

ANDROMAT TODAY

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Fasteners

"A bolt is a bolt, right?"

Scott Wilson

Henschel Andromat Inc

Hello friends,

"What's in a bolt? That which we call a fastener by any other name will work as well."

I doubt this is what ol' Shakespeare had in mind when writing *Romeo & Juliet*.

Oddly enough, that very question is asked regularly, though not quite as eloquent. "Will any bolt work here in place of the broken one?"

Bolt Broke!

We use fasteners every day. From a zip tie to a rivet, all types of fasteners can be found in the everyday things we encounter. So what do we do when a fastener fails? "Replace it, of course."

While this answer is technically correct, it is quite a way from complete. This is especially true for your Andromats.

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Andromat Today is a quarterly trade publication for discussing Andromat issues important to the end user. Each issue will contain useful tidbits of information as well as any news updates from the company. Look for your issue of *Andromat Today* in your inbox.

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Fastener 101:

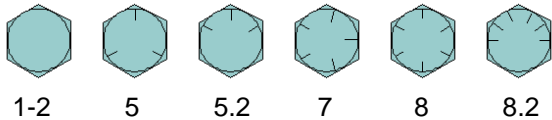
When we find a missing or broken fastener, we should immediately desire to replace it. We make a trip to the bolt bins, find one close and (BAM!), it's fixed. Did we really complete the repair, or did we slap on a band-aide?

Like cuts of meat, fasteners are graded. These grades are based on their performance criteria. Shear strength, elongation, etc. These grades are very important when deciding which fastener to use as a replacement.

Most every fastener used in the assembly of your Andromat has a part number associated with it. Additionally, the necessary specifications and grade can be found within the part description.

Grades:

The SAE bolt grades are 1, 2, 5, 5.2, 7, 8, and 8.2. The bolt heads should be stamped in such a way as to provide the user with its grade. See below:



A quick Google search will yield the full meaning of each numerical grade. My information came from: http://www.engineeringtoolbox.com/steel-bolts-sae-grades-d_1426.html.

Metric bolts are no different. They too have a numerical scale and corresponding head stampings. Check out: http://www.engineeringtoolbox.com/steel-bolts-metric-grades-d_1428.html.

These values are the same as what can be found in the Andromat part descriptions. For example, the description for part A081020142 is a hex bolt size M16x150-8.8 used to attach the cabin to the frame. The number 8.8 is the grade of the bolt. Any bolt used to replace one in this position should meet the criteria for the grade 8.8.

Got Grade, Now What?:

Aside from the bolt's grade, there are a few other specs to be aware of; things such as ASTM, DIN, or ISO. These specifications relate to the bolts design or environmental considerations; full or partial thread, fine or coarse threads, steel or stainless along with many others. This information is important if looking for a replacement bolt when no sample is available or when finding the right bolt for a specific function.

Conclusion:

Who knew fastener selection could be so complicated? In many cases, it's not. Around the home we may use whatever is available with success. Usually, little is riding on that success when compared to a manipulator being down at work. Millions of dollars along with maintenance performance can be riding on a \$2.00 bolt. Shouldn't we use the correct one?



Hey folks!

Check out our newly designed webpage! We have added all new pics, videos, and company information. We hope to provide you with a deeper understanding of what Henschel Andromat Inc. has to offer and what it means to be our customer. Visit us at: www.andromatusa.com

ENJOY!

Customer Feedback:

Bernie Kalman of Tube City IMS gave us a hint regarding part sourcing.

You may need to replace a contactor in your electrical cabinet. You give your local Allen Bradley rep the part number only to have them tell you "no way, it's one of those foreign 50Hz jobs". In this case, provide them with the part number for the 60Hz version, which BTW is the US standard, and BINGO, they have four on the shelf.