

TR3 RESTORATION: A LONGTIME OWNER'S LABOR OF LOVE



Hemmings

SPORTS & EXOTIC CAR

AUGUST 2014 #108 \$4.99

THE FINEST COLLECTOR CARS FROM AROUND THE WORLD



Ferrari MONDIAL

THE SURPRISINGLY
EASY TO OWN,
FAMILY-FRIENDLY
EXOTIC

1948-'71 MINOR

OUR EXPERTS
HELP YOU PICK
THE BEST ONE



1976 JENSEN

WE DRIVE
THIS RARE
BRITISH GT



PLUS:

- 1991 BMW 318is
- TORREY PINES, 1955
- BIRTH OF THE MIATA

Family Fun in a Ferrari

One owner found the ideal family car that he can service himself—
a four-seat, 1989 Ferrari Mondial T



WORDS AND PHOTOGRAPHY BY TERRY SHEA

It's probably not all that different from calling someone the least attractive supermodel in the room, but that's kind of how the Ferrari Mondial was treated when it was new. Only by Ferrari standards could the Mondial have ever been considered a homely car, but, alas, when it debuted, despite emerging from the pen of the illustrious Pininfarina design studio, there were plenty of detractors.

The problem might have been that the

Mondial's form needed to follow function. Finding room for four passengers and a V-8 engine within a relatively modest wheelbase didn't leave the designers all that much room for truly exhibiting the best flourishes from their pens. Shove a folding roof into the mix, as with the Mondial Cabriolet, and things get even murkier in the leaving-room-for-beauty department, though the Cabrio's lines improved the look to some eyes.

While they ate up every 308, 328 and Testarossa from the 1980s, critics never took kindly to the Mondial's style. Ferrari, however, got the last laugh, because the critics aren't their customers. Plenty of people lined up for the Mondial, with Americans taking the lion's share and preferring the Cabriolet version, in particular. Given the model's relatively long life—it was offered from 1981 through 1993—it's safe to say that the naysayers got it wrong.



And, like clockwork, just as time often has the amazing power of healing wounds, today, the Mondial, which remains eminently affordable as a collector Ferrari, has found its own, strong following. And—would you believe it?—the look has aged remarkably well. Closely related to the 308, 328 and 348 two-seat V-8 sports cars, the Mondial spanned the market availability of all three models and benefited significantly under the skin as those cars

were updated and upgraded.

Perhaps the best model—and certainly the fastest—was the Mondial T, which debuted in 1989. Like the new-for-1990 348, the Mondial sported a new 3.4-liter DOHC V-8 with 32 valves that produced 300 hp, almost 50 percent more than the original 1981 Mondial 8's DOHC, 16-valve 3.0-liter V-8. Amazingly, though they created a body that looked like previous-generation Mondials, Ferrari engineers

and designers completely re-imagined the T's driveline layout.

Like the 308 and 328, all Mondials through 1988 featured a V-8 engine transversely mounted behind the rear seats, its crankshaft rotating in the same direction as the axles. With the Mondial T, Ferrari re-engineered the car to mount the engine longitudinally. Ironically enough, the T in the name stands for the transverse mounting of the gearbox at the back of

1989 Mondial T Owner's Story



The Mondial came about because we have two young sons. They are nine and 13 now, and we wanted something with a back seat. We'd been around Ferraris and I had worked on them in the past. I knew I wanted a Ferrari, but having the need for a back seat drew the number of models way down. I especially wanted one we could do our own work on. That's why we came up with the Mondial.

The T was more thought out. In looking at the cars a lot and studying them, the T came out in '89, had the bigger engine—the 3.4-liter—and it had power steering. And that was Ferrari's first car with power steering on it. I just liked the shape of it. It was a little bit wider, a little bit lower. It just looked better to me than the earlier Mondials. —Chip McLeod



the engine. With this longitudinal layout, Ferrari placed the engine five inches lower in the chassis, which offered a boon to handling and balance.

The Mondial also featured the first use of power-assisted rack-and-pinion steering in a Ferrari. Though beyond parking-lot speeds, earlier mid-engined Ferraris were never a chore to drive, the cars were noted for their precise and communicative steering, a sensation which fortunately remained intact in the T. Electronically controlled, adjustable shocks also gave drivers the option of going a little soft when they wanted to or firming things up when the roads called for it, though the "soft" setting never approached Buick levels of cushiness.

Along with the upgrades to the engine over the years, topped by the 300 hp from the 3.4-liter V-8, the rest of the Mondial enjoyed such incremental improvements as well. One of the big changes with the 3.4-liter was Ferrari's decision to dump the 1970s-era Bosch K-Jetronic fuel injection and Marelli ignition pairing for the integrated Bosch Motronic system, which combined fuel mapping and ignition timing into a single unit, and also included knock sensors and other added features that improved driveability and reliability. Original Mondials had debuted with the odd-sized Michelin TRX tire system, which went away in favor of more conventional wheels and tires, though the alloy wheel designs themselves had a similar pattern.

Ferrari designers spent some time on the Connolly-leather covered interior as well, improving the ergonomics. The gauge cluster, still mounted atop the dashboard, was now a more rounded and seemingly better integrated affair. The center console, too, seemed better thought out, extending all the way up to the dash instead of stopping short and leaving a large gap.

Outside, a keen observer will notice a nip here and a tuck there. The final Mondials lost the simple fender flares of the originals. Additionally, the early black bumpers gave way to body-color units. The slatted side air intakes for the T featured a more square shape, somewhat different from the more raked original.

Ferrari always intended the Mondial to be a more livable option than its outright sports cars, and it shows. With longer doors and a more upright driving position, ingress and egress from the Mondial was a far more civil affair compared to climbing in and out of a contemporary 328. Again, despite the harsh eye of the critics, the Mondial did very well, with nearly 7,000 units sold overall, which, at the time, was



a great showing for Ferrari.

Chip McLeod and his wife, Stone Kelly McLeod, who own the 1989 Mondial T featured here, were in the market for a Ferrari, but had two requirements: It had to accommodate the two of them and their two sons, Cason, 9, and Huntington, 13. And it also had to be simple enough for Chip to work on himself. Now, before you start questioning that logic from a man who works days as a financial advisor, take a gander at what he has to say about servicing a car that requires removal of the entire rear subframe assembly to get the engine out to replace the timing belt: "It's a lot of hard work," says Chip. "There's no doubt about it. It's labor-intensive, back-breaking, lying-under-the-car, busted-knuckles kind of work. It's not an easy thing. But, it's not real complicated. If someone is working on Fords or Hondas, they can do this work. It's not beyond the complexity. It's just a matter of doing it very slowly, because if you do mess something up, the cost for an error is terrible."

Remember, this attitude is not from a life-long Ferrari specialist who apprenticed in a dungeon in Maranello for years where he learned to curse effusively in Italian.



Mondial seats featured Connolly leather, which remains inviting 25 years after it was first installed in Maranello. Updated, later Mondial interior shows improved gauge cluster and center console; glovebox "door" is just a mirage – Mondials never had them.

Chip's expertise with a wrench comes from not being intimidated, a trait passed down from his father, Charles McLeod. "I grew up on a farm and my father taught me everything I know," recalls Chip. "He's 10 times the mechanic I am. He has the best mechanical mind I have ever seen in my life. When something breaks out in the middle of the field, he would have to fix it. You didn't call people! You didn't take it somewhere! You drug a torch or a welder out there and you fixed it. You just have to become that way.

"When I meet people now, I try to encourage them to do their own work. Not if it's, like, a new California. You can't work on anything from, like, 2000 on up. But people who have 308s, 328s, 348s, 355s or Testarossas, if they're relatively handy and they can change their own oil, I feel like it's my mission to get them to try it. And, half the time, if they are within a hundred miles, probably to the chagrin of my wife and family, I offer to help them. I like to see people tackle their own things, because it's not any different from any other car, with the exception being that you have to take your time and the cost for making a mistake is vastly higher." But, the rewards of work-

ing on your own Ferrari are higher, too.

Driving them, of course, offers its own reward. And the more you drive it, somewhat paradoxically, the cheaper it is to run, certainly on a per-mile basis. Chip shares this thought with us: "I heard some Ferrari person say, 'It costs you the same amount of money whether you drive it or leave it in the garage, so you might as well drive it.' Because, if you put the service off, you are going to pay for it one way or another."

Just a few weeks removed from the exhilarating experience of sampling a trio of V-8 Ferraris (*HS&EC* #101, January 2014) that included the 328, 355 F1 and F430, Chip gave me the chance to put a few miles on his Mondial T from the driver's seat. The most obvious car to compare it to would be the contemporary 1989 328 GTS.

With that slightly more upright driving position and longer doors compared to the 328, getting in and out of the Mondial required no particular contortions or maneuvers. Other than being surrounded by some of the most spectacular cowhides ever to grace an automobile, it was just like getting into any other car, particularly as we had the roof down on a cloudless October morning near Chip's Spartanburg,

South Carolina, home. Of course, once you turn the key and blip the throttle, it hits home that this is not just like any other car.

After getting re-acquainted with the tall, gated, dogleg shifter, with the engine rumbling, we head out. And I notice right away the difference that 221 cc and a bump in compression make. The 300 hp from the Mondial T's V-8 makes it feel much faster than the 328's 260 hp. Most noticeably, the added displacement and compression prove markedly more tractable. Though Chip noted that he is not all that into driving fast, he lets me get on the revs. Being a cabriolet, the Mondial filtered out none of the engine noises that make a Ferrari great. Truly, the sound of the flat-plane-crank V-8 is unlike anything else on the road and it only grows more intoxicating as the revs rise. Repeating second-to-third shifts and back down again with a blip of the throttle proves relatively easy, but I am always cognizant of the chrome gate.

The Mondial might be the most practical of road-going, mid-engined Ferraris, but that doesn't mean it can clear speed bumps in a single bound. Extra care has to be taken when crossing intersections or entering driveways and parking lots.

What to Pay

1989 Ferrari Mondial T

Low	\$30,000
Average	\$37,000
High	\$44,000

Club Scene

Ferrari Club of America

P.O. Box 2488
Ft. Lauderdale, Florida 33303
800-328-0444 (phone and fax)
www.ferrariclubofamerica.org
Dues: \$100 or \$135 per year,
depending on state and country;
Membership: 5,000

Pros & Cons

Pros

Sexy Ferrari sounds in a four-place package

Cabriolet offers unfiltered Ferrari experience

Bigger 3.4-liter V-8 with 300 hp

Cons

Engine-out maintenance procedures not for the faint of heart, or wallet

Not likely to skyrocket in value like some other Ferraris

Low, low, low—be careful of speed bumps and parking ramps



By aligning the Mondial T's 300-hp, 3.4-liter engine longitudinally in the chassis—a first for a mid-engined V-8 Ferrari—engineers were able to mount it five inches lower, improving handling.

A slow approach at an angle seemed the best policy. Back on the gas, enjoying the surge in power in the mid-range as the revs built, made second and third gear a thrill. Slowing down, I found myself engaging a lower gear sooner than I would in a lesser car.

Despite the Mondial T's relatively hefty weight and Ferrari's first use of power steering on a V-8 model, the steering remains true to the sports car spirit—direct, communicative and with zero slop. On public roads and driving someone else's pride and joy, I never went in search of the car's limits, but even at brisk back-road speeds, the mechanical chicanery going on between my hands on the wheel and the rubber on the road instills great confidence. Perhaps

more amazing is that the car still maintains that confidence despite being 25 years old. The Mondial T might be a four-seat GT car on paper, but it's still a mid-engined, screaming Ferrari at heart.

Chip, who carries his father's mechanic's attitude with pride, has already found that the Mondial is helping him pass that torch to the next generation. "They love it when we're riding down the road," says Chip, "and they'll say, 'Dad, there's a 348, there's a 355.' They're even getting close to the point where they could even tell you what year they are. We saw a Boxer and they said in unison, 'Dad, that's a 365, not a 512 because it's carbureted,' because they looked at the exhaust pipes." Quite the family car, indeed. ☺

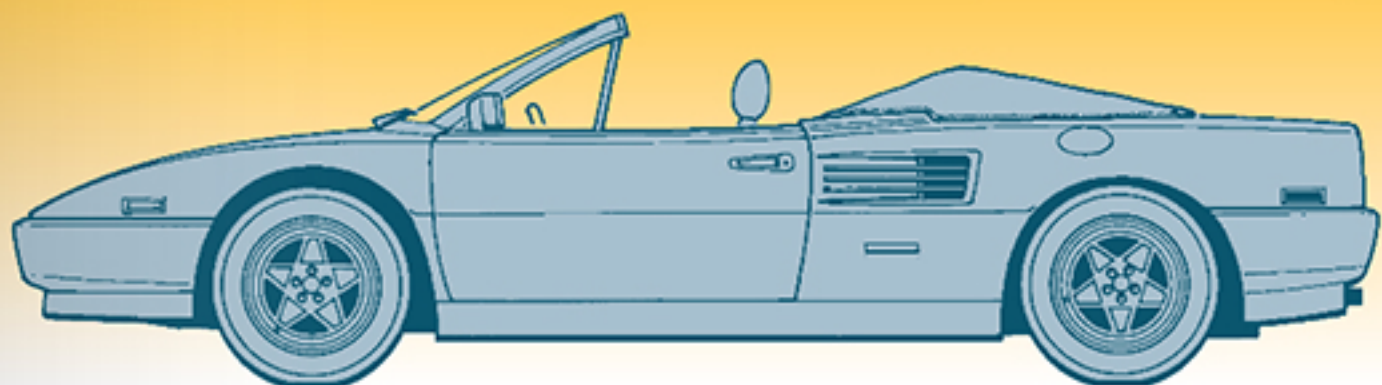


**FERRARI****1989 Mondial T****PERFORMANCE**

0-60 MPH 6.6 sec.

1/4 Mile 15.0 sec.

Top Speed 154 MPH

**SPECIFICATIONS****ENGINE**

Type.....	DOHC V-8 aluminum alloy block and cylinder heads
Displacement.....	3,405 cc (207.8-cu.in.)
Bore x stroke.....	85 mm x 75 mm
Compression ratio.....	10.4:1
Horsepower @ RPM.....	300 @ 7,000
Torque @ RPM.....	229-lb.ft. @ 4,000
Main bearings.....	Five
Fuel system.....	Bosch Motronic DME electronic fuel injection
Lubrication system.....	Full pressure
Electrical system.....	12-volt
Exhaust system.....	Dual

TRANSMISSION

Type.....	Five-speed manual
Ratios: 1st.....	3.21:1
2nd.....	2.11:1
3rd.....	1.46:1
4th.....	1.09:1
5th.....	0.86:1
Reverse.....	2.79:1

DIFFERENTIAL

Type.....	ZF limited-slip with hypoid gears
Ratio.....	3.56:1

STEERING

Type.....	Rack and pinion; power assisted
Turns, lock-to-lock.....	3.0
Turning circle.....	38.9 feet

BRAKES

Type.....	Four-wheel ventilated disc, with vacuum assist and ABS
Front/Rear.....	11.1-inch discs/11.0-inch discs

CHASSIS & BODY

Construction.....	Steel monocoque frame with tubular steel subframe; steel and aluminum body panels
Body style.....	Four-seat, two-door convertible
Layout.....	Mid-engine, rear-wheel drive

SUSPENSION

Front.....	Independent with dual A-arms, coil springs, driver adjustable hydraulic shock absorbers, anti-roll bar
Rear.....	Independent with dual A-arms, coil springs, driver adjustable hydraulic shock absorbers, anti-roll bar

WHEELS & TIRES

Wheels.....	Cast aluminum alloy
Front/Rear.....	16 x 7 inches/16 x 8 inches
Tires.....	Goodyear Eagle ZR (original)
Front/Rear.....	205/55ZR-16/225/55ZR-16

WEIGHTS & MEASURES

Wheelbase.....	104.3 inches
Overall length.....	178.5 inches
Overall width.....	71.3 inches
Overall height.....	48.6 inches
Front track.....	59.9 inches
Rear track.....	61.4 inches
Curb weight.....	3,461 pounds

CAPACITIES

Crankcase.....	11.6 quarts
Cooling system.....	5.3 gallons
Fuel tank.....	22.5 gallons
Transmission.....	4.2 quarts

CALCULATED DATA

Hp per liter.....	88.1
Weight per hp.....	11.54 pounds
Weight per cu.in.....	16.58 pounds

PERFORMANCE*

0-60 MPH.....	6.6 seconds
1/4-mile.....	15.0 seconds at 93 MPH
Top speed.....	154 MPH

*Test data from *Road & Track* magazine, January 1991**PRICE**

Cost new.....	\$96,300 (1990 model year)
---------------	----------------------------