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Report No. 1, 1972

LEGISLATIVE REFERENCE BUREAU

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FOREWORD

This study of new car warranties has been made in response to House Resolution 20, which was adopted during the Regular Session of 1970.

The Resolution expressed concern with the warranty servicing that consumers were receiving on their cars and the condition of the cars delivered. The report attempts to pinpoint the reasons for poorly conditioned cars and inadequate service and suggests possible solutions to the problem.

To a great extent, this report could not have been completed without the cooperation and assistance of the new car dealers; Mr. James Remedios, Informations Systems, City and County of Honolulu; and Miss Janice LeDoux, Survey Research, University of Hawaii. It is hoped that this report will aid the legislature in solving some of the problems of new car warranties.

Henry N. Kitamura Direc'tor

SUMMARY

This study of new car warranties shows that throughout the nation, over a seven year period, 34.4 per cent of domestic car buyers were dissatisfied with their cars upon delivery. For 1969 cars in Hawaii, that figure was higher at 45.5 per cent. A smaller percentage of foreign car buyers are dissatisfied with their cars with the national figure for 1970 being 20 per cent. (No comparable figures are available for 1969.) The Hawaii rate for 1969 cars is 23.3 per cent. Although there are no national figures for dissatisfaction with the car as finally received after the correction of predelivery defects, in Hawaii such dissatisfaction averaged 24.9 per cent for the domestic car buyers and 10 per cent for the foreign car buyers.

In the area of warranty servicing, throughout the nation during the period 1963 to 1970, 25 per cent of those persons asking for warranty repairs were dissatisfied with such repairs. Nationally, there are no separate figures for domestic and foreign cars. In Hawaii, 23.8 per cent of domestic car owners and 17.5 per cent of foreign car owners, or an average of 20.7 per cent, were dissatisfied with the warranty repairs made on their 1969 cars.

The apparent reasons for such consumer dissatisfaction are set forth in the report and possible solutions for relief of the consumer are suggested.

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CHAPTER I

INTRODUCTION

The following report on new car warranties is submitted in response to House Resolution 20, passed during the 1970 legislative session. House Resolution 20 requested the Legislative Reference Bureau to conduct a comprehensive study on new car warranties that are available to the residents of Hawaii. The study includes an analysis of the issues involved and recommendations for legislation that will enable automobile owners in Hawaii to avail themselves of meaningful protection under their warranties.

During the Regular Session of 1971, the Bureau submitted a progress report on the study to the legislature. This report concludes our study of new car warranties.

Part I. History of Warranties

Domestic Manufacturers

For thirty years prior to the 1961 model car year domestic manufacturers (Ford, General Motors, Chrysler, and American Motors) offered a simple, short-term warranty on all new cars. The warranty on new cars included guarantees against defects in material and workmanship for 90 days or 4,000 miles, whichever occurred first. The warranty covered all items in the car, except tires which were guaranteed by the tire manufacturer. During the past ten years, warranty terms and coverage have been subject to numerous changes.

In 1960, the four domestic manufacturers announced that the warranty on 1961 cars would be extended to 12 months or 12,000 miles, whichever came first. The terms, coverage, and exclusions of the four manufacturers' warranties were identical as applied to most cars³ and became known as the "basic warranty". The basic warranty remained unchanged for the 1961 and 1962 cars and is still in use today. This basic warranty covers all items in the car, subject to the following exclusions: parts and labor considered to be part of normal maintenance or parts which need replacing only because of wear. 4

The basic warranty does not apply to vehicles subject to misuse, negligence, alteration, accident, or alteration of the odometer. 5

Tires are not covered by the basic warranty, but by a separate tire manufacturer's warranty. 6

In 1962 Chrysler proclaimed the "power train" warranty which was offered in addition to the basic warranty. The power train of all 1963 Chrysler cars and trucks was guaranteed for 5 years or 50,000 miles, whichever came first. The power train warranty covered items such as the engine block, head and internal engine parts, water pump, transmission, drive shaft, universal joints, rear axle, differential, and rear wheel bearings. The power train warranty was not offered on 1963 cars by Ford, General Motors, and American Motors. These companies, instead, extended their basic warranty to 24 months or 24,000 miles, whichever came first. Between 1963 and 1966, warranties remained essentially the same for all domestic manufacturers. 8

In 1966 Ford, General Motors, and American Motors all followed Chrysler's example and offered a 5 years or 50,000 miles warranty on the power train of 1967 cars. Ford and General Motors went even further than the 1963 Chrysler power train warranty and extended their power train warranty to steering and suspension components. Chrysler, in 1966, followed Ford and General Motors by expanding its power train warranty to steering and suspension components and also extended its basic warranty to 24 months or 24,000 miles, whichever came first.9

Until 1968, both the basic warranty and the power train warranty offered by domestic manufacturers were available to the original owner of the car. In addition subsequent owners of the car received the benefits of both warranties, so long as the warranty had not expired due to lapse of time or mileage. Notification of change in ownership was not required, nor was any fee charged for transfer of the warranty to the subsequent owner.

In 1967, domestic manufacturers began to reduce the warranty protection to other than the original owner. While retaining the same terms and coverage, Chrysler allowed its basic warranty to be transferred to second owners only and announced that the power train warranty on the 1968 cars would not be transferable. Subsequently, this announcement was changed to allow the purchase of the unexpired portion of the power train warranty for \$25 by the second owner. Ford allowed all subsequent owners to purchase the unused portion of the basic warranty for \$15, but restricted purchase of the power train warranty to second owners for a fee of \$25. General Motors allowed a full transfer of both the basic and power train warranty during the period of the basic warranty with fees of \$2 and \$25 respectively. After the basic warranty had expired, General Motors restricted the purchase of the unexpired power train warranty to the second owner for a fee of \$25. American Motors allowed an



From 1961 to 1968, all four domestic manufacturers, in varying terms, guaranteed that their cars were free from defects. For example, in 1966, all manufacturers used language to the effect that each new vehicle or part thereof was guaranteed to be free from defects in material or workmanship. 17 References to the car or its parts were dropped by Ford in 1969 and the warranty was changed to read that defects would be repaired or replaced. 18 In the 1970 warranties, General Motors, Chrysler, and American Motors adopted language similar to Ford. Presently all domestic manufacturers, except Ford, state that defects will be repaired or replaced at any authorized dealer. 19 "Any authorized dealer" is not used by Ford; instead, Ford restricts repairs, with exceptions, to the selling dealer. Additionally, in 1970, Ford made its warranty a joint offering from Ford and the selling dealer. 20

Foreign Manufacturers

Due to the variety of foreign cars being sold in the State of Hawaii, only the three best selling cars were covered in this study - Datsun, Toyota, and Volkswagen. While there have been several national studies on warranties, none have covered the foreign car manufacturers. As there is no easily available data, the new car warranties offered by foreign manufacturers were only traced back to 1969.

Since 1969, both Datsun (manufactured by Nissan Motor Company) and Toyota have offered a basic warranty of 12 months or 12,000 miles, whichever comes first. Volkswagen, on the other hand, has offered a warranty of 24 months or 24,000 miles, whichever comes first. None of the foreign manufacturers have offered a special power train warranty such as that of the domestic manufacturers. In addition to the manufacturer's warranty, in 1971, Datsun of Hawaii offered an additional warranty of 12 months or 12,000 miles, whichever came first - thus warranting the car for 24 months or 24,000 miles. This additional warranty is a dealer warranty and is presently being offered only to purchasers on the island of Oahu.

The basic warranty offered by foreign manufacturers is similar to that offered by the domestic manufacturers in that it covers the entire car, subject to listed exclusions. The exclusions, while varying between the manufacturers, are similar to those set forth for domestic manufacturers. The warranties for Toyota and Volkswagen include both tires and battery, while that of Datsun excludes tires and battery but the manufacturer's warranty on the tires and battery is passed on to the consumer.

The warranties of the foreign manufacturers use language similar to that used by domestic manufacturers. That is, all three foreign manufacturers state that the vehicle is free from

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defects in material and workmanship and that the manufacturer's obligation is limited to repairing or replacing parts at an authorized dealer without charge. 21

Foreign manufacturers also require maintenance of the vehicle at regular intervals and proof thereof in case of a warranty claim. In addition to requiring proof of maintenance, in 1969, Volkswagen also required a yearly validation by the dealer that such maintenance was performed. This validation requirement was discontinued after 1969.

Part II. Warranties as a Selling Point

The reason for the extension of the basic warranty and the addition of the power train warranty in 1962 is the competitive aspects of new car selling. In 1960, the nation was in a recession and new car sales had started to slip. This led to the announcement of the extended basic warranty by all major domestic new car manufacturers.²³ Sales continued to drop in 1961, but in 1962 both General Motors and Ford began selling more new cars than in any period other than 1955, the boom year for new car sales. Chrysler's sales, had not substantially increased in 1961 and 1962 and its share of the market had decreased by almost 5 per cent. This led to the introduction by Chrysler of the 5 years or 50,000 miles power train warranty on its 1963 cars. Chrysler changed its advertising campaign to center on its new warranty and in 1963 Chrysler's new car sales increased by 40 per cent. 24 By 1966, Chrysler's share of the new car market had increased from 9.6 per cent in 1962 to 15.4 per cent with production of twice as many cars than in 1963.25

The reason for Chrysler's introduction of the power train warranty can be gathered from the following excerpt from the Chrysler-Plymouth Service Manager's Society Meeting Guide of December, 1964:

I'm sure you've wondered from time to time just why Chrysler Corporation came out with the 5/50 Warranty and Certified Car Care...and you've probably come up with some pretty interesting answers, too! We all know that the Corporation had confidence in the engineering and production quality they put in every car...or they couldn't afford to give this outstanding Warranty!

But when you boil it all down, there's only one reason for 5/50 and Certified Car Care - and that reason is simple...to SELL CARS!26

In 1966, the other three domestic manufacturers adopted the power train warranty and they in turn advertised this fact, although not as extensively as did Chrysler.

A similar warranty offering may be found in an advertisement by Datsun of Hawaii. Datsun has extended the manufacturer's 12 months or 12,000 miles warranty by another 12 months and 12,000 miles in order to give a 24 months or 24,000 miles warranty. The addition is being paid for by Datsun of Hawaii and not the manufacturer. 27

The latest attempt to sell cars through the use of warranties may be seen in American Motor's advertisement introducing the "Guaranteed Car". The advertisement closes with the statement, "Since we're giving American car-buyers exactly what they say they want, we should sell more cars than we've ever sold before."28

The warranty sales race between the manufacturers has been very costly to the manufacturers. This high cost, in turn, has led to the reduction in warranty terms as evidenced by the 1969, 1970, and 1971 warranty offerings. Except for Chrysler, the industry had a warranty cost of between \$50 and \$60 per 1966 model car. In 1967, the first year Ford issued the power train warranty, Ford's estimated warranty cost for 1967 models was between \$110 and \$120 per car. To some extent the increased cost was due to consumer awareness of the warranties, inflation, changes in mechanics' compensation and flat rates, and increased complexity of the cars involved. But a substantial portion of the increase was due to the paper work required for processing warranty claims and the number of additional years that a manufacturer and dealer is responsible for a car. ²⁹ For instance, those cars sold in 1967 have a valid power train warranty until 1972.

The increased length of the warranties has created a heavy burden on the dealer who must service the cars. In some cases, this has caused much dealer and consumer dissatisfaction which will be discussed in Chapters III and IV.

CHAPTER II

THE WARRANTY

Part I. Manufacturer and Consumer

Automobile warranties are express warranties offered directly by the manufacturer to the consumer. The warranty is limited in its terms and disclaims both the express and implied warranties of the Uniform Commercial Code and any other implied warranties that might arise during the course of dealing. 1 The new car warranty makes certain promises to the consumer and creates certain duties and responsibilities for the dealer. The warranty makes the express promise of repair or replacement of defective parts or workmanship. The remainder of the new car warranty is devoted to limiting the manufacturer's and dealer's exposure to liability. Limits are placed on the time and mileage of a vehicle during which the warranty is extended. The manufacturer's liability for repair of the vehicle and the owner's remedies for such repair are limited to an authorized dealer, or in the case of Ford to the selling dealer. If the Ford owner, however, has moved out of the vicinity of the selling dealer he may go to the dealer nearest him. 2 As posited in Chapter I the warranties exclude certain parts, components, or maintenance from coverage.

Although the manufacturer's express warranty covers the repair or replacement of defective parts or workmanship, the warranty document given to the consumer does not mention how the warranty will be applied to a particular item with a defect. All manufacturers have extensive procedures that must be followed in processing a claim under a warranty. Basically, the procedures established by the manufacturer are in much more detail than a consumer sees in his one page warranty. Some examples of such procedures and services are:

(1) Defects in a car's paint, glass, carburetor, or engine valves, might appear to be covered by the warranty and subject to immediate repair or replacement by any authorized dealer. But warranty claims for these items may not be acted upon by the dealer without the approval of the dealer's zone manager. The zone manager is an overseer for the manufacturer to whom the dealer may go for help or authorizations. No paint repair may be made 60 days after sale of the car without prior zone approval. Further, all glass replacement requires prior authorization no matter when it occurs, and the replacement of carburetor needles and seats also requires prior zone authorization. Such authorization may be in

writing, or by telephone, or in the case of one local General Motors dealer, by a zone inspector who is available once a week.

- (2) A service provided but not mentioned in the warranty is towing charges. General Motors will pay towing charges if (1) the vehicle cannot be driven, (2) the necessity for towing results from the vehicle being inoperable due to a defect that is covered by the warranty, (3) the towing charges are reasonable, and (4) zone approval has been obtained.⁵
- (3) Other services may even be provided which appear to be subject to the exclusions listed in the warranty. Decorative bright metal trim is excluded from the warranty if the replacement or repair is necessitated because of normal wear or exposure. The determination of such wear or exposure is made by the dealer and if he determines that replacement is not due to wear or exposure, then the dealer may replace such part under the warranty with prior zone approval.

The above examples illustrate that although warranties are supposed to provide some protection to the consumer, they, in fact, may be rendered ineffectual through detailed policy and procedural manuals which are not freely available to the consumer. Furthermore, these manuals appear to be written by the manufacturers more for their own self-protection than for assistance to the consumer in providing warranty services.

Part II. Manufacturer and Dealer Relationships

While the manufacturer offers the warranty to the consumer, it is the dealer who must service the consumer and perform under the warranty. Dealers are given extensive instructions by the manufacturers in the policies and procedures that must be followed in (1) inspecting and preparing new cars for delivery to the purchaser, (2) honoring warranties, and (3) processing claims for reimbursement from the manufacturers for work performed under the warranty. 7

The importance of good service and customer satisfaction to the reputation of the manufacturer and to the business of the dealer is stressed in manufacturers' manuals. Dealers are informed that they are to perform conscientiously and fairly under the warranty.

THE WARRANTY

Predelivery Servicing

All cars must be placed in condition for delivery to the consumer. Thus, prior to the sale of a car, the dealer is required to perform extensive predelivery servicing and inspection. For example, Pontiac dealers must perform sixty-one separate service and inspection functions. These requirements may be found in the 1970 Pontiac predelivery service and adjustment check sheet in Appendix A.

In making the predelivery services and adjustments, the dealer may be reimbursed by the manufacturer for parts and labor involved in replacing defective parts during predelivery servicing. The general practice, however, is to pass on to the consumer in the suggested retail price all predelivery servicing made at the dealer's expense. The suggested retail price may include costs varying between \$50 to \$150 for predelivery servicing, depending on the model and type of car. In 1971, General Motors instituted a reimbursement program for its dealers on a sliding scale based on the type and model of the car serviced. Thus, in addition to obtaining some return for predelivery servicing from the consumer, the General Motors dealer also received reimbursement from the manufacturer. 9

Warranty Reimbursement

Since the warranty offered by the manufacturer places the burden of service upon the dealer, the dealers are reimbursed for work done under the warranty. Dealers are reimbursed for parts replaced under the warranty at the net cost of parts to the dealer, plus 25 per cent. This reimbursement rate is generally true for both domestic and foreign manufacturers. 10

The dealer is reimbursed for the labor involved in making a warranty correction at the dealer's warranty labor rate by both foreign and domestic manufacturers. Chrysler, for example, determines the dealer's warranty labor rate which is 220 per cent of the mechanics' average hourly wage plus 150 per cent of the dealer's portion of the cost for the following allowable fringe benefits for the mechanics: paid vacation; pay in lieu of vacation; holiday pay; sick pay; separation allowance; hospital insurance; retirement or pension plan; uniforms and laundry; and group life insurance. This formula determines the warranty labor rate whenever the warranty labor rate does not exceed the dealer's stated customer retail labor charge. The rate of dealer reimbursement is subject to change as the dealer's expenses change and as such changes are accepted by the manufacturer.

The dealer's reimbursement is sometimes limited by the use of a "flat rate time". Flat rate time is based on the manufacturer's study which determines the time within which a mechanic, with an

average mechanical aptitude working at a normal rate of speed, takes to perform a repair operation. The time taken to perform the repair also includes the manufacturer's determination of a reasonable time allowance for diagnosis of the repair problem. Thus, a mechanic may take fifteen or forty-five minutes on a repair job which, under the flat rate time, is determined to require one-half hour. Whether the mechanic requires fifteen or forty-five minutes, the dealer is reimbursed for only the flat rate time of one-half hour. 12

Manufacturer's Requirements Concerning Service Space

As part of their franchise with manufacturers, dealers are required to have sufficient servicing space and mechanics to perform predelivery and warranty service, in addition to regular maintenance service. Both American Motors and Chrysler provide specific standards for physical facilities used for servicing, relating space required for service and parts to new car sales. 13 Neither Ford nor General Motors has established specific standards for service area, parts, inventory, or personnel for their dealers, but dealers are assisted in determining the facilities, manpower, and other necessities needed for a service operation. 14

When the Federal Trade Commission asked domestic manufacturers how many of their dealers did not meet the manufacturer's standards concerning space and equipment in their service areas, American Motors and Chrysler answered that most of their dealers met the requirements. Ford disclosed it knew of no dealer which did not have the stalls and mechanics needed to handle warranty work, while General Motors stated that it did not maintain records of dealers who do not meet the corporation's standards. None of the manufacturers indicated that they strictly enforced servicing standards. 15

Manufacturer's Aid to Dealers

In return for meeting the demands of the manufacturers, dealers are provided with considerable assistance by the manufacturers. All manufacturers maintain an elaborate nationwide organization to assist dealers in processing warranty claims and in making determinations on whether a particular claim is a warranty claim. Manufacturers review recurring maintenance problems in particular car models and these problems are explained to all dealers. Non-recurring maintenance problems which a dealer is unable to diagnose may be solved by calling on his manufacturer for help. All but two of the thirty-four new car dealers interviewed throughout the State of Hawaii indicated that they could count on their manufacturer for diagnostic assistance. 16

In addition to help in maintenance, diagnosis, and clerical work, manufacturers make extensive efforts to assist the dealers

THE WARRANTY

in meeting their needs for trained mechanics and specialized equipment. American Motors has a traveling training program to train mechanics and other service personnel throughout the country. Chrysler has many programs and films it distributes to its dealers. In addition, Chrysler maintains twenty-two parts depots and plants in key locations to supply dealers. Ford also has many special programs for its dealers. General Motors maintains a network of thirty training centers around the nation and in 1967 these centers trained 514,000 persons. Of this amount, 120,000 took courses designed to improve mechanical skills.17

CHAPTER III

WARRANTY EXPERIENCE—NATIONWIDE

Part I. Consumer Experience

The consumer who makes extensive outlays to purchase a new car should be able to expect a vehicle substantially free from defects. Until 1969, domestic manufacturers promised the consumer a vehicle free from defects in material and workmanship. Now domestic manufacturers no longer promise a defect-free vehicle, although a defect-free vehicle is still being offered by foreign manufacturers in their warranties. The domestic manufacturers' warranties presently promise to repair or replace any part that is defective in material or workmanship.

Many consumers have become disenchanted with manufacturers' warranty promises. The reason for this dissatisfaction becomes apparent when the results of nationwide consumer surveys and other indices are studied. 1

A summary report of the surveys conducted yearly by Consumers Union is presented below. These annual surveys are of major magnitude since they cover between 40,000 and 50,000 car owners. The car owners responding to the survey were subscribers to the Consumers Union publication, Consumer Reports. Consumers Union asked three questions in order to determine the extent of warranty and warranty related problems. The first question asked whether the new car the consumer received was in a satisfactory condition when delivered. This question was used to determine the lack of quality control by manufacturers and if poor dealer predelivery servicing existed.

Consumers Union found that during the period 1963 through 1970 an average of 34.3 per cent of the new car purchasers were dissatisfied with the condition of their new car upon delivery. If the average is applied to 8,223,392, the total number of new cars produced by domestic manufacturers in 1969, a total of 2.8 million car owners received their cars in what the owner felt to be an unsatisfactory condition.

Consumers Union first reported on foreign manufacturers in 1969. Fourteen per cent of those persons replying to the 1969 survey on Volkswagen felt their Volkswagen was delivered in an unsatisfactory condition. In 1970 Consumers Union did not have a breakdown of foreign manufacturers, but stated that 20 per cent of the buyers of imported cars were dissatisfied with the condition of the car when received. 5

WARRANTY EXPERIENCE - NATIONWIDE

The second question asked by the Consumers Union survey was directed at those persons having had warranty work done on their car. The question asked if the warranty work performed was satisfactory. Twenty-five per cent of the persons having warranty work performed on their cars were dissatisfied with the work when completed. Those persons dissatisfied with the work were further asked: "If the warranty work was not performed satisfactorily, what was the trouble?"

Seventy per cent of the owners of 1966 cars reported that the dealer could not fix the car; ll per cent said the dealer did not cooperate; 7 per cent stated that the item to be repaired was not covered by the warranty; and 10 per cent of the owners gave other reasons for their dissatisfaction. The problem of warranty work then, from the consumer's point of view appears to center increasingly on the inability - and perhaps unwillingness - of the dealer to perform repairs requested on the car.

A Newsweek magazine study of 1967 car owners, based on a scientific sampling of 371,014 registrations, indicated that while more than half of those responding found their cars extremely reliable, more than 9 per cent found them to be mechanically unreliable. When questioned on the services offered by the dealers, 86 per cent responded that the dealer services were satisfactory, while 14 per cent responded that the services received were unsatisfactory.

A third study on warranties was conducted between June, 1968, and September, 1969, by Operations Research, Incorporated, for the National Highways Safety Bureau. Operations Research found that in warranty repairs involving safety-critical subsystems, more than 22 per cent of the vehicles were returned by the consumer to the dealer because of inadequate repair.9

As a further indication of a consumer warranty problem on a nationwide scale, the Federal Trade Commission has received more than 3,000 complaints on warranties. This number is the largest volume of complaint letters received regarding a single topic since the Commission was established in 1914.10

A final indication of the quality of cars being released from both domestic and foreign manufacturers is the number of cars involved in safety recalls under the National Traffic and Motor Vehicle Safety Act of 1966.11 Between the time the Act took effect in 1966 through 1969, 14,124,108 vehicles (cars and trucks) have been recalled. During the year 1969 alone, 7.9 million vehicles, 7,502,440 domestic vehicles, and 405,744 foreign vehicles, were recalled. Since the total registration of passenger cars in 1969 in the United States was 87,153,381,12 a significant percentage of passenger cars were recalled.

While many of the defects involved in the recalls were caused by mistakes made on the assembly line, or by use of defective materials, a signficant portion were caused by faulty design or engineering. 13 It should be kept in mind that the great number of recalls do not necessarily mean that all cars recalled had safety defects, since more cars than necessary are usually recalled in order to discover all possible defective cars. Moreover, many of the cars subject to recall were still in the dealer's inventory and not yet in the hands of the consumer. 14 Even with the above caveats taken into consideration, the number of vehicles recalled indicate that cars are not leaving the factories free from defects. These defects may later turn into warranty problems.

Thus, the results of major consumer surveys and other indicies point toward a definite car quality and warranty problem for the new car owner throughout the nation.

Part II. Dealer Experience

Although manufacturers appear to make extensive efforts to help the dealer in the areas of maintenance, diagnosis of repair problems, clerical work, and quality control, 15 warranty performance in the final analysis is up to the dealer. The dealer's responsibility commences upon receipt of the car from the manufacturer and continues until the warranty expires.

Predelivery Servicing

The first step in the warranty process, once the car is received by the dealer, is predelivery servicing. In principle, a thorough predelivery servicing and inspection could reduce the number of warranty claims, since many warranty related defects could be corrected during such preservicing. In practice, however, this is not always the case. Some of the reasons why warranty claims are not substantially reduced by predelivery servicing will be explored below.

Predelivery servicing and inspection places a burden on the dealer if the cars he receives are not in excellent condition. According to the thirty-four local dealers interviewed, only nine rated the condition of cars received from their manufacturer as excellent. Many of the dealers stated that the cars they received were in good, fair, or poor condition. The poor condition of these cars is in some instances due to shipping, such as nicks in paint and dents, but the majority of the trouble is due to poor factory quality control, such as door alignment. 16 If the

WARRANTY EXPERIENCE - NATIONWIDE

cars are received by the dealers in less than an excellent condition, coupled with the large amount of new car sales made in Hawaii (the average dealer in Hawaii sells approximately 385 cars a year 17), the workload and time burden on mechanics doing predelivery service is greatly increased. As a result, the quality of predelivery service is affected and the time spent on such service is reduced.

The second problem concerning predelivery service is the dealer's compensation for such servicing. The suggested retail price of a new car may include servicing costs which varies from \$50 to \$150 per car, depending on the make and model. This suggested retail price is established by the manufacturer, but dealers claim that the servicing cost which is passed on in the suggested retail price, is inadequate for compensation purposes. Compensation is inadequate because it is included in the retail price, and the retail price is seldom the selling price. Is Instead, the retail price is the starting point for dealer-consumer bargaining. The better the bargaining of the consumer, the less the dealer will receive on the sale of the car. Since the reduced sales price has to cover the cost of predelivery service, which cost is already inadequate, predelivery servicing itself may not be performed adequately due to the dealer's need for profit. 19

Thus, in the first stage of the warranty process, the car received by the customer may have defects that should have been corrected during the predelivery servicing but were not corrected for the reasons stated.

Warranty Reimbursement

Although dealers are reimbursed for warranty labor and parts replacement, as previously stated, dealers feel that such reimbursement is very inadequate and does not cover the actual costs involved. Warranty reimbursement is based upon three separate elements: (1) payment for parts used in warranty repair; (2) the flat rate schedules of time allowed for repair operations; and (3) the hourly rate paid for warranty work.

As discussed in Chapter II, dealer reimbursement for parts replaced under the warranty is net cost of the part plus 25 per cent. The Federal Trade Commission found that dealers feel such reimbursement to be totally inadequate since the cost to the dealer for a part includes factors other than the initial cost of the part, and the 25 per cent increase in reimbursement by the manufacturer does not meet this cost. In some instances the cost of shipping parts to the dealer is paid by the dealer, which is an additional cost attributable to the part. Moreover, once received, the part must

be handled and stored. The National Automobile Dealers Association (NADA) estimates that handling and storage of parts is 23 to 25 per cent of the true cost of the part. Thus, the manufacturer's compensation allows the dealer little if any profit on parts used in warranty repair. 20 Of course, dealers should not make a profit under the manufacturer's warranty reimbursement program, but only obtain full cost recovery. Nevertheless, full cost recovery does not seem to be occurring in practice. 21

A manufacturer's "flat rate time" establishes the time allowance for the performance of warranty repairs and is based on actual time studies. (Flat rate time is the time it takes an average mechanic working at a normal rate of speed to complete a repair.) In addition, manufacturers maintain that the flat rate time includes reasonable time allowances for diagnosis and job preparation. Dealers claim that the flat rate time is much too short, primarily, due to inadequate time allowed for diagnosis. Dealers also state that the system does not provide for learning time allowances when new cars are introduced. Manufacturers, on the other hand, indicate that procedures for the adjustment of the flat rate time have been established and are often used. 22 A NADA survey revealed that in one-third of the repairs requiring one hour or less of labor time, the mechanic could not complete the job in the flat rate time. The reasons given were the time involved in moving the car to and from the work space and preparing the job report. This same study also showed that the average mechanic does 9.4 hours of work based on the flat rate time for each 8.0 hours he works. The study further indicated that in electrical and accessory repair jobs the mechanics could do 7.4 and 6.6 hours of work, respectively, based on flat rate time in an 8.0-hour day. The excess of 1.4 hours for nonelectrical and nonaccessory repair jobs would appear to offset the slower rate of work on electrical and accessory repairs. do not have, however, any percentages of work performed between the two categories of repair work nor how many jobs take less than one hour to conclusively say that dealers are as bad off concerning ilat rate time as they claim.

The third element in warranty reimbursement is the hourly rate paid for warranty work. This rate is based upon what the dealer pays his mechanics by the hour plus fringe benefits multiplied by a factor established by the manufacturer to obtain the dealer's hourly rate. The dealer's hourly rate is then multiplied by the flat rate time for the particular repair work being claimed as a warranty repair. For example, using the Chrysler reimbursement formula set forth in Chapter II, if the dealer pays his mechanics an average of \$3.65 per hour and has an additional 50 cents per hour in fringe benefits cost, the dealer's warranty rate would be \$9.13 per hour (\$4.15 x 220%). This \$9.13 rate is then applied to the repair work done by the mechanic by multiplying it with the flat time for the repair claimed.

WARRANTY EXPERIENCE - NATIONWIDE

The warranty rate is thus based upon the <u>average</u> hourly wage rate of the dealer's mechanics. The dealer's <u>mechanic</u> force, however, is not made up of mechanics who receive the <u>average</u> hourly wage rate. For example, a dealer may have journeyman, intermediate, and apprentice mechanics all of whom receive a different wage rate. ²⁴ If a journeyman mechanic's hourly wage rate is above the average of \$3.65 an hour the dealer may be disinclined to use his journeyman mechanics on warranty work. The net result may be inadequate warranty repair, thereby leading to customer dissatisfaction. ²⁵

In addition to the use of an average hourly wage rate for repairs, there is a time lag between approval by the dealer of a new labor contract providing for increased wages or fringe benefits and the time in which the manufacturer makes a reevaluation of the dealer's average hourly wage rate. ²⁶ Until an upward adjustment is made, the dealer would be receiving even less reimbursement and is thus more unlikely to view warranty work as something on which his best efforts should be made.

Labor performed on mechanical, electrical, and accessory repair is not the only cost to the dealer of doing warranty work. Warranty repairs require extensive paperwork and record keeping for which there is no reimbursement. Records must be preserved by the dealer and parts replaced under the warranty must be tagged and stored so that the manufacturer's representative may examine the parts. A study by the NADA in 1967 reported 18 clerical steps in preparing warranty claim forms as compared to 9 steps in regular service procedures, adding \$3.45 in extra cost for which there is no reimbursement. Similar dealer studies have produced the same results. 28

Finally, the dealers in many instances must wait 30 to 120 days for warranty reimbursement for labor, while the manufacturer expects to be paid by the dealer within 30 days after the cars are delivered. Several manufacturers, particularly Ford, now reimburse their dealers with a monthly credit advance based on a one month average claim experience. Those dealers not being reimbursed in advance have their money tied up until they are reimbursed.

From the foregoing discussion, it appears that the dealers are not being adequately reimbursed for consumer services placed upon them by the manufacturers. Without an adequate reimbursement, there is little incentive for the dealer to give the best service where predelivery and warranty servicing is involved.

CHAPTER IV

WARRANTY EXPERIENCE—STATE

Part I. Consumer Experience

In order to determine consumer experience with warranties on new cars, local consumer protection agencies were contacted. The State Consumer Protector, during the period from July, 1969, to July, 1971, received thirty-five complaints on motor vehicle warranties. The Hawaii Motor Vehicle Industry Licensing Board, from the date of its inception as a state board in November, 1969, to July, 1971, received thirty complaints. Some of the complaints received by the Consumer Protector were forwarded to the Motor Vehicle Industry Licensing Board as being more appropriately the business of the Board. Therefore, there is some duplication in the number of complaints received by the Board and the Consumer Protector.

The Better Business Bureau of Hawaii received no warranty complaints in 1970 and five complaints through September, 1971. Since the number of warranty complaints filed with consumer protection agencies in the State was low in comparison with the nationwide experience, the Legislative Reference Bureau conducted a study among 1969 car owners registered in the state. The year 1969 was chosen as the model year in order to obtain data which was relatively recent yet would be based on a period sufficient to afford car owners an opportunity to ascertain defects, if any, manifested in their automobile.

A questionnaire consisting of five pages and containing four major parts was used in the study (see Appendix C). Part one of the questionnaire dealt with general background information concerning the owner. Part two of the questionnaire queried the owner on the condition of the car when it was delivered to him in order to determine factory quality problems and the adequacy of predelivery servicing by the dealer. Part three measured the warranty servicing experience of the consumer. Both parts two and three asked questions to determine consumer satisfaction with the quality of the servicing in a manner similar to the Consumers Union survey set forth in Chapter III. Part four of the questionnaire attempted to detect consumer knowledge and understanding of the warranty.

The questionnaire was sent to a random sampling of 1969 registered private car owners. Fourteen hundred questionnaires were sent out with two hundred going to owners of each manufacturer - American Motors, Chrysler, Ford, General Motors, Datsun, Toyota, and Volkswagen. Table 1 gives the number of private car owners who

WARRANTY EXPERIENCE - STATE

were included in the random sample and the number of business-owned 1969 cars which were not included in the random sample:

Table 1
Number of 1969 Cars

	<u>Private</u>	Business	Total
American Motors Chrysler Ford General Motors Datsun Toyota Volkswagen	1,244 8,409 5,502 9,875 3,626 4,107 4,508	320 1,082 1,401 1,741 863 547 351	1,564 9,491 6,903 11,616 4,489 4,654 4,859
Total	37,271	6,305	43,576

The total number of 1969 cars of all manufacturers registered in the State of Hawaii is 46,023. Thus, 94.7 per cent of the 1969 cars in the State were represented by the seven manufacturers included in this study.

Table 2 indicates the number and percentage of returns for each manufacturer.

Table 2
Number of Returns

	Total Questionnaires			
	Sent	Returned	Per Cent	
American Motors	200	94	47.0	
Chrysler	200	114	57.0	
Ford	200	107	53.5	
General Motors	200	93	46.5	
Datsun	200	95	47.5	
Toyota	200	97	48.5	
Volkswagen	<u>200</u>	96	48.0	
Total	1,400	696	49.7	

The answers to the questionnaire have been weighed so that a percentage of the total number of cars for each manufacturer in Table 1 can be set forth in the tables of this report. For reference to complete results, weights assigned, and statistical error due to such weighing, see Appendix D.

Predelivery Servicing

Question seven of the questionnaire was used to determine the possible lack of quality control by manufacturers and poor dealer predelivery servicing. Table 3 presents the answers to this question. The numbers in parenthesis represent the actual number of responses.

Table 3

Question: "When the car was delivered to you, was it in satisfactory condition?"

		Responses by On Purchasing	Car from:
	Total Responses	Local Dealer	Dealer on Mainland or Manufacturer
American Motors			
Yes	54.3% (51)	52.6% (30)	25.0% (3)
No	45 . 7% (43)	47.4% (27)	75.0% (9)
Chrysler			
Yes	67.5% (77)	67.8% (58)	50.0% (3)
No	32.5% (37)	32.2% (29)	50.0% (3)
Ford			
Yes	48.6% (52)	42.6% (29)	78.6% (11)
No	51.4% (55)	57.4% (39)	21.4% (3)
General Motors			
Yes	60.2% (56)	55.7% (34)	70.0% (7)
No	39.8% (37)	44.3% (27)	30.0% (3)
Datsun			***
Yes	72.6% (69)	75.4% (43)	100.0% (2)
No	26.3% (25)	22.8% (13)	0% (0)
Toyota	ma an 7661	74 (0 (70)	CC 70 10\
Yes	71.1% (69)	74.6% (50)	66.7% (2)
No	28.9% (28)	25.4% (17)	33.3% (1)
Volkswagen	00 20 (77)	70 (0. (40)	OE 70. /10\
Yes	80.2% (77)	78.6% (40)	85.7% (18)
No	19.8% (19)	21.6% (11)	14.3% (3)

WARRANTY EXPERIENCE - STATE

Table 3 reveals that, on the average, purchasers of 1969 domestic cars from local dealers are dissatisfied with the car upon delivery 45.4 per cent of the time with a wide variation between Ford and Chrysler. Purchasers of foreign cars fare better, being dissatisfied with the car upon delivery about 23.3 per cent of the time. This is a higher percentage than the 34.3 per cent dissatisfaction with domestic cars and the 20 per cent dissatisfaction with foreign cars found by Consumers Union.

Those persons stating that they were dissatisfied with the car upon delivery were further asked why they were dissatisfied with the condition of the car. The answers were divided into three major categories: (1) mechanical which includes brakes, steering, engine, clutch, transmission, wheel alignment, carburetor, starter, etc.; (2) body exterior which included paint scrapes, scratches, chips, dents in the body or exterior chrome, rust, etc.; and (3) body interior which included seat covers, other upholstery, dirt, interior trim, window seals and operation, etc. All manufacturers received complaints about the mechanical condition of the car when it was delivered. Also, domestic manufacturers received more complaints concerning the exterior and interior of the car than foreign manufacturers, particularily concerning paint, rust, and window seals.

Often, dealer service satisfaction by a consumer is measured by whether or not the dealer has corrected an unsatisfactory condition after it was brought to his attention. Table 4 sets forth the number of persons who asked to have an unsatisfactory condition corrected which was discovered prior to accepting the car and whether the condition was corrected to their satisfaction.

Table 4 discloses that about 50 per cent of those persons who purchased from local dealers obtained correction to their satisfaction. In this area, there does not appear to be much difference between domestic dealers and foreign dealers. An average of 24.9 per cent of those persons purchasing a domestic car from local dealers were still not satisfied with the car they finally received. Purchasers from foreign dealers fare somewhat better with only 10 per cent being dissatisfied.

Table 4

Question: Did you have the condition corrected prior to acceptance of the car?

		Responses by Original Owners Purchasing Car from:		
			Dealer on Mainland or	
	Total Responses	Local Dealer	<u>Manufacturer</u>	
American Motors				
Asked to correct Corrected to satisfaction	44.7% (42)	47.4% (27)	75.0% (9)	
Yes	21.3% (20)	17.5% (10)	41.7% (5)	
No	23.4% (22)	29.8% (17)	33.3% (4)	
Chrysler				
Asked to correct Corrected to satisfaction	32.5% (37)	32.2% (28)	50.0% (3)	
Yes	20.2% (23)	18.4% (16)	33.3% (2)	
No	12.3% (14)	13.8% (12)	16.7% (1)	
Ford				
Asked to correct Corrected to satisfaction	47.7% (51)	55.9% (38)	21.4% (3)	
Yes	18.7% (20)	17.6% (12)	14.3% (2)	
No	29.0% (31)	38.2% (26)	7.1% (1)	
General Motors				
Asked to correct	36.6% (34)	41.0% (25)	20.0% (2)	
Corrected to satisfaction				
Yes	21.5% (20)	23.0% (14)	10.0% (1)	
No	15.1% (14)	18.0% (11)	10.0% (1)	
Datsun				
Asked to correct	24.2% (23)	19.3% (11)	0% (0)	
Corrected to satisfaction	10 00 (10)	a a a a a a a a a a a a a a a a a a a		
Yes	18.9% (18)	12.3% (7)	0% (0)	
No	5.3% (5)	7.0% (4)	0% (0)	
Toyota				
Asked to correct	25.8% (25)	25.4% (17)	0% (0)	
Corrected to satisfaction	37 70 137	44 677 (6)		
Yes	16.5% (16)	11.9% (8)	0% (0)	
No	10.3% (10)	13.4% (9)	0% (0)	
Volkswagen	•			
Asked to correct	19.8% (19)	21.6% (11)	14.3% (3)	
Corrected to satisfaction	10 19 100	n a month	many J. T.	
Yes	10.4% (10)	11.8% (6)	0% (0)	
No	9.4% (9)	9.8% (5)	14.3% (3)	

WARRANTY EXPERIENCE - STATE

Those persons not satisfied with the correction received on their cars were asked to give a reason for their dissatisfaction. Of those persons answering, a much larger number of persons felt that the dealer did not cooperate with them when dealing with domestic dealers than foreign dealers. Usual explanations given for lack of cooperation by disgruntled owners were that the dealer was unable to fix the problem, the problem kept recurring, the dealer took too long to correct the problem, poor service due to stalling or runarounds, or a poor job was done when the car was finished. Like the Consumers Union's findings for warranty service, in the area of predelivery servicing, Hawaii's consumers are finding that the dealers are either unable or unwilling to correct faulty cars. Those persons purchasing their cars from a mainland dealer or direct from the factory do not appear to have received treatment different from that of persons purchasing their car from a local dealer. It must be kept in mind, however, that the number of persons falling within this category is small, making an accurate determination difficult.

Warranty Servicing

In order to determine the number of persons having warranty work done, the following question was asked: "After delivery and use of the automobile by you, did you have any work or repair done under your new car warranty or guarantee?" Table 5 gives the results.

Table 5 reveals that, on the average, more than 56.9 per cent of the new car owners who purchased from a local dealer had to obtain warranty work on their car after having driven it for some time. Toyota and Datsun owners had the lowest percentage of warranty work performed - less than 50 per cent of the time. Those persons having warranty work done were asked whether the work involved a mechanical, body exterior, or body interior problem. In general, the answers indicate that there are more mechanical problems after delivery than problems with the exterior or interior of the body. The exterior and interior problems such as paint, trim, and fittings may have been corrected at the time of delivery. Thus, they appear to be less of a problem in the warranty service area.

Table 5

Question: Did you have warranty work done on your car?

		Responses by O Purchasing	Car from:
			Dealer on Mainland or
	Total Responses	Local Dealer	Manufacturer
American Motors			
Yes	45.7% (43)	56.1% (32)	66.7% (8)
No	52.1% (49)	42.1% (24)	33.3% (4)
Chrysler			
Yes	57.0% (65)	65.5% (57)	50.0% (3)
No	42.1% (48)	33.3% (29)	50.0% (3)
Ford			
Yes	56.1% (60)	66.2% (45)	64.3% (9)
No	42.1% (45)	32.4% (22)	35.7% (5)
General Motors			
Yes	55.9% (52)	67.2% (41)	40.0% (4)
No	44.1% (41)	32.8% (20)	60.0% (6)
Datsun			
Yes	33.7% (32)	42.1% (24)	50.0% (1)
No	64.2% (61)	56.1% (32)	50.0% (1)
Toyota			
Yes	33.0% (32)	38.8% (26)	0% (0)
No	66.0% (64)	59.7% (40)	100.0% (3)
Volkswagen			
Yes	56.3% (54)	62.7% (32)	57.1% (12)
ИО	43.8% (42)	37.3% (19)	42.9% (9)

When the consumer has to return a car for warranty work, one of his biggest concerns is the amount of time it will take and how many times the consumer will have to return the car in order to have the problem corrected. With the exception of Volkswagen owners, more than half of all persons purchasing from local dealers and having warranty work done on their car had to take their car back to the dealer for repairs two to three times in order to complete the repair. Generally, the time required to repair a car is from one to three days.

Table 6 indicates the number of persons who were satisfied or dissatisfied with the repair of the car under the warranty as performed by the dealer.

WARRANTY EXPERIENCE - STATE

Table 6

Question: Was warranty repair work done to your satisfaction?

			riginal Owners Car from:
	Total Responses	Local Dealer	Pealer on Mainland or Manufacturer
American Motors			
Satisfied	25.5% (24)	31.6% (18)	33.3% (4)
Dissatisfied	19.1% (18)	24.6% (14)	33.3% (4)
Chrysler			
Satisfied	36.8% (42)	42.5% (37)	16.7% (1)
Dissatisfied	17.5% (20)	19.5% (17)	33.3% (2)
Ford			
Satisfied	35.5% (38)	39.7% (27)	50.0% (7)
Dissatisfied	19.6% (21)	26.5% (18)	7.1% (1)
General Motors			
Satisfied	35.5% (33)	39.3% (24)	30.0% (3)
Dissatisfied	18.3% (17)	24.6% (15)	10.0% (1)
Datsun			
Satisfied	23.2% (22)	26.3% (15)	50.0% (1)
Dissatisfied	8.4% (8)	14.0% (8)	0% (0)
Toyota		~~	
Satisfied	18.6% (18)	22.4% (15)	0% (0)
Dissatisfied	13.4% (13)	14.9% (10)	0% (0)
Volkswagen	20 60 (20)	07 00 (70)	10 00 (0)
Satisfied	39.6% (38)	37.3% (19)	42.9% (9)
Dissatisfied	15.6% (15)	23.5% (12)	14.3% (3)

Table 6 discloses that about one-fourth of the purchasers from local dealers were dissatisfied with the repair of the car they ordered, a finding similar to that of Consumers Union in Chapter III. Those persons not satisfied with the repair received were asked to give a reason for their dissatisfaction. Over 40 per cent of responses were that the dealer was unable to repair the car. These findings also agree with those of Consumers Union.

The data presented above indicates that an average of 23.8 per cent of the purchasers of domestic cars from local dealers and 17.5 per cent of the purchasers of foreign cars from local dealers who had to obtain warranty work were dissatisfied with the warranty work they received. While this does not seem to be a large percentage, when applied to the total number of 1969 cars in Hawaii, this means 5,957 owners of private domestic cars and 2,142 owners

of foreign cars were dissatisfied with the warranty work done. If these findings are applied to all model years, then a significant number of persons in Hawaii may be unhappy with the warranty service they are receiving.

Warranty Understanding

The Bureau also wished to determine consumer understanding of the warranty. In order to determine consumer understanding, seven questions were included in the questionnaire dealing with the length and coverage of the warranty and requirements for keeping the warranty in force. Two of the seven questions dealt in particular with exceptions contained in the warranties. The questionnaire permitted the person answering the questions to look at the warranty in answering the questions, if they so desired.

When asked the length of their warranty, domestic car owners did very poorly, possibly because they had to check two answers for the basic and power train warranty. The foreign car owners, however, did quite well in their knowledge of the length of the warranty. Questions concerning the consumer's knowledge on the various areas of the car that were covered by the warranty were asked. The responses to these questions were poor for both domestic and foreign car owners, with less than 50 per cent knowing the correct answers. Poor responses were also received when the consumers were asked to correctly check the various areas of the car that is covered by the different warranties.

When questioned about required maintenance, over 75 per cent of the consumers knew that they had to follow a maintenance schedule to keep their warranties in force. The majority of the new car owners felt that they had to take their car to a new car dealer for servicing in order to keep their warranty. Except for Volkswagen in 1969, however, owners could take their car anywhere for servicing. Thus, it appears that consumers have only a fair knowledge of the terms of the warranty.

The Bureau next asked questions concerning the understanding of the warranty. First, the consumer was asked if brake linings on the car would be replaced at no cost under the warranty when the linings wore out at 17,000 miles. Only a little over 50 per cent knew the correct answer to this question. Brake linings are specifically exempted from the warranty coverage.

An additional question was asked: "If the paint on your automobile had deteriorated and you had the automobile for eleven months, could you have the automobile repainted at no cost to you under the warranty or guarantee?" Even less persons knew the correct answer to this question. Paint is not specifically

WARRANTY EXPERIENCE - STATE

excepted from the warranty, but falls within the warranty exclusion concerning normal deterioration of external appearance due to wear and exposure.

The answers to these questions reveal that the average consumer has very little understanding of the terms and conditions of the warranty he is receiving. Dealers were interviewed and asked if their salesmen were required to inform the customer of the terms of the warranty. All dealers stated the salesmen were so required and most did so at the time of delivery of the car to the customer. The questionnaire of the Bureau asked consumers if the terms of the warranty had been explained to them by the selling dealer. There was a wide variance of answers, but an average of 34 per cent said the dealer did not explain the warranty. The high rate of consumers answering that they did not have the terms of the warranty explained to them may be due to the fact that, since the terms are explained upon delivery of the car, the consumer is more interested in the car than the explanation of the terms of the warranty.

Whatever the reason for the poor consumer understanding of the warranty, such feeling will, to a certain degree, be reflected in consumer dissatisfaction with dealer servicing under the warranty.

In summary, the Bureau's survey of consumers, in addition to revealing a poor consumer understanding of the warranty, found that the consumer experience in Hawaii is similar to that found nationally. About one-third of the purchasers of domestic cars are dissatisfied with their cars upon delivery and approximately one-fourth of such purchasers are dissatisfied with the warranty work performed on their cars. A smaller percentage of foreign car buyers are dissatisfied with their cars on a national and local basis. About one-fourth of the foreign car purchasers are dissatisfied with their cars upon delivery and about one-fifth are dissatisfied with warranty work completed on their cars.

Part II. Dealer Experience

There are fifty-six new car dealers registered with the Motor Vehicle Industry Licensing Board and of these, twenty-two do not handle American Motors, Chrysler, Ford, General Motors, Datsun, Toyota, or Volkswagen cars, the subjects of this study. Thirty-four interviews with new car dealers were conducted throughout the State - twelve with foreign car dealers and twenty-two with domestic car dealers. Seven of the dealers interviewed handled both foreign and domestic cars and will be treated as separate dealers in this report. Many of the dealers who were not interviewed

are part of the same corporation as those interviewed, such as Datsun dealerships which are part of the Hawaii Corporation and Toyota dealerships which are part of Servco.

Predelivery Servicing

Reimbursement for predelivery servicing in Hawaii is the same as on the mainland, being part of the list price of the car established by the manufacturer and paid for by the consumer. The newly adopted General Motors' policy of manufacturer reimbursement for predelivery servicing discussed in Chapter II, has not been initiated for all General Motors dealers in the state; only two of the six interviewed stated that they were being reimbursed under this policy.

One of the reasons for poor predelivery servicing reimbursement is poor factory quality control. When predelivery service is extensive and more time and work would be required to properly service the vehicle, the dealer will be inadequately reimbursed for his efforts because reimbursement by the manufacturer is based on a formula of normal servicing. When asked about the quality of cars being received, eight of the foreign car dealers stated that the cars received were in excellent condition and four felt that the cars were in good or very good condition. On the other hand, only one of the domestic car dealers felt that the cars received were in excellent condition while nine rated the cars from fair to bad.

The dealers were primarily concerned with poorly fitted trim and other fittings, wheel balancing and alignment, paint chips, rust, and dents. Some dealers mentioned that the paint chips and dents were due to shipping damage, which is particularily a problem for Hawaii because of the distance and number of changes in modes of transportation involved. Transportation damage is covered by the insurance of the shipper. Some dealers expressed dissatisfaction with this type of remedy because of the time involved in obtaining recovery. Additionally, the amount of the claim is generally small thus making the cost for filing a claim more expensive than the amount of the claim itself. Many of the local dealers are making a practice of absorbing this cost, and further lowering predelivery reimbursement.

It would appear, then, that Hawaii's new car dealers suffer the same problem of poor reimbursement as their mainland counterparts with the addition of a possible higher cost for shipping damages.

Warranty Reimbursement, Policies, and Procedures

a. Labor

The formula for warranty labor reimbursement is different for all manufacturers. The labor reimbursement rates for foreign dealers varied from a low of \$7.00 to a high of \$10.00, while the domestic dealers' rates varied from a low of \$7.50 to a high of \$11.25. The variance is apparently due in part to labor contracts with different labor rates and fringe benefits. On the other hand, the retail labor rate, i.e., the rate charged customers who are not eligible for free warranty work, averaged \$11.82 an hour throughout the state and varied between \$9.50 and \$12.00 for foreign dealers and between \$11.00 and \$14.00 for domestic dealers.

The warranty labor rate is lower for all dealers on the outer islands. However, the retail labor rate for the outer island dealers is approximately the same as that for Oahu dealers. Dealers were asked whether they were losing money on their reimbursement rate. Nineteen stated that they were losing money, while ten said they were breaking even and three indicated that they were making a profit. The answers were spread among all types of dealers, with no one manufacturer's dealers stating that they were all losing money on the reimbursement rate. The outer island dealers were generally losing money except for Volkswagen dealers whose reimbursement rate is the same for all dealers. Like their mainland counterparts local dealers complained of the flat rate time, particularly the allowance for diagnostic time.

b. Parts

The dealers in the state observe the same manufacturer parts reimbursement policy as practiced on the mainland. Both foreign and domestic dealers, except Datsun and Toyota, are reimbursed for parts used in warranty work at the rate of the cost of the part plus 25 per cent. Some Datsun and Toyota dealers received cost plus shipping costs or cost plus 10 per cent, while others received cost plus 25 per cent.

Dealers were asked about the time it took to receive parts that were ordered from the mainland. Many of the dealers received all shipments by air, and parts not mailed by air took between one and three months to arrive. About one-half of the dealers stated that parts required in warranty servicing were automatically shipped by air, although in some instances there was a shipping charge to the customer. The outer island dealers generally attempt to obtain parts from Oahu prior to contacting the mainland.

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Obtaining parts has been a problem on the mainland due to poor distribution systems and an insufficient quantity of parts. This problem has been remedied somewhat by the manufacturers through the establishment of parts depots in various areas of the country and manufacturers now feel that the parts supply system will be more responsive to consumer demands. Foreign dealers indicated that parts are stockpiled in various areas on the mainland and they seldom have to go to the country of origin for parts.

c. Reimbursement Process Time

Although there have been scattered instances of reimbursement by the manufacturer to its dealer within 30 days, generally, the process time required between 45 and 120 days, or an average of 72 days, after the claim was presented. The one exception was Ford which allows a credit advance to the dealer based on the dealer's past warranty cost experience. The credit advance was also used by Chrysler and General Motors for one dealer each. The slowness of manufacturers to process reimbursement claims has been a source of irritation to the dealers since such tardiness deprives the dealers of essential working capital which could be used to provide better warranty repair efforts.

d. Replacement of Car

Dealers were quaered on the policy they had for replacing a customer's car that was in the shop for warranty work. Both foreign and domestic dealers were split in their practices, sixteen dealers provided free loaner cars and fifteen dealers provided a rental car. Only three dealers had no type of replacement car available. Generally, the loaners and rentals were given out on a first-come, first-served basis, although arrangements could be made in advance. The customer whose car would be inoperable for more than one day was usually given preference in obtaining a car. The rental charged for cars ranged from a low of \$2.00 a day to \$8.00 a day plus 10 cents a mile.

e. Warranty as a Sales Item

Dealers were also asked if they used the warranty as a sales item. Dealers indicated that in 1969 the practice was to use the warranty as a sales item since, at that time, the 5 years or 50,000 miles extended warranty was still being offered. In 1971, however, none of the domestic dealers were using the warranty as a selling point, while the foreign dealers were split in their practices. Both Datsun of Hawaii and Volkswagen are emphasizing their warranties since they are offering a 2 years or 24,000 miles warranty as compared to the 1 year or 12,000 miles warranty being given by domestic dealers and Toyota dealers.

CHAPTER V

LEGISLATIVE ATTEMPTS TO SOLVE WARRANTY PROBLEMS

Part I. State Attempts

Since 1967 numerous states have tried to deal with the warranty problem in order to protect both the dealers and the consumers. The subject matter of the bills and statutes examined, for the purposes of this report, will be broken down into three basic categories - predelivery servicing, warranty reimbursement, and warranty requirements. A fourth category, labeled miscellaneous, is composed of attempts which appear to deal with the results of the warranty problem rather than the problem itself.

Predelivery Servicing

Massachusetts, Mississippi, Tennessee, and Wisconsin have passed statutes requiring manufacturers to specify the dealer's predelivery and preparation obligations. Such specifications, together with a schedule of compensation for performance of the obligations, must be filed with the attorney general of the state or the equivalent of the Hawaii Motor Vehicle Industry Licensing Board. The compensation in the schedules must be reasonable, and Mississippi requires the reasonableness of the compensation to be approved by its motor vehicle commission.

All state attempts to control predelivery service provide that filed statement of predelivery duties shall constitute the dealer's only responsibility for product liability between the dealer and his manufacturer. This proviso is made so that the dealer will not be responsible for performing any predelivery and preparation work not stated in the schedule, and presumably the dealer could refuse to accept a vehicle needing such work. This would tend to alleviate the dealer's problems in the case of poorly produced vehicles as discussed in Chapters III and IV.

The experiences of the four states with this type of legislation have been very poor until recently. Manufacturers would estimate the cost of the predelivery servicing per vehicle and that amount would be added to the dealer's invoice with an additional charge of 7 per cent of the increase to cover the federal excise tax. To illustrate, if the normal car invoice was \$4,000 and the predelivery costs were \$50, the new invoice paid by the dealer bears the increase of \$50 plus \$3.50 tax. The dealers in neighboring states with an invoice of \$4,000 thus gained a competitive advantage over the dealers with the higher invoice price.

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When faced with this type of manufacturer's practice, the dealers in Massachusetts vigorously protested against the practice as being in violation of the policy and very terms of the adopted statute. Apparently, the pressure of the dealers forced General Motors to announce a new practice which provided that new car invoice charges would be increased evenly on a national basis, and dealers would be reimbursed for the cost of the warranty work on each car, payable as the work is performed.⁴

If the General Motors' policy is followed by all manufacturers, then this type of statute would appear to solve at least two of the problems caused by the dealer's predelivery obligations — that of poor factory quality control causing extra work and that of unfair reimbursement to the dealer. A third problem — the number of cars a dealer sells each year per available manpower for preservicing could perhaps be solved by requiring the dealers to have a certain ratio of mechanics per number of new cars sold, based on the previous year's experience or projected sales or a combination thereof.

Warranty Reimbursement

Florida, Mississippi, Massachusetts, Tennessee, and Wisconsin have adopted statutes requiring that manufacturers reasonably compensate dealers for warranty work. Both Massachusetts and Mississippi also require dealer's claims to be approved or disapproved within 30 days following receipt and to be paid within 30 days following approval. Tennessee and Mississippi require the warranty reimbursement rate to be not less than the retail labor rate the dealer charges customers who are not entitled to free warranty work. The Arizona and California legislatures have considered similar legislation but failed to pass such legislation.

The Tennessee statute is now in litigation in the federal court as a result of suits brought immediately after its passage by Ford, General Motors, Chrysler, and International Harvester. Since the Tennessee statute enacted in 1968 was the first of its kind, other states with similar statutes are holding the enforcement of the statutes in abeyance until a decision is reached.

The manufacturers wish to have the Tennessee statute declared unconstitutional as an unreasonable interference with interstate commerce and a violation of the fourteenth amendment's due process clause. The latter argument is based, in part, on the ground that the Tennessee Motor Vehicle Commission, which is charged with enforcement of the new law, is composed almost entirely of automobile dealers. 10 The due process argument as used in the Tennessee case would not appear to be applicable in Hawaii, since the Hawaii Motor Vehicle Industry Licensing Board has more public members than

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dealer members. Concerning the issue of interference with interstate commerce, the trend of legal authority is to declare state laws regulating manufacturer-dealer relationships to be constitutional on the basis that they do not impose an undue burden on interstate commerce. One commentator believes that the statute is constitutional:

In view of such federal precedents as the Davis-Bacon Act, 40 U.S.C. Sec. 276a(a) (1964) (prescribing "prevailing wages" for labor on government construction contracts), the Walsh-Healey Act, 41 U.S.C. Sec. 35(b) (1964) (requiring that specified local labor rates be incorporated into government procurement contracts), and the Fair Labor Standards Act, 29 U.S.C. Sec. 206 (1964) (prescribing minimum labor rates), it is difficult to comprehend the basis for a constitutional attack on state legislation prescribing "retail" labor rates for warranty work, particularly since states are not confronted with the jurisdictional problems inherent in the federal statutes. 12

If constitutional, this type of statute would solve the dealer's problem of inadequate reimbursement.

Warranty Requirements

California appears to be the only state which has passed a statute establishing warranty requirements. 13 This statute, passed in late 1970, applies to all consumer goods bought primarily for personal, family, or household purposes.

The statute requires express warranties to be set forth in readily understood language and to clearly identify the parties making the warranty. If a manufacturer makes an express warranty on consumer goods sold within the State of California, he is required to maintain sufficient service and repair facilities to carry out the terms of the warranty or be liable to the retail seller for the obligations imposed by the express warranty. The statute also imposes requirements on those manufacturers who do not maintain service facilities within the state, but who sell in the state. 15

The main interests in the California statute are the requirements setting forth the warranty in readily understood language and maintaining service facilities within the state. While the requirement to maintain service facilities may indirectly help the plight of the new car dealer, it is not a direct solution to the problem as are the statutes concerning predelivery servicing and warranty reimbursement.

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Illinois has a statute which applies to any motor vehicle sold after January 1, 1968, making the dealer liable to the purchaser for a listed percentage of the cost of repair of the power train as defined, similar to the manufacturer's definition in a power train warranty. The statute further provides that the dealer and the customer may negotiate a sale not subject to the statute so long as there is a disclaimer printed above the signature of the customer.16 There is no information on how effective this statute is, nor are there any court cases interpreting the provisions of the statute.

Two other states have introduced bills in the warranty area, although they do not appear to go to the heart of the problem. Florida introduced a bill to require the manufacturer to reimburse a car owner for any time lost from his occupation due to a defect discovered within six months after delivery of the car. 17 A similar bill was submitted in Minnesota requiring reimbursement for any loss of use of the car in excess of a reasonable time which must not exceed seven calendar days. The manufacturer's warranty period is extended for the period in excess of a reasonable period but the dealer is allowed to furnish a replacement vehicle which would suspend the operation of the proposed bill. 18 Both bills are aimed at consumer protection but neither of these bills would help the predicament of the dealer.

Part II. Federal Attempts

On the federal level Congress has introduced bills on warranties but, to date, nothing has passed. The first bills were introduced in 1967, in the 90th Congress, with two different approaches being used. The first approach was to protect the consumer by requiring full disclosure of the terms and conditions of the warranties and by creating an Advisory Council on Guarantees, Warranties, and Servicing to conduct a study of the problems arising in securing adequate performance under warranties. 19 This bill would have applied to motor vehicles as well as other merchandise. The main concern of the bill was to require a complete disclosure of the terms of the warranty and the obligations of all parties to the warranty.

The second approach was to provide higher standards of quality control in the manufacture of motor vehicles and to provide for the establishment of standards for new motor vehicle warranties and for motor vehicle dealer franchise agreements. 20 This bill would have provided for at least once a year factory inspection of manufacturers producing new motor vehicles for sale in interstate commerce.

In the 91st Congress, 1969 to 1970, there was more activity in warranty legislation with seven house bills and one senate bill being introduced. All bills failed to pass both houses of Congress. These bills, generally, fell in two categories: (1) the setting of minimum standards by a federal agency to guarantee comprehensive warranty protection to purchasers, 21 and (2) requiring disclosure standards for warranties and guarantees of consumer products. 22

Since the start of the 92nd Congress in 1971, eight house bills and three senate bills on warranties have been introduced. Some of these bills are, in substance, similar to those bills that were considered in the 91st Congress.²³

Two bills provide increased warranty protection for consumers. 24 These bills apply to all consumer products over \$10 and allow the Federal Trade Commission to pass rules and regulations requiring full and conspicuous disclosure of the terms of the warranty. The commission is not allowed to prescribe the duration of the warranty nor to require that warranties be given. If a warranty is given, then the provision of the bills would apply and the warranty would have to meet the specifications in the bills. House bill H. R. 6314 has had a hearing before the House Interstate and Foreign Commerce Committee, but the results of the hearing are as yet unknown.

One bill provides for the establishment of national standards for warranties made with respect to consumer goods distributed in or affecting interstate commerce. The bill provides that warranties being offered must be found by the Federal Trade Commission to conform to standards established for warranties under the bill. Further, such warranty must be registered with the Commission after determination of conformity. The Federal Trade Commission is given extensive rule and regulation-making power concerning warranties under the bill.

The major concern of these congressional bills is to insure that if an express warranty is being offered, certain minimum terms must be disclosed and conditions in the warranty met. For example, senate bill S. 986 (1971) which has passed the senate and is now in the House Interstate and Foreign Commerce Committee would require the disclosure of the provisions of the warranty in simple and readily understood language. The Federal Trade Commission is not allowed to prescribe the duration of the warranty, nor require that a warranty be given. If a warranty is given, its provisions must be disclosed pursuant to regulations of the Federal Trade Commission which regulations may require inclusion of any of the following provisions in the warranty:

(1) The clear identification of the name and address of the warrantor.

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- (2) Identity of the class or classes of persons to whom the warranty is extended.
- (3) The products or parts covered.
- (4) A statement of what the warrantor will do in the event of a defect or malfunction at whose expense and for what period of time.
- (5) A statement of what the purchaser must do and expenses he must bear.
- (6) Exceptions and exclusions from the terms of the warranty.
- (7) The step-by-step procedure which the purchaser should take in order to obtain performance of any obligation under the warranty, including the identification of any class of persons authorized to perform the obligations set forth in the warranty.
- (8) On what days and during what hours the warrantor will perform his obligations.
- (9) The period of time within which, after notice of malfunction or defect, the warrantor will under normal circumstances repair, replace, or otherwise perform any obligations under the warranty.
- (10) The availability of any informal dispute settlement procedure offered by the warrantor and a recital that the purchaser must resort to such procedure before pursuing any legal remedies in the courts.
- (11) A recital that any purchaser who successfully pursues his legal remedies in court may recover the reasonable costs incurred, including reasonable attorneys' fees.26

Under S. 986, the manufacturer may offer either a limited or full warranty but it must be conspicuously stated whether a limited or full warranty is being offered. If a full warranty is offered it must incorporate federal standards which require the manufacturer to: (1) repair or replace any malfunctioning or defective warranted consumer product; (2) within a reasonable time; and (3) without charge. A limited warranty is a warranty which does not incorporate any of the three federal standards.²⁷

Senate bill S. 986 further provides that suppliers engaged in the business of making a consumer product or offering service contracts to consumers either directly or indirectly are encouraged to establish informal dispute settlement procedures for settling consumer complaints. The informal settlement procedures are to be created by

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the suppliers in cooperation with independent and governmental entities pursuant to guidelines established by the Federal Trade Commission. If the informal settlement procedures are incorporated in a written warranty, then the informal procedures must be used by the consumer prior to bringing a court suit. After pursuing the informal procedures and providing a supplier with reasonable time to meet the consumer's demands, the consumer may go to court. If the consumer wins in court, then the consumer may recover a sum equal to the aggregate amount of costs and expenses, including attorney fees. 28

The bills in the 92nd Congress would help the consumer by: clarifying what the consumer is receiving from a warranty; insuring that the consumer will receive certain minimum protections; and by establishing informal complaint procedures that the consumer may use. ²⁹ Violations of these bills, generally, are made violations of the Federal Trade Commission Act and court actions by the Commission or by the United States Attorney General may be used to enforce the provisions of the bills. ³⁰

The bills presently being considered by Congress are primarily consumer oriented. None of the bills address themselves to the major problems of dealers considered by this report. Any attempt to fully solve the problems created by automobile warranties must also consider the plight of the new car dealers.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

Part I. Conclusions

The foregoing chapters have pointed out that when cars leave the factory, the quality of such cars is not as good as it should be. This in turn places a burden on the dealers which is reflected in inadequate predelivery and warranty service, and in consumer dissatisfaction with such services.

On the average throughout the nation, over a seven year period, 34.4 per cent of domestic car buyers were dissatisfied with their cars upon delivery. For 1969 cars in Hawaii, that figure was higher at 45.5 per cent. A smaller percentage of foreign car buyers are dissatisfied with their cars with the national figure for 1970 being 20 per cent (no comparable figures are available for 1969). The Hawaii rate for 1969 cars is 23.3 per cent. Although there are no national figures for dissatisfaction with the car as finally received after the correction of predelivery defects, in Hawaii such dissatisfaction averaged 24.9 per cent for the domestic car buyers and 10 per cent for the foreign car buyers.

In the area of warranty service, throughout the nation during the period 1963 to 1970, 25 per cent of those persons asking for warranty repairs were dissatisfied with such repairs. Nationally, there are no separate figures for domestic and foreign cars. In Hawaii, 23.8 per cent of domestic car owners and 17.5 per cent of foreign car owners, or an average of 20.7 per cent, were dissatisfied with the warranty repairs made on their 1969 cars.

Further, in Hawaii, the Bureau's survey indicated that there is a poor understanding of the warranty document by the consumer. The warranty given the consumer is usually a one page document. The dealer, however, in servicing a warranty claim is guided by the policies and procedures established by the manufacturer, which procedures and policies the consumer is unaware of. This sometimes leads to a misunderstanding, resulting in consumer dissatisfaction.

Dealers themselves have problems in their dealings with the manufacturers, which in turn may affect the relationship between the dealer and the consumer. Dealers throughout the nation and in Hawaii are not reimbursed for their full cost of predelivery servicing and, in some cases, must absorb costs due to poor factory quality control. Also, dealers are underpaid for their labor costs because of the inadequate "flat rate time" and low hourly reimbursement rate set by the manufacturer. These underpayments may cause some dealers to perform below par in predelivery and warranty servicing.

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To alleviate some of the warranty problems pointed out in this report, several alternative recommendations are discussed in the following section.

Part II. Recommendations

Consumer dissatisfaction with the dealer, and dealer dissatisfaction with the manufacturer's reimbursement policies represent two areas in which problems may be corrected through legislation.

Dealer Dissatisfaction

Those states which have adopted statutes requiring manufacturers to specify the dealer's predelivery and preparation obligations and to establish a schedule of compensation for the performance of obligations appear to have had good results. In Hawaii only General Motors has adopted a method of payment acceptable under this type of statute. This form of reimbursement requires direct reimbursement to the dealer from the manufacturer for predelivery servicing instead of reimbursement from the consumer to the dealer based on the list price. For example, the Mississippi statute provides:

The [Mississippi motor vehicle] commission may deny an application for a license, or revoke or suspend a license after it has been granted, for any of the following reasons:

(9) Being a manufacturer who for the protection of the buying public fails to specify the delivery and preparation obligations of its motor vehicle dealers prior to delivery of new motor vehicles to retail buyers. A copy of the delivery and preparation obligations of its motor vehicle dealers and a schedule of the compensation to be paid to its motor vehicle dealers for the work and services they shall be required to perform in connection with such delivery and preparation obligations shall be filed with the commission by every licensed motor vehicle manufacturer and shall constitute any such dealer's only responsibility for product liability as between such dealer and such manufacturer. The compensation as set forth on said schedule shall be reasonable and the reasonableness thereof shall be subject to the approval of the commission. Any mechanical, body or parts defects arising from any express or implied warranties of any such manufacturer shall constitute such manufacturers' product or warranty liability.1

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Hawaii may also want to consider a statute similar to that of Massachusetts which requires adequate and fair compensation for labor and parts but sets no level of compensation.

Every manufacturer, distributor, wholesaler, distributor branch or division, factory branch or division, or wholesale branch or division shall properly fulfill any warranty agreement and adequately and fairly compensate each of its motor vehicle dealers for labor and parts. All claims made by motor vehicle dealers hereunder and under section 5 for such labor and parts shall be paid within 30 days following their approval. All such claims shall be either approved or disapproved within 30 days after their receipt, and when any such claim is disapproved the motor vehicle dealer who submits it shall be notified in writing of its disapproval within said period, and each such notice shall state the specific grounds upon which the disapproval is based.²

There is no information concerning the experience of dealers in Massachusetts with this statute. The apparent drawback of such a statute seems to be that there is no definition of what adequate and fair compensation means or who is to determine when the compensation is fair and adequate. The Massachusetts statute does provide that the attorney general is to enforce the statute, but such enforcement would appear to be after the dealer has complained of inadequate compensation. A possible alternative to this method of enforcement is to allow the Hawaii Motor Vehicle Industry Licensing Board to make a determination as to the adequacy of the compensation when requested by the dealer and then require enforcement by the attorney general if the manufacturers fail to comply with the board's decision.

The Massachusetts statute further requires approval of claims for reimbursement within 30 days after receipt by the manufacturer and payment within 30 days after approval. This requirement does not seem to speed payment since 60 days could elapse between receipt and payment. The dealers in Hawaii receive reimbursement as early as 45 days, with the average being 72 days. A better alternative may be to require advance payment or credit allowances, such as that used by Ford which is based on a monthly average of the dealer's warranty costs computed by dividing the previous year's warranty costs by twelve. This type of reimbursement would not add a great burden on the manufacturers and is apparently successful in Ford's operation.

Consumer Dissatisfaction

Once the dealer is adequately reimbursed for his work, he will more likely improve his warranty work. Since businesses are profit motivated however, it would still be to a dealer's advantage in

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some instances to claim that the warranty did not allow such work or to charge for warranty work when the work should be done for free. Additionally, pressure is occasionally exerted by the manufacturers upon the dealers not to be too lenient with warranty complaints. Thus, the consumer should also be considered in enacting warranty legislation.

A statute similar to the California statute or the Congressional bills establishing certain minimum requirements that a warranty must contain may be considered to protect the interests of the consumer. The legislation should require the manufacturer to pay for the repair or replacement of any part it supplies that is defective in material or workmanship within the warranty period, with no exceptions permitted for such items as brakes or wheel alignment if the vehicle is used for other than business purposes. This would allow the manufacturer to determine whether or not to offer a warranty and the length of the warranty, while the state would determine the minimum coverage.

Enforcement of warranty requirements should be solely the responsibility of the Consumer Protector. Placement of the burden of enforcement on the Consumer Protector instead of the Motor Vehicle Industry Licensing Board will prevent a conflict of interest for the board, since the board would be charged with protecting the dealers, in their warranty relations with the manufacturer.

FOOTNOTES

Chapter I

- Model car year is the period from the introduction of a new car in September to August of the following year.
- U. S. Federal Trade Commission, <u>Staff Report on Automobile Warranties</u> (Washington: U. S. Government Printing Office, 1968), p. 24. (Hereinafter cited as FTC Report, 1968.)
- 3. FTC Report, 1968, p. 24.
- 4. The exclusions specifically include engine tune-up, adjustments of wheels, brakes, or clutch, lubrication and oil change, and replacement of items such as brake and clutch linings, spark plugs, ignition points, filters, clutch plates, and light bulbs. Also excluded is deterioration due to normal wear or exposure of soft trim, decorative bright metal trim, pointed parts, rubber parts and the like.
- 5. FTC Report, 1968, pp. 27-28.
- 6. Ibid., Appendix B.
- 7. Ibid.
- U. S. Federal Trade Commission, Report on Automobile Warranties (Washington: 1970), p. 16. (Hereinafter cited as FTC Report, 1970.)
- 9. Ibid.
- 10. Ibid., pp. 17-18; FTC Report, 1968, p. 25;
 See generally, American Motors Corporation,
 Warranty Administration; Warranty and Policy
 Procedures (Detroit: 1970); Chrysler Corporation, Warranty Policy and Procedure Manual
 Passenger Cars and Trucks (Detroit: 1970);
 Ford Motor Company, Warranty and Policy Manual
 (Dearborn: 1970); General Motors Overseas
 Distributors Corporation, GMODC Service Policies
 and Procedures Manual #1170H (New York: 1970).
- Components deleted were suspension, steering gear, steering pump, steering linkage, wheels, and wheel bearings.
- 12. FTC Report, 1970, p. 19; See generally, American Motors Corporation; Chrysler Corporation; Ford Motor Company; General Motors Overseas Distributors Corporation.
- 13. FTC Report, 1970, p. 20; American Motors Corporation, "American Motors 1970 New Ambassador, Rebel, Javelín, AMX Warranty"; Chrysler Corporation, "Chrysler Corporation's Warranty and Limitation of Liability for 1970 Model Passenger Cars"; Ford Motor Company, "Ford and Dealer Basic Warranty and Limitation

- of Liability: 1970 Passenger Cars (Except Mavericks and Cortinas) and Light Trucks"; General Motors Corporation, "1970 Model General Motors Passenger Car New Vehicle Warranty".
- 14. Ford Motor Company, "1971 Model Passenger Car (Except Capri, Comet, Maverick and Pinto) and Light Truck-Warranty and Limitation of Liability"; General Motors Corporation, "1971 GMODC Passenger Car New Vehicle Warranty Except Nova and Vega 2300". Free adjustment items include wheel balancing, alignment, engine adjustments, addition of fluids, except gasoline, and tightening of nuts, bolts and fittings.
- 15. See advertisement in <u>Business Week</u>, September 25, 1971, pp. 44-46.
- 16. FTC Report, 1968, p. 29.
- 17. American Motors Corporation, "1966 New Car Warranty"; Chrysler Corporation, "1966 New Car Warranty"; Ford Motor Company, "1966 New Car Warranty"; General Motors Corporation, "1966 New Car Warranty".
- 18. Ford Motor Company, "1969 Model Car and Two Wheel Drive Light Truck Warranty" and "Ford and Dealer Basic Warranty and Limitation of Liability: 1970 Passenger Cars (Except Mavericks and Cortinas) and Light Trucks".
- 19. American Motors Corporation, "American Motors 1970 New Ambassador, Rebel, Javelin, AMX Warranty"; Chrysler Corporation, "Chrysler Corporation's Warranty and Limitation of Liability for 1970 Model Passenger Cars"; General Motors Corporation, "1970 Model General Motors Passenger Car New Vehicle Warranty".
- 20. Ford Motor Company, "Ford and Dealer Basic Warranty and Limitation of Liability: 1970 Passenger Cars (Except Mavericks and Cortinas) and Light Trucks".
- 21. Nissan Motor Company, "Nissan New Vehicle Warranty"; Toyota Motor Sales Company, "Warranty"; Volkswagenwerk Aktiengesellschaft, "Warranty for New Volkswagen Vehicles".
- Volkswagenwerk Aktiengesellschaft, "Warranty for New Volkswagen Vehicles - 1969".
- 23. FTC Report, 1968, pp. 30-33.
- See advertisement in <u>Fortune</u>, January, 1963, pp. 152-153.
- 25. FTC Report, 1968, pp. 30-33.
- 26. <u>Ibid</u>., p. 35.
- See advertisement, <u>HIC Guide</u>, April-May, 1971, p. 20.

- 28. Business Week, September 25, 1971, p. 46
- 29. FTC Report, 1970, pp. 23-25.

Chapter II

- The UCC Warranties disclaimed are found in <u>Hawaii Revised Statutes</u>, secs. 490: 2-313 to 490: 2-315.
- Ford Motor Company, "1971 Model Passenger Car (Except Capri, Comet, Maverick and Pinto) and Light Truck-Warranty and Limitation of Liability".
- General Motors Overseas Distributors
 Corporation, <u>GMODC Service Policies and Procedures Manual #1170H</u> (New York: 1970)
 part 2, section 2, part 4, pp. 7-8.
- 4. Ibid.
- 5. Ibid., part 2a, section 2, part 5, p. 4.
- 6. Ibid., part 2, section 2, part 4, p. 8.
- 7. See for example, American Motors Corporation,
 Warranty Administration; Warranty and Policy
 Procedures (Detroit: 1970); Chrysler Corporation, Warranty Policy and Procedure Manual
 Passenger Cars and Trucks (Detroit: 1970);
 Ford Motor Company, Warranty and Policy Manual
 (Dearborn: 1970); General Motors Overseas
 Distributors Corporation, CMODC Service
 Policies and Procedures Manual #1170H (New York:
 1970).

These manuals contain information and instructions with regard to such matters as: (1) the terms of warranties for the current as well as previous model years, (2) a list of items or repairs not covered by warranties, (3) procedures relating to receipt, inspection, and delivery of new cars to buyers, (4) discussion of rates at which the dealer will be reimbursed for work performed and how he will be credited or paid, (5) discussion and explanation of the forms to be used by dealers in claiming reimbursement, (6) instructions concerning disposition, storage, or return of parts replaced by dealers in performing work, and (7) maintenance of records of warranty work the dealer has performed and a reference to periodic examination of the records by the manufacturer's representative.

- 8. U. S. Federal Trade Commission, Staff Report on Automobile Warranties (Washington: U. S. Government Printing Office, 1968), p. 91. (Hereinafter cited as FTC Report, 1968.) See also chapter IV, part II.
- Interview with General Motors Dealer, August, 1970.
- 10. FTC Report, 1968, p. 94.

11. Chrysler further states the dealer's cost of fringe benefits other than those listed (including those required by law such as social security and workmen's compensation) are not included in the warranty labor rate unless such costs are part of a union negotiated contract. U. S. Federal Trade Commission, Report on Automobile Warranties (Washington: 1970), p. 109. (Hereinafter cited as FTC Report, 1970.); Chrysler Corporation, Warranty Policy and Procedure Manual Passenger Cars and Trucks (Detroit: 1970), section II, subject II-5, p. 1.

General Motors has a similar formula to Chrysler, General Motors Overseas Distributors Corporation, GMODC Service Policies and Procedures Manual #1170H (New York: 1970), part 2, section 2, part 5, p. 1.

American Motors does not adopt a formula approach, but instead studies the wage rate in the dealer's market area and then sets his warranty reimbursement rate at a level that will allow him to compete. FTC Report, 1970, p. 109.

Ford Motor Company computes its warranty labor rate at the average wage rate for similar mechanics skills as computed by the Department of Labor's Bureau of Labor Standards for each labor area. Ford then multiplies that wage by 200 to 215 per cent depending on the particular dealer's performance in certain prescribed areas. FTC Report, 1970, pp. 108-109.

Nissan Motor Company (Datsun) bases its labor rate on net labor cost which includes base pay and fringe benefits. This is compared with an 80 per cent valuation of retail labor rate and a comparison with other manufacturer reimbursement rates in the area. Interview with Datsun Dealer, November, 1970.

Toyota Motor Company uses the General Motors formula which the dealers compute and then send to Japan for approval. Interview with Toyota Dealer, October, 1970.

Volkswagen of America takes an average of the retail labor rate in all fifty states and pays all Volkswagen dealers that average. Interview with Volkswagen Dealer, October, 1970.

- 12. FTC Report, 1968, p. 98.
- 13. Chrysler's standards also include the value of parts inventory and number of personnel to be provided by the dealer. Chrysler requires its dealers selling 1,000 cars a year to have 18,050 square feet devoted to servicing. American Motors dealers who sell fifty cars or less per year must have 3,800 square feet of building space of which 66 per cent is devoted to service, while a dealer selling 1,000 cars annually is urged to provide 28,600 square feet of space with the service department occupying 70 per cent of the area. <u>Ibid.</u>, pp. 113-114.

- 14. Ibid., pp. 116-117.
- 15. <u>Ibid</u>., pp. 117-119.
- 16. <u>Ibid</u>., p. 125; Interviews with new car dealers, July to September 1971.
- 17. FTC Report, 1968, pp. 127-128.

Chapter III

- These surveys are used primarily to indicate an existing problem and therefore, do not represent the experience of the entire buying public.
- 2. See Appendix B, Table 1.
- Automobile Manufacturers Association, 1970
 <u>Automobile Facts and Figures</u> (Detroit: 1970),
 p. 9.
- "Warranties...and what should be done about them," <u>Consumer Reports</u>, April, 1969, pp. 177-181.
- "Some variable costs of ownership; repairs, insurance, warranties," <u>Consumer Reports</u>, April, 1970, pp. 201-204.
- 6. See Appendix B, Table 2.
- 7. See Appendix B, Table 3.
- U. S. Federal Trade Commission, <u>Staff Report on Automobile Warranties</u> (Washington: U. S. Government Printing Office, 1968), pp. 63-66. (Hereinafter cited as FTC Report, 1968.)
- 9. B. H. Lovejoy and others, A Study of Garage Repair and Dealer Warranty Practices (Springfield: Clearinghouse for Federal Scientific and Technical Information, 1969), p. 88. Of interest in this study is that the quality of repair was found inadequate. In all of the jobs which involved a safety-critical subsystem of the vehicle, more than ll per cent of all non-warranty and more than 22per cent of all warranty jobs were returned because of inadequate repair. Moreover, more than 6 per cent of the customers involved cited a safety hazard present in non-warranty repair jobs, and more than 11 per cent reported such hazard in repairs under warranty (p. 88).
- 10. FTC Report, 1968, pp. 66-67. During the fourteen-month period between January 1, 1967 and February 29, 1968 the Commission received 380 letters of complaint concerning warranty problems or 13 per cent of the total complaint file. <u>Ibid</u>.
- 11. 15 U. S. C. A. sec. 1381 et. seq. (1963).
- 12. The New York Times Encyclopedic Alamanac

- $\frac{1971}{\text{Educational Division, 1970}}$ (New York: The New York Times Book and
- 13. U. S. Federal Trade Commission, Report on Automobile Warranties (Washington: 1970), p. 47. (Hereinafter cited as FTC Report, 1970.)
- 14. <u>Ibid</u>., p. 48.
- 15. Ibid., p. 45, footnote 1.
- 16. FTC Report, 1968, p. 90; Interviews with new car dealers, July to September, 1971.
- 17. In determining how many cars an average dealer sells, a few of the larger dealers have not been included within the average as they sell between 1,000 and 3,000 cars a year.
- 18. FTC Report, 1970, pp. 73-75.
- 19. <u>Ibid</u>.
- 20. Ibid., pp. 102-103.
- 21. Ibid., pp. 103-104.
- 22. <u>Ibid</u>., p. 105.
- 23. Ibid., p. 119-120.
- 24. Interviews with new car dealers, July to September, 1971.
- 25. FTC Report, 1968, pp. 95-96, 102.
- 26. Ibid., p. 96.
- 27. FTC Report, 1970, p. 110-111.
- 28. <u>Ibid.</u>, pp. 110-114. Manufacturer's studies, however, give different results. <u>Ibid.</u>, pp. 112-113.
- FTC Report, 1968, p. 101. Interviews with new car dealers, July to September 1971.

Chapter IV

- 1. See chapter II.
- U. S. Federal Trade Commission, Report on Automobile Warranties (Washington: 1970), p. 93.

Chapter V

Mass. Gen. Laws Ann., ch. 93B, sec. 5; Miss. Code Ann., sec. 8017.7-06(9); Tenn. Code Ann., sec. 59-1714(h)(7); Wis. Stat. Ann., sec. 218.01(3)(a)(22).

- 2. Miss. Code Ann., sec. 8017.7-06(9).
- Brown, "A Bill of Rights for Auto Dealers,"
 B. C. Ind. & Com. L. Rev. 757, 807 (1971).
- 4. Ibid., p. 809.
- Fla. Stat. Ann., sec. 320.696; Mass. Gen. Laws Ann., ch. 93B, sec. 6; Miss. Code Ann., sec. 8017.7-06(10); Tenn. Code Ann., sec. 59-1714 (h)(7); Wis. Stat. Ann., sec. 218.01(3)(a) (22).
- 6. <u>Mass. Gen. Laws Ann.</u>, ch. 93B, sec. 6; <u>Miss.</u> <u>Code Ann.</u>, sec. 8017.7-06(10).
- 7. <u>Miss. Code Ann.</u>, sec. 8017.7-06(10); <u>Tenn.</u> <u>Code Ann.</u>, sec. 59-1714(h)(7).
- 8. S. B. 277, Arizona, 1970 Legislative Session.
- 9. Brown, p. 807.
- 10. Whitford, "Law and the Consumer Transaction: A Case Study of the Automobile Warranty," 1968 Wis. L. Rev. 1006, 1075, note 175 (1968).
- 11. Brown, p. 807, note 256.
- 12. 7 A. L. R. 3d Validity and Construction of
 Statutes Regulating Dealings between Automobile Manufacturers, Distributors and Dealers,
 1173, 1192.
- 13. Calif. Civil Code, secs. 1790 to 1795.
- 14. Calif. Civil Code, sec. 1793.2 (a).
- 15. Calif. Civil Code, secs. 1793.3, 1793.5.
- 16. <u>Ill. Ann. Stat.</u>, ch. 121, sec. 262L.
- 17. H. B. 3458, Florida, 1970 Legislative Session.
- H. F. 1628, Minnesota, 1969 Legislative Session.
- 19. S. 2726, 90th Cong., 1st Sess. (1967); H. R. 16169, 90th Cong., 1st Sess. (1967).
- 20. S. 2727, 90th Cong., 1st Sess. (1967); H. R. 14746, 90th Cong., 1st Sess. (1967).
- 21. H. R. 10690, 91st Cong., 1st Sess. (1969); H. R. 12656, 91st Cong., 1st Sess. (1969); H. R. 16782, 91st Cong., 2nd Sess. (1970); H. R. 18056, 91st Cong., 2nd Sess. (1970).
- 22. H. R. 13390, 91st Cong., 1st Sess. (1969);
 S. 3074, 91st Cong., 2nd Sess. (1970);
 H. R. 18758, 91st Cong., 2nd Sess. (1970);
 H. R. 19293, 91st Cong., 2nd Sess. (1970).
- 23. S. 986, 92nd Cong., 1st Sess. (1971); H. R. 261, 92nd Cong., 1st Sess. (1971); H. R. 989, 92nd Cong., 1st Sess. (1971); H. R. 4809, 92nd Cong., 1st Sess. (1971); H. R. 5037, 92nd Cong., 1st Sess. (1971);

- H. R. 5519, 92nd Cong., 1st Sess. (1971); H. R. 5942, 92nd Cong., 1st Sess. (1971); H. R. 10673, 92nd Cong., 1st Sess. (1971).
- 24. S. 1221, 92nd Cong., 1st Sess. (1971); H. R. 6314, 92nd Cong., 1st Sess. (1971).
- 25. S. 425, 92nd Cong., 1st Sess. (1971).
- 26. U. S., Congress, Senate, Committee on Commerce, Hearings on S. 986, Consumer Product Warranties and Federal Trade Commission Improvement Act of 1971, 92nd Cong., 1st Sess., 1971, pp. 30-31.
- 27. <u>Ibid</u>., pp. 29-32.
- 28. Ibid., pp. 33-34.
- 29. Ibid.
- 30. <u>Ibid</u>., pp. 35-36.

Chapter VI

- 1. Miss. Code Ann., sec. 8071.7-06(9).
- 2. Mass. Gen. Laws Ann., ch. 93B, sec. 7.
- 3. Mass. Gen. Laws Ann., ch. 93B, sec. 12.
- 4. U. S. Federal Trade Commission, Staff Report on Automobile Warranties (Washington: U. S. Government Printing Office, 1968), p. 145; U. S., Congress, Senate, Consumer Subcommittee of the Committee on Commerce, Hearings on S. 3074, Consumer Products Guaranty Act, 91st Cong., 2nd Sess., 1970, pp. 24-33.

APPENDIX A



PONTIAC MOTOR DIVISION General Motors Corporation



Maintena	1971 PONTIAC
VEHICLE IDENTIFICATION NO.	PRE-DELIVERY SERVICE
VERICLE IDENTIFICATION NO.	ASIN AN ILLEVERY
STOCK NOR.O. NO	AND ADJUSTMENT
KEY NO.	CHECK SHEET
IGNITION COMPARTMENT	· ·
1. UNDER CAR INSPECTION AND SERVICES	 License plate light
CHECK FOR PROPER ASSEMBLY:	• Tail lights
 Steering gear and steering linkage 	Back-up lights
Tie rad clamp boit tarque and clamp position	 Parking lights Stop lights
Front and rear suspension assemblies	Directional signals
Check differential and manual transmission fluid levels	Hazard warning lights
CHECK FOR LEAKS:	Engine warning lights
 Engine and cooling system Transmission and cooler 	
Brake system	3. UNDERHOOD FUNCTIONAL CHECKS
Steering gear	IMPORTANT EMISSION CONTROL CHECKS (DECAL
• Fuel system	SPECIFICATIONS)
Differential	 Set dwell and ignition timing Adjust carburetor fast and slow idle speed,
 Adjust tire inflation pressure to specifications 	mixture, and check for fuel leaks
 Check wheel nuts (assembly and tightness) 	* Automatic transmission fluid level
 Install wheel covers and trim rings 	 Air conditioning sight glass
2. BODY-CHASSIS INSPECTION AND ADJUSTMENTS	4. ROAD TEST
FUNCTIONALLY CHECK AND CORRECT AS NECESSARY:	CHECK AND CORRECT AS NECESSARY:
Operation and alignment of hood, doors,	Steering column ignition lock
windows, deck lid, and all locks and latches	Neutral switch
 Windshield washer and wiper 	Instruments and gauges
 Adjust radio antenna trim 	 Brakes (including parking brake and warning light)
• Headlamp aim	 Throttle controls and engine performance
Check toe in and adjust if necessary	 Transmission performance (including down shift
 All accessories Remove convertible top cover — check top operation 	switch)
and boot fit, when applicable	 Cruise Control, if so equipped Steering, steering wheel center position and
LUBRICANTS AND FLUIDS, CHECK FOR LEAKS AND PROPER	handling
LEVELS, REPAIR AND REPLENISH AS NECESSARY:	Squeaks and rattles
 Power steering pump or steering gear 	 Heater and/or air conditioner
 Brake master cylinder 	• Horns
• Engine oil	
Energizer (level and state of charge)	S. APPEARANCE
 Engine coolant level and freeze protection Windshield washer (level and solvent) 	INSPECT CONDITION AND CORRECT AS NECESSARY:
	• Wash car
 Check throttle linkage for freeness at wide open and closed throttle 	Exterior trim and moldings Exterior frish bound and moldings
 Properly tension all for and accessory drive 	 Exterior finish-brush touch-up, spot paint repair, rub out, and detail clean-up as required
belts	 Interior moldings and hard frim
Start Engine (Parking Brake Set)	 Seat and shoulder belts and anchars
LIGHTS:	 Interior trim-detail clean interior and remove
Headlights	protective covering
Instrument panel lights	6. REMOVE KEY NUMBER SLUGS FROM DOOR AND TRUNK
 Dome and courtesy lights 	KEYS AND PLACE SPARE KEYS AND SLUGS IN ENVELOPE
Side marker lights	PROVIDED
OWNER - DEALER - VEHICLE DATA Fill in owner and vehicle data on face of "Owner Identification"	NOTE: Refer to Service Manual for Correct Specifications
and New Vehicle Warranty" folder provided with vehicle.	
Explain Warranty Provisions:	Above the state of
Maintenance requirements.	Above Services and Adjustments Performed Date
NOTE: Caution owner to save receipts.	Technicion or Supervitor
Review Owner's Manual with owner.	
Demonstrate operation of all accessories.	Delivered by Date

OWNER COPY

APPENDIX B

Table 1

Question: "Was the new car in satisfactory condition when delivered?"

	General Motors	Chrysler	Ford	American Moto	ors Average
1970 Cars		stely 36% of n when deliv		were in an t	ınsatisfactory
1969 Cars % Yes % No	67.0 33.0	63.0 37.0	66.0 34.0	67.0 33.0	65.7 34.3
1968 Cars		ately 33% of n when deliv		were in an u	unsatisfactory
1967 Cars		ately 35% of when delive		were in an t	unsatisfactory
1966 Cars % Yes % No	62.5 37.5	62.0 38.0	63.4 36.6	68.8 31.2	64.2 35.8
1965 Cars % Yes % No	56.7 43.3	63.6 36.4	63.5 36.5	62.1 37.9	61.5 38.5
1964 Cars % Yes % No	63.3 36.7	74.2 25.8	68.8 31.2	68.5 31.5	68.7 31.3
1963 Cars % Yes % No	67.2 32.8	76.4 23.6	70.0 30.0	63.8 36.2	69.3 30.7

Source: U. S. Federal Trade Commission, Staff Report on Automobile Warranties (Washington: U. S. Government Printing Office, 1968), p. 58; "Warranties: This year's retreat," Consumer Reports, April, 1968, pp. 176-179; "Warranties...and what should be done about them," Consumer Reports, April, 1969, pp. 177-181; "Some variable costs of ownership: Repairs, insurance, warranties," Consumer Reports, April, 1970, pp. 201-204; "From showroom to service shop," Consumer Reports, April, 1971, pp. 203-206.

Table 2

Question: "Was warranty work

performed satisfactorily?"

	General Motors	Chrysler	Ford	American Mot	ors Total
1970 Cars				were unable under the wa	e to get their tranty.
1969 Cars				were unable under the wa	e to get their tranty.
1968 Cars				were unable under the wa	e to get their ranty.
1967 Cars				were unable under the wa	e to get their ranty.
1966 Cars % Yes % No Total	76.9 23.1 3,921	82.4 17.6 2,653	81.3 18.7 2,461	83.8 16.2 315	79.9 20.1 9,350
1965 Cars % Yes % No Total	70.1 29.9 6,452	77.6 22.4 3,408	77.4 22.6 3,543	78.1 21.9 885	74.2 25.8 14,288
1964 Cars % Yes % No Total	71.5 28.5 5,730	80.7 19.3 2,079	76.4 23.6 2,161	76.0 24.0 834	74.6 25.4 10,804
1963 Cars % Yes % No Total	69.5 30.5 3,998	77.4 22.6 1,443	75.2 24.8 1,784	72.9 27.1 893	72.5 27.5 8,118

Source: U. S. Federal Trade Commission, Staff Report on Automobile Warranties (Washington: U. S. Government Printing Office, 1968), p. 60; "Warranties: This year's retreat," Consumer Reports, April, 1968, pp. 176-179; "Warranties...and what should be done about them," Consumer Reports, April, 1969, pp. 177-181; "Some variable costs of ownership: Repairs, insurance, warranties," Consumer Reports, April, 1970, pp. 201-204; "From showroom to service shop," Consumer Reports, April, 1971, pp. 203-206.

Table 3

Question: "If warranty work was not performed satisfactorily, what was the trouble?"

	General Motors	Chrysler	<u>Ford</u>	American Motors	<u>Total</u>
1966 Cars					
Dealer did not cooperate	11.1	11.7	12.1	10.0	11.5
Not covered	9.3	5.8	6.7	12.5	7.9
Dealer could not fix	71.6	69.2	70.0	70.0	70.6
Other	8.0	13.3	11.1	7.5	10.0
Total	795	377	404	40	1,616
1965 Cars					
Dealer did not cooperate	14.9	18.0	14.2	10.3	15.2
Not covered	12.6	11.7	8.2	9.1	11.2
Dealer could not fix	66.3	61.2	67.3	69.1	65.6
Other	6.2	9.1	10.3	11.5	8.0
Total	1,597	649	681	165	3,092
1964 Cars					
Dealer did not cooperate	15.8	18.1	15.2	15.6	16.0
Not covered	11.4	18.4	11.2	9.0	12.2
Dealer could not fix	64.8	54.8	66.4	67.1	63.8
Other	8.0	8.7	7.2	8.4	8.0
Total	1,293	343	429	167	2,232
1963 Cars					
Dealer did not cooperate	19.0	18.6	12.8	13.0	17.1
Not covered	14.7	18.6	11.4	6.2	13.7
Dealer could not fix	59.0	52.5	67.6	75.6	61.5
Other	7.3	10.3	8.2	5.2	7.7
Total	1,029	280	376	193	1,878

Source: U. S. Federal Trade Commission, Staff Report on Automobile Warranties (Washington: U. S. Government Printing Office, 1968), p. 61. The responses for years following 1966 are unavailable, although repeated inquiries were made to Consumers Union.

APPENDIX C

Questionnaire

In answering the following questions, if the spaces provided are not sufficient, please use the back of the page. Most of the questions may be answered by simply placing an X in the appropriate box; a few questions ask for written-in answers. You may write additional comments whenever you wish to do so. Please ignore the numbers besides the questions and answers; they are for machine tabulation only.

The Legislative Reference Bureau would like to thank you in advance for your cooperation in completing this questionnaire.

1.	•	ly own a 1969 automo			
	1 [] Yes		2 [] No		
	If your answer complete the requestions.	is <u>yes</u> , please est of the	If your answer is <u>no</u> , disregard the rest of the questions and return the questionnaire to the		
	If you own more than one 1969 automobile, please answer the questions for the car you first bought in 1969.		Legislative Reference Bureau.		
2.	Did you purcha	se your automobile f	rom:		
		on the mainland rom the manufacturer agency			
3.	sed your automobile explain the termee to you?				
	1 [] Yes 2 [] No				
4.	Please indicate automobile was		model, and the month that your 1969		
	Manufacturer:	2 [] Chrysler	ors 5 [] Datsun 6 [] Toyota ors 7 [] Volkswagen		
	Model				
	Month sold to	70u			

5.	1 [you the original owner of the automobile?] Yes] No					
	If	your answer is <u>no</u> , please indicate the year and month in which you uired the automobile.					
	1 [2 [
6.	How	many miles has the automobile traveled?					
	3 [4 [5 [6 [7 [Less than 12,000 12,000 18,000 24,000 30,000 36,000 42,000 More than 42,000					
7.	Whe	n the automobile was delivered to you, was it in satisfactory condition					
1 [] Yes 2 [] No							
	If :	your answer is no, please answer the following:					
	a. Was the unsatisfactory condition of your automobile:						
		[] Mechanical problem [] Body exterior problem [] Body interior problem					
		(1) If your answer is body exterior or body interior, please explain:					
	b.	Did you have the condition corrected?					
		1 [] Yes 2 [] No					
		If your answer is <u>yes</u> :					
		(1) Was the condition corrected by:					
		<pre>1 [] Dealer</pre>					
		(2) Was the condition corrected to your satisfaction?					
		l [] Yes 2 [] No					

		[] Dealer did not cooperate [] Not covered by the warranty or predelivery service [] Dealer could not fix [] Other
		Explanation:
8.	rep 1 [er delivery and use of the automobile by you, did you have any work or air done under your new car warranty or guarantee?] Yes] No
	Ιf	your answer is <u>yes</u> , please indicate:
	а.	The approximate dates on which the work was done
	b.	The nature of the repair work that was done: [] Mechanical [] Body exterior [] Body interior Explanation:
	с.	Did you have to return the car more than once for the same warranty or guaranty problem? 1 [] Yes 2 [] No If your answer is yes, how many times? [] 1 [] 2
		[] 3 [] 4 [] 5 or more
		How long did the repair take? 1 [] 1 day 2 [] 2 to 3 days 3 [] 4 to 5 days 4 [] 1 to 2 weeks 5 [] 1 month 6 [] More than 1 month
		What was the problem?

	d.	Was the repair work done in a satisfactory manner?
		1 [] Yes 2 [] No
		If your answer is no, check one or more and please explain:
		<pre>[] Dealer did not cooperate [] Not covered by the warranty [] Dealer could not fix [] Other</pre>
		Explanation:
Bur wil	eau v 1 be	ople find new automobile warranties confusing. The Legislative Reference would like to determine how much confusion exists. The following questions used to determine how well you understand your warranty. You may, if you book at your warranty to answer these questions.
9.	How more	long is the length of the warranty on your automobile? Check one or
	2 [3 [4 [5 [<pre>1 12,000 miles/12 months 24,000 miles/24 months 36,000 miles/36 months 1 50,000 miles/5 years 1 60,000 miles/6 years 1 Don't know</pre>
10.		er than tires and battery, is the length of the warranty on your auto- le the same for all parts?
	2 [] Yes] No] Don't know
11.	mobi	he length of the warranty is not the same for all parts of the auto- le, other than tires and battery, what parts are covered by different anty periods?
	2 [3 [4 [5 [Body Drive train and related parts Paint Interior Don't know None
12.		you required to follow maintenance services and schedules to keep warranty or guarantee?
	2 [] Yes] No] Don't know

IJ.	where are these maintenance services to be performed:
	<pre>1 [] New car dealer 2 [] Service station 3 [] Other 4 [] Don't know</pre>
14.	If the brake linings of your automobile were worn out at 17,000 miles, would you be able to have them repaired at no cost to you under the warranty or guarantee?
	1 [] Yes 2 [] No 3 [] Don't know
15.	If the paint on your automobile had deteriorated and you had the automobile for eleven months, could you have the automobile repainted at no cost to you under the warranty or guarantee?
	1 [] Yes 2 [] No 3 [] Don't know

APPENDIX D

The tables in this report were obtained from a compilation of the answers to a questionnaire sent to registered owners of 1969 cars obtained through a simple random sample. The simple random sampling technique is a statistical method insuring each individual car owner an equal chance to be selected in a sample. The tables in this report represent an expansion of the actual responses for each question. The expansion of the responses was made by attaching weights to each manufacturer. A weight is the multiplication of subgroup data (responses) by a factor or factors so as to bring their values into proper proportions relative to the population (total manufacturer's cars) or to other subgroups surveyed. The expansion was calculated by dividing the total number of cars for a particular manufacturer (e.g. General Motors 9,875) by the total number of responses (93) to find the weight for each response (106). This weight was in turn used to expand the responses by multiplying the weight assigned to that manufacturer (e.g. General Motors 106) by the number of responses for a particular question (e.g. 46) for an answer (4,876). This answer was in turn divided by the total number of cars as weighed for each manufacturer (e.g. General Motors 9,858) to obtain an actual percentage of the total number of cars for that manufacturer (49.4%). That percentage is used in this report in conjunction with the actual number of responses found in parenthesis in the tables.

Table of Population, Responses, Weights, and Standard Error

Manufacturer	Population	Respondents	Weights	Standard Error
American Motors	1,244	94	13	.0954
Chrysler	8,409	114	74	.0924
Ford	5,502	107	51	.0948
General Motors	9,875	93	106	.1027
Datsun	3,626	95	38	.0999
Toyota	4,107	97	42	.0991
Volkswagen	4,508	96	47	.0999

The standard error was determined by using this formula:

SE = 2 X
$$\sqrt{\frac{.25}{N}}$$
 X $(1 - \frac{n}{N})$

Where SE stands for standard error

- 2 is a correction in the formula for a finite population
- N represents the total population
- n represents the number of respondents.

Although the respondents may appear to be small in number, under the statistical method used, the probability of error on account of the lack of a greater number of responses is in the magnitude of approximately plus or minus 10 per cent.

The tables in this report concerning predelivery servicing and warranty servicing contain three vertical columns. Column one is a compilation of all 696 responses to the questionnaire which was answered by persons who purchased their cars from any of the following:

(1)	A local dealer	(489)
(2)	A dealer on the mainland	(70)
(3)	Direct from the manufacturer	(2)
(4)	Used car agency	(56)
(5)	Original owner	(57)
(6)	Any other seller	(20)
(7)	No answer	(2)

Column two is composed of responses only from those persons who are original owners and who purchased their cars from local dealers (489). In order to ascertain if persons who are original owners but who buy from a non-local source are treated differently by local dealers, a third column is established to reflect these responses. In using the tables it should be kept in mind that some questions required more than one answer and in some instances persons did not answer all the questions.

Table 1
Question: "What was the unsatisfactory condition of your automobile?"

		Responses by Original Own Purchasing Car from:	
			Dealer on
	Total Responses	Local Dealer	Mainland or Manufacturer
	TOCAL RESPONSES	TOCAL DEALEL	Manuracturer
American Motors			
Mechnical	22.3% (21)	21.1% (12)	33.3% (4)
Body exterior	24.5% (23)	28.1% (16)	50.0% (6)
Body interior	21.3% (20)	21.1% (12)	50.0% (6)
Chrysler			
Mechnical	21.9% (25)	21.8% (19)	50.0% (3)
Body exterior	14.9% (17)	16.1% (14)	33.3% (2)
Body interior	14.0% (16)	16.1% (14)	16.7% (1)
Ford			
Mechanical	21.5% (23)	23.5% (16)	7.1% (1)
Body exterior	32.7% (35)	39.7% (27)	7.1% (1)
Body interior	23.4% (25)	26.5% (18)	14.3% (2)
General Motors			
Mechanical	23.7% (22)	26.2% (16)	10.0% (1)
Body exterior	19.4% (18)	21.3% (13)	20.0% (2)
Body interior	15.1% (14)	18.0% (11)	10.0% (1)
Datsun			
Mechanical	17.9% (17)	15.8% (9)	0% (0)
Body exterior	10.5% (10)	8.8% (5)	0% (0)
Body interior	0% (0)	0% (0)	0% (0)
Toyota			
Mechanical	23.7% (23)	20.9% (14)	33.3% (1)
Body exterior	5.2% (5)	6.0% (4)	0% (0)
Body interior	5.2% (5)	6.0% (4)	0% (0)
Volkswagen			
Mechanical	11.5% (11)	13.7% (7)	4.8% (1)
Body exterior	7.3% (7)	7.8% (4)	0% (0)
Body interior	5.2% (5)	5.9% (3)	9.5% (2)

 $\label{eq:table 2} \mbox{ Table 2}$ Question on reasons for dissatisfaction with repair.

			Responses by Original Owners Purchasing Car from:			
					Deale:	r on
					Mainla	nd or
	Total Re	sponses	<u>Local I</u>	Dealer	Manufa	cturer
American Motors						
Dealer did not cooperate Not covered by warranty or	10.6%	(10)	12.3%	(7)	25.0%	(3)
predelivery service	2.1%	(2)	3.5%	(2)	0%	(0)
Dealer could not fix	7.4%	(7)	12.3%	(7)		(0)
Other	8.5%	(8)	10.5%	(6)	8.3%	
Chrysler						
Dealer did not cooperate	3.5%	(4)	3.4%	(3)	16.7%	(1)
Not covered by warranty or	A 000	(4.)				
predelivery service	0.9%	(1)	1.1%	(1)		(0)
Dealer could not fix	4.4%	(5)	5.7%	(5)		(0)
Other	3.5%	(4)	.3.4%	(3)	0%	(0)
Ford						
Dealer did not cooperate	8.4%	(9)	11.8%	(8)	0%	(0)
Not covered by warranty or						
predelivery service	4.7%	(5)	2.9%	(2)	7.1%	(1)
Dealer could not fix	7.5%	(8)	10.3%	(7)	0%	(0)
Other	10.3%	(11)	16.2%	(11)	0%	(0)
General Motors						
Dealer did not cooperate	8.6%	(8)	11.5%	(7)	0%	(0)
Not covered by warranty or	- •	(+)		\.,	-	(0)
predelivery service	6.5%	(6)	8.2%	(5)	10.0%	(1)
Dealer could not fix	5.4%	(5)	8.2%	(5)		(0)
Other	3.2%	(3)	4.9%	(3)		(0)
Datsun						
Dealer did not cooperate	3.2%	(3)	5.3%	(3)	0%	(0)
Not covered by warranty or	J • 2/6		J. J/6	(3)	076	(0)
predelivery service	1.1%	(1)	0%	(0)	0%	(0)
Dealer could not fix	0%	(0)	0%	(0)		(0)
Other	2.1%	(2)	3.5%	(2)		(0)
				` '		` ,
Toyota	en 18 (92	(0)	0 000		w. m.	463
Dealer did not cooperate Not covered by warranty or	2.1%	(2)	3.0%	(2)	0%	(0)
predelivery service	0%	(0)	0%	(0)	0 %	(0)
Dealer could not fix	5.2%	(5)	7.5%	(5)	0%	
Other	4.1%	(4)	4.5%	(3)	0%	
Volkswagen						
Dealer did not cooperate	2.1%	(2)	2.0%	(1)	1. 09	(1)
Not covered by warranty or	£ • 1/o	(4)	2.0%	(1)	4.8%	(1)
predelivery service	1.0%	(1)	0%	(0)	0%	(0)
Dealer could not fix	4.2%	(4)	2.0%	(1)	9.5%	
Other	3.1%	(3)	5.9%	(3)	0%	
					_	

Table 3

Question: "What was the unsatisfactory condition of your automobile?"

		Responses by O Purchasing	Car from:
			Dealer on
	_		Mainland or
	Total Responses	Local Dealer	Manufacturer
American Motors	/		
Mechanical	30.9% (29)	36.8% (21)	58.3% (7)
Body exterior	13.8% (13)	17.5% (10)	16.7% (2)
Body interior	13.8% (13)	19.3% (11)	16.7% (2)
Chrysler			
Mechanical	48.2% (55)	55.2% (48)	50.0% (3)
Body exterior	14.0% (16)	14.9% (13)	50.0% (3)
Body interior	10.5% (12)	11.5% (10)	16.7% (1)
		*******	10 1 / O (1)
Ford			
Mechanical	45.8% (49)	54.4% (37)	42.9% (6)
Body exterior	10.3% (11)	13.2% (9)	7.1% (1)
Body interior	12.1% (13)	14.7% (10)	14.3% (2)
General Motors			
Mechanical	48.4% (45)	57.4% (35)	40.0% (4)
Body exterior	9.7% (9)	14.8% (9)	08 (0)
Body interior	7.5% (7)	9.8% (6)	0% (0)
body interior	7.38 (7)	2.05 (0)	08 (0)
Datsun			
Mechanical	30.5% (29)	36.8% (21)	50.0% (1)
Body exterior	1.1% (1)	1.8% (1)	0% (0)
Body interior	3.2% (3)	5.3% (3)	0% (0)
em			
Toyota Mechanical	30.9% (30)	35.8% (24)	۸۵. (۸)
Body exterior	5.2% (5)	7.5% (24)	0% (0)
Body exterior Body interior	1.0% (1)		0% (0)
pody Interior	1.04 (1)	1.5% (1)	0% (0)
Volkswagen			
Mechanical	45.8% (44)	52.9% (27)	38.1% (8)
Body exterior	6.3% (6)	9.8% (5)	4.8% (1)
Body interior	10.4% (10)	13.7% (7)	9.5% (2)

Table 4

Question: Did you have to return the car more than once for the same warranty problem?

		Responses by O	
		Purchasing	
			Dealer on Mainland or
	Total Responses	Local Dealer	Manufacturer
	Total Responses	LOCAL DEALEL	Fiditulacturer
American Motors			
Returned	29.8% (28)	38.6% (22)	41.7% (5)
Not Returned	16.0% (15)	17.5% (10)	25.0% (3)
ivo icculiica	10.00 (13)	17.50 (10)	23.08 (3)
Chrysler			
Returned	33.3% (38)	39.1% (34)	33.3% (2)
Not Returned	23.7% (27)	26.4% (23)	16.7% (1)
1100001100	201,0 (2.,		201/0 (2)
Ford			
Returned	31.8% (34)	39.7% (27)	28.6% (4)
Not Returned	25.2% (27)	26.5% (18)	42.9% (6)
	23.23 (2,7	20.00 (20)	12.50 (0)
General Motors			
Returned	26.9% (25)	34.4% (21)	10.0% (1)
Not Returned	29.0% (27)	32.8% (20)	30.0% (3)
			00400 (0)
Datsun			
Returned	17.9% (17)	24.6% (14)	50.0% (1)
Not Returned	15.8% (15)	17.5% (10)	0% (0)
			3 \$ (3)
Toyota			
Returned	16.5% (16)	19.4% (13)	0% (0)
Not Returned	16.5% (16)	19.4% (13)	0% (0)
			• • (• /
Volkswagen			
Returned	24.0% (23)	29.4% (15)	33.3% (7)
Not Returned	31.3% (30)	31.4% (16)	23.8% (5)
	" , , ,		

 $\label{eq:table 5} \mbox{ \begin{tabular}{ll} Table 5 \\ \mbox{ \end{tabular} Question on number of times car returned for same problem. \end{tabular}}$

		Responses by Original Owners Purchasing Car from:			
	<u>Total Responses</u>	Local Dealer	Dealer on Mainland or Manufacturer		
American Motors					
1	1.1% (1)	1.8% (1)	0% (0)		
2	13.8% (13)	19.3% (11)	8.3% (1)		
3	7.4% (7)	7.0% (4)	25.0% (3)		
4	3.2% (3)	5.3% (3)	0% (0)		
5 or more	4.3% (4)	5.3% (3)	8.3% (1)		
Chrysler					
1	2.6% (3)	3.4% (3)	0% (0)		
2	12.3% (14)	16.1% (14)	0% (0)		
3	9.6% (11)	9.2% (8)	33.3% (2)		
4	5.3% (6)	5.7% (5)	0% (0)		
5 or more	3.5% (4)	4.6% (4)	0% (0)		
Ford					
1	0.9% (1)	0% (0)	7.1% (1)		
2	14.0% (15)	17.6% (12)	14.3% (2)		
3	10.3% (11)	14.7% (10)	0% (0)		
4	4.7% (5)	4.4% (3)	7.1% (1)		
5 or more	1.9% (2)	2.9% (2)	0% (0)		
General Motors					
1	0% (0)	0% (0)	0% (0)		
2	12.9% (12)	14.8% (9)	10.0% (1)		
3	9.7% (9)	13.1% (8)	0% (0)		
4	1.1% (1)	1.6% (1)	0% (0)		
5 or more	3.2% (3)	4.9% (3)	0% (0)		
Datsun					
1	1.1% (1)	1.8% (1)	0% (0)		
2	9.5% (9)	14.0% (8)	50.0% (1)		
3	5.3% (5)	7.0% (4)	0% (0)		
4	2.1% (2)	1.8% (1)	0% (0)		
5 or more	0% (0)	0% (0)	0% (0)		
Toyota					
1	0% (0)	0% (0)	0% (0)		
2	7.2% (7)	9.0% (6)	0% (0)		
3	4.1% (4)	6.0% (4)	0% (0)		
4	1.0% (1)	0% (0)	0% (0)		
5 or more	4.1% (4)	4.5% (3)	0% (0)		
Volkswagen					
1	2.1% (2)	3.9% (2)	0% (0)		
2	10.4% (10)	11.8% (6)	14.3% (3)		
3	7.3% (7)	9.8% (5)	9.5% (2)		
4	2.1% (2)	2.0% (1)	4.8% (1)		
5 or more	2,1% (2)	2.0% (1)	4.8% (1)		

Table 6

Question: How long did repair take on same problem?

		Responses by O	_
	Total Responses	Local Dealer	Mainland or Manufacturer
American Motors 1 day 2 to 3 days 4 to 5 days 1 to 2 weeks 1 month More than one month	14.9% (14) 12.8% (12) 0% (0) 1.1% (1) 0% (0) 1.1% (1)	21.1% (12) 14.0% (8) 0% (0) 1.8% (1) 0% (0) 1.8% (1)	None
Chrysler 1 day 2 to 3 days 4 to 5 days 1 to 2 weeks 1 month More than one month	19.3% (22) 8.8% (10) 2.6% (3) 0% (0) 0% (0) 2.6% (3)	23.0% (20) 9.2% (8) 3.4% (3) 0% (0) 0% (0) 3.4% (3)	None
Ford 1 day 2 to 3 days 4 to 5 days 1 to 2 weeks 1 month More than one month	17.8% (19) 9.3% (10) 0.9% (1) 1.9% (2) 0.9% (1) 0% (0)	19.1% (13) 14.7% (10) 0% (0) 2.9% (2) 1.5% (1) 0% (0)	None
General Motors 1 day 2 to 3 days 4 to 5 days 1 to 2 weeks 1 month More than one month	15.1% (14) 5.4% (5) 2.2% (2) 1.1% (1) 1.1% (1)	18.0% (11) 6.6% (4) 3.3% (2) 1.6% (1) 1.6% (1)	None
Datsun 1 day 2 to 3 days 4 to 5 days 1 to 2 weeks 1 month More than one month	13.7% (13) 3.2% (3) 1.1% (1) 0% (0) 0% (0) 0% (0)	15.8% (9) 5.3% (3) 1.8% (1) 0% (0) 0% (0) 0% (0)	None
Toyota 1 day 2 to 3 days 4 to 5 days 1 to 2 weeks 1 month More than one month	10.3% (10) 2.1% (2) 2.1% (2) 0% (0) 0% (0) 1.0% (1)	13.4% (9) 3.0% (2) 0% (0) 0% (0) 0% (0) 1.5% (1)	None
Volkswagen 1 day 2 to 3 days 4 to 5 days 1 to 2 weeks 1 month More than one month	17.7% (17) 2.1% (2) 2.1% (2) 1.0% (1) 0% (0) 1.0% (1)	23.5% (12) 2.0% (1) 2.0% (1) 0% (0) 0% (0) 2.0% (1)	None

Table 7

Question on reasons for dissatisfaction with repair.

			Responses by Original Owners Purchasing Car from:			
	Total Re	sponses	Local	<u>Dealer</u>	Deale Mainla <u>Manufa</u>	
American Motors						
Dealer did not cooperate Not covered by warranty or	7.4%	(7)	8.8%	(5)	16.7%	(2)
predelivery service	0%	(0)	0%	(0)	0%	(0)
Dealer could not fix	8.5%	(8)	10.5%		16.7%	
Other	6.4%	(6)	8.8%	(5)	8.3%	(1)
Chrysler						
Dealer did not cooperate	4.4%	(5)	4.6%	(4)	16.7%	(1)
Not covered by warranty or	च ≰ च /ও	(3)	7,076	(4)	10.110	(1)
predelivery service	0.9%	(1)	1.1%	(1)	0%	(0)
Dealer could not fix	10.5%		10.3%		33.3%	
Other	4.4%	(5)	4.6%			(0)
Ford						
Dealer did not cooperate	6.5%	(7)	7.4%	(5)	7.1%	(1)
Not covered by warranty or	0.5%	(O	J + 91/0	(3)	/ . 1/0	(1)
predelivery service	1.9%	(2)	2.9%	(2)	0%	(0)
Dealer could not fix	8.4%	(9)	13.2%			(0)
Other	3.7%	(4)	4.4%			(0)
General Motors						
Dealer did not cooperate	5.4%	(5)	4.9%	(2)	10.0%	(1)
Not covered by warranty or	J.470	(3)	4.76	(3)	10.0%	(1)
predelivery service	3.2%	(3)	1.6%	(1)	10.0%	(1)
Dealer could not fix	8.6%	(8)	13.1%			(0)
Other	5.4%	(5)	8.2%			(0)
Datsun						
Dealer did not cooperate	0%	(0)	0%	(0)	09	(0)
Not covered by warranty or	078	(0)	0 %	(0)	070	(0)
predelivery service	1.1%	(1)	1.8%	(1)	0%	(0)
Dealer could not fix	4.2%	(4)	7.0%			(0)
Other	3.2%	(3)	5.3%			(0)
Toyota						
Dealer did not cooperate	6.2%	(6)	6.0%	00	0%	(0)
Not covered by warranty or	0 ≱	(0)	0.0%	(4)	076	(0)
predelivery service	0%	(0)	0%	(0)	0%	(0)
Dealer could not fix	7.2%	(7)	10.4%		0%	
Other	3.1%	(3)	1.5%		0%	
Volkswagen						
Dealer did not cooperate	2.1%	(2)	0%	(0)	9.5%	(2)
Not covered by warranty or	Z. 110	(4)	U /u	(0)	9.36	14)
predelivery service	5.2%	(5)	9.8%	(5)	0%	(0)
Dealer could not fix	3.1%	(3)	5.9%		0%	
Other	6.3%	(6)	9.8%		4.8%	
	U . J/6	(9)	J • U/o	(7)	+ • O /o	(1)

Total responses by all persons answering the questionnaire are not given in Tables 8 to 14. Only responses from original owners are presented since the used car owners either did not receive a warranty due to expiration of the warranty period prior to purchase or indicated by their answers very little understanding of the warranty, thus tending to cloud the results.

Table 8

Question: How long is the length of the warranty on your automobile?

	Resp	onses by O	riginal Own	ers
		Purchasing		
			Dealer	
			Mainland	d or
	Local 1	<u>Dealer</u>	Manufac	turer
American Motors				
Correct	10.6%	(10)	21.2%	(2)
Partially correct	27.6%		63.8%	(6)
Incorrect	11.7%		21.2%	(2)
Don't know	9.5%		21.2%	(2)
Chrysler	J.J.	(2)	2. ± • 2. 0	(4-)
Correct	12.2%	(14)	17.5%	(2)
Partially correct	56.1%		4.3%	(5)
Incorrect	7.0%		0%	(0)
Don't know		(5)	0%	(0)
Ford	4. 50	(3)	0.8	(0)
Correct	8.4%	(9)	9.3%	(1)
Partially Correct	32.7%		65.4%	(7)
Incorrect	15.8%	(17)	18.6%	(2)
Don't know	11.2%	(12)	37.3%	(4)
General Motors				
Correct	7.5%	(7)	1.0%	(1)
Partially correct	49.4%	(46)	5.3%	(5)
Incorrect	3.2%	(3)	2.1%	(2)
Don't know	7.5%	(7)	1.0%	(1)
Datsun				
Correct	46.3%	(44)	10.5%	(1)
Incorrect	8.4%	(8)	10.5%	(1)
Don't know	4.2%	(4)	0 %	(0)
Toyota				
Correct	48.4%	(47)	3.0%	(3)
Incorrect	4.1%	(4)	0 %	(0)
Don't know	13.4%	(13)	0 %	(0)
Volkswagen				
Correct	39.5%	(38)	17.7%	(17)
Incorrect	7.2%	(7)	2.0%	
Don't know	6.2%	(6)	2.0%	(2)

Table 9

Question: Is the length of the warranty on your automobile the same for all parts?

		onses by Ori Purchasing C		ers
			Dealer	
			Mainlan	d or
	Local	Dealer	Manufac	turer
				· · · · · · · · · · · · · · · · · · ·
American Motors				
Correct	42.1%	(24)	58.3%	(7)
Incorrect	17.5%		0%	(0)
Don't Know	35.1%		41.7%	(5)
	00.20	(-0)	****	(0,
Chrysler				
Correct	54.0%	(47)	66.7%	(4)
Incorrect	19.5%		0%	(0)
Don't Know	24.1%	•	33.3%	(2)
Don't know	24.10	(44)	33.35	(2)
Ford				
Correct	41.2%	(28)	57.1%	(8)
Incorrect	19.1%		14.3%	
Don't Know	38.2%		28.6%	
DON'T KNOW	30.48	(20)	∠0.05	(4)
General Motors				
Correct	59.0%	(36)	60.0%	(6)
	11.5%		10.0%	
Incorrect	27.9%			
Don't Know	21.98	(17)	20.0%	(2)
Datsun				
Correct	40.4%	(23)	100.0%	(2)
	17.5%	, .	0%	(0)
Incorrect			= :	
Don't Know	35.1%	(20)	0 &	(0)
Morrota				
Toyota	41 00	(20)	66.7%	(2)
Correct	41.8%	- •		
Incorrect	16.4%		0%	(0)
Don't Know	38.8%	(26)	33.3%	(1)
Molleguagen				
Volkswagen	מו כיו	(22)	E7 10	1391
Correct	43.1%		57.1%	
Incorrect	25.5%		28.6%	(6)
Don't Know	31.4%	(16)	14.3%	(3)

Table 10

Question: What parts are covered by different warranty periods?

	Responses by Or Purchasing	Car from:
	Local Dealer	Dealer on Mainland or Manufacturer
American Motors Correct Incorrect Don't know	35.1% (20) 10.5% (6) 31.6% (18)	41.7% (5) 16.7% (2) 33.3% (4)
Chrysler Correct Incorrect Don't know	32.2% (28) 19.5% (17) 27.6% (24)	16.7% (1) 16.7% (1) 33.3% (2)
Ford Correct Incorrect Don't know	30.9% (21) 8.8% (6) 45.6% (31)	28.6% (4) 21.3% (3) 42.9% (6)
General Motors Correct Incorrect Don't know	42.6% (26) 18.1% (11) 32.8% (20)	40.0% (4) 10.0% (1) 30.0% (3)
Datsun Correct Incorrect Don't know	8.8% (5) 10.6% (6) 40.4% (23)	0% (0) 0% (0) 0% (0)
Toyota Correct Incorrect Don't know	6.0% (4) 10.5% (7) 38.8% (26)	33.3% (1) 0% (0) 33.3% (1)
Volkswagen Correct Incorrect Don't know	9.8% (5) 19.6% (10) 41.2% (21)	4.8% (1) 14.4% (3) 28.6% (6)

Table 11

Question: "Are you required to follow maintenance services and schedules to keep the warranty or guarantee in force?"

	Responses by O Purchasing	
		Dealer on
		Mainland or
	Local Dealer	Manufacturer
American Motors		
Correct	73.7% (42)	100.0% (12)
Incorrect	5.3% (3)	0% (0)
Don't know	17.5% (10)	0% (0)
DOIL C KHOW	17.36 (10)	0 6 (0)
Chrysler		
Correct	87.4% (76)	66.7% (4)
Incorrect	4.6% (4)	16.7% (1)
Don't know	4.6% (4)	0% (0)
DOIL C KHOW	4.05 (4)	06 (0)
Ford		
Correct	79.4% (54)	64.3% (9)
Incorrect	5.9% (4)	7.1% (1)
Don't know	13.2% (9)	21.4% (3)
DOIL C KHOW	13.28 (9)	21.45 (3)
General Motors		
Correct	82.0% (50)	80.0% (8)
Incorrect	6.6% (4)	0% (0)
Don't know	11.5% (7)	10.0% (1)
DON C KNOW	11.50 (//	10.02 (1)
Datsun		
Correct	68.4% (39)	50.0% (1)
Incorrect	5.3% (3)	50.0% (1)
Don't know	21.1% (12)	0% (0)
DOM C MITOW	21.10 (12)	0 0 (0)
Toyota		
Correct	59.7% (40)	100.0% (3)
Incorrect	17.9% (12)	0% (0)
Don't know	19.4% (13)	0% (0)
2 - 1 - 2 - 1 - 2 - 1 - 2 - 2 - 2 - 2 -	10.40 (10)	0 0 (0)
Volkswagen		
Correct	90.2% (46)	95.2% (20)
Incorrect	5.9% (3)	4.8% (1)
Don't know	3.9% (2)	0% (0)
7057 C 12110M	J. J. (2)	0.0 (0)

Table 12

Question on where warranty maintenance services are to be obtained.

	Resp	onses by Origi Purchasing Car	
	-		Dealer on Mainland or
	Local	Dealer	Manufacturer
American Motors New Car Dealer Service Station Other Don't Know	7.0% 1.8%	(37) (4) (5 (1) (8)	58.3% (7) 8.3% (1) 8.3% (1) 0% (0)
Chrysler New Car Dealer Service Station Other Don't Know	24.1%	(43) (21) (4) (4) (2)	16.7% (1) 0% (0) 33.3% (2) 0% (0)
Ford New Car Dealer Service Station Other Don't Know	5.9%	(42) (4) (5) (8)	42.9% (6) 28.6% (4) 7.1% (1) 21.4% (3)
General Motors New Car Dealer Service Station Other Don't Know	27 . 9%	(25) (17) (0) (6)	20.0% (2) 20.0% (2) 10.0% (1) 0% (0)
Datsun New Car Dealer Service Station Other Don't Know	70.2% 12.3% 1.8% 7.0%	(7) (1)	50.0% (1) 0% (0) 50.0% (1) 0% (0)
Toyota New Car Dealer Service Station Other Don't Know		(4) (3)	100.0% (3) 0% (0) 0% (0) 0% (0)
Volkswagen New Car Dealer Service Station Other Don't Know	74.5% 3.9% 13.7% 0%	(2) (7)	85.7% (18) 4.8% (1) 4.8% (1) 0% (0)

Table 13

Question: If your brake linings wear out at 17,000 miles, can free warranty repair be obtained?

	Responses by Original Owners Purchasing Car from:			
	Local Dealer	Dealer on Mainland or Manufacturer		
	DOCAL DEALEL	Manuracturer		
American Motors Correct Incorrect Don't Know	54.4% (3) 0% (0) 43.9% (25)	41.7% (5) 0% (0) 58.3% (7)		
Charral or				
Chrysler Correct Incorrect Don't Know	47.1% (41) 6.9% (6) 43.7% (38)	33.3% (2) 0% (0) 50.0% (3)		
Ford				
Correct Incorrect Don't Know	55.9% (38) 0% (0) 41.2% (28)	57.1% (8) 0% (0) 42.9% (6)		
General Motors				
Correct Incorrect Don't Know	55.7% (34) 3.3% (2) 39.3% (24)	50.0% (5) 0% (0) 40.0% (4)		
Datsun				
Correct Incorrect Don't Know	57.9% (33) 5.3% (3) 35.1% (20)	50.0% (1) 50.0% (1) 0% (0)		
Toyota				
Correct Incorrect Don't Know	58.2% (39) 4.5% (3) 35.8% (24)	33.3% (1) 0% (0) 66.7% (2)		
Volkswagen				
Correct Incorrect Don't Know	43.1% (22) 7.8% (4) 45.1% (23)	38.1% (8) 23.8% (5) 38.1% (8)		

Question: If paint deteriorates in eleven months, can free warranty repair be obtained?

Responses by Original Owners Purchasing Car from: Dealer on Mainland or Manufacturer Local Dealer American Motors 25.0% Correct 40.4% (23) (3)Incorrect 12.3% (7) 8.3% (1)Don't Know 45.6% (26) 66.7% (8) Chrysler 29.9% (26) 16.7% Correct (1)16.1% (14) Incorrect 16.7% (1) Don't Know 51.7% (45) 50.0% (3) Ford Correct 39.7% (27) 42.9% (6) Incorrect 7.4% (5) 14.3% (2) Don't Know 51.5% (35) 42.9% (6) General Motors 45.9% (28) 30.0% Correct (3) Incorrect 13.1% 20.0% (8) (2) Don't Know 39.3% (24) 30.0% (3)Datsun Correct 24.6% (14) 0% (0) Incorrect 12.3% (7) 0 % (0)Don't Know 100.0% 61.4% (35) (2)Toyota Correct 28.4% (19) 0 왕 (0) Incorrect 10.4% 33.3% (7) (1)Don't Know 59.7% (40) 66.7% (2) Volkswagen Correct 39.2% (20) 28.6% (6)Incorrect 13.7% (7) 19.0% (4)Don't Know 47.1% (24) 52.4% (11)

Table 15

Question: Did dealer inform you of the terms of the warranty?

American Motors Yes No	54.4% 36.8%	
Chrysler Yes No	72.4% 26.4%	
Ford Yes No	38.2% 58.8%	
General Motors Yes No	63.9% 34.4%	
Datsun Yes No	71.9% 24.6%	
Toyota Yes No	65.7% 31.3%	
Volkswagen Yes No	74.5% 25.5%	

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