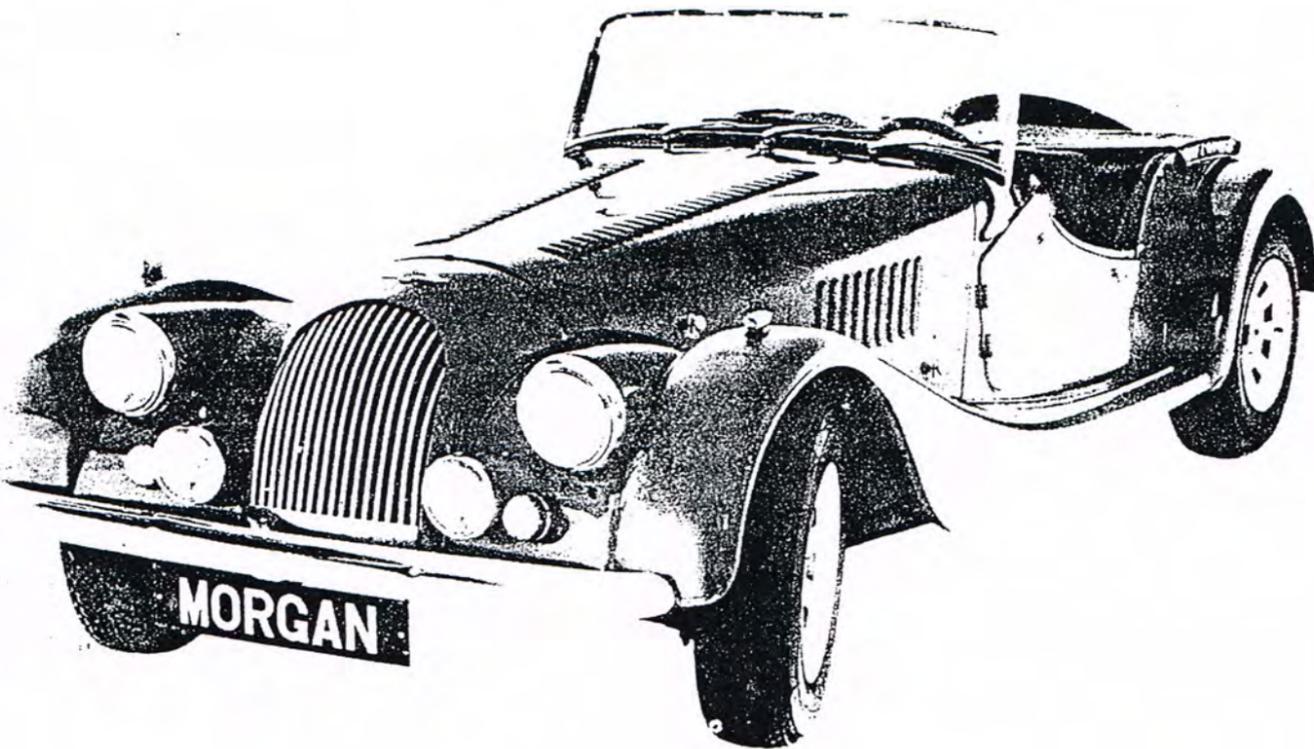




FEBRUARY 1983

*Basic - Electronic systems*

## Small is Beautiful



*Morgan*

Morgan Motor Company Ltd.,  
Pickersleigh Road, Malvern Link,  
Worcs. WR14 2LL. Tel: 06845 3104.

**OWNER'S  
GROUP  
NORTHWEST**

From The President

This seasons schedule of events is shaping up very well. So far:

March -

April -

May - John Batters

June - Bob and Janice Hauge's Puget Sound Trip (discussion at the March meeting)

July - July 16 - Bob and Janet McHenry - Vintage Car Race, Portland  
July 14-19 - Dwight and Meredith Smith - Morgans at Morro Bay, Calif.

August - Roscoe and Linda Nelson

September - Roger and Linda Huntley

Oct. -

Nov. -

Dec. -

Since March is upon us, this month is the time to get out the tools, tighten up the nuts and bolts, put a little grease to those fittings and start getting ready for spring and summer. If your car has been sitting for a while, why not make this month the one to start putting it all back together and pump some life back into that motor.

Our 1983 calendars arrived from England just before the February meeting. These are 2-sided appointment calendars and well worth the \$1.00 each costs. If you want one or more sent to you by mail, add 25¢ each for postage. They will also be available at the next meeting. All mail orders should be sent to : Dwight Smith 2694 S. W. 196th Ct, Beaverton, Oregon 97006.

The February event, organized by the Crocketts, went well and was a lot of fun. Davy and Tricia, John Batters and friend Sarah, and Meredith and myself all had a great time in the snow. We went to the Mt. Hood Meadows new Cross Country Ski Touring Center. The same area is featured in the March edition of Sunset Magazine. If you missed the trip, pick up a copy and see what a great time lies ahead for next year. P.S.- Looks like the Crocketts are definitely in the market for a 4 place.

Since the first day of March landed on a Tuesday, the next meeting will be March 15. See you there. Also, if I haven't reached you about the factory order, the ProForma invoice is here.

Dwight Smith

TRIVIA QUESTION: How many Plus 4 Plus' were built??

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**TECH EDITOR****LOU GANUT**

Sooner or later most of us are confronted with electrical problems or rewiring our Mogs. Many backyard mechanics don't understand the basic principals of electricity and the wiring diagrams just look like a bunch of lines drawn by some maniac. This article will attempt to clarify some of the mysteries of your Morgan's electrical system and will hopefully give you a better understanding of how electricity works.

BASICS OF ELECTRICITY

There are three things basic to all electrical circuits; voltage, amperage and resistance. Voltage is a rating of the electrical PRESSURE in a circuit that causes current to flow. It is much like the water pressure in the pipes of your home. Even though the water may not be flowing, the pressure is still there, ready and waiting until the tap is turned on. A battery's potential to push current through a wire to make something work is rated in volts. For example, a 12 volt battery has twice the electrical pressure of a 6 volt battery and can push twice as much current through a similar size wire. This is why 12 volt systems have smaller wires than 6 volt systems. Remember, voltage is only the potential to do work, not the flow of current.

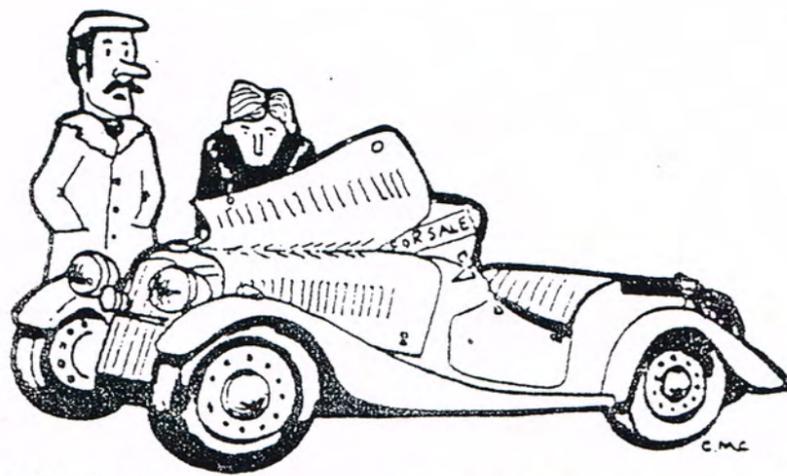
Amperage is the rating of the actual FLOW OF CURRENT through the wire which makes an electric component such as a gauge or light work. Various components in an auto require different amounts of current to make them operate. That is why a starter motor that has a big load to move has a very large wire to carry a lot of current as compared to a light that needs comparatively little current to operate. Unlike a water system, where the flow does work and then is dissipated, an electric system must always make a complete loop from the source of power (battery or generator) back to the other side of the battery before anything connected in between can work. This is a point that confuses some backyard mechanics. They don't understand the use of the car's chassis as a return "wire" for electric current. The chassis is called "Ground" (in England, "Earth") and is really nothing more than a common return wire from the various components (lights, gauges, etc) back to the battery. The Morgan uses a positive (+) ground, while the negative (-) terminal is connected to the wires that run to the components. Remember, if there is not a complete circuit, no current can flow and no work can be done. If the wires become frayed and touches the chassis or the negative side of a component is in contact with the chassis, the current flow is intercepted and returns to the battery without doing any work. This is called a "short". To check for shorts or faulty switches and components, measurements of voltage (pressure) are taken at various points of the circuit to determine where the current has been intercepted. Remember amperage is the amount of current flow.

Resistance to the flow of current in a circuit is measured in Ohms ( $\Omega$ ). All materials have some resistance to current flow. Those that have a low resistance are called conductors (copper wire and chassis) and, high resistance materials are called insulators (rubber and wire covering). The higher the resistance, the more voltage is needed to make a certain amount of current flow. If the voltage remains the same, and the circuit resistance is lowered (Example: larger wire), more current can flow. Likewise, if the resistance is raised, and the voltage remains the same, less current can flow. See! It's easy! Now that you have a basic understanding of electricity, next month we will get into the various basic electrical systems in your Morgan.

The car is referred to as "Morgan",  
As a family, we possess three.  
A green one for Dad, a white one for Bro,  
And a red one for Mommy and me.  
You can hear Morgans coming  
As they putt down the streets,  
A most unmistakable sound.  
Hair flies in your face  
As you sit down so low;  
Your rear almost frags on the ground.

Of all of our Morgans, my Bro's is the best,  
Especially after it rains.  
No fishtail through puddles,  
"But please don't tell Dad!"  
He yells as the car hydroplanes.

So that is a Morgan  
And I hope you have learned  
That they always give lots of good times.  
And throughout the years  
As my middle-age nears,  
I pray that "Big Red" will be mine.  
--- Jenny Dale



"OF COURSE IT'S ORIGINAL - IT'S ONLY HAD TWO NEW CHASSIS, ONE  
NEW BODY FRAME, THREE ENGINES AND A DOZEN OR SO SUSPENSION  
REBUILDS"