



U.S. Department of Transportation
National Highway Traffic Safety Administration

DOT Auto Safety Hotline
Vehicle Owner's Questionnaire
To Report Vehicle Safety Defects
1-888-DASH-2-DOT
(1-888-327-4236)
INTERNET: www.nhtsa.dot.gov/hotline

FOR AGENCY USE ONLY 100145

Date Received 21-MAR-2005
Repository
Reference No. **2005 JUN - 2 AM 7:40**
10115478

OWNER INFORMATION (Type or Print)

Name [REDACTED]
Address [REDACTED]
City **NEBBIT SOUTHAVEN** State **MS** Zip Code [REDACTED]

Daytime Telephone Number [REDACTED] E-mail Address [REDACTED]
Evening Telephone Number [REDACTED]

Do you authorize NHTSA to provide a copy of this report to the manufacturer of your vehicle? YES NO
In the absence of an authorized signature, please provide your name or address to the vehicle manufacturer.
Signature of Owner [REDACTED] Date **5/18/05**

VEHICLE INFORMATION

17 digit Vehicle Identification Number Located at bottom of windshield on driver's side **1FTNW20F1YE [REDACTED]** Make **FORD** Model **F250** Model Year **2003**
Date Purchased [REDACTED] Dealer's Name and Telephone Number [REDACTED] Engine: **7.3L** Fuel Type: **Diesel**
Original Owner Dealer's City [REDACTED] State [REDACTED] Zip Code [REDACTED] No. of Cylinders: **8**
Transmission Type **AUTOMATIC** Antilock Brakes Cruise Control Powertrain [REDACTED] Vehicle Component Code **061000 ENGINE AND ENGINE COOLING:ENGINE**
Multiple Failure: **2**

FAILED COMPONENT(S)/PART(S) INFORMATION

Incident Date(s) **16-MAR-2005** Failure Mileage **99165** Failure Speed **50** **CAM POSITIONING SENSOR**
FORD P/N - F7TZ-12K073-A

ADDITIONAL ITEMS TO BE COMPLETED WHEN REPORTING A TIRE FAILURE

Tire Make [REDACTED] Tire Model (Name or Number) [REDACTED] Tire Size (Example P215/65R15) [REDACTED]
DOT No. (Example: DOTM19ABC036) Original Equipment Prior Repair Failure Location: [REDACTED]
Tire Component Code [REDACTED] Tire Failure Type [REDACTED]

ADDITIONAL ITEMS TO BE COMPLETED WHEN REPORTING A CHILD SEAT FAILURE

Make: [REDACTED] Date Manufactured: [REDACTED] Model No./Name: [REDACTED]
Seat Type: [REDACTED] Installation System: [REDACTED]
Child Seat Component Code: [REDACTED] Failed Part: [REDACTED]

APPLICABLE INCIDENT INFORMATION

(Please describe in detail the incident(s), failure(s), crash(es), and injury(ies).)

Crash Yes No Fire Yes No Number of Persons Injured **0** Number of Deaths **0** Reported to Police **N**

Narrative Description of Incident(S), Crash(es), and Injury(ies).
Please describe (1) events leading up to the failure, (2) failure and its consequences, and (3) what was done to correct the failure; i.e. parts repaired or replaced (and if old part is available).

WHILE DRIVING 50 MPH ENGINE SHUT OFF. CONSUMER STATED AFTER WAITING 10 TO 15 MINUTES BEFORE THE VEHICLE STARTED AGAIN. THE CAM SHAFT POSITION SENSOR NEEDED TO BE REPLACED, AND IT WAS. HOWEVER, THE PROBLEM RECURRED. *AK

Include, if available: Police/Fire Department Report, Photos, and Repair Invoice. ATTACH ADDITIONAL SHEETS IF NECESSARY

The Privacy Act of 1974-Public Law 93-579 This information is requested pursuant to authority vested in the National Highway Traffic Safety Act and subsequent amendments. You are under no obligation to respond to this questionnaire. Your response may be used to assist the NHTSA in determining whether a Manufacturer should take appropriate action to correct a safety defect. If the NHTSA proceeds with administrative enforcement or litigation against a manufacturer, your response, or a statistical summary thereof, may be used in support of the agency's action.

Narrative Description of Incident(s), Failure(s), Crash(es), and Injury(ies)

THIS IS A PROBLEM THAT FORD DOES NOT WANT TO OWN UP TO. I'VE INCLUDED SEVERAL PAGES OF COMPLAINTS AND COMMENTS FROM OTHER FORD POWERSTROKE DIESEL OWNERS AND YOU CAN TELL FROM THEIR COMMENTS HOW SAFETY PLAYS AN IMPORTANT ROLE IN THE DRIVING OF THIS VEHICLE. AGAIN WHEN THIS PART FAILS IT CAUSES THE VEHICLE TO COMPLETELY SHUT OFF AT ANY SPEED OR AT ANY LOCATION (EG. INTERSECTION). THANK YOU, [REDACTED]

ATTACH ADDITIONAL SHEETS IF NECESSARY

U.S. Department of Transportation

93

National Highway Traffic Safety Administration

400 Seventh St., S.W. Washington, D.C. 20590

Official Business Penalty for Private Use \$300



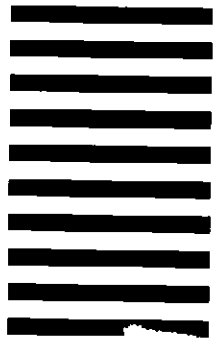
NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO 73173 WASHINGTON, D.C.

POSTAGE WILL BE PAID BY NATL. HWY. TRAFFIC SAFETY ADMIN.

U.S. Department of Transportation
National Highway Traffic Safety Administration
Office of Defects Investigation, NVS-216
400 7th Street, SW
Washington, DC 20590



VEHICLE OWNER'S QUESTIONNAIRE

DOT AUTO SAFETY HOTLINE

TO REPORT VEHICLE SAFETY DEFECTS
COMPLETE THIS FORM
OR

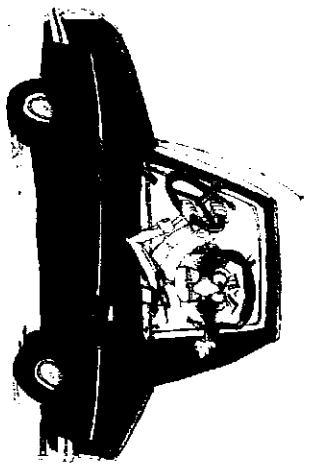
DASH2DOT

and dial toll free at

1-888-DASH-2-DOT

1-888-327-4236

DOT Auto Safety Hotline
(DASH) 2 DOT



U.S. Department of Transportation
National Highway Traffic Safety Administration
www.nhtsa.dot.gov/hotline

Hello to you all,

I am an engineer who designs CPS for one of the after-market companies. For obvious reasons we are interested in making the 12K073 CPS.

I have gone as far as disassembling a few 12K073 and cataloging the parts inside it, but I haven't got good information on the ways they fail, only that they do fail. I am interested in your opinions on how they fail - who better to ask than the folks that suffer most, eh?

Are they failing under some particular conditions? Do they fail more in particular trucks? Do you buy them and find they don't work out of the box? Is it possible that you are messing them up by jumping starting?

The truth is that a good Hall Effect sensor almost never fails. This particular design seems like a reinvention of the wheel from my position. It makes me wonder if there is something in particular about the application that caused Ford to start from scratch on this one.

For instance I know that the sensing element inside is an unusual Hall Effect element made from a Gallium Arsenide semiconductor. This is uncommon, I am guessing that a Hall Effect manufacturer might like this because GaAs is more stable as temperature changes. Are there particularly high temperatures where this CPS is mounted on the 7.3L engines? Do some exhaust parts "shine" on it or something.




So if you all will brainstorm with me on this I would appreciate it. It can't hurt. If I can help you learn to trouble shoot the CPS better as I learn how this one works I will do it. I will trade as much information as I can. You shouldn't have to keep spares in the glove box and swap them in without knowing, if they are dead or alive.

You may notice I didn't say who I work for. I am not sure I can do that without causing trouble. Mostly folks in my position keep a low profile and only lurk in groups like this. I would prefer to be more upfront , but...

Best regards,

Mike




slimriter
Shop Foreman

 posted February 14, 2005 08:33 PM  

I don't know the answer to your extremely technical questions, however, as a Ford service writer for years in a truck shop I always scratched my head when a problem like the CMP's happens so often for so long - could a company really be so blind as to let problems like that go on so long as if they are blind to the issue? I find it refreshing that a designer would get so involved and find it refreshing that you would take such an interest. Really if you think about it, wouldn't it save warranty repair dollars and customer confidence if they took interest and action to such a repetitive problem???? How many engines did Ford have to buy because they didn't want to buy better hose clamps???? IT'S INCREDIBLE how short sighted the manufactures really can be.
I wish you luck in your project

IP: Logged

toptuner
Shop Foreman




 posted February 14, 2005 10:11 PM  

It's hard to believe temperature is a problem 'cause it's mounted here:
<http://freeautoadvice.com/diesel/psdpics/camsensor.html>
Pretty much right out in the wind. Gotta be the coolest sensor on the truck. And I can't recall anyone ever mentioning an overheating problem on a PSD. Gassers have a lot more heat related issues, especially when towing. Just seems they go bad when they decide to!

Fred, 1999.5 F-250 Automatic, 3.73 LS, SOTF 4X4, Extended Cab, Long Bed, DRL.
8700 lbs with slide-in camper. Towing 4000 lb motorcycle dyno trailer. www.drtdyno.com
Bully Dog 0/50/75/100 HP chip. NVK3 code, Autometer pyrometer (in left manifold) & boost gauges.
Stock intake & exhaust. Purolator A25446 air filter. 0-60 8.7s from idle, LT 235/85 & 265/75 R16E tires.
Disconnected waste gate. Shortened filler vent pipe.
Around-the-belt top radiator hose, NAPA #9066

"DYNOS MEASURE ENGINE POWER OUTPUT, NOT DOLLAR POWER INPUT." Dr. Dyno

hittmanone
Technician

 posted February 15, 2005 06:59 AM  

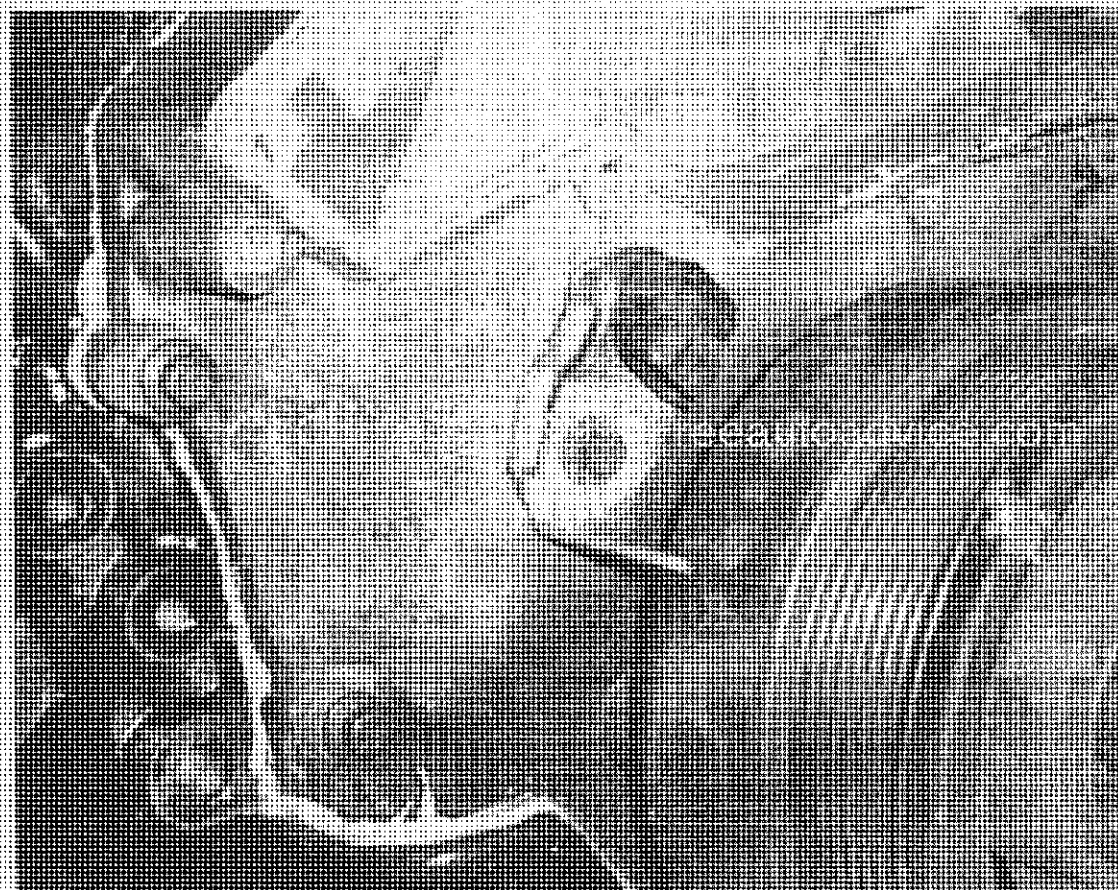
I'm not sure if this helps but my 2003 4x4 sd f250 was only 3 weeks old and had only 4k when it died. Ford towed it fixed it and told me it was the cps? So I don't see any pattern.



The Truck Professionals



Close Up of a Cam Sensor






- Main Site
- Diesel Home
- Powerstroke
- Bobcat Board
- PSD Pictures
- Classifieds
- What's New
- Cool Sounds
- Free
- Magazines
- Crash Test
- Recalls
- Service
- Bulletins

- Articles
- Banks
- Cavitation
- Glow Plugs
- Stuff
- Fuel Quality
- Turbo
- Tips
- Ten Facts
- Glossary
- History

Ford
Powerstroke

- Articles
- PSD Pictures
- Injectors
- Abbreviations
- Glow Plug
- Relay
- Intercooler
- Diagnostics
- Turbo
- Backpressure
- PSD Fuel
- Crash Test

bushman
Shop Foreman




 posted February 15, 2005 06:55 PM  

They seem to fail whenever, wherever. Mine failed at around 170,000 miles, but some fail much quicker, and yes, I've heard of them not working right out of the box. I didn't disassemble mine, so I don't know what failed. If it ever happens again, I'll check it out.

Oh yeah, mine failed about three blocks after leaving a jobsite. I was on the job about 2-1/2 hours, truck was sitting, not running. When I left, truck started missing, SES light came on, and it completely died a block after first symptoms, which left me sitting at a light. The truck did restart an hour later, idled for 15 minutes, but died again when given RPM's.

I hope this helps.

alabamafrog
Shop Foreman




 posted February 16, 2005 03:46 AM  

Mine failed at about 135,000 (bought truck at 130,000) This is what first brought me to this site. I was about 3 miles from home heading to town and it just shutoff at 65mph. It would not restart until I let it sit for 5-10min. then it would start and run for 2-3 minutes. The longer I let it sit the longer it would run. Had it towed home and after sitting about 18hours it would run for about 20 minutes. Seemed heat related (colder run longer hotter run less) each time it shut off it would not restart at all until it sit for at least 5-10 minutes. Shop quoted around \$500 estimate to fix it. The guys here and \$92 had me fixed in about 10 minutes of work.

Don't know if that helps but it's my experience and I now carry a spare and a wrench in the glove box (CPS box).

Early 99 F-250 SD 4X4 7.3L XLT, extended cab, short bed, automatic(Wish it was a 6spd), 5"exhaust, Bully Dog stock,60,100,150 (165k+ miles), Large Baldwin open air filter, pillar gauges. EBPV tied open, Waste gate disconnected, regulator on MAP sensor, Remote starter, CCV mod, HPX mod. 3"Frontend lift and airshocks 285/75/16 AT tires (Comp. code XLE4)Powerstroke Pics





PaulJ
Shop Foreman

 posted February 17, 2005 02:14 PM  

Mike, How refreshing to have somebody actually look into this problem and attempt to solve it because Ford will not

or dosen't give a damn! Many of my friends have PSDs' and have had them fail. Simply rediculess to pay \$40,000 for a truck and have repeat failures like this. And Fords answer is to stock plenty of parts! I also have an engineering background. If I designed a part with a failure rate like this it would be redesigned within the next batch or I would be unemployed by the end of the week! Sorry for the rant. The engineer in me is coming out I guess. I figured someone like you or maybe toptuner would take this on. I am aware of one person with a Dodge that had a similar problem. Good luck on your research, let us know what you find. Thanks again.




Wyman
Service Center
Shop Foreman

 posted February 17, 2005 03:02 PM   

Mike, the 7.3 is built and designed by International,their designation is the 444E,I run service on Ryder=Budget rental trucks and I have had to replace the cps on a lot of the 444E,as many as 5 in one day,no certain milage,most are driven on highways with no specific driving conditions.International also has a six cyl version of the 7.3,it is the DT466E,uses the same parts in general as the 7.3.It also has the same CPS problem and tech at International can give no clarification as to why the failures occur.I have seen the CPS go out whether it is hot or cold,driving,shut down while having a meal and would not start up again,shut down overnight,wouldnt start the next morning,start up and when engine warms up,shuts down and would not start up again.I had one truck that had four sensors replaced in four differant states on one trip,I have not noticed any particular condition as to when they go out.There seems to be no particular event common to when they fail.





Layton

Gary Tom
Technician

 posted February 18, 2005 12:21 AM  

Mike, my CPS failed at 45,000 miles on 2002 PSD
Symptoms: Occasionally would die for an instant when at throttle just like you pulled the coil wire on a gasser. Twice it completely died while pulling into a parking lot. Once set SES but no codes!!
It always happened on a relatively cold engine, never hot. Engine has had 2 alternators now has aftermarket hi amp unit.
To my knowledge never had any shorts or jump starting. I am very happy to see someone working on this. It appear as Navistar-Ford are NOT interested despite the extremely high number of failures.
Good Luck,
Gary Tompkins





powerstrok`n
Shop Foreman

 posted March 15, 2005 03:09 AM   

there is no pattern to the milage for a CPS to go out. Al had a new vehicle @ 300 miles with a bad CPS. I have 156K miles on my truck with the original CPS. a new CPS bouncing around in the glove box is getting more wear on it. I`am not bragging, my CPS will probably go out tomorrow after this post.

BEST OF LUCK ON YOUR TEST Mike





bertrand
Technician

 posted May 10, 2005 04:57 PM   

How do camshaft position sensors fail? Do they die hard or fail intermittently? My 2002 Ford F350 began to shift into overdrive hard and then began to stall intermittently. Can it be a sensor? Ford will not replace it without an error code being thrown. Any thoughts?

IP: [Logged](#)

Lager Head
Technician

 posted May 10, 2005 05:57 PM   





When mine failed it would die at a stop light and then restart but some people it just dies . I have never heard anybody saying it caused a hard shift. They will fail and never throw a code .the international part # 1825899c93 it will be about half the price of a ford part

99.5 psd cc sb TS 4 program prepump filter 10 micron intank mods wing, stacks, signal mirrors ,,running lights on mirrors, tv,, dvd ,vhs, 5er gate, lund visor, hx hose, replaced supply lines from filter to the heads ,full flow tranny filter, coolant filter, open element K&N 336rwhp/672 rwftlbs trq,05 badges. apc projector lights

[This message has been edited by Lager Head (edited May 10, 2005).]

IP: [Logged](#)

Powerstroke95
Shop Foreman

 posted May 10, 2005 10:53 PM   

Yep...just best to replace it when it goes! Then keep a spare in the glove box, in case there is a next time.

I had the dreaded "die at a stop light" and changed mine, and all has been well for 25K or so now.

There was quite a good thread regarding CPS's some time ago here, so you might want to look back several months

ago, as it was quite a good read.

Dale





'95 Ford Powerstroke

Tru-cool tranny cooler
IDM mod
Guages
TYMAR intake
Amsoil dual by-pass
Precision triple disk TC & Pro build tranny
Ford AIC
Mini-Me/SWAMP 250cc Hybrid 530 injectors
'02 HPOP
5" custom exhaust
Superduty Intercooler
CCV mod
TS 4 position Flip Chip

390.2 RWHP @ 67 MPH.

IP: [Logged](#)

FORDSRULE
Technician

 posted May 14, 2005 10:30 AM   

I'V LOST THREE CPS TO DATE, THE FIRST ONE WOULD JUST INTERMITANTLY DIE, ON THE HIWAY, IN MY DRIVE WAY, WHEN EVER IT FELT LIKE IT. THE SECOND ONE JUST DIED PERIOD, I COULD LET IT SIT FOR 20-30 MINUTES AND IT WOULD START AGAIN AND GO FOR MAYBE 10-15 MILES THEN DIE. THE THIRD ONE, IT WAS WARMING UP IN MY DRIVE WAY AND SUDDENLY DIED, I DIDN'T TRY TO GET IT TO GO I JUST PUT IN A NEW ONE, SO FAR SO GOOD. BUT AS SOME ONE SAID, PUT AN EXTRA IN YOUR TOOL BOX OR GLOVE COMPARTMENT, BECOUSE WHEN THEY GO THEY DO IT WITH OUT WARNING, AND IT MIGHT START & GO AGAIN A WAYS OR IT MIGHT NOT START AGAIN TILL REPLACED. IT WOULD SUCK MORE THAN ANYTHING HAS EVER SUCKED BEFORE TO BE DEAD IN THE WATER WAY OUT IN THE MIDDLE OF NOWHERE AND NOT HAVE ONE. YOUR LOCAL INTERNATIONAL DEALER SHOULD HAVE THEM FOR AROUND \$100.00, HIGH PRICED YA, BUT BETTER THAN WALKING BACK FROM THE MIDDLE OF NOWHERE