



The Southeast Times

By The Falcon Club of America Southeast Chapter

May - June 2007

Editor: Jeff Thomas

The 2007 Southeast Falcon Club Officers

President: Wally Till
Vice President: Les Triggs
Secretary: Sara Moon
Treasurer: Mildred Kerbow
Newsletter: Jeff Thomas
Technical Advisor: Lynn Moon
Membership Chairman: Conrad Lavender

2007 CLUB MEETINGS

May 6th
James & Shelia's house
2:00 pm

June 3rd
Conrad & Hilda house
12:30 pm

Southeast Family News

Birthdays

May 31st.....Doris Triggs
June 4th.....Kathy Chester

June 5th.....Mildred Kerbow
June 24th.....Doug Burns

EDITOR'S MESSAGE

The March Meeting was held at Doug Burns house. We had 18 Members attended and 10 drove their Falcon. In this issue you will see pictures taking at this meeting. Thanks again Doug for hosting this Meeting.

The April Meeting was at the Old Hickory House and they were 12 Members and 2 Members drove their Falcon.

I planed on doing an article on converting electric wiper to intermittent wipers but the National Newsletter beat me to the punch. Dick Harrington did an outstanding job on his article in **The National Falcon News**.

In this issue is an article on how to stiffen your motor mounts and how you can recognize pre ignition and detonation. Wally did an article on his garage door monitor.

Leff

12th Annual Florida Falcons Regional



Upcoming Events

May 6th

*Club Meeting at James and Shelia's House
Dawsonville, GA*

Directions inside this Newsletter

June 3rd

*Club Meeting at Conrad and Hilda's House
Jefferson, GA*

May 26th -27th

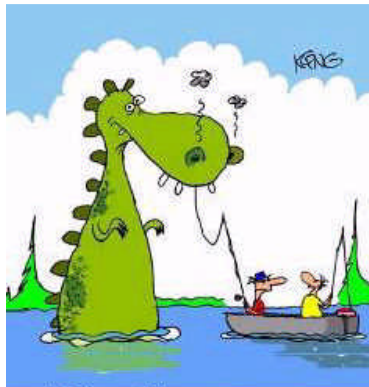
*Kentucky Regional
Friday and Saturday
Louisville, KY*



Accomplishments and Projects

Jeff Thomas has recently replaced his worn out T-10 transmission for a fresh rebuilt Toploader in his '60 Sedan





"If that thing eats you,
can I have you Falcon?"

Trivia

- Some automakers installed lap belts as standard equipment decades earlier, but the National Highway Traffic Safety Administration made them mandatory in all new cars on Jan. 1, 1968.
- The Cobra 427 was built in November 1964 and was capable of incredible performance, going from 0 to 100 to 0 in less than thirteen seconds.

Tech Tip

Knocking (also called pinging) occurs when air/fuel mixture in the cylinder has been ignited by the spark plug and the smooth burning is interrupted by the unburned mixture in the combustion chamber exploding before the flame front can reach it. The resulting shockwave reverberates in the combustion chamber, creating a characteristic metallic "pinging" sound, and pressures increase catastrophically.

Normal combustion

Under ideal conditions the engine burns its fuel air mix in the cylinder in an orderly and controlled fashion. The combustion is started by the spark plug some 8–40 crankshaft degrees prior to TDC (top dead center) the point of maximum compression. This ignition advance allows time for the combustion process to develop peak pressure at the ideal time for maximum recovery of work from the expanding gases. This point is typically 14–18 crankshaft degrees ATDC (after top dead center).

The spark plug produces an electrical spark that jumps a small gap from its center electrode to its ground electrode. This spark initiates the combustion. In normal combustion, this flame front moves throughout the fuel air mix at a rate characteristic for the fuel-air mixture. Pressure rises smoothly to a peak, burning nearly

all the available fuel then falls as the piston descends. In normal combustion this produces a rapid increase in cylinder pressure as the piston passes TDC and begins to move down the cylinder. As mentioned above in a properly tuned engine the maximum cylinder pressure is achieved a few crankshaft degrees after the piston passes TDC, so that the increasing pressure can give the piston a hard push when its speed and mechanical advantage on the crank shaft gives the best recovery of force from the expanding gases.

Detonation

The fuel/air mixture is normally ignited slightly before the point of maximum compression to allow a small time for the flame-front of the burning fuel to expand throughout the mixture so that maximum pressure occurs at the optimum point. The flame-front moves at roughly 33.5 m/second (110 feet/second) during normal combustion. It is only when the remaining unburned mixture is heated and pressurized by the advancing flame front for a certain length of time that the detonation occurs. It is caused by an instantaneous ignition of the remaining fuel/air mixture in the form of an explosion. The cylinder pressure rises dramatically beyond its design limits and if allowed to persist detonation will damage or destroy engine parts.

Detonation can be prevented by:

- The use of a fuel with higher octane rating
- The addition of octane or other antiknock agents.
- Increasing the amount of fuel
- Reduction of cylinder pressure by increasing the engine revolutions (lower gear), decreasing the manifold pressure (throttle opening) or reducing the load on the engine, or any combination.
- Reduction of charge (in -cylinder) temperatures (such as through cooling, water injection or compression ratio reduction).
- Retardation of spark plug ignition.
- Improved combustion chamber design that concentrates mixture near the spark plug and generates high turbulence to promote fast even burning.
- Use of a spark plug of colder heat range in cases where the spark plug insulator has become a source of pre-ignition leading to detonation.

Pre-ignition

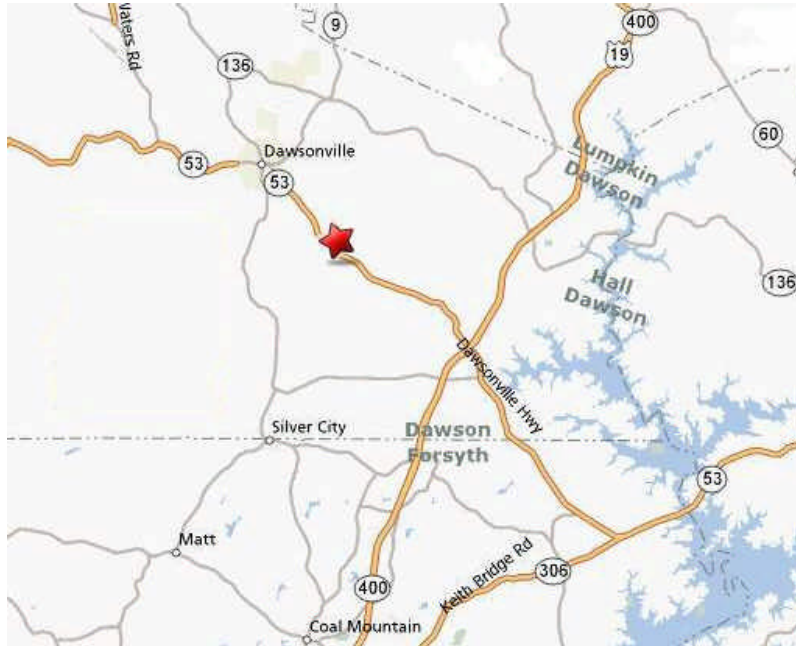
Pre-ignition is a different phenomenon from detonation, and occurs when the air/fuel mixture in the cylinder (or even just entering the cylinder) ignites before the spark plug fires. Pre-ignition is caused by an ignition source other than the spark. Heat or hot spots can buildup in engine intake or cylinder components due to improper design, for example, spark plugs with heat range too hot for the conditions, or due to carbon deposits in the combustion chamber. Spark plugs with a high heat range will run hot enough to burn off deposits that lead to plug fouling in a worn engine, but the electrode of the plug itself can occasionally heat soak, and begin glowing hot enough to become an uncontrolled ignition source on its own. Bits of carbon that build up in a combustion chamber can also heat soak to the point where they also are glowing hot and ignite the air-fuel mixture before the proper time.

Pre-ignition and "dieseling" or "run on" are the same phenomenon, except in the latter case the engine continues to run after the ignition is shut off with a hot spot as an ignition source. Pre-ignition might cause rough running due to the advanced and erratic effective ignition timing and may cause noise if it leads to detonation. It may also cause "rumble" which is fast and premature but not detonating combustion.

If pre-ignition is allowed to continue for any length of time, power output and fuel economy is reduced and engine damage may result. The engine might be slightly harder to get running at once after pre-ignition.

Pre-ignition *may* lead to detonation and detonation *may* lead to pre-ignition or either may exist separately.

The May 6th meeting will be at James & Shelia house Dawsonville, GA. at 2pm. If you need help with directions call a Club Officer or call James



Pinned Motor Mounts

After separating a motor mount again I knew I needed something stronger than stock motor mounts. I'm thinking they are making mounts with different rubber than they use to or the manufacture procedure is different. Something is up. All I know they don't last as long as they did years ago. It looks like with today's technology they know how to make a motor mount that doesn't pull apart without you doing a basic backyard fix. For what its worth, as always anything made with metal I will buy from a quality part chain, not from a discount auto part franchise.

I hear that the Bronco mounts have torque limiters or pins going through mount that limits the movement of the engine. The draw back is this motor mount will also raise the engine in the bay approximately 1/4 to 1/2 inch. This might be acceptable if used in a '64-'65 Falcon, but the '60 Falcon having the smallest transmission tunnel needs all the room it can get with a V8 bellhousing. It should be noted that the 260 V8 has a 6 inch bolt span and the 289-351 has a 7 inch span. So if you have a 221 or 260 forget about using Bronco mounts.

I didn't want the harshness of solid motor mounts on a street driven car. Other than the cruelty of this type mount the vibration from the engine will eventually take its toll on other parts.

I remembered seeing something very similar to this modification in an old Hot Rod magazine years ago. This modification not only keeps the motor mounts in one piece, it will also put more torque to the driveshaft by eliminating the flex in the OEM mount that is lifting the engine when it is rev. It will make a more responsive drivetrain that will responds crisper to throttle response. You also gain less wheel hop, not to mention less chances of the headers hitting the shock towers due to the engine twisting. With this modification I can now have almost the smoothness of rubber mounts and the strength of solid. I can feel a very slight vibration with the mounts being pinned, but it is not enough to to be concern it is something that was expected.



Separated motor mount



New motor mounts



Drill 2- 25/64" holes in each mount



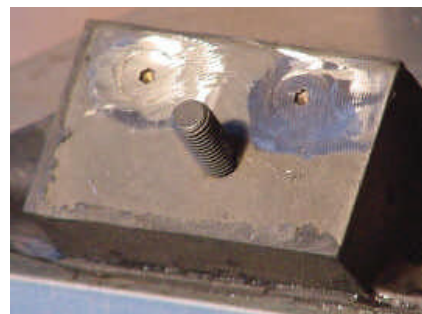
Counter sink the holes



3/8" x 1 3/4" Stainless Flat Head Cap Bolt



Using Loctite tighten nut until the bolt starts to spin plus an extra 1/4 to 1/2 turn.



Grind the bolt head flush with mount then paint mount to deter rust





Garage Door Monitor

By Wally Till

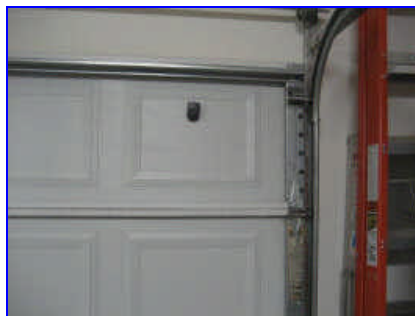
On several occasions I have left my garage door open when it should have been closed. Jeff and I looked at the garage door system and came up with a plan to implement a monitoring system. Our plan called for a 12 volt source (an old battery charger), wiring from the garage to the house (no good way to do this), an LED indicator (where to put it?), and sensing switches for the rail system. So I was off to find the switches.

I got the Overhead Door (my system) web site and started snooping around for rail replacement switches, and a link caught my eye: "Garage Door Monitor". I went there and immediately ordered the system. It solved all of my problems: power source,



switches, cabling (its wireless) and other associated hardware. The name of the system is "LiftMaster".

INSTALLATION: I installed the system in under 5 minutes. The sensor mounts on the garage door with an adhesive on one side and Velcro on the other side so that it can be removed. The receiver is powered with an A/C adapter that plugs into the wall. That's it. I keep the receiver on an end table by the recliner where I watch TV.



OPERATION: When the garage door is down, a green light glows steady on the receiver. When the door is opened up, the receiver shows a blinking red light. Very simple and straight-forward.



Ordering Information

www.1stdooropeners.com
1st Garage Door Openers
P.O. Box 637
1107 N. 100 E.
Chesterton, IN 46304
Phone 219-396-9391

List \$24.95
S/H 6.95
Total \$31.90

2007 Members

Anderson	Don & Pat	2082 Cooper Way	Jonesboro, GA 30236
Bales	Wyatt & Torino	P.O. Box 242	Dawsonville, GA 30534
Ballard	Tony Jr & Cindy	5545 Crow Dr.	Cumming, GA 30041
Barron	Bobby & Yvonne	449 Macedonia Forest Circle	Canton, GA 30114
Baxter	James	1192 Mirror Lake Rd.	Lincolnton, NC 28092
Brown	John Fred	7284 Midland Chase Loop	Columbus, GA 31909
Burns	Doug	2535 Dacula Ridge Dr.	Dacula, GA 30019
Buyck	Walter	35 Covey Trail	Newnan, GA 30265
Chester	Bobby & Kathy	2599 Camp Wahsega Rd.	Dahlonega, GA 30533
Cole	James & Shelia	P.O. Box 1858	Dawsonville, GA 30534
Danes	Ed & Ellen	1202 Garden	Milford, MI 48381
Daniels	Jerry F. & Laura	69 Henderson Woods Dr.	Jasper, GA 30143
Dirkens	Robert & Valerie	1595 Chattahoochee Run Dr.	Suwanee, GA 30024
Ferguson	Bob & Gerri	BOX 1343	Tullahoma, TN 37388
Foster	Donald & Kristi	1548 Kon Tiki Ln.	Jonesboro, GA 30236
Goddard	Gary	7164 Hwy 212	Covington, GA 30209
Goddard	Leon & Betty	3808 Gloucester Dr.	Tucker, GA 30084
Hartley	Fred & Martie	4203 Kimlie Cove	Decatur, GA 30035
Harris	Todd & Ashley	5246 Marston Rd.	Dunwoody, GA 30360
Hood	A.J.	4065 Green Hawk Trail	Decatur, GA 30035
Johnson	Don	RT 1 Box 107	Cuthbert, GA 39840
Kerbow	Ricky & Mildred	166 Crowell Rd., S.E.	Conyers, GA 30094
Kerbow	Richard & Hazel	93 Crowell Rd., S.E	Conyers, GA 30094
Kleschka	Thomas & Kay	320 Norris Rd.	Otto, NC 28763
Lavender	Conrad & Hilda	176 Lavender Rd.	Jefferson, GA 30549

McCracken	D. Tutt	2447 Doubletree Dr.	Acworth, GA 30102
McDaniel	David L. & Donna	2150 Old Holton Rd.	Macon, GA 31204
Moon	Lynn & Sara	559 Cannon Farm Rd., S.W.	Oxford, GA 30054
Myers	Jerry & Sha	6125 Grants Ford Dr.	Gainesville, GA 30506
Nelson	Jerry & Joyce	508 Meadowridge Dr.	Warner Robins, GA 31093
Peppers	James & Ealine	199 Carl-Bethlehem Rd., S.W.	Bethlehem, GA 30620
Pointer	Keith & Amy	465 Chandler Heights Circle	Alto, GA 30510
Roberson	Alvin & Judy	317 Peoples Rd, S.E.	Aragon, GA 30104
Sanders	Ed & Joanna	3713 Jolane Terrace	Conyers, GA 30094
Sosbee	Doug & Julie	2026 Lou Dr.,SE.	Conyers, GA 30013
Rollins	Wayne & Judy	5542 Evergreen Farms Lane	Greenback, TN 37742
Tallant	Terry & Sandra	6110 Jewell Bennett Rd.	Dawsonville, GA 30534
Tate	Pat & Toby	181 Highlands Dr.	Woodstock, GA 30188
Till	Wallace C., JR.	461 Grandiflora Dr.	McDonough, GA 30253
Thomas	Ronald	102 Overlook Dr.	McDonough, GA 30252
Triggs	Les & Doris	5034 Hugh Howell Rd.	Stone Mountain, GA 30087
Young	Earnest & Peggy	5205 Oakgrove Circle	Cumming, GA 30040

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