

# Proven

## BMW135i Better breathing and mental steroids for the Bantam Bimmer

by Michael Febbo

■ **BMW has created quite a stir** with its return to small performance coupes. While some say the normally aspirated 3.0-liter found in the 128 is more than adequate for the car, the twin-turbo inline six makes for the wild ride enthusiasts line up for. While most software tuners are holding back on an actual flash for the N54 engine, a few plug-and-play modules are being used with varying degrees of success. We've tried the Turbo Tuner on the 335i and were impressed with the ease of use and instant power produced by the device. No mechanical modifications have to be made to the car, so it is completely reversible. It can even be transferred from one car to the next in a matter of minutes. The Turbo Tuner's distributor has also started pairing the device with an intake and cat-back exhaust system for an added bump in power. We decided to test all three to see what they could do.

### Vehicle Data

#### 2008 BMW 135i

- **Mileage:** 11,000
- **Engine:** 3.0-liter inline six, dohc, 24-valve, turbocharged and intercooled, direct injection
- **Transmission:** Six-speed manual
- **Driveline:** Longitudinal front engine, rear-wheel drive

#### Dyno Data

- **Dynojet 224**
- **Temperature:** 80-90 degrees F
- **Humidity:** 29.8-30.03 in-Hg
- **Test gear:** Fourth

#### Baseline

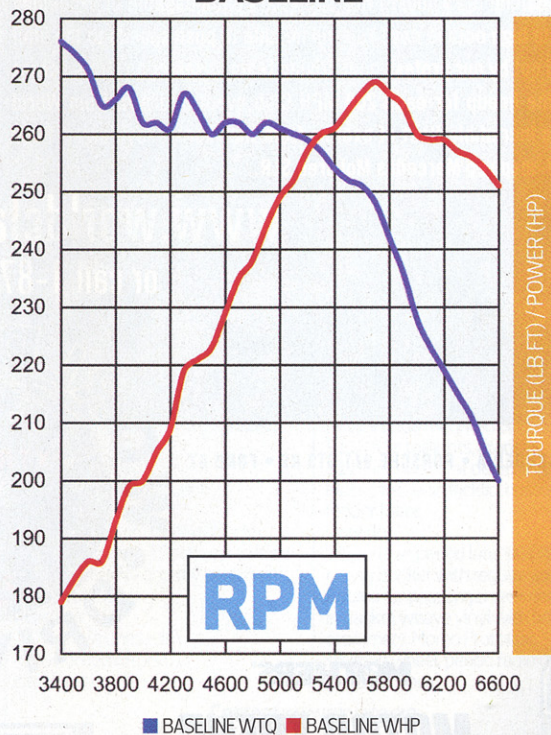
- **Peak wheel-horsepower:** 269 hp @ 5700 rpm
- **Peak wheel-torque:** 277 lb-ft @ 3300 rpm

#### Test Notes

This car seemed to have one of the stronger engines we've seen. It put out great power right from the beginning. From experience, we know that these cars put out an extremely flat torque curve from 1300 rpm into the mid-range of around 4500-5000 rpm. With this in mind, we decided that with the hotter afternoon temperatures we would get more accurate top end results by starting our pulls a little later in the rpm band.



### BASELINE





#### Contacts

**Advanced Flow Engineering**  
951.493.7100  
www.afefilters.com

**Eurobahn Performance**  
866.Euro.Power  
www.eurobahn.us

**Pecora Dyno Service**  
714.751.4381

## Eurobahn cat-back exhaust

### Price

- Rear section: \$799
- Center section: \$499

- Peak wheel-horsepower: 271 hp @ 5600 rpm
- Peak wheel-torque: 275 lb-ft @ 3400 rpm
- Max power gain: 6 hp @ 3700 rpm
- Max torque gain: 7 lb-ft @ 3700 rpm

### Pros

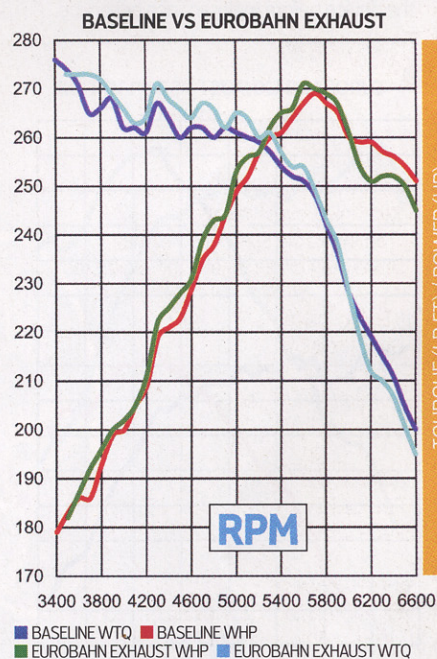
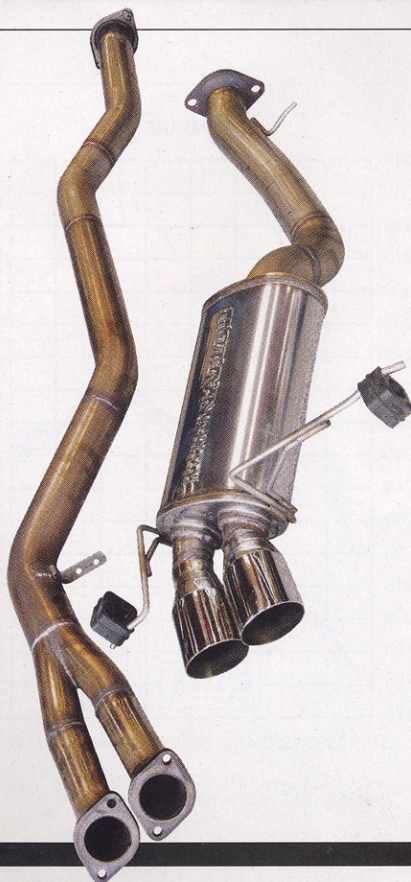
Although the numbers don't look big, the results are decent for a cat-back exhaust. The real advantage of this system is the weight savings. The Eurobahn exhaust drops 45 pounds off the car, which the 135i desperately needs. It bolts on just like the factory system.

### Cons

The exhaust is definitely louder and more aggressive than factory; you won't be confused with a stock car.

### Notes

As we've found in past testing, the real restriction in factory exhausts is in the catalysts. Eurobahn has decided to only do a



legal street system and so gains are not as big as they could be with cat deletes. If you want to build a racing vehicle, you may look into that option for maximum power.



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## AFE intake

**Price**  
\$399

- **Peak wheel-horsepower:** 274 hp @ 5600 rpm
- **Peak wheel-torque:** 275 lb-ft @ 3500 rpm
- **Max power gain:** 7 hp @ 6100 rpm
- **Max torque gain:** 7 lb-ft @ 4900 rpm

### Pros

Clean, high-quality piece with two filters, one per turbo. Sound is improved with a characteristic turbo whoosh on spool-up. Still



uses factory cool air scoop in conjunction with a heat shield to ensure cold induction air.

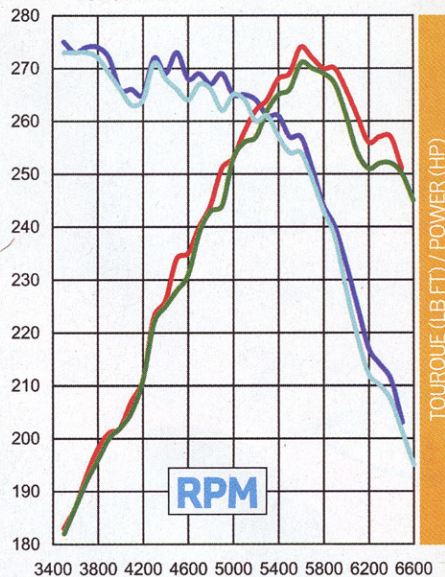
### Cons

Check local laws for emissions compliance.

### Notes

We're not convinced that the full advantage of this system can be simulated on a dyno. It is next to impossible to duplicate the airflow conditions the car would see at highway speeds with a closed hood and a high-pressure pocket in front of the kidney grilles.

### EUROBAHN EXHAUST VS AFE INTAKE



■ AFE INTAKE WTO ■ AFE INTAKE WHP  
■ EUROBAHN EXHAUST WHP ■ EUROBAHN EXHAUST WTO

### Notes

The Turbo Tuner attenuates the signal coming from the car's MAP sensor to make it think it is producing less boost than it actually is. All the other systems on the car are untouched, which means everything functions the same, just at a level that matches the requirements of the greater airflow. The car will still protect itself from overheating and detonation just like the factory configuration.

### Conclusion

We almost couldn't believe the results with the Turbo Tuner installed. We've tested them in the past and have seen big numbers, but not quite this big. Apparently the intake and exhaust really start working well when flow rates go beyond what factory numbers require. For reference, the Turbo Tuner alone made 314 hp and 327 lb-ft at the wheels. The next step would be downpipes and a front-mount intercooler. Even with those two mods, the stock turbos start running out of capacity at the top end, meaning they will give mostly low-end power. Of the plug-and-play systems we've tested on the N54, the Turbo Tuner is the easiest and fastest to install. Your dealer may have issues with its use, so ease of removal is a good thing. We were assured that the Turbo Tuner doesn't force any system to work outside its designed range, so in theory it won't raise any red flags as far as your service department is concerned. But keep in mind we certainly aren't encouraging our readers to lie to their dealerships. We're just relaying information. 🛠️

## Turbo Tuner

**Price**  
\$599

- **Peak wheel-horsepower:** 332 hp @ 5600 rpm
- **Peak wheel-torque:** 336 lb-ft @ 3800 rpm
- **Max power gain:** 60 hp @ 5800 rpm
- **Max torque gain:** 62 lb-ft @ 3800 rpm

### Pros

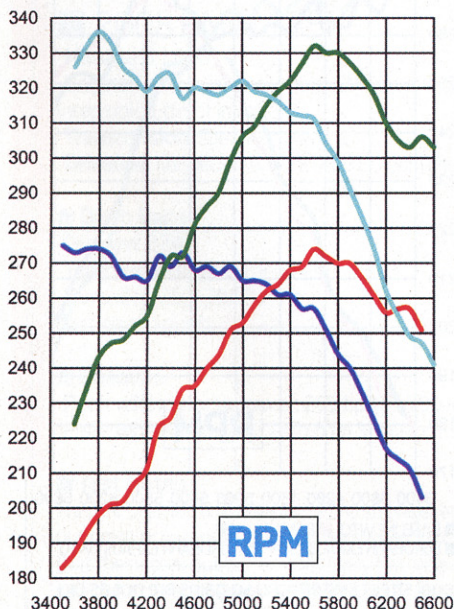
Tons of power at a reasonable price. Easy to install and requires no modifications to the car.

### Cons

Consult your dealer for concerns about your new-car warranty. You may need to remove the device before maintenance or service.

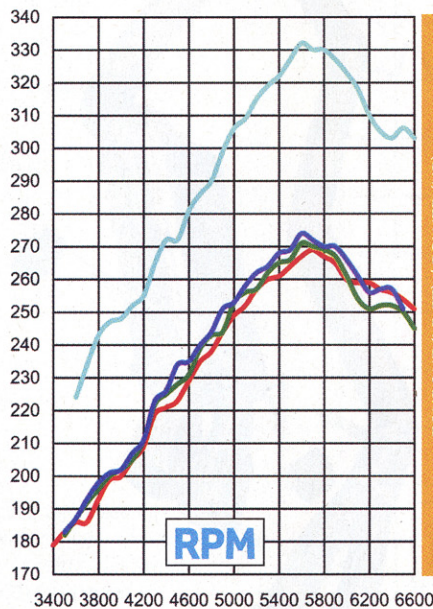


### EUROBAHN EXHAUST VS TURBO TUNE



■ AFE INTAKE WTO ■ AFE INTAKE WHP  
■ TURBO TUNER WHP ■ TURBO TUNER WTO

### COMPARE



■ BASELINE WHP ■ EUROBAHN EXHAUST WHP  
■ AFE INTAKE WHP ■ TURBO TUNER WHP