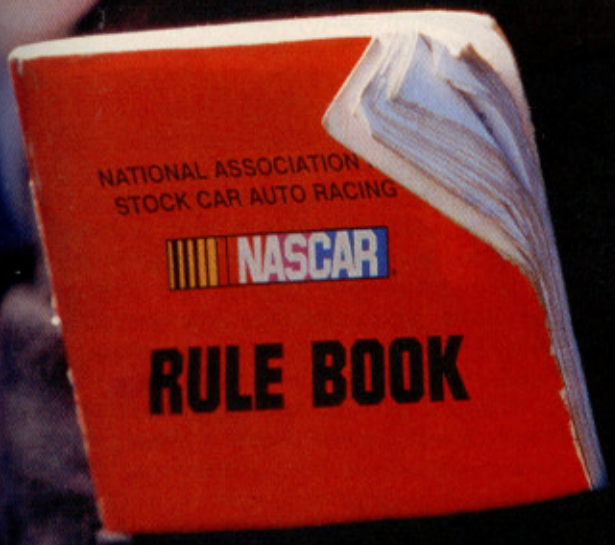
It's small enough to hide in a shirt pocket.
It can be thrown out the car window.
It's being used — and it's winning races.
NASCAR's rule book states that it's illegal.
What is it? A Traction Control device.



SOFT ON CRIME

WHY WON'T NASCAR CRACK DOWN ON TRACTION CONTROL?

Tim Clark/Athlon Sports

So why aren't drivers being punished? Are NASCAR officials really that blind not to see it? Or are they just soft on crime?

Traction control is standard equipment on most passenger cars. Its purpose is to prevent drivers from losing control of their cars. In a nutshell, it prevents drive wheels from spinning when the other wheels are not moving. A sensor detects a difference in the speed of the front and rear wheels. If the drive wheels spin, the engine is retarded to keep you from losing control. Traction control is standard equipment in Formula 1 but taboo in NASCAR.

So what's the big deal?

Traction control in stock car racing retards the engine up to 50 horsepower while the driver is able to mat the gas. When the engine catches up, the throttle is wide open; all the while legal drivers have been feathering the throttle making them a bit tardy in running wide open.

It boils down to talent and seat-of-the-pants driving (legal) vs. a machine (illegal). Tracks that are slick and require finesse driving are more likely to have teams running with active traction control. The track that provides the best example is Darlington. The track is slick and tire wear is excessive. The driver has to tip-toe through the turns and will spin the tires if the gas is mashed. Too much tire spin will send the car into the wall. Successful drivers at Darlington have learned how to feather the gas — by keeping the throttle open just enough to maintain speed — without breaking loose. Traction control performs that function for the drivers, and that levels the playing field and removes the skill factor.

One driver who wished to remain anonymous told us in frustration that he knew he had been outrun by the illegal system, but nothing was done to look for traction control in the offending car. He complained that it took him years to learn how to drive certain tracks and now a first-year driver can run just as well by using traction control. His years of experience have been neutralized by electronics.

The effect of traction control is both immediate — in faster lap times — and long-term over the course of a race. Teams work to get a chassis balanced and free during a race. With traction control, the spring and shock selection is different to reduce or eliminate push. Cars without traction control can't be set up as "free" or "loose" as cars that have traction control; therefore, push is more of a factor. The more the car pushes, the sooner the right front tire wears out. Once the right front tire wears, laps times slow. When teams are fighting a push, more than likely they are not running traction control.

Traction control can be an advantage at most any track, with the exception of the plate tracks. It is more effective on tracks that require harder braking in the turns; the harder the driver has to nail the gas off the turns, the better the results.

None of the drivers who talked to us were willing to go on record, but all of them said, without hesitation, that the use of traction control is rampant in the Truck, Busch and Cup Series. We know that drivers are notorious for pointing fingers. They are quick to say they got beat by a cheater, so we have taken that attitude into account in researching this story.

So how can so many teams be getting away with such blatant cheating?

Well, it's not like looking for weapons of mass destruction. Or is it?

The poor man's version of traction control is rampant at most weekly racing series. It is cheaper than many horsepower enhancements and is tough for local racetracks to police. For about $5,000 you can make a mediocre driver good, and a good driver great.

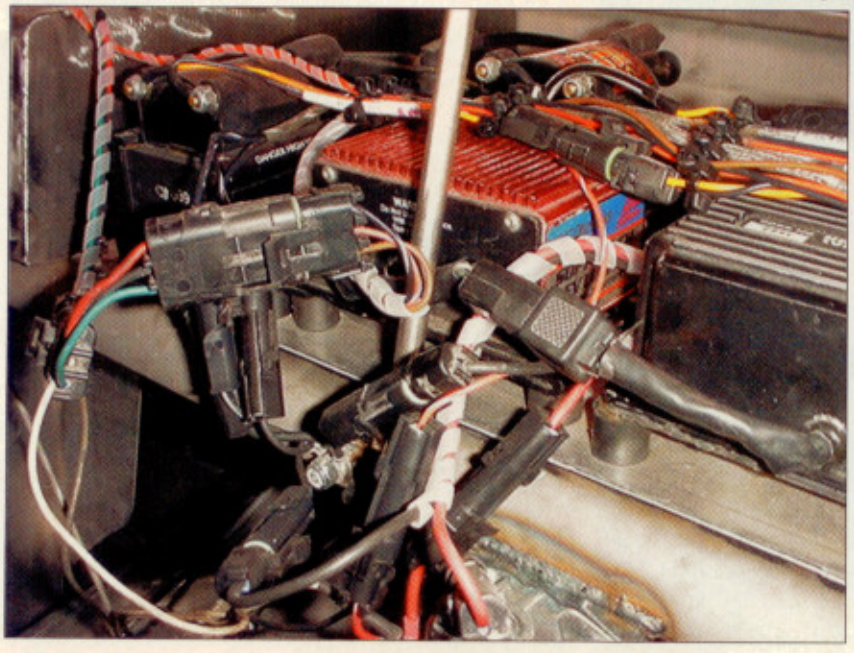
Why Not Legalize Traction Control?

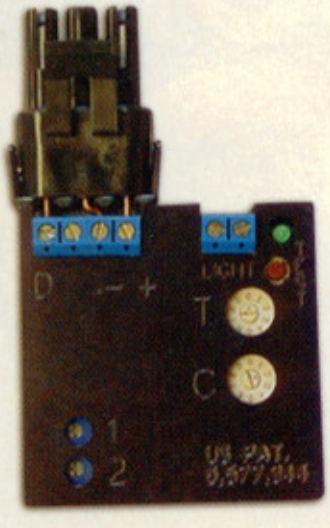
Because it could have a negative effect on the sport. Young and upcoming drivers across the country are learning to race with a crutch. Good drivers with potential are getting beat by a machine. Once a local track has teams with traction control, everyone else has to get on board to keep up. Drivers are winning with less skill and are not learning the driving skills they will need to move up.

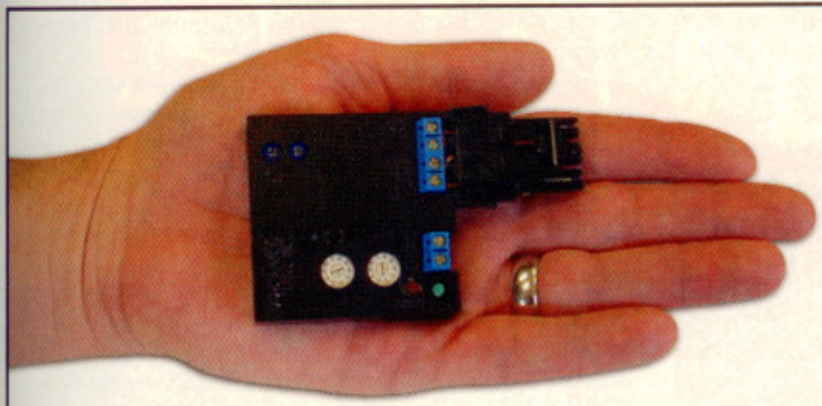
The poor man's version of the device consists of a module that easily fits in the palm of your hand. It plugs into the ignition box within reach of the driver. The driver gets in the car, puts on his helmet, straps in, and plugs his little secret into the ignition system. After the race, he unplugs, hides the evidence or just throws it out the window.

Many spotters and officials noticed an object fall from a certain car at Bristol during the cool-down lap. Later, a traction control module was found on the track. Busted! No, wait. It seems no effort was made to confront the offender. Hmm....

Plenty of room for mischief: A traction control device can plug right into the ignition system.







Small enough to fit in the palm of your hand: Once the race is over, simply unplug and stash it in your fire suit. Or better yet, toss it out the window for all to see.

NASCAR to the Rescue

In a move to deter traction control in 2004, all ignition boxes must be mounted on the dashboard with the wiring harness exposed. This move should keep the module from being plugged in and out during the race, as well as prevent crews from mounting any illegal devices in the garage. The poor man's version should be obsolete in NASCAR's top divisions. The message is: If you can't do it right, don't do it. The elementary version has been exposed. The task for teams looking for an illegal advantage now becomes to develop technology that is more difficult to find. The companies that design and make traction control devices have answered the call.

The big boys' version of traction control is built into the car from the ground up. Wiring is put in the frame rails before the car is built, and the wires are painted over for further concealment. In these days of tiny computer chips, the better-financed teams install a chip the size of a watch battery in the transmission, electronics or even the tachometer — anywhere that can detect a spike in RPM's will suffice. The wires can go through the eye of a pop rivet. The only way to find it? Cut up the car. Then what happens if nothing is found? A needle in a haystack would be easier to find. So why would NASCAR risk embarrassing itself and infuriating teams by confiscating and destroying a car only to find nothing?

If traction control is as rampant as suspected, teams are forced to cheat to keep up. Most teams have tested traction control and many have researched ways of installing the systems. The vendors that sell traction control constantly improve their product and have a great sales pitch. They simply show their client list. Under these circumstances, teams with less experienced drivers are almost forced to use traction control to compete.

When key crew members leave and go to another team, they take the team secrets with them. These employment changes create a flow of information from team to team. When a driver leaves a team, he does not want to race against his former team's secrets, so in many cases the driver or crew member will rat on his former team. Many, if not most, major infractions found in the past are a result of tattletales. In the case of traction control, not a single team has been publicly busted.

The cost to compete has gone up with the elimination of the poor man's method. Teams now are forced to purchase and install a system for every car, including the backup cars, and this substantially increases the cost of operation.

Currently some teams are spending thousands of dollars on the newest editions of traction control. There has been a tremendous advancement in technology since the beginning of the summer. Systems operated by GPS

The ol' wire through the pop rivet trick: The wiring goes through the eye of a pop rivet and can run into the driver's compartment.

and line-of-sight technology are now available. It's now possible for a spotter to turn the system on and off during the race. Big-time racing is all about winning; if you want to win, you'd better run some wires.

Catching A Cheater

If you want to know who is running with traction control, watch races carefully. Check out the tach from the in-car camera as a suspicious car is coming off a turn. If you see the tachometer start to fluctuate down and the needle jumping, there could be something fishy going on. Legal drivers should be slowly accelerating at this point causing the tachometer to show a steady climb. Trained observers can watch a race telecast and hear the motor "catch up" or slightly hesitate in the turns.

So why doesn't NASCAR crack down harder on the more sophisticated cheating?

The technology to detect traction control is available and has been used at several races. NASCAR officials have the ability to point the finger with technology. There is ultra-sonic technology with equipment so sensitive it can detect which cylinder is misfiring. The question is: Why don't they?

Perhaps they can't afford to.

It has nothing to do with the cost of intelligence officers and mounted police at all the garages. The high cost would come when many fans — and more important, the mainstream media — begin to compare NASCAR and its widespread cheating to the WWF or the XFL. Now that, NASCAR can't afford.

In fact, many members of the media think big-league stock car racing is a couple of folding chairs away from professional wrestling already.

But the longer this goes on, the more likely the mainstream media will pick up on it and cause a real uproar in the sport.

Can't Something be Done?

There is another catch. What happens if NASCAR lowers the boom on a team it catches with traction control? What if one of the sport's darlings or champions is exposed as a cheater?

The current situation with the sport falls back to money. This is an appearance issue with a sport that prospers from sponsorship money. No other major league sport depends on sponsorship money like automobile racing. Would the sanctioning body bust a team when its sponsor spends huge bucks in the sport?

Many team sponsors are also involved with large ticket purchases, race sponsorships, official status programs and more. The appearance of this conflict of interest does not look good. When the sanctioning body is faced with lowering the boom or making a judgment call, they will always be questioned.

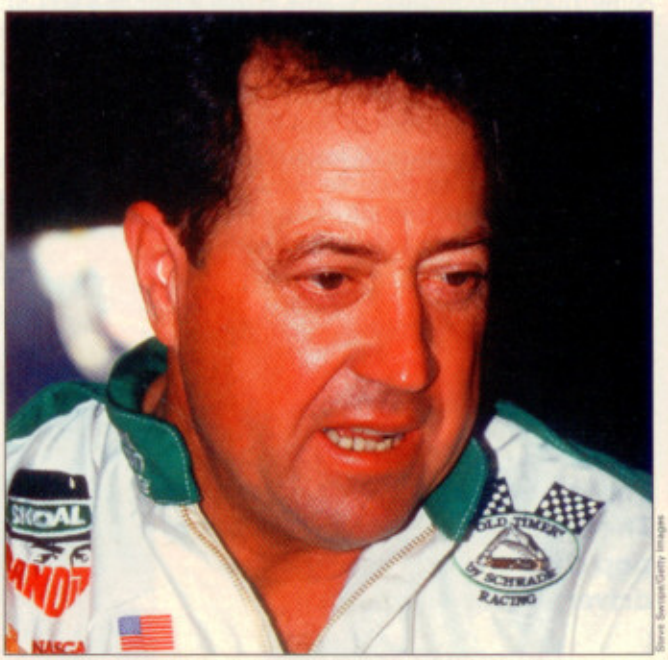
Simply put, it is easier to talk tough and do nothing than to face the music by exposing the worst-kept secret in stock car racing. The method of operation is to talk mean so the media thinks that race teams are scared into compliance.

But none of the teams are shaking in their fire suits. NASCAR's record on catching cheaters doesn't exactly inspire a lot of fear. In the 1983 fall Charlotte race, Richard Petty was caught with an engine with too many cubic inches — a major violation — but the NASCAR record book still shows Petty as the winner. So what is the deterrent?

We know of one team that crashed in practice and had to roll out a backup. The crew took the dash and gauges out of the crashed car and put it in the backup. This team is well-funded and can easily afford two sets of gauges. This is not proof, but other teams had a great deal of suspicion while the dashboard was being swapped in plain sight of other teams and officials. This is why so many insiders wink and grin when talking about traction control. Was NASCAR sending the message that officials were looking the other way on traction control?

When asked why officials look the other way in the face of considerable evidence, participants have various responses. Many insiders think that the technology is so advanced they cannot outsmart the team. One crew chief said that as long as the sport continues to grow, no one will want to make waves by fingering guilty parties.

There is a recurring theme: As long as profits continue to roll in, don't upset the apple cart.



Traction control for Harry Gant was nerve and finesse. In the days of Yarborough and Pearson, real men drove hard to handle cars. Now electronic toys do the work that men used to do.