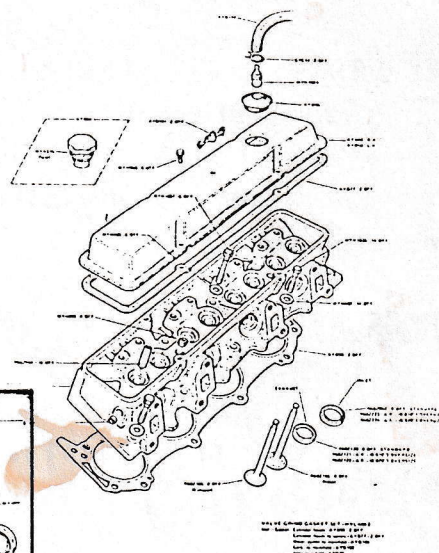
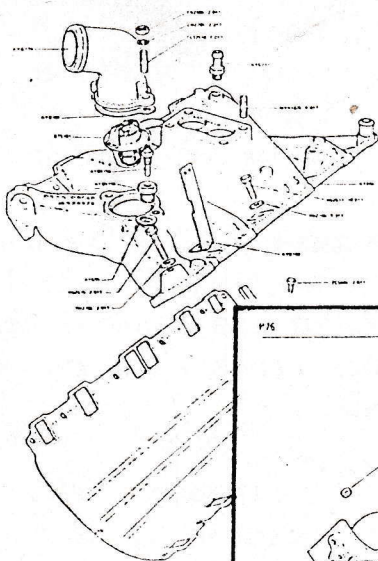


# S.A. CLUB NEWS

## P76

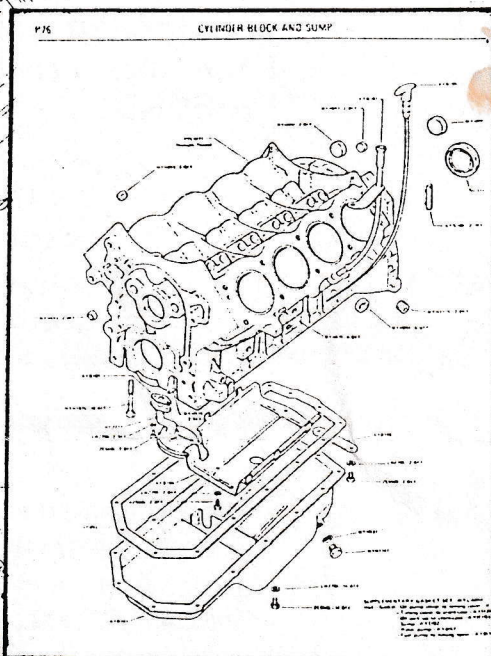
CYLINDER HEAD

MANIFOLD - INLET

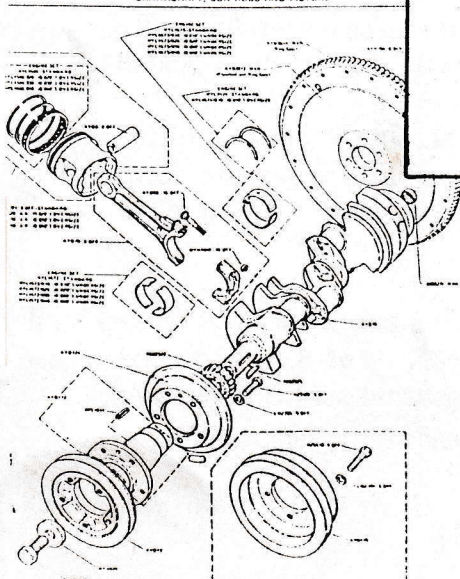


P76

CYLINDER BLOCK AND SUMP



CRANKSHAFT, CON RODS AND PISTONS



SEPTEMBER 1990





# CLUB INFORMATION PAGE

## COMMITTEE

### PRESIDENT -

Nigel Bray  
24 Elijah Street  
Morphett Vale 5162

PH- 382 6512

### VICE PRESIDENT -

David Wallace  
12 Kestel Road  
One Tree Hill 5114

PH- 280 7276

### SECRETARY -

Gerry Stewart  
Kings Lodge, 117 Kings Rd.  
Salisbury Downs 5108

PH- 250 2264

### TREASURER -

Chris Cutting  
21 ST. Helena Street  
Flagstaff Hill 5159

PH- 270 3799

### EDITOR -

Geoff Cutting  
21 ST. Helena Street  
Flagstaff Hill 5159

PH- 270 3799

### PUBLICITY -

Kym Lindner  
25 Maurice Road  
Murray Bridge 5253

PH- (085) 324 967

### NON-OFFICE BEARERS -

Alan Baker - 261 1175  
John Armstrong - 337 5474  
Richard Schlabowsky - 388 7350  
Steve Westmacott, S.M.A.S.A.  
Club Delegate - 297 9891

## MEETINGS

Club Meetings are held on the  
**1st Tuesday** of each month  
except January at the Goodwood  
Scout Hall, Florence Street,  
Goodwood.

Time: 7.30 p.m.

### DATES-

1991	
February	5th
March	5th
April	2nd
May	7th
June	4th
July	2nd

**August AGM** - The Annual  
General meeting is held in August  
in lieu of the General Meeting  
for that month on a date to be  
decided.

1990	
September	4th
October	2nd
November	6th
December	4th

Meetings may change if and when the committee  
feels necessary as appearing through this page.

The opinions expressed within this publication  
are not necessarily those of the committee  
except where indicated.

The committee accepts no responsibility for  
any damage of any form which may occur as the  
result of using information appearing in this  
publication.

This is the official publication of the "**Leyland  
P76 Owners' Club of S.A. Inc.**" and is not  
for sale to the general public. Copies are  
included in a years Full Membership.



## BITS N PIECES

### DASHMATS

Latest info is that they are going ahead Now and should be available in approx 4 weeks. For those parties that have ordered the mats please forward remaining money due to the Treasurer.

Kym Lindner

### SUBS DUE

Are you financial? If not this will be your last magazine. Should you not remember, please check your address label. If your name is highlighted OOPS you've forgotten. Please submit ASAP.

### FOR SALE

Deluxe 6 cyl Body and some parts for sale by the Club. For more info Ring Gordon or Gerry A/H 2502264

## COMING EVENTS

### SEPTEMBER

Sunday 9th  
Springtime Cruise

Held in conjunction with the Street Machine Association Of SA (SMASA)  
See Advt below

### OCTOBER - NOVEMBER

Suggestions & Ideas

### DECEMBER

XMAS Break-Up  
Date to be set.



## 5th ANNUAL SPRINGTIME CRUISE

STREET MACHINE  
ASSOCIATION  
OF SOUTH AUSTRALIA Inc.



**Top Street  
Machines to Shine**

**9th SEPTEMBER, 1990**

Cruise north through the Barossa Valley to the Tanunda Oval, where we have exclusive rights to the oval for the day.

All members, individual and club welcome.  
Lots of parking available.



**Leaving LLOYDS CAR PARK  
Gepps Cross  
approx. 10.30 a.m.**

**B.Y.O. Food and Drink  
Novelty Events and Prizes  
Family day (leave your bad habits at home!)  
Leave at your own leisure!**



## POST - THE EDITOR

Well, there it is. The above title is not a reference to the mailing of a person but sums up the capacity in which I now write.

The Annual General Meeting has again come and gone with the accompanying changes to the committee line-up for the next year. I was especially pleased to see that there were a few positions for which votes had to be taken, thus giving an indication that there does exist a wide body of our members who are keen and interested enough to stand for positions. This is a healthy and encouraging sign.

On a personal level, I now hold the position of Vice-President and Geoff Cutting will take the reigns of the Club Newsletter as Editor. Being familiar with the manner in which Geoff approaches things, which is evidenced by just a glance at any of his numerous P76s, I'm sure that he will be more than able in his new position as Editor. I look forward to witnessing his individual stamp on the area of the Club News and wish him every success and enjoyment. I would ask each one of you to support Geoff with material for inclusion in the Newsletter. I know from experience that the seemingly trivial and unimportant things which you experience in life with a P76 are to others vital pieces of information to keep their car running sweetly and will be treasured in times to come by others. So share with the other members through the Newsletter your mundane things as well as those which may seem more interesting.

Taking a backwards glance. A year ago, after the AGM, I wrote in the September edition of the Club News that there were a couple projects in hand that I wished to see completed before the end of the decade. I also had in mind then to see them completed before my term as Editor was up. Those were - the ability to make more freely available the other P76 club's newsletters and the cataloging of our own club's publications over the years. I am pleased to report that the other club's publications are now in volumes of suitable size for borrowing and now that the system is in place this will enable them to be updated from year to year. Also, thanks entirely to Paul Young, the cataloging is nearly complete. I have the first instalment and after a bit of fine tuning we all should soon see the fruit of his labour - a complete index of our states publications from inception.

I would now like to thank those who have supported and helped me as Editor in the past. They are many, and their help has been varied, but without the help my past efforts would not have been possible.



I remember, what seems aeons ago, a gathering of three or four people in a members flat in mid summers heat. This was my first encounter with P76 people, and I must admit there was some trepidation at the time. We had convened because of the sudden demise of a person to assemble the club newsletter, and something had to be done. I responded to a plea of help offering what I could - mainly interest and enthusiasm. I knew no P76 members personally, little except what I'd read about the P76, and even less about the production of a newsletter.

The only other person still in the club that was at that crisis meeting is Alan Baker, who, as it happens, was Vice-President last year - strange that. Well, Alan has nearly always loomed large in committee circles, and I wish to thank all who have served on the various committee line-ups over the years who have invariably given their support, assistance and loyalty. Thanks also to Jilden, an 'early-days' assistant in the newsletter production; Steve, ever-present, word-flowing writer of articles, assistant in ways too numerous to mention, and idea bouncing board; Richard, always there with a helping hand, supporter and confidant; and of course my family, who know who they are, for uncountable copies copied, pages paged, staples stapled, folds folded, stamps stamped, etc etc...

Also thanks to everyone who has ever contributed to, commented on, or thought about the Club News during my time as Ed.

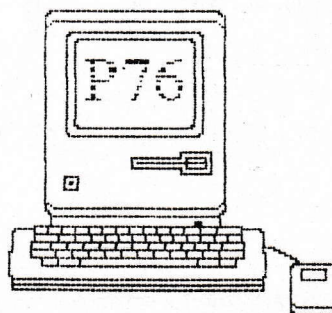
I knew I shouldn't have started naming names as one is always faced by the dilemma of making sure everyone is accounted for. So, I will take the same route as others and conclude by thanking all those I may have accidentally omitted.

Now, while the above may sound as though I'm leaving the planet, I can assure you that is not my intention - I'm only leaving the orbit of Editor, not the realm of the P76. I will still be around, only my name will be in a different place.

Till next time,

Take it away Geoff...

**David.**  
**(Ex-Ed.)**



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**"The value of knowledge lies not in  
its accumulation, but in its utilization."**



# MINUTES

ANNUAL GENERAL MEETING - Sat. 18th August, 1990.

Held Goodwood Scout Hall.

MEETING OPENED 7.50p.m.

PRESENT: - 20 (as per Attendance Book)

APOLOGIES: - 7 (as per Attendance Book)

MINUTES of previous meeting were read and accepted.

BUSINESS ARISING: - Dashmats - Kym has received the cheque from Qld. so will go ahead with them and hopes to have them ready by the next meeting.

Oil filters - Richard has two left @ \$8.00 ea.

Slot Car night - Nigel is still looking into it.

TREASURER'S REPORT:- As at the end of June, 1990 - \$669.88.

As at 12th August, 1990 - \$1244.23.

CORRESPONDENCE:- IN - Newsletters 1/NSW Jul/Aug 2/Westwords Jun/JUL 3/Qld Jun/Jul 4/NZ Jul.

OTHER - 1/Glen Lemcke re Dashmats, 2/Val Baker re death of her father, 3/Edward Houghton & Assoc. re fibreglass corners, 4/Car for sale \$2,000 plus parts \$400, Mt. Gambier.

COMING EVENTS:- as per Magazine.

Aug 26th - Nat. Meet Meeting 1.30p.m. at Alan Baker's.

Sep 9th - Springtime Cruise.

NATIONAL MEETING:- We have firm deposits from more than 90 people, so it looks like we will be booked out. Most things are in hand and running smoothly. Meeting next Sunday to finalize details.

Concours' sub-committee is progressing and will have more info in Sept.

NATIONAL MAG:- There will be vacancies for drivers in the road test in the Mag. Will discuss further on the 26th.

GENERAL BUSINESS:- Observation Run - 1st Nigel & Geoff, 2nd Richard, Bruce and David, 3rd (tied) between Steve & Christopher and Jilden & friend, next tie between Shane & Greg, Bert & Heather and Lloyd & Audrey.

All committee positions were declared vacant and elections held with the following results:-

President - Nigel Bray.

Vice-President - David Wallace.

Secretary - Gerry Stewart.

Treasurer - Chris Cutting.

Editor - Geoff Cutting.

Publicity - Kym Lindner.

Non-Office Bearers - Steve Westmacott - SMASA Delegate

Alan Baker - Nat. Meet. Co-ordinator.

Richard Schlabowsky.

John Armstrong.

MEETING CLOSED 8.59p.m.



Leyland P 76 Owners Club S A

Financial Statement July 89 - June 90

Opening Balance

214.01

Income

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Subs Joining Fee

1116.00

T/Shirts Memorabilia

63.50

Spare Parts Inc Extractors

2779.30

Other EH Raffle Easter Dep

886.07

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4844.87

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5058.88

Expenses

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Committee Exps in Hall Hire

1143.61

Trophies

94.25

Spare Parts Inc Extractors

2227.00

Other Inc Easter dep

924.14

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4389.00

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Balance as at 30/6/90

669.88

Balance as at 12/8/90 \$ 1244.23



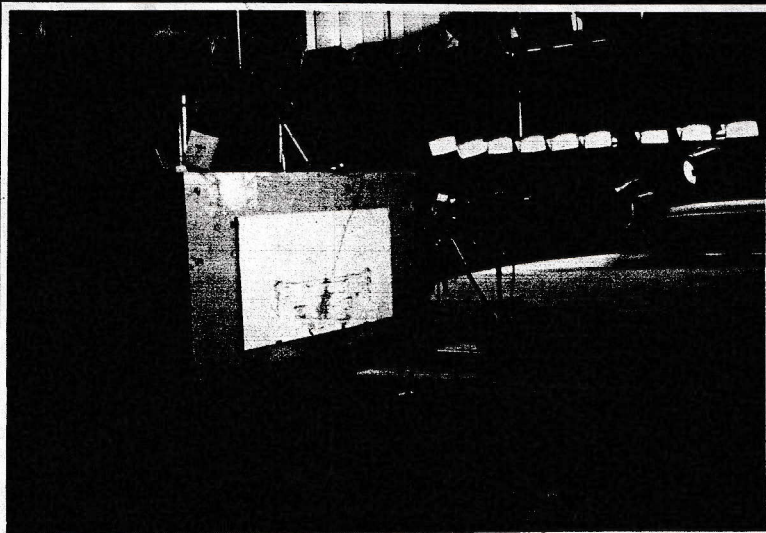
**This month~**

# **P76 AND THE ADRs**





# P26 AND THE ADR'S



10



"THE concept of both the Australian Design Rules for motor vehicle safety (ADRs) and Leyland's P76 is that both place people before sheet metal."

The speaker is Mr Steve Mutch, who is the Leyland man charged with the responsibility of liaison with the Federal government on ADRs, and the man responsible for the new car's ultimate compliance with these rules.

According to Mutch, the introduction of the ADRs has added new dimensions to the task of designing an automobile — including the establishment of his own position, and the creation of an entire new department whose task it is to produce interpretive engineering plans for presentation to government.

This, coupled with the fact that Leyland chose to subject the car to crash tests at the Motor Industry Research Authority's establishment in England added considerably to the cost of the P76. By how much, Leyland is not saying.

Leyland's Managing Director (Peter North) says the P76, conceived in 1968, is the first locally produced car in which the parameters and design execution have been carried out totally by an Australian company.

On that basis the P76 should set high standards as far as compliance with ADRs is concerned.

Steve Mutch, justifiably proud of his company's new car, claims that the P76 would have achieved the same standards of primary and secondary safety without the compulsion of government regulations.

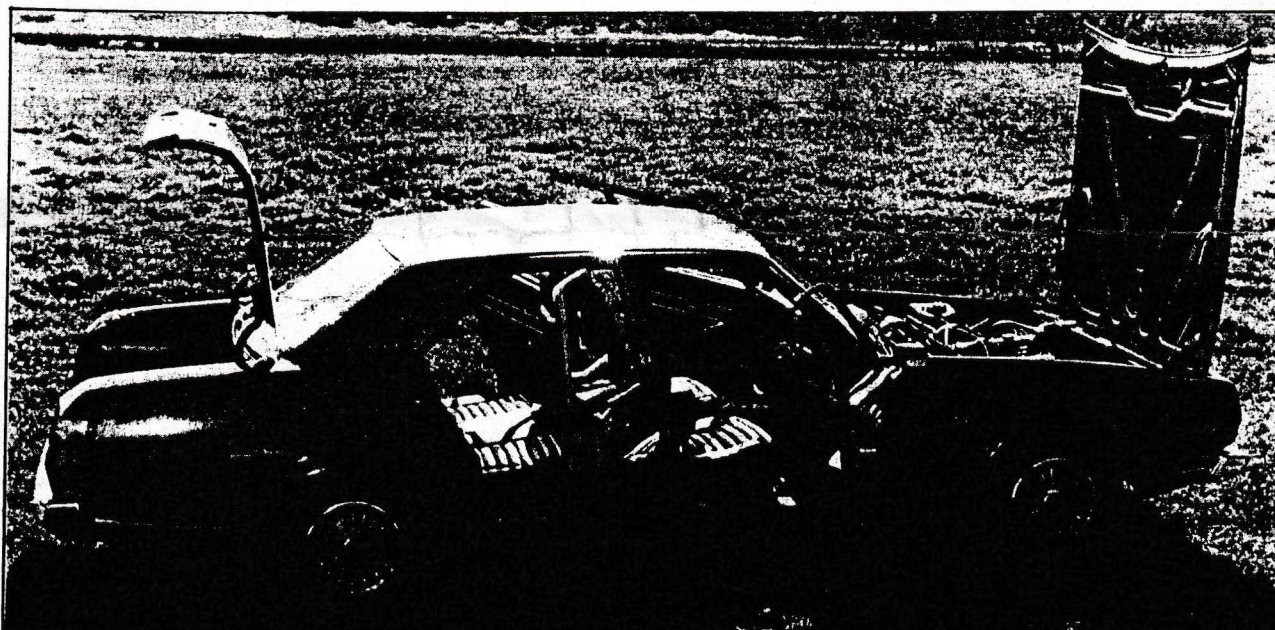
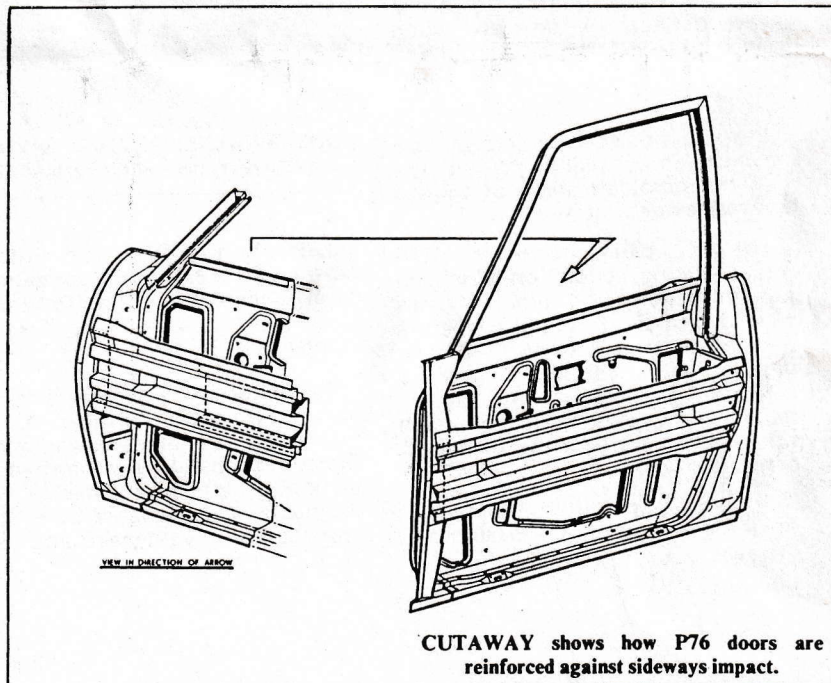
However, he concedes that the cost penalty of ADR compliance now applies to all manufacturers; no one car maker is at an advantage. The risk of one factory cheeseparing to lower unit-cost

has been eliminated, he says.

Mutch points out that the advent of the Design Rules has caused engineers to revise their methods of design. He says that the rear vision mirror in the P76 was placed in a position predetermined by the need to comply with the letter of the law.

"Prior to the ADRs, the mirror would have been arbitrarily positioned and proved later in practice.

"If at that stage a completely



COLOUR PAGE: P76 during testing at MIRA proving ground in UK. ABOVE: "Everything that opens and shuts". Big boot, long bonnet provides good crash protection.



satisfactory position was not available without costly redesign work, a compromise may have been reached in which only minimum rear vision was available to the driver."

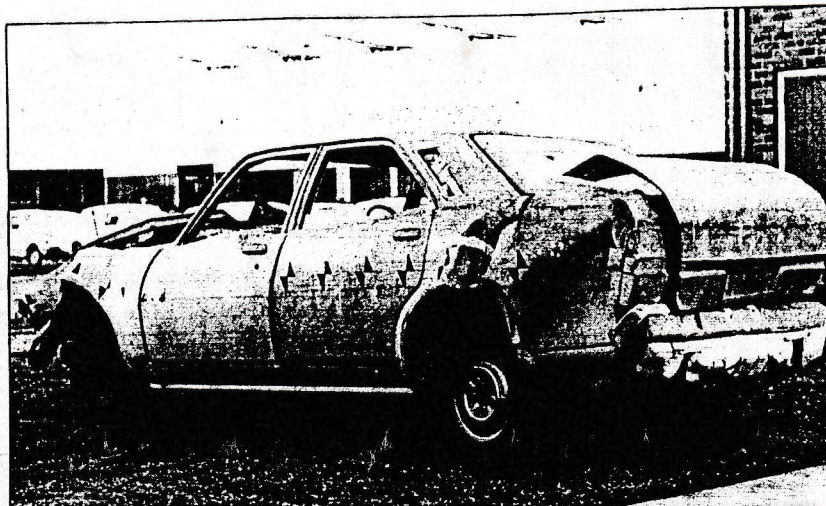
Mutch points out that his brief of "liaison and negotiation with the Commonwealth Department of Transport" over the ADRs resulted in what he calls "several small considerations because of the vehicle's unique design".

For example ADR 14.2 calls for the rear vision mirror to break away, deflect, or collapse when subjected to a force of 90lb in any plane 45 degrees below or above the horizontal.

Leyland made the point that it is a physical impossibility to hit the P76 mirror at an angle of 45 deg above the horizontal.

The first blueprint for the P76 was a seating "buck" on which 95 percentile male and female figures were drawn. Seating and eye-levels were determined from SAE test procedures. A test sampling of 50 Leyland employees of varying height, arm, leg-length and girth was used to confirm the American computations.

According to Mutch, safety was an integral part of the design and



COMPREHENSIVELY stacked P76 shows effectiveness of controlled crumple rates, although doors look a little "saggy". This car was crashed under controlled conditions.

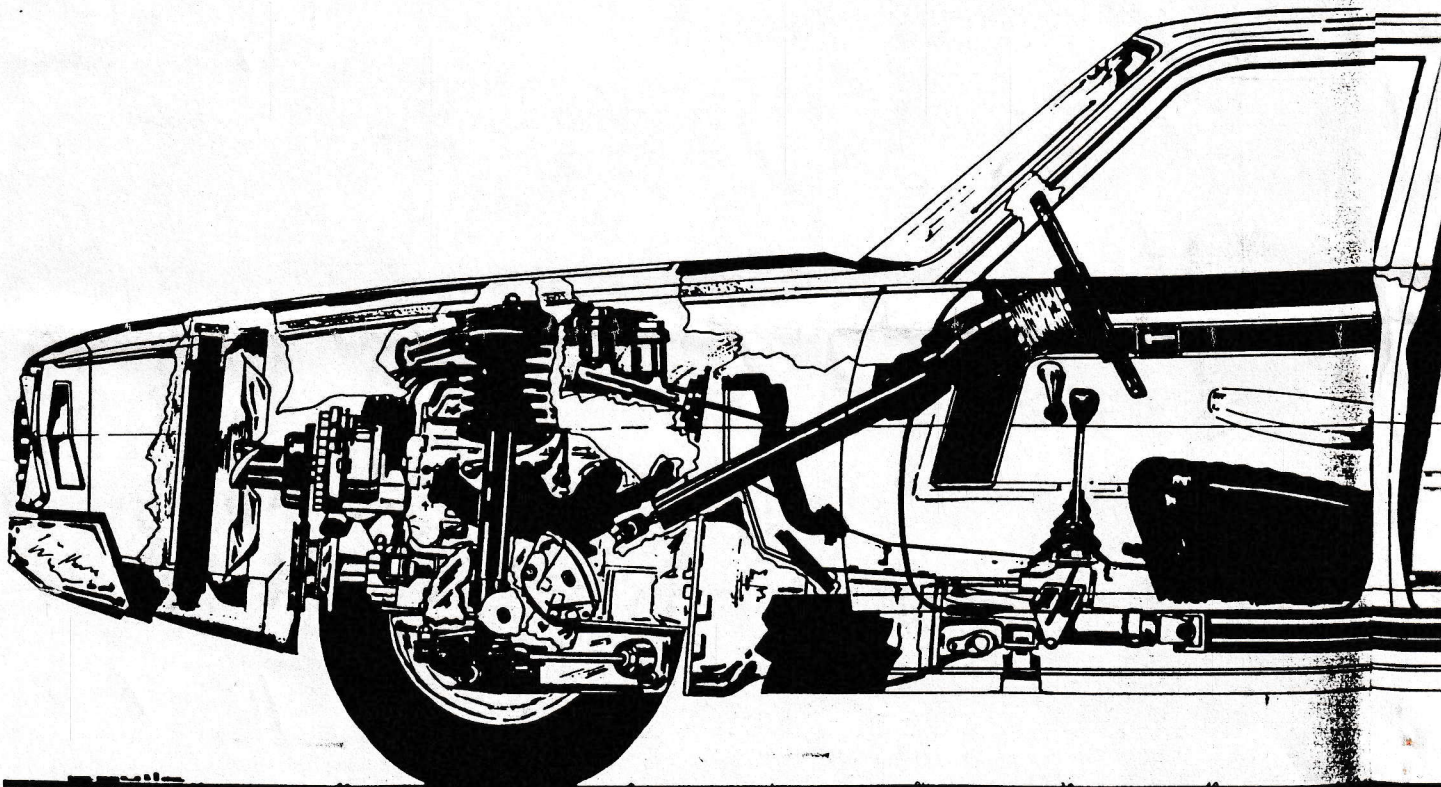
construction of P76. It is difficult, he says, to break down budgets for safety design, but "primary" safety is a major concern of Leyland engineers.

Twenty seven year-old Dick Hill, also a graduate member of the Institution of Engineers, was one of those responsible for on-the-road testing of the new vehicles. The drogue cars, designated SEP (Semi engineering prototypes) and MEP

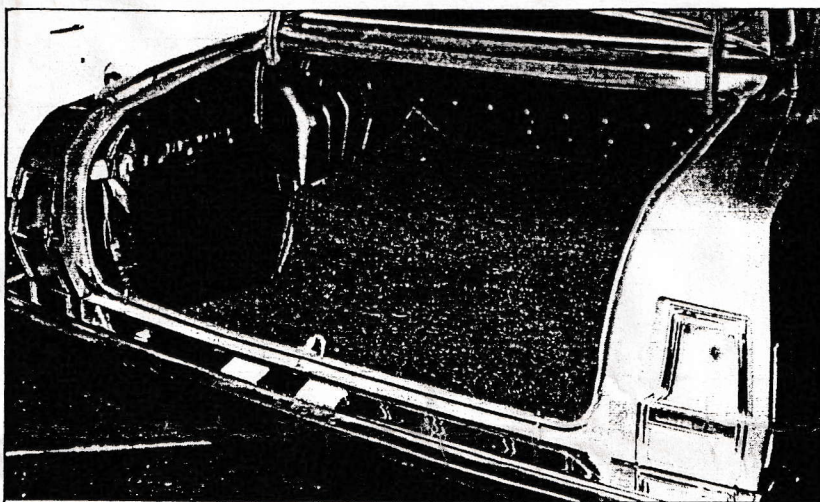
(Mechanical engineering prototypes) were hidden in HK, HT, and HG Holden bodies.

According to Hill, choice of the component parts for P76 was determined as much by cost and availability as by suitability. The job of the test driving team was to integrate the components into a smooth handling package.

The task was not without its difficulties.







**BIG** air space of boot is seen by P76 designers as great cushion in case of rear-end collision. Bulkhead between boot and passenger compartment is very stout.

Anti-dive handling properties, a prime requisite of the design parameters, was achieved, but at the cost of handling and manoeuvrability in reverse gear. At worst, Hill says, the car would jack its rear end in the air to the stage where the drive shaft became inoperable. The compromise finally achieved is he believes, a satisfactory one.

Hill and Mutch agreed that four-

wheel disc brakes were unnecessary on a car of the weight of P76. "The difference between four-wheel-discs and disc-drums is almost imperceptible," Mutch said.

"We aimed at producing a situation where the rear wheels would not lock and where the coefficient of retardation to input effort at the pedal was equal. Double the effort on the pedal will give double the braking effect."

A major factor in the decision against rear disc brakes was cost. Rear drums are about two-thirds as expensive, and since their performance in that context is not greatly inferior, they were chosen.

Handling engineers have built moderate understeer characteristics into the car.

Secondary safety in the P76 complies with the ADRs except, as Mutch puts it, "in cases where it costs no more to exceed the design rules."

The P76 is the first local car to incorporate protective barriers in the doors. These are not called for by ADR — nor are they mooted before 1976.

Leyland engineers say they are incorporated to assist the planned crushability rate of the front and rear ends.

The door barriers have been subjected to US standards test 214, in which a plunger is rammed into the side of the door.

But at penetration distances of 6in and 12in, the doors failed the test by five percent. At 18in they exceeded the US standard of resistance to 6000lb thrust by 900lb.

— John Smailes

