

Pegasus

March 2007



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February 2007 Club Minutes

President Dave Glidewell opened the monthly meeting on Friday, Feb. 2nd 2007 at 7:45 p.m. in the Kent Bowen Scarff Showroom.

Secretary's Report: January minutes were approved as written; the only exception was in the 1/24/07 Board Meeting minutes, Steve and Tom Denyer were NOT present...my error!

Treasurer's Report: Brad Hofman noted we still have room/tickets left for a few more people for our annual Banquet on Sat. 3rd.

Newsletter: Donna Kercher thanked Cecil Paoletti for his recent submission, and also thanked Chris Johnson for his "metric article" submitted to Donna in our latest newsletter. Members are asked to write up articles/photos of any car events they attend and send them to Donna.

Membership: Linda Hallberg announced we had no actual "guests" tonight, except for traveling members Steve & Tom Denyer visiting from England. We had approx. 39 members attend tonight's meeting.

Tours & Events: Margaret Petersen mentioned the Swap Meet in Puyallup is Feb. 17th-18th (Chris Johnson will have a booth). There is also another Swap Meet in March too.

Keep checking out the calendar of events on our website as Margaret is constantly adding to it.

Feb. 13th dinner night out TBA (maybe flying Pie Pizza?)

Pony Trails is Friday, July 13th, car show is 14th & 15th at Bellevue Community College.

Club members gathered at "The Mustang Shop" in Auburn on Sat. Jan. 27th (the only complaint was the shop not actually being opened on weekends), but that could be changing in the future.

Boise trip is July 5th -8th. Margaret and Bruce were possibly planning on leaving early to head to the Nevada border and visit an opal mine. Dave Glidewell has rooms reserved, let him know if you're planning on attending.

End of the World Rod Run is Sept. 8th-9th which is apparently a lot of fun to attend.

Website: Skip Echert asked members to take recent pictures of their cars and send to him for our gallery.

Tech. Session : Chris Johnson is planning an "early Mustang heater core" session on Sat. March 24th at Burien City Garage. Time approx. 10:00a.m.-2:00 p.m.

New Business: President Dave Glidewell asked members to vote if Ed Harris brought an extra 'guest' to our Banquet Sat. if the club would pay for their dinner. Members voted unanimously 'yea', as Darren Capps guest was not attending as planned, the cost would actually be a 'push'.

Vice President Kirk Charboneau announced members can arrive at "Verrazanos" at 6 p.m. Dinner will be served from 7-8:30 p.m. Then 8:30-9:00 is guest speaker, then awards and door prizes afterwards. Kirk will print up name tags.

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(minutes, cont'd)

Members nominated to elect new Board Member **Heather Sharp**, who will be replacing **Jo Paoletti**. Dave Glidewell has 2 more club coats for sale (M & XL).

Lotteries: Split the pot was won by President **Dave Glidewell**. Member in attendance was won by newly elected board member **Heather Sharp**.

The meeting was adjourned at 8:37 p.m.

Julie Thompson, Secretary

GENERAL WIRING INFO

by the Techmen
April 7, 1996

When adding electrical devices, such as driving lights, halogen headlights, CBs, etc. (device), to your Mustang, try to locate the electrical specification which shows the amount of current (load) required for the device. This load may be expressed in current or watts, but you can calculate either with Ohm's law (watts = volts * current). You will need to determine how many devices, such as driving lights, you will add. A heavy load, such as driving lights, will require separate wiring, but changing to Halogen headlights can be done by adding a light relay. The existing wiring and protection (fuses or circuit breakers) in your Mustang are engineered to meet only the electrical demand originally designed, so don't plan on major additions using the existing fuse block.

There are several items to be considered when adding any electrical device, and how to get the power. Among them:

- 1) How much capacity is left in the original wiring and fusing?
- 2) Is it essential to have the device activated with the ignition switch?
- 3) If another fuse panel is required, where should it be located and how should it be wired?
- 4) Will an in-line fuse directly from a 'hot' lead be adequate?



5) Will another wiring harness be required, and if so, how is this done?

6) What safety margin is required for the new wiring?

If your Mustang has factory or dealer GT items, a separate toggle switch for the driving/fog lights has already been installed. The changeover from regular to halogen lights is easily accomplished with the addition of a light relay in the headlight wiring circuit.

First, we will cover some basics. As you probably guessed, auto manufacturers did not design electrical system for the buyer to add a lot of extra goodies. There is very little extra capacity in the existing system, as you will see later. There are many books on electrical systems, and most provide wiring tables to help you. One thing we have found is you had better read carefully, because we found a few errors. Most would have had little impact on the circuit.

Electrical current (what lights your light) creates heat in the wiring. If you add too many lights on a wire, the wire will get hot, the insulation will melt and the wire may short out. If you have the circuit correctly fused, you will probably blow a fuse before anything serious happens.

There are several methods of circuit protection. Most autos have a combination of fuse blocks, fusible links and circuit breakers. Some add on electrical devices are connected with in line fuses. One drawback to a circuit breaker is when a short occurs, the circuit breaker continually sets and resets. The wiring could overheat, if the circuit breaker is too small in current carrying capacity. Some fuses on the fuse block are controlled by the ignition switch and may be suitable to add a device not requiring much current. Other fuses on the fuse block are not controlled by the ignition switch, such as the cigarette lighter, and could be used for some device addition. Be very careful where you connect devices if you have electronic ignition and a computer. Many add-on devices will have wiring information, but we have found some instructions to be very vague, such as wiring an electric control to the choke. Toggle switches, with small indicator lamps to indicate the 'on' position, can also be wired to a 'hot' lead, as long as you see the

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indicator light and don't forget to turn them off when leaving your Mustang.

Example 1. You want to add driving lights to your '66 Mustang. If there is a state law that allows driving lights only with high beam, they have to be wired in a special way. To the best of my knowledge, this is not required in Washington. We mentioned earlier that the engineering design left very little capacity on the fuse block. Let's review the capacity of one of the fuses on the '66 Mustang. There are five fuses in the fuse block: a 14 amp for back-up lights, windshield washer pump and the radio, under control of the ignition switch; a 14 amp heater fan, also under control of the ignition switch; a 2.5 amp instrument panel and shift lever lights, powered from the 15 amp circuit breaker in the headlight switch; a 7.5 amp courtesy, console and clock lights; and a 20 amp lighter and emergency flasher.

The 14 amp fuse under control of the ignition switch has the following load (approximate current shown):

3.0 amps	2 back-up lights
1.5 amps	single-speed wiper motor
7.0 amps	horns 3.5 - 5.5 amps each
2.0 amps	radio
13.0 amps	total

As you can see, the circuits are designed with no extra capacity. The other circuits on the fuse block are similar in sizing. To add a pair of 100 watt driving lights will require a 15 amp circuit, 'the book' says use No. 14 (I think I would use No. 12) wire and a switch capable of 20 amps. Use an illuminated toggle switch to avoid leaving lights on when you leave the car. This method of analysis should be done for any circuit that you want to add.

Example 2. You want to replace the existing headlamps on your '66 Mustang with halogen headlights. The existing headlights require about 4 amps each. Halogen headlights require about 6-8 amps each. The

existing Mustang headlight switch has a 15 amp circuit breaker for headlights, stoplights and instrument panel lights. Adding extra load will burn out the circuit breaker. Purchase and install a head light relay. The instructions will guide you on providing the power for the headlights, through the relay contacts and be sure to include either a circuit breaker (preferred) or a fuse between the relay contacts and the lights. The circuit breaker from a tail gate window can be used. The existing headlight switch now only controls the relay. The power for the halogen headlights does not pass through the headlight switch.

Example 3. You want to change the single-speed wiper motor to a two-speed wiper motor. The single-speed and two-speed are both protected by circuit breakers in the wiper motor switch. You will have to change the wiper motor switch because the single speed switch only provides one operating path and besides that, the circuit breaker does not have enough current protection. You will have to verify the wiring to the washer motor after installation is complete.

Example 4. You want to change the choke control on your '66 Mustang to an electric control (which works much better than the heat tube choke control). The choke control requires a circuit that is hot only while the ignition switch is on. We have used the coil wire (shame on me) on one installation, and it seemed to work okay. You could not use the same lead on an electronic ignition. You can find and splice into the lead for the radio, also. If you use the splice/clamps, be sure the splice is closed tight and tape closed (or use a tie wrap), to insure it does not loosen. Do not increase the fuse size, if it is too small you will need to select a different power source.

If you plan on some serious wiring, get a good book on auto electrical wiring (the shop manuals and other repair books don't really cover adding electrical stuff. Always disconnect the battery when working on your classic Mustang so you don't accidentally short out the battery lead. Review the work BEFORE YOU START. Need anything else? Maybe only some common sense. Go for it.

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Club Contacts

President: Dave Glidewell, d.glidewell@comcast.net
Vice President: Kirk Charboneau,
kirk.charboneau@alaskaair.com
Treasurer: Brad Hofman, bradhofman@yahoo.com
Secretary: Julie Thompson, jtsmustang@comcast.net
Past President: Gary Dagan, gdagan@msn.com
Membership: Linda Hallberg, Woolf764@cs.com
Web Focal: Skip Echert, skip@skipechert.com
Dealer Rep.: Mark Palmore, MarkPal-
more@bowenscarff.com
Historian: Gary Hallberg, ghallberg@comcast.net
Newsletter: Donna Kercher, dkercher@hotmail.com
Tours& Events: Margaret Petersen, bcplmp@aol.com
Board Member: Tom Rowley, mustangthomas@msn.com
Board Member: Jo Paoletti, cecilandjo@juno.com

Calendar

March 2007

3-2, PCMC Meeting 7:30PM
3-2, 3, 4 Seattle Roadster Show
3-13, 6:30 PM Dinner Nite- TBA
3-17, 18 Spring Puyallup Swap Meet

April 2007

4-6, PCMC Meeting 7:30 PM
4-13, Dinner Night 7:00 PM TBA
4-21, XXX, Vintage Military Vehicles
4-27,28,29, Mild to Wild World of Motorcycles
4-29, Spring Open Car Show Covington

May 2007

5-4, PCMC Meeting 7:30PM
5-13, Dinner (lunch) Cruise/Mothers Day
5-27, 28, Cruzin to Colby in Everett

June 2007

6-1, PCMC Meeting 7:30 PM
6-3, All Ford Picnic, Mustangs NW
6-13, Dinner Night TBA

Membership Qualifications

1. Attend two functions; one of which must be a Membership meeting.
2. Be a currently licensed driver with Insurance
3. Own a Ford powered vehicle.
4. Have a desire to enjoy companionship and interests of other Mustang and Ford enthusiasts.
5. Pay Annual Dues: \$25 per year per household.
Contact Linda Hallberg, Membership Chairman, 425-235-1321, Woolf764@cs.com

Pegasus Newsletter
Pacific Cascade Mustang Club
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