield and cab and is lightly loaded the throttle will close to hold the vehicle at the programmed maximum speed. The DURACLUTCH will adjust to throttle position and compensate accordingly.

Start with the weight guidelines for elevation. To check upshift RPM start from stationary and push the throttle wide open. Observe RPM at mid-speeds around 30, 50 and 60mph. You should be in the target upshift range.

Also observe the following: If the engine seems to be lugging try a lighter weight. If it seems to run at a higher RPM without "pulling" try a heavier weight.

- 2. TIRE SIZE: RANGERS and RZRS are geared in the drive train for the stock tire size to provide the full CVT ratio capability. Tire diameter directly affects overall gearing. For example on a RANGER 900XP with 25" stock tires, changing to 30" tires is the same as a 20% gear up. This will be like starting out in 2nd gear with a standard transmission car or pickup. Overall CVT ratio is compromised and cannot be recovered. This is true for any clutch/CVT. No clutch/CVT can compensate for a gear-up from larger tires unless there is an off-setting gear reduction in the drivetrain. This can be done by installing portal gear reductions at the wheels, gear changes within the transmission or a combination of both.
- 3. TIRE SIZE AND WEIGHT: Both tire size and weight determine rotating inertia which affects acceleration. The rotating inertia is increased directly by the weight or mass (2 x mass = 2 x inertia). Also the rotating inertia is increased by the square of the radius of the mass from the center of rotation. Assuming the mass is concentrated at the outer diameter (a fair assumption), changing from a stock 25" tire at 25 lbs to a 30" tire at 50 lbs (real numbers) will increase the rotating inertia by almost 3 times (2x15<sup>2</sup>/12.5<sup>2</sup> = 2.9). Add to this 4 tires and the rotating inertia increases by 10 times! This is a very large increase and greatly affects acceleration. Because of this inertia increase LO gear must be used much of the time even if gear reductions are installed. If LO gear is not used as required the clutch packs will wear prematurely. The warranty will be void.

<sup>&</sup>lt;sup>2</sup>Machined side

<sup>&</sup>lt;sup>3</sup>Early weights were 10-133. These weights need to have the heel machined for clearance, if not already.

<sup>&</sup>lt;sup>4</sup>Early weights were 10-034. These weights need to have the heel machined for clearance, if not already.