

Flashback: 1988



How does it fare

35 years later?

by Oton Ribić

It is difficult to write about anything of age without facing risk of being declared a nostalgic lost case. These accusations are not totally unfounded, however; often enough one encounters the case of, if you let me paraphrase another author, “music peaked at the exact moment I was most vulnerable to trite love songs”. Hence I shall try to avoid claiming that LEGO coincidentally peaked right in the happiest period of my childhood. (Who knows, maybe the happiest period of my childhood is yet to come?)

With that overblown disclaimer out of the way, what could be an interesting take on historical material, especially for Technic veterans, is to look back at some principles from several decades ago and to consider them from today’s standpoint. Specifically, the Idea Books, which represented the ultimate in how many ideas could be crammed into a book. Four were published altogether in the eighties and early nineties, with the 8891 from 1991 representing some kind of flagship of the era. My own copy is thoroughly weather-beaten, and I still have enough old, studded Technic parts to build most of its models. But the question is, again – how does such literature fare after the later shift to studless? Is it worth revisiting, or even procuring, despite its part selection being obsolete to some extent?

There are several ways this question can be tackled, and let’s begin with some general observations. The 100-page book contains instructions for twelve models, ranging from fairly simple to pretty complex, with most in between. To be precise, one gets instructions for a rally car, a speedboat, a service truck, a two-seat glider, a dinosaur, a cable car, a mobile crane, a submarine, a mecha, a mechanical rodeo bull, an aeroplane, and a robot. All of them rely mostly on standard Technic building material from the time, though several also require somewhat more exotic parts, like excavator bowls, motors, and an electric controller.

Before diving into mechanics, let’s just stop and consider the fact that twelve models were crammed into a hundred pages, which include the intro and the full two-page photos. The instructions are compressed even by the standards of the time, let alone the current ones.

Due to such limitations, the principles of laying out steps in this book were pretty harsh: no parts list, and the absolute maximum possible number of new parts per step as long as the ambiguities can mostly be avoided. With larger builds, the aforementioned submarine being the perfect example, at every step there are many things

going on in parallel at several spots. That is how a sub with pneumatically controlled and swiveling manipulator arms, also with a pneumatically controlled bucket, and swiveling rear propulsion is built here in fifteen steps over eight pages!

All these nowadays seemingly crazy facts aside – are the ideas from this book we took for an example (and thus, by extension, from the Technic instructions from the era) relevant at the beginning of the 21st century’s second quarter? The answer is not a simple yes or no, but rather depends on the level – or rather, the depth – one wants to dive into.

Let us remember that the overall Technic part selection in the eighties and early nineties was very limited compared to today, and furthermore, that the studded Technic, which was the only available sort, naturally encouraged certain building techniques. Not that anything other than building from bottom upward was impossible, but doing so usually compromised the construction’s strength, reliability or simplicity.

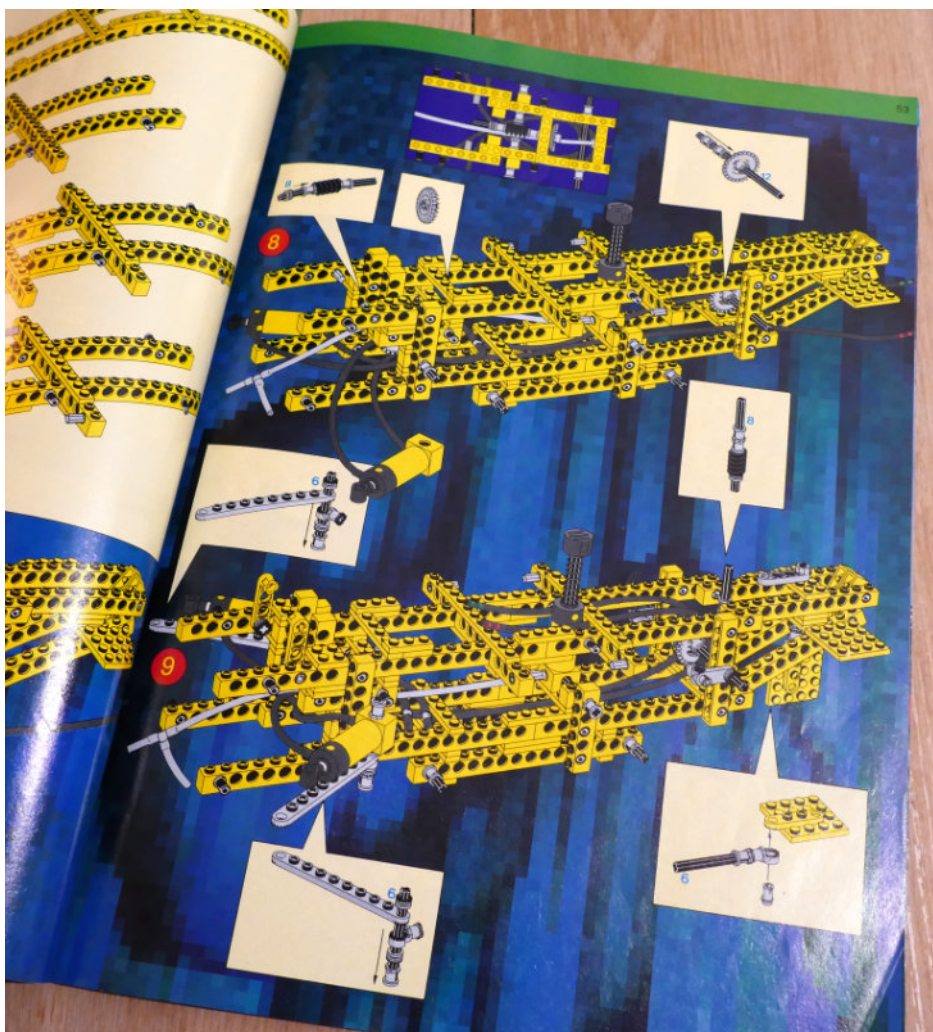
In that sense, the mechanical principles employed in the book, and the sets of the era in general, nowadays seem somewhat basic. With a narrower selection of mechanical parts and the “feature density” limited by the studded Technic

bricks themselves, mechanical functions revolved around several elementary ideas: liftarms, clever linkages, gears, axles, and occasional motorization and pneumatics.

And considered from that angle, the 8891 book, as well as its siblings and the contemporary Technic sets, still serve as excellent training grounds. Studded or not, the theoretical mechanical principles apply the same – though they may be necessarily larger in the older, studded Technic.

The newer, studless approach allowed for denser features and was freed from the concept of building upward, which in turn enabled more complex mechanics, but fundamentals remained the same. If one wants to learn how to build a good steering system, or a linkage, or how to convey rotation from one part of the model to another, both eras of Technic are effective. Or, one could argue that the studded era actually had to deal with stricter limitations and is therefore a better learning material. And many mechanical marvels, no matter how complex overall, are based on carefully orchestrated fundamental principles.

Where the 8891 and its contemporaries are lacking is in exact mechanical implementations



for the modern era. Whereas the fundamentals may remain the same, studless sets can teach how to build them using parts that are actually widely used right now, i.e., parts which you are likely to get as a standard building material in any Technic set from the turn of the millennium onward. If you are interested in exact modern solutions you can copy directly into your creation without any modifications (such as modern gearboxes, linear actuators, e.g.), the studded-era Technic books and sets simply do not have them.

Furthermore, there is a difference in fundamental approach to construction. Studded Technic bricks, with their axle holes between the studs (though there are some exceptions), naturally lean toward frames and distances of even values, i.e., even lengths. Studless, however, favors the odd lengths all around, and symmetric models such as cars almost always have a central beam. This “evenness” factor, which is most visibly demonstrated in the lengths of beams and dimensions of frames, influences the mechanical design built around them.

In my opinion, any Technic builder would benefit from being familiar with both. But if you do not want to commit to more than one, it is probably the studless sort you will want to lean toward. Yes, classic studded Technic bricks are still around and appear regularly even in the newest sets, but the fundamental thinking behind the modern models is studless and odd-number-oriented, as opposed to studded and even. Studless is also more readily available and generally allows for denser and more customizable mechanical design.

On a side note, apart from the acknowledged benefits of studless Technic, the studded still has an indisputable ace up its sleeve: usability beyond pure Technic models. It is much easier to integrate studded Technic into System MOCs, where it serves to provide an interesting mechanical trick without too much effort. Things like working triphammers or an automatically opening cargo bay in a space transporter much more often rely on studded Technic than studless. And it is not uncommon for us, Technic fans, to sometimes forget there are other megaworlds of LEGO out there (I’ll be the first to admit to doing this sin). Therefore, it is not only the question of inherent properties of studded and studless, but of the context where one intends to apply Technic.

And what about the Idea Books? Even if they are not interesting for you as learning material, think of them as nice little time machines to Technic history which look good on any bookshelf.

