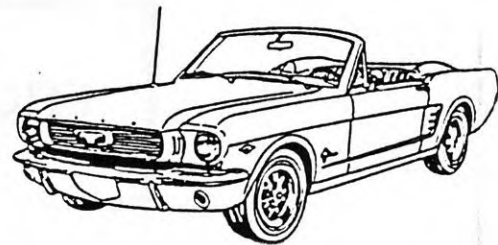




PRESERVATION

RESTORATION

ENJOYMENT



MUSTANGERS

" A Few to Preserve the Best "

From the Prez :

December 28, 1992

Well I made it through another Christmas without Santa leaving any coal in my stocking. I hope everyone else had the same success. Tammy and I had a very enjoyable Holiday with the folks, hers and mine.

January is almost upon us and by the time you receive this, the first Swap Meet of the year will be history. Away we go ! Before you know it, we'll be uncovering the cars and getting ready for the '93 Show Season. It promises to be a exciting year for the club. There will be a number of Over the Road Trips, Day Trips, and other activities that you won't want to miss. We'll keep you posted in the coming months as the dates and destinations are finalized. You'll find a tentative calander of events in this newsletter, so start planning now.

On a sad note, Sue Coyle passed away over the holiday season. Sue was a active, caring person who always had a smile on her face and we will miss her. Our hearts and prayers go out to Dick and Chris in their time of sorrow.

Until next time

Keep on Stangin !

Scott

FROM YOUR EDITOR

LET'S ALL VOW TO MAKE 1993 A BANNER YEAR FOR THE WISCONSIN EARLY MUSTANGERS BY TAKING AN ACTIVE PART IN OUR CLUB FUNCTIONS. PLEASE SAVE THE ANNUAL CALENDAR PAGE WHICH YOU WILL FIND PRINTED IN THIS NEWSLETTER.

HAVE A HAPPY AND PROSPEROUS 1993.

BOB ZIMMERMANN

**DID YOU RENEW YOUR DUES ?
OR WILL THIS BE YOUR LAST NEWSLETTER ??**

Membership to the Wisconsin Early Mustangers are up for renewal for 1993. The dues remain at \$15.00. The Deadline is January 1st. Please be prompt

SEND TO:
WISCONSIN EARLY MUSTANGERS
2511 W. CARRINGTON AVE.
OAK CREEK, WI 53154

NAME: _____

ADDRESS _____

PHONE _____

:

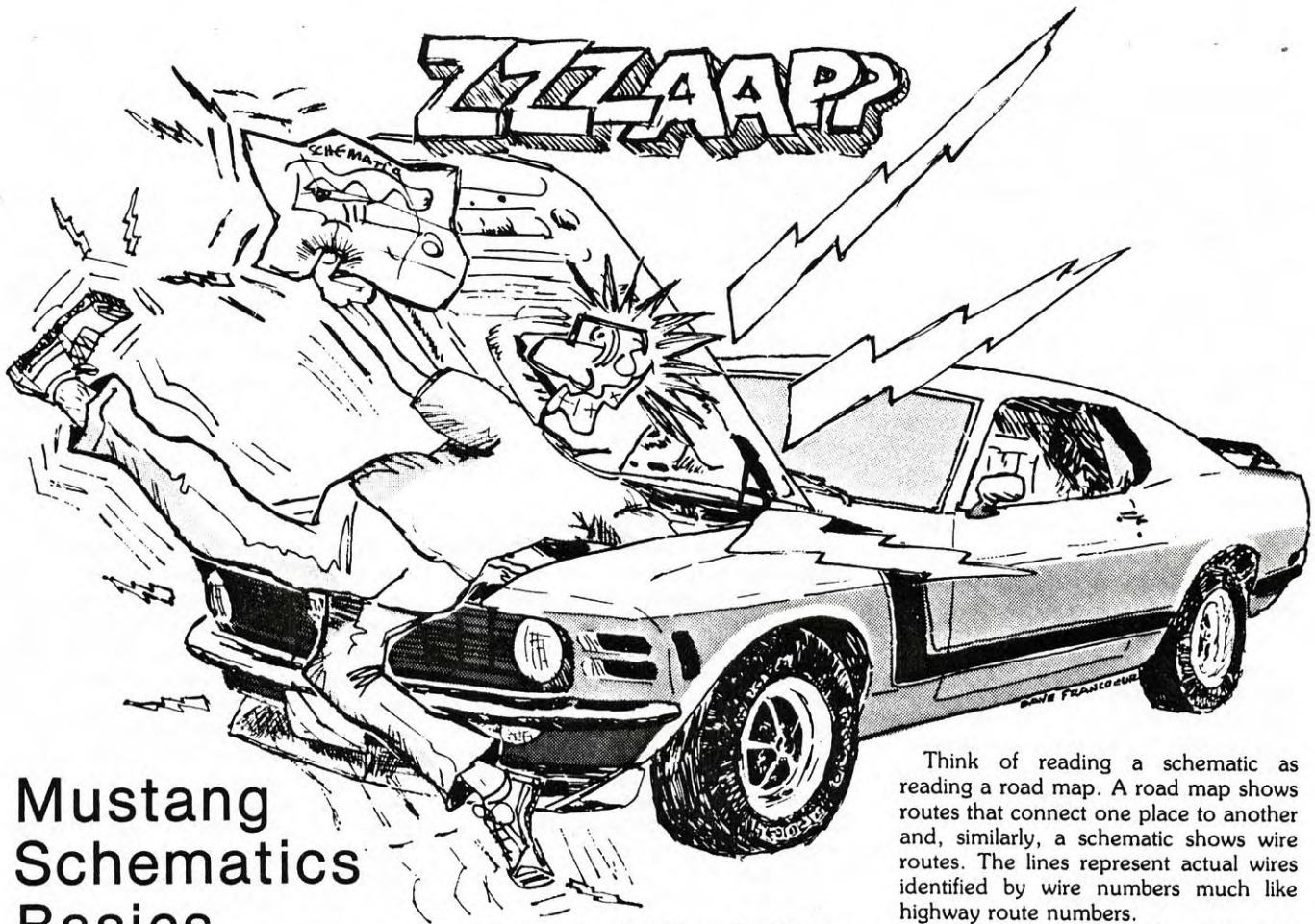


1993 CLUB CALENDAR



- 1/16/93 The Early 60's Ford Club annual dinner. The W.E.M. is invited. Contact Rich Bruhn 425-4710.
- 1/31/93 Monthly Club Meeting on Sunday at 2PM. Wauwatosa S&L Meeting room.
- 2/21/93 Swap meet at State Fair Park. The W.E.M. will hand out show fliers.
- 2/22/93 Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room.
- 2/27/93 Annual W.E.M Club Dinner. More details and sign up form in Feb. newsletter.
- 2/28/93 Annual Gimmick Bowling Party. Sign up form in newsletter.
- 3/28/93 Planning meeting for our annual car show.
- 3/29/93 Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room.
- 4/25/93 Annual W.E.M. Ice Breaker Sunday Brunch.
- 4/26/93 Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room.
- 5/22/93 Saturday set up for car show at Schwister Ford.
- 5/23/93 The W.E.M. 11th Annual Show and Swap at Schwister Ford.
- 5/24/93 Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room. One week earlier.
- 6/12/93 6/13/93 Mustang Over the Road Trip. Destination to be announced.
- 6/26/93 W.E.M day trip. Destination to be announced.
- 6/28/93 Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room.
- 7/16/93 7/17/93 Nostalgia Days held in Zion Illinois. Contact Kathy Lerner for details.
- 7/18/93 Super 60's Ford show held at Sorens Ford.
- 7/26/93 Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room.
- 7/30/93 7/31/93 Hot Summer Nights held in Lafayette Indiana.
- 8/8/93 Super 60's Ford show held at Towne Ford.
- 8/15/93 Annual Club picnic and reunion.
- 8/22/93 Midwest Ford show in Antioch Illinois.
- 8/28/93 8/29/93 W.E.M. Over the Road Weekender. Wisconsin Dells Car Show.
- 8/30/93 Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room.
- 9/11/93 W.E.M Day trip. Destination to be Announced.
- 9/23/93 9/26/93 Joint OTR trip with the Midwest Ford Club. Destination Dearborn Michigan.
- 9/27/93 Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room.
- 10/25/93 **DOOR COUNTY**
Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room.
- 10/30/93 Halloween Rally.
- 11/29/93 Monthly Club Meeting. 7:30PM Wauwatosa S&L Meeting room.

PLEASE SAVE THIS PAGE TO USE AS A REFERENCE



Mustang Schematics Basics

by J.R. Gillespie

By the time we purchase our Mustang, there have been numerous modifications to them, especially to the electrical systems. Wires have been cut and spliced to add stereos, speakers, tachometers, and lights. During major accident repairs, it was always easier to cut and splice wires rather than replace them. In time, many of these splices corrode due to poor insulation, causing short circuits, open circuits, and other electrical system failures. In most instances, the splice is no more than two wires twisted together covered with a piece of tape, if that much.

With a basic wiring schematic and D.C. test lamp or volt meter, you can trouble shoot and repair many electrical failures yourself. D.C. test lamps can be purchased for about \$6.00 from most major department stores, automotive parts stores, or electronic shops. Volt meters are available at most electronic shops, but they are expensive for the limited use they would receive from the average backyard mechanic.

Electrical trouble shooting procedures could fill an entire detailed book. Here we will present only a basic introduction into reading schematics and how to trace a simple circuit on your car.

Electrical failures, like mechanical failures, should be diagnosed. Anyone can replace a fuse or a light bulb; but what caused the fuse to fail or bulb to burn out? Will the problem reoccur?

You, as the electrician, should determine what caused the failure. You should also determine which systems are functioning correctly and which are not.

To the average backyard mechanic a wiring schematic - or wiring harness assembly - looks like a puzzle that would take an electrical engineer to figure out. But it's not really so complicated once you become acquainted with basic schematic and electrical symbols.

Schematics and pictorial diagrams for 1965-68 Mustangs can be found in your shop manual electrical section. Manuals after 1968 do not contain complete schematics. Wiring diagram manuals (schematics) for most years can be ordered from many of the Mustang parts advertisers for about \$3.00 to \$6.00 each. Call them on their toll free number or write for the price and availability. Also schematics can be obtained from Helm, Inc. by sending a self addressed, stamped envelope to Helm, Inc., P.O. Box 07150, Detroit, Michigan 48207, and requesting a price list for specific year or years schematics. The schematics are normally \$3.00 each, but as mentioned by Jerry Ostalecki in "Mustang Paperchase", March 1981, write first - the price and availability may vary.

Schematics illustrate all electrical components, switches, wires, connections, and battery. They also include graphic illustrations and labels for each major component: numbered lines leading from one component to another, and a wire color code chart.

Think of reading a schematic as reading a road map. A road map shows routes that connect one place to another and, similarly, a schematic shows wire routes. The lines represent actual wires identified by wire numbers much like highway route numbers.

For electricity to leave its source and travel to the using electrical component, then return to the source is known as a circuit. The electricity has completed a round trip. Your house uses two separate wires - one to bring electricity in, and the other to carry it out. This is called a two wire circuit. Automobile electrical systems do not have a wire to carry electricity back to its source. Most automobiles utilize a single wire circuit, using the metal parts of the car as the return wire. Most circuits use the body, engine, or frame as a ground return. Whenever you see a symbol like this \equiv on a schematic, you've located the ground or return. Every circuit must have at least one ground.








A good GROUND is just about the most important part of any circuit. Without it, your electrical system will not function properly. Remember, the ground is the return wire and requires good connections. Paint, corrosion, grease, and oil make for poor ground connection and trouble.

OPEN CIRCUITS are breaks in the hot wire preventing electricity from traveling from the battery to the using electrical component and then back to the ground.

SHORT CIRCUITS generally happen in two ways; the first would be the grounded circuit: a hot wire going directly to the ground causing the fuse or circuit breaker, if there is one, to blow. The second type occurs when the hot wire insulation wears through two or more wires, and touching bare wires cause electricity

to detour from one electrical system to another - with some very strange results.

There are various symbols reflected on most schematics which normally are not self explanatory:

1.  Ground - acts as a return to the battery.
2.  Fuse - prevents damage to the system.
3.  Circuit Breaker - prevents damage to the system.
4.  Common Point or Splice - a heavy black dot, wires connect at this point.
5.  Male Connector - elements stick out.
6.  Female Connector - holes.
7.  These wires are not connected, they are drawn this way for convenience.

A 12 volt automobile electrical system cannot physically hurt you. The secondary side of the ignition (spark plug wires) will get your attention quickly with up to 30,000 volts, but the very low amperage will not injure you, although the quick upward movement of your head against the hood may leave a nasty bump and a few choice words.

Let's trouble shoot a very simple example of the license plate lamp circuit and follow it through its route. Say you've determined that both the bulb and fuse are okay, but let's assume the lamp will not illuminate when the lights are turned on.

On the schematic, locate the graphic illustration for the license plate lamp. Trace

the wire (line) from the license plate lamp; you'll find the wire number is "14B". In one corner of the schematic, a "wiring color code" chart converts the wire numbers into actual wire color or colors. From the chart, you'll determine that wire 14B, 57A, 57, 38, 14C, 14A and 14 are solid black. For all practical purposes, wire 14, 14A, 14B, and 14C are one and the same wire or wire assembly. On the wire color code chart you will notice that most wires have two colors. The first color is always the base color of the wire, while the second color is the stripe which runs the entire length of the wire.

The pictorial diagram in your shop manual, if one exists, for the electrical component you are trying to locate will make locating that component and wire harness a much easier task.

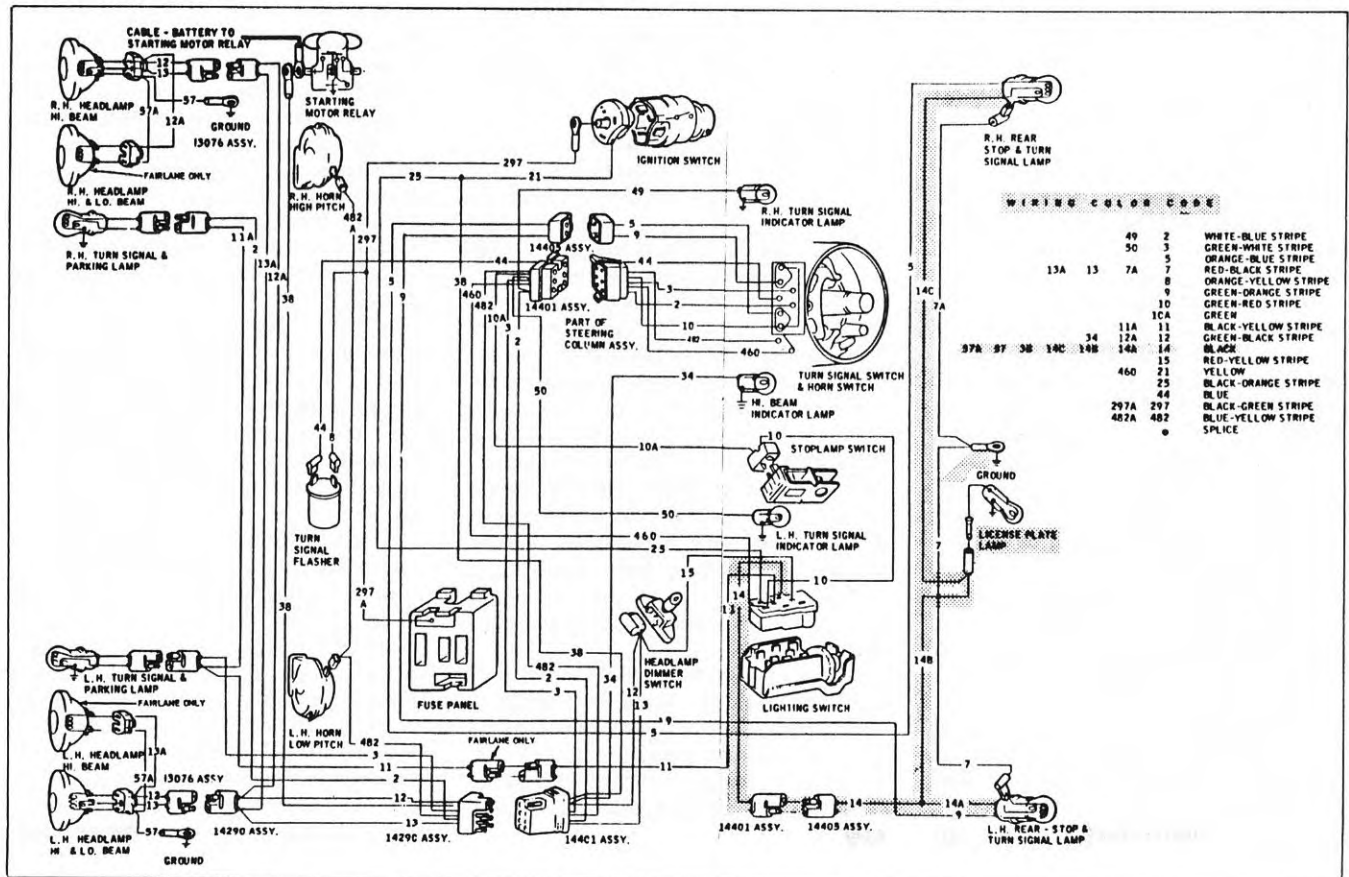
Return to the car and trace the license plate lamp wire into the trunk. Inside, again locate the wire by its color, but it soon disappears into a bundle of wires sheathed in black tape. How do you trace the wire now? Once again consult your schematic. You'll need to find the route between two points by tracing the wire by its number along its path to the point of termination. From the schematic, you should be able to determine where the wire physically terminates. The schematic shows that the wire from the license plate lamp "14B", right hand rear lamp "14C", and left hand rear lamp "14A" terminates at the light switch wire "14". At the light switch, once again find the correct wire

by its color code. With the lights on, your test lamp or volt meter will determine if you have 12 volts at the light switch.

Return to the license plate lamp. With the lights on, observe the tail lamps. If they are working and the license plate lamp is not, you can assume the license plate lamp housing has a poor ground. This can be verified with your test lamp: attach one lead (alligator clip) to a good ground and, with the probe from the other lead, touch the hot contact inside the socket. If the test lamp lights up you have verified the poor ground. If the test lamp does not light up, you can assume an open circuit exists.

If the tail lamps and license plate lamp fail to light up after checking for proper grounding, you can look for an open circuit between the light switch and sockets. At this point, with the aid of your schematic and manual, you must systematically trace wire "14" back to the light switch. Make voltage checks with your test lamp at each connector as you go. At some point along the route, you should find a broken wire, corroded plug contacts, or even a disconnected plug. By following a systematic method of circuit tracing, voltage checks using a test lamp and visual inspections, you should be able to analyze most basic electrical malfunctions and correct them. When more serious electrical problems are apparent which you cannot solve, take your car to a qualified automotive electrical repair shop for analysis.

MM





W.E.M. GIMMICK BOWLING PARTY

DATE: FEBRUARY 28, 1993
TIME: 12 NOON
PLACE: CLASSIC LANES OAK CREEK

Come join us for our seventh annual Bowling Party. The price per bowler remains at \$8.00. This includes fee for bowling as well as a chance to win prizes retailing over \$700 in value. Skill is not required to win a prize. This year we are offering an incentive for early sign up. If your sign up slip is received before January 1st you will be eligible for a special prize drawing. Your friends, neighbors, and relatives are all welcome to participate. Don't miss out. 80 spots are open and we fill them every year.

Fill out the form below and mail in soon !!

NAME : _____ PHONE: _____

OF BOWLERS _____ @ \$8 ea = \$ _____

LIST NAMES OF OTHER BOWLERS



SEND TO:
BOB ZIMMERMANN
2307 W CARRINGTON AVE
OAK CREEK WI 53154



TAKE A BREAK



SPECIAL DELIVERY

T	E	P	I	Z	Z	A	B	T	N	E	S	E	R	P
R	B	S	O	D	Y	D	E	E	P	S	M	E	T	I
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N	R	A	I	E	T	R	R	T	E	R	E	P	A	P
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P	A	C	K	A	G	E	L	C	E	R	I	P	J	R
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E	I	T	I	M	E	N	S	F	S	T	E	K	S	C
D	N	E	S	L	A	R	E	F	S	N	A	R	T	A

ACCOMPANY	ARRIVED	BEAR
BRING	CAKE	CARRY
CARS	CEDE	CONVEY
COST	DIRECT	DISTRIBUTE
ESCORT	EXPRESS	FORWARD
GATHER	IMPORTANT	ITEMS
LETTER	MAIL	MILK
NOTES	ORDER	PACKAGE
PAPER	PITCHER	PIZZA
POSTAL	PRESENT	RELEASE
RENDITION	SEND	SPECIAL
SPEEDY	STORK	TIME
TOSS	TRANSFERAL	TRANSPORT
TRUCK	UNLOAD	

Take the Money and Run

The best investment of the savings and loan industry was in the U.S. Congress. —W.G.

"The S&L mess just keeps growing," says Jay Leno. "But don't worry, it's covered by the FDIC. That's the Foolish, Dumb, Innocent Citizens who are going to pay for it."

"I knew the S&Ls were in trouble," claims one man, "when my banker knocked on my door and asked for his calendar back."

Calculators

A COUSIN OF OURS with three young children was going on a much-needed vacation. "How long will you be gone?" I asked her. "Twenty-seven meals," she replied gleefully. —Contributed by A. J. R.

SAYS A SCHOOL CUSTODIAN: "I've discovered that you can tell how far along the school year has progressed by the size of the crayons on the floor." —Contributed by Carol Hunt

"At 37," my friend said, "I'm no longer in my mid-30s. And I'm a two-boxer."

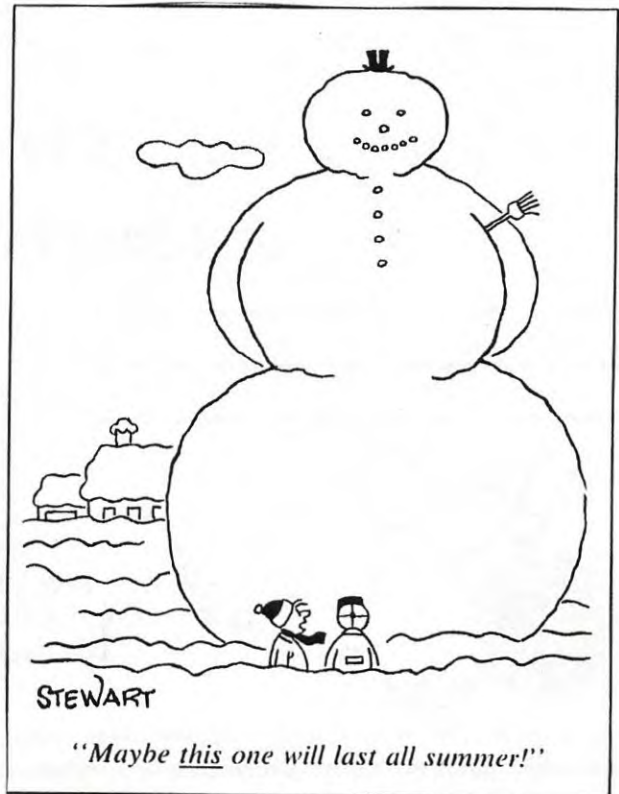
"A what?" I asked.

"A two-boxer. The birthday candles we use come in boxes of 36."

—Contributed by Pamela Watson

A MICHIGAN GOVERNOR once revealed how he judged his popularity: "When people wave at me, I count how many fingers they use."

—Quoted by Bob Talbert in *Detroit Free Press*



STEWART

"Maybe this one will last all summer!"