

ROAD TEST

1st Test: 1973 Mercury Montego

Transpo 72—What Future For The Automobile?

Ford Pinto Runabout
50,000-Mile Teardown
Preview

'73 Montego



COMPLETE ROAD TESTS:

- Mazda RX-3 Wagon • Datsun 620 Pickup •
- Subaru GL Coupe • Plymouth Cricket Wagon •
- Alfa Romeo 2000 GT Veloce • Steyr-Puch Haflinger •



A Fun Machine

The Haflinger 700 AP is a small, four wheel drive, cross country runner, built by Steyr-Puch of Austria, that just loves dirt and rocks.

The hottest thing on the vehicle market today is the RV; recreational vehicles of all sorts are selling like the proverbial hot cakes. Cost doesn't seem to be a problem, and folks in search of mobilized leisure living think nothing of plunking down the price of a suburban cottage for a mobile luxury liner.

There has been a huge surge upward in four wheel drive vehicle sales too. Once confined to surplus Jeeps, the market now is huge with Chevrolet, Ford, International, and of course, American Motors' Jeep Division, all making bob tailed four by fours with V-8 power and the creature comforts far beyond the original concept of a general purpose utility vehicle. The imports are into the act with the Toyota Land Cruiser leading the overseas manufacturers in domestic sales with several versions of its four wheeler from stark reality to luxury station wagon. Land Rover is the other major import in the field, and it too

comes with more goodies than the British Army ever envisioned. Of course all these vehicles are available in stripped, utility forms as well, and all of our major companies make standard four wheel drive pickup trucks in sundry sizes.

The four wheel drive movement has gone to such astounding proportions that it has been noted as a definite factor in passenger car sales. Escape to the out back on weekends is gathering converts every day, and sooner or later these people will buy a camper/truck or motor home, and tow a dune buggy, four by four, or a brace of motorcycles behind them in their search for outdoor recreation away from the city smog and congestion. Now we mentioned the general availability of standard sized four wheelers from foreign shores, but there is still one more category in the fun machines. Pint sized four wheel drive utilities, like our subject Haflinger, are something relatively new on the

American scene. In fact they are seldom seen far from the ports of entry. Most common in the southwest is the little Suzuki Brute, but distribution is confined at present to that area. Down in east Texas, a fresh contender in mini utility sales has just put in an appearance, and the plans for distribution include country wide agents for the Austrian built Haflinger from Steyr-Puch.

At this point you may wonder "what's a Haflinger?" Well, so did the ROAD TEST staff, so a little background is in order. The little truck comes from Austria's only current auto maker, Steyr-Puch. The Viennese company was founded in 1864, and has been named, since 1935, Steyr-Damiler-Puch-AG. Long time buffs may recall that the first Volkswagen was designed around a Steyr engine, an ancestor of the power plant in the Haflinger. Of course, Dr. Porsche spent his exile from Germany as a consultant in Austria, and it was there that



Tiny four wheeler will turn extremely tight circles; the handling and off road stability is very good on the short wheelbase, and maneuverability is absolutely tops.

the first Porsche automobiles evolved from the drawing board to reality.

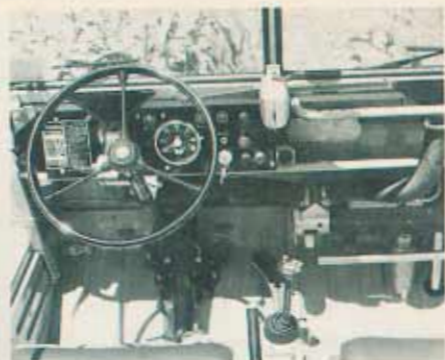
Overshadowed by the post war boom in the German automobile industry, the Steyr-Puch firm, with contractual agreements in Italy with Fiat, built only small trucks and cars, and eventually developed this kooky, mini jeep for use by forestry services, Alpine based military units, hunters, and whatever industry demanded the agility of a mountain goat in a people and equipment carrying wheeled device. The company continued to manufacture their 500S sedan, which looks exactly like a Fiat 500, but the engine is all Steyr-Puch — different in design, although sized along with the two cylinder, air cooled engine that powers the baby Fiats.

The Hafflinger 700 has appeared in this country on occasion, and in the last few years several efforts to import it for sales have been started by agents in Goldsboro, N.C. Currently, the Speedwell Motor Company, of Beaumont, Texas, is bringing the Hafflinger in through Gulf ports for resale in decent quantity, and they also have a good spare parts department underway. So it is feasible that repair and maintenance parts on the Steyr would be a mere matter of inland freight rather than overseas hassles. We were presented with a Hafflinger for test by Norman Bartle, Speedwell's president, who hauled the little four wheeler from Texas on a

trailer. It is a lot of good things, but the Hafflinger is definitely not a highway cruiser. Top speed is rated around 48 mph, but that is strictly under optimum conditions. We never got over 45 down hills on the pavement, and, for this reason, the regular performance figures such as quarter mile times, brake stops, and so forth are not a part of the Hafflinger road test.

The base vehicle is really basic! It has a lot of mechanical charm, but beyond that it is a platform on wheels with two front seats and a fold down windshield, and it costs around three grand in this form. Our test unit was equipped with the optional cab top and front doors — a canvas covering that fits well and makes a pick up cab out of the 700 platform. The other major extras included a U.S. built Superwinch with a 1500 pound rating, and a full set of the fat wheels shod with Goodyear Terra tires. Total cost of our test Hafflinger stands over \$3500 bucks, putting it into the fun car, adult toy category, and out of the slot for second family car use. However, its rough terrain capabilities, plus its diminutive size, make it a natural for survey work, power line repair, and mountain farm hay wagon, as well as the possibilities already mentioned. The Hafflinger can be fitted with a snow plow device also, and it could be a dandy trail blazer at a ski resort.

Mechanically the tiny Steyr-Puch has some extremely sophisticated bits and pieces not at all common on mini trucks from overseas. The engine is an air cooled, four cycle, two cylinder, horizontally opposed unit that looks a bit like half a push rod Porsche. With an 80 mm bore and a 64 mm stroke, the engine



Cockpit is tidy, but the U.S. required gasoline heater and defroster ducts are outsize for the need. Foot bar and grab handle for the passenger are a big comfort factor, and parcel shelf is still usable behind the defrost hose.



Head on the Hafflinger looks purposeful with street legal bumper and lights. Rubber topped brackets just inside the mirror mountings are stops for the windshield when it is folded down.

displaces 643cc (39.23 ci). The tiny powerplant has hemispherical combustion chambers with opposed valves operated by pushrods with rockers at both ends, a nitroded crank, full flow oil filter, and an oil cooler. The Zenith 32 NDIX carburetor is a special version for cross country work and is fitted with an oil bath air cleaner and micron filter with a paper element. That does sound a bit familiar!

The electrics are all 12 volt Bosch, and the starter is a dyna type where one must hold the key on until the little engine catches and builds some RPM. Nice touches include the oil dip stick that screws into place so it can't work its way out from vibration, double fan belt drive pulley, and complete sealing of the engine and shielding of the wiring to aid durability off road. Horsepower is rated at 30 SAE gross, and the engine fits snugly into a compact compartment at the rear under the floor. Access is



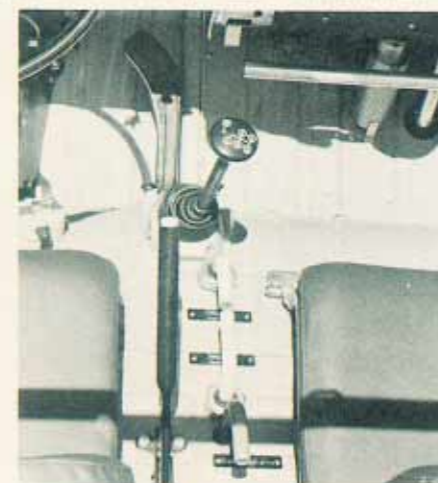
Short wheelbase is really visible from the side view; door/window piece just lifts out of the slot, and top is easily removed and replaced by using the tiny tie down tabs.



Lower rear bumper is a U.S. addition, mud flaps, all lights, including back up, are standard. Test unit had a towing plug (left), and engine is tucked in behind the screen.



Storage bins carry the battery on one side, and the tool kits and miscellany on the other. All boxes are padlocked, and share a common key.



Pull out handles between the seats engage the front drive and differential locks, and they are handy to use. Strange gas pedal is oddly placed, but one adapts to its use easily.

through a screened vertical panel in the tail and a trap door affair on the extreme rear of the body platform.

The five speeds forward gearbox is all synchromesh, but first and second gear are for use only in the rough. First gear tops out around 2 mph, and it's really a stump puller. Starting from rest in third gear is standard procedure on the street, and it is easily accomplished without slipping the clutch. Fourth and fifth are reached through a spring load further on to the driver's right. The engine has a governing device so you must shift whenever the engine runs close to its 4800 rpm maximum, and that can come

quickly in the intermediate gears in normal driving.

The all independent suspension is unusual in a utility vehicle, and it features swing axles front and rear connected to the chassis by drag links inclined toward the rear and the front respectively to form a triangle for a sturdy layout. At each wheel the drive shaft terminates in a spur wheel reduction gear, shades of the VW van. There are hefty coil springs on all four corners, with rubber bumpers in the springs to supply a progressive rate on bumps, and telescopic shocks. Skid plates are standard under each differential, as is the differential locks.

Four wheel drive is engaged by turning a lever between the seats, and it can be brought in without stopping the car. With no hubs to turn the front drive is available anytime. The front and rear differential locks are also activated by levers between the seats, and these too can be engaged while motoring along. Actually, the various drive set ups can be activated without disengaging the clutch, and that feature is handy in the rocks and ditches of the out back. The Hafflinger has 8.5 inch finned alloy drum brakes all around, and Fiat patterned 12 inch wheels fitted with 165 x 12 Semperit Universal Grip PR 4 tires are standard. These tires are quite similar to Goodyear snow and mud units, and we found them equal to all local off road



Terra tires and wide wheels are an extra that would be handy in the sand or swamps. Cabin drain plug, just visible above the tire, looks like a jacking point, but it is not. It is tricky to use a floor jack on the Steyr.



If needed the rear seats unfold like a jack-in-the-box from the flat bed floor. Seats move with ease, and it's a one hand operation.



Spare tire carrier is well protected from road damage, and one can carry another spare on the opposite side. Canvas top support does double duty as a roll bar, and all detail work is really quite well done.

demands. With the test unit came the second set of wheels, fat 10.50 by 12 numbers and Goodyear Terra tires. These 23 inch wide paddlers would be at home in the soft sand or real mud, but we liked the Semperits for regular Haflinger motoring.

The steering box is mounted between the brake and clutch pedal, and the worm and sector unit connects to equal length tie rods. The gear is a bit complex for so stark a machine, but the driver sits forward of the front wheels which makes for a weirdo linkage. Still, the steering effort is light, and the feeling is quite precise on any ground. The little 4 x 4 turns circles in a driveway, and the 30 foot turning circle is indicative of the great maneuverability in tight quarters.

The odd looking gas pedal is not at all difficult to operate by the way. The instrument panel is plain with only a mile per hour speedometer that reads to an optimistic 60. To the driver's left on the dash are fuses and a metal plate tells all the secrets of the shift and drive mechanisms. On the right are oil and ignition warning lights, and the ignition keyhole.

The spartan looking front seats are a big surprise for they are really comfortable. The driver's seat tilts forward to reveal the gas filler cap, and in front of the passenger is a large, no nonsense type grab handle for off road security. The test unit was fitted with three point diagonal harness, and it is hopeless to wear to advantage, plus there is no way to use the seat belt only in comfort. Also, for U.S. consumption, a gasoline heater is tucked under the passenger's foot space and huge blower ducts supply the mandatory defrost. Other U.S. additions include the secondary rear bumper mounted below the original to conform to local requirements.

In the truck bed itself are two pop up



Trap door in the bed provides entry to the top of the engine and carb. Bed sides are removable.

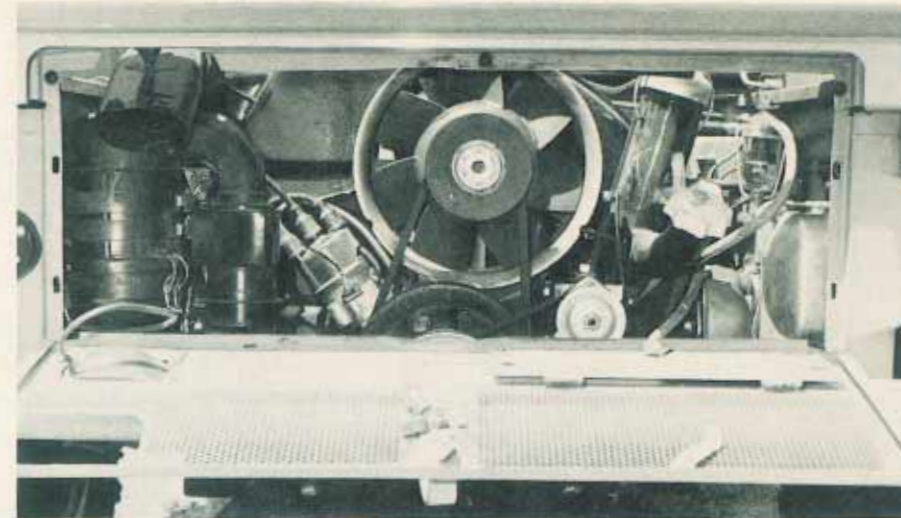
rear seats that just unfold from the floor like a taxi cab jump seat. These are comfortable also, and the rear seat riders can hang onto the rear cross member braces while in motion. Mud flaps for the rear tires are a handy bit of standard equipment, and the top, while primitive in appearance gets the job done on the road. We took the doors off, a mere matter of lifting them up and out of the retaining slots, for most of our Haflinger tests, and the little theater rope style retainers alongside the front seats brought smiles from everyone on the street. One feature that is as practical as it is whimsical is the drain plugs in the cockpit. To wash the Haflinger you just hose it down inside and out, and it drips dry. How about that!

As we said before, the Haflinger is not the greatest mode of daily transportation. Although the side emblem says Pathfinder, the Haflinger name suits it more — it refers to a Tyrolean mountain pony, an Alpine style burro, and the comparison is a good one. We rowed the little four wheeler through a days worth of chores, and it did take an unusual amount of time to get from place to place. It is hardly the car for L.A.'s frantic freeways, so we motored sedately on the surface streets, engaging in many conversations with neighboring drivers in more conventional craft. Everyone, of course, asked, "What is it?" We settled on Austrian mini-jeep for a quick reply. It is slow going, but a joy to park; you can slide into the most confining slot with perfect ease.

However, the dirt and rocks of the great outdoors are the Haflinger's forte, and what seemed like skittish behavior on the pavement became stable and secure in the dirt. The vehicle is rated to

carry over 1100 pounds of payload on the platform, and it probably would if you were not in a hurry. It is a real "creeper" device off road, and it will negotiate the 65° gradient the factory says it will. In the dry California spring-time we couldn't locate a decent stream to cross, but it is said to have a fording depth of some 14 inches and that seems feasible. Ditches, rocks, and all manner of rubble present little problems to the Haflinger chauffeur, and it is like many other mini machines... you end up grinning all the time you are behind the wheel. There is scant overhang, especially at the rear, on the 59 inch wheelbase. There is a 72 inch wheelbase version of the Haflinger, available on special order. The backbone type frame is a sturdy number, and the drive shaft housing is a husky integral part of the chassis.

We spent a full day bounding around in the foothills, and it didn't seem to make much of a dent in the gas supply. We have quoted the factory figures here on gas consumption, since we have no real yardstick on that, and the yardstick



Engine access for quick checks is via the latched screen at the rear. Double fan pulley is a nice touch, and weather shielding is quite complete on the working parts.

actually makes a handy gas gauge when you poke into the tank under the seat. We got some wheelspin climbing in the

soft dirt with the on/off road tires, but grabbing four wheel drive and the front differential lock would enable the Haflinger to idle its way out of self dug holes in the low, low first gear. You don't need a running start on a steep hill, although it does help. You can stop half way up a grade and then creep away again, and

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STEYR-PUCH HAFLINGER 700AP



SPECIFICATIONS AS TESTED

Engine	643cc, 2 cyl., flat opposed, 4 cycle, air cooled	
Bore & Stroke	3.149 x 2.519	
Compression ratio	8.0:1	
Horsepower	30 (SAE) at 4800 rpm	
Torque	33.7 lb-ft at 2500 rpm	
Transmission	5-speed manual, all synchromesh	
Steering	worm & sector, 3 turns lock-to-lock, 30.5 ft curb to curb	
Brakes	8.5 in. finned alloy drums all around	
Suspension	all independent, swing axles, coil springs, tube shocks	
Tires	165 x 12 Semperit, all weather	
Dimensions (ins.):		
Wheelbase	59.05	Rear track 44.48
Length	117.5	Ground clearance . . . 9.5
Width	53.1	Height 68.5
Front track	44.48	Weight 1570 lbs
Capacities:		
Fuel	8.25 gal	Oil 3% pts
Coolant	N/A	Bed 21 sq ft approx

PERFORMANCE AND MAINTENANCE

Acceleration:	Gears:
0-30 mph	N/A
0-45 mph	N/A
0-60 mph	N/A
0-75 mph	N/A
0-1/4 mile	N/A
Ideal cruise	35-40 mph
Top speed	45 mph
Average economy (city)	26 mpg
Average economy (country)	approx 1 gal/hour off road
Fuel required	Premium
Oil change (mos/miles)	depends on use
Lubrication (mos/miles)	depends on use
Warranty (mos/miles)	12 / 12,000
Type tools required	Metric
U.S. Dealers	n/a

BASE PRICE OF CAR

(Excludes state and local taxes, license, dealer preparation, and domestic transportation): \$2995.00 POE
 Beaumont, Texas
 Plus desirable options:
 \$ 175.00 Half cab top, doors
 \$ 175.00 Terra tires, wheels (exchange)
 \$ 199.50 Winch
 \$3544.50 TOTAL

N/A—Not applicable
 n/a—Not available

Fun Machine

continued

the tight first gear is every bit as valuable on the down hill side. The brakes on our test unit were its worst feature. They required substantial pedal effort, and seldom stopped the car in a decent distance on or off the road from low speeds. We didn't experience brake fade per se, but the brakes just didn't work well in the first instance or any time thereafter.

Ditches were a ball to climb through in the 700 AP. With a good eight inches of wheel travel on each corner, and good ground clearance, the little utility would clamber in and out of any hole. There is a good bit of lean in these maneuvers, but the low center of gravity gives one confidence that the car will stay upright, even with three or just two wheels on the ground. We were impressed with these features, and even when listing hard to one side, the Haflinger would eventually right itself with the horizon and carry on, if the driver snagged the proper center levers at the proper time. Anyhow, if you did lay it on its side, a couple of guys could easily pop it back on the wheels, for the Haflinger's unladen weight is similar to a two seat dune buggy.

In summary, the Haflinger 700 AP is unique among the normal vehicles on test by this magazine. It is great fun for scampering around in rough country, and it could have real value as transport for something like a fire spotting post in the woods. It will go through canyons and trails that are far too narrow for a standard size utility, but it just doesn't have enough punch for regular off road outings. All the slick drive units and super suspension are just great for the rough stuff, but the very real lack of usable power puts the Haflinger in a limited use category. It certainly does have all terrain capabilities, which makes it keen for specific uses in the back country. But for the average searcher after a recreational vehicle, the Haflinger is somewhat of an expensive novelty, without the cruising speed of more ordinary carryalls, but with a cost that is quite similar.

Still, there is a place for everything on wheels in this car crazy country, and we expect that there will be private RV users, as well as back country resort and maintenance people, who will find that the Haflinger fills an exact need ... a need for a sturdy all terrain runner with go anywhere ability and decent carrying capacity. Without a doubt it is fun to bound around the country in a Haflinger. We predict that the importers will sell all the Steyr-Puch four wheelers that they can get off the boat, and probably a good half of them will never leave Texas. ●