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here's big news in the <sup>1</sup>/<sub>2</sub>ton pickup category for 2004. Some models in this hot-selling class have received an injection of more power, and yet another has been completely redesigned. The addition of an entirely new player has also stirred the pot.

At least three pickups in the category now offer maximum trailer weight (tow) ratings that a few years ago existed only in the <sup>3</sup>/4-ton pickup class — a trend that led us to call these trucks the "1/2-tons on steroids." Changes to the category have

made it ripe for comparison — an obvious choice for the *Trailer Boats* 2004 Tow Vehicle of the Year test.

#### **FINAL CUT**

We started our evaluation with five players in the ½-ton, fourwheel-drive (4WD) class: Chevrolet's Silverado 1500 Quadrasteer Extra Cab; Dodge's Ram 1500 Hemi Quad Cab; Ford's redesigned F-150 SuperCrew; Nissan's new Titan Crew Cab; and Toyota's redesigned Tundra Double Cab.

However, as you can see

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from the photographs, only three vehicles from this class made the final cut. In some ways, this year's competition began much like an early episode in the *Survivor* TV "reality" series. Maximum trailer weight ratings for the original group of vehicles ranged from 6800 to 9500 pounds. Yet, in the interest of fairness, we decided that all vehicles with tow ratings under 8000 pounds would have to go.

As a result, the Dodge Ram 1500 Quad Cab Hemi and the Toyota Tundra Double Cab were dropped from the field. We want to emphasize however that these two trucks are darn good rigs in their own rights. (See "Twisted Sister" in last month's issue for a test on the Toyota Tundra with a TRD-supercharged, 4.7L V-8; and look for a full evaluation of the Dodge Ram 1500 in the future.)

Still, we just didn't feel it was prudent to perform a serious comparison between vehicles with tow ratings more than 2000 pounds apart.

Having selected the final three, we then chose our test

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load — a Chaparral 260 SSi bowrider on a tandem-axle Zieman trailer with dual disc brakes. Boat and trailer weighed in at 7840 pounds, enough mass to give our finalists a substantial challenge.

## CHEVY'S 1500 QUADRASTEER

We had originally asked for a 1500 HD Crew Cab (part of our proposed test criterion was that all vehicles be crew-cab style models, as these are so popular and such useful family conveyances). Unfortunately, a 2004 model was not available in time for our test schedule. Our second choice from Chevrolet was a 1500 with Quadrasteer (four-wheel steering). The optional feature is an industry exclusive, and we thought this test would be the perfect opportunity to compare it against the traditional front-steer technology of the other vehicles. The unit we were given was the Silverado LT 1500 4WD Extra Cab. Base MSRP for the vehicle is \$35,245.

Our test vehicle was equipped with the standard Vortec 5300 (5.3L) V-8 producing 295 hp at 5200 rpm and 330 lb.-ft. of torque at 4000 rpm. A four-speed



■ All three of our 1/2-ton final contestants offer the kind of tow ratings formerly found only in 3/4- and 1-ton pickups.

OD automatic transmission, optional 4.10:1 axle-gear ratio, optional Quadrasteer package (including four-wheel steering system, roof and rear fender marker lights and a manual select ride control system that offers either a firm or soft suspension setting) and the optional Z82 HD trailering equipment package were also present. Four-wheel ABS disc brakes came standard; the off-road skid plates and P265/75R16 tires were options. The LT décor group was along for the ride, too. Among the extras with the package are power-adjustable front bucket seats, power-adjustable side mirrors, AutoTrac electronic transfer case and front fog lamps. The price as tested (including an \$810 destination charge) was \$38,785.

The tow rating for the Chevy with Ouadrasteer is 8600 pounds. It would be higher with a traditional front-steering system, but we felt that the increased maneuverability of the four-wheel-steering-equipped Silverado would more than compensate for the lower tow rating. The importance of gear ratios to towing capability as evidenced by this vehicle is worth noting, too. We requested our test vehicle be equipped with the optional 4.10:1 axle gears. The standard 3.73:1 axle gear ratio would net this same vehicle a substantially lower tow rating.

## FORD'S NEW F-150

Ford has done a complete redesign of the F-150 for 2004. A fully boxed frame, optional three-valve per cylinder, 5.4L Triton V-8, four-speed OD automatic transmission designed specifically for this engine, wider rear leaf springs, outboard-mounted rear shocks on a solid rear axle, coil-overshock design on the IFS and larger four-wheel ABS disc brakes are just a handful of its new features. The new engine offers 300 hp at 5000 rpm and 365 lb.-ft. of torque at 3750

rpm. The interior of the F-150 is stunningly beautiful; it was our styling favorite, hands-down. We received a brand-new F-150 Lariat SuperCrew 4WD with a base MSRP of \$31,040.

Our SuperCrew test unit was equipped with a 5.4L Triton and matching tranny (the new V-8 is part of the Lariat and FX4 option packages; a 4.6L V-8 is standard equipment on all other 2004 F-150s), and the 3.73:1 axle ratio. This gave our test unit a tow rating of 9200 pounds (9500 pounds if it had been 2WD). The standard axle ratio is 3.55:1, offering tow ratings of 8500 pounds (2WD) and 8200 pounds (4WD). The 4.10:1 axle ratio is not available in the SuperCrew models.

Also on board our test unit were option highlights such as front power-adjustable captain's chairs with a flow-through center console and console-mounted shift lever, power-adjustable foot pedals, 18-inch wheels with P275/65R18 tires, trailer tow package, pickup bed extender (a flip-over cage used when the tailgate is open so that 8-feet-long cargo can fit into the shortened bed), reverse sensing system and power sliding (side-

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	CHEVROLET 1500 (Quadrasteer)	FORD F-150	NISSAI TITAN
Max. Tow Rating (as tested)	8600 lbs.	9200 lbs.	9500 lbs
Price (as tested)	\$38,785	\$34,028	\$32,650
Acceleration/Towing			
0-60 mph	23.0 secs.	26.8 secs.	20.8 sec
40-60 mph	11.4 secs.	15.0 secs.	11.6 secs
Acceleration/Non-towing			
0-60 mph	8.6 secs.	10.5 secs.	8.8 secs
40-60 mph	5.0 secs.	5.6 secs.	4.0 sec
Braking 55-0 mph			
(Towing)	162 ft.	156 ft.	168 ft.
(Non-Tow)	84 ft.	93 ft.	87 ft.
Fuel Mileage			
(Towing)	9.5 mpg	9.1 mpg	8.7 mp
(Non-Tow)	13.3 mpg	11.4 mpg	12.9 mp

(909/390-6600): suncountrymarine.com) for providing us with the Chaparral 260 SSi on a Zieman tandem-axle, disc brake-equipped trailer for this comparison.

## 2004 Tow Vehicle of the Year

ways) rear center window. Price as tested was \$34,028.

### **NISSAN'S NEW TITAN**

The Nissan Titan is a totally new vehicle. Nissan engineers began the Titan design program with horsepower, torque and towing capability at the top of the list, so it's no surprise to find a powerful 5.6L Endurance V-8 and a five-speed OD automatic transmission as standard equipment. A fully boxed frame, leaf spring and solidaxle rear suspension, IFS with coil-over shocks, and fourwheel ABS disc brakes form the base of the Titan's chassis. Its 5.6L V-8 kicks out 305 hp at 4900 rpm and 379 lb.-ft. of torque at 3600 rpm, providing the most torque at the lowest rpm of the three final contestants. Our 4WD SE Crew Cab test unit came to us with a base MSRP of \$29,800.

Our test unit was also equipped with the optional tow package, utility bed and offroad package. The tow package includes a Class-IV receiver hitch, 3.36:1 axle-gear ratio, transmission oil temperature gauge (the only vehicle in its class to be so equipped), extended mirrors, heavy-duty battery, heavy-duty cooling and the Vehicle Dynamic Control (VDC) system.

The optional 3.36:1 axle ratio may not seem like a good choice for towing until you consider that the first gear ratio of the Titan's five-speed OD auto-

matic transmission is a low 3.83:1. This makes the Titan's final drive ratio approximately equivalent to what a 4.10:1 axle ratio and four-speed transmission would offer. The first-gear ratios in the Chevy and Ford we tested were 3.06:1 and 2.84:1, respectively.

Included in the utility bed package is the C-channel (with multiple tie-downs) bed-floor rail system, exterior bedside storage, rear bed lighting and power point, and spray-in bedliner coating. The offroad package for the Titan added a switch-on-demand rear locking differential, Rancho shocks, P285/70R17 tires and 17-inch alloy wheels, skid plates for the radiator and transfer case, fog lamps and tow hooks. The desirable 3.36:1 axle ratio also comes with the off-road package good towing gears are also good off-road gears.

The Titan came equipped with captain's chairs and console shifter. Our test vehicle had a price as tested of \$32,650.

## TONGUE WEIGHT

Tongue (hitch) weight is a subject ignored by some trailer boaters, much to their chagrin. Overloading your tow vehicle with too much tongue weight can upset the dynamic balance of the vehicle's chassis, leading to poor, ill-defined handling at best and dangerous loss of steering control at worst. The tongue weight of our trailered Chaparral 260 SSi was 720 pounds, almost 11 percent of its gross trailered weight (GTW). A range of 5 to 10 percent of the GTW is considered typical for trailer boats, so this rig was a bit on the high side. Travel trailers typically operate with anywhere from 10 to 15 percent of GTW; and fifth-wheel trailers carry more weight ahead of the axles.

While none of the pickups suffered under the tongue weight, the Ford and Nissan supported and handled the hitch weight equally well, better than the Chevy. The Silverado's rear end sagged under the tongue weight, but the truck exhibited no adverse handling quirks.



#### VISIBILITY

The Ford and Nissan offered the best side-view mirrors. The Chevy's were tapered and a bit too small for full trailer coverage. The F-150 side mirrors were rectangular and larger, but the Nissan had large square main mirrors, and small, manually adjustable lower convex mirrors. That said, all of these vehicles could use a good set of very large aftermarket towing mirrors for a better view of what's behind the trailer. As to 360-degree visibility from the driver's seat, none of the vehicles presented any large line-ofsight roadblocks.

#### **FLATLAND TOWING**

This is the entry exam for a tow vehicle. A bad performance towing an appropriate load on flat stretches of highway means the builder should go back to the drawing board. We noted no bad performances this year.

The Chevy ran very well on the open highway and had no trouble keeping the 7840-pound load rolling under moderate throttle pressure once we were up to speed. In third gear we could cruise 55 mph at an engine speed of 2450 rpm. A road speed of 65 mph would bring the revs up to 2900, a good operating range for the Chevy, but

■ Although the Chevy 1500 interior (lower left) was updated just a few years ago, it appears drab in comparison to the new Ford F-150 (left) and Nissan Titan (below).





## 2004 Tow Vehicle of the Year .



■ The GM 5.3L V-8 (above) has a great surge of power right off idle, and the Ford 5.4L V-8 (top right) offers good power in the midrange. However, it was Nissan's 5.6L V-8 (right) that provided the biggest kick of towing power during our test.

we had to open the throttle wide to jump into the 5300 Vortec's power band.

On flat highway, Ford's F-150 easily hauled the test trailer boat at 55 mph in third gear at 2100 rpm. A speed of 65 mph could be maintained at 2500 rpm in the same gear. The Ford's engine was already producing a generous amount of torque at this operating speed range, so power was just a push of the pedal away. Little if any pedal pressure was required to maintain speed.

On stretches of flat highway, the Nissan Titan offered wonderful performance. Open highway cruising could be done with leisure at 65 mph in fourth gear at 2300 rpm or at 55 mph in fourth gear at 1900 rpm. Because the 5.6L Endurance V-8 begins to produce a healthy amount of torque in the low 2000 rpm range, you can tap into power fairly quickly.

#### MOUNTAIN TOWING

On a moderate climb (3-percent grade on our test course), the Chevy Silverado was able to maintain its flatland speeds

without stress, and could pull the hill with a little power left over. We found the engine pulled this grade best at 2800 rpm. However, the steepest (6-percent grade) hill and the 7840-pound load brought the Chevy to its knees with a speed of 45 mph only maintained in second gear with the engine spinning at 3300 rpm. It could not maintain speed in third gear on this steepest grade. Almost no acceleration was available.

The Ford F-150 pulled the 3-percent grade easily in third gear at 2600 rpm, and could accelerate up this incline in third gear. However, on the 6-percent grade, the Ford began to slow, too. It could only keep up a 40 mph pace if in second gear at 2700 rpm, but if slowed by impeding traffic to below 2000 rpm, the F-150 could not get back up to speed on our steepest test incline unless dropped into first gear for a moment.

Nissan's Titan wouldn't pull fourth gear on the 3-percent grade but would easily cruise up the moderate incline in third gear at 55 mph at 3100 rpm, and accelerate in this gear from 55

mph. On the 6-percent grade, the Titan would comfortably pull the hill at 40 mph in third gear at 2400 rpm, but almost no acceleration was left over. The Titan's engine pulled best when running in the 2500 to 3000 rpm range, and was judged to be the best hill climber of the trio.

## **ENGINE/TRANSMISSION**

All three engines have plenty of power, but it's where the power lies that separates them. In nontowing acceleration tests, Chevy finished first with a 0-to-40 mph elapsed time (ET) of 3.6 seconds. Nissan and Ford finished second and third with ETs of 4.8 and 4.9 seconds, respectively.

In the non-towing 0-to-60 mph test, Chevy again was first with an ET of 8.6 seconds, followed closely by the Nissan with a time of 8.8 seconds. Ford was distant third with a 10.5-second ET.

In the 40-to-60 mph non-towing acceleration tests, Nissan took the honors with a 4-second ET; Chevy was in the middle with 5 seconds and Ford was third with an ET of 5.6 seconds.

The GM engine has a great surge of power right off idle, but the Nissan

engine offers a more linear acceleration curve. The Ford 5.4L V-8 lies somewhere in between.

Towing acceleration was recorded using the 7860-pound trailer boat as a weight sled. In the towing 0-to-40 mph holeshot test, Nissan won the blue ribbon with a 9.2-second ET. Chevy and Ford finished second and third with 11.6- and 11.8-second ETs, respectively.

In 0-to-60 mph towing runs, the Nissan Titan was again the quickest, recording an ET of 20.8 seconds. Chevrolet's 1500 was first runner-up, knocking off 60 mph in 23 seconds. Ford was third with 26.8 seconds.

While the 40-to-60 mph towing acceleration times for the Chevy and Nissan were close (about 11<sup>1</sup>/<sub>2</sub> seconds), the Ford lagged behind with an ET of 15 seconds.

These towing acceleration times are not exactly parallel to the vehicle's non-towing times. One explanation may be the ways in which each vehicle's transmission handles the extra load placed on it by the trailer. Torque converter slip and varying converter lock-up timing can account for some of these performance differences.

The Chevy and Nissan transmissions have tow/haul modes. For the most part, the way they work is to hold gears longer before upshifting to take better advantage of the full scope of the engine's power curve. The Chevy has a manually selected tow/haul mode that operates through the entire gear range. The Nissan's tow/haul mode, manually selected, provides this gear-holding up through the first three gears only — where most towing acceleration oc-

curs. The Titan's high-ratio first and second gears probably account for the Nissan's best towing holeshot and outstanding towing acceleration.

Overall transmission performance was good across the board, but the Chevy was definitely the "hardest" shifter of the group, especially under high rpms and a full load. It also had the only column-mounted shifter. making it more difficult to quickly and accurately shift through the gears. The Nissan and Ford had center-consolemounted shifters, but the Nissan is a gated shift pattern, while the Ford is a straight-line shift. The Nissan shifter is easy to use, but the Ford transmission is the quickest to operate. However, the extra top gear and the lowest first gear made the Nissan tranny our favorite overall performer

## HANDLING/RIDE QUALITY

During our test drives, we perform a variety of exercises and



■ Optional rear-wheel-steering gave the Chevy 1500 high marks in overall maneuverability.

drive over a medley of road surfaces to evaluate vehicle handling and ride quality.

Chevy's Quadrasteer system really shined. Not only did it aid in high-speed stability during snap lane changes, but under slow-speed maneuvering trials, the Silverado 1500 performed like a finely trained dancer, never missing a step. It had the

smallest turning circle, and made backing a trailer into tight spots a breeze. The overall ride quality was very comfortable, but the effect of the tongue weight on the soft rear cut down on available rear suspension travel. This meant a rougher ride than we would have preferred when towing. Braking was steady and straight, even while towing.

Ford's redesigned F-150 offers a firmer ride, and its body remains rigidly flat by comparison to the Chevy during hard cornering. Some of our staff considered the Ford to have the best overall non-towing ride quality, and it was certainly the quietest of the cabins. Its control over the trailer was good, although we experienced some wallowing after bumps in the road. Only under the most radical of maneuvers could we get the trailer even slightly out of shape. Its braking behavior was secure and without any surprises, but some testers noted that it required more pedal pressure than the others. Yet, it recorded the shortest 55-to-0 mph braking distance while towing — 156 feet. That beat the Chevy by 6 feet and the Nissan by 12 feet.

Receiving almost universally positive remarks from our test crew, the Nissan Titan topped the chart when it came to towing handling and ride quality. Once hooked up to the trailer boat, the Nissan proved itself worthy of our admiration. It provided a very stable towing platform with a smooth ride, and no handling quirks as a result of the 720 pounds of tongue weight. However, as indicated earlier, the Nissan had the longest recorded towing brake distance, but it received a "good" rating for its braking stability from all testers.

While none of these vehicles can be judged losers, there can be only one winner. So the 2004 *Trailer Boats* Tow Vehicle of the Year is...

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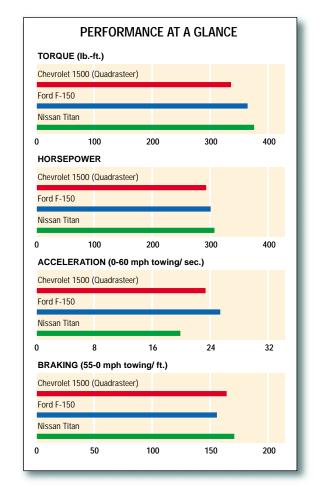
# Nissan Titan SE Crew Cab 4WD

# 5.6L Endurance V-8

The 2004 Nissan Titan, powered by the 5.6L Endurance V-8, is the winner of the 22nd Annual Tow Vehicle of the Year competition. This is a first-ever win for Nissan, and it comes on the heels of the debut of Nissan's first full-size pickup. Kudos for a great job right out of the gate. The Nissan Titan joins the ranks of the popular <sup>1</sup>/2-ton pickup class, a category now filled with tow ratings and cargo capacities that historically have been the exclusive realm of <sup>3</sup>/4-ton and HD <sup>1</sup>/2-ton pickups. Its interior is not as luxurious as the F-150, but is no less functional, and offers more interior volume than the Ford. Non-towing ride and handling of the Titan was excellent; its styling is fresh and bold, and it is priced very competitively.

Most importantly, the Titan's overall towing performance and towing ride and handling were tops and extremely well received among our testers. This is why the editors of *Trailer Boats* magazine have voted it the 2004 Tow Vehicle of the Year.





## TOW VEHICLE OF THE YEAR WINNERS 2004 — Nissan Titan SE Crew Cab 4WD 5.6L Endurance V-8 2003 — Ford F-350 4WD Crew Cab DRW 6.0L Power Stroke 2002 — Ford Explorer Limited 4WD 4.6L V-8 2001 — Toyota Sequoia 4.7L V-8 2000 — Dodge Quad Cab 8.0L V-10 1999 — Ford SuperCab F-150 5.4L V-8 1998 — Ford Club Wagon 6.8L V-10 1997 — Jeep Grand Cherokee 5.2L V-8 1996 — Jeep Grand Cherokee 4.0L I-6 1995 — Dodge Club Cab 8.0L V-10 1994 — Ford Ranger 4.0L V-6 1993 — Ford Crown Victoria 4.6L V-8 1992 — Dodge Turbo Diesel 5.9L I-6 1991 — Chevrolet C1500 Pickup 454 SS 1990 — Mitsubishi Mighty Max 3.0L V-6 1989 — Dodge Turbo Diesel 5.9L I-6 1988 — GMC S-15 4.3L V-6 1987 — Jeep Wagoneer 4.0L I-6 1986 — Chevrolet Astro 4.3L V-6 1985 — Toyota 1-Ton Pickup 2.4L I-4 1984 — Ford Crown Victoria 5.0L V-8 1983 — Chevrolet/GMC Suburban 7.4L V-8