Just What Exactly Is A TM20K370 Motorized Wheel Anyway?

*A Very Brief Description Of The Herbach & Rademan Company (H&R Company, Inc) TM20K370 Motorized Caster Wheel*

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# Introduction:

# Why I Wrote This Book

I wrote this *“book”,* or more appropriately, *“booklet”,* as an attempt to answer the question: “Just What Exactly Is A **TM20K370 Motorized Caster Wheel** Anyway?” As such, this “booklet” serves as a very brief description of the “Herbach & Rademan Company (H&R Company, Inc) TM20K370 Motorized Caster Wheel”. The TM20K370 and later, the TM21K460 were popularly used by Tod Loofbourrow in the design and construction of Tods MicroTron Robot in 1976 which was published as a project in “Interface Age, month year” and later as a full blown construction project book “name book hayden” in 1978 which was followed my mention of the project and book in the September 1979 issue of “Boys Life” magazine.

# Why You Should Read This Book

Perhaps the primary (and maybe the *only*) reason for reading this booklet would be to glean some valuable information and specifications in relation to the Herbach & Rademan, Inc. TM20K370 Motorized Wheel. Herbach & Rademan Company sold this particular version of the motorized wheel from the mid to late 1970s and perhaps on into the 1980s. It was actually at some point after 1978 that the supply of the Herbach & Rademan, Incorporated TM20K370 Motorized Wheel began to wane, and thus it was replaced by the Herbach and Rademan, Inc. TM21K460 Motorized Wheel.

The Herbach & Rademan, Inc. TM21K460 Motorized Wheel was, for all intents and purposes, a direct drop-in replacement for the then depleted TM20K370 Motorized Wheel. The differences, I am assuming, were very minor, yet enough to require updating the description in the catalogs and assigning a new part number to the replacement unit. What is not immediately and abundantly clear would be “how many different versions of this Motorized Wheel actually existed” to which I must, sadly, answer “I do not, and may never, know”. It is interesting, at least to me, to note that the two versions of the motorized wheel listed above, TM20K370 and TM21K460 made use of “all metal” construction with the exception of the rubber tread of the wheel and the few bushings and/or washers attached to either side of the actual wheel. By 1986, the original, all-metal versions, had been replaced by a much cheaper “hybrid” version. The frame components themselves remained metal, but the wheel/tire had been changed to what amounted to an “all-rubber” wheel. It was basically just a “chunk” of rubber moulded into the shape of a wheel. The original metal driver gear (the gear that is actually attached to the wheel itself) was replaced with a plastic (nylon) driver gear. Unlike the original versions in which a metal gear was bolted to the metal rim of the wheel, this cheaper version simply had the “driver gear” pressed against the wheel in such a manner that it gripped the wheel allowing the gear to rotate the wheel. Further, the large metal gearbox and motor of the original versions was replaced with a small plastic (nylon) gearbox having internal gears also made of nylon. The motor itself was also smaller and less capable than the predecessors. That final, cheaper version of the motorized wheels was rated to carry a load of up to 25 pounds (11.3398 Kg). Contrast this to the originals which were rated for carrying a load of 200 pounds (90.7185 Kg). That final, cheaper motorized wheel was mechanically a drop-in replacement for the older, more powerful versions but was much weaker in terms of load bearing and carrying capacity thus being largely unsuitable for use in the construction of the MicroTron Robot. The MicroTron or “Mike” Robot remains perhaps the most popular use of the H&R Motorized Caster Wheels.

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# About The Author



**TOM CORSON-KNOWLES** is the #1 Amazon best-selling author of *The Kindle Publishing Bible* and *Schedule Your Success,* among others. He lives in Kapaa, Hawaii with his fiancé. Tom loves educating and inspiring other authors and entrepreneurs to succeed and live the life of their dreams.

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