



# MX



**W**HETHER YOU'RE an off-roader who wants to find out how the other half lives, or you're just getting started in on-reading, the odds are good that you don't want to spend a fortune to find out what it's like. Surprise!—you don't have to. McAllister\* recently intro-

duced the Hyundai of R/C on-road cars!

I know that there are already plenty of inexpensive on-road cars on the market and that the last thing anyone should be subjected to is another in a long line of listless little Yugos. Their fiberglass chassis and flanged bronze bushings are


M C A L L S T E R

# K-PRO

by BILL O'BRIEN



cheap  
thrills



too much to inflict on anyone! But what if you could spend as much as you would on one of these "wannabes" for a car that, although it might not be ready to take on a Lynx II right out of the box, at least has what you need to have a fighting chance?!

# MX-PRO

Even with the dual rate dialed down to almost nothing, I could still power through turns without a problem.



## THE SEMI-KIT

Let's look at the MX-Pro's features. Its lightweight graphite chassis has a conventional bat-wing design, and it's slotted to hold four individual cells on either side. This means that you can distribute the weight of the batteries to suit the type of track you're running on. You can also use a standard stick pack, and that's an immense boon to off-roaders who want to get into on-reading without spending more money on new batteries.

McAllister includes an aluminum front beam and beam carriers

from spinning out on oval tracks, some on-rovers like to put all the weight on the left side of their cars.)

The motor pod is attached to a standard graphite T-bar which, in turn, is bolted to the main chassis. Not as traditional on a budget racer is the aluminum-tipped graphite rear axle. Most inexpensive car kits use a heavy steel axle that racers quickly replace with a graphite unit—or a titanium one, if they have big bucks to spend. A 48-pitch spur gear (not 32) is also part of the package.

Perhaps the MX-

expensive than some model cars. Given the wide choice of tires—from straight foams to rubber-capped radials—and the many available tire compounds (and staggers), you'll be able to find just the right tire traction for your track. Likewise, with such a wide choice of IMSA, NASCAR, CART, F1 and plain old scale bodies, you're sure to find a look you like.

## CONSTRUCTION

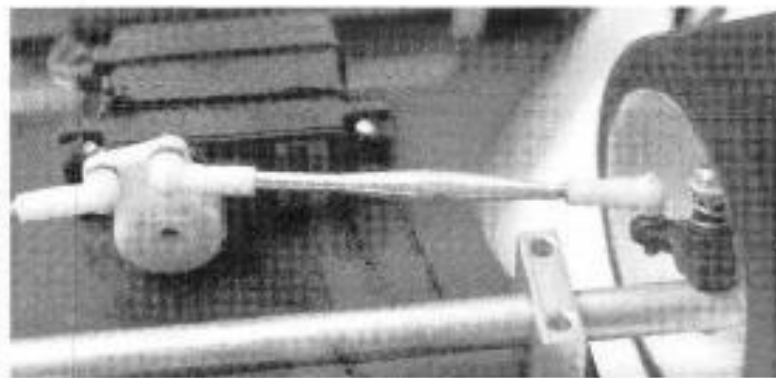
Don't look too hard for an assembly manual; all you'll find is a 11x17 sheet of paper folded in half. It's a

the way all diffs are: it isn't easy to keep the aluminum-tipped graphite axle level while you're filling the spur gear with the diff balls.

Because the MX-Pro's price is so reasonable, you might want to make some changes as you complete the assembly. Switching to Hyperballs\* for the diff will add about \$10 to the cost, and you'll shell out a sawbuck or so for Robinson Racing's\* gold-anodized diff rings. (Ceramic diff rings are another possibility. They're incredibly



*This simple rear damper is nothing more than a rod, a tube and a spring. CRP's Frog shocks should work well as replacements.*



*It's easy to make adjustments with TAC's aluminum turnbuckles. The stock McAllister rods are threaded so that one end of the rod must be removed before you can adjust its length.*

as well as an aluminum engine pod—and a strange pod it is. That it's aluminum isn't unusual, but it has been drilled out to allow you to set-up the motor on either side of the pod, and this gives you another way to control weight distribution. (To prevent the rear end

Pro's crowning glory is that there isn't a bushing to be found; flanged bearings are included for the front wheels, the rear axle and the differential.

You don't get tires or a body, but you do get wheels. That's part of the reason why the MX-Pro is less

good thing that the instructions are well-written!

There are only two difficult stages in the assembly—putting the differential together and assembling the rear damper—and everything else is smooth sailing. The diff is difficult to handle in

smooth, but they cost a lot. I recommend that you keep it cheap until you've decided whether or not you like on-road racing.)

The rear spring damper is connected to the T-pod, and it prevents the pod from flexing too far forward and snapping.

# McALLISTER MX- PRO



...it tracked as  
straight as  
an arrow!

Type ..... 2WD on-road  
Scale ..... 1/10  
Retail Price ..... \$215

#### DIMENSIONS:

Overall Length ..... 13.5 inches  
Width (f/r) ..... 8.5 inches  
Wheelbase ..... 10.25 inches  
Track (f/r) ..... 7 inches

#### WEIGHT:

Gross (w/battery) ..... 3.48 pounds

#### BODY:

Type ..... not included

#### CHASSIS:

Type ..... Pan  
Material ..... Graphite

#### DRIVE TRAIN:

Primary ..... Direct-drive  
Differential ..... Ball  
Bearings/Bushings ..... Ball bearings

#### SUSPENSION:

Front: Type ..... Solid axle  
Damping ..... Independent front  
springs  
Rear: Type ..... Stressed T-pod  
Damping ..... Spring damper

#### WHEELS:

Front: Type ..... BBS  
Dimensions (DxW) ..... 2x1 inches  
Rear: Type ..... BBS  
Dimensions (DxW) ..... 2x2 inches

#### TIRES:

Front/Rear ..... not included

#### ELECTRICS:

Motor ..... not included  
Battery ..... not included  
Speed Controller ..... not included

#### OPTIONS AS TESTED:

Novak 2-channel receiver and T-4 speed controller; JR 507 servo; Duratrax 1,500mAh battery; TRC green-dot tires; Tecnicraft titanium tumbuckles; Revtech stock motor.

#### COMMENTS:

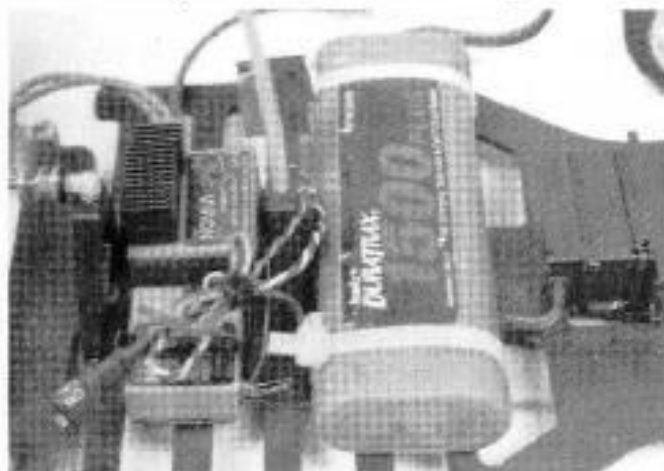
The MX-Pro is an excellent entry-level car that can "grow" with you through at least your first year of on-road racing.

McAllister says this design is very effective, but I've seen spring dampers on Frogs that worked better! Basically, the damper is a shaft with a tube and a spring. Golly! There's

You might also want to change the tie rods. You can't adjust the stock rods without removing the ball links from the ball pivots, and that's a no-no. There are several solutions to this problem: the cheapest is to use Du-Bro\* adjustable tumbuckles. They're a little heavy, but they work. A



If you do a lot of off-roading, you can use your stick packs in this car. CRP makes tie-wraps that can be used over and over again.



The Novak electronics worked well, but a torque-limiting speed controller would help eliminate wheel spinning. The rear-pod brace prevents you from mounting the battery any farther back than it is, so this is a good place for the radio gear.

really no way to vary the resistance or the T-pod's response (in shock terminology, these are called damping and rebound), so keep CRP's\* Frog front shocks in mind as

second alternative is Tecnicraft\* titanium tumbuckles. Now we're talking high-tech and relatively high bucks, as these are about \$8 a pair. If you really want to make an investment in the car

right away, spend the \$10 to \$15 it takes to get a center-point steering kit. That's the ultimate no-slop setup.

#### ELEC-TRICKS

For radio gear, I chose a Novak\* receiver and speed controller and a small JR\* 507 servo. Adding to the hodge-podge, I use a Hi-Tec\* 3-channel pistol-grip radio (I put the third channel on unemployment). As you might suspect, these are all things I had lying around. If I were going to buy all new stuff for the car, I'd make some changes.

First, I'd go with one of the tiny receivers from RCD\*, Tekin\* or Novak. Because weight reduction is one of the keys to successful on-road racing, I'd also use a Futaba\* S-129 microservo. Most important of all is the speed controller. If you use a hot motor wind, a torque-limiting SC is a must for good off-road control, especially when your car comes off the line.

Don't let the "torque-limiting" part of the name frighten you: these speed controllers are actually current limiters that clamp down any time the controller exceeds the current limit you've set. This usually happens when your car comes off the line, or at any other time when you accelerate hard (you know, those times when you're trying to go straight quickly, and

*(Continued on page 150)*

through the hassles of mounting and truing them (why I own a tire-truing machine when I've never had an on-road car, I don't know), I bought TRC mounted, trued and glued front and rear wheels and tires.

Tires are coded with colored dots that indicate their hardness or softness. Although the most basic reason for having a variety of tire compounds has to do with track surfaces, part of the traction equation relates to how you have your car set up. If you've never tried on-roading before (let alone run this car before), you can't possibly know which are the correct tires to buy.

I started with green dots because the color looked better than any of the others (yup, that was my reasoning!), but I hope to make more informed decisions about the tire compound as I get more practice. Don't rely on traction compounds to do the work your tire should be doing. If you lose traction, get a softer tire. If you have too much traction, use a tire that's a little harder. Traction compound lets you fine-tune the tire, not make up for its deficiencies.

### BODY WORKS

Deluged with a nearly overwhelming choice of bodies (far more than I've ever found for off-road!), I retreated into a small corner of my local hobby shop and bumped into a Lexan version of Oldsmobile's Aerotech body. In size and style, the Aerotech body is remarkably similar to an IMSA Camel Light body. On the full-size car, the body was designed to provide the utmost in aerodynamic efficiency. The scale body is a faithful reproduction.

like to take all the credit, but I'm sure that the MX-Pro's easy setup had as much, if not more, to do with it as I did!

The car turns on a nickel (I tried a dime, but it kept giving me change), but I had to dial the dual rate way down to prevent the car from spinning out on turns. (Someone said I should slow down, but the whine of the MX-Pro at speed just sounded too good.) Even with the dual rate dialed down to almost nothing, I could still power through turns without a problem. I like that!

When my Duratrax\* batteries eventually dumped after 4 minutes, 28 seconds and I retrieved the MX-Pro from the center of the grid (duck, dodge, jump to avoid oncoming traffic), it was obvious that I was pleased. (Of course, repeating "Yes" in an ever-increasing volume was probably a dead give-away.) One drawback: although there isn't any dirt to clean off, there's an awful lot of tire dust all over the place, and it's much harder to remove.

### WHAT'S NEXT

I don't know what to tell you about improving this car. I'd certainly like to do something about that rear damper (it wasn't a problem, but I just don't like it). Camber adjustments should be possible, but not with the stock, solid, front-axle setup. There are kits that remedy the deficiencies, but they increase the car's cost, and I'm not sure I want to do that. I guess I'll just have to be satisfied with driving the MX-Pro and enjoying it the way it is. What a shame!

