# Genesis EasyPack Errata Sheet - 7/21/06

This errata sheet lists the shaft loading specifications for AMCI resolvers and transducers that have been developed since the manual's release. In order to make the document complete, it lists shaft loading specifications for all AMCI transducers.

The following ratings are known as "$L_{10}$ ratings" in the bearing trade associations. $L_{10}$ is a statical rating meaning that 90% of the bearings will survive the specified number of revolutions. AMCI has decided to specify $2X10^9$, or 2 billion, as our rated number of revolutions. This number is commonly used in the industry. By specifying the maximum load and statical life, AMCI gives you data you need to choose the right transducer for your application.

Note that these load ratings are maximums, and you should always strive to keep shaft loading to a minimum. The inverse relationship between shaft loading and bearing life is not linear, it's exponential.

$$\left(\frac{1}{x}\right)^3 \text{ Where } x = \frac{\text{new shaft load}}{\text{old shaft load}}$$

This means that cutting the shaft loading in half will, statically, increase the bearing life by a factor of eight.

$$\left(\frac{1}{0.5}\right)^3 = 8$$

*At the specified maximum loads, bearing life is $2X10^9$ revolutions minimum.*

| | Shaft Dia. | Maximum Radial Load | Maximum Axial Load |
|---|---|---|---|
| ***R11 Series*** | | | |
| | 0.120" | 2.0 lbs. (8.9N) | 1.0 lb. (4.4N) |
| | 0.188" | 6.0 lbs. (26.7N) | 3.0 lbs. (13.3N) |
| ***HT-6*** | | | |
| | 0.188" | 6.0 lbs. (26.7N) | 3.0 lbs. (13.3N) |
| ***H25 Series*** | | | |
| | 0.250" | 40 lbs. (178N) | 20 lbs. (89N) |
| | 10mm | 40 lbs. (178N) | 20 lbs. (89N) |
| | 0.375" | 40 lbs. (178N) | 20 lbs. (89N) |
| | 0.625" | 100 lbs. (445N) | 50 lbs. (222N) |
| ***HT Series*** | | | |
| | 0.375" | 100 lbs. (445N) | 50 lbs. (222N) |
| | 0.625" | 100 lbs. (445N) | 50 lbs. (222N) |
| ***HTT Series*** | | | |
| | 0.375" | 100 lbs. (445N) | 50 lbs. (222N) |
| | 0.625" | 100 lbs. (445N) | 50 lbs. (222N) |